

Planck 2018 Results: Cosmological Parameter Tables

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Abstract

These tables summarize the results of *Planck* 2018 parameter estimation exploration results. They are based on *Planck* HFI data and *Planck* lensing, as well as additional non-CMB data as detailed in the main parameter papers.

1 Introduction

The tables are arranged in groups, firstly by cosmological model, and then by data combination. The name tags match those of the full chains also provided on the PLA. The names all start with **base** to denote the baseline model, followed by the parameter tags of any additional parameters that are also varied (as defined in the parameter paper). Data combination tags are as follows (see the parameters paper for full description and references):

Data tag	Data used
plikHM	Baseline high- ℓ <i>Planck</i> power spectra (plik cross-half-mission, $30 \leq \ell \leq 2508$).
CamSpecHM	CamSpec high- ℓ <i>Planck</i> power spectra.
CleanedCamSpecHM	Foreground-cleaned CamSpec high- ℓ <i>Planck</i> power spectra.
lowl	Low- ℓ <i>Planck</i> temperature (Commander , $2 \leq \ell \leq 29$).
lowE	Low- ℓ HFI <i>EE</i> polarization only (SimAll , $2 \leq \ell \leq 29$).
lensing	<i>Planck</i> lensing power spectrum reconstruction. When used without other CMB likelihoods, it is marginalized over the theory CMB spectra given.
BAO	Baryon oscillation data from BOSS DR12, MGS, and 6DF.
Pantheon18	Supernova data from the Pantheon sample, with updated main distance file with heliocentric redshifts.
JLA	Supernova data from the SDSS-II/SNLS3 Joint Light-curve Analysis.
Riess18	Hubble parameter measurement from SHOES (Riess et al. 2018a, $H_0 = 73.45 \pm 1.66$).
BK15	Bicep-Keck (+Planck/WMAP) 2015 analysis (arXiv:1810.05216).
zre6p5	A hard prior, $z_{\text{re}} > 6.5$.
reion	A hard prior, $z_{\text{re}} > 6.5$, combined with a Gaussian prior, $z_{\text{re}} = 7 \pm 1$.
lenspriors	Standard base parameters with $n_s = 0.96 \pm 0.02$, $\Omega_b h^2 = 0.0222 \pm 0.0005$, $100 > H_0 > 40$, $\tau = 0.055$.
DESpriors	DES cosmological parameter priors (flat on $0.1 < \Omega_m < 0.9$, $0.03 < \Omega_b < 0.07$, $55 < H_0 < 91$, $0.5 < 10^9 A_s < 5$, $Y_P = 0.245341$ and, if varied, $0.05\text{eV} < \sum m_\nu < 1\text{eV}$).
CookeDH	A Gaussian prior $\Omega_b h^2 = 0.0222 \pm 0.0005$ (conservative, motivated by Cooke et al. 2017).
Cooke17	A Gaussian prior on D/H (Cooke et al. 2017), mean and error adjusted to approximately agree with CookeDH for $N_{\text{eff}} = 3.046$.
Aver15	A Gaussian constraint on $Y_P^{\text{BBN}} = 0.2449 \pm 0.0040$ (Aver et al. 2015).
theta	A Gaussian prior $100\theta_{\text{MC}} = 1.0409 \pm 0.0006$ (acoustic scale from <i>Planck</i> CMB without LCDM assumption).
WMAP	The full WMAP (temperature and polarization) 9-year data.
DES	DES 1yr, cosmic shear+galaxy auto+cross.
DESlens	DES 1yr, cosmic shear only.
DESw	DES 1yr, galaxy auto+cross only.

The high- ℓ *Planck* likelihoods have TT, TE, EE variants from each spectrum alone, plus the TTTEEE joint constraint. Note that unless **nnu** is specified in the file name, the neutrino mass sum is fixed to $\sum_\nu m_\nu = 0.06\text{eV}$ (including for DES chains). Non-linear corrections are modelled with HMCode in all cases (including when using DESpriors).

Data likelihoods are either included when running the chains, or by importance sampling. Data combinations that are added by importance sampling appear at the end of the list, following the **post_** tag. Note that the best fits are merely examples of parameter combinations that fit the data well; due to parameter degeneracies there may be other combinations of parameters that fit the data nearly equally well.

Beneath each table is the $\chi_{\text{eff}}^2 = -2\log(\text{likelihood})$ for each best-fit model, and also the contributions coming from each separate part of the likelihood. Mean minus log likelihoods are also given, as $\bar{\chi}_{\text{eff}}^2$. The tables also give the χ_{eff}^2 of the various component parts of the likelihood, where quoted values are the best-fit and mean, standard

deviation (in the case of 1σ tables), or effective degrees of freedom (ν , defined by $\sigma^2/2$). Normalization of likelihoods is arbitrary, i.e., a constant can be added to log likelihoods without affecting any results. Only some likelihoods normalize so that the number is immediately interpretable as similar to a χ^2 for some number of data points.

The $R - 1$ value is also given, which measures the convergence of the sampling chains, with small values being better converged. The sampling uncertainty on quoted mean values are typically of order $R - 1$ in units of the standard deviation.

Parameter constraints were calculated from Monte Carlo chains from **CosmoMC** using **GetDist** (getdist.readthedocs.org).

Parameters and derived parameters, along with the name tags used in the chain files, are briefly described in the tables below.

Additional nuisance parameters for each likelihood are described in more detail in the respective papers.

Parameter	Tag	baseline	Definition
$\Omega_b h^2$	omegab2	...	Baryon density today
$\Omega_c h^2$	omegac2	...	Cold dark matter density today
$100\theta_{\text{MC}}$	theta	...	$100\times$ approximation to r_s/D_M (CosmoMC)
τ	tau	...	Thomson scattering optical depth due to reionization
Ω_K	omegak	0	$\Omega_{\text{tot}} = 1 - \Omega_K$
Σm_ν	mnu	0.06	Sum of active neutrino masses in eV
$m_{\nu, \text{sterile}}^{\text{eff}}$	meffsterile	0	Effective mass in sterile neutrinos in eV
w_0	w	-1	Dark energy equation of state, $w(a) = w_0 + (1 - a)w_a$
w_a	wa	0	As above (perturbations modelled using PPF)
N_{eff}	nnu	3.046	Total effective number of massive and massless neutrinos (see text)
Y_{P}	yhe	BBN	Fraction of baryonic mass in helium (only if varied independently of BBN)
α_{-1}	alpha1	0	Fully correlated isocurvature amplitude parameter
A_{L}	Alens	1	Amplitude of the lensing power relative to the physical value
$A_{\text{L}}^{\phi\phi}$	Aphiphi	1	Amplitude of the lensing reconstruction power relative to the physical value
$A_{\text{L}}^{\text{fid}}$	Alensf	...	Amplitude of the lensing power relative to a fixed fiducial spectrum
n_s	ns	...	Scalar spectrum power-law index ($k_0 = 0.05\text{Mpc}^{-1}$)
n_t	nt	Inflation	Tensor spectrum power-law index ($k_0 = 0.05\text{Mpc}^{-1}$)
$d \ln n_s / d \ln k$	nrun	0	Running of the spectral index
$\log[10^{10} A_s]$	logA	...	Log power of the primordial curvature perturbations ($k_0 = 0.05\text{Mpc}^{-1}$)
$r_{0.05}$	r	0	Tensor power spectrum amplitude ($k_0 = 0.05\text{Mpc}^{-1}$)
H_0	H0	...	Current expansion rate in $\text{km s}^{-1}\text{Mpc}^{-1}$
Ω_{m}	omegam	...	Matter density (incl. massive neutrinos) today divided by the critical density
Ω_{Λ}	omegal	...	Dark energy density divided by the critical density today
$\Omega_{\text{m}} h^2$	omegamh2	...	Total matter density today (incl. massive neutrinos)
$\Omega_{\text{m}} h^3$	omegamh3	...	$h \times$ total matter density today
σ_8	sigma8	...	RMS matter fluctuations today in linear theory
S_8	S8	...	$\sigma_8(\Omega_{\text{m}}/0.3)^{0.5}$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	s8omegamp5	...	$\sigma_8 \Omega_{\text{m}}^{0.5}$ constrained by low-redshift lensing
$\sigma_8 \Omega_{\text{m}}^{0.25}$	s8omegamp25	...	$\sigma_8 \Omega_{\text{m}}^{0.25}$ constrained by CMB lensing
$\sigma_8 / h^{0.5}$	s8h5	...	$\sigma_8 / h^{0.5}$
$\sigma_8 / h^{0.5}$	rdragh	...	$r_{\text{drag}} h$ in Mpc
$\langle d^2 \rangle^{1/2}$	rmsdeflect	...	RMS CMB lensing deflection angle in arcmin (approx. using $2 \leq L \leq 2000$)
z_{re}	zrei	...	Redshift at which Universe is half reionized
$10^9 A_s$	A	...	Power of the primordial curvature perturbations ($k_0 = 0.05\text{Mpc}^{-1}$)
$10^9 A_s e^{-2\tau}$	clamp	...	Parameter determining the small-scale CMB power
Y_{P}	yheused	bbn	Fraction of baryonic mass in helium
$Y_{\text{P}}^{\text{BBN}}$	YpBBN	bbn	Nucleon fraction in helium
10^5D/H	DHBBN	bbn	10^5 deuterium-helium ratio from Parthenope BBN prediction (pre-Marcucci rates)
Age/Gyr	age	...	Time since the start of the hot big bang

Parameter	Tag	baseline	Definitions
z_*	zstar	...	Redshift for which the optical depth equals unity
$r_* = r_s(z_*)$	rstar	...	Comoving size of the sound horizon at $z = z_*$
$100\theta_*$	thetastar	...	$100\times$ Angular size of the sound horizon at last scattering
$D_M/\text{Gpc}(z_*)$	DAstar	...	Comoving angular diameter distance to last scattering
z_{drag}	zdrag	...	Redshift at which baryon-drag optical depth equals unity
$r_{\text{drag}} = r_s(z_{\text{drag}})$	rdrag	...	Comoving size of the sound horizon at $z = z_{\text{drag}}$
k_D	kd	...	Characteristic damping comoving wavenumber (Mpc^{-1})
$100\theta_D$	thetad	...	$100\times$ angular extent of photon diffusion at last scattering
z_{eq}	zeq	...	Redshift of matter-radiation equality (massless neutrinos)
k_{eq}	keq	...	$[a(z_{\text{eq}})H(z_{\text{eq}})]^{-1}$
$100\theta_{\text{eq}}$	thetaeq	...	$100\times$ angular size of the comoving Horizon at matter-radiation equality
$100\theta_{s,\text{eq}}$	thetarseq	...	$100\times$ angular size of the comoving sound Horizon at matter-radiation equality
D_{40}	D40	...	$\ell(\ell+1)C_\ell^{TT}/2\pi$ at $\ell = 40$ in μK^2
D_{220}	D200	...	$\ell(\ell+1)C_\ell^{TT}/2\pi$ at $\ell = 220$ in μK^2
D_{810}	D810	...	$\ell(\ell+1)C_\ell^{TT}/2\pi$ at $\ell = 810$ in μK^2
D_{1420}	D1420	...	$\ell(\ell+1)C_\ell^{TT}/2\pi$ at $\ell = 1420$ in μK^2
D_{2000}	D2000	...	$\ell(\ell+1)C_\ell^{TT}/2\pi$ at $\ell = 2000$ in μK^2
$n_{s,0.002}$	ns02	...	Scalar spectral index at $k = 0.002\text{Mpc}^{-1}$
$r_{0.002}$	r02	0	Tensor/scalar ratio at $k = 0.002\text{Mpc}^{-1}$
$r_{0.01}$	rBB	0	Tensor/scalar ratio at $k = 0.01\text{Mpc}^{-1}$ (roughly BB peak)
r_{10}	r10	0	Tensor-scalar temperature C_ℓ amplitude at $\ell = 10$
A_t	AT	0	$10^9 A_t$ ($k_0 = 0.05\text{Mpc}^{-1}$)
$10^9 A_t e^{-2\tau}$	ctlamp	0	Parameter determining $\ell \simeq 100$ tensor C_ℓ amplitude
$H(z)$	Hubble{100z}	...	Hubble parameter at redshift z ($\text{km s}^{-1}\text{Mpc}^{-1}$)
$D_M(z)$	DM{100z}	...	Comoving angular diameter distance to redshift z in Mpc
$f\sigma_8(z)$	fsigma8z{100z}	...	Growth parameter $f\sigma_8$ at redshift z
$\sigma_8(z)$	sigma8z{100z}	...	σ_8 at redshift z
f_{2000}^{143}	f2000_143	...	Total temperature foreground power at $\ell = 2000$ in 143GHz C_ℓ
$f_{2000}^{143\times 217}$	f2000_x	...	Total temperature foreground power at $\ell = 2000$ in $217\text{GHz} \times 143\text{GHz}$ C_ℓ
f_{2000}^{217}	f2000_217	...	Total temperature foreground power at $\ell = 2000$ in 217GHz C_ℓ
χ_x^2	chi2_x	...	$-2\log(\text{likelihood})$ for likelihood x ; (most are normalized like a χ^2).

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7.119	base_nnu_BAO_Cooke17Adel_Aver15	680
7.120	base_nnu_BAO_Cooke17Adel_Aver15_Pantheon18	680
7.121	base_nnu_BAO_Cooke17Adel_Aver15_theta	681
7.122	base_nnu_BAO_Cooke17Adel_Aver15_Pantheon18_theta	681
8	nnu+meffsterile	682
8.1	base_nnu_meffsterile_plikHM_TT_lowl_lowE	682
8.2	base_nnu_meffsterile_plikHM_TT_lowl_lowE_post_lensing	683
8.3	base_nnu_meffsterile_plikHM_TT_lowl_lowE_post_zre6p5	684
8.4	base_nnu_meffsterile_plikHM_TT_lowl_lowE_post_lensing_zre6p5	685
8.5	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE	686
8.6	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_post_lensing	687
8.7	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_post_zre6p5	688
8.8	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	689
8.9	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE	690
8.10	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_post_lensing	691
8.11	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5	692
8.12	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	693
8.13	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO	694
8.14	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Pantheon18	695
8.15	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Aver15	696
8.16	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15	697
8.17	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_zre6p5	698
8.18	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5	699
8.19	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Aver15_zre6p5	700
8.20	base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5	701
8.21	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO	702
8.22	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18	703
8.23	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15	704
8.24	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15	705
8.25	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_zre6p5	706
8.26	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5	707
8.27	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15_zre6p5	708
8.28	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5	709
8.29	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO	710
8.30	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18	711
8.31	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15	712
8.32	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15	713
8.33	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_zre6p5	714
8.34	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5	715
8.35	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15_zre6p5	716
8.36	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5	717
8.37	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO	718
8.38	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18	719
8.39	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Aver15	720
8.40	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15	721
8.41	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_zre6p5	722
8.42	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5	723
8.43	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Aver15_zre6p5	724

8.44	base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15_zre6p5	725
8.45	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO	726
8.46	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18	727
8.47	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15	728
8.48	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15	729
8.49	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_zre6p5	730
8.50	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5	731
8.51	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15_zre6p5	732
8.52	base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15_zre6p5	733
8.53	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO	734
8.54	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18	735
8.55	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15	736
8.56	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15	737
8.57	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_zre6p5	738
8.58	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5	739
8.59	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15_zre6p5	740
8.60	base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15_zre6p5	741
9	nnu+mnu	742
9.1	base_nnu_mnu_plikHM_TT_lowl_lowE	742
9.2	base_nnu_mnu_plikHM_TT_lowl_lowE_post_lensing	743
9.3	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE	744
9.4	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_post_lensing	745
9.5	base_nnu_mnu_CamSpecHM_TT_lowl_lowE	746
9.6	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_post_lensing	747
9.7	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE	748
9.8	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_post_lensing	749
9.9	base_nnu_mnu_plikHM_TT_lowl_lowE_BAO	750
9.10	base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Pantheon18	751
9.11	base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Aver15	752
9.12	base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15	753
9.13	base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5	754
9.14	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO	755
9.15	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18	756
9.16	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15	757
9.17	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15	758
9.18	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5	759
9.19	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO	760
9.20	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Pantheon18	761
9.21	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Aver15	762
9.22	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15	763
9.23	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5	764
9.24	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO	765
9.25	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18	766
9.26	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15	767
9.27	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15	768
9.28	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5	769
9.29	base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO	770
9.30	base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18	771
9.31	base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Aver15	772
9.32	base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15	773
9.33	base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5	774
9.34	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO	775
9.35	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18	776
9.36	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15	777
9.37	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15	778
9.38	base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5	779
9.39	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO	780
9.40	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18	781
9.41	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Aver15	782
9.42	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15	783
9.43	base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5	784
9.44	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO	785
9.45	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18	786
9.46	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15	787
9.47	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15	788
9.48	base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5	789
9.49	base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15	790

9.50	base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15_post_Pantheon18	791
9.51	base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15_theta	792
9.52	base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15_theta_post_Pantheon18	793
9.53	base_nnu_mnu_BAO_Cooke17_Aver15	794
9.54	base_nnu_mnu_BAO_Cooke17_Aver15_Pantheon18	794
9.55	base_nnu_mnu_BAO_Cooke17_Aver15_theta	795
9.56	base_nnu_mnu_BAO_Cooke17_Aver15_Pantheon18_theta	795
9.57	base_nnu_mnu_BAO_Cooke17Marc_Aver15	796
9.58	base_nnu_mnu_BAO_Cooke17Marc_Aver15_Pantheon18	796
9.59	base_nnu_mnu_BAO_Cooke17Marc_Aver15_theta	797
9.60	base_nnu_mnu_BAO_Cooke17Marc_Aver15_Pantheon18_theta	797
9.61	base_nnu_mnu_BAO_Cooke17Adel_Aver15	798
9.62	base_nnu_mnu_BAO_Cooke17Adel_Aver15_Pantheon18	798
9.63	base_nnu_mnu_BAO_Cooke17Adel_Aver15_theta	799
9.64	base_nnu_mnu_BAO_Cooke17Adel_Aver15_Pantheon18_theta	799
10	nnu+nrn	800
10.1	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE	800
10.2	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO	801
10.3	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_lensing	802
10.4	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing	803
10.5	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_zre6p5	804
10.6	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	805
10.7	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	806
10.8	base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	807
11	nnu+yhe	808
11.1	base_nnu_yhe_plikHM_TT_lowl_lowE	808
11.2	base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO	809
11.3	base_nnu_yhe_plikHM_TT_lowl_lowE_post_lensing	810
11.4	base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing	811
11.5	base_nnu_yhe_plikHM_TT_lowl_lowE_post_zre6p5	812
11.6	base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO_zre6p5	813
11.7	base_nnu_yhe_plikHM_TT_lowl_lowE_post_lensing_zre6p5	814
11.8	base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing_zre6p5	815
11.9	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE	816
11.10	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO	817
11.11	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_lensing	818
11.12	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing	819
11.13	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_zre6p5	820
11.14	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	821
11.15	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	822
11.16	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	823
11.17	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE	824
11.18	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO	825
11.19	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_lensing	826
11.20	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing	827
11.21	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5	828
11.22	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	829
11.23	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	830
11.24	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	831
11.25	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15	832
11.26	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO	833
11.27	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_lensing	834
11.28	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_lensing	835
11.29	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_zre6p5	836
11.30	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_zre6p5	837
11.31	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_lensing_zre6p5	838
11.32	base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_lensing_zre6p5	839
11.33	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15	840
11.34	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO	841
11.35	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_lensing	842
11.36	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing	843
11.37	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_zre6p5	844
11.38	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5	845
11.39	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_lensing_zre6p5	846
11.40	base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5	847
11.41	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15	848
11.42	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO	849

11.43	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_lensing	850
11.44	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing	851
11.45	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_zre6p5	852
11.46	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5	853
11.47	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_lensing_zre6p5	854
11.48	base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5	855
12	nrn	856
12.1	base_nrn_plikHM_TT_lowl_lowE	856
12.2	base_nrn_plikHM_TT_lowl_lowE_post_BAO	857
12.3	base_nrn_plikHM_TT_lowl_lowE_post_lensing	858
12.4	base_nrn_plikHM_TT_lowl_lowE_post_BAO_lensing	859
12.5	base_nrn_plikHM_TT_lowl_lowE_post_Riess18	860
12.6	base_nrn_plikHM_TT_lowl_lowE_post_zre6p5	861
12.7	base_nrn_plikHM_TT_lowl_lowE_post_BAO_zre6p5	862
12.8	base_nrn_plikHM_TT_lowl_lowE_post_lensing_zre6p5	863
12.9	base_nrn_plikHM_TT_lowl_lowE_post_BAO_lensing_zre6p5	864
12.10	base_nrn_plikHM_TT_lowl_lowE_post_Riess18_zre6p5	865
12.11	base_nrn_plikHM_TTTEEE_lowl_lowE	866
12.12	base_nrn_plikHM_TTTEEE_lowl_lowE_post_BAO	867
12.13	base_nrn_plikHM_TTTEEE_lowl_lowE_post_lensing	868
12.14	base_nrn_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing	869
12.15	base_nrn_plikHM_TTTEEE_lowl_lowE_post_Riess18	870
12.16	base_nrn_plikHM_TTTEEE_lowl_lowE_post_zre6p5	871
12.17	base_nrn_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	872
12.18	base_nrn_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	873
12.19	base_nrn_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	874
12.20	base_nrn_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5	875
12.21	base_nrn_CamSpecHM_TT_lowl_lowE	876
12.22	base_nrn_CamSpecHM_TT_lowl_lowE_post_BAO	877
12.23	base_nrn_CamSpecHM_TT_lowl_lowE_post_lensing	878
12.24	base_nrn_CamSpecHM_TT_lowl_lowE_post_BAO_lensing	879
12.25	base_nrn_CamSpecHM_TT_lowl_lowE_post_zre6p5	880
12.26	base_nrn_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5	881
12.27	base_nrn_CamSpecHM_TT_lowl_lowE_post_lensing_zre6p5	882
12.28	base_nrn_CamSpecHM_TT_lowl_lowE_post_BAO_lensing_zre6p5	883
12.29	base_nrn_CamSpecHM_TTTEEE_lowl_lowE	884
12.30	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_BAO	885
12.31	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_lensing	886
12.32	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing	887
12.33	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18	888
12.34	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5	889
12.35	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	890
12.36	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	891
12.37	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	892
12.38	base_nrn_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5	893
12.39	base_nrn_plikHM_TE_lowE	894
12.40	base_nrn_plikHM_TE_lowE_post_BAO	895
12.41	base_nrn_plikHM_TE_lowE_post_zre6p5	896
12.42	base_nrn_plikHM_TE_lowE_post_BAO_zre6p5	897
12.43	base_nrn_plikHM_EE_lowE	898
12.44	base_nrn_plikHM_EE_lowE_post_BAO	899
12.45	base_nrn_plikHM_EE_lowE_post_zre6p5	900
12.46	base_nrn_plikHM_EE_lowE_post_BAO_zre6p5	901
12.47	base_nrn_CleanedCamSpecHM_TT_lowl_lowE	902
13	nrn+nnu+w+mnu	903
13.1	base_nrn_nnu_w_mnu_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_lensing	903
13.2	base_nrn_nnu_w_mnu_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_lensing_post_zre6p5	904
14	nrn+nrnrun	905
14.1	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE	905
14.2	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE_post_BAO	906
14.3	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE_post_lensing	907
14.4	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing	908
14.5	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE_post_zre6p5	909
14.6	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	910
14.7	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	911
14.8	base_nrn_nrnrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	912

15	nrun+r	913
15.1	base_nrun_r_plikHM_TT_lowl_lowE	913
15.2	base_nrun_r_plikHM_TT_lowl_lowE_post_BAO	914
15.3	base_nrun_r_plikHM_TT_lowl_lowE_post_Riess18	915
15.4	base_nrun_r_plikHM_TT_lowl_lowE_post_zre6p5	916
15.5	base_nrun_r_plikHM_TT_lowl_lowE_post_BAO_zre6p5	917
15.6	base_nrun_r_plikHM_TT_lowl_lowE_post_Riess18_zre6p5	918
15.7	base_nrun_r_plikHM_TTTEEE_lowl_lowE	919
15.8	base_nrun_r_plikHM_TTTEEE_lowl_lowE_post_BAO	920
15.9	base_nrun_r_plikHM_TTTEEE_lowl_lowE_post_Riess18	921
15.10	base_nrun_r_plikHM_TTTEEE_lowl_lowE_post_zre6p5	922
15.11	base_nrun_r_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	923
15.12	base_nrun_r_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5	924
15.13	base_nrun_r_CamSpecHM_TT_lowl_lowE	925
15.14	base_nrun_r_CamSpecHM_TT_lowl_lowE_post_BAO	926
15.15	base_nrun_r_CamSpecHM_TT_lowl_lowE_post_zre6p5	927
15.16	base_nrun_r_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5	928
15.17	base_nrun_r_plikHM_TT_lowl_lowE_lensing	929
15.18	base_nrun_r_plikHM_TT_lowl_lowE_lensing_post_BAO	930
15.19	base_nrun_r_plikHM_TT_lowl_lowE_lensing_post_zre6p5	931
15.20	base_nrun_r_plikHM_TT_lowl_lowE_lensing_post_BAO_zre6p5	932
15.21	base_nrun_r_plikHM_TTTEEE_lowl_lowE_lensing	933
15.22	base_nrun_r_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO	934
15.23	base_nrun_r_plikHM_TTTEEE_lowl_lowE_lensing_post_zre6p5	935
15.24	base_nrun_r_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5	936
15.25	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing	937
15.26	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO	938
15.27	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_zre6p5	939
15.28	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5	940
15.29	base_nrun_r_plikHM_TT_lowl_lowE_BK15	941
15.30	base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO	942
15.31	base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_lensing	943
15.32	base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing	944
15.33	base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_zre6p5	945
15.34	base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO_zre6p5	946
15.35	base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_lensing_zre6p5	947
15.36	base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5	948
15.37	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15	949
15.38	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15_post_BAO	950
15.39	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15_post_zre6p5	951
15.40	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15_post_BAO_zre6p5	952
15.41	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15	953
15.42	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO	954
15.43	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing	955
15.44	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing	956
15.45	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_zre6p5	957
15.46	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_zre6p5	958
15.47	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing_zre6p5	959
15.48	base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5	960
15.49	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15	961
15.50	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO	962
15.51	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_lensing	963
15.52	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_lensing	964
15.53	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_zre6p5	965
15.54	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_zre6p5	966
15.55	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_lensing_zre6p5	967
15.56	base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_lensing_zre6p5	968
15.57	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing	969
15.58	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_BAO	970
15.59	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_zre6p5	971
15.60	base_nrun_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_BAO_zre6p5	972

16	omegak	973
16.1	base_omegak_plikHM.TT_lowl_lowE	973
16.2	base_omegak_plikHM.TT_lowl_lowE_post_zre6p5	974
16.3	base_omegak_plikHM.TTTEEE_lowl_lowE	975
16.4	base_omegak_plikHM.TTTEEE_lowl_lowE_post_zre6p5	976
16.5	base_omegak_CamSpecHM.TT_lowl_lowE	977
16.6	base_omegak_CamSpecHM.TT_lowl_lowE_post_zre6p5	978
16.7	base_omegak_CamSpecHM.TTTEEE_lowl_lowE	979
16.8	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_post_zre6p5	980
16.9	base_omegak_plikHM.TT_lowl_lowE_BAO	981
16.10	base_omegak_plikHM.TT_lowl_lowE_BAO_post_lensing	982
16.11	base_omegak_plikHM.TT_lowl_lowE_BAO_post_lensing_Pantheon18	983
16.12	base_omegak_plikHM.TT_lowl_lowE_BAO_post_zre6p5	984
16.13	base_omegak_plikHM.TT_lowl_lowE_BAO_post_lensing_zre6p5	985
16.14	base_omegak_plikHM.TT_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5	986
16.15	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO	987
16.16	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_post_lensing	988
16.17	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18	989
16.18	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_post_zre6p5	990
16.19	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5	991
16.20	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5	992
16.21	base_omegak_CamSpecHM.TT_lowl_lowE_BAO	993
16.22	base_omegak_CamSpecHM.TT_lowl_lowE_BAO_post_lensing	994
16.23	base_omegak_CamSpecHM.TT_lowl_lowE_BAO_post_lensing_Pantheon18	995
16.24	base_omegak_CamSpecHM.TT_lowl_lowE_BAO_post_zre6p5	996
16.25	base_omegak_CamSpecHM.TT_lowl_lowE_BAO_post_lensing_zre6p5	997
16.26	base_omegak_CamSpecHM.TT_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5	998
16.27	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_BAO	999
16.28	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_BAO_post_lensing	1000
16.29	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18	1001
16.30	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_BAO_post_zre6p5	1002
16.31	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5	1003
16.32	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5	1004
16.33	base_omegak_plikHM.TT_lowl_lowE_BAO_Riess18_JLA	1005
16.34	base_omegak_plikHM.TT_lowl_lowE_BAO_Riess18_JLA_post_lensing	1006
16.35	base_omegak_plikHM.TT_lowl_lowE_BAO_Riess18_JLA_post_zre6p5	1007
16.36	base_omegak_plikHM.TT_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5	1008
16.37	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_Riess18_JLA	1009
16.38	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing	1010
16.39	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_zre6p5	1011
16.40	base_omegak_plikHM.TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5	1012
16.41	base_omegak_plikHM.TT_lowl_lowE_lensing	1013
16.42	base_omegak_plikHM.TT_lowl_lowE_lensing_post_zre6p5	1014
16.43	base_omegak_plikHM.TTTEEE_lowl_lowE_lensing	1015
16.44	base_omegak_plikHM.TTTEEE_lowl_lowE_lensing_post_zre6p5	1016
16.45	base_omegak_CamSpecHM.TT_lowl_lowE_lensing	1017
16.46	base_omegak_CamSpecHM.TT_lowl_lowE_lensing_post_zre6p5	1018
16.47	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_lensing	1019
16.48	base_omegak_CamSpecHM.TTTEEE_lowl_lowE_lensing_post_zre6p5	1020
16.49	base_omegak_CleanedCamSpecHM.TT_lowl_lowE	1021
17	r	1022
17.1	base_r_plikHM.TT_lowl_lowE	1022
17.2	base_r_plikHM.TT_lowl_lowE_post_BAO	1023
17.3	base_r_plikHM.TT_lowl_lowE_post_Riess18	1024
17.4	base_r_plikHM.TT_lowl_lowE_post_zre6p5	1025
17.5	base_r_plikHM.TT_lowl_lowE_post_BAO_zre6p5	1026
17.6	base_r_plikHM.TT_lowl_lowE_post_Riess18_zre6p5	1027
17.7	base_r_plikHM.TTTEEE_lowl_lowE	1028
17.8	base_r_plikHM.TTTEEE_lowl_lowE_post_BAO	1029
17.9	base_r_plikHM.TTTEEE_lowl_lowE_post_Riess18	1030
17.10	base_r_plikHM.TTTEEE_lowl_lowE_post_zre6p5	1031
17.11	base_r_plikHM.TTTEEE_lowl_lowE_post_BAO_zre6p5	1032
17.12	base_r_plikHM.TTTEEE_lowl_lowE_post_Riess18_zre6p5	1033
17.13	base_r_CamSpecHM.TT_lowl_lowE	1034
17.14	base_r_CamSpecHM.TT_lowl_lowE_post_BAO	1035
17.15	base_r_CamSpecHM.TT_lowl_lowE_post_zre6p5	1036
17.16	base_r_CamSpecHM.TT_lowl_lowE_post_BAO_zre6p5	1037

17.17	base_r_CamSpecHM_TTTEEE_lowl_lowE	1038
17.18	base_r_CamSpecHM_TTTEEE_lowl_lowE_post_BAO	1039
17.19	base_r_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5	1040
17.20	base_r_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	1041
17.21	base_r_plikHM_TE_lowE	1042
17.22	base_r_plikHM_TE_lowE_post_BAO	1043
17.23	base_r_plikHM_TE_lowE_post_zre6p5	1044
17.24	base_r_plikHM_TE_lowE_post_BAO_zre6p5	1045
17.25	base_r_plikHM_EE_lowE	1046
17.26	base_r_plikHM_EE_lowE_post_BAO	1047
17.27	base_r_plikHM_EE_lowE_post_zre6p5	1048
17.28	base_r_plikHM_EE_lowE_post_BAO_zre6p5	1049
17.29	base_r_plikHM_TT_lowl_lowE_lensing	1050
17.30	base_r_plikHM_TT_lowl_lowE_lensing_post_BAO	1051
17.31	base_r_plikHM_TT_lowl_lowE_lensing_post_zre6p5	1052
17.32	base_r_plikHM_TT_lowl_lowE_lensing_post_BAO_zre6p5	1053
17.33	base_r_plikHM_TTTEEE_lowl_lowE_lensing	1054
17.34	base_r_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO	1055
17.35	base_r_plikHM_TTTEEE_lowl_lowE_lensing_post_zre6p5	1056
17.36	base_r_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5	1057
17.37	base_r_CamSpecHM_TTTEEE_lowl_lowE_lensing	1058
17.38	base_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO	1059
17.39	base_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_zre6p5	1060
17.40	base_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5	1061
17.41	base_r_CleanedCamSpecHM_TT_lowl_lowE	1062
17.42	base_r_plikHM_TT_lowl_lowE_BK15	1063
17.43	base_r_plikHM_TT_lowl_lowE_BK15_post_BAO	1064
17.44	base_r_plikHM_TT_lowl_lowE_BK15_post_lensing	1065
17.45	base_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing	1066
17.46	base_r_plikHM_TT_lowl_lowE_BK15_post_zre6p5	1067
17.47	base_r_plikHM_TT_lowl_lowE_BK15_post_BAO_zre6p5	1068
17.48	base_r_plikHM_TT_lowl_lowE_BK15_post_lensing_zre6p5	1069
17.49	base_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5	1070
17.50	base_r_plikHM_TTTEEE_lowl_lowE_BK15	1071
17.51	base_r_plikHM_TTTEEE_lowl_lowE_BK15_post_BAO	1072
17.52	base_r_plikHM_TTTEEE_lowl_lowE_BK15_post_zre6p5	1073
17.53	base_r_plikHM_TTTEEE_lowl_lowE_BK15_post_BAO_zre6p5	1074
17.54	base_r_CamSpecHM_TT_lowl_lowE_BK15	1075
17.55	base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO	1076
17.56	base_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing	1077
17.57	base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing	1078
17.58	base_r_CamSpecHM_TT_lowl_lowE_BK15_post_zre6p5	1079
17.59	base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_zre6p5	1080
17.60	base_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing_zre6p5	1081
17.61	base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5	1082
17.62	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15	1083
17.63	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO	1084
17.64	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_lensing	1085
17.65	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_lensing	1086
17.66	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_zre6p5	1087
17.67	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_zre6p5	1088
17.68	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_lensing_zre6p5	1089
17.69	base_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_lensing_zre6p5	1090
17.70	base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing	1091
17.71	base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_BAO	1092
17.72	base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_zre6p5	1093
17.73	base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_BAO_zre6p5	1094
18	w	1095
18.1	base_w_plikHM_TT_lowl_lowE	1095
18.2	base_w_plikHM_TT_lowl_lowE_post_lensing	1096
18.3	base_w_plikHM_TT_lowl_lowE_post_Riess18	1097
18.4	base_w_plikHM_TT_lowl_lowE_post_zre6p5	1098
18.5	base_w_plikHM_TT_lowl_lowE_post_lensing_zre6p5	1099
18.6	base_w_plikHM_TT_lowl_lowE_post_Riess18_zre6p5	1100
18.7	base_w_plikHM_TTTEEE_lowl_lowE	1101
18.8	base_w_plikHM_TTTEEE_lowl_lowE_post_lensing	1102
18.9	base_w_plikHM_TTTEEE_lowl_lowE_post_Riess18	1103

18.10	base_w_plikHM_TTTEEE_lowl_lowE_post_zre6p5	1104
18.11	base_w_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	1105
18.12	base_w_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5	1106
18.13	base_w_CamSpecHM_TT_lowl_lowE	1107
18.14	base_w_CamSpecHM_TT_lowl_lowE_post_lensing	1108
18.15	base_w_CamSpecHM_TT_lowl_lowE_post_zre6p5	1109
18.16	base_w_CamSpecHM_TT_lowl_lowE_post_lensing_zre6p5	1110
18.17	base_w_CamSpecHM_TTTEEE_lowl_lowE	1111
18.18	base_w_CamSpecHM_TTTEEE_lowl_lowE_post_lensing	1112
18.19	base_w_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18	1113
18.20	base_w_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5	1114
18.21	base_w_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5	1115
18.22	base_w_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5	1116
18.23	base_w_plikHM_TT_lowl_lowE_BAO	1117
18.24	base_w_plikHM_TT_lowl_lowE_BAO_post_lensing	1118
18.25	base_w_plikHM_TT_lowl_lowE_BAO_post_zre6p5	1119
18.26	base_w_plikHM_TT_lowl_lowE_BAO_post_lensing_zre6p5	1120
18.27	base_w_plikHM_TTTEEE_lowl_lowE_BAO	1121
18.28	base_w_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing	1122
18.29	base_w_plikHM_TTTEEE_lowl_lowE_BAO_post_zre6p5	1123
18.30	base_w_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5	1124
18.31	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO	1125
18.32	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing	1126
18.33	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_zre6p5	1127
18.34	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5	1128
18.35	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA	1129
18.36	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing	1130
18.37	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_zre6p5	1131
18.38	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5	1132
18.39	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA	1133
18.40	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing	1134
18.41	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_zre6p5	1135
18.42	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5	1136
18.43	base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18	1137
18.44	base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing	1138
18.45	base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5	1139
18.46	base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5	1140
18.47	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18	1141
18.48	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing	1142
18.49	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5	1143
18.50	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5	1144
18.51	base_w_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18	1145
18.52	base_w_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing	1146
18.53	base_w_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5	1147
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18.55	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18	1149
18.56	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing	1150
18.57	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5	1151
18.58	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5	1152
18.59	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18	1153
18.60	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1154
18.61	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1155
18.62	base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1156
18.63	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18	1157
18.64	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1158
18.65	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1159
18.66	base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1160
18.67	base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18	1161
18.68	base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1162
18.69	base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1163
18.70	base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1164
18.71	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18	1165
18.72	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1166
18.73	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1167
18.74	base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1168
18.75	base_w_CleanedCamSpecHM_TT_lowl_lowE	1169

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19.2	base_w_wa_plikHM_TT_lowl_lowE_BAO_post_lensing	1171
19.3	base_w_wa_plikHM_TT_lowl_lowE_BAO_post_zre6p5	1172
19.4	base_w_wa_plikHM_TT_lowl_lowE_BAO_post_lensing_zre6p5	1173
19.5	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO	1174
19.6	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing	1175
19.7	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_post_zre6p5	1176
19.8	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5	1177
19.9	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA	1178
19.10	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing	1179
19.11	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_zre6p5	1180
19.12	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5	1181
19.13	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA	1182
19.14	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing	1183
19.15	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_zre6p5	1184
19.16	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5	1185
19.17	base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18	1186
19.18	base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing	1187
19.19	base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5	1188
19.20	base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5	1189
19.21	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18	1190
19.22	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing	1191
19.23	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5	1192
19.24	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5	1193
19.25	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18	1194
19.26	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing	1195
19.27	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5	1196
19.28	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5	1197
19.29	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18	1198
19.30	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing	1199
19.31	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5	1200
19.32	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5	1201
19.33	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18	1202
19.34	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1203
19.35	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1204
19.36	base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1205
19.37	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18	1206
19.38	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1207
19.39	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1208
19.40	base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1209
19.41	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18	1210
19.42	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1211
19.43	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1212
19.44	base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1213
19.45	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18	1214
19.46	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing	1215
19.47	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5	1216
19.48	base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5	1217
20	yhe	1218
20.1	base_yhe_plikHM_TT_lowl_lowE	1218
20.2	base_yhe_plikHM_TT_lowl_lowE_post_BAO	1219
20.3	base_yhe_plikHM_TT_lowl_lowE_post_lensing	1220
20.4	base_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing	1221
20.5	base_yhe_plikHM_TT_lowl_lowE_post_Riess18	1222
20.6	base_yhe_plikHM_TT_lowl_lowE_post_zre6p5	1223
20.7	base_yhe_plikHM_TT_lowl_lowE_post_BAO_zre6p5	1224
20.8	base_yhe_plikHM_TT_lowl_lowE_post_lensing_zre6p5	1225
20.9	base_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing_zre6p5	1226
20.10	base_yhe_plikHM_TT_lowl_lowE_post_Riess18_zre6p5	1227
20.11	base_yhe_plikHM_TTTEEE_lowl_lowE	1228
20.12	base_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO	1229
20.13	base_yhe_plikHM_TTTEEE_lowl_lowE_post_lensing	1230
20.14	base_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing	1231
20.15	base_yhe_plikHM_TTTEEE_lowl_lowE_post_Riess18	1232
20.16	base_yhe_plikHM_TTTEEE_lowl_lowE_post_zre6p5	1233
20.17	base_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5	1234

20.18	base_yhe.plikHM.TTTEEE_lowl_lowE_post_lensing_zre6p5	1235
20.19	base_yhe.plikHM.TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	1236
20.20	base_yhe.plikHM.TTTEEE_lowl_lowE_post_Riess18_zre6p5	1237
20.21	base_yhe.CamSpecHM.TT_lowl_lowE	1238
20.22	base_yhe.CamSpecHM.TT_lowl_lowE_post_BAO	1239
20.23	base_yhe.CamSpecHM.TT_lowl_lowE_post_lensing	1240
20.24	base_yhe.CamSpecHM.TT_lowl_lowE_post_BAO_lensing	1241
20.25	base_yhe.CamSpecHM.TT_lowl_lowE_post_zre6p5	1242
20.26	base_yhe.CamSpecHM.TT_lowl_lowE_post_BAO_zre6p5	1243
20.27	base_yhe.CamSpecHM.TT_lowl_lowE_post_lensing_zre6p5	1244
20.28	base_yhe.CamSpecHM.TT_lowl_lowE_post_BAO_lensing_zre6p5	1245
20.29	base_yhe.CamSpecHM.TTTEEE_lowl_lowE	1246
20.30	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_BAO	1247
20.31	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_lensing	1248
20.32	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_BAO_lensing	1249
20.33	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_Riess18	1250
20.34	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_zre6p5	1251
20.35	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_BAO_zre6p5	1252
20.36	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_lensing_zre6p5	1253
20.37	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5	1254
20.38	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_post_Riess18_zre6p5	1255
20.39	base_yhe.plikHM.TE_lowE	1256
20.40	base_yhe.plikHM.TE_lowE_post_BAO	1257
20.41	base_yhe.plikHM.TE_lowE_post_zre6p5	1258
20.42	base_yhe.plikHM.TE_lowE_post_BAO_zre6p5	1259
20.43	base_yhe.plikHM.EE_lowE	1260
20.44	base_yhe.plikHM.EE_lowE_post_BAO	1261
20.45	base_yhe.plikHM.EE_lowE_post_zre6p5	1262
20.46	base_yhe.plikHM.EE_lowE_post_BAO_zre6p5	1263
20.47	base_yhe.plikHM.TT_lowl_lowE_Aver15	1264
20.48	base_yhe.plikHM.TT_lowl_lowE_Aver15_post_BAO	1265
20.49	base_yhe.plikHM.TT_lowl_lowE_Aver15_post_lensing	1266
20.50	base_yhe.plikHM.TT_lowl_lowE_Aver15_post_BAO_lensing	1267
20.51	base_yhe.plikHM.TT_lowl_lowE_Aver15_post_zre6p5	1268
20.52	base_yhe.plikHM.TT_lowl_lowE_Aver15_post_BAO_zre6p5	1269
20.53	base_yhe.plikHM.TT_lowl_lowE_Aver15_post_lensing_zre6p5	1270
20.54	base_yhe.plikHM.TT_lowl_lowE_Aver15_post_BAO_lensing_zre6p5	1271
20.55	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15	1272
20.56	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15_post_BAO	1273
20.57	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15_post_lensing	1274
20.58	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15_post_BAO_lensing	1275
20.59	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15_post_zre6p5	1276
20.60	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5	1277
20.61	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15_post_lensing_zre6p5	1278
20.62	base_yhe.plikHM.TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5	1279
20.63	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15	1280
20.64	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15_post_BAO	1281
20.65	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15_post_lensing	1282
20.66	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15_post_BAO_lensing	1283
20.67	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15_post_zre6p5	1284
20.68	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5	1285
20.69	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15_post_lensing_zre6p5	1286
20.70	base_yhe.CamSpecHM.TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5	1287
20.71	base_yhe.CleanedCamSpecHM.TT_lowl_lowE	1288

2 Baseline model

2.1 base_plikHM-TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022126	$0.02212^{+0.00044}_{-0.00043}$	$\sigma_8 \Omega_m^{0.25}$	0.6116	$0.611^{+0.023}_{-0.023}$	$H(0.15)$	72.23	$72.3^{+1.6}_{-1.5}$
$\Omega_c h^2$	0.12068	$0.1206^{+0.0041}_{-0.0041}$	$\sigma_8/h^{0.5}$	0.9938	$0.993^{+0.031}_{-0.031}$	$D_M(0.15)$	647.8	648^{+16}_{-16}
$100\theta_{MC}$	1.04075	$1.04077^{+0.00093}_{-0.00091}$	$r_{drag}h$	98.40	$98.5^{+3.2}_{-3.1}$	$H(0.38)$	82.50	$82.5^{+1.1}_{-1.1}$
τ	0.0523	$0.052^{+0.016}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	2.454	$2.454^{+0.074}_{-0.073}$	$D_M(0.38)$	1542.6	1542^{+31}_{-31}
$\ln(10^{10} A_s)$	3.0413	$3.040^{+0.033}_{-0.032}$	z_{re}	7.54	$7.5^{+1.6}_{-1.7}$	$H(0.51)$	89.31	$89.32^{+0.90}_{-0.83}$
n_s	0.9635	$0.963^{+0.011}_{-0.011}$	$10^9 A_s$	2.093	$2.092^{+0.069}_{-0.066}$	$D_M(0.51)$	1996.8	1997^{+36}_{-36}
y_{cal}	1.00046	$1.0004^{+0.0049}_{-0.0049}$	$10^9 A_s e^{-2\tau}$	1.8853	$1.884^{+0.027}_{-0.027}$	$H(0.61)$	95.00	$95.01^{+0.72}_{-0.67}$
A_{217}^{CIB}	48.5	48^{+10}_{-10}	D_{40}	1231.7	1234^{+30}_{-30}	$D_M(0.61)$	2322.3	2322^{+39}_{-39}
$\xi^{tSZ \times CIB}$	0.32	—	D_{220}	5710	5713^{+83}_{-82}	$H(2.33)$	236.75	$236.7^{+2.5}_{-2.5}$
A_{143}^{tSZ}	7.03	$5.1^{+3.8}_{-4.0}$	D_{810}	2538.2	2536^{+27}_{-27}	$D_M(2.33)$	5777.8	5778^{+32}_{-33}
A_{100}^{PS}	255	263^{+60}_{-60}	D_{1420}	815.5	$814^{+10}_{-9.9}$	$f\sigma_8(0.15)$	0.4642	$0.464^{+0.024}_{-0.024}$
A_{143}^{PS}	49.8	49^{+20}_{-20}	D_{2000}	229.94	$229.5^{+3.6}_{-3.5}$	$\sigma_8(0.15)$	0.7500	$0.749^{+0.015}_{-0.015}$
$A_{143 \times 217}^{PS}$	47.3	44^{+20}_{-20}	$n_{s,0.002}$	0.9635	$0.963^{+0.011}_{-0.011}$	$f\sigma_8(0.38)$	0.4804	$0.480^{+0.019}_{-0.019}$
A_{217}^{PS}	119.9	115^{+20}_{-20}	Y_P	0.245295	$0.24529^{+0.00018}_{-0.00021}$	$\sigma_8(0.38)$	0.6638	$0.663^{+0.012}_{-0.012}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246621	$0.24661^{+0.00018}_{-0.00021}$	$f\sigma_8(0.51)$	0.4779	$0.477^{+0.016}_{-0.016}$
A_{100}^{dustTT}	8.86	$8.9^{+3.7}_{-3.6}$	$10^5 D/H$	2.632	$2.634^{+0.083}_{-0.082}$	$\sigma_8(0.51)$	0.6208	$0.620^{+0.011}_{-0.011}$
A_{143}^{dustTT}	10.80	$10.7^{+3.5}_{-3.5}$	Age/Gyr	13.830	$13.830^{+0.072}_{-0.074}$	$f\sigma_8(0.61)$	0.4722	$0.472^{+0.014}_{-0.014}$
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.5}_{-6.5}$	z_*	1090.29	$1090.30^{+0.80}_{-0.80}$	$\sigma_8(0.61)$	0.5904	$0.590^{+0.010}_{-0.010}$
A_{217}^{dustTT}	94.8	93^{+10}_{-10}	r_*	144.44	$144.46^{+0.94}_{-0.94}$	$f\sigma_8(2.33)$	0.2973	$0.2971^{+0.0051}_{-0.0049}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04096	$1.04097^{+0.00091}_{-0.00089}$	$\sigma_8(2.33)$	0.3061	$0.3059^{+0.0054}_{-0.0051}$
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.876	$13.878^{+0.087}_{-0.086}$	f_{2000}^{143}	30.5	31^{+6}_{-6}
H_0	66.86	$66.9^{+1.8}_{-1.8}$	z_{drag}	1059.44	$1059.39^{+0.92}_{-0.91}$	$f_{2000}^{143 \times 217}$	33.34	34^{+4}_{-4}
Ω_Λ	0.6791	$0.679^{+0.025}_{-0.026}$	r_{drag}	147.18	$147.21^{+0.94}_{-0.95}$	f_{2000}^{217}	107.77	$108.2^{+3.8}_{-3.8}$
Ω_m	0.3209	$0.321^{+0.026}_{-0.025}$	k_D	0.14058	$0.1405^{+0.0010}_{-0.0010}$	χ_{small}^2	395.88	$397.0 (\nu: 1.5)$
$\Omega_m h^2$	0.14345	$0.1434^{+0.0039}_{-0.0039}$	$100\theta_D$	0.16105	$0.16107^{+0.00052}_{-0.00053}$	χ_{lowl}^2	23.60	$23.9 (\nu: 0.8)$
$\Omega_m h^3$	0.09591	$0.09589^{+0.00090}_{-0.00089}$	z_{eq}	3413	3411^{+94}_{-93}	χ_{plik}^2	758.7	$771.4 (\nu: 14.9)$
σ_8	0.8126	$0.812^{+0.017}_{-0.018}$	k_{eq}	0.010416	$0.01041^{+0.00029}_{-0.00028}$	χ_{prior}^2	1.4	$7.3 (\nu: 6.8)$
S_8	0.8405	$0.840^{+0.048}_{-0.046}$	$100\theta_{eq}$	0.8106	$0.811^{+0.018}_{-0.017}$	χ_{CMB}^2	1178.2	$1192.3 (\nu: 15.1)$
$\sigma_8 \Omega_m^{0.5}$	0.4604	$0.460^{+0.026}_{-0.025}$	$100\theta_{s,eq}$	0.4482	$0.4483^{+0.0091}_{-0.0088}$			

Best-fit $\chi_{eff}^2 = 1179.58$; $\bar{\chi}_{eff}^2 = 1199.58$; $R - 1 = 0.00927$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 commander_dx12_v3.2_29: 23.60 plik_rd12_HM_v22_TT: 758.75

2.2 base_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022225	$0.02222^{+0.00038}_{-0.00039}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9814	$0.982^{+0.023}_{-0.022}$ (−0.7 σ)	$H(0.38)$	82.97	$82.96^{+0.70}_{-0.68}$ (+0.8 σ)
$\Omega_c h^2$	0.11898	$0.1190^{+0.0024}_{-0.0024}$ (−0.8 σ)	$r_{\text{drag}} h$	99.76	$99.8^{+1.8}_{-1.8}$ (+0.8 σ)	$D_M(0.38)$	1529.5	1530^{+18}_{-18} (−0.8 σ)
$100\theta_{\text{MC}}$	1.04102	$1.04098^{+0.00082}_{-0.00082}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.425	$2.429^{+0.054}_{-0.053}$ (−0.7 σ)	$H(0.51)$	89.67	$89.66^{+0.58}_{-0.56}$ (+0.8 σ)
τ	0.0532	$0.054^{+0.017}_{-0.015}$ (+0.2 σ)	z_{re}	7.59	$7.6^{+1.7}_{-1.6}$ (+0.2 σ)	$D_M(0.51)$	1981.5	1982^{+22}_{-22} (−0.8 σ)
$\ln(10^{10} A_s)$	3.0390	$3.040^{+0.035}_{-0.032}$ (−0.0 σ)	$10^9 A_s$	2.089	$2.091^{+0.073}_{-0.067}$ (−0.0 σ)	$H(0.61)$	95.272	$95.26^{+0.50}_{-0.48}$ (+0.7 σ)
n_s	0.9673	$0.9664^{+0.0085}_{-0.0084}$ (+0.7 σ)	$10^9 A_s e^{-2\tau}$	1.8777	$1.877^{+0.023}_{-0.023}$ (−0.5 σ)	$D_M(0.61)$	2305.9	2306^{+23}_{-23} (−0.8 σ)
y_{cal}	1.00044	$1.0005^{+0.0048}_{-0.0051}$ (+0.1 σ)	D_{40}	1223.2	1226^{+26}_{-25} (−0.5 σ)	$H(2.33)$	235.75	$235.7^{+1.5}_{-1.5}$ (−0.8 σ)
A_{217}^{CIB}	49.2	48^{+10}_{-10} (+0.0 σ)	D_{220}	5717	5721^{+80}_{-81} (+0.2 σ)	$D_M(2.33)$	5766.2	5767^{+24}_{-24} (−0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.26	—	D_{810}	2536.8	2536^{+27}_{-27} (−0.0 σ)	$f\sigma_8(0.15)$	0.4542	$0.454^{+0.015}_{-0.015}$ (−0.8 σ)
A_{143}^{tSZ}	7.06	$5.1^{+3.8}_{-4.0}$ (+0.0 σ)	D_{1420}	816.3	815^{+10}_{-10} (+0.2 σ)	$\sigma_8(0.15)$	0.7459	$0.746^{+0.014}_{-0.013}$ (−0.4 σ)
A_{100}^{PS}	255	264^{+60}_{-60} (+0.0 σ)	D_{2000}	230.24	$229.9^{+3.5}_{-3.5}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4727	$0.473^{+0.013}_{-0.013}$ (−0.7 σ)
A_{143}^{PS}	48.1	48^{+20}_{-20} (−0.1 σ)	$n_{s,0.002}$	0.9673	$0.9664^{+0.0085}_{-0.0084}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6613	$0.661^{+0.012}_{-0.011}$ (−0.3 σ)
$A_{143 \times 217}^{\text{PS}}$	44.9	43^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245336	$0.24533^{+0.00016}_{-0.00017}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4715	$0.472^{+0.011}_{-0.011}$ (−0.7 σ)
A_{217}^{PS}	118.4	114^{+20}_{-20} (−0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246663	$0.24666^{+0.00016}_{-0.00017}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6190	$0.619^{+0.011}_{-0.011}$ (−0.2 σ)
A^{kSZ}	0.0	—	$10^5 \text{D}/\text{H}$	2.613	$2.615^{+0.074}_{-0.070}$ (−0.4 σ)	$f\sigma_8(0.61)$	0.4666	$0.467^{+0.011}_{-0.011}$ (−0.7 σ)
A_{100}^{dustTT}	8.85	$9.0^{+3.6}_{-3.5}$ (+0.0 σ)	Age/Gyr	13.805	$13.807^{+0.055}_{-0.056}$ (−0.6 σ)	$\sigma_8(0.61)$	0.5890	$0.589^{+0.011}_{-0.0099}$ (−0.1 σ)
A_{143}^{dustTT}	10.85	$10.8^{+3.5}_{-3.5}$ (+0.0 σ)	z_*	1090.01	$1090.03^{+0.59}_{-0.58}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.2970	$0.2971^{+0.0054}_{-0.0050}$ (+0.0 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.3^{+6.6}_{-6.5}$ (+0.0 σ)	r_*	144.81	$144.82^{+0.63}_{-0.62}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3063	$0.3063^{+0.0057}_{-0.0052}$ (+0.2 σ)
A_{217}^{dustTT}	94.4	93^{+10}_{-10} (−0.0 σ)	$100\theta_*$	1.04121	$1.04118^{+0.00081}_{-0.00081}$ (+0.5 σ)	f_{2000}^{143}	30.3	31^{+6}_{-6} (−0.1 σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.907	$13.909^{+0.062}_{-0.060}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	33.11	33^{+4}_{-4} (−0.1 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.51	$1059.50^{+0.85}_{-0.90}$ (+0.2 σ)	f_{2000}^{217}	107.61	$107.9^{+3.9}_{-3.7}$ (−0.1 σ)
H_0	67.62	$67.6^{+1.1}_{-1.1}$ (+0.8 σ)	r_{drag}	147.52	$147.54^{+0.68}_{-0.67}$ (+0.7 σ)	χ_{small}^2	395.89	$397.1 (\nu: 1.9)$ (+0.1 σ)
Ω_Λ	0.6898	$0.690^{+0.014}_{-0.015}$ (+0.8 σ)	k_{D}	0.14030	$0.14027^{+0.00087}_{-0.00088}$ (−0.5 σ)	χ_{lowl}^2	22.83	$23.09 (\nu: 0.4)$ (−0.6 σ)
Ω_{m}	0.3102	$0.310^{+0.015}_{-0.014}$ (−0.8 σ)	$100\theta_{\text{D}}$	0.16101	$0.16102^{+0.00051}_{-0.00050}$ (−0.2 σ)	χ_{plik}^2	760.1	$772.2 (\nu: 15.1)$ (+0.1 σ)
$\Omega_{\text{m}} h^2$	0.14185	$0.1418^{+0.0023}_{-0.0023}$ (−0.8 σ)	z_{eq}	3374	3374^{+56}_{-56} (−0.8 σ)	$\chi_{6\text{DF}}^2$	0.022	$0.059 (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	0.09593	$0.09589^{+0.00090}_{-0.00088}$ (+0.0 σ)	k_{eq}	0.010299	$0.01030^{+0.00017}_{-0.00017}$ (−0.8 σ)	χ_{MGS}^2	1.28	$1.35 (\nu: 0.1)$
σ_8	0.8071	$0.807^{+0.016}_{-0.015}$ (−0.5 σ)	$100\theta_{\text{eq}}$	0.8180	$0.818^{+0.010}_{-0.010}$ (+0.8 σ)	χ_{DR12BAO}^2	4.18	$4.8 (\nu: 1.3)$
S_8	0.8207	$0.821^{+0.030}_{-0.028}$ (−0.8 σ)	$100\theta_{\text{s,eq}}$	0.4519	$0.4520^{+0.0053}_{-0.0053}$ (+0.8 σ)	χ_{prior}^2	1.4	$7.4 (\nu: 6.9)$ (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4495	$0.450^{+0.016}_{-0.016}$ (−0.8 σ)	$H(0.15)$	72.89	$72.88^{+0.92}_{-0.91}$ (+0.8 σ)	χ_{BAO}^2	5.49	$6.2 (\nu: 0.9)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6023	$0.602^{+0.016}_{-0.015}$ (−0.7 σ)	$D_M(0.15)$	641.2	$641.3^{+9.1}_{-9.1}$ (−0.8 σ)	χ_{CMB}^2	1178.8	$1192.4 (\nu: 15.4)$ (+0.0 σ)

Best-fit $\chi_{\text{eff}}^2 = 1185.74$; $\bar{\chi}_{\text{eff}}^2 = 1206.02$; $R - 1 = 0.01940$

χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.18 CMB - small_100x143_offlike5_EE_Aplanck_B: 395.89 commander_dx12_v3.2.29: 22.83 plik_rd12_HM_v22.TT: 760.10

2.3 base_plikHM_TT_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022379	$0.02237^{+0.00044}_{-0.00041}$ (+1.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5933	$0.593^{+0.022}_{-0.024}$ (−1.5 σ)	$H(0.15)$	73.62	$73.6^{+1.4}_{-1.4}$ (+1.8 σ)
$\Omega_c h^2$	0.11720	$0.1171^{+0.0037}_{-0.0037}$ (−1.7 σ)	$\sigma_8/h^{0.5}$	0.9695	$0.969^{+0.031}_{-0.032}$ (−1.5 σ)	$D_M(0.15)$	634.0	634^{+14}_{-13} (−1.7 σ)
$100\theta_{MC}$	1.04127	$1.04127^{+0.00091}_{-0.00088}$ (+1.1 σ)	$r_{drag}h$	101.22	$101.3^{+2.8}_{-2.9}$ (+1.8 σ)	$H(0.38)$	83.50	$83.5^{+1.0}_{-1.0}$ (+1.8 σ)
τ	0.0554	$0.056^{+0.016}_{-0.015}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.398	$2.400^{+0.070}_{-0.077}$ (−1.4 σ)	$D_M(0.38)$	1515.0	1515^{+28}_{-27} (−1.8 σ)
$\ln(10^{10} A_s)$	3.0399	$3.041^{+0.036}_{-0.037}$ (+0.0 σ)	z_{re}	7.74	$7.8^{+1.6}_{-1.6}$ (+0.4 σ)	$H(0.51)$	90.09	$90.10^{+0.82}_{-0.82}$ (+1.8 σ)
n_s	0.9719	$0.971^{+0.010}_{-0.010}$ (+1.5 σ)	$10^9 A_s$	2.090	$2.093^{+0.076}_{-0.076}$ (+0.0 σ)	$D_M(0.51)$	1964.6	1964^{+33}_{-32} (−1.8 σ)
y_{cal}	1.0007	$1.0006^{+0.0050}_{-0.0053}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8711	$1.870^{+0.026}_{-0.027}$ (−1.1 σ)	$H(0.61)$	95.61	$95.62^{+0.65}_{-0.67}$ (+1.7 σ)
A_{217}^{CIB}	48.4	48^{+10}_{-10} (−0.0 σ)	D_{40}	1214.7	1217^{+29}_{-29} (−1.1 σ)	$D_M(0.61)$	2287.7	2287^{+35}_{-34} (−1.8 σ)
$\xi^{tSZ \times CIB}$	0.35	—	D_{220}	5729	5732^{+82}_{-85} (+0.5 σ)	$H(2.33)$	234.75	$234.7^{+2.3}_{-2.3}$ (−1.6 σ)
A_{143}^{tSZ}	7.07	$5.2^{+3.8}_{-4.1}$ (+0.0 σ)	D_{810}	2537.4	2535^{+28}_{-28} (−0.1 σ)	$D_M(2.33)$	5751.9	5752^{+30}_{-30} (−1.6 σ)
A_{100}^{PS}	253	262^{+60}_{-60} (−0.1 σ)	D_{1420}	818.1	$816.9^{+9.5}_{-9.9}$ (+0.5 σ)	$f\sigma_8(0.15)$	0.4442	$0.444^{+0.022}_{-0.024}$ (−1.6 σ)
A_{143}^{PS}	48.0	47^{+20}_{-20} (−0.2 σ)	D_{2000}	231.01	$230.6^{+3.2}_{-3.5}$ (+0.6 σ)	$\sigma_8(0.15)$	0.7426	$0.742^{+0.016}_{-0.016}$ (−0.9 σ)
$A_{143 \times 217}^{PS}$	46.4	43^{+20}_{-20} (−0.1 σ)	$n_{s,0.002}$	0.9719	$0.971^{+0.010}_{-0.010}$ (+1.5 σ)	$f\sigma_8(0.38)$	0.4652	$0.465^{+0.018}_{-0.020}$ (−1.6 σ)
A_{217}^{PS}	118.6	114^{+20}_{-20} (−0.1 σ)	Y_P	0.245399	$0.24539^{+0.00017}_{-0.00017}$ (+1.1 σ)	$\sigma_8(0.38)$	0.6596	$0.659^{+0.013}_{-0.014}$ (−0.6 σ)
A^{kSZ}	0.01	< 8.25 (−0.1 σ)	Y_P^{BBN}	0.246725	$0.24672^{+0.00017}_{-0.00017}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4652	$0.465^{+0.016}_{-0.018}$ (−1.5 σ)
A_{100}^{dustTT}	8.96	$9.1^{+3.3}_{-3.6}$ (+0.1 σ)	$10^5 D/H$	2.584	$2.586^{+0.078}_{-0.080}$ (−1.1 σ)	$\sigma_8(0.51)$	0.6178	$0.618^{+0.012}_{-0.012}$ (−0.4 σ)
A_{143}^{dustTT}	10.84	$10.7^{+3.5}_{-3.7}$ (−0.0 σ)	Age/Gyr	13.774	$13.774^{+0.067}_{-0.064}$ (−1.5 σ)	$f\sigma_8(0.61)$	0.4613	$0.461^{+0.014}_{-0.015}$ (−1.5 σ)
$A_{143 \times 217}^{dustTT}$	19.4	$18.1^{+6.8}_{-6.1}$ (−0.1 σ)	z_*	1089.66	$1089.67^{+0.73}_{-0.76}$ (−1.6 σ)	$\sigma_8(0.61)$	0.5882	$0.588^{+0.011}_{-0.012}$ (−0.3 σ)
A_{217}^{dustTT}	94.7	93^{+10}_{-10} (−0.0 σ)	r_*	145.15	$145.18^{+0.93}_{-0.87}$ (+1.5 σ)	$f\sigma_8(2.33)$	0.2971	$0.2971^{+0.0056}_{-0.0055}$ (+0.0 σ)
c_{100}	0.99967	$0.9996^{+0.0013}_{-0.0012}$ (+0.0 σ)	$100\theta_*$	1.04146	$1.04146^{+0.00090}_{-0.00087}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3069	$0.3069^{+0.0057}_{-0.0056}$ (+0.4 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0011}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.938	$13.940^{+0.085}_{-0.080}$ (+1.4 σ)	f_{2000}^{143}	29.5	30^{+6}_{-6} (−0.3 σ)
H_0	68.47	$68.5^{+1.6}_{-1.7}$ (+1.8 σ)	z_{drag}	1059.74	$1059.73^{+0.92}_{-0.95}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	32.53	33^{+4}_{-4} (−0.4 σ)
Ω_Λ	0.7009	$0.701^{+0.021}_{-0.022}$ (+1.7 σ)	r_{drag}	147.83	$147.86^{+0.85}_{-0.89}$ (+1.4 σ)	f_{2000}^{217}	107.06	$107.4^{+3.9}_{-3.7}$ (−0.4 σ)
Ω_m	0.2991	$0.299^{+0.022}_{-0.021}$ (−1.7 σ)	k_D	0.14010	$0.1401^{+0.0010}_{-0.0011}$ (−0.9 σ)	χ_{simall}^2	396.07	397.3 (ν : 2.1) (+0.2 σ)
$\Omega_m h^2$	0.14022	$0.1401^{+0.0035}_{-0.0034}$ (−1.6 σ)	$100\theta_D$	0.16089	$0.16091^{+0.00051}_{-0.00054}$ (−0.6 σ)	χ_{lowl}^2	22.09	22.35 (ν : 0.5) (−1.2 σ)
$\Omega_m h^3$	0.09602	$0.09599^{+0.00093}_{-0.00096}$ (+0.2 σ)	z_{eq}	3335	3333^{+84}_{-80} (−1.6 σ)	χ_{plik}^2	763.0	775.9 (ν : 23.6) (+0.8 σ)
σ_8	0.8023	$0.802^{+0.019}_{-0.019}$ (−1.1 σ)	k_{eq}	0.010180	$0.01017^{+0.00026}_{-0.00024}$ (−1.6 σ)	$\chi_{H073p45}^2$	9.0	9.1 (ν : 4.7)
S_8	0.8010	$0.800^{+0.042}_{-0.047}$ (−1.6 σ)	$100\theta_{eq}$	0.8257	$0.826^{+0.016}_{-0.016}$ (+1.7 σ)	χ_{prior}^2	1.4	7.4 (ν : 7.1) (+0.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4387	$0.438^{+0.023}_{-0.026}$ (−1.6 σ)	$100\theta_{s,eq}$	0.4559	$0.4561^{+0.0083}_{-0.0083}$ (+1.7 σ)	χ_{CMB}^2	1181.2	1195.6 (ν : 21.1) (+0.6 σ)

Best-fit $\chi_{eff}^2 = 1191.57$; $\bar{\chi}_{eff}^2 = 1212.08$; $R - 1 = 0.09494$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.07 commander_dx12_v3.2_29: 22.09 plik_rd12_HM_v22_TT: 763.02 Hubble - H073p45: 8.98

2.4 base_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02212^{+0.00044}_{-0.00043} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.612^{+0.023}_{-0.022} \quad (+0.0\sigma)$	$H(0.15)$	$72.3^{+1.6}_{-1.5} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1206^{+0.0041}_{-0.0041} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$D_M(0.15)$	$647^{+16}_{-16} \quad (-0.0\sigma)$
$100\theta_{MC}$	$1.04077^{+0.00093}_{-0.00091} \quad (+0.0\sigma)$	$r_{drag} h$	$98.5^{+3.2}_{-3.1} \quad (+0.0\sigma)$	$H(0.38)$	$82.5^{+1.1}_{-1.1} \quad (+0.0\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.457^{+0.073}_{-0.072} \quad (+0.1\sigma)$	$D_M(0.38)$	$1542^{+31}_{-31} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.028}_{-0.026} \quad (+0.2\sigma)$	z_{re}	$< 8.86 \quad (+0.2\sigma)$	$H(0.51)$	$89.34^{+0.90}_{-0.83} \quad (+0.0\sigma)$
n_s	$0.963^{+0.011}_{-0.011} \quad (+0.0\sigma)$	$10^9 A_s$	$2.098^{+0.060}_{-0.055} \quad (+0.2\sigma)$	$D_M(0.51)$	$1996^{+36}_{-37} \quad (-0.0\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.884^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$H(0.61)$	$95.02^{+0.72}_{-0.67} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1234^{+30}_{-30} \quad (-0.0\sigma)$	$D_M(0.61)$	$2321^{+39}_{-39} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5713^{+83}_{-82} \quad (+0.0\sigma)$	$H(2.33)$	$236.7^{+2.5}_{-2.5} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.0\sigma)$	$D_M(2.33)$	$5777^{+32}_{-33} \quad (-0.0\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$814^{+10}_{-9.9} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.023} \quad (+0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.6^{+3.6}_{-3.4} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.014}_{-0.013} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.963^{+0.011}_{-0.011} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.019}_{-0.019} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.24529^{+0.00019}_{-0.00020} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.45 \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24661^{+0.00019}_{-0.00020} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	$10^5 D/H$	$2.633^{+0.083}_{-0.081} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0090} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.829^{+0.072}_{-0.073} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.014}_{-0.014} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	z_*	$1090.29^{+0.79}_{-0.80} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0095}_{-0.0082} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.48^{+0.93}_{-0.94} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0044}_{-0.0041} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.04098^{+0.00092}_{-0.00090} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0046}_{-0.0042} \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.879^{+0.086}_{-0.086} \quad (+0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$66.9^{+1.8}_{-1.8} \quad (+0.0\sigma)$	z_{drag}	$1059.40^{+0.91}_{-0.92} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.0\sigma)$
Ω_Λ	$0.680^{+0.025}_{-0.026} \quad (+0.0\sigma)$	r_{drag}	$147.22^{+0.94}_{-0.95} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.1^{+3.8}_{-3.8} \quad (-0.0\sigma)$
Ω_m	$0.320^{+0.026}_{-0.025} \quad (-0.0\sigma)$	k_D	$0.1405^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	χ_{simall}^2	$396.9 \quad (\nu: 1.5) \quad (-0.1\sigma)$
$\Omega_m h^2$	$0.1433^{+0.0039}_{-0.0039} \quad (-0.0\sigma)$	$100\theta_D$	$0.16107^{+0.00053}_{-0.00053} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 0.8) \quad (+0.0\sigma)$
$\Omega_m h^3$	$0.09589^{+0.00091}_{-0.00090} \quad (+0.0\sigma)$	z_{eq}	$3410^{+94}_{-92} \quad (-0.0\sigma)$	χ_{plik}^2	$771.3 \quad (\nu: 14.7) \quad (-0.0\sigma)$
σ_8	$0.813^{+0.017}_{-0.016} \quad (+0.1\sigma)$	k_{eq}	$0.01041^{+0.00029}_{-0.00028} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
S_8	$0.840^{+0.048}_{-0.046} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.811^{+0.018}_{-0.017} \quad (+0.0\sigma)$	χ_{CMB}^2	$1192.0 \quad (\nu: 14.8) \quad (-0.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.460^{+0.026}_{-0.025} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4485^{+0.0090}_{-0.0089} \quad (+0.0\sigma)$		

$\bar{\chi}_{eff}^2 = 1199.32; R - 1 = 0.00921$

2.5 base_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02222^{+0.00038}_{-0.00039} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.022}_{-0.021} \quad (-0.6\sigma)$	$H(0.38)$	$82.97^{+0.71}_{-0.68} \quad (+0.8\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.8}_{-1.8} \quad (+0.8\sigma)$	$D_M(0.38)$	$1530^{+18}_{-18} \quad (-0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04099^{+0.00083}_{-0.00082} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.053}_{-0.051} \quad (-0.6\sigma)$	$H(0.51)$	$89.66^{+0.59}_{-0.56} \quad (+0.8\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 9.04 \quad (+0.3\sigma)$	$D_M(0.51)$	$1982^{+22}_{-22} \quad (-0.8\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.030}_{-0.027} \quad (+0.1\sigma)$	$10^9 A_s$	$2.097^{+0.064}_{-0.057} \quad (+0.1\sigma)$	$H(0.61)$	$95.27^{+0.50}_{-0.48} \quad (+0.7\sigma)$
n_s	$0.9665^{+0.0084}_{-0.0083} \quad (+0.7\sigma)$	$10^9 A_s e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$D_M(0.61)$	$2306^{+23}_{-24} \quad (-0.8\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0051} \quad (+0.1\sigma)$	D_{40}	$1226^{+26}_{-25} \quad (-0.5\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (-0.8\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{220}	$5721^{+79}_{-81} \quad (+0.2\sigma)$	$D_M(2.33)$	$5767^{+24}_{-25} \quad (-0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	$2536^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.015}_{-0.014} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.3\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.0\sigma)$	D_{2000}	$230.0^{+3.5}_{-3.6} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9665^{+0.0084}_{-0.0083} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.010} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.010}_{-0.0092} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.615^{+0.075}_{-0.071} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.0097} \quad (-0.6\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.806^{+0.056}_{-0.056} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.5898^{+0.0096}_{-0.0087} \quad (-0.0\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	z_*	$1090.02^{+0.60}_{-0.58} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0048}_{-0.0043} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.6}_{-6.5} \quad (-0.0\sigma)$	r_*	$144.82^{+0.63}_{-0.61} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0050}_{-0.0045} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.04119^{+0.00082}_{-0.00081} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.909^{+0.062}_{-0.060} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.51^{+0.84}_{-0.87} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.9^{+3.9}_{-3.7} \quad (-0.2\sigma)$
H_0	$67.6^{+1.1}_{-1.1} \quad (+0.8\sigma)$	r_{drag}	$147.54^{+0.68}_{-0.67} \quad (+0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.1\sigma)$
Ω_Λ	$0.690^{+0.014}_{-0.014} \quad (+0.8\sigma)$	k_{D}	$0.14028^{+0.00087}_{-0.00088} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.11 \quad (\nu: 0.4) \quad (-0.6\sigma)$
Ω_{m}	$0.310^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$100\theta_{\text{D}}$	$0.16101^{+0.00051}_{-0.00050} \quad (-0.2\sigma)$	χ_{plik}^2	$772.0 \quad (\nu: 14.8) \quad (+0.1\sigma)$
$\Omega_{\text{m}} h^2$	$0.1418^{+0.0023}_{-0.0023} \quad (-0.8\sigma)$	z_{eq}	$3373^{+56}_{-56} \quad (-0.8\sigma)$	$\chi_{6\text{DF}}^2$	$0.058 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09589^{+0.00090}_{-0.00089} \quad (+0.0\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.36 \quad (\nu: 0.1)$
σ_8	$0.808^{+0.015}_{-0.013} \quad (-0.4\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	χ_{DR12BAO}^2	$4.8 \quad (\nu: 1.3)$
S_8	$0.822^{+0.029}_{-0.028} \quad (-0.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4520^{+0.0053}_{-0.0053} \quad (+0.8\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.016}_{-0.015} \quad (-0.7\sigma)$	$H(0.15)$	$72.89^{+0.93}_{-0.91} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.603^{+0.015}_{-0.015} \quad (-0.7\sigma)$	$D_M(0.15)$	$641.2^{+9.1}_{-9.1} \quad (-0.8\sigma)$	χ_{CMB}^2	$1192.2 \quad (\nu: 15.0) \quad (-0.0\sigma)$
$\bar{\chi}_{\text{eff}}^2 = 1205.76; R - 1 = 0.02069$					

2.6 base_plikHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00044}_{-0.00041} \quad (+1.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.022}_{-0.022} \quad (-1.5\sigma)$	$H(0.15)$	$73.6^{+1.4}_{-1.4} \quad (+1.8\sigma)$
$\Omega_c h^2$	$0.1171^{+0.0036}_{-0.0034} \quad (-1.7\sigma)$	$\sigma_8/h^{0.5}$	$0.970^{+0.029}_{-0.032} \quad (-1.4\sigma)$	$D_M(0.15)$	$634^{+14}_{-13} \quad (-1.7\sigma)$
$100\theta_{MC}$	$1.04127^{+0.00089}_{-0.00088} \quad (+1.1\sigma)$	$r_{drag} h$	$101.3^{+2.9}_{-2.9} \quad (+1.8\sigma)$	$H(0.38)$	$83.5^{+1.0}_{-1.0} \quad (+1.8\sigma)$
τ	$0.057^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.403^{+0.069}_{-0.065} \quad (-1.4\sigma)$	$D_M(0.38)$	$1515^{+28}_{-27} \quad (-1.8\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.034}_{-0.030} \quad (+0.2\sigma)$	z_{re}	$< 9.16 \quad (+0.5\sigma)$	$H(0.51)$	$90.10^{+0.82}_{-0.81} \quad (+1.8\sigma)$
n_s	$0.971^{+0.010}_{-0.010} \quad (+1.5\sigma)$	$10^9 A_s$	$2.097^{+0.072}_{-0.061} \quad (+0.2\sigma)$	$D_M(0.51)$	$1964^{+32}_{-32} \quad (-1.8\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0054} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.870^{+0.026}_{-0.027} \quad (-1.1\sigma)$	$H(0.61)$	$95.62^{+0.65}_{-0.66} \quad (+1.7\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1217^{+29}_{-29} \quad (-1.1\sigma)$	$D_M(0.61)$	$2287^{+35}_{-34} \quad (-1.8\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5732^{+82}_{-85} \quad (+0.5\sigma)$	$H(2.33)$	$234.7^{+2.2}_{-2.4} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.1} \quad (+0.0\sigma)$	D_{810}	$2535^{+28}_{-29} \quad (-0.1\sigma)$	$D_M(2.33)$	$5752^{+30}_{-29} \quad (-1.6\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.1\sigma)$	D_{1420}	$816.9^{+9.6}_{-10} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.021}_{-0.024} \quad (-1.6\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.3\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.5} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.015}_{-0.014} \quad (-0.8\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.971^{+0.010}_{-0.010} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.018}_{-0.018} \quad (-1.5\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	Y_P	$0.24539^{+0.00017}_{-0.00017} \quad (+1.1\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.013}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	$< 8.25 \quad (-0.1\sigma)$	Y_P^{BBN}	$0.24672^{+0.00017}_{-0.00017} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.015}_{-0.017} \quad (-1.5\sigma)$
A_{100}^{dustTT}	$9.1^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$10^5 D/H$	$2.586^{+0.078}_{-0.080} \quad (-1.2\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.012}_{-0.0097} \quad (-0.3\sigma)$
A_{143}^{dustTT}	$10.6^{+3.5}_{-3.7} \quad (-0.0\sigma)$	Age/Gyr	$13.774^{+0.067}_{-0.064} \quad (-1.5\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.014}_{-0.015} \quad (-1.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.1^{+6.4}_{-6.4} \quad (-0.1\sigma)$	z_*	$1089.66^{+0.72}_{-0.76} \quad (-1.6\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.011}_{-0.0091} \quad (-0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	r_*	$145.18^{+0.93}_{-0.86} \quad (+1.5\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0053}_{-0.0044} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0013}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.04145^{+0.00088}_{-0.00086} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0051}_{-0.0048} \quad (+0.5\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0011} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.940^{+0.085}_{-0.079} \quad (+1.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
H_0	$68.5^{+1.6}_{-1.6} \quad (+1.8\sigma)$	z_{drag}	$1059.74^{+0.92}_{-0.95} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
Ω_Λ	$0.701^{+0.020}_{-0.022} \quad (+1.7\sigma)$	r_{drag}	$147.85^{+0.86}_{-0.88} \quad (+1.3\sigma)$	f_{2000}^{217}	$107.4^{+3.9}_{-3.6} \quad (-0.4\sigma)$
Ω_m	$0.299^{+0.022}_{-0.020} \quad (-1.7\sigma)$	k_D	$0.1401^{+0.0010}_{-0.0011} \quad (-0.9\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.2) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1401^{+0.0035}_{-0.0034} \quad (-1.6\sigma)$	$100\theta_D$	$0.16090^{+0.00052}_{-0.00053} \quad (-0.6\sigma)$	χ_{lowl}^2	$22.37 \quad (\nu: 0.5) \quad (-1.2\sigma)$
$\Omega_m h^3$	$0.09599^{+0.00094}_{-0.00097} \quad (+0.2\sigma)$	z_{eq}	$3334^{+83}_{-82} \quad (-1.6\sigma)$	χ_{plik}^2	$775.6 \quad (\nu: 22.3) \quad (+0.8\sigma)$
σ_8	$0.803^{+0.018}_{-0.016} \quad (-1.0\sigma)$	k_{eq}	$0.01017^{+0.00025}_{-0.00025} \quad (-1.6\sigma)$	$\chi_{H073p45}^2$	$9.1 \quad (\nu: 4.5)$
S_8	$0.801^{+0.042}_{-0.045} \quad (-1.6\sigma)$	$100\theta_{eq}$	$0.826^{+0.016}_{-0.016} \quad (+1.7\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 7.0) \quad (+0.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.023}_{-0.025} \quad (-1.6\sigma)$	$100\theta_{s,eq}$	$0.4561^{+0.0083}_{-0.0082} \quad (+1.7\sigma)$	χ_{CMB}^2	$1195.3 \quad (\nu: 20.0) \quad (+0.5\sigma)$

$$\bar{\chi}_{eff}^2 = 1211.81; R - 1 = 0.08503$$

2.7 base_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022377	$0.02236^{+0.00029}_{-0.00029}$ (+1.1 σ)	$\Omega_{\text{m}}h^3$	0.09636	$0.09633^{+0.00058}_{-0.00057}$ (+1.0 σ)	$100\theta_{\text{eq}}$	0.8128	$0.812^{+0.011}_{-0.011}$ (+0.2 σ)
$\Omega_{\text{c}}h^2$	0.12010	$0.1202^{+0.0027}_{-0.0027}$ (−0.2 σ)	σ_8	0.8120	$0.812^{+0.015}_{-0.014}$ (+0.0 σ)	$100\theta_{\text{s,eq}}$	0.4491	$0.4490^{+0.0058}_{-0.0057}$ (+0.1 σ)
$100\theta_{\text{MC}}$	1.04092	$1.04090^{+0.00059}_{-0.00062}$ (+0.3 σ)	S_8	0.8331	$0.834^{+0.032}_{-0.030}$ (−0.2 σ)	$H(0.15)$	72.65	$72.6^{+1.0}_{-1.0}$ (+0.5 σ)
τ	0.0543	$0.054^{+0.017}_{-0.015}$ (+0.3 σ)	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4563	$0.457^{+0.017}_{-0.017}$ (−0.2 σ)	$D_{\text{M}}(0.15)$	643.7	644^{+10}_{-10} (−0.4 σ)
$\ln(10^{10}A_{\text{s}})$	3.0447	$3.045^{+0.032}_{-0.030}$ (+0.3 σ)	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6087	$0.609^{+0.016}_{-0.015}$ (−0.2 σ)	$H(0.38)$	82.85	$82.82^{+0.74}_{-0.73}$ (+0.5 σ)
n_{s}	0.9659	$0.9649^{+0.0085}_{-0.0087}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9896	$0.990^{+0.023}_{-0.022}$ (−0.2 σ)	$D_{\text{M}}(0.38)$	1534.0	1535^{+20}_{-20} (−0.5 σ)
y_{cal}	1.00061	$1.0005^{+0.0049}_{-0.0050}$ (+0.0 σ)	$r_{\text{drag}}h$	99.00	$98.9^{+2.1}_{-2.0}$ (+0.3 σ)	$H(0.51)$	89.61	$89.59^{+0.59}_{-0.57}$ (+0.6 σ)
A_{217}^{CIB}	47.2	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.445	$2.448^{+0.055}_{-0.053}$ (−0.2 σ)	$D_{\text{M}}(0.51)$	1986.5	1988^{+24}_{-24} (−0.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.42	—	z_{re}	7.68	$7.7^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	95.270	$95.25^{+0.47}_{-0.45}$ (+0.7 σ)
A_{143}^{tSZ}	7.23	$5.5^{+3.6}_{-3.9}$ (+0.2 σ)	$10^9 A_{\text{s}}$	2.100	$2.101^{+0.068}_{-0.063}$ (+0.3 σ)	$D_{\text{M}}(0.61)$	2311.1	2312^{+26}_{-26} (−0.5 σ)
A_{100}^{PS}	251	258^{+50}_{-50} (−0.2 σ)	$10^9 A_{\text{s}}e^{-2\tau}$	1.8843	$1.884^{+0.023}_{-0.023}$ (−0.0 σ)	$H(2.33)$	236.64	$236.7^{+1.6}_{-1.6}$ (−0.0 σ)
A_{143}^{PS}	47.4	46^{+20}_{-20} (−0.4 σ)	D_{40}	1229.3	1232^{+25}_{-24} (−0.1 σ)	$D_{\text{M}}(2.33)$	5763.6	5765^{+21}_{-21} (−0.8 σ)
$A_{143 \times 217}^{\text{PS}}$	47.3	42^{+20}_{-20} (−0.1 σ)	D_{220}	5730	5731^{+76}_{-76} (+0.4 σ)	$f\sigma_8(0.15)$	0.4605	$0.461^{+0.016}_{-0.015}$ (−0.2 σ)
A_{217}^{PS}	119.8	115^{+20}_{-20} (+0.0 σ)	D_{810}	2541.1	2539^{+26}_{-27} (+0.2 σ)	$\sigma_8(0.15)$	0.7499	$0.750^{+0.013}_{-0.012}$ (+0.1 σ)
A^{kSZ}	0.01	< 8.02 (−0.2 σ)	D_{1420}	818.3	$817.2^{+9.5}_{-9.7}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4779	$0.478^{+0.013}_{-0.013}$ (−0.2 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	231.26	$230.9^{+3.1}_{-3.2}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6642	$0.664^{+0.011}_{-0.010}$ (+0.2 σ)
A_{143}^{dustTT}	11.10	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9659	$0.9649^{+0.0085}_{-0.0087}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4760	$0.476^{+0.011}_{-0.011}$ (−0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	Y_{P}	0.245398	$0.24539^{+0.00011}_{-0.00012}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6214	$0.621^{+0.010}_{-0.0096}$ (+0.2 σ)
A_{217}^{dustTT}	95.1	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246725	$0.24672^{+0.00011}_{-0.00012}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4707	$0.471^{+0.010}_{-0.010}$ (−0.1 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.076}_{-0.076}$	10^5D/H	2.584	$2.588^{+0.055}_{-0.053}$ (−1.1 σ)	$\sigma_8(0.61)$	0.5912	$0.5910^{+0.0097}_{-0.0091}$ (+0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.059}$	Age/Gyr	13.7973	$13.800^{+0.047}_{-0.047}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.29790	$0.2978^{+0.0049}_{-0.0046}$ (+0.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.92	$1089.95^{+0.55}_{-0.53}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3069	$0.3068^{+0.0053}_{-0.0049}$ (+0.4 σ)
A_{143}^{dustTE}	0.224	$0.23^{+0.10}_{-0.10}$	r_*	144.40	$144.39^{+0.58}_{-0.58}$ (−0.2 σ)	f_{2000}^{143}	28.9	29^{+5}_{-5} (−0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	1.04110	$1.04109^{+0.00059}_{-0.00061}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	32.04	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dustTE}	2.08	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.870	$13.869^{+0.054}_{-0.055}$ (−0.2 σ)	f_{2000}^{217}	106.69	$107.0^{+3.5}_{-3.4}$ (−0.6 σ)
c_{100}	0.99969	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.97	$1059.93^{+0.58}_{-0.60}$ (+1.2 σ)	χ_{simall}^2	396.05	397.1 (ν : 2.0) (+0.1 σ)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.06	$147.05^{+0.57}_{-0.58}$ (−0.3 σ)	χ_{lowl}^2	23.26	23.55 (ν : 0.5) (−0.3 σ)
H_0	67.32	$67.3^{+1.2}_{-1.2}$ (+0.4 σ)	k_{D}	0.14091	$0.14090^{+0.00062}_{-0.00060}$ (+0.7 σ)	χ_{plik}^2	2344.6	2359.5 (ν : 16.6) (+291.4 σ)
Ω_{Λ}	0.6842	$0.683^{+0.016}_{-0.017}$ (+0.3 σ)	$100\theta_{\text{D}}$	0.160744	$0.16077^{+0.00034}_{-0.00034}$ (−1.2 σ)	χ_{prior}^2	1.8	11.6 (ν : 10.3) (+1.2 σ)
Ω_{m}	0.3158	$0.317^{+0.017}_{-0.016}$ (−0.3 σ)	z_{eq}	3405	3407^{+60}_{-60} (−0.1 σ)	χ_{CMB}^2	2764.0	2780.2 (ν : 16.6) (+289.2 σ)
$\Omega_{\text{m}}h^2$	0.14313	$0.1432^{+0.0025}_{-0.0025}$ (−0.1 σ)	k_{eq}	0.010392	$0.01040^{+0.00018}_{-0.00018}$ (−0.1 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2765.77$; $\bar{\chi}_{\text{eff}}^2 = 2791.77$; $R - 1 = 0.01231$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.05 commander_dx12_v3.2_29: 23.26 plik_rd12_HM_v22b_TTTEEE: 2344.65

2.8 base_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022432	$0.02242^{+0.00026}_{-0.00026}$ (+1.4 σ)	σ_8	0.8098	$0.810^{+0.015}_{-0.013}$ (−0.2 σ)	$H(0.15)$	72.97	$72.94^{+0.76}_{-0.74}$ (+0.9 σ)
$\Omega_c h^2$	0.11926	$0.1193^{+0.0020}_{-0.0020}$ (−0.6 σ)	S_8	0.8240	$0.825^{+0.025}_{-0.024}$ (−0.6 σ)	$D_M(0.15)$	640.5	$640.8^{+7.5}_{-7.4}$ (−0.9 σ)
$100\theta_{MC}$	1.04100	$1.04101^{+0.00054}_{-0.00057}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4513	$0.452^{+0.014}_{-0.013}$ (−0.6 σ)	$H(0.38)$	83.07	$83.05^{+0.56}_{-0.55}$ (+1.0 σ)
τ	0.0553	$0.056^{+0.017}_{-0.015}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6046	$0.605^{+0.014}_{-0.013}$ (−0.5 σ)	$D_M(0.38)$	1527.8	1528^{+15}_{-15} (−0.9 σ)
$\ln(10^{10} A_s)$	3.0452	$3.046^{+0.034}_{-0.030}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9843	$0.985^{+0.020}_{-0.019}$ (−0.5 σ)	$H(0.51)$	89.785	$89.77^{+0.44}_{-0.44}$ (+1.0 σ)
n_s	0.9680	$0.9670^{+0.0074}_{-0.0074}$ (+0.8 σ)	$r_{drag} h$	99.66	$99.6^{+1.5}_{-1.5}$ (+0.7 σ)	$D_M(0.51)$	1979.2	1980^{+17}_{-18} (−0.9 σ)
y_{cal}	1.00071	$1.0006^{+0.0049}_{-0.0049}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4326	$2.436^{+0.048}_{-0.047}$ (−0.5 σ)	$H(0.61)$	95.401	$95.39^{+0.36}_{-0.36}$ (+1.1 σ)
A_{217}^{CIB}	46.7	47^{+10}_{-10} (−0.2 σ)	z_{re}	7.76	$7.8^{+1.6}_{-1.5}$ (+0.4 σ)	$D_M(0.61)$	2303.2	2304^{+19}_{-19} (−0.9 σ)
$\xi^{tSZ \times CIB}$	0.54	—	$10^9 A_s$	2.101	$2.103^{+0.071}_{-0.062}$ (+0.3 σ)	$H(2.33)$	236.14	$236.2^{+1.2}_{-1.2}$ (−0.4 σ)
A_{143}^{tSZ}	7.12	$5.5^{+3.6}_{-3.9}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8813	$1.880^{+0.021}_{-0.021}$ (−0.3 σ)	$D_M(2.33)$	5758.2	5759^{+17}_{-17} (−1.2 σ)
A_{100}^{PS}	249	258^{+50}_{-60} (−0.2 σ)	D_{40}	1225.2	1227^{+23}_{-21} (−0.4 σ)	$f\sigma_8(0.15)$	0.4560	$0.456^{+0.013}_{-0.012}$ (−0.6 σ)
A_{143}^{PS}	48.6	45^{+20}_{-20} (−0.5 σ)	D_{220}	5735	5735^{+74}_{-73} (+0.5 σ)	$\sigma_8(0.15)$	0.7484	$0.748^{+0.013}_{-0.012}$ (−0.1 σ)
$A_{143 \times 217}^{PS}$	49.8	42^{+20}_{-20} (−0.2 σ)	D_{810}	2541.5	2539^{+26}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4745	$0.475^{+0.011}_{-0.011}$ (−0.5 σ)
A_{217}^{PS}	120.4	115^{+20}_{-20} (−0.0 σ)	D_{1420}	819.1	$817.8^{+9.6}_{-9.3}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6635	$0.664^{+0.011}_{-0.010}$ (+0.1 σ)
A^{kSZ}	0.00	< 8.03 (−0.2 σ)	D_{2000}	231.58	$231.1^{+3.1}_{-3.1}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4732	$0.473^{+0.010}_{-0.0096}$ (−0.5 σ)
A_{100}^{dustTT}	8.89	$8.9^{+3.7}_{-3.5}$ (−0.0 σ)	$n_{s,0.002}$	0.9680	$0.9670^{+0.0074}_{-0.0074}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6210	$0.621^{+0.011}_{-0.0096}$ (+0.1 σ)
A_{143}^{dustTT}	11.01	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P	0.245420	$0.245413^{+0.000095}_{-0.00010}$ (+1.3 σ)	$f\sigma_8(0.61)$	0.4683	$0.4685^{+0.0095}_{-0.0090}$ (−0.4 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.3}_{-6.3}$ (+0.1 σ)	Y_P^{BBN}	0.246746	$0.246739^{+0.000095}_{-0.00011}$ (+1.3 σ)	$\sigma_8(0.61)$	0.5909	$0.591^{+0.010}_{-0.0091}$ (+0.2 σ)
A_{217}^{dustTT}	95.2	94^{+10}_{-10} (+0.1 σ)	$10^5 D/H$	2.5740	$2.577^{+0.049}_{-0.046}$ (−1.4 σ)	$f\sigma_8(2.33)$	0.29796	$0.2979^{+0.0051}_{-0.0046}$ (+0.3 σ)
A_{100}^{dustTE}	0.114	$0.113^{+0.075}_{-0.075}$	Age/Gyr	13.7857	$13.787^{+0.039}_{-0.039}$ (−1.2 σ)	$\sigma_8(2.33)$	0.3072	$0.3072^{+0.0053}_{-0.0048}$ (+0.5 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.057}_{-0.059}$	z_*	1089.776	$1089.80^{+0.44}_{-0.41}$ (−1.2 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (−0.7 σ)
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.17}_{-0.17}$	r_*	144.576	$144.57^{+0.44}_{-0.46}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	31.78	32^{+4}_{-4} (−0.8 σ)
A_{143}^{dustTE}	0.225	$0.23^{+0.10}_{-0.11}$	$100\theta_*$	1.04118	$1.04119^{+0.00055}_{-0.00056}$ (+0.5 σ)	f_{2000}^{217}	106.39	$106.8^{+3.5}_{-3.3}$ (−0.7 σ)
$A_{143 \times 217}^{dustTE}$	0.666	$0.67^{+0.15}_{-0.15}$	$D_M(z_*)/\text{Gpc}$	13.8858	$13.885^{+0.042}_{-0.044}$ (+0.2 σ)	χ_{small}^2	396.20	$397.3 (\nu: 2.4)$ (+0.2 σ)
A_{217}^{dustTE}	2.08	$2.09^{+0.51}_{-0.52}$	z_{drag}	1060.01	$1060.00^{+0.54}_{-0.56}$ (+1.3 σ)	χ_{lowl}^2	22.87	$23.13 (\nu: 0.3)$ (−0.6 σ)
c_{100}	0.99971	$0.9997^{+0.0013}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.221	$147.22^{+0.45}_{-0.48}$ (+0.0 σ)	χ_{plik}^2	2345.5	$2359.6 (\nu: 17.0)$ (+291.4 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_D	0.14078	$0.14077^{+0.00058}_{-0.00055}$ (+0.4 σ)	χ_{6DF}^2	0.029	$0.057 (\nu: 0.0)$
H_0	67.69	$67.67^{+0.87}_{-0.87}$ (+0.9 σ)	$100\theta_D$	0.160709	$0.16073^{+0.00033}_{-0.00032}$ (−1.3 σ)	χ_{MGS}^2	1.22	$1.25 (\nu: 0.1)$
Ω_Λ	0.6894	$0.689^{+0.011}_{-0.012}$ (+0.8 σ)	z_{eq}	3385.9	3387^{+45}_{-44} (−0.5 σ)	$\chi_{DR12BAO}^2$	4.41	$4.9 (\nu: 1.0)$
Ω_m	0.3106	$0.311^{+0.012}_{-0.011}$ (−0.8 σ)	k_{eq}	0.010334	$0.01034^{+0.00014}_{-0.00013}$ (−0.5 σ)	χ_{prior}^2	1.7	$11.6 (\nu: 10.4)$ (+1.2 σ)
$\Omega_m h^2$	0.14233	$0.1424^{+0.0019}_{-0.0018}$ (−0.5 σ)	$100\theta_{eq}$	0.8165	$0.8162^{+0.0084}_{-0.0083}$ (+0.6 σ)	χ_{BAO}^2	5.66	$6.2 (\nu: 0.7)$
$\Omega_m h^3$	0.09635	$0.09634^{+0.00058}_{-0.00056}$ (+1.0 σ)	$100\theta_{s,eq}$	0.45098	$0.4509^{+0.0043}_{-0.0043}$ (+0.6 σ)	χ_{CMB}^2	2764.6	$2780.1 (\nu: 16.4)$ (+289.2 σ)

Best-fit $\chi_{\text{eff}}^2 = 2771.92$; $\bar{\chi}_{\text{eff}}^2 = 2797.91$; $R - 1 = 0.01929$
 χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.41 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.20 commander_dx12_v3_2_29: 22.87 plik_rd12_HM_v22b_TTTEEE: 2345.51

2.9 base_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022507	$0.02249^{+0.00026}_{-0.00028}$ (+1.7 σ)	$\Omega_m h^3$	0.09642	$0.09638^{+0.00056}_{-0.00056}$ (+1.1 σ)	$100\theta_{\text{eq}}$	0.8195	$0.819^{+0.011}_{-0.011}$ (+0.9 σ)
$\Omega_c h^2$	0.11853	$0.1186^{+0.0025}_{-0.0025}$ (−1.0 σ)	σ_8	0.8085	$0.808^{+0.015}_{-0.015}$ (−0.4 σ)	$100\theta_{\text{s,eq}}$	0.4525	$0.4524^{+0.0057}_{-0.0055}$ (+0.9 σ)
$100\theta_{\text{MC}}$	1.04111	$1.04109^{+0.00057}_{-0.00059}$ (+0.7 σ)	S_8	0.8165	$0.817^{+0.030}_{-0.030}$ (−0.9 σ)	$H(0.15)$	73.28	$73.23^{+0.97}_{-0.95}$ (+1.2 σ)
τ	0.0570	$0.057^{+0.017}_{-0.015}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4472	$0.448^{+0.016}_{-0.017}$ (−0.9 σ)	$D_{\text{M}}(0.15)$	637.5	$638.0^{+9.4}_{-9.3}$ (−1.2 σ)
$\ln(10^{10} A_{\text{s}})$	3.0469	$3.047^{+0.035}_{-0.031}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6013	$0.602^{+0.015}_{-0.016}$ (−0.8 σ)	$H(0.38)$	83.30	$83.26^{+0.71}_{-0.69}$ (+1.3 σ)
n_{s}	0.9701	$0.9687^{+0.0083}_{-0.0082}$ (+1.1 σ)	$\sigma_8/h^{0.5}$	0.9801	$0.980^{+0.022}_{-0.023}$ (−0.8 σ)	$D_{\text{M}}(0.38)$	1521.7	1523^{+19}_{-19} (−1.2 σ)
y_{cal}	1.00063	$1.0006^{+0.0049}_{-0.0050}$ (+0.1 σ)	$r_{\text{drag}} h$	100.25	$100.2^{+2.0}_{-1.9}$ (+1.1 σ)	$H(0.51)$	89.97	$89.94^{+0.54}_{-0.54}$ (+1.4 σ)
A_{217}^{CIB}	45.8	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.423	$2.427^{+0.053}_{-0.055}$ (−0.7 σ)	$D_{\text{M}}(0.51)$	1972.0	1973^{+22}_{-23} (−1.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.68	—	z_{re}	7.90	$7.9^{+1.6}_{-1.6}$ (+0.5 σ)	$H(0.61)$	95.547	$95.52^{+0.44}_{-0.43}$ (+1.5 σ)
A_{143}^{tSZ}	7.08	$5.6^{+3.7}_{-3.8}$ (+0.2 σ)	$10^9 A_{\text{s}}$	2.105	$2.105^{+0.075}_{-0.065}$ (+0.4 σ)	$D_{\text{M}}(0.61)$	2295.5	2297^{+24}_{-24} (−1.3 σ)
A_{100}^{PS}	247	257^{+50}_{-50} (−0.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8782	$1.877^{+0.023}_{-0.023}$ (−0.5 σ)	$H(2.33)$	235.75	$235.8^{+1.5}_{-1.5}$ (−0.7 σ)
A_{143}^{PS}	49.4	45^{+10}_{-20} (−0.6 σ)	D_{40}	1221.2	1224^{+24}_{-25} (−0.6 σ)	$D_{\text{M}}(2.33)$	5751.8	5753^{+19}_{-19} (−1.5 σ)
$A_{143 \times 217}^{\text{PS}}$	52.7	42^{+20}_{-20} (−0.2 σ)	D_{220}	5739	5740^{+72}_{-74} (+0.7 σ)	$f\sigma_8(0.15)$	0.4522	$0.453^{+0.015}_{-0.016}$ (−0.9 σ)
A_{217}^{PS}	121.3	115^{+20}_{-20} (−0.0 σ)	D_{810}	2541.3	2539^{+26}_{-27} (+0.2 σ)	$\sigma_8(0.15)$	0.7476	$0.747^{+0.014}_{-0.013}$ (−0.2 σ)
A^{kSZ}	0.01	< 7.96 (−0.2 σ)	D_{1420}	819.9	$818.4^{+9.4}_{-9.6}$ (+0.8 σ)	$f\sigma_8(0.38)$	0.4718	$0.472^{+0.013}_{-0.013}$ (−0.8 σ)
A_{100}^{dustTT}	8.83	$8.8^{+3.7}_{-3.6}$ (−0.1 σ)	D_{2000}	231.96	$231.4^{+3.2}_{-3.3}$ (+1.0 σ)	$\sigma_8(0.38)$	0.6633	$0.663^{+0.012}_{-0.011}$ (−0.0 σ)
A_{143}^{dustTT}	11.00	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9701	$0.9687^{+0.0083}_{-0.0082}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4710	$0.471^{+0.011}_{-0.012}$ (−0.8 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.0	$18.5^{+6.4}_{-6.3}$ (+0.1 σ)	Y_{P}	0.245447	$0.245438^{+0.000095}_{-0.00011}$ (+1.6 σ)	$\sigma_8(0.51)$	0.6210	$0.621^{+0.011}_{-0.0099}$ (+0.1 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246774	$0.246765^{+0.000095}_{-0.00011}$ (+1.6 σ)	$f\sigma_8(0.61)$	0.4665	$0.467^{+0.010}_{-0.011}$ (−0.7 σ)
A_{100}^{dustTE}	0.113	$0.113^{+0.074}_{-0.078}$	10^5D/H	2.5606	$2.565^{+0.052}_{-0.046}$ (−1.6 σ)	$\sigma_8(0.61)$	0.5911	$0.591^{+0.010}_{-0.0094}$ (+0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.057}_{-0.057}$	Age/Gyr	13.7716	$13.775^{+0.043}_{-0.043}$ (−1.5 σ)	$f\sigma_8(2.33)$	0.2982	$0.2981^{+0.0055}_{-0.0048}$ (+0.4 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.17}$	z_*	1089.620	$1089.66^{+0.51}_{-0.48}$ (−1.6 σ)	$\sigma_8(2.33)$	0.3077	$0.3076^{+0.0058}_{-0.0051}$ (+0.6 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	r_*	144.71	$144.70^{+0.54}_{-0.56}$ (+0.5 σ)	f_{2000}^{143}	27.9	29^{+5}_{-6} (−0.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.663	$0.66^{+0.15}_{-0.16}$	$100\theta_*$	1.04129	$1.04127^{+0.00057}_{-0.00057}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	31.41	32^{+4}_{-4} (−0.9 σ)
A_{217}^{dustTE}	2.08	$2.07^{+0.50}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.897	$13.897^{+0.050}_{-0.053}$ (+0.4 σ)	f_{2000}^{217}	105.97	$106.6^{+3.4}_{-3.3}$ (−0.8 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.16	$1060.10^{+0.55}_{-0.59}$ (+1.6 σ)	χ_{simall}^2	396.47	397.6 (ν : 3.2) (+0.4 σ)
c_{217}	0.99817	$0.9982^{+0.0013}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.33	$147.33^{+0.53}_{-0.57}$ (+0.2 σ)	χ_{lowl}^2	22.54	22.86 (ν : 0.4) (−0.8 σ)
H_0	68.05	$68.0^{+1.1}_{-1.1}$ (+1.2 σ)	k_{D}	0.14072	$0.14070^{+0.00063}_{-0.00055}$ (+0.3 σ)	χ_{plik}^2	2346.8	2361.0 (ν : 21.4) (+291.6 σ)
Ω_{Λ}	0.6940	$0.693^{+0.015}_{-0.015}$ (+1.1 σ)	$100\theta_{\text{D}}$	0.160647	$0.16067^{+0.00033}_{-0.00031}$ (−1.5 σ)	χ_{H073p45}^2	10.58	10.9 (ν : 2.5)
Ω_{m}	0.3060	$0.307^{+0.015}_{-0.015}$ (−1.1 σ)	z_{eq}	3370	3372^{+57}_{-57} (−0.8 σ)	χ_{prior}^2	1.6	11.7 (ν : 11.5) (+1.2 σ)
$\Omega_{\text{m}} h^2$	0.14169	$0.1418^{+0.0024}_{-0.0024}$ (−0.8 σ)	k_{eq}	0.010287	$0.01029^{+0.00017}_{-0.00017}$ (−0.8 σ)	χ_{CMB}^2	2765.8	2781.5 (ν : 20.4) (+289.4 σ)

Best-fit $\chi_{\text{eff}}^2 = 2777.94$; $\bar{\chi}_{\text{eff}}^2 = 2804.16$; $R - 1 = 0.03140$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.47 commander_dx12_v3.2_29: 22.54 plik_rd12_HM_v22b_TTTEEE: 2346.76 Hubble - H073p45: 10.59

2.10 base_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02236^{+0.00029}_{-0.00029} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09633^{+0.00058}_{-0.00057} \quad (+1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1202^{+0.0027}_{-0.0027} \quad (-0.2\sigma)$	σ_8	$0.813^{+0.014}_{-0.013} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0058}_{-0.0057} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00059}_{-0.00062} \quad (+0.3\sigma)$	S_8	$0.834^{+0.032}_{-0.030} \quad (-0.2\sigma)$	$H(0.15)$	$72.6^{+1.0}_{-1.0} \quad (+0.5\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.017}_{-0.016} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+10}_{-10} \quad (-0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.028}_{-0.026} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.016}_{-0.015} \quad (-0.1\sigma)$	$H(0.38)$	$82.83^{+0.74}_{-0.73} \quad (+0.5\sigma)$
n_{s}	$0.9650^{+0.0085}_{-0.0087} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.022}_{-0.021} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1535^{+20}_{-20} \quad (-0.5\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	$r_{\mathrm{drag}}h$	$99.0^{+2.1}_{-2.0} \quad (+0.3\sigma)$	$H(0.51)$	$89.60^{+0.58}_{-0.57} \quad (+0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.450^{+0.054}_{-0.052} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+24}_{-24} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 9.03 \quad (+0.3\sigma)$	$H(0.61)$	$95.26^{+0.47}_{-0.46} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.5^{+3.6}_{-3.9} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.060}_{-0.055} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+26}_{-25} \quad (-0.5\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$H(2.33)$	$236.7^{+1.6}_{-1.6} \quad (-0.0\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{40}	$1232^{+25}_{-24} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+21}_{-21} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5731^{+76}_{-75} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.015} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2539^{+26}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.012}_{-0.011} \quad (+0.2\sigma)$
A^{kSZ}	$< 7.99 \quad (-0.2\sigma)$	D_{1420}	$817.2^{+9.5}_{-9.7} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.013}_{-0.012} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$230.9^{+3.1}_{-3.2} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.010}_{-0.0095} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9650^{+0.0085}_{-0.0087} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.011}_{-0.011} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.24539^{+0.00011}_{-0.00012} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6219^{+0.0092}_{-0.0087} \quad (+0.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.010}_{-0.0098} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.076}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.587^{+0.055}_{-0.053} \quad (-1.1\sigma)$	$\sigma_8(0.61)$	$0.5916^{+0.0087}_{-0.0082} \quad (+0.3\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.059}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.799^{+0.047}_{-0.047} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0044}_{-0.0041} \quad (+0.4\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.94^{+0.55}_{-0.53} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0046}_{-0.0043} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.10}_{-0.10}$	r_*	$144.40^{+0.58}_{-0.58} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	$1.04109^{+0.00058}_{-0.00061} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.09^{+0.53}_{-0.53}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.870^{+0.054}_{-0.055} \quad (-0.2\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.4} \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.93^{+0.57}_{-0.57} \quad (+1.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.1) \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.06^{+0.57}_{-0.58} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.56 \quad (\nu: 0.5) \quad (-0.3\sigma)$
H_0	$67.3^{+1.2}_{-1.2} \quad (+0.4\sigma)$	k_{D}	$0.14090^{+0.00062}_{-0.00060} \quad (+0.7\sigma)$	χ_{plik}^2	$2359.3 \quad (\nu: 16.1) \quad (+291.3\sigma)$
Ω_{Λ}	$0.684^{+0.016}_{-0.017} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00034}_{-0.00034} \quad (-1.2\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.2\sigma)$
Ω_{m}	$0.316^{+0.017}_{-0.016} \quad (-0.4\sigma)$	z_{eq}	$3406^{+60}_{-60} \quad (-0.1\sigma)$	χ_{CMB}^2	$2779.9 \quad (\nu: 16.1) \quad (+289.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0025}_{-0.0025} \quad (-0.1\sigma)$	k_{eq}	$0.01040^{+0.00018}_{-0.00018} \quad (-0.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2791.53; R - 1 = 0.01241$

2.11 base_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02242^{+0.00026}_{-0.00026} \quad (+1.4\sigma)$	σ_8	$0.810^{+0.013}_{-0.013} \quad (-0.1\sigma)$	$H(0.15)$	$72.95^{+0.76}_{-0.74} \quad (+0.9\sigma)$
$\Omega_c h^2$	$0.1193^{+0.0020}_{-0.0019} \quad (-0.6\sigma)$	S_8	$0.825^{+0.024}_{-0.023} \quad (-0.6\sigma)$	$D_M(0.15)$	$640.7^{+7.4}_{-7.5} \quad (-0.9\sigma)$
$100\theta_{MC}$	$1.04101^{+0.00054}_{-0.00057} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$83.06^{+0.56}_{-0.55} \quad (+1.0\sigma)$
τ	$0.057^{+0.015}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_M(0.38)$	$1528^{+15}_{-15} \quad (-0.9\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.030}_{-0.027} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.020}_{-0.018} \quad (-0.5\sigma)$	$H(0.51)$	$89.78^{+0.44}_{-0.44} \quad (+1.0\sigma)$
n_s	$0.9670^{+0.0075}_{-0.0073} \quad (+0.8\sigma)$	$r_{drag} h$	$99.6^{+1.5}_{-1.5} \quad (+0.7\sigma)$	$D_M(0.51)$	$1980^{+17}_{-18} \quad (-0.9\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.048}_{-0.045} \quad (-0.4\sigma)$	$H(0.61)$	$95.39^{+0.36}_{-0.36} \quad (+1.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$D_M(0.61)$	$2304^{+19}_{-19} \quad (-0.9\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.106^{+0.063}_{-0.057} \quad (+0.4\sigma)$	$H(2.33)$	$236.2^{+1.2}_{-1.2} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$D_M(2.33)$	$5759^{+17}_{-17} \quad (-1.2\sigma)$
A_{100}^{PS}	$258^{+50}_{-60} \quad (-0.2\sigma)$	D_{40}	$1227^{+22}_{-21} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{220}	$5735^{+74}_{-73} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.012}_{-0.011} \quad (-0.0\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.010} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.8^{+9.6}_{-9.3} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.010}_{-0.0096} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.01 \quad (-0.2\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.1} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.0093} \quad (-0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9670^{+0.0075}_{-0.0073} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0096}_{-0.0089} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	Y_P	$0.245414^{+0.000094}_{-0.00010} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.4687^{+0.0093}_{-0.0087} \quad (-0.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.3}_{-6.3} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.246740^{+0.000095}_{-0.00010} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0091}_{-0.0084} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 D/H$	$2.577^{+0.049}_{-0.046} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0046}_{-0.0042} \quad (+0.4\sigma)$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.075}$	Age/Gyr	$13.787^{+0.039}_{-0.039} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0048}_{-0.0044} \quad (+0.6\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.059}$	z_*	$1089.80^{+0.44}_{-0.41} \quad (-1.2\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.7\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.57^{+0.44}_{-0.46} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	$1.04119^{+0.00054}_{-0.00056} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.15}_{-0.15}$	$D_M(z_*)/\text{Gpc}$	$13.886^{+0.042}_{-0.044} \quad (+0.2\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.5) \quad (+0.2\sigma)$
A_{217}^{dustTE}	$2.09^{+0.51}_{-0.52}$	z_{drag}	$1060.00^{+0.54}_{-0.53} \quad (+1.3\sigma)$	χ_{lowl}^2	$23.14 \quad (\nu: 0.3) \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0013}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.22^{+0.45}_{-0.48} \quad (+0.0\sigma)$	χ_{plik}^2	$2359.5 \quad (\nu: 16.4) \quad (+291.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_D	$0.14077^{+0.00058}_{-0.00054} \quad (+0.4\sigma)$	χ_{6DF}^2	$0.056 \quad (\nu: 0.0)$
H_0	$67.67^{+0.88}_{-0.86} \quad (+0.9\sigma)$	$100\theta_D$	$0.16072^{+0.00033}_{-0.00032} \quad (-1.3\sigma)$	χ_{MGS}^2	$1.26 \quad (\nu: 0.1)$
Ω_Λ	$0.689^{+0.011}_{-0.012} \quad (+0.8\sigma)$	z_{eq}	$3387^{+45}_{-45} \quad (-0.5\sigma)$	$\chi_{DR12BAO}^2$	$4.9 \quad (\nu: 1.0)$
Ω_m	$0.311^{+0.012}_{-0.011} \quad (-0.8\sigma)$	k_{eq}	$0.01034^{+0.00014}_{-0.00014} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
$\Omega_m h^2$	$0.1424^{+0.0019}_{-0.0019} \quad (-0.5\sigma)$	$100\theta_{eq}$	$0.8163^{+0.0083}_{-0.0083} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$
$\Omega_m h^3$	$0.09634^{+0.00058}_{-0.00055} \quad (+1.0\sigma)$	$100\theta_{s,eq}$	$0.4509^{+0.0043}_{-0.0043} \quad (+0.6\sigma)$	χ_{CMB}^2	$2779.9 \quad (\nu: 15.7) \quad (+289.1\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 2797.72; R - 1 = 0.02064$$

2.12 base_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02249^{+0.00026}_{-0.00028} (+1.7\sigma)$	$\Omega_{\text{m}}h^3$	$0.09638^{+0.00056}_{-0.00056} (+1.1\sigma)$	$100\theta_{\text{eq}}$	$0.819^{+0.011}_{-0.011} (+0.9\sigma)$
$\Omega_{\text{c}}h^2$	$0.1186^{+0.0025}_{-0.0025} (-1.0\sigma)$	σ_8	$0.809^{+0.014}_{-0.014} (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4524^{+0.0054}_{-0.0055} (+0.9\sigma)$
$100\theta_{\text{MC}}$	$1.04110^{+0.00059}_{-0.00059} (+0.7\sigma)$	S_8	$0.818^{+0.029}_{-0.030} (-0.9\sigma)$	$H(0.15)$	$73.24^{+0.94}_{-0.94} (+1.3\sigma)$
τ	$0.058^{+0.016}_{-0.014} (+0.7\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.448^{+0.016}_{-0.017} (-0.9\sigma)$	$D_{\text{M}}(0.15)$	$637.9^{+9.4}_{-9.2} (-1.2\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.048^{+0.032}_{-0.029} (+0.5\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.602^{+0.015}_{-0.016} (-0.8\sigma)$	$H(0.38)$	$83.27^{+0.69}_{-0.69} (+1.3\sigma)$
n_{s}	$0.9687^{+0.0083}_{-0.0082} (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.022}_{-0.022} (-0.7\sigma)$	$D_{\text{M}}(0.38)$	$1523^{+19}_{-18} (-1.3\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} (+0.1\sigma)$	$r_{\text{drag}}h$	$100.2^{+1.9}_{-1.9} (+1.1\sigma)$	$H(0.51)$	$89.94^{+0.53}_{-0.54} (+1.4\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.052}_{-0.051} (-0.7\sigma)$	$D_{\text{M}}(0.51)$	$1973^{+22}_{-22} (-1.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$8.0^{+1.3}_{-1.5} (+0.6\sigma)$	$H(0.61)$	$95.52^{+0.43}_{-0.43} (+1.5\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.8} (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.108^{+0.068}_{-0.061} (+0.5\sigma)$	$D_{\text{M}}(0.61)$	$2297^{+24}_{-23} (-1.3\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} (-0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.022} (-0.5\sigma)$	$H(2.33)$	$235.8^{+1.5}_{-1.5} (-0.7\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} (-0.6\sigma)$	D_{40}	$1224^{+24}_{-23} (-0.6\sigma)$	$D_{\text{M}}(2.33)$	$5753^{+19}_{-19} (-1.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} (-0.2\sigma)$	D_{220}	$5741^{+71}_{-71} (+0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.015}_{-0.016} (-0.9\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} (-0.0\sigma)$	D_{810}	$2539^{+26}_{-27} (+0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.012} (-0.2\sigma)$
A^{kSZ}	$< 7.89 (-0.2\sigma)$	D_{1420}	$818.4^{+9.3}_{-9.5} (+0.8\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.012}_{-0.013} (-0.8\sigma)$
A_{100}^{dustTT}	$8.8^{+3.6}_{-3.5} (-0.1\sigma)$	D_{2000}	$231.4^{+3.2}_{-3.2} (+1.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} (+0.1\sigma)$
A_{143}^{dustTT}	$10.9^{+3.6}_{-3.5} (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.9687^{+0.0083}_{-0.0082} (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.012} (-0.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.3}_{-6.3} (+0.1\sigma)$	Y_{P}	$0.245438^{+0.000096}_{-0.00011} (+1.6\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0094} (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.246765^{+0.000096}_{-0.00011} (+1.6\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.010} (-0.7\sigma)$
A_{100}^{dustTE}	$0.113^{+0.074}_{-0.079}$	$10^5 \text{D}/\text{H}$	$2.565^{+0.051}_{-0.046} (-1.7\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0097}_{-0.0089} (+0.3\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.057}$	Age/Gyr	$13.774^{+0.043}_{-0.042} (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0049}_{-0.0044} (+0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.65^{+0.50}_{-0.47} (-1.6\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0051}_{-0.0046} (+0.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_*	$144.70^{+0.55}_{-0.56} (+0.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} (-0.8\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	$100\theta_*$	$1.04127^{+0.00057}_{-0.00057} (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} (-0.9\sigma)$
A_{217}^{dustTE}	$2.07^{+0.50}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.897^{+0.051}_{-0.053} (+0.4\sigma)$	f_{2000}^{217}	$106.5^{+3.4}_{-3.4} (-0.8\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} (+0.1\sigma)$	z_{drag}	$1060.11^{+0.55}_{-0.59} (+1.6\sigma)$	χ_{small}^2	$397.6 (\nu: 3.3) (+0.4\sigma)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} (-0.1\sigma)$	r_{drag}	$147.33^{+0.53}_{-0.57} (+0.3\sigma)$	χ_{lowl}^2	$22.87 (\nu: 0.4) (-0.8\sigma)$
H_0	$68.0^{+1.1}_{-1.1} (+1.2\sigma)$	k_{D}	$0.14070^{+0.00061}_{-0.00057} (+0.3\sigma)$	χ_{plik}^2	$2360.9 (\nu: 20.7) (+291.6\sigma)$
Ω_{Λ}	$0.693^{+0.015}_{-0.015} (+1.1\sigma)$	$100\theta_{\text{D}}$	$0.16067^{+0.00033}_{-0.00031} (-1.5\sigma)$	χ_{H073p45}^2	$10.9 (\nu: 2.5)$
Ω_{m}	$0.307^{+0.015}_{-0.015} (-1.1\sigma)$	z_{eq}	$3372^{+57}_{-54} (-0.8\sigma)$	χ_{prior}^2	$11.6 (\nu: 10.4) (+1.2\sigma)$
$\Omega_{\text{m}}h^2$	$0.1417^{+0.0024}_{-0.0023} (-0.8\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00016} (-0.8\sigma)$	χ_{CMB}^2	$2781.4 (\nu: 19.8) (+289.4\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 2803.89; R - 1 = 0.03660$$

2.13 base_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022132	$0.02214^{+0.00044}_{-0.00043}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4585	$0.458^{+0.026}_{-0.025}$ (−0.1 σ)	$100\theta_{s,eq}$	0.4486	$0.4487^{+0.0090}_{-0.0089}$ (+0.1 σ)
$\Omega_c h^2$	0.12049	$0.1205^{+0.0042}_{-0.0041}$ (−0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6098	$0.610^{+0.023}_{-0.023}$ (−0.1 σ)	$H(0.15)$	72.32	$72.3^{+1.6}_{-1.5}$ (+0.1 σ)
$100\theta_{MC}$	1.04085	$1.04084^{+0.00094}_{-0.00095}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9911	$0.991^{+0.031}_{-0.032}$ (−0.1 σ)	$D_M(0.15)$	646.9	647^{+16}_{-15} (−0.1 σ)
τ	0.0519	$0.052^{+0.016}_{-0.015}$ (−0.0 σ)	$r_{drag}h$	98.58	$98.6^{+3.2}_{-3.1}$ (+0.1 σ)	$H(0.38)$	82.57	$82.6^{+1.1}_{-1.1}$ (+0.1 σ)
$\ln(10^{10} A_s)$	3.0384	$3.039^{+0.031}_{-0.032}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.447	$2.448^{+0.075}_{-0.074}$ (−0.2 σ)	$D_M(0.38)$	1540.8	1541^{+31}_{-31} (−0.1 σ)
n_s	0.9639	$0.964^{+0.011}_{-0.012}$ (+0.2 σ)	z_{re}	7.50	$7.5^{+1.6}_{-1.7}$ (−0.0 σ)	$H(0.51)$	89.36	$89.38^{+0.89}_{-0.85}$ (+0.1 σ)
y_{cal}	1.0004	$1.0005^{+0.0050}_{-0.0050}$ (+0.0 σ)	$10^9 A_s$	2.087	$2.089^{+0.066}_{-0.066}$ (−0.1 σ)	$D_M(0.51)$	1994.7	1994^{+36}_{-36} (−0.1 σ)
A_{100}^{PS}	238.8	242^{+50}_{-50} (−0.7 σ)	$10^9 A_s e^{-2\tau}$	1.8813	$1.882^{+0.027}_{-0.027}$ (−0.2 σ)	$H(0.61)$	95.04	$95.05^{+0.71}_{-0.68}$ (+0.1 σ)
A_{143}^{PS}	41.3	41^{+20}_{-20} (−1.0 σ)	D_{40}	1228.7	1230^{+31}_{-29} (−0.3 σ)	$D_M(0.61)$	2320.0	2320^{+39}_{-39} (−0.1 σ)
A_{217}^{PS}	100.6	101^{+30}_{-30} (−1.4 σ)	D_{220}	5702	5704^{+83}_{-84} (−0.2 σ)	$H(2.33)$	236.64	$236.6^{+2.5}_{-2.5}$ (−0.1 σ)
A_{217}^{CIB}	45.0	41^{+20}_{-10} (−1.0 σ)	D_{810}	2534.0	2534^{+27}_{-28} (−0.1 σ)	$D_M(2.33)$	5775.9	5775^{+32}_{-32} (−0.1 σ)
A_{143}^{tSZ}	5.89	< 7.38 (−0.7 σ)	D_{1420}	814.3	814^{+10}_{-10} (−0.0 σ)	$f\sigma_8(0.15)$	0.4624	$0.462^{+0.024}_{-0.024}$ (−0.1 σ)
$r_{143 \times 217}^{PS}$	0.582	$0.65^{+0.25}_{-0.25}$	D_{2000}	229.56	$229.6^{+3.5}_{-3.6}$ (+0.0 σ)	$\sigma_8(0.15)$	0.7486	$0.749^{+0.015}_{-0.015}$ (−0.1 σ)
$r_{143 \times 217}^{CIB}$	0.79	—	$n_{s,0.002}$	0.9639	$0.964^{+0.011}_{-0.012}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4789	$0.479^{+0.019}_{-0.019}$ (−0.1 σ)
$\xi^{tSZ \times CIB}$	0.12	—	Y_P	0.245298	$0.24529^{+0.00018}_{-0.00021}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6627	$0.663^{+0.012}_{-0.012}$ (−0.1 σ)
A^{kSZ}	1.2	—	Y_P^{BBN}	0.246624	$0.24662^{+0.00018}_{-0.00021}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4766	$0.476^{+0.016}_{-0.016}$ (−0.1 σ)
A_{100}^{dust}	1.011	$1.01^{+0.38}_{-0.39}$	$10^5 D/H$	2.631	$2.630^{+0.084}_{-0.081}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6199	$0.620^{+0.011}_{-0.011}$ (−0.1 σ)
A_{143}^{dust}	0.991	$0.98^{+0.34}_{-0.35}$	Age/Gyr	13.826	$13.825^{+0.072}_{-0.072}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4710	$0.471^{+0.014}_{-0.014}$ (−0.1 σ)
A_{217}^{dust}	0.966	$0.97^{+0.20}_{-0.20}$	z_*	1090.27	$1090.26^{+0.81}_{-0.80}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5896	$0.5896^{+0.0099}_{-0.010}$ (−0.1 σ)
$A_{143 \times 217}^{dust}$	0.995	$1.03^{+0.32}_{-0.32}$	r_*	144.49	$144.49^{+0.94}_{-0.93}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.29696	$0.2970^{+0.0049}_{-0.0049}$ (−0.0 σ)
c_{100}	0.99755	$0.9975^{+0.0021}_{-0.0021}$ (−3.5 σ)	$100\theta_*$	1.04105	$1.04105^{+0.00093}_{-0.00093}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3058	$0.3058^{+0.0052}_{-0.0052}$ (−0.0 σ)
c_{217}	1.00139	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	$D_M(z_*)/\text{Gpc}$	13.879	$13.879^{+0.086}_{-0.086}$ (+0.0 σ)	f_{2000}^{143}	31.1	31^{+6}_{-6} (−0.1 σ)
H_0	66.96	$67.0^{+1.8}_{-1.8}$ (+0.1 σ)	z_{drag}	1059.44	$1059.43^{+0.89}_{-0.90}$ (+0.1 σ)	f_{2000}^{217}	107.60	$107.6^{+4.0}_{-4.0}$ (−0.3 σ)
Ω_Λ	0.6805	$0.680^{+0.025}_{-0.026}$ (+0.1 σ)	r_{drag}	147.22	$147.23^{+0.94}_{-0.93}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	32.96	33^{+4}_{-4} (−0.3 σ)
Ω_m	0.3195	$0.320^{+0.026}_{-0.025}$ (−0.1 σ)	k_D	0.14054	$0.1405^{+0.0010}_{-0.0010}$ (−0.0 σ)	χ_{small}^2	395.83	396.9 (ν : 1.3) (−0.0 σ)
$\Omega_m h^2$	0.14327	$0.1432^{+0.0039}_{-0.0039}$ (−0.1 σ)	$100\theta_D$	0.16106	$0.16106^{+0.00053}_{-0.00051}$ (−0.0 σ)	χ_{lowl}^2	23.40	23.5 (ν : 0.8) (−0.3 σ)
$\Omega_m h^3$	0.09594	$0.09593^{+0.00089}_{-0.00088}$ (+0.1 σ)	z_{eq}	3408	3408^{+94}_{-92} (−0.1 σ)	$\chi_{CamSpec}^2$	7050.3	7063.4 (ν : 14.8)
σ_8	0.8110	$0.811^{+0.017}_{-0.018}$ (−0.1 σ)	k_{eq}	0.010403	$0.01040^{+0.00029}_{-0.00028}$ (−0.1 σ)	χ_{prior}^2	2.2	7.7 (ν : 6.3) (+0.1 σ)
S_8	0.8370	$0.837^{+0.048}_{-0.046}$ (−0.1 σ)	$100\theta_{eq}$	0.8115	$0.812^{+0.018}_{-0.017}$ (+0.1 σ)	χ_{CMB}^2	7469.6	7483.8 (ν : 15.1) (+1145.7 σ)

Best-fit $\chi_{eff}^2 = 7471.74$; $\bar{\chi}_{eff}^2 = 7491.54$; $R - 1 = 0.00710$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.83 commander_dx12_v3.2_29: 23.40 CamSpec like_10.7HM: 7050.34

2.14 base_CamSpecHM_TT_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00039}_{-0.00039} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$D_M(0.38)$	$1529^{+18}_{-18} \quad (-0.9\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0024}_{-0.0023} \quad (-0.8\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.8}_{-1.8} \quad (+0.9\sigma)$	$H(0.51)$	$89.69^{+0.58}_{-0.55} \quad (+0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04105^{+0.00084}_{-0.00083} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.053}_{-0.054} \quad (-0.8\sigma)$	$D_M(0.51)$	$1981^{+21}_{-21} \quad (-0.9\sigma)$
τ	$0.054^{+0.016}_{-0.016} \quad (+0.2\sigma)$	z_{re}	$7.6^{+1.5}_{-1.7} \quad (+0.1\sigma)$	$H(0.61)$	$95.29^{+0.48}_{-0.47} \quad (+0.8\sigma)$
$\ln(10^{10} A_s)$	$3.039^{+0.033}_{-0.034} \quad (-0.1\sigma)$	$10^9 A_s$	$2.088^{+0.069}_{-0.071} \quad (-0.1\sigma)$	$D_M(0.61)$	$2305^{+23}_{-23} \quad (-0.9\sigma)$
n_s	$0.9674^{+0.0081}_{-0.0085} \quad (+0.8\sigma)$	$10^9 A_s e^{-2\tau}$	$1.875^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (-0.8\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	D_{40}	$1222^{+26}_{-25} \quad (-0.8\sigma)$	$D_M(2.33)$	$5765^{+24}_{-24} \quad (-0.8\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5711^{+82}_{-82} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-0.8\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2534^{+27}_{-28} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.013}_{-0.014} \quad (-0.5\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.1\sigma)$	D_{2000}	$229.9^{+3.4}_{-3.5} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.012} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.44 \quad (-0.6\sigma)$	$n_{s,0.002}$	$0.9674^{+0.0081}_{-0.0085} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.011} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.26}_{-0.26}$	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.613^{+0.074}_{-0.071} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.010} \quad (-0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.803^{+0.053}_{-0.056} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0050}_{-0.0052} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	z_*	$1090.01^{+0.59}_{-0.57} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0052}_{-0.0054} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	r_*	$144.82^{+0.62}_{-0.62} \quad (+0.8\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04125^{+0.00083}_{-0.00082} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.4^{+3.8}_{-3.9} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.33}_{-0.33}$	$D_M(z_*)/\text{Gpc}$	$13.909^{+0.059}_{-0.060} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1059.52^{+0.87}_{-0.89} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.0\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.54^{+0.67}_{-0.68} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.81 \quad (\nu: 0.4) \quad (-0.8\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.9\sigma)$	k_{D}	$0.14028^{+0.00088}_{-0.00086} \quad (-0.5\sigma)$	χ_{CamSpec}^2	$7063.9 \quad (\nu: 14.3)$
Ω_{Λ}	$0.690^{+0.014}_{-0.014} \quad (+0.9\sigma)$	$100\theta_{\text{D}}$	$0.16102^{+0.00052}_{-0.00050} \quad (-0.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.054 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.014}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3373^{+56}_{-55} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^2$	$0.1418^{+0.0024}_{-0.0023} \quad (-0.8\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{DR12BAO}^2	$4.7 \quad (\nu: 1.2)$
$\Omega_{\text{m}} h^3$	$0.09593^{+0.00090}_{-0.00087} \quad (+0.1\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.2) \quad (+0.1\sigma)$
σ_8	$0.807^{+0.015}_{-0.016} \quad (-0.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4521^{+0.0053}_{-0.0053} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
S_8	$0.820^{+0.029}_{-0.029} \quad (-0.8\sigma)$	$H(0.15)$	$72.92^{+0.92}_{-0.91} \quad (+0.9\sigma)$	χ_{CMB}^2	$7483.8 \quad (\nu: 14.5) \quad (+1145.7\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-0.8\sigma)$	$D_M(0.15)$	$640.9^{+9.1}_{-9.0} \quad (-0.9\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.602^{+0.016}_{-0.016} \quad (-0.8\sigma)$	$H(0.38)$	$83.00^{+0.70}_{-0.68} \quad (+0.9\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 7497.55; R - 1 = 0.01113$

2.15 base_CamSpecHM_TT_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02239^{+0.00044}_{-0.00042} \quad (+1.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.592^{+0.021}_{-0.021} \quad (-1.6\sigma)$	$D_{\text{M}}(0.15)$	$634^{+13}_{-15} \quad (-1.8\sigma)$
$\Omega_{\text{c}}h^2$	$0.1171^{+0.0036}_{-0.0037} \quad (-1.7\sigma)$	$\sigma_8/h^{0.5}$	$0.968^{+0.029}_{-0.029} \quad (-1.5\sigma)$	$H(0.38)$	$83.6^{+1.1}_{-1.1} \quad (+1.8\sigma)$
$100\theta_{\text{MC}}$	$1.04132^{+0.00089}_{-0.00088} \quad (+1.2\sigma)$	$r_{\text{drag}}h$	$101.3^{+2.8}_{-3.0} \quad (+1.8\sigma)$	$D_{\text{M}}(0.38)$	$1514^{+28}_{-28} \quad (-1.8\sigma)$
τ	$0.056^{+0.018}_{-0.016} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.396^{+0.068}_{-0.061} \quad (-1.5\sigma)$	$H(0.51)$	$90.13^{+0.87}_{-0.84} \quad (+1.8\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.039^{+0.033}_{-0.032} \quad (-0.1\sigma)$	z_{re}	$7.8^{+1.7}_{-1.6} \quad (+0.3\sigma)$	$D_{\text{M}}(0.51)$	$1963^{+33}_{-33} \quad (-1.8\sigma)$
n_{s}	$0.9718^{+0.0097}_{-0.010} \quad (+1.6\sigma)$	$10^9 A_{\text{s}}$	$2.089^{+0.069}_{-0.067} \quad (-0.1\sigma)$	$H(0.61)$	$95.64^{+0.75}_{-0.65} \quad (+1.8\sigma)$
y_{cal}	$1.0008^{+0.0057}_{-0.0052} \quad (+0.1\sigma)$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.868^{+0.025}_{-0.027} \quad (-1.2\sigma)$	$D_{\text{M}}(0.61)$	$2286^{+36}_{-36} \quad (-1.8\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1214^{+29}_{-28} \quad (-1.3\sigma)$	$H(2.33)$	$234.7^{+2.2}_{-2.1} \quad (-1.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5724^{+87}_{-89} \quad (+0.3\sigma)$	$D_{\text{M}}(2.33)$	$5750^{+30}_{-34} \quad (-1.7\sigma)$
A_{217}^{PS}	$101^{+20}_{-30} \quad (-1.4\sigma)$	D_{810}	$2534^{+28}_{-28} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.021}_{-0.022} \quad (-1.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$816.9^{+9.6}_{-10} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.015}_{-0.015} \quad (-1.0\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.6\sigma)$	D_{2000}	$230.6^{+3.3}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.018}_{-0.017} \quad (-1.6\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\text{s},0.002}$	$0.9718^{+0.0097}_{-0.010} \quad (+1.6\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.012}_{-0.012} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.24540^{+0.00017}_{-0.00017} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.015}_{-0.015} \quad (-1.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24673^{+0.00017}_{-0.00017} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.583^{+0.079}_{-0.079} \quad (-1.2\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.014}_{-0.014} \quad (-1.5\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.37}$	Age/Gyr	$13.771^{+0.066}_{-0.070} \quad (-1.6\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1089.65^{+0.72}_{-0.80} \quad (-1.6\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0052}_{-0.0050} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$145.17^{+0.87}_{-0.85} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0054}_{-0.0052} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.33}_{-0.32}$	$100\theta_*$	$1.04151^{+0.00089}_{-0.00087} \quad (+1.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.938^{+0.075}_{-0.079} \quad (+1.4\sigma)$	f_{2000}^{217}	$106.9^{+3.9}_{-4.0} \quad (-0.7\sigma)$
c_{217}	$1.0012^{+0.0029}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.77^{+0.92}_{-0.91} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
H_0	$68.5^{+1.7}_{-1.7} \quad (+1.8\sigma)$	r_{drag}	$147.84^{+0.88}_{-0.86} \quad (+1.3\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.1\sigma)$
Ω_{Λ}	$0.701^{+0.022}_{-0.021} \quad (+1.7\sigma)$	k_{D}	$0.14009^{+0.00098}_{-0.00097} \quad (-0.9\sigma)$	χ_{lowl}^2	$22.13 \quad (\nu: 0.4) \quad (-1.4\sigma)$
Ω_{m}	$0.299^{+0.021}_{-0.022} \quad (-1.7\sigma)$	$100\theta_{\text{D}}$	$0.16089^{+0.00052}_{-0.00051} \quad (-0.7\sigma)$	χ_{CamSpec}^2	$7067.0 \quad (\nu: 18.2)$
$\Omega_{\text{m}}h^2$	$0.1401^{+0.0034}_{-0.0033} \quad (-1.6\sigma)$	z_{eq}	$3334^{+82}_{-80} \quad (-1.6\sigma)$	χ_{H073p45}^2	$9.0 \quad (\nu: 4.4)$
$\Omega_{\text{m}}h^3$	$0.09604^{+0.00096}_{-0.00087} \quad (+0.3\sigma)$	k_{eq}	$0.01017^{+0.00025}_{-0.00024} \quad (-1.6\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.802^{+0.017}_{-0.017} \quad (-1.2\sigma)$	$100\theta_{\text{eq}}$	$0.826^{+0.016}_{-0.017} \quad (+1.7\sigma)$	χ_{CMB}^2	$7486.3 \quad (\nu: 17.5) \quad (+1146.2\sigma)$
S_8	$0.800^{+0.041}_{-0.042} \quad (-1.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4561^{+0.0080}_{-0.0085} \quad (+1.7\sigma)$		
$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.438^{+0.023}_{-0.023} \quad (-1.7\sigma)$	$H(0.15)$	$73.7^{+1.4}_{-1.4} \quad (+1.8\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 7502.88; R - 1 = 0.07941$

2.16 base_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02214^{+0.00043}_{-0.00043} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.459^{+0.026}_{-0.025} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	$0.4489^{+0.0090}_{-0.0089} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1204^{+0.0041}_{-0.0040} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.610^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.5} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.04086^{+0.00093}_{-0.00094} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.031}_{-0.031} \quad (-0.0\sigma)$	$D_M(0.15)$	$646^{+16}_{-15} \quad (-0.2\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{drag} h$	$98.7^{+3.2}_{-3.1} \quad (+0.1\sigma)$	$H(0.38)$	$82.6^{+1.1}_{-1.1} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.027}_{-0.026} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.450^{+0.074}_{-0.072} \quad (-0.1\sigma)$	$D_M(0.38)$	$1540^{+31}_{-31} \quad (-0.2\sigma)$
n_s	$0.964^{+0.011}_{-0.012} \quad (+0.3\sigma)$	z_{re}	$< 8.83 \quad (+0.2\sigma)$	$H(0.51)$	$89.40^{+0.89}_{-0.85} \quad (+0.2\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s$	$2.095^{+0.058}_{-0.054} \quad (+0.1\sigma)$	$D_M(0.51)$	$1994^{+36}_{-36} \quad (-0.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.027}_{-0.026} \quad (-0.2\sigma)$	$H(0.61)$	$95.07^{+0.71}_{-0.68} \quad (+0.2\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	$1229^{+31}_{-29} \quad (-0.3\sigma)$	$D_M(0.61)$	$2319^{+39}_{-39} \quad (-0.2\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{220}	$5704^{+82}_{-84} \quad (-0.2\sigma)$	$H(2.33)$	$236.6^{+2.5}_{-2.5} \quad (-0.1\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$D_M(2.33)$	$5775^{+32}_{-32} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.7\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.024}_{-0.024} \quad (-0.1\sigma)$
$r_{143 \times 217}^{PS}$	$0.65^{+0.25}_{-0.25}$	D_{2000}	$229.6^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.014}_{-0.013} \quad (+0.1\sigma)$
$r_{143 \times 217}^{CIB}$	—	$n_{s,0.002}$	$0.964^{+0.011}_{-0.012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P	$0.24530^{+0.00017}_{-0.00021} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24662^{+0.00018}_{-0.00021} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.016}_{-0.016} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$10^5 D/H$	$2.629^{+0.084}_{-0.081} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0089} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	Age/Gyr	$13.824^{+0.071}_{-0.072} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.014}_{-0.014} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1090.24^{+0.81}_{-0.79} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0092}_{-0.0082} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.51^{+0.94}_{-0.93} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0043}_{-0.0040} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$100\theta_*$	$1.04106^{+0.00092}_{-0.00092} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0045}_{-0.0042} \quad (+0.2\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	$D_M(z_*)/Gpc$	$13.881^{+0.086}_{-0.086} \quad (+0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
H_0	$67.0^{+1.8}_{-1.8} \quad (+0.2\sigma)$	z_{drag}	$1059.44^{+0.88}_{-0.92} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-4.0} \quad (-0.3\sigma)$
Ω_Λ	$0.681^{+0.024}_{-0.026} \quad (+0.1\sigma)$	r_{drag}	$147.25^{+0.94}_{-0.92} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
Ω_m	$0.319^{+0.026}_{-0.024} \quad (-0.1\sigma)$	k_D	$0.1405^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
$\Omega_m h^2$	$0.1432^{+0.0039}_{-0.0038} \quad (-0.1\sigma)$	$100\theta_D$	$0.16106^{+0.00053}_{-0.00051} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.8) \quad (-0.3\sigma)$
$\Omega_m h^3$	$0.09594^{+0.00089}_{-0.00087} \quad (+0.1\sigma)$	z_{eq}	$3406^{+94}_{-92} \quad (-0.1\sigma)$	$\chi_{CamSpec}^2$	$7063.2 \quad (\nu: 14.7)$
σ_8	$0.812^{+0.017}_{-0.016} \quad (+0.0\sigma)$	k_{eq}	$0.01040^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.3) \quad (+0.1\sigma)$
S_8	$0.837^{+0.048}_{-0.046} \quad (-0.1\sigma)$	$100\theta_{eq}$	$0.812^{+0.018}_{-0.017} \quad (+0.1\sigma)$	χ_{CMB}^2	$7483.6 \quad (\nu: 14.6) \quad (+1145.7\sigma)$

$\bar{\chi}_{eff}^2 = 7491.26; R - 1 = 0.00680$

2.17 base_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00039}_{-0.00039} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$D_M(0.38)$	$1529^{+18}_{-18} \quad (-0.9\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0024}_{-0.0023} \quad (-0.8\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.8}_{-1.8} \quad (+0.9\sigma)$	$H(0.51)$	$89.70^{+0.58}_{-0.55} \quad (+0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04105^{+0.00084}_{-0.00083} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.052}_{-0.050} \quad (-0.7\sigma)$	$D_M(0.51)$	$1981^{+21}_{-22} \quad (-0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.95 \quad (+0.3\sigma)$	$H(0.61)$	$95.30^{+0.48}_{-0.47} \quad (+0.8\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.028}_{-0.027} \quad (+0.1\sigma)$	$10^9 A_s$	$2.093^{+0.060}_{-0.056} \quad (+0.1\sigma)$	$D_M(0.61)$	$2305^{+23}_{-23} \quad (-0.9\sigma)$
n_s	$0.9675^{+0.0082}_{-0.0084} \quad (+0.9\sigma)$	$10^9 A_s e^{-2\tau}$	$1.875^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (-0.8\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	D_{40}	$1222^{+26}_{-24} \quad (-0.8\sigma)$	$D_M(2.33)$	$5765^{+23}_{-24} \quad (-0.8\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5711^{+81}_{-80} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.014} \quad (-0.8\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2534^{+27}_{-28} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815.3^{+9.9}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.0^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0098} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.44 \quad (-0.6\sigma)$	$n_{s,0.002}$	$0.9675^{+0.0082}_{-0.0084} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.26}_{-0.26}$	Y_{P}	$0.24534^{+0.00016}_{-0.00016} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6196^{+0.0095}_{-0.0090} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00016}_{-0.00016} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.0097} \quad (-0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.613^{+0.075}_{-0.071} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.5896^{+0.0089}_{-0.0085} \quad (-0.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.803^{+0.053}_{-0.056} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0045}_{-0.0042} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	z_*	$1090.00^{+0.58}_{-0.57} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0046}_{-0.0043} \quad (+0.3\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	r_*	$144.83^{+0.62}_{-0.62} \quad (+0.8\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.21}$	$100\theta_*$	$1.04125^{+0.00083}_{-0.00082} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.3^{+3.8}_{-3.9} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.33}_{-0.33}$	$D_M(z_*)/\text{Gpc}$	$13.909^{+0.060}_{-0.060} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1059.53^{+0.86}_{-0.89} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.54^{+0.68}_{-0.68} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.83 \quad (\nu: 0.4) \quad (-0.8\sigma)$
H_0	$67.7^{+1.1}_{-1.0} \quad (+0.9\sigma)$	k_{D}	$0.14028^{+0.00088}_{-0.00086} \quad (-0.5\sigma)$	χ_{CamSpec}^2	$7063.8 \quad (\nu: 14.1)$
Ω_Λ	$0.690^{+0.014}_{-0.014} \quad (+0.9\sigma)$	$100\theta_{\text{D}}$	$0.16101^{+0.00052}_{-0.00049} \quad (-0.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.054 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.014}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3372^{+56}_{-55} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.40 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^2$	$0.1418^{+0.0024}_{-0.0023} \quad (-0.8\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{DR12BAO}^2	$4.6 \quad (\nu: 1.2)$
$\Omega_{\text{m}} h^3$	$0.09594^{+0.00091}_{-0.00087} \quad (+0.1\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.2) \quad (+0.1\sigma)$
σ_8	$0.808^{+0.014}_{-0.013} \quad (-0.5\sigma)$	$100\theta_{\text{s,eq}}$	$0.4522^{+0.0054}_{-0.0053} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
S_8	$0.821^{+0.029}_{-0.028} \quad (-0.8\sigma)$	$H(0.15)$	$72.93^{+0.93}_{-0.90} \quad (+0.9\sigma)$	χ_{CMB}^2	$7483.5 \quad (\nu: 14.1) \quad (+1145.7\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.449^{+0.016}_{-0.015} \quad (-0.8\sigma)$	$D_M(0.15)$	$640.8^{+9.0}_{-9.1} \quad (-0.9\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.603^{+0.015}_{-0.015} \quad (-0.7\sigma)$	$H(0.38)$	$83.00^{+0.70}_{-0.67} \quad (+0.9\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 7497.31; R - 1 = 0.01176$

2.18 base_CamSpecHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00043}_{-0.00042} \quad (+1.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.593^{+0.021}_{-0.021} \quad (-1.6\sigma)$	$D_M(0.15)$	$633^{+13}_{-15} \quad (-1.8\sigma)$
$\Omega_c h^2$	$0.1171^{+0.0036}_{-0.0037} \quad (-1.7\sigma)$	$\sigma_8/h^{0.5}$	$0.969^{+0.029}_{-0.029} \quad (-1.5\sigma)$	$H(0.38)$	$83.6^{+1.1}_{-1.1} \quad (+1.9\sigma)$
$100\theta_{MC}$	$1.04133^{+0.00092}_{-0.00087} \quad (+1.2\sigma)$	$r_{drag} h$	$101.4^{+2.8}_{-3.0} \quad (+1.8\sigma)$	$D_M(0.38)$	$1514^{+27}_{-30} \quad (-1.8\sigma)$
τ	$0.057^{+0.015}_{-0.013} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.398^{+0.067}_{-0.061} \quad (-1.5\sigma)$	$H(0.51)$	$90.14^{+0.91}_{-0.80} \quad (+1.9\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.031}_{-0.028} \quad (+0.0\sigma)$	z_{re}	$< 9.09 \quad (+0.4\sigma)$	$D_M(0.51)$	$1963^{+32}_{-35} \quad (-1.8\sigma)$
n_s	$0.972^{+0.010}_{-0.010} \quad (+1.6\sigma)$	$10^9 A_s$	$2.093^{+0.066}_{-0.058} \quad (+0.0\sigma)$	$H(0.61)$	$95.65^{+0.74}_{-0.65} \quad (+1.8\sigma)$
y_{cal}	$1.0008^{+0.0057}_{-0.0051} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.868^{+0.025}_{-0.027} \quad (-1.2\sigma)$	$D_M(0.61)$	$2286^{+34}_{-38} \quad (-1.8\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1214^{+30}_{-27} \quad (-1.3\sigma)$	$H(2.33)$	$234.7^{+2.2}_{-2.1} \quad (-1.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+87}_{-89} \quad (+0.3\sigma)$	$D_M(2.33)$	$5750^{+30}_{-34} \quad (-1.7\sigma)$
A_{217}^{PS}	$101^{+20}_{-30} \quad (-1.4\sigma)$	D_{810}	$2534^{+27}_{-28} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.021}_{-0.022} \quad (-1.6\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$816.9^{+9.2}_{-9.9} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.014}_{-0.013} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$< 7.32 \quad (-0.6\sigma)$	D_{2000}	$230.7^{+3.2}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.018}_{-0.017} \quad (-1.6\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.972^{+0.010}_{-0.010} \quad (+1.6\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.012}_{-0.010} \quad (-0.6\sigma)$
$r_{143 \times 217}^{CIB}$	—	Y_P	$0.24540^{+0.00017}_{-0.00017} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.015}_{-0.015} \quad (-1.5\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P^{BBN}	$0.24673^{+0.00017}_{-0.00017} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.0092} \quad (-0.4\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.582^{+0.079}_{-0.078} \quad (-1.2\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.014}_{-0.013} \quad (-1.5\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.770^{+0.066}_{-0.075} \quad (-1.7\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.010}_{-0.0087} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	z_*	$1089.63^{+0.71}_{-0.79} \quad (-1.6\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0049}_{-0.0041} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$145.18^{+0.86}_{-0.85} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0047}_{-0.0044} \quad (+0.4\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.33}_{-0.32}$	$100\theta_*$	$1.04151^{+0.00088}_{-0.00086} \quad (+1.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	$D_M(z_*)/Gpc$	$13.939^{+0.078}_{-0.079} \quad (+1.4\sigma)$	f_{2000}^{217}	$106.9^{+3.9}_{-3.8} \quad (-0.7\sigma)$
c_{217}	$1.0012^{+0.0029}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.78^{+0.91}_{-0.92} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
H_0	$68.6^{+1.7}_{-1.7} \quad (+1.8\sigma)$	r_{drag}	$147.85^{+0.92}_{-0.86} \quad (+1.3\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.1\sigma)$
Ω_Λ	$0.702^{+0.022}_{-0.021} \quad (+1.7\sigma)$	k_D	$0.14009^{+0.00098}_{-0.00097} \quad (-0.9\sigma)$	χ_{lowl}^2	$22.13 \quad (\nu: 0.4) \quad (-1.4\sigma)$
Ω_m	$0.298^{+0.021}_{-0.022} \quad (-1.7\sigma)$	$100\theta_D$	$0.16089^{+0.00052}_{-0.00051} \quad (-0.7\sigma)$	$\chi_{CamSpec}^2$	$7066.9 \quad (\nu: 17.7)$
$\Omega_m h^2$	$0.1401^{+0.0034}_{-0.0033} \quad (-1.7\sigma)$	z_{eq}	$3333^{+81}_{-79} \quad (-1.7\sigma)$	$\chi_{H073p45}^2$	$8.9 \quad (\nu: 4.4)$
$\Omega_m h^3$	$0.09605^{+0.00096}_{-0.00086} \quad (+0.3\sigma)$	k_{eq}	$0.01017^{+0.00025}_{-0.00024} \quad (-1.7\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.8) \quad (+0.1\sigma)$
σ_8	$0.802^{+0.017}_{-0.016} \quad (-1.1\sigma)$	$100\theta_{eq}$	$0.826^{+0.016}_{-0.017} \quad (+1.7\sigma)$	χ_{CMB}^2	$7486.2 \quad (\nu: 16.9) \quad (+1146.1\sigma)$
S_8	$0.800^{+0.041}_{-0.042} \quad (-1.7\sigma)$	$100\theta_{s,eq}$	$0.4562^{+0.0082}_{-0.0080} \quad (+1.7\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.023}_{-0.023} \quad (-1.7\sigma)$	$H(0.15)$	$73.7^{+1.5}_{-1.5} \quad (+1.8\sigma)$		

$\bar{\chi}_{eff}^2 = 7502.64; R - 1 = 0.09766$

2.19 base_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022297	$0.02229^{+0.00031}_{-0.00031}$ (+0.8 σ)	S_8	0.8261	$0.827^{+0.032}_{-0.032}$ (−0.5 σ)	$100\theta_{s,eq}$	0.4505	$0.4503^{+0.0060}_{-0.0058}$ (+0.4 σ)
$\Omega_c h^2$	0.11956	$0.1196^{+0.0027}_{-0.0027}$ (−0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4525	$0.453^{+0.017}_{-0.017}$ (−0.5 σ)	$H(0.15)$	72.73	$72.7^{+1.1}_{-1.0}$ (+0.6 σ)
$100\theta_{MC}$	1.04087	$1.04088^{+0.00061}_{-0.00060}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6047	$0.605^{+0.016}_{-0.016}$ (−0.5 σ)	$D_M(0.15)$	642.8	643^{+10}_{-10} (−0.6 σ)
τ	0.0531	$0.053^{+0.016}_{-0.016}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9843	$0.985^{+0.023}_{-0.023}$ (−0.5 σ)	$H(0.38)$	82.87	$82.86^{+0.77}_{-0.74}$ (+0.6 σ)
$\ln(10^{10} A_s)$	3.0390	$3.039^{+0.033}_{-0.033}$ (−0.1 σ)	$r_{drag} h$	99.32	$99.3^{+2.1}_{-2.1}$ (+0.5 σ)	$D_M(0.38)$	1532.6	1533^{+21}_{-21} (−0.6 σ)
n_s	0.9662	$0.9658^{+0.0087}_{-0.0088}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.433	$2.434^{+0.055}_{-0.056}$ (−0.5 σ)	$H(0.51)$	89.61	$89.60^{+0.61}_{-0.59}$ (+0.6 σ)
y_{cal}	1.00034	$1.0005^{+0.0049}_{-0.0048}$ (+0.0 σ)	z_{re}	7.56	$7.5^{+1.6}_{-1.7}$ (+0.0 σ)	$D_M(0.51)$	1985.0	1985^{+24}_{-25} (−0.6 σ)
A_{100}^{PS}	234.8	240^{+50}_{-50} (−0.8 σ)	$10^9 A_s$	2.088	$2.088^{+0.069}_{-0.067}$ (−0.1 σ)	$H(0.61)$	95.243	$95.24^{+0.49}_{-0.47}$ (+0.7 σ)
A_{143}^{PS}	41.1	40^{+20}_{-20} (−1.2 σ)	$10^9 A_s e^{-2\tau}$	1.8780	$1.879^{+0.023}_{-0.022}$ (−0.4 σ)	$D_M(0.61)$	2309.6	2310^{+26}_{-26} (−0.6 σ)
A_{217}^{PS}	101.9	102^{+30}_{-30} (−1.2 σ)	D_{40}	1225.0	1226^{+25}_{-25} (−0.5 σ)	$H(2.33)$	236.19	$236.2^{+1.6}_{-1.6}$ (−0.4 σ)
A_{217}^{CIB}	44.3	40^{+10}_{-10} (−1.2 σ)	D_{220}	5716	5718^{+76}_{-75} (+0.1 σ)	$D_M(2.33)$	5766.4	5767^{+22}_{-22} (−0.7 σ)
A_{143}^{tSZ}	6.43	< 7.48 (−0.6 σ)	D_{810}	2534.7	2535^{+26}_{-26} (−0.1 σ)	$f\sigma_8(0.15)$	0.4569	$0.457^{+0.016}_{-0.016}$ (−0.5 σ)
$r_{143 \times 217}^{PS}$	0.629	$0.66^{+0.25}_{-0.25}$	D_{1420}	815.8	$815.6^{+9.4}_{-9.4}$ (+0.2 σ)	$\sigma_8(0.15)$	0.7467	$0.747^{+0.013}_{-0.013}$ (−0.3 σ)
$r_{143 \times 217}^{CIB}$	0.76	—	D_{2000}	230.27	$230.2^{+3.2}_{-3.2}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.4748	$0.475^{+0.013}_{-0.013}$ (−0.5 σ)
$\xi^{tSZ \times CIB}$	0.20	—	$n_{s,0.002}$	0.9662	$0.9658^{+0.0087}_{-0.0088}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6616	$0.662^{+0.011}_{-0.011}$ (−0.3 σ)
A^{kSZ}	0.3	—	Y_P	0.245366	$0.24536^{+0.00012}_{-0.00013}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4731	$0.473^{+0.012}_{-0.012}$ (−0.5 σ)
A_{100}^{dust}	1.003	$1.01^{+0.38}_{-0.38}$	Y_P^{BBN}	0.246692	$0.24669^{+0.00012}_{-0.00013}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6191	$0.619^{+0.010}_{-0.010}$ (−0.2 σ)
A_{143}^{dust}	0.980	$0.96^{+0.35}_{-0.35}$	$10^5 D/H$	2.599	$2.601^{+0.059}_{-0.057}$ (−0.8 σ)	$f\sigma_8(0.61)$	0.4680	$0.468^{+0.011}_{-0.011}$ (−0.5 σ)
A_{217}^{dust}	0.966	$0.97^{+0.20}_{-0.20}$	Age/Gyr	13.8046	$13.805^{+0.049}_{-0.049}$ (−0.7 σ)	$\sigma_8(0.61)$	0.5890	$0.5890^{+0.0099}_{-0.0098}$ (−0.2 σ)
$A_{143 \times 217}^{dust}$	1.012	$1.03^{+0.32}_{-0.32}$	z_*	1089.98	$1089.99^{+0.56}_{-0.55}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.2969	$0.2969^{+0.0050}_{-0.0049}$ (−0.1 σ)
c_{100}	0.99760	$0.9975^{+0.0021}_{-0.0020}$ (−3.4 σ)	r_*	144.60	$144.58^{+0.62}_{-0.60}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3060	$0.3060^{+0.0053}_{-0.0052}$ (+0.0 σ)
c_{217}	1.00127	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	$100\theta_*$	1.04106	$1.04107^{+0.00060}_{-0.00059}$ (+0.2 σ)	f_{2000}^{143}	30.0	30^{+6}_{-6} (−0.5 σ)
c_{TE}	0.9965	$0.9968^{+0.0097}_{-0.0096}$	$D_M(z_*)/\text{Gpc}$	13.890	$13.888^{+0.058}_{-0.056}$ (+0.2 σ)	f_{2000}^{217}	106.72	$106.9^{+3.8}_{-3.8}$ (−0.6 σ)
c_{EE}	0.9920	$0.9921^{+0.0097}_{-0.0094}$	z_{drag}	1059.74	$1059.73^{+0.62}_{-0.64}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	32.23	32^{+4}_{-4} (−0.7 σ)
H_0	67.43	$67.4^{+1.2}_{-1.2}$ (+0.6 σ)	r_{drag}	147.29	$147.27^{+0.62}_{-0.61}$ (+0.1 σ)	χ_{small}^2	395.90	$396.9 (\nu: 1.4)$ (−0.0 σ)
Ω_Λ	0.6866	$0.686^{+0.016}_{-0.017}$ (+0.5 σ)	k_D	0.14060	$0.14061^{+0.00067}_{-0.00068}$ (+0.1 σ)	χ_{lowl}^2	23.00	$23.16 (\nu: 0.4)$ (−0.6 σ)
Ω_m	0.3134	$0.314^{+0.017}_{-0.016}$ (−0.5 σ)	$100\theta_D$	0.160865	$0.16087^{+0.00037}_{-0.00037}$ (−0.8 σ)	$\chi_{CamSpec}^2$	11499.6	$11514.5 (\nu: 15.8)$
$\Omega_m h^2$	0.14250	$0.1426^{+0.0026}_{-0.0026}$ (−0.4 σ)	z_{eq}	3390	3392^{+61}_{-61} (−0.4 σ)	χ_{prior}^2	2.2	$7.8 (\nu: 6.0)$ (+0.1 σ)
$\Omega_m h^3$	0.09609	$0.09610^{+0.00061}_{-0.00061}$ (+0.5 σ)	k_{eq}	0.010347	$0.01035^{+0.00019}_{-0.00019}$ (−0.4 σ)	χ_{CMB}^2	11918.5	$11934.6 (\nu: 16.4)$ (+1956.2 σ)
σ_8	0.8082	$0.808^{+0.015}_{-0.015}$ (−0.4 σ)	$100\theta_{eq}$	0.8152	$0.815^{+0.012}_{-0.011}$ (+0.5 σ)			

Best-fit $\chi_{eff}^2 = 11920.76$; $\bar{\chi}_{eff}^2 = 11942.46$; $R - 1 = 0.01233$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.90 commander_dx12_v3.2.29: 23.00 CamSpec like_10.7HM_1400_unified: 11499.65

2.20 base_CamSpecHM_TTTEE_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02234^{+0.00028}_{-0.00028} \quad (+1.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$D_M(0.15)$	$640.4^{+7.6}_{-7.7} \quad (-0.9\sigma)$
$\Omega_c h^2$	$0.1190^{+0.0020}_{-0.0020} \quad (-0.8\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.602^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$H(0.38)$	$83.05^{+0.58}_{-0.56} \quad (+0.9\sigma)$
$100\theta_{MC}$	$1.04097^{+0.00057}_{-0.00059} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.020}_{-0.020} \quad (-0.8\sigma)$	$D_M(0.38)$	$1528^{+15}_{-16} \quad (-0.9\sigma)$
τ	$0.054^{+0.016}_{-0.016} \quad (+0.2\sigma)$	$r_{drag} h$	$99.8^{+1.5}_{-1.5} \quad (+0.8\sigma)$	$H(0.51)$	$89.75^{+0.47}_{-0.46} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.039^{+0.033}_{-0.033} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.049}_{-0.049} \quad (-0.8\sigma)$	$D_M(0.51)$	$1979^{+18}_{-18} \quad (-0.9\sigma)$
n_s	$0.9674^{+0.0076}_{-0.0076} \quad (+0.8\sigma)$	z_{re}	$7.6^{+1.5}_{-1.7} \quad (+0.1\sigma)$	$H(0.61)$	$95.35^{+0.39}_{-0.38} \quad (+1.0\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s$	$2.089^{+0.069}_{-0.067} \quad (-0.1\sigma)$	$D_M(0.61)$	$2304^{+19}_{-20} \quad (-0.9\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$H(2.33)$	$235.8^{+1.2}_{-1.3} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{40}	$1223^{+24}_{-24} \quad (-0.7\sigma)$	$D_M(2.33)$	$5762^{+19}_{-18} \quad (-1.0\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{220}	$5722^{+76}_{-73} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{1420}	$816.1^{+9.4}_{-9.3} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.8\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.24}_{-0.25}$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$r_{143 \times 217}^{CIB}$	—	$n_{s,0.002}$	$0.9674^{+0.0076}_{-0.0076} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.010}_{-0.010} \quad (-0.8\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P	$0.24538^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.011}_{-0.010} \quad (-0.3\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24671^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4662^{+0.0094}_{-0.0095} \quad (-0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.38}$	$10^5 D/H$	$2.592^{+0.054}_{-0.051} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.0097} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	Age/Gyr	$13.795^{+0.042}_{-0.041} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0051}_{-0.0049} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.87^{+0.46}_{-0.45} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0053}_{-0.0051} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.73^{+0.50}_{-0.48} \quad (+0.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04116^{+0.00057}_{-0.00059} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.7} \quad (-0.7\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	$D_M(z_*)/Gpc$	$13.901^{+0.048}_{-0.047} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{TE}	$0.9969^{+0.0098}_{-0.0095}$	z_{drag}	$1059.79^{+0.60}_{-0.62} \quad (+0.9\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.0\sigma)$
c_{EE}	$0.9924^{+0.0096}_{-0.0093}$	r_{drag}	$147.40^{+0.52}_{-0.51} \quad (+0.4\sigma)$	χ_{lowl}^2	$22.87 \quad (\nu: 0.3) \quad (-0.8\sigma)$
H_0	$67.71^{+0.91}_{-0.89} \quad (+0.9\sigma)$	k_D	$0.14051^{+0.00063}_{-0.00063} \quad (-0.1\sigma)$	$\chi_{CamSpec}^2$	$11514.6 \quad (\nu: 16.1)$
Ω_Λ	$0.690^{+0.012}_{-0.012} \quad (+0.9\sigma)$	$100\theta_D$	$0.16084^{+0.00037}_{-0.00036} \quad (-0.9\sigma)$	χ_{6DF}^2	$0.045 \quad (\nu: 0.0)$
Ω_m	$0.310^{+0.012}_{-0.012} \quad (-0.9\sigma)$	z_{eq}	$3377^{+46}_{-46} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.36 \quad (\nu: 0.1)$
$\Omega_m h^2$	$0.1419^{+0.0019}_{-0.0019} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00014}_{-0.00014} \quad (-0.7\sigma)$	$\chi_{DR12BAO}^2$	$4.6 \quad (\nu: 0.8)$
$\Omega_m h^3$	$0.09611^{+0.00060}_{-0.00064} \quad (+0.5\sigma)$	$100\theta_{eq}$	$0.8179^{+0.0087}_{-0.0086} \quad (+0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.807^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$100\theta_{s,eq}$	$0.4518^{+0.0045}_{-0.0044} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.5)$
S_8	$0.819^{+0.025}_{-0.025} \quad (-0.8\sigma)$	$H(0.15)$	$72.97^{+0.79}_{-0.76} \quad (+0.9\sigma)$	χ_{CMB}^2	$11934.5 \quad (\nu: 16.4) \quad (+1956.2\sigma)$

$$\bar{\chi}_{eff}^2 = 11948.28; R - 1 = 0.01864$$

2.21 base_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02242^{+0.00029}_{-0.00029} \quad (+1.4\sigma)$	S_8	$0.810^{+0.030}_{-0.029} \quad (-1.2\sigma)$	$100\theta_{s,eq}$	$0.4538^{+0.0056}_{-0.0056} \quad (+1.2\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0026}_{-0.0025} \quad (-1.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.016}_{-0.016} \quad (-1.2\sigma)$	$H(0.15)$	$73.34^{+0.94}_{-0.98} \quad (+1.4\sigma)$
$100\theta_{MC}$	$1.04108^{+0.00059}_{-0.00063} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.597^{+0.016}_{-0.015} \quad (-1.2\sigma)$	$D_M(0.15)$	$636.8^{+9.7}_{-9.3} \quad (-1.4\sigma)$
τ	$0.055^{+0.016}_{-0.016} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.974^{+0.023}_{-0.022} \quad (-1.1\sigma)$	$H(0.38)$	$83.32^{+0.70}_{-0.72} \quad (+1.4\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.031}_{-0.032} \quad (+0.0\sigma)$	$r_{drag} h$	$100.5^{+2.1}_{-2.0} \quad (+1.3\sigma)$	$D_M(0.38)$	$1520^{+19}_{-18} \quad (-1.4\sigma)$
n_s	$0.9696^{+0.0086}_{-0.0085} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.412^{+0.054}_{-0.052} \quad (-1.1\sigma)$	$H(0.51)$	$89.96^{+0.56}_{-0.56} \quad (+1.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.5}_{-1.6} \quad (+0.3\sigma)$	$D_M(0.51)$	$1971^{+23}_{-21} \quad (-1.4\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s$	$2.092^{+0.066}_{-0.066} \quad (+0.0\sigma)$	$H(0.61)$	$95.52^{+0.45}_{-0.45} \quad (+1.5\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.873^{+0.022}_{-0.023} \quad (-0.9\sigma)$	$D_M(0.61)$	$2294^{+25}_{-23} \quad (-1.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1219^{+25}_{-24} \quad (-0.9\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.6} \quad (-1.1\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{220}	$5729^{+78}_{-73} \quad (+0.4\sigma)$	$D_M(2.33)$	$5755^{+21}_{-20} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$< 7.69 \quad (-0.6\sigma)$	D_{810}	$2535^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.015}_{-0.015} \quad (-1.2\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$817.0^{+9.2}_{-9.5} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.013}_{-0.013} \quad (-0.7\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.8^{+3.2}_{-3.2} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.469^{+0.013}_{-0.013} \quad (-1.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9696^{+0.0086}_{-0.0085} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	—	Y_P	$0.24541^{+0.00011}_{-0.00012} \quad (+1.3\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.011}_{-0.011} \quad (-1.1\sigma)$
A_{100}^{dust}	$1.02^{+0.40}_{-0.40}$	Y_P^{BBN}	$0.24674^{+0.00011}_{-0.00012} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.010} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.96^{+0.33}_{-0.35}$	$10^5 D/H$	$2.577^{+0.055}_{-0.053} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.011}_{-0.010} \quad (-1.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	Age/Gyr	$13.779^{+0.047}_{-0.045} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.0096} \quad (-0.3\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.32}$	z_*	$1089.69^{+0.52}_{-0.51} \quad (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0050}_{-0.0048} \quad (+0.0\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	r_*	$144.90^{+0.58}_{-0.59} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0050}_{-0.0051} \quad (+0.3\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0030} \quad (+4.5\sigma)$	$100\theta_*$	$1.04126^{+0.00058}_{-0.00062} \quad (+0.6\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
c_{TE}	$0.9969^{+0.010}_{-0.0094}$	$D_M(z_*)/Gpc$	$13.916^{+0.054}_{-0.056} \quad (+0.9\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.9} \quad (-0.8\sigma)$
c_{EE}	$0.9925^{+0.0096}_{-0.0094}$	z_{drag}	$1059.91^{+0.59}_{-0.63} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
H_0	$68.1^{+1.1}_{-1.1} \quad (+1.4\sigma)$	r_{drag}	$147.55^{+0.56}_{-0.60} \quad (+0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
Ω_Λ	$0.696^{+0.015}_{-0.016} \quad (+1.3\sigma)$	k_D	$0.14042^{+0.00067}_{-0.00068} \quad (-0.2\sigma)$	χ_{lowl}^2	$22.52 \quad (\nu: 0.3) \quad (-1.1\sigma)$
Ω_m	$0.304^{+0.016}_{-0.015} \quad (-1.3\sigma)$	$100\theta_D$	$0.16078^{+0.00037}_{-0.00034} \quad (-1.1\sigma)$	$\chi_{CamSpec}^2$	$11516.4 \quad (\nu: 20.7)$
$\Omega_m h^2$	$0.1411^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	z_{eq}	$3357^{+58}_{-57} \quad (-1.1\sigma)$	$\chi_{H073p45}^2$	$10.3 \quad (\nu: 2.5)$
$\Omega_m h^3$	$0.09615^{+0.00061}_{-0.00061} \quad (+0.6\sigma)$	k_{eq}	$0.01025^{+0.00018}_{-0.00017} \quad (-1.1\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.804^{+0.015}_{-0.015} \quad (-0.8\sigma)$	$100\theta_{eq}$	$0.822^{+0.011}_{-0.011} \quad (+1.2\sigma)$	χ_{CMB}^2	$11936.1 \quad (\nu: 20.0) \quad (+1956.5\sigma)$
$\bar{\chi}_{eff}^2 = 11954.26; R - 1 = 0.03390$					

2.22 base_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00031}_{-0.00031} \quad (+0.8\sigma)$	S_8	$0.828^{+0.031}_{-0.032} \quad (-0.5\sigma)$	$100\theta_{s,eq}$	$0.4504^{+0.0060}_{-0.0058} \quad (+0.5\sigma)$
$\Omega_c h^2$	$0.1196^{+0.0027}_{-0.0027} \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.15)$	$72.7^{+1.1}_{-1.0} \quad (+0.6\sigma)$
$100\theta_{MC}$	$1.04089^{+0.00060}_{-0.00059} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.606^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$D_M(0.15)$	$643^{+10}_{-10} \quad (-0.6\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$H(0.38)$	$82.88^{+0.76}_{-0.73} \quad (+0.6\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$r_{drag} h$	$99.3^{+2.1}_{-2.1} \quad (+0.5\sigma)$	$D_M(0.38)$	$1533^{+20}_{-21} \quad (-0.6\sigma)$
n_s	$0.9660^{+0.0086}_{-0.0087} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.054}_{-0.053} \quad (-0.4\sigma)$	$H(0.51)$	$89.62^{+0.60}_{-0.58} \quad (+0.7\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	z_{re}	$< 8.88 \quad (+0.2\sigma)$	$D_M(0.51)$	$1985^{+24}_{-24} \quad (-0.6\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s$	$2.095^{+0.058}_{-0.054} \quad (+0.1\sigma)$	$H(0.61)$	$95.25^{+0.49}_{-0.46} \quad (+0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.878^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$D_M(0.61)$	$2310^{+26}_{-26} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1226^{+25}_{-25} \quad (-0.5\sigma)$	$H(2.33)$	$236.2^{+1.6}_{-1.6} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5718^{+77}_{-75} \quad (+0.1\sigma)$	$D_M(2.33)$	$5766^{+22}_{-22} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.6\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.016}_{-0.016} \quad (-0.5\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$815.7^{+9.4}_{-9.4} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.012}_{-0.011} \quad (-0.2\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.3^{+3.2}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (-0.5\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9660^{+0.0086}_{-0.0087} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0094} \quad (-0.1\sigma)$
A^{kSZ}	—	Y_P	$0.24536^{+0.00012}_{-0.00013} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Y_P^{BBN}	$0.24669^{+0.00012}_{-0.00013} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6200^{+0.0092}_{-0.0086} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	$10^5 D/H$	$2.600^{+0.059}_{-0.057} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.010}_{-0.010} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	Age/Gyr	$13.804^{+0.049}_{-0.049} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.5899^{+0.0087}_{-0.0081} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.32}$	z_*	$1089.98^{+0.56}_{-0.55} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0043}_{-0.0040} \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	r_*	$144.59^{+0.62}_{-0.61} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0045}_{-0.0041} \quad (+0.2\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_*$	$1.04108^{+0.00060}_{-0.00059} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
c_{TE}	$0.9966^{+0.0097}_{-0.0096}$	$D_M(z_*)/Gpc$	$13.889^{+0.058}_{-0.057} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.9^{+3.8}_{-3.7} \quad (-0.7\sigma)$
c_{EE}	$0.9921^{+0.0097}_{-0.0094}$	z_{drag}	$1059.74^{+0.61}_{-0.65} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
H_0	$67.4^{+1.2}_{-1.2} \quad (+0.6\sigma)$	r_{drag}	$147.28^{+0.62}_{-0.61} \quad (+0.2\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.1\sigma)$
Ω_Λ	$0.686^{+0.016}_{-0.017} \quad (+0.6\sigma)$	k_D	$0.14061^{+0.00067}_{-0.00068} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.17 \quad (\nu: 0.4) \quad (-0.6\sigma)$
Ω_m	$0.314^{+0.017}_{-0.016} \quad (-0.6\sigma)$	$100\theta_D$	$0.16087^{+0.00038}_{-0.00037} \quad (-0.8\sigma)$	$\chi_{CamSpec}^2$	$11514.3 \quad (\nu: 15.7)$
$\Omega_m h^2$	$0.1425^{+0.0026}_{-0.0025} \quad (-0.4\sigma)$	z_{eq}	$3391^{+61}_{-61} \quad (-0.4\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^3$	$0.09610^{+0.00061}_{-0.00062} \quad (+0.5\sigma)$	k_{eq}	$0.01035^{+0.00019}_{-0.00019} \quad (-0.4\sigma)$	χ_{CMB}^2	$11934.4 \quad (\nu: 16.0) \quad (+1956.2\sigma)$
σ_8	$0.809^{+0.014}_{-0.013} \quad (-0.3\sigma)$	$100\theta_{eq}$	$0.815^{+0.012}_{-0.011} \quad (+0.5\sigma)$		

$\bar{\chi}_{eff}^2 = 11942.19; R - 1 = 0.01099$

2.23 base_CamSpecHM_TTTEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00028}_{-0.00029} \quad (+1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.013}_{-0.013} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.3^{+7.7}_{-7.7} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0020}_{-0.0020} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$H(0.38)$	$83.06^{+0.57}_{-0.57} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04097^{+0.00057}_{-0.00059} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.019}_{-0.019} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+15}_{-16} \quad (-0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.5}_{-1.5} \quad (+0.9\sigma)$	$H(0.51)$	$89.75^{+0.46}_{-0.46} \quad (+1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.047}_{-0.045} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+18}_{-18} \quad (-0.9\sigma)$
n_{s}	$0.9675^{+0.0076}_{-0.0076} \quad (+0.9\sigma)$	z_{re}	$< 8.93 \quad (+0.3\sigma)$	$H(0.61)$	$95.36^{+0.39}_{-0.38} \quad (+1.0\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.060}_{-0.055} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+19}_{-20} \quad (-0.9\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$H(2.33)$	$235.8^{+1.2}_{-1.3} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1223^{+24}_{-23} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+19}_{-18} \quad (-1.0\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{220}	$5722^{+77}_{-73} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.011} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{1420}	$816.1^{+9.4}_{-9.3} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.24}_{-0.25}$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0094} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9675^{+0.0076}_{-0.0076} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.4716^{+0.0098}_{-0.0096} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.6196^{+0.0093}_{-0.0087} \quad (-0.1\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4668^{+0.0091}_{-0.0088} \quad (-0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.591^{+0.055}_{-0.051} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.5896^{+0.0088}_{-0.0082} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.36}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.794^{+0.042}_{-0.042} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0044}_{-0.0041} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.86^{+0.46}_{-0.45} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0046}_{-0.0042} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	r_*	$144.73^{+0.50}_{-0.48} \quad (+0.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04116^{+0.00057}_{-0.00059} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.7^{+3.7}_{-3.7} \quad (-0.7\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.048}_{-0.047} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{TE}	$0.9968^{+0.0098}_{-0.0095}$	z_{drag}	$1059.79^{+0.64}_{-0.62} \quad (+0.9\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
c_{EE}	$0.9923^{+0.0097}_{-0.0093}$	r_{drag}	$147.41^{+0.52}_{-0.51} \quad (+0.4\sigma)$	χ_{lowl}^2	$22.88 \quad (\nu: 0.3) \quad (-0.8\sigma)$
H_0	$67.73^{+0.90}_{-0.89} \quad (+0.9\sigma)$	k_{D}	$0.14051^{+0.00063}_{-0.00064} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.4 \quad (\nu: 15.8)$
Ω_{Λ}	$0.691^{+0.012}_{-0.012} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00038}_{-0.00036} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.012}_{-0.012} \quad (-0.9\sigma)$	z_{eq}	$3376^{+46}_{-46} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0019}_{-0.0019} \quad (-0.7\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00014} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^3$	$0.09611^{+0.00061}_{-0.00064} \quad (+0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8180^{+0.0087}_{-0.0086} \quad (+0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.808^{+0.013}_{-0.012} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0045}_{-0.0044} \quad (+0.8\sigma)$	χ_{BAO}^2	$5.96 \quad (\nu: 0.5)$
S_8	$0.820^{+0.025}_{-0.025} \quad (-0.8\sigma)$	$H(0.15)$	$72.98^{+0.79}_{-0.77} \quad (+0.9\sigma)$	χ_{CMB}^2	$11934.2 \quad (\nu: 16.1) \quad (+1956.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11947.99; R - 1 = 0.01741$$

2.24 base_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02242^{+0.00028}_{-0.00030} \quad (+1.4\sigma)$	S_8	$0.810^{+0.030}_{-0.030} \quad (-1.2\sigma)$	$100\theta_{s,eq}$	$0.4539^{+0.0056}_{-0.0056} \quad (+1.2\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0025}_{-0.0025} \quad (-1.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.016}_{-0.016} \quad (-1.2\sigma)$	$H(0.15)$	$73.36^{+0.92}_{-0.98} \quad (+1.4\sigma)$
$100\theta_{MC}$	$1.04108^{+0.00057}_{-0.00062} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.598^{+0.016}_{-0.016} \quad (-1.1\sigma)$	$D_M(0.15)$	$636.6^{+9.6}_{-9.2} \quad (-1.4\sigma)$
τ	$0.056^{+0.013}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.975^{+0.022}_{-0.022} \quad (-1.1\sigma)$	$H(0.38)$	$83.33^{+0.69}_{-0.71} \quad (+1.4\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.030}_{-0.026} \quad (+0.1\sigma)$	$r_{drag} h$	$100.6^{+2.1}_{-2.0} \quad (+1.3\sigma)$	$D_M(0.38)$	$1520^{+19}_{-18} \quad (-1.4\sigma)$
n_s	$0.9697^{+0.0087}_{-0.0083} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.414^{+0.053}_{-0.050} \quad (-1.1\sigma)$	$H(0.51)$	$89.97^{+0.55}_{-0.56} \quad (+1.5\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$< 8.99 \quad (+0.4\sigma)$	$D_M(0.51)$	$1971^{+23}_{-21} \quad (-1.4\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s$	$2.096^{+0.060}_{-0.057} \quad (+0.1\sigma)$	$H(0.61)$	$95.53^{+0.45}_{-0.45} \quad (+1.5\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.873^{+0.022}_{-0.023} \quad (-0.9\sigma)$	$D_M(0.61)$	$2294^{+24}_{-23} \quad (-1.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1219^{+25}_{-25} \quad (-0.9\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.5} \quad (-1.1\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{220}	$5729^{+79}_{-73} \quad (+0.4\sigma)$	$D_M(2.33)$	$5754^{+21}_{-20} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$< 7.69 \quad (-0.6\sigma)$	D_{810}	$2535^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.015}_{-0.015} \quad (-1.2\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$817.0^{+9.1}_{-9.4} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.8^{+3.2}_{-3.2} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.469^{+0.013}_{-0.013} \quad (-1.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9697^{+0.0087}_{-0.0083} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.0095} \quad (-0.3\sigma)$
A^{kSZ}	—	Y_P	$0.24541^{+0.00011}_{-0.00012} \quad (+1.3\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.011}_{-0.011} \quad (-1.1\sigma)$
A_{100}^{dust}	$1.02^{+0.40}_{-0.40}$	Y_P^{BBN}	$0.24674^{+0.00011}_{-0.00012} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.010}_{-0.0087} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$10^5 D/H$	$2.576^{+0.054}_{-0.053} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.010}_{-0.010} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.19}$	Age/Gyr	$13.778^{+0.047}_{-0.044} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.5892^{+0.0096}_{-0.0084} \quad (-0.1\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.33}$	z_*	$1089.68^{+0.52}_{-0.51} \quad (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0044}_{-0.0042} \quad (+0.1\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	r_*	$144.91^{+0.58}_{-0.59} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0046}_{-0.0043} \quad (+0.4\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.5\sigma)$	$100\theta_*$	$1.04126^{+0.00056}_{-0.00061} \quad (+0.6\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
c_{TE}	$0.997^{+0.010}_{-0.0094}$	$D_M(z_*)/Gpc$	$13.916^{+0.054}_{-0.056} \quad (+0.9\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.9} \quad (-0.9\sigma)$
c_{EE}	$0.9925^{+0.0098}_{-0.0093}$	z_{drag}	$1059.92^{+0.59}_{-0.63} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
H_0	$68.2^{+1.1}_{-1.1} \quad (+1.4\sigma)$	r_{drag}	$147.56^{+0.56}_{-0.60} \quad (+0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
Ω_Λ	$0.696^{+0.015}_{-0.015} \quad (+1.3\sigma)$	k_D	$0.14041^{+0.00067}_{-0.00068} \quad (-0.2\sigma)$	χ_{lowl}^2	$22.52 \quad (\nu: 0.3) \quad (-1.1\sigma)$
Ω_m	$0.304^{+0.015}_{-0.015} \quad (-1.3\sigma)$	$100\theta_D$	$0.16077^{+0.00037}_{-0.00034} \quad (-1.1\sigma)$	$\chi_{CamSpec}^2$	$11516.3 \quad (\nu: 20.8)$
$\Omega_m h^2$	$0.1411^{+0.0024}_{-0.0024} \quad (-1.2\sigma)$	z_{eq}	$3356^{+58}_{-58} \quad (-1.2\sigma)$	$\chi_{H073p45}^2$	$10.3 \quad (\nu: 2.5)$
$\Omega_m h^3$	$0.09615^{+0.00062}_{-0.00061} \quad (+0.6\sigma)$	k_{eq}	$0.01024^{+0.00018}_{-0.00018} \quad (-1.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.805^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{eq}$	$0.822^{+0.011}_{-0.011} \quad (+1.2\sigma)$	χ_{CMB}^2	$11935.9 \quad (\nu: 20.0) \quad (+1956.5\sigma)$
$\bar{\chi}_{eff}^2 = 11954.01; R - 1 = 0.03572$					

2.25 base_plikHM_TE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022460	$0.02249^{+0.00050}_{-0.00049}$ (+1.7 σ)	$\langle d^2 \rangle^{1/2}$	2.388	$2.384^{+0.081}_{-0.086}$ (−1.8 σ)	$H(0.15)$	73.51	$73.6^{+1.6}_{-1.5}$ (+1.7 σ)
$\Omega_c h^2$	0.11788	$0.1177^{+0.0040}_{-0.0039}$ (−1.4 σ)	z_{re}	7.09	$7.1^{+1.7}_{-1.8}$ (−0.5 σ)	$D_{\text{M}}(0.15)$	635.2	634^{+15}_{-15} (−1.7 σ)
$100\theta_{\text{MC}}$	1.04137	$1.04139^{+0.00095}_{-0.00098}$ (+1.3 σ)	$10^9 A_{\text{s}}$	2.044	$2.045^{+0.079}_{-0.082}$ (−1.4 σ)	$H(0.38)$	83.46	$83.5^{+1.2}_{-1.1}$ (+1.8 σ)
τ	0.0491	$0.050^{+0.016}_{-0.017}$ (−0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8528	$1.851^{+0.037}_{-0.035}$ (−2.4 σ)	$D_{\text{M}}(0.38)$	1517.1	1515^{+30}_{-30} (−1.7 σ)
$\ln(10^{10} A_{\text{s}})$	3.0175	$3.018^{+0.038}_{-0.041}$ (−1.4 σ)	D_{40}	1215	1212^{+52}_{-51} (−1.4 σ)	$H(0.51)$	90.08	$90.15^{+0.93}_{-0.87}$ (+1.9 σ)
n_{s}	0.9660	$0.967^{+0.022}_{-0.022}$ (+0.8 σ)	D_{220}	5695	5693^{+110}_{-110} (−0.5 σ)	$D_{\text{M}}(0.51)$	1966.8	1965^{+35}_{-35} (−1.7 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.076}_{-0.076}$	D_{810}	2507.0	2507^{+51}_{-48} (−2.2 σ)	$H(0.61)$	95.63	$95.68^{+0.77}_{-0.70}$ (+1.9 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.136^{+0.058}_{-0.059}$	D_{1420}	806.8	807^{+24}_{-23} (−1.4 σ)	$D_{\text{M}}(0.61)$	2289.8	2287^{+38}_{-38} (−1.7 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.477	$0.48^{+0.17}_{-0.17}$	D_{2000}	227.5	$227.6^{+8.6}_{-8.2}$ (−1.1 σ)	$H(2.33)$	235.29	$235.2^{+2.4}_{-2.4}$ (−1.2 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	$n_{\text{s},0.002}$	0.9660	$0.967^{+0.022}_{-0.022}$ (+0.8 σ)	$D_{\text{M}}(2.33)$	5749.0	5747^{+33}_{-34} (−1.9 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.657	$0.66^{+0.16}_{-0.16}$	Y_{P}	0.245430	$0.24544^{+0.00021}_{-0.00020}$ (+1.6 σ)	$f\sigma_8(0.15)$	0.4413	$0.440^{+0.024}_{-0.024}$ (−1.9 σ)
A_{217}^{dustTE}	2.04	$2.04^{+0.53}_{-0.53}$	$Y_{\text{P}}^{\text{BBN}}$	0.246756	$0.24676^{+0.00021}_{-0.00020}$ (+1.6 σ)	$\sigma_8(0.15)$	0.7343	$0.734^{+0.019}_{-0.019}$ (−2.0 σ)
c_{100}	1.00017	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	10^5D/H	2.569	$2.565^{+0.091}_{-0.091}$ (−1.6 σ)	$f\sigma_8(0.38)$	0.4614	$0.460^{+0.020}_{-0.020}$ (−2.0 σ)
c_{217}	0.99799	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	Age/Gyr	13.766	$13.761^{+0.073}_{-0.076}$ (−1.9 σ)	$\sigma_8(0.38)$	0.6519	$0.652^{+0.016}_{-0.016}$ (−1.9 σ)
y_{cal}	1.00005	$0.99999^{+0.0049}_{-0.0048}$ (−0.2 σ)	z_*	1089.62	$1089.57^{+0.82}_{-0.83}$ (−1.8 σ)	$f\sigma_8(0.51)$	0.4611	$0.460^{+0.017}_{-0.018}$ (−2.1 σ)
H_0	68.33	$68.4^{+1.8}_{-1.8}$ (+1.7 σ)	r_*	144.91	$144.95^{+0.93}_{-0.93}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6105	$0.610^{+0.014}_{-0.014}$ (−1.8 σ)
Ω_{Λ}	0.6980	$0.699^{+0.023}_{-0.024}$ (+1.5 σ)	$100\theta_*$	1.04154	$1.04156^{+0.00094}_{-0.00096}$ (+1.3 σ)	$f\sigma_8(0.61)$	0.4570	$0.456^{+0.016}_{-0.016}$ (−2.1 σ)
Ω_{m}	0.3020	$0.301^{+0.024}_{-0.023}$ (−1.5 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.913	$13.917^{+0.086}_{-0.087}$ (+0.9 σ)	$\sigma_8(0.61)$	0.5812	$0.581^{+0.014}_{-0.014}$ (−1.7 σ)
$\Omega_{\text{m}} h^2$	0.14098	$0.1408^{+0.0038}_{-0.0037}$ (−1.3 σ)	z_{drag}	1060.01	$1060.0^{+1.1}_{-1.1}$ (+1.4 σ)	$f\sigma_8(2.33)$	0.2934	$0.2934^{+0.0068}_{-0.0067}$ (−1.4 σ)
$\Omega_{\text{m}} h^3$	0.09633	$0.0963^{+0.0010}_{-0.0010}$ (+1.0 σ)	r_{drag}	147.55	$147.59^{+0.96}_{-0.96}$ (+0.8 σ)	$\sigma_8(2.33)$	0.3029	$0.3030^{+0.0069}_{-0.0069}$ (−1.1 σ)
σ_8	0.7936	$0.793^{+0.022}_{-0.022}$ (−2.1 σ)	k_{D}	0.14044	$0.1404^{+0.0011}_{-0.0011}$ (−0.2 σ)	χ_{small}^2	395.69	396.8 (ν : 1.2) (−0.1 σ)
S_8	0.7962	$0.794^{+0.046}_{-0.046}$ (−1.9 σ)	$100\theta_{\text{D}}$	0.16077	$0.16075^{+0.00062}_{-0.00061}$ (−1.2 σ)	χ_{plikTE}^2	852.9	859.8 (ν : 6.7)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4361	$0.435^{+0.025}_{-0.025}$ (−1.9 σ)	z_{eq}	3354	3349^{+90}_{-89} (−1.3 σ)	χ_{prior}^2	0.4	7.4 (ν : 6.8) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5883	$0.587^{+0.024}_{-0.024}$ (−2.0 σ)	k_{eq}	0.010235	$0.01022^{+0.00027}_{-0.00027}$ (−1.3 σ)	χ_{CMB}^2	1248.5	1256.6 (ν : 7.8) (+11.7 σ)
$\sigma_8/h^{0.5}$	0.9601	$0.959^{+0.034}_{-0.034}$ (−2.1 σ)	$100\theta_{\text{eq}}$	0.8227	$0.824^{+0.017}_{-0.017}$ (+1.4 σ)			
$r_{\text{drag}} h$	100.82	$101.0^{+3.2}_{-3.1}$ (+1.6 σ)	$100\theta_{\text{s,eq}}$	0.4542	$0.4547^{+0.0090}_{-0.0088}$ (+1.4 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1248.98$; $\bar{\chi}_{\text{eff}}^2 = 1264.01$; $R - 1 = 0.00711$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.69 plik_rd12_HM_v22_TE: 852.85

2.26 base_plikHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02250^{+0.00050}_{-0.00049} \quad (+1.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.390^{+0.079}_{-0.080} \quad (-1.7\sigma)$	$H(0.15)$	$73.6^{+1.5}_{-1.5} \quad (+1.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1176^{+0.0040}_{-0.0039} \quad (-1.5\sigma)$	z_{re}	$< 8.55 \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$634^{+15}_{-15} \quad (-1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04139^{+0.00094}_{-0.00097} \quad (+1.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.058^{+0.066}_{-0.060} \quad (-1.0\sigma)$	$H(0.38)$	$83.6^{+1.1}_{-1.1} \quad (+1.9\sigma)$
τ	$0.0528^{+0.012}_{-0.0097} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.852^{+0.037}_{-0.035} \quad (-2.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1515^{+30}_{-30} \quad (-1.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.024^{+0.032}_{-0.029} \quad (-1.0\sigma)$	D_{40}	$1212^{+50}_{-50} \quad (-1.4\sigma)$	$H(0.51)$	$90.17^{+0.92}_{-0.88} \quad (+1.9\sigma)$
n_{s}	$0.968^{+0.022}_{-0.021} \quad (+0.9\sigma)$	D_{220}	$5693^{+110}_{-110} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1964^{+35}_{-35} \quad (-1.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.075}$	D_{810}	$2508^{+51}_{-48} \quad (-2.1\sigma)$	$H(0.61)$	$95.70^{+0.77}_{-0.70} \quad (+2.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.136^{+0.058}_{-0.059}$	D_{1420}	$808^{+24}_{-22} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2287^{+38}_{-38} \quad (-1.8\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	D_{2000}	$227.9^{+8.5}_{-8.1} \quad (-0.9\sigma)$	$H(2.33)$	$235.1^{+2.4}_{-2.3} \quad (-1.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$n_{\mathrm{s},0.002}$	$0.968^{+0.022}_{-0.021} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(2.33)$	$5746^{+33}_{-34} \quad (-1.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	Y_{P}	$0.24544^{+0.00021}_{-0.00020} \quad (+1.6\sigma)$	$f\sigma_8(0.15)$	$0.441^{+0.023}_{-0.023} \quad (-1.8\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.03^{+0.53}_{-0.53}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00021}_{-0.00020} \quad (+1.6\sigma)$	$\sigma_8(0.15)$	$0.736^{+0.017}_{-0.016} \quad (-1.7\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.563^{+0.092}_{-0.090} \quad (-1.7\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.019}_{-0.019} \quad (-1.9\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.760^{+0.073}_{-0.076} \quad (-1.9\sigma)$	$\sigma_8(0.38)$	$0.654^{+0.014}_{-0.013} \quad (-1.5\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0048} \quad (-0.2\sigma)$	z_*	$1089.55^{+0.82}_{-0.82} \quad (-1.8\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.017}_{-0.017} \quad (-1.9\sigma)$
H_0	$68.5^{+1.8}_{-1.8} \quad (+1.8\sigma)$	r_*	$144.96^{+0.92}_{-0.93} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.612^{+0.013}_{-0.012} \quad (-1.4\sigma)$
Ω_{Λ}	$0.700^{+0.023}_{-0.024} \quad (+1.6\sigma)$	$100\theta_*$	$1.04157^{+0.00093}_{-0.00096} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.015}_{-0.015} \quad (-1.9\sigma)$
Ω_{m}	$0.300^{+0.024}_{-0.023} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.918^{+0.086}_{-0.088} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.012}_{-0.011} \quad (-1.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1407^{+0.0038}_{-0.0037} \quad (-1.3\sigma)$	z_{drag}	$1060.1^{+1.1}_{-1.0} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.2945^{+0.0058}_{-0.0054} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0964^{+0.0010}_{-0.0010} \quad (+1.0\sigma)$	r_{drag}	$147.60^{+0.96}_{-0.97} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3041^{+0.0059}_{-0.0055} \quad (-0.7\sigma)$
σ_8	$0.796^{+0.020}_{-0.019} \quad (-1.8\sigma)$	k_{D}	$0.1404^{+0.0011}_{-0.0011} \quad (-0.2\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
S_8	$0.796^{+0.046}_{-0.045} \quad (-1.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00062}_{-0.00061} \quad (-1.3\sigma)$	χ_{plikTE}^2	$859.8 \quad (\nu: 6.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.436^{+0.025}_{-0.025} \quad (-1.8\sigma)$	z_{eq}	$3347^{+90}_{-88} \quad (-1.3\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.589^{+0.024}_{-0.023} \quad (-1.9\sigma)$	k_{eq}	$0.01022^{+0.00028}_{-0.00027} \quad (-1.3\sigma)$	χ_{CMB}^2	$1256.2 \quad (\nu: 7.4) \quad (+11.6\sigma)$
$\sigma_8/h^{0.5}$	$0.962^{+0.033}_{-0.032} \quad (-2.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.824^{+0.017}_{-0.017} \quad (+1.5\sigma)$		
$r_{\mathrm{drag}} h$	$101.1^{+3.2}_{-3.1} \quad (+1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4549^{+0.0089}_{-0.0088} \quad (+1.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1263.64$; $R - 1 = 0.00713$

2.27 base_plikHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02372	$0.0240^{+0.0025}_{-0.0023}$ (+8.4 σ)	D_{220}	5924	5959^{+380}_{-370} (+5.9 σ)	$H(0.38)$	84.36	$84.7^{+4.0}_{-3.6}$ (+4.0 σ)
$\Omega_{\mathrm{c}} h^2$	0.1164	$0.1158^{+0.0094}_{-0.0088}$ (−2.3 σ)	D_{810}	2585	2590^{+75}_{-77} (+3.9 σ)	$D_{\mathrm{M}}(0.38)$	1497	1489^{+91}_{-89} (−3.3 σ)
$100\theta_{\mathrm{MC}}$	1.04002	$1.0400^{+0.0017}_{-0.0017}$ (−1.7 σ)	D_{1420}	841.3	844^{+37}_{-38} (+5.8 σ)	$H(0.51)$	90.91	$91.3^{+3.4}_{-3.0}$ (+4.4 σ)
τ	0.0526	$0.053^{+0.017}_{-0.018}$ (+0.1 σ)	D_{2000}	240.2	241^{+14}_{-14} (+6.5 σ)	$D_{\mathrm{M}}(0.51)$	1942	1933^{+110}_{-110} (−3.4 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0504	$3.052^{+0.043}_{-0.044}$ (+0.7 σ)	$n_{\mathrm{s},0.002}$	0.9781	$0.980^{+0.029}_{-0.027}$ (+3.1 σ)	$H(0.61)$	96.40	$96.7^{+2.9}_{-2.7}$ (+4.9 σ)
n_{s}	0.9781	$0.980^{+0.029}_{-0.027}$ (+3.1 σ)	Y_{P}	0.24595	$0.24603^{+0.00093}_{-0.00095}$ (+7.6 σ)	$D_{\mathrm{M}}(0.61)$	2262	2252^{+120}_{-120} (−3.5 σ)
y_{cal}	1.00009	$0.9999^{+0.0050}_{-0.0048}$ (−0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24728	$0.24736^{+0.00094}_{-0.00095}$ (+7.6 σ)	$H(2.33)$	235.47	$235.3^{+4.3}_{-3.8}$ (−1.1 σ)
H_0	69.5	$69.9^{+5.5}_{-5.2}$ (+3.3 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.352	$2.32^{+0.39}_{-0.36}$ (−7.4 σ)	$D_{\mathrm{M}}(2.33)$	5709	5695^{+130}_{-140} (−5.1 σ)
Ω_{Λ}	0.708	$0.711^{+0.056}_{-0.060}$ (+2.4 σ)	Age/Gyr	13.672	$13.64^{+0.28}_{-0.30}$ (−5.1 σ)	$f\sigma_8(0.15)$	0.437	$0.433^{+0.058}_{-0.055}$ (−2.5 σ)
Ω_{m}	0.292	$0.289^{+0.060}_{-0.056}$ (−2.4 σ)	z_*	1088.01	$1087.8^{+3.4}_{-3.1}$ (−6.3 σ)	$\sigma_8(0.15)$	0.7399	$0.737^{+0.027}_{-0.029}$ (−1.6 σ)
$\Omega_{\mathrm{m}} h^2$	0.1408	$0.1404^{+0.0075}_{-0.0069}$ (−1.5 σ)	r_*	144.33	$144.3^{+1.3}_{-1.3}$ (−0.4 σ)	$f\sigma_8(0.38)$	0.4598	$0.456^{+0.045}_{-0.045}$ (−2.5 σ)
$\Omega_{\mathrm{m}} h^3$	0.09778	$0.0981^{+0.0036}_{-0.0033}$ (+4.9 σ)	$100\theta_*$	1.04007	$1.0400^{+0.0017}_{-0.0017}$ (−2.1 σ)	$\sigma_8(0.38)$	0.6581	$0.656^{+0.019}_{-0.021}$ (−1.1 σ)
σ_8	0.7986	$0.796^{+0.035}_{-0.036}$ (−1.8 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.877	$13.87^{+0.12}_{-0.12}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4608	$0.457^{+0.038}_{-0.039}$ (−2.4 σ)
S_8	0.788	$0.78^{+0.12}_{-0.11}$ (−2.5 σ)	z_{drag}	1062.76	$1063.2^{+4.8}_{-4.6}$ (+8.3 σ)	$\sigma_8(0.51)$	0.6168	$0.615^{+0.017}_{-0.018}$ (−0.9 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.431	$0.427^{+0.063}_{-0.058}$ (−2.5 σ)	r_{drag}	146.55	$146.5^{+1.4}_{-1.4}$ (−1.6 σ)	$f\sigma_8(0.61)$	0.4575	$0.454^{+0.033}_{-0.034}$ (−2.4 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.587	$0.583^{+0.055}_{-0.052}$ (−2.4 σ)	k_{D}	0.14239	$0.1426^{+0.0024}_{-0.0025}$ (+3.9 σ)	$\sigma_8(0.61)$	0.5874	$0.586^{+0.015}_{-0.016}$ (−0.7 σ)
$\sigma_8/h^{0.5}$	0.958	$0.952^{+0.077}_{-0.075}$ (−2.5 σ)	$100\theta_{\mathrm{D}}$	0.15899	$0.1588^{+0.0025}_{-0.0024}$ (−8.5 σ)	$f\sigma_8(2.33)$	0.2970	$0.2965^{+0.0069}_{-0.0071}$ (−0.2 σ)
$r_{\mathrm{drag}} h$	101.8	$102.4^{+7.9}_{-7.8}$ (+2.5 σ)	z_{eq}	3349	3340^{+180}_{-170} (−1.5 σ)	$\sigma_8(2.33)$	0.3071	$0.3069^{+0.0072}_{-0.0074}$ (+0.4 σ)
$\langle d^2 \rangle^{1/2}$	2.384	$2.37^{+0.15}_{-0.15}$ (−2.1 σ)	k_{eq}	0.01022	$0.01019^{+0.00055}_{-0.00051}$ (−1.5 σ)	χ_{small}^2	395.59	$396.7 (\nu: 1.2)$ (−0.1 σ)
z_{re}	7.17	$7.1^{+1.7}_{-1.7}$ (−0.5 σ)	$100\theta_{\mathrm{eq}}$	0.8261	$0.829^{+0.038}_{-0.038}$ (+2.0 σ)	χ_{plikEE}^2	739.0	$743.9 (\nu: 4.9)$
$10^9 A_{\mathrm{s}}$	2.112	$2.116^{+0.093}_{-0.092}$ (+0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.4550	$0.456^{+0.018}_{-0.018}$ (+1.7 σ)	χ_{prior}^2	0.00	$0.98 (\nu: 1.0)$ (−1.7 σ)
$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.9014	$1.904^{+0.047}_{-0.047}$ (+1.4 σ)	$H(0.15)$	74.55	$75.0^{+4.9}_{-4.6}$ (+3.5 σ)	χ_{CMB}^2	1134.6	$1140.6 (\nu: 5.9)$ (−9.4 σ)
D_{40}	1229	1230^{+59}_{-58} (−0.3 σ)	$D_{\mathrm{M}}(0.15)$	625.6	622^{+45}_{-43} (−3.2 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1134.55$; $\bar{\chi}_{\mathrm{eff}}^2 = 1141.61$; $R - 1 = 0.00482$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.59 plik_rd12_HM_v22_EE: 738.96

2.28 base_plikHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.0240^{+0.0025}_{-0.0023} \quad (+8.4\sigma)$	D_{220}	$5954^{+380}_{-370} \quad (+5.7\sigma)$	$H(0.38)$	$84.7^{+4.0}_{-3.6} \quad (+4.0\sigma)$
$\Omega_{\text{c}}h^2$	$0.1158^{+0.0095}_{-0.0090} \quad (-2.3\sigma)$	D_{810}	$2589^{+75}_{-77} \quad (+3.8\sigma)$	$D_{\text{M}}(0.38)$	$1489^{+92}_{-90} \quad (-3.3\sigma)$
$100\theta_{\text{MC}}$	$1.0400^{+0.0017}_{-0.0017} \quad (-1.6\sigma)$	D_{1420}	$844^{+37}_{-38} \quad (+5.7\sigma)$	$H(0.51)$	$91.3^{+3.3}_{-3.2} \quad (+4.4\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	D_{2000}	$241^{+14}_{-15} \quad (+6.5\sigma)$	$D_{\text{M}}(0.51)$	$1933^{+110}_{-110} \quad (-3.4\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.058^{+0.039}_{-0.035} \quad (+1.1\sigma)$	$n_{\text{s},0.002}$	$0.981^{+0.029}_{-0.027} \quad (+3.2\sigma)$	$H(0.61)$	$96.7^{+2.9}_{-2.8} \quad (+4.8\sigma)$
n_{s}	$0.981^{+0.029}_{-0.027} \quad (+3.2\sigma)$	Y_{P}	$0.24602^{+0.00094}_{-0.00095} \quad (+7.5\sigma)$	$D_{\text{M}}(0.61)$	$2252^{+120}_{-120} \quad (-3.5\sigma)$
y_{cal}	$0.99996^{+0.0050}_{-0.0048} \quad (-0.2\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24735^{+0.00095}_{-0.00096} \quad (+7.5\sigma)$	$H(2.33)$	$235.3^{+4.4}_{-3.9} \quad (-1.1\sigma)$
H_0	$69.9^{+5.5}_{-5.3} \quad (+3.3\sigma)$	$10^5 D/\text{H}$	$2.33^{+0.40}_{-0.36} \quad (-7.3\sigma)$	$D_{\text{M}}(2.33)$	$5696^{+130}_{-140} \quad (-5.0\sigma)$
Ω_{Λ}	$0.711^{+0.056}_{-0.061} \quad (+2.5\sigma)$	Age/Gyr	$13.65^{+0.29}_{-0.31} \quad (-5.1\sigma)$	$f\sigma_8(0.15)$	$0.435^{+0.059}_{-0.055} \quad (-2.4\sigma)$
Ω_{m}	$0.289^{+0.061}_{-0.056} \quad (-2.5\sigma)$	z_*	$1087.8^{+3.5}_{-3.2} \quad (-6.2\sigma)$	$\sigma_8(0.15)$	$0.740^{+0.026}_{-0.028} \quad (-1.3\sigma)$
$\Omega_{\text{m}}h^2$	$0.1404^{+0.0077}_{-0.0070} \quad (-1.5\sigma)$	r_*	$144.3^{+1.3}_{-1.3} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.458^{+0.045}_{-0.045} \quad (-2.3\sigma)$
$\Omega_{\text{m}}h^3$	$0.0981^{+0.0037}_{-0.0033} \quad (+4.8\sigma)$	$100\theta_*$	$1.0400^{+0.0017}_{-0.0017} \quad (-2.1\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.018}_{-0.019} \quad (-0.8\sigma)$
σ_8	$0.798^{+0.034}_{-0.035} \quad (-1.5\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.88^{+0.12}_{-0.12} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.038}_{-0.039} \quad (-2.3\sigma)$
S_8	$0.78^{+0.12}_{-0.11} \quad (-2.4\sigma)$	z_{drag}	$1063.2^{+4.8}_{-4.7} \quad (+8.3\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.016}_{-0.016} \quad (-0.5\sigma)$
$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.429^{+0.064}_{-0.058} \quad (-2.4\sigma)$	r_{drag}	$146.5^{+1.4}_{-1.4} \quad (-1.5\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.033}_{-0.035} \quad (-2.2\sigma)$
$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.585^{+0.055}_{-0.053} \quad (-2.2\sigma)$	k_{D}	$0.1426^{+0.0024}_{-0.0025} \quad (+3.9\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.014}_{-0.014} \quad (-0.4\sigma)$
$\sigma_8/h^{0.5}$	$0.955^{+0.076}_{-0.075} \quad (-2.4\sigma)$	$100\theta_{\text{D}}$	$0.1588^{+0.0026}_{-0.0023} \quad (-8.4\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0063}_{-0.0058} \quad (+0.2\sigma)$
$r_{\text{drag}}h$	$102.5^{+8.1}_{-7.9} \quad (+2.5\sigma)$	z_{eq}	$3339^{+180}_{-170} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.3079^{+0.0067}_{-0.0060} \quad (+0.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.38^{+0.15}_{-0.14} \quad (-1.9\sigma)$	k_{eq}	$0.01019^{+0.00056}_{-0.00051} \quad (-1.5\sigma)$	χ_{simall}^2	$396.4 \quad (\nu: 0.9) \quad (-0.3\sigma)$
z_{re}	$< 8.50 \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.829^{+0.038}_{-0.038} \quad (+2.0\sigma)$	χ_{plikEE}^2	$743.9 \quad (\nu: 5.0)$
$10^9 A_{\text{s}}$	$2.128^{+0.081}_{-0.077} \quad (+1.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.456^{+0.018}_{-0.019} \quad (+1.8\sigma)$	χ_{prior}^2	$1.0 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_{\text{s}}e^{-2\tau}$	$1.903^{+0.047}_{-0.047} \quad (+1.4\sigma)$	$H(0.15)$	$75.0^{+5.0}_{-4.7} \quad (+3.5\sigma)$	χ_{CMB}^2	$1140.3 \quad (\nu: 5.8) \quad (-9.5\sigma)$
D_{40}	$1229^{+59}_{-58} \quad (-0.3\sigma)$	$D_{\text{M}}(0.15)$	$622^{+45}_{-43} \quad (-3.2\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1141.31; R - 1 = 0.00558$

2.29 base_CamSpecHM_TE_lowE

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_b h^2$	0.02247	$0.02248^{+0.00050}_{-0.00050}$	(+1.7 σ)	D_{220}	5719	5716^{+120}_{-120}	(+0.1 σ)	$H(0.38)$	83.66	$83.7^{+1.2}_{-1.2}$	(+2.1 σ)
$\Omega_c h^2$	0.11696	$0.1169^{+0.0041}_{-0.0041}$	(−1.8 σ)	D_{810}	2548	2546^{+51}_{-50}	(+0.7 σ)	$D_M(0.38)$	1511.4	1511^{+31}_{-31}	(−2.0 σ)
$100\theta_{MC}$	1.04140	$1.04141^{+0.00099}_{-0.0010}$	(+1.4 σ)	D_{1420}	824.6	824^{+24}_{-23}	(+1.9 σ)	$H(0.51)$	90.23	$90.26^{+0.93}_{-0.92}$	(+2.1 σ)
τ	0.0518	$0.050^{+0.017}_{-0.018}$	(−0.2 σ)	D_{2000}	233.4	$233.3^{+8.7}_{-8.5}$	(+2.1 σ)	$D_M(0.51)$	1960.2	1959^{+36}_{-36}	(−2.0 σ)
$\ln(10^{10} A_s)$	3.0345	$3.031^{+0.039}_{-0.042}$	(−0.6 σ)	$n_{s,0.002}$	0.9781	$0.978^{+0.022}_{-0.022}$	(+2.8 σ)	$H(0.61)$	95.73	$95.76^{+0.77}_{-0.76}$	(+2.1 σ)
n_s	0.9781	$0.978^{+0.022}_{-0.022}$	(+2.8 σ)	Y_P	0.245433	$0.24544^{+0.00021}_{-0.00021}$	(+1.6 σ)	$D_M(0.61)$	2282.8	2282^{+39}_{-39}	(−2.0 σ)
y_{cal}	1.00007	$0.99999^{+0.0049}_{-0.0049}$	(−0.2 σ)	Y_P^{BBN}	0.246760	$0.24676^{+0.00021}_{-0.00021}$	(+1.6 σ)	$H(2.33)$	234.70	$234.7^{+2.5}_{-2.5}$	(−1.6 σ)
H_0	68.68	$68.7^{+1.9}_{-1.8}$	(+2.0 σ)	$10^5 D/H$	2.567	$2.566^{+0.094}_{-0.090}$	(−1.6 σ)	$D_M(2.33)$	5745.7	5745^{+34}_{-34}	(−2.0 σ)
Ω_Λ	0.7030	$0.703^{+0.023}_{-0.024}$	(+1.9 σ)	Age/Gyr	13.760	$13.757^{+0.077}_{-0.075}$	(−2.0 σ)	$f\sigma_8(0.15)$	0.4421	$0.441^{+0.025}_{-0.025}$	(−1.9 σ)
Ω_m	0.2970	$0.297^{+0.024}_{-0.023}$	(−1.9 σ)	z_*	1089.53	$1089.51^{+0.85}_{-0.82}$	(−1.9 σ)	$\sigma_8(0.15)$	0.7415	$0.740^{+0.020}_{-0.020}$	(−1.2 σ)
$\Omega_m h^2$	0.14007	$0.1400^{+0.0039}_{-0.0039}$	(−1.7 σ)	r_*	145.15	$145.2^{+1.0}_{-0.97}$	(+1.4 σ)	$f\sigma_8(0.38)$	0.4634	$0.462^{+0.020}_{-0.021}$	(−1.8 σ)
$\Omega_m h^3$	0.09620	$0.0962^{+0.0011}_{-0.0010}$	(+0.7 σ)	$100\theta_*$	1.04158	$1.04158^{+0.00098}_{-0.00099}$	(+1.3 σ)	$\sigma_8(0.38)$	0.6589	$0.658^{+0.016}_{-0.017}$	(−0.9 σ)
σ_8	0.8009	$0.799^{+0.022}_{-0.023}$	(−1.4 σ)	$D_M(z_*)/\text{Gpc}$	13.935	$13.936^{+0.093}_{-0.091}$	(+1.3 σ)	$f\sigma_8(0.51)$	0.4638	$0.463^{+0.018}_{-0.019}$	(−1.8 σ)
S_8	0.7968	$0.795^{+0.048}_{-0.048}$	(−1.9 σ)	z_{drag}	1059.93	$1060.0^{+1.1}_{-1.1}$	(+1.3 σ)	$\sigma_8(0.51)$	0.6173	$0.616^{+0.015}_{-0.016}$	(−0.8 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4364	$0.435^{+0.026}_{-0.026}$	(−1.9 σ)	r_{drag}	147.79	$147.8^{+1.0}_{-1.0}$	(+1.2 σ)	$f\sigma_8(0.61)$	0.4600	$0.459^{+0.016}_{-0.017}$	(−1.8 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5912	$0.590^{+0.025}_{-0.026}$	(−1.8 σ)	k_D	0.14021	$0.1402^{+0.0012}_{-0.0012}$	(−0.6 σ)	$\sigma_8(0.61)$	0.5878	$0.587^{+0.014}_{-0.015}$	(−0.6 σ)
$\sigma_8/h^{0.5}$	0.9664	$0.964^{+0.035}_{-0.036}$	(−1.8 σ)	$100\theta_D$	0.16079	$0.16078^{+0.00063}_{-0.00061}$	(−1.1 σ)	$f\sigma_8(2.33)$	0.2970	$0.2964^{+0.0070}_{-0.0072}$	(−0.3 σ)
$r_{drag} h$	101.50	$101.6^{+3.3}_{-3.2}$	(+1.9 σ)	z_{eq}	3332	3331^{+94}_{-93}	(−1.7 σ)	$\sigma_8(2.33)$	0.3068	$0.3063^{+0.0071}_{-0.0074}$	(+0.1 σ)
$\langle d^2 \rangle^{1/2}$	2.376	$2.370^{+0.084}_{-0.085}$	(−2.2 σ)	k_{eq}	0.010169	$0.01017^{+0.00029}_{-0.00029}$	(−1.7 σ)	χ_{small}^2	395.67	$396.9 (\nu: 1.3)$	
z_{re}	7.36	$7.2^{+1.8}_{-1.8}$	(−0.4 σ)	$100\theta_{eq}$	0.8267	$0.827^{+0.018}_{-0.018}$	(+1.8 σ)	$\chi_{CamSpec}^2$	2575.9	$2581.0 (\nu: 5.1)$	
$10^9 A_s$	2.079	$2.072^{+0.081}_{-0.086}$	(−0.6 σ)	$100\theta_{s,eq}$	0.4563	$0.4565^{+0.0094}_{-0.0092}$	(+1.8 σ)	χ_{prior}^2	10.03	$11.0 (\nu: 1.0)$	
$10^9 A_s e^{-2\tau}$	1.8744	$1.873^{+0.038}_{-0.038}$	(−0.8 σ)	$H(0.15)$	73.80	$73.8^{+1.6}_{-1.6}$	(+2.0 σ)	χ_{CMB}^2	2971.6	$2977.9 (\nu: 6.5)$	
D_{40}	1201	1200^{+52}_{-52}	(−2.2 σ)	$D_M(0.15)$	632.3	632^{+15}_{-15}	(−2.0 σ)				

Best-fit $\chi_{\text{eff}}^2 = 2981.64$; $\bar{\chi}_{\text{eff}}^2 = 2988.91$; $R - 1 = 0.00640$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.67 CamSpec like_10.7HM_1400_unified: 2575.95

2.30 base_CamSpecHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02249^{+0.00051}_{-0.00050}$ (+1.7 σ)	D_{220}	5716^{+120}_{-120} (+0.1 σ)	$H(0.38)$	$83.7^{+1.2}_{-1.1}$ (+2.1 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1168^{+0.0041}_{-0.0040}$ (−1.8 σ)	D_{810}	2547^{+51}_{-50} (+0.8 σ)	$D_{\mathrm{M}}(0.38)$	1510^{+31}_{-30} (−2.0 σ)
$100\theta_{\mathrm{MC}}$	$1.04141^{+0.00099}_{-0.0010}$ (+1.4 σ)	D_{1420}	825^{+24}_{-23} (+2.0 σ)	$H(0.51)$	$90.28^{+0.93}_{-0.92}$ (+2.2 σ)
τ	$0.054^{+0.012}_{-0.010}$ (+0.2 σ)	D_{2000}	$233.6^{+8.7}_{-8.5}$ (+2.2 σ)	$D_{\mathrm{M}}(0.51)$	1959^{+36}_{-36} (−2.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.037^{+0.033}_{-0.031}$ (−0.2 σ)	$n_{\mathrm{s},0.002}$	$0.979^{+0.022}_{-0.022}$ (+2.9 σ)	$H(0.61)$	$95.77^{+0.76}_{-0.75}$ (+2.2 σ)
n_{s}	$0.979^{+0.022}_{-0.022}$ (+2.9 σ)	Y_{P}	$0.24544^{+0.00021}_{-0.00020}$ (+1.6 σ)	$D_{\mathrm{M}}(0.61)$	2281^{+39}_{-39} (−2.1 σ)
y_{cal}	$0.99997^{+0.0049}_{-0.0050}$ (−0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00021}_{-0.00020}$ (+1.6 σ)	$H(2.33)$	$234.6^{+2.5}_{-2.5}$ (−1.6 σ)
H_0	$68.8^{+1.8}_{-1.8}$ (+2.1 σ)	$10^5D/H$	$2.564^{+0.093}_{-0.091}$ (−1.7 σ)	$D_{\mathrm{M}}(2.33)$	5744^{+34}_{-34} (−2.1 σ)
Ω_{Λ}	$0.704^{+0.023}_{-0.024}$ (+1.9 σ)	Age/Gyr	$13.756^{+0.077}_{-0.074}$ (−2.0 σ)	$f\sigma_8(0.15)$	$0.442^{+0.024}_{-0.025}$ (−1.8 σ)
Ω_{m}	$0.296^{+0.024}_{-0.023}$ (−1.9 σ)	z_*	$1089.49^{+0.84}_{-0.82}$ (−2.0 σ)	$\sigma_8(0.15)$	$0.742^{+0.018}_{-0.018}$ (−0.9 σ)
$\Omega_{\mathrm{m}}h^2$	$0.1400^{+0.0039}_{-0.0039}$ (−1.7 σ)	r_*	$145.2^{+1.0}_{-0.97}$ (+1.5 σ)	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.021}$ (−1.7 σ)
$\Omega_{\mathrm{m}}h^3$	$0.0962^{+0.0011}_{-0.0011}$ (+0.7 σ)	$100\theta_*$	$1.04159^{+0.00098}_{-0.00098}$ (+1.3 σ)	$\sigma_8(0.38)$	$0.660^{+0.015}_{-0.014}$ (−0.6 σ)
σ_8	$0.802^{+0.021}_{-0.021}$ (−1.1 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.937^{+0.093}_{-0.091}$ (+1.3 σ)	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.018}$ (−1.6 σ)
S_8	$0.797^{+0.047}_{-0.048}$ (−1.8 σ)	z_{drag}	$1060.0^{+1.1}_{-1.1}$ (+1.3 σ)	$\sigma_8(0.51)$	$0.618^{+0.014}_{-0.013}$ (−0.4 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.436^{+0.026}_{-0.026}$ (−1.8 σ)	r_{drag}	$147.8^{+1.0}_{-1.0}$ (+1.2 σ)	$f\sigma_8(0.61)$	$0.460^{+0.016}_{-0.017}$ (−1.6 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.024}_{-0.025}$ (−1.7 σ)	k_{D}	$0.1402^{+0.0012}_{-0.0012}$ (−0.6 σ)	$\sigma_8(0.61)$	$0.589^{+0.013}_{-0.012}$ (−0.3 σ)
$\sigma_8/h^{0.5}$	$0.967^{+0.033}_{-0.035}$ (−1.6 σ)	$100\theta_{\mathrm{D}}$	$0.16077^{+0.00062}_{-0.00062}$ (−1.1 σ)	$f\sigma_8(2.33)$	$0.2974^{+0.0063}_{-0.0056}$ (+0.1 σ)
$r_{\mathrm{drag}}h$	$101.6^{+3.2}_{-3.2}$ (+2.0 σ)	z_{eq}	3329^{+93}_{-93} (−1.7 σ)	$\sigma_8(2.33)$	$0.3073^{+0.0062}_{-0.0058}$ (+0.5 σ)
$\langle d^2 \rangle^{1/2}$	$2.376^{+0.083}_{-0.083}$ (−2.1 σ)	k_{eq}	$0.01016^{+0.00028}_{-0.00028}$ (−1.7 σ)	χ_{small}^2	396.4 (ν : 0.7) (−0.3 σ)
z_{re}	< 8.65 (+0.0 σ)	$100\theta_{\mathrm{eq}}$	$0.827^{+0.018}_{-0.018}$ (+1.9 σ)	$\chi_{\mathrm{CamSpec}}^2$	2581.0 (ν : 5.1)
10^9A_{s}	$2.085^{+0.068}_{-0.064}$ (−0.2 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4567^{+0.0094}_{-0.0092}$ (+1.8 σ)	χ_{prior}^2	11.0 (ν : 1.0) (+1.0 σ)
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.873^{+0.038}_{-0.038}$ (−0.8 σ)	$H(0.15)$	$73.9^{+1.6}_{-1.6}$ (+2.1 σ)	χ_{CMB}^2	2977.5 (ν : 5.8) (+325.1 σ)
D_{40}	1199^{+52}_{-51} (−2.3 σ)	$D_{\mathrm{M}}(0.15)$	632^{+15}_{-15} (−2.0 σ)		

$\bar{\chi}_{\mathrm{eff}}^2 = 2988.52$; $R - 1 = 0.00517$

2.31 base_CamSpecHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02320	$0.0233^{+0.0024}_{-0.0022}$ (+5.3 σ)	D_{220}	5947	5950^{+380}_{-370} (+5.7 σ)	$H(0.38)$	83.13	$83.3^{+3.6}_{-3.5}$ (+1.4 σ)
$\Omega_c h^2$	0.1197	$0.1192^{+0.0093}_{-0.0090}$ (−0.7 σ)	D_{810}	2598	2597^{+77}_{-75} (+4.4 σ)	$D_M(0.38)$	1528	1525^{+91}_{-91} (−1.1 σ)
$100\theta_{MC}$	1.03933	$1.0393^{+0.0017}_{-0.0017}$ (−3.2 σ)	D_{1420}	839.2	840^{+37}_{-36} (+4.9 σ)	$H(0.51)$	89.90	$90.1^{+3.0}_{-2.9}$ (+1.7 σ)
τ	0.0500	$0.050^{+0.017}_{-0.018}$ (−0.2 σ)	D_{2000}	238.6	239^{+14}_{-14} (+5.2 σ)	$D_M(0.51)$	1979	1975^{+110}_{-110} (−1.2 σ)
$\ln(10^{10} A_s)$	3.0583	$3.058^{+0.043}_{-0.043}$ (+1.1 σ)	$n_{s,0.002}$	0.9650	$0.967^{+0.028}_{-0.026}$ (+0.8 σ)	$H(0.61)$	95.55	$95.7^{+2.6}_{-2.5}$ (+2.0 σ)
n_s	0.9650	$0.967^{+0.028}_{-0.026}$ (+0.8 σ)	Y_P	0.24574	$0.24575^{+0.00093}_{-0.00091}$ (+4.8 σ)	$D_M(0.61)$	2302	2298^{+120}_{-120} (−1.2 σ)
y_{cal}	0.99999	$1.0000^{+0.0049}_{-0.0049}$ (−0.2 σ)	Y_P^{BBN}	0.24707	$0.24708^{+0.00094}_{-0.00091}$ (+4.8 σ)	$H(2.33)$	237.00	$236.8^{+4.5}_{-4.1}$ (+0.1 σ)
H_0	67.6	$67.9^{+5.3}_{-5.0}$ (+1.1 σ)	$10^5 D/H$	2.439	$2.44^{+0.40}_{-0.37}$ (−4.7 σ)	$D_M(2.33)$	5748	5743^{+120}_{-130} (−2.1 σ)
Ω_Λ	0.686	$0.687^{+0.060}_{-0.065}$ (+0.6 σ)	Age/Gyr	13.760	$13.75^{+0.27}_{-0.30}$ (−2.2 σ)	$f\sigma_8(0.15)$	0.459	$0.456^{+0.058}_{-0.057}$ (−0.6 σ)
Ω_m	0.314	$0.313^{+0.065}_{-0.060}$ (−0.6 σ)	z_*	1088.88	$1088.8^{+3.4}_{-3.2}$ (−3.6 σ)	$\sigma_8(0.15)$	0.7490	$0.747^{+0.026}_{-0.028}$ (−0.3 σ)
$\Omega_m h^2$	0.1435	$0.1431^{+0.0076}_{-0.0072}$ (−0.1 σ)	r_*	143.89	$143.9^{+1.3}_{-1.3}$ (−1.1 σ)	$f\sigma_8(0.38)$	0.4764	$0.474^{+0.044}_{-0.045}$ (−0.6 σ)
$\Omega_m h^3$	0.09705	$0.0971^{+0.0035}_{-0.0031}$ (+2.6 σ)	$100\theta_*$	1.03943	$1.0394^{+0.0017}_{-0.0016}$ (−3.5 σ)	$\sigma_8(0.38)$	0.6637	$0.662^{+0.018}_{-0.020}$ (−0.1 σ)
σ_8	0.8108	$0.809^{+0.033}_{-0.036}$ (−0.4 σ)	$D_M(z_*)/\text{Gpc}$	13.843	$13.85^{+0.12}_{-0.12}$ (−0.6 σ)	$f\sigma_8(0.51)$	0.4747	$0.473^{+0.036}_{-0.039}$ (−0.6 σ)
S_8	0.829	$0.83^{+0.12}_{-0.11}$ (−0.6 σ)	z_{drag}	1061.80	$1061.9^{+4.7}_{-4.5}$ (+5.5 σ)	$\sigma_8(0.51)$	0.6210	$0.620^{+0.016}_{-0.017}$ (−0.1 σ)
$\sigma_8 \Omega_m^{0.5}$	0.454	$0.452^{+0.064}_{-0.060}$ (−0.6 σ)	r_{drag}	146.27	$146.3^{+1.3}_{-1.3}$ (−1.9 σ)	$f\sigma_8(0.61)$	0.4696	$0.468^{+0.031}_{-0.034}$ (−0.6 σ)
$\sigma_8 \Omega_m^{0.25}$	0.607	$0.604^{+0.054}_{-0.053}$ (−0.6 σ)	k_D	0.14235	$0.1423^{+0.0024}_{-0.0024}$ (+3.4 σ)	$\sigma_8(0.61)$	0.5908	$0.590^{+0.014}_{-0.016}$ (−0.0 σ)
$\sigma_8/h^{0.5}$	0.986	$0.982^{+0.075}_{-0.076}$ (−0.7 σ)	$100\theta_D$	0.15943	$0.1594^{+0.0027}_{-0.0024}$ (−6.2 σ)	$f\sigma_8(2.33)$	0.2978	$0.2974^{+0.0068}_{-0.0069}$ (+0.1 σ)
$r_{drag} h$	98.9	$99.3^{+7.8}_{-7.5}$ (+0.5 σ)	z_{eq}	3414	3405^{+180}_{-170} (−0.1 σ)	$\sigma_8(2.33)$	0.3069	$0.3067^{+0.0073}_{-0.0074}$ (+0.3 σ)
$\langle d^2 \rangle^{1/2}$	2.457	$2.45^{+0.15}_{-0.15}$ (−0.1 σ)	k_{eq}	0.01042	$0.01039^{+0.00055}_{-0.00053}$ (−0.1 σ)	χ_{small}^2	395.62	396.8 (ν : 1.2) (−0.1 σ)
z_{re}	7.06	$7.1^{+1.7}_{-1.8}$ (−0.5 σ)	$100\theta_{eq}$	0.8123	$0.814^{+0.037}_{-0.036}$ (+0.4 σ)	$\chi_{CamSpec}^2$	1886.5	1891.5 (ν : 4.9)
$10^9 A_s$	2.129	$2.130^{+0.092}_{-0.091}$ (+1.1 σ)	$100\theta_{s,eq}$	0.4482	$0.449^{+0.018}_{-0.018}$ (+0.2 σ)	χ_{prior}^2	10.03	11.0 (ν : 1.0) (+1.0 σ)
$10^9 A_s e^{-2\tau}$	1.9264	$1.925^{+0.048}_{-0.047}$ (+3.0 σ)	$H(0.15)$	72.95	$73.2^{+4.8}_{-4.4}$ (+1.2 σ)	χ_{CMB}^2	2282.1	2288.3 (ν : 6.1) (+199.6 σ)
D_{40}	1265	1260^{+61}_{-60} (+1.8 σ)	$D_M(0.15)$	640.9	639^{+45}_{-44} (−1.0 σ)			

Best-fit $\chi_{eff}^2 = 2292.16$; $\bar{\chi}_{eff}^2 = 2299.35$; $R - 1 = 0.00959$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.62 CamSpec like_10.7HM_1400_unified: 1886.52

2.32 base_CamSpecHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0233^{+0.0023}_{-0.0022} \quad (+5.1\sigma)$	D_{220}	$5943^{+370}_{-370} \quad (+5.5\sigma)$	$H(0.38)$	$83.3^{+3.5}_{-3.5} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1192^{+0.0093}_{-0.0091} \quad (-0.7\sigma)$	D_{810}	$2596^{+76}_{-75} \quad (+4.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+91}_{-91} \quad (-1.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0393^{+0.0017}_{-0.0017} \quad (-3.2\sigma)$	D_{1420}	$839^{+37}_{-36} \quad (+4.9\sigma)$	$H(0.51)$	$90.0^{+3.0}_{-2.9} \quad (+1.6\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	D_{2000}	$239^{+14}_{-14} \quad (+5.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+110}_{-110} \quad (-1.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.065^{+0.038}_{-0.035} \quad (+1.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.028}_{-0.026} \quad (+0.9\sigma)$	$H(0.61)$	$95.7^{+2.6}_{-2.5} \quad (+1.9\sigma)$
n_{s}	$0.968^{+0.028}_{-0.026} \quad (+0.9\sigma)$	Y_{P}	$0.24574^{+0.00093}_{-0.00090} \quad (+4.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+120}_{-120} \quad (-1.2\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0049} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24707^{+0.00093}_{-0.00091} \quad (+4.7\sigma)$	$H(2.33)$	$236.8^{+4.5}_{-4.1} \quad (+0.1\sigma)$
H_0	$67.9^{+5.3}_{-5.0} \quad (+1.1\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.44^{+0.40}_{-0.37} \quad (-4.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5744^{+120}_{-120} \quad (-2.1\sigma)$
Ω_{Λ}	$0.687^{+0.058}_{-0.068} \quad (+0.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.75^{+0.27}_{-0.30} \quad (-2.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.058}_{-0.056} \quad (-0.5\sigma)$
Ω_{m}	$0.313^{+0.068}_{-0.058} \quad (-0.6\sigma)$	z_*	$1088.9^{+3.4}_{-3.2} \quad (-3.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.025}_{-0.027} \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1431^{+0.0076}_{-0.0072} \quad (-0.1\sigma)$	r_*	$144.0^{+1.3}_{-1.3} \quad (-1.0\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.043}_{-0.045} \quad (-0.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0970^{+0.0035}_{-0.0031} \quad (+2.5\sigma)$	$100\theta_*$	$1.0394^{+0.0017}_{-0.0016} \quad (-3.5\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.017}_{-0.018} \quad (+0.3\sigma)$
σ_8	$0.812^{+0.032}_{-0.034} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.85^{+0.12}_{-0.12} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.036}_{-0.038} \quad (-0.4\sigma)$
S_8	$0.83^{+0.12}_{-0.11} \quad (-0.5\sigma)$	z_{drag}	$1061.8^{+4.6}_{-4.4} \quad (+5.3\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.015}_{-0.015} \quad (+0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.064}_{-0.060} \quad (-0.5\sigma)$	r_{drag}	$146.3^{+1.3}_{-1.3} \quad (-1.8\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.030}_{-0.034} \quad (-0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.054}_{-0.054} \quad (-0.4\sigma)$	k_{D}	$0.1423^{+0.0024}_{-0.0024} \quad (+3.3\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.013}_{-0.013} \quad (+0.4\sigma)$
$\sigma_8/h^{0.5}$	$0.986^{+0.074}_{-0.075} \quad (-0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.1595^{+0.0027}_{-0.0024} \quad (-6.1\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0062}_{-0.0056} \quad (+0.5\sigma)$
$r_{\mathrm{drag}}h$	$99.3^{+7.8}_{-7.5} \quad (+0.5\sigma)$	z_{eq}	$3405^{+180}_{-170} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0067}_{-0.0061} \quad (+0.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.46^{+0.14}_{-0.15} \quad (+0.1\sigma)$	k_{eq}	$0.01039^{+0.00056}_{-0.00053} \quad (-0.1\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 1.0) \quad (-0.3\sigma)$
z_{re}	$< 8.53 \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.038}_{-0.037} \quad (+0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$1891.4 \quad (\nu: 4.8)$
$10^9 A_{\mathrm{s}}$	$2.144^{+0.084}_{-0.073} \quad (+1.5\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.449^{+0.018}_{-0.018} \quad (+0.2\sigma)$	χ_{prior}^2	$11.0 \quad (\nu: 1.0) \quad (+1.0\sigma)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.924^{+0.049}_{-0.046} \quad (+2.9\sigma)$	$H(0.15)$	$73.2^{+4.8}_{-4.4} \quad (+1.2\sigma)$	χ_{CMB}^2	$2287.9 \quad (\nu: 5.7) \quad (+199.5\sigma)$
D_{40}	$1260^{+60}_{-60} \quad (+1.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+45}_{-44} \quad (-1.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2298.97; R - 1 = 0.00869$$

2.33 base_plikHM_TE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022421	$0.02245^{+0.00045}_{-0.00047}$ (+1.5 σ)	z_{re}	7.08	$7.0^{+1.8}_{-1.8}$ (−0.6 σ)	$H(0.38)$	83.35	$83.40^{+0.73}_{-0.71}$ (+1.6 σ)
$\Omega_c h^2$	0.11820	$0.1181^{+0.0024}_{-0.0024}$ (−1.2 σ)	$10^9 A_s$	2.042	$2.044^{+0.081}_{-0.084}$ (−1.4 σ)	$D_M(0.38)$	1519.9	1519^{+18}_{-19} (−1.5 σ)
$100\theta_{\text{MC}}$	1.04130	$1.04133^{+0.00090}_{-0.00090}$ (+1.2 σ)	$10^9 A_s e^{-2\tau}$	1.8520	$1.854^{+0.033}_{-0.033}$ (−2.3 σ)	$H(0.51)$	89.99	$90.04^{+0.61}_{-0.60}$ (+1.6 σ)
τ	0.0488	$0.049^{+0.016}_{-0.018}$ (−0.4 σ)	D_{40}	1217.9	1217^{+47}_{-46} (−1.1 σ)	$D_M(0.51)$	1970.1	1969^{+22}_{-22} (−1.5 σ)
$\ln(10^{10} A_s)$	3.0166	$3.017^{+0.039}_{-0.042}$ (−1.4 σ)	D_{220}	5692	5695^{+110}_{-110} (−0.4 σ)	$H(0.61)$	95.56	$95.60^{+0.53}_{-0.52}$ (+1.7 σ)
n_s	0.9641	$0.965^{+0.020}_{-0.020}$ (+0.5 σ)	D_{810}	2503.5	2507^{+49}_{-49} (−2.2 σ)	$D_M(0.61)$	2293.5	2292^{+24}_{-24} (−1.5 σ)
y_{cal}	0.99984	$1.0000^{+0.0050}_{-0.0049}$ (−0.1 σ)	D_{1420}	804.8	806^{+23}_{-23} (−1.6 σ)	$H(2.33)$	235.46	$235.5^{+1.5}_{-1.6}$ (−1.0 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.075}$	D_{2000}	226.8	$227.4^{+8.3}_{-8.3}$ (−1.2 σ)	$D_M(2.33)$	5752.2	5750^{+26}_{-27} (−1.7 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.136^{+0.059}_{-0.058}$	$n_{s,0.002}$	0.9641	$0.965^{+0.020}_{-0.020}$ (+0.5 σ)	$f\sigma_8(0.15)$	0.4428	$0.443^{+0.017}_{-0.016}$ (−1.7 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	Y_P	0.245416	$0.24542^{+0.00018}_{-0.00019}$ (+1.4 σ)	$\sigma_8(0.15)$	0.7343	$0.735^{+0.018}_{-0.018}$ (−1.9 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	Y_P^{BBN}	0.246742	$0.24675^{+0.00018}_{-0.00019}$ (+1.4 σ)	$f\sigma_8(0.38)$	0.4624	$0.462^{+0.015}_{-0.014}$ (−1.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.658	$0.66^{+0.16}_{-0.16}$	10^5D/H	2.576	$2.571^{+0.087}_{-0.082}$ (−1.5 σ)	$\sigma_8(0.38)$	0.6517	$0.652^{+0.015}_{-0.016}$ (−1.8 σ)
A_{217}^{dustTE}	2.04	$2.04^{+0.53}_{-0.53}$	Age/Gyr	13.773	$13.769^{+0.060}_{-0.061}$ (−1.7 σ)	$f\sigma_8(0.51)$	0.4619	$0.462^{+0.014}_{-0.013}$ (−1.9 σ)
c_{100}	1.00016	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	z_*	1089.70	$1089.66^{+0.65}_{-0.63}$ (−1.6 σ)	$\sigma_8(0.51)$	0.6102	$0.611^{+0.014}_{-0.014}$ (−1.7 σ)
c_{217}	0.99800	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	r_*	144.86	$144.85^{+0.65}_{-0.65}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4576	$0.458^{+0.013}_{-0.013}$ (−1.9 σ)
H_0	68.16	$68.2^{+1.1}_{-1.1}$ (+1.5 σ)	$100\theta_*$	1.04148	$1.04151^{+0.00089}_{-0.00089}$ (+1.2 σ)	$\sigma_8(0.61)$	0.5809	$0.581^{+0.013}_{-0.014}$ (−1.7 σ)
Ω_Λ	0.6959	$0.696^{+0.014}_{-0.014}$ (+1.3 σ)	$D_M(z_*)/\text{Gpc}$	13.909	$13.908^{+0.064}_{-0.065}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.2932	$0.2934^{+0.0067}_{-0.0069}$ (−1.4 σ)
Ω_m	0.3041	$0.304^{+0.014}_{-0.014}$ (−1.3 σ)	z_{drag}	1059.93	$1060.0^{+1.0}_{-1.1}$ (+1.3 σ)	$\sigma_8(2.33)$	0.3026	$0.3028^{+0.0070}_{-0.0072}$ (−1.1 σ)
$\Omega_m h^2$	0.14126	$0.1412^{+0.0023}_{-0.0023}$ (−1.1 σ)	r_{drag}	147.51	$147.50^{+0.72}_{-0.75}$ (+0.6 σ)	χ^2_{simall}	395.66	396.9 (ν : 1.4) (−0.1 σ)
$\Omega_m h^3$	0.09629	$0.0963^{+0.0010}_{-0.0010}$ (+1.0 σ)	k_D	0.14046	$0.1405^{+0.0010}_{-0.00099}$ (−0.1 σ)	χ^2_{plikTE}	852.9	859.3 (ν : 6.1)
σ_8	0.7939	$0.794^{+0.020}_{-0.020}$ (−2.0 σ)	$100\theta_D$	0.16080	$0.16077^{+0.00063}_{-0.00060}$ (−1.1 σ)	$\chi^2_{6\text{DF}}$	0.000	0.037 (ν : 0.0)
S_8	0.7992	$0.799^{+0.032}_{-0.031}$ (−1.7 σ)	z_{eq}	3360	3360^{+55}_{-56} (−1.1 σ)	χ^2_{MGS}	1.75	1.85 (ν : 0.2)
$\sigma_8 \Omega_m^{0.5}$	0.4377	$0.438^{+0.018}_{-0.017}$ (−1.7 σ)	k_{eq}	0.010256	$0.01025^{+0.00017}_{-0.00017}$ (−1.1 σ)	χ^2_{DR12BAO}	3.44	3.98 (ν : 0.4)
$\sigma_8 \Omega_m^{0.25}$	0.5895	$0.590^{+0.018}_{-0.018}$ (−1.8 σ)	$100\theta_{\text{eq}}$	0.8213	$0.822^{+0.010}_{-0.010}$ (+1.2 σ)	χ^2_{prior}	0.4	7.4 (ν : 6.9) (+0.0 σ)
$\sigma_8/h^{0.5}$	0.9616	$0.962^{+0.027}_{-0.027}$ (−2.0 σ)	$100\theta_{s,\text{eq}}$	0.4535	$0.4537^{+0.0054}_{-0.0053}$ (+1.2 σ)	χ^2_{BAO}	5.19	5.87 (ν : 0.4)
$r_{\text{drag}} h$	100.55	$100.6^{+1.8}_{-1.8}$ (+1.3 σ)	$H(0.15)$	73.37	$73.42^{+0.95}_{-0.93}$ (+1.5 σ)	χ^2_{CMB}	1248.6	1256.1 (ν : 7.4) (+11.6 σ)
$\langle d^2 \rangle^{1/2}$	2.395	$2.393^{+0.064}_{-0.065}$ (−1.6 σ)	$D_M(0.15)$	636.6	$636.1^{+9.1}_{-9.1}$ (−1.5 σ)			

Best-fit $\chi^2_{\text{eff}} = 1254.23$; $\bar{\chi}^2_{\text{eff}} = 1269.42$; $R - 1 = 0.00891$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.44 CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.66 plik_rd12_HM_v22_TE: 852.93

2.34 base_plikHM_TE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00048}_{-0.00046} \quad (+1.8\sigma)$	z_{re}	$7.7^{+1.4}_{-1.4} \quad (+0.2\sigma)$	$H(0.38)$	$83.28^{+0.72}_{-0.73} \quad (+1.4\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0022}_{-0.0022} \quad (-0.8\sigma)$	$10^9 A_s$	$2.087^{+0.060}_{-0.059} \quad (-0.1\sigma)$	$D_M(0.38)$	$1523^{+19}_{-18} \quad (-1.2\sigma)$
$100\theta_{\text{MC}}$	$1.04129^{+0.00083}_{-0.00092} \quad (+1.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.026}_{-0.026} \quad (-1.0\sigma)$	$H(0.51)$	$89.97^{+0.61}_{-0.60} \quad (+1.5\sigma)$
τ	$0.055^{+0.014}_{-0.014} \quad (+0.3\sigma)$	D_{40}	$1222^{+46}_{-47} \quad (-0.8\sigma)$	$D_M(0.51)$	$1973^{+23}_{-22} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.038^{+0.029}_{-0.029} \quad (-0.1\sigma)$	D_{220}	$5721^{+110}_{-110} \quad (+0.2\sigma)$	$H(0.61)$	$95.56^{+0.54}_{-0.52} \quad (+1.6\sigma)$
n_s	$0.968^{+0.020}_{-0.020} \quad (+0.9\sigma)$	D_{810}	$2529^{+37}_{-41} \quad (-0.6\sigma)$	$D_M(0.61)$	$2297^{+24}_{-24} \quad (-1.3\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	D_{1420}	$815^{+19}_{-20} \quad (+0.1\sigma)$	$H(2.33)$	$236.0^{+1.4}_{-1.4} \quad (-0.6\sigma)$
A_{100}^{dustTE}	$0.113^{+0.076}_{-0.075}$	D_{2000}	$230.4^{+7.2}_{-7.4} \quad (+0.5\sigma)$	$D_M(2.33)$	$5750^{+26}_{-27} \quad (-1.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.136^{+0.059}_{-0.060}$	$n_{\text{s},0.002}$	$0.968^{+0.020}_{-0.020} \quad (+0.9\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.013}_{-0.012} \quad (-1.0\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.16}$	Y_{P}	$0.24545^{+0.00020}_{-0.00018} \quad (+1.7\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24677^{+0.00020}_{-0.00018} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.011}_{-0.010} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	10^5D/H	$2.561^{+0.085}_{-0.086} \quad (-1.7\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{217}^{dustTE}	$2.06^{+0.54}_{-0.54}$	Age/Gyr	$13.768^{+0.060}_{-0.061} \quad (-1.7\sigma)$	$f\sigma_8(0.51)$	$0.4698^{+0.0097}_{-0.0093} \quad (-0.9\sigma)$
c_{100}	$1.0002^{+0.0013}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.65^{+0.64}_{-0.64} \quad (-1.6\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.011}_{-0.010} \quad (-0.3\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	r_*	$144.61^{+0.58}_{-0.56} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4652^{+0.0092}_{-0.0086} \quad (-0.9\sigma)$
H_0	$68.0^{+1.1}_{-1.1} \quad (+1.2\sigma)$	$100\theta_*$	$1.04146^{+0.00084}_{-0.00091} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.010} \quad (-0.2\sigma)$
Ω_Λ	$0.693^{+0.013}_{-0.014} \quad (+1.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.885^{+0.057}_{-0.055} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0051}_{-0.0051} \quad (-0.0\sigma)$
Ω_{m}	$0.307^{+0.014}_{-0.013} \quad (-1.0\sigma)$	z_{drag}	$1060.2^{+1.1}_{-1.0} \quad (+1.7\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0054}_{-0.0054} \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^2$	$0.1421^{+0.0022}_{-0.0022} \quad (-0.7\sigma)$	r_{drag}	$147.23^{+0.64}_{-0.67} \quad (+0.0\sigma)$	χ^2_{lensing}	$10.5 \quad (\nu: 1.7)$
$\Omega_{\text{m}} h^3$	$0.0966^{+0.0010}_{-0.00099} \quad (+1.5\sigma)$	k_{D}	$0.14083^{+0.00092}_{-0.00091} \quad (+0.5\sigma)$	χ^2_{simall}	$397.0 \quad (\nu: 1.4) \quad (-0.0\sigma)$
σ_8	$0.806^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\text{D}}$	$0.16066^{+0.00061}_{-0.00061} \quad (-1.5\sigma)$	χ^2_{plikTE}	$860.0 \quad (\nu: 6.3)$
S_8	$0.816^{+0.024}_{-0.024} \quad (-1.0\sigma)$	z_{eq}	$3379^{+52}_{-52} \quad (-0.7\sigma)$	$\chi^2_{6\text{DF}}$	$0.038 \quad (\nu: 0.0)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.447^{+0.013}_{-0.013} \quad (-1.0\sigma)$	k_{eq}	$0.01031^{+0.00016}_{-0.00016} \quad (-0.7\sigma)$	χ^2_{MGS}	$1.52 \quad (\nu: 0.1)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.013}_{-0.013} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.8181^{+0.0096}_{-0.0094} \quad (+0.8\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.7)$
$\sigma_8/h^{0.5}$	$0.977^{+0.019}_{-0.018} \quad (-1.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.4518^{+0.0049}_{-0.0049} \quad (+0.8\sigma)$	χ^2_{prior}	$7.4 \quad (\nu: 6.5) \quad (+0.0\sigma)$
$r_{\text{drag}} h$	$100.1^{+1.7}_{-1.8} \quad (+1.0\sigma)$	$H(0.15)$	$73.23^{+0.94}_{-0.95} \quad (+1.2\sigma)$	χ^2_{CMB}	$1267.4 \quad (\nu: 7.2) \quad (+13.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.421^{+0.056}_{-0.057} \quad (-0.9\sigma)$	$D_M(0.15)$	$638.1^{+9.3}_{-9.0} \quad (-1.2\sigma)$	χ^2_{BAO}	$5.87 \quad (\nu: 0.4)$

$\bar{\chi}^2_{\text{eff}} = 1280.69; R - 1 = 0.02724$

2.35 base_plikHM_TE_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02246^{+0.00046}_{-0.00047} \quad (+1.6\sigma)$	z_{re}	$< 8.54 \quad (-0.1\sigma)$	$H(0.38)$	$83.41^{+0.73}_{-0.72} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0024}_{-0.0024} \quad (-1.2\sigma)$	$10^9 A_s$	$2.059^{+0.064}_{-0.061} \quad (-0.9\sigma)$	$D_M(0.38)$	$1519^{+19}_{-19} \quad (-1.5\sigma)$
$100\theta_{\text{MC}}$	$1.04133^{+0.00088}_{-0.00090} \quad (+1.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.854^{+0.033}_{-0.034} \quad (-2.2\sigma)$	$H(0.51)$	$90.05^{+0.61}_{-0.60} \quad (+1.6\sigma)$
τ	$0.0524^{+0.012}_{-0.0094} \quad (+0.0\sigma)$	D_{40}	$1216^{+46}_{-45} \quad (-1.2\sigma)$	$D_M(0.51)$	$1968^{+22}_{-22} \quad (-1.5\sigma)$
$\ln(10^{10} A_s)$	$3.025^{+0.031}_{-0.030} \quad (-1.0\sigma)$	D_{220}	$5694^{+110}_{-110} \quad (-0.5\sigma)$	$H(0.61)$	$95.61^{+0.53}_{-0.52} \quad (+1.7\sigma)$
n_s	$0.966^{+0.020}_{-0.020} \quad (+0.6\sigma)$	D_{810}	$2508^{+48}_{-50} \quad (-2.1\sigma)$	$D_M(0.61)$	$2292^{+24}_{-24} \quad (-1.5\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0050} \quad (-0.2\sigma)$	D_{1420}	$807^{+22}_{-23} \quad (-1.4\sigma)$	$H(2.33)$	$235.4^{+1.6}_{-1.6} \quad (-1.0\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.075}$	D_{2000}	$227.7^{+8.1}_{-8.3} \quad (-1.0\sigma)$	$D_M(2.33)$	$5750^{+26}_{-27} \quad (-1.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.136^{+0.060}_{-0.058}$	$n_{s,0.002}$	$0.966^{+0.020}_{-0.020} \quad (+0.6\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.016}_{-0.015} \quad (-1.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	Y_P	$0.24543^{+0.00018}_{-0.00019} \quad (+1.5\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.016}_{-0.014} \quad (-1.6\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	Y_P^{BBN}	$0.24675^{+0.00018}_{-0.00019} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.014}_{-0.013} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$10^5 D/H$	$2.570^{+0.088}_{-0.083} \quad (-1.5\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.014}_{-0.012} \quad (-1.4\sigma)$
A_{217}^{dustTE}	$2.04^{+0.53}_{-0.53}$	Age/Gyr	$13.768^{+0.060}_{-0.061} \quad (-1.7\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.013}_{-0.012} \quad (-1.7\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.64^{+0.65}_{-0.63} \quad (-1.6\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.013}_{-0.011} \quad (-1.3\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	r_*	$144.85^{+0.66}_{-0.66} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.012}_{-0.011} \quad (-1.7\sigma)$
H_0	$68.2^{+1.1}_{-1.1} \quad (+1.5\sigma)$	$100\theta_*$	$1.04151^{+0.00088}_{-0.00089} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.012}_{-0.011} \quad (-1.2\sigma)$
Ω_Λ	$0.697^{+0.014}_{-0.014} \quad (+1.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.908^{+0.066}_{-0.065} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2945^{+0.0060}_{-0.0053} \quad (-1.0\sigma)$
Ω_m	$0.303^{+0.014}_{-0.014} \quad (-1.3\sigma)$	z_{drag}	$1060.0^{+1.0}_{-1.1} \quad (+1.3\sigma)$	$\sigma_8(2.33)$	$0.3040^{+0.0062}_{-0.0055} \quad (-0.7\sigma)$
$\Omega_m h^2$	$0.1412^{+0.0023}_{-0.0024} \quad (-1.1\sigma)$	r_{drag}	$147.49^{+0.73}_{-0.75} \quad (+0.6\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
$\Omega_m h^3$	$0.0964^{+0.0010}_{-0.0010} \quad (+1.0\sigma)$	k_D	$0.1405^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	χ_{plikTE}^2	$859.3 \quad (\nu: 6.0)$
σ_8	$0.797^{+0.018}_{-0.016} \quad (-1.6\sigma)$	$100\theta_D$	$0.16076^{+0.00063}_{-0.00060} \quad (-1.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.038 \quad (\nu: 0.0)$
S_8	$0.802^{+0.031}_{-0.030} \quad (-1.6\sigma)$	z_{eq}	$3359^{+56}_{-57} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.87 \quad (\nu: 0.2)$
$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.017}_{-0.016} \quad (-1.6\sigma)$	k_{eq}	$0.01025^{+0.00017}_{-0.00017} \quad (-1.1\sigma)$	χ_{DR12BAO}^2	$3.98 \quad (\nu: 0.4)$
$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.017}_{-0.016} \quad (-1.7\sigma)$	$100\theta_{\text{eq}}$	$0.822^{+0.011}_{-0.010} \quad (+1.2\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.965^{+0.025}_{-0.024} \quad (-1.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4537^{+0.0055}_{-0.0053} \quad (+1.2\sigma)$	χ_{BAO}^2	$5.89 \quad (\nu: 0.5)$
$r_{\text{drag}} h$	$100.7^{+1.8}_{-1.8} \quad (+1.4\sigma)$	$H(0.15)$	$73.44^{+0.95}_{-0.95} \quad (+1.5\sigma)$	χ_{CMB}^2	$1255.7 \quad (\nu: 6.7) \quad (+11.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.399^{+0.060}_{-0.058} \quad (-1.4\sigma)$	$D_M(0.15)$	$635.9^{+9.3}_{-9.1} \quad (-1.5\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1269.00$; $R - 1 = 0.00969$

2.36 base_plikHM_TE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00048}_{-0.00046} \quad (+1.8\sigma)$	z_{re}	$< 8.86 \quad (+0.3\sigma)$	$H(0.38)$	$83.29^{+0.72}_{-0.74} \quad (+1.4\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0022}_{-0.0022} \quad (-0.8\sigma)$	$10^9 A_s$	$2.091^{+0.057}_{-0.050} \quad (-0.0\sigma)$	$D_M(0.38)$	$1522^{+19}_{-19} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04129^{+0.00085}_{-0.00093} \quad (+1.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.026}_{-0.026} \quad (-1.0\sigma)$	$H(0.51)$	$89.97^{+0.61}_{-0.60} \quad (+1.5\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.4\sigma)$	D_{40}	$1222^{+46}_{-46} \quad (-0.8\sigma)$	$D_M(0.51)$	$1973^{+23}_{-22} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.027}_{-0.024} \quad (-0.0\sigma)$	D_{220}	$5720^{+100}_{-110} \quad (+0.2\sigma)$	$H(0.61)$	$95.56^{+0.54}_{-0.52} \quad (+1.6\sigma)$
n_s	$0.968^{+0.020}_{-0.020} \quad (+0.9\sigma)$	D_{810}	$2528^{+37}_{-41} \quad (-0.6\sigma)$	$D_M(0.61)$	$2296^{+25}_{-24} \quad (-1.3\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	D_{1420}	$815^{+19}_{-20} \quad (+0.1\sigma)$	$H(2.33)$	$236.0^{+1.4}_{-1.4} \quad (-0.6\sigma)$
A_{100}^{dustTE}	$0.113^{+0.075}_{-0.075}$	D_{2000}	$230.4^{+7.2}_{-7.4} \quad (+0.5\sigma)$	$D_M(2.33)$	$5750^{+26}_{-27} \quad (-1.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.060}$	$n_{\text{s},0.002}$	$0.968^{+0.020}_{-0.020} \quad (+0.9\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.013}_{-0.012} \quad (-1.0\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.16}$	Y_{P}	$0.24545^{+0.00020}_{-0.00018} \quad (+1.7\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.011} \quad (-0.5\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24677^{+0.00020}_{-0.00018} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.010}_{-0.010} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.15}$	10^5D/H	$2.561^{+0.085}_{-0.086} \quad (-1.7\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.0099} \quad (-0.3\sigma)$
A_{217}^{dustTE}	$2.05^{+0.54}_{-0.54}$	Age/Gyr	$13.768^{+0.060}_{-0.061} \quad (-1.7\sigma)$	$f\sigma_8(0.51)$	$0.4701^{+0.0096}_{-0.0091} \quad (-0.9\sigma)$
c_{100}	$1.0002^{+0.0013}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.65^{+0.63}_{-0.63} \quad (-1.6\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.010}_{-0.0091} \quad (-0.2\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0012} \quad (-0.4\sigma)$	r_*	$144.62^{+0.58}_{-0.57} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4655^{+0.0092}_{-0.0083} \quad (-0.8\sigma)$
H_0	$68.0^{+1.1}_{-1.1} \quad (+1.2\sigma)$	$100\theta_*$	$1.04146^{+0.00084}_{-0.00091} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.5891^{+0.0097}_{-0.0087} \quad (-0.1\sigma)$
Ω_Λ	$0.693^{+0.013}_{-0.014} \quad (+1.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.886^{+0.057}_{-0.055} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0050}_{-0.0045} \quad (+0.1\sigma)$
Ω_{m}	$0.307^{+0.014}_{-0.013} \quad (-1.0\sigma)$	z_{drag}	$1060.2^{+1.1}_{-1.0} \quad (+1.7\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0052}_{-0.0048} \quad (+0.3\sigma)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0021}_{-0.0022} \quad (-0.7\sigma)$	r_{drag}	$147.23^{+0.64}_{-0.67} \quad (+0.1\sigma)$	χ^2_{lensing}	$10.4 \quad (\nu: 1.5)$
$\Omega_{\text{m}} h^3$	$0.0966^{+0.0010}_{-0.00098} \quad (+1.5\sigma)$	k_{D}	$0.14082^{+0.00093}_{-0.00091} \quad (+0.5\sigma)$	χ^2_{simall}	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
σ_8	$0.806^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\text{D}}$	$0.16066^{+0.00062}_{-0.00061} \quad (-1.5\sigma)$	χ^2_{plikTE}	$859.9 \quad (\nu: 6.2)$
S_8	$0.816^{+0.024}_{-0.024} \quad (-1.0\sigma)$	z_{eq}	$3379^{+51}_{-52} \quad (-0.7\sigma)$	$\chi^2_{6\text{DF}}$	$0.037 \quad (\nu: 0.0)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.447^{+0.013}_{-0.013} \quad (-1.0\sigma)$	k_{eq}	$0.01031^{+0.00016}_{-0.00016} \quad (-0.7\sigma)$	χ^2_{MGS}	$1.54 \quad (\nu: 0.1)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.013}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.8182^{+0.0096}_{-0.0095} \quad (+0.8\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.7)$
$\sigma_8/h^{0.5}$	$0.978^{+0.019}_{-0.018} \quad (-0.9\sigma)$	$100\theta_{\text{s,eq}}$	$0.4519^{+0.0049}_{-0.0050} \quad (+0.8\sigma)$	χ^2_{prior}	$7.4 \quad (\nu: 6.5) \quad (+0.0\sigma)$
$r_{\text{drag}} h$	$100.1^{+1.7}_{-1.8} \quad (+1.0\sigma)$	$H(0.15)$	$73.23^{+0.94}_{-0.96} \quad (+1.3\sigma)$	χ^2_{CMB}	$1267.2 \quad (\nu: 7.0) \quad (+13.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.422^{+0.056}_{-0.057} \quad (-0.8\sigma)$	$D_M(0.15)$	$638.0^{+9.4}_{-9.0} \quad (-1.2\sigma)$	χ^2_{BAO}	$5.86 \quad (\nu: 0.4)$

$\bar{\chi}^2_{\text{eff}} = 1280.53; R - 1 = 0.02893$

2.37 base_plikHM_EE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02355	$0.0235^{+0.0013}_{-0.0013}$ (+6.1 σ)	D_{810}	2581	2580^{+68}_{-67} (+3.2 σ)	$H(0.51)$	90.59	$90.5^{+1.2}_{-1.1}$ (+2.7 σ)
$\Omega_c h^2$	0.11753	$0.1176^{+0.0029}_{-0.0028}$ (−1.4 σ)	D_{1420}	838.8	838^{+29}_{-29} (+4.6 σ)	$D_M(0.51)$	1953.7	1956^{+36}_{-36} (−2.2 σ)
$100\theta_{MC}$	1.03988	$1.0399^{+0.0016}_{-0.0016}$ (−1.9 σ)	D_{2000}	239.2	239^{+11}_{-11} (+5.2 σ)	$H(0.61)$	96.13	$96.1^{+1.1}_{-1.1}$ (+3.0 σ)
τ	0.0521	$0.052^{+0.016}_{-0.017}$ (−0.1 σ)	$n_{s,0.002}$	0.9755	$0.975^{+0.019}_{-0.019}$ (+2.2 σ)	$D_M(0.61)$	2275.0	2278^{+40}_{-39} (−2.2 σ)
$\ln(10^{10} A_s)$	3.0498	$3.049^{+0.041}_{-0.043}$ (+0.5 σ)	Y_P	0.24589	$0.24584^{+0.00049}_{-0.00052}$ (+5.6 σ)	$H(2.33)$	236.02	$236.0^{+2.0}_{-1.9}$ (−0.6 σ)
n_s	0.9755	$0.975^{+0.019}_{-0.019}$ (+2.2 σ)	Y_P^{BBN}	0.24721	$0.24716^{+0.00049}_{-0.00052}$ (+5.6 σ)	$D_M(2.33)$	5721	5724^{+58}_{-59} (−3.3 σ)
y_{cal}	0.99972	$1.0000^{+0.0050}_{-0.0048}$ (−0.2 σ)	$10^5 D/H$	2.380	$2.40^{+0.22}_{-0.21}$ (−5.6 σ)	$f\sigma_8(0.15)$	0.4441	$0.445^{+0.019}_{-0.019}$ (−1.5 σ)
H_0	68.86	$68.8^{+1.7}_{-1.6}$ (+2.1 σ)	Age/Gyr	13.699	$13.71^{+0.13}_{-0.14}$ (−3.3 σ)	$\sigma_8(0.15)$	0.7426	$0.743^{+0.018}_{-0.018}$ (−0.9 σ)
Ω_Λ	0.7011	$0.700^{+0.017}_{-0.018}$ (+1.6 σ)	z_*	1088.30	$1088.4^{+1.6}_{-1.5}$ (−4.6 σ)	$f\sigma_8(0.38)$	0.4651	$0.466^{+0.017}_{-0.016}$ (−1.5 σ)
Ω_m	0.2989	$0.300^{+0.018}_{-0.017}$ (−1.6 σ)	r_*	144.17	$144.2^{+1.0}_{-1.0}$ (−0.5 σ)	$\sigma_8(0.38)$	0.6597	$0.660^{+0.015}_{-0.016}$ (−0.6 σ)
$\Omega_m h^2$	0.14173	$0.1417^{+0.0027}_{-0.0027}$ (−0.8 σ)	$100\theta_*$	1.03995	$1.0399^{+0.0016}_{-0.0016}$ (−2.3 σ)	$f\sigma_8(0.51)$	0.4652	$0.466^{+0.015}_{-0.015}$ (−1.4 σ)
$\Omega_m h^3$	0.09759	$0.0975^{+0.0025}_{-0.0023}$ (+3.4 σ)	$D_M(z_*)/\text{Gpc}$	13.863	$13.867^{+0.099}_{-0.10}$ (−0.2 σ)	$\sigma_8(0.51)$	0.6179	$0.618^{+0.014}_{-0.014}$ (−0.4 σ)
σ_8	0.8023	$0.802^{+0.020}_{-0.020}$ (−1.0 σ)	z_{drag}	1062.45	$1062.2^{+2.8}_{-2.9}$ (+6.2 σ)	$f\sigma_8(0.61)$	0.4613	$0.462^{+0.014}_{-0.014}$ (−1.4 σ)
S_8	0.8008	$0.802^{+0.037}_{-0.036}$ (−1.5 σ)	r_{drag}	146.44	$146.5^{+1.4}_{-1.4}$ (−1.4 σ)	$\sigma_8(0.61)$	0.5883	$0.588^{+0.014}_{-0.014}$ (−0.3 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4386	$0.439^{+0.020}_{-0.020}$ (−1.5 σ)	k_D	0.14240	$0.1423^{+0.0023}_{-0.0023}$ (+3.3 σ)	$f\sigma_8(2.33)$	0.2971	$0.2970^{+0.0067}_{-0.0068}$ (−0.0 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5932	$0.594^{+0.020}_{-0.020}$ (−1.5 σ)	$100\theta_D$	0.15914	$0.1593^{+0.0017}_{-0.0015}$ (−6.8 σ)	$\sigma_8(2.33)$	0.3069	$0.3068^{+0.0070}_{-0.0071}$ (+0.3 σ)
$\sigma_8/h^{0.5}$	0.9668	$0.968^{+0.030}_{-0.030}$ (−1.6 σ)	z_{eq}	3371	3372^{+66}_{-64} (−0.8 σ)	χ_{small}^2	395.61	396.8 (ν : 1.2) (−0.1 σ)
$r_{drag} h$	100.84	$100.7^{+2.2}_{-2.2}$ (+1.4 σ)	k_{eq}	0.010290	$0.01029^{+0.00020}_{-0.00019}$ (−0.8 σ)	χ_{plikEE}^2	739.0	743.2 (ν : 4.2)
$\langle d^2 \rangle^{1/2}$	2.401	$2.403^{+0.070}_{-0.069}$ (−1.4 σ)	$100\theta_{eq}$	0.8213	$0.821^{+0.012}_{-0.012}$ (+1.1 σ)	χ_{6DF}^2	0.004	0.056 (ν : 0.0)
z_{re}	7.17	$7.1^{+1.7}_{-1.7}$ (−0.4 σ)	$100\theta_{s,eq}$	0.4527	$0.4526^{+0.0060}_{-0.0059}$ (+0.9 σ)	χ_{MGS}^2	1.89	1.91 (ν : 0.2)
$10^9 A_s$	2.111	$2.110^{+0.089}_{-0.089}$ (+0.5 σ)	$H(0.15)$	74.03	$73.9^{+1.5}_{-1.5}$ (+2.2 σ)	$\chi_{DR12BAO}^2$	3.60	4.4 (ν : 0.7)
$10^9 A_s e^{-2\tau}$	1.9024	$1.902^{+0.049}_{-0.048}$ (+1.3 σ)	$D_M(0.15)$	630.5	631^{+14}_{-14} (−2.0 σ)	χ_{prior}^2	0.01	1.0 (ν : 1.1) (−1.7 σ)
D_{40}	1232	1232^{+60}_{-59} (−0.1 σ)	$H(0.38)$	83.97	$83.9^{+1.3}_{-1.3}$ (+2.4 σ)	χ_{BAO}^2	5.49	6.4 (ν : 0.9)
D_{220}	5898	5891^{+270}_{-260} (+4.2 σ)	$D_M(0.38)$	1506.6	1509^{+30}_{-29} (−2.1 σ)	χ_{CMB}^2	1134.7	1139.9 (ν : 5.4) (−9.5 σ)

Best-fit $\chi_{\text{eff}}^2 = 1140.16$; $\bar{\chi}_{\text{eff}}^2 = 1147.36$; $R - 1 = 0.00786$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.89 DR12BAO: 3.60 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.61 plik_rd12_HM_v22_EE: 739.04

2.38 base_plikHM_EE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.0234^{+0.0011}_{-0.0011} \quad (+5.9\sigma)$	D_{1420}	$835^{+23}_{-23} \quad (+4.1\sigma)$	$H(0.61)$	$96.0^{+1.1}_{-0.99} \quad (+3.0\sigma)$
$\Omega_c h^2$	$0.1174^{+0.0027}_{-0.0027} \quad (-1.6\sigma)$	D_{2000}	$237.9^{+8.5}_{-8.4} \quad (+4.7\sigma)$	$D_M(0.61)$	$2277^{+38}_{-39} \quad (-2.3\sigma)$
$100\theta_{MC}$	$1.0399^{+0.0016}_{-0.0016} \quad (-1.9\sigma)$	$n_{s,0.002}$	$0.974^{+0.020}_{-0.019} \quad (+2.1\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.5} \quad (-0.7\sigma)$
τ	$0.051^{+0.015}_{-0.016} \quad (-0.2\sigma)$	Y_P	$0.24582^{+0.00041}_{-0.00043} \quad (+5.5\sigma)$	$D_M(2.33)$	$5726^{+51}_{-53} \quad (-3.2\sigma)$
$\ln(10^{10} A_s)$	$3.045^{+0.030}_{-0.031} \quad (+0.3\sigma)$	Y_P^{BBN}	$0.24715^{+0.00041}_{-0.00043} \quad (+5.5\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.016}_{-0.017} \quad (-1.7\sigma)$
n_s	$0.974^{+0.020}_{-0.019} \quad (+2.1\sigma)$	$10^5 D/H$	$2.40^{+0.18}_{-0.18} \quad (-5.5\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.014}_{-0.014} \quad (-1.2\sigma)$
y_{cal}	$0.99996^{+0.0048}_{-0.0048} \quad (-0.2\sigma)$	Age/Gyr	$13.71^{+0.12}_{-0.12} \quad (-3.2\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.013}_{-0.014} \quad (-1.7\sigma)$
H_0	$68.8^{+1.6}_{-1.6} \quad (+2.1\sigma)$	z_*	$1088.4^{+1.4}_{-1.4} \quad (-4.5\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.012}_{-0.012} \quad (-0.9\sigma)$
Ω_Λ	$0.701^{+0.017}_{-0.017} \quad (+1.7\sigma)$	r_*	$144.30^{+0.75}_{-0.76} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.012}_{-0.012} \quad (-1.7\sigma)$
Ω_m	$0.299^{+0.017}_{-0.017} \quad (-1.7\sigma)$	$100\theta_*$	$1.0399^{+0.0016}_{-0.0016} \quad (-2.3\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$\Omega_m h^2$	$0.1415^{+0.0023}_{-0.0023} \quad (-1.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.876^{+0.076}_{-0.079} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.011}_{-0.011} \quad (-1.6\sigma)$
$\Omega_m h^3$	$0.0973^{+0.0020}_{-0.0019} \quad (+3.1\sigma)$	z_{drag}	$1062.1^{+2.3}_{-2.3} \quad (+6.0\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.010}_{-0.011} \quad (-0.6\sigma)$
σ_8	$0.800^{+0.015}_{-0.016} \quad (-1.3\sigma)$	r_{drag}	$146.6^{+1.0}_{-1.0} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2963^{+0.0052}_{-0.0054} \quad (-0.3\sigma)$
S_8	$0.799^{+0.032}_{-0.032} \quad (-1.7\sigma)$	k_D	$0.1421^{+0.0018}_{-0.0017} \quad (+3.0\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0055}_{-0.0057} \quad (+0.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.437^{+0.017}_{-0.018} \quad (-1.7\sigma)$	$100\theta_D$	$0.1593^{+0.0014}_{-0.0013} \quad (-6.6\sigma)$	$\chi^2_{lensing}$	$9.1 \quad (\nu: 0.6)$
$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.016}_{-0.017} \quad (-1.7\sigma)$	z_{eq}	$3365^{+54}_{-55} \quad (-1.0\sigma)$	χ^2_{small}	$396.6 \quad (\nu: 0.9) \quad (-0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.965^{+0.025}_{-0.025} \quad (-1.8\sigma)$	k_{eq}	$0.01027^{+0.00017}_{-0.00017} \quad (-1.0\sigma)$	χ^2_{plikEE}	$742.6 \quad (\nu: 3.4)$
$r_{drag} h$	$100.9^{+2.2}_{-2.1} \quad (+1.5\sigma)$	$100\theta_{eq}$	$0.822^{+0.011}_{-0.011} \quad (+1.3\sigma)$	χ^2_{6DF}	$0.056 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.398^{+0.060}_{-0.059} \quad (-1.5\sigma)$	$100\theta_{s,eq}$	$0.4532^{+0.0052}_{-0.0052} \quad (+1.1\sigma)$	χ^2_{MGS}	$1.99 \quad (\nu: 0.2)$
z_{re}	$7.1^{+1.6}_{-1.6} \quad (-0.5\sigma)$	$H(0.15)$	$74.0^{+1.5}_{-1.4} \quad (+2.2\sigma)$	$\chi^2_{DR12BAO}$	$4.3 \quad (\nu: 0.6)$
$10^9 A_s$	$2.101^{+0.063}_{-0.065} \quad (+0.3\sigma)$	$D_M(0.15)$	$631^{+14}_{-14} \quad (-2.1\sigma)$	χ^2_{prior}	$0.9 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_s e^{-2\tau}$	$1.898^{+0.034}_{-0.033} \quad (+1.0\sigma)$	$H(0.38)$	$83.9^{+1.3}_{-1.2} \quad (+2.4\sigma)$	χ^2_{CMB}	$1148.4 \quad (\nu: 5.5) \quad (-8.0\sigma)$
D_{40}	$1231^{+55}_{-54} \quad (-0.2\sigma)$	$D_M(0.38)$	$1508^{+29}_{-29} \quad (-2.2\sigma)$	χ^2_{BAO}	$6.4 \quad (\nu: 0.8)$
D_{220}	$5883^{+220}_{-220} \quad (+4.1\sigma)$	$H(0.51)$	$90.5^{+1.1}_{-1.1} \quad (+2.7\sigma)$		
D_{810}	$2574^{+51}_{-50} \quad (+2.7\sigma)$	$D_M(0.51)$	$1956^{+34}_{-35} \quad (-2.2\sigma)$		

$\bar{\chi}^2_{eff} = 1155.69; R - 1 = 0.01010$

2.39 base_plikHM_EE_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0234^{+0.0013}_{-0.0013} \quad (+6.0\sigma)$	D_{810}	$2579^{+67}_{-68} \quad (+3.1\sigma)$	$H(0.51)$	$90.5^{+1.2}_{-1.1} \quad (+2.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1176^{+0.0029}_{-0.0028} \quad (-1.4\sigma)$	D_{1420}	$838^{+28}_{-29} \quad (+4.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1957^{+36}_{-36} \quad (-2.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0399^{+0.0016}_{-0.0016} \quad (-1.9\sigma)$	D_{2000}	$239^{+11}_{-11} \quad (+5.1\sigma)$	$H(0.61)$	$96.0^{+1.1}_{-1.1} \quad (+2.9\sigma)$
τ	$0.055^{+0.012}_{-0.010} \quad (+0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.975^{+0.019}_{-0.020} \quad (+2.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2278^{+40}_{-40} \quad (-2.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.055^{+0.038}_{-0.036} \quad (+0.9\sigma)$	Y_{P}	$0.24583^{+0.00049}_{-0.00052} \quad (+5.5\sigma)$	$H(2.33)$	$236.0^{+2.0}_{-1.9} \quad (-0.6\sigma)$
n_{s}	$0.975^{+0.019}_{-0.020} \quad (+2.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24715^{+0.00049}_{-0.00052} \quad (+5.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5726^{+58}_{-59} \quad (-3.2\sigma)$
y_{cal}	$1.0000^{+0.0050}_{-0.0049} \quad (-0.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.40^{+0.22}_{-0.20} \quad (-5.5\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.019}_{-0.018} \quad (-1.4\sigma)$
H_0	$68.7^{+1.7}_{-1.7} \quad (+2.0\sigma)$	Age/Gyr	$13.71^{+0.14}_{-0.14} \quad (-3.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.017}_{-0.015} \quad (-0.6\sigma)$
Ω_{Λ}	$0.700^{+0.017}_{-0.018} \quad (+1.6\sigma)$	z_*	$1088.5^{+1.6}_{-1.5} \quad (-4.5\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.016}_{-0.015} \quad (-1.3\sigma)$
Ω_{m}	$0.300^{+0.018}_{-0.017} \quad (-1.6\sigma)$	r_*	$144.2^{+1.0}_{-1.0} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.014}_{-0.013} \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1417^{+0.0027}_{-0.0027} \quad (-0.9\sigma)$	$100\theta_*$	$1.0399^{+0.0017}_{-0.0016} \quad (-2.2\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.014}_{-0.014} \quad (-1.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0974^{+0.0025}_{-0.0023} \quad (+3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.869^{+0.099}_{-0.10} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.013}_{-0.012} \quad (-0.1\sigma)$
σ_8	$0.805^{+0.019}_{-0.017} \quad (-0.8\sigma)$	z_{drag}	$1062.2^{+2.8}_{-2.9} \quad (+6.1\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.013}_{-0.012} \quad (-1.2\sigma)$
S_8	$0.805^{+0.036}_{-0.035} \quad (-1.4\sigma)$	r_{drag}	$146.5^{+1.4}_{-1.4} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.012}_{-0.011} \quad (+0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.020}_{-0.019} \quad (-1.4\sigma)$	k_{D}	$0.1422^{+0.0023}_{-0.0023} \quad (+3.2\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0062}_{-0.0056} \quad (+0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.596^{+0.019}_{-0.019} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1593^{+0.0017}_{-0.0015} \quad (-6.6\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0064}_{-0.0059} \quad (+0.7\sigma)$
$\sigma_8/h^{0.5}$	$0.971^{+0.028}_{-0.027} \quad (-1.4\sigma)$	z_{eq}	$3371^{+66}_{-64} \quad (-0.9\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 1.0) \quad (-0.3\sigma)$
$r_{\mathrm{drag}}h$	$100.7^{+2.2}_{-2.2} \quad (+1.4\sigma)$	k_{eq}	$0.01029^{+0.00020}_{-0.00020} \quad (-0.9\sigma)$	χ_{plikEE}^2	$743.2 \quad (\nu: 4.3)$
$\langle d^2 \rangle^{1/2}$	$2.409^{+0.067}_{-0.064} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.012}_{-0.012} \quad (+1.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
z_{re}	$< 8.54 \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4526^{+0.0060}_{-0.0059} \quad (+0.9\sigma)$	χ_{MGS}^2	$1.90 \quad (\nu: 0.2)$
$10^9 A_{\mathrm{s}}$	$2.122^{+0.082}_{-0.075} \quad (+0.9\sigma)$	$H(0.15)$	$73.9^{+1.5}_{-1.5} \quad (+2.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.8)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.901^{+0.049}_{-0.048} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$632^{+14}_{-14} \quad (-2.0\sigma)$	χ_{prior}^2	$1.0 \quad (\nu: 1.1) \quad (-1.7\sigma)$
D_{40}	$1231^{+61}_{-60} \quad (-0.2\sigma)$	$H(0.38)$	$83.9^{+1.3}_{-1.3} \quad (+2.4\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.9)$
D_{220}	$5885^{+270}_{-260} \quad (+4.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1509^{+30}_{-29} \quad (-2.1\sigma)$	χ_{CMB}^2	$1139.7 \quad (\nu: 5.2) \quad (-9.6\sigma)$
$\bar{\chi}_{\mathrm{eff}}^2 = 1147.07; R - 1 = 0.01186$					

2.40 base_plikHM_EE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_{\mathrm{b}}h^2$	$0.0234^{+0.0011}_{-0.0010}$	$(+5.7\sigma)$	D_{1420}	834^{+22}_{-23}	$(+3.9\sigma)$	$H(0.61)$	$96.0^{+1.0}_{-1.0}$	$(+2.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1173^{+0.0027}_{-0.0027}$	(-1.6σ)	D_{2000}	$237.6^{+8.4}_{-8.4}$	$(+4.5\sigma)$	$D_{\mathrm{M}}(0.61)$	2278^{+38}_{-39}	(-2.2σ)
$100\theta_{\mathrm{MC}}$	$1.0399^{+0.0016}_{-0.0015}$	(-1.9σ)	$n_{\mathrm{s},0.002}$	$0.975^{+0.020}_{-0.019}$	$(+2.1\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5}$	(-0.8σ)
τ	$0.0540^{+0.011}_{-0.0094}$	$(+0.2\sigma)$	Y_{P}	$0.24580^{+0.00040}_{-0.00042}$	$(+5.3\sigma)$	$D_{\mathrm{M}}(2.33)$	5728^{+52}_{-54}	(-3.1σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.050^{+0.027}_{-0.025}$	$(+0.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24713^{+0.00040}_{-0.00042}$	$(+5.3\sigma)$	$f\sigma_{\mathrm{s}}(0.15)$	$0.444^{+0.016}_{-0.016}$	(-1.6σ)
n_{s}	$0.975^{+0.020}_{-0.019}$	$(+2.1\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.41^{+0.18}_{-0.18}$	(-5.2σ)	$\sigma_{\mathrm{s}}(0.15)$	$0.742^{+0.012}_{-0.012}$	(-0.9σ)
y_{cal}	$0.9999^{+0.0047}_{-0.0048}$	(-0.2σ)	Age/Gyr	$13.72^{+0.12}_{-0.12}$	(-3.1σ)	$f\sigma_{\mathrm{s}}(0.38)$	$0.465^{+0.013}_{-0.013}$	(-1.6σ)
H_0	$68.8^{+1.6}_{-1.6}$	$(+2.1\sigma)$	z_*	$1088.5^{+1.4}_{-1.3}$	(-4.4σ)	$\sigma_{\mathrm{s}}(0.38)$	$0.660^{+0.011}_{-0.0099}$	(-0.6σ)
Ω_{Λ}	$0.701^{+0.017}_{-0.017}$	$(+1.7\sigma)$	r_*	$144.36^{+0.74}_{-0.75}$	(-0.2σ)	$f\sigma_{\mathrm{s}}(0.51)$	$0.465^{+0.011}_{-0.012}$	(-1.5σ)
Ω_{m}	$0.299^{+0.017}_{-0.017}$	(-1.7σ)	$100\theta_*$	$1.0400^{+0.0016}_{-0.0016}$	(-2.2σ)	$\sigma_{\mathrm{s}}(0.51)$	$0.6178^{+0.0098}_{-0.0089}$	(-0.4σ)
$\Omega_{\mathrm{m}}h^2$	$0.1414^{+0.0023}_{-0.0022}$	(-1.0σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.881^{+0.076}_{-0.077}$	$(+0.1\sigma)$	$f\sigma_{\mathrm{s}}(0.61)$	$0.461^{+0.010}_{-0.010}$	(-1.4σ)
$\Omega_{\mathrm{m}}h^3$	$0.0972^{+0.0020}_{-0.0019}$	$(+2.9\sigma)$	z_{drag}	$1062.0^{+2.3}_{-2.3}$	$(+5.7\sigma)$	$\sigma_{\mathrm{s}}(0.61)$	$0.5882^{+0.0093}_{-0.0084}$	(-0.3σ)
σ_{s}	$0.802^{+0.014}_{-0.013}$	(-1.1σ)	r_{drag}	$146.70^{+0.97}_{-1.0}$	(-1.1σ)	$f\sigma_{\mathrm{s}}(2.33)$	$0.2971^{+0.0047}_{-0.0044}$	$(+0.0\sigma)$
S_{s}	$0.801^{+0.031}_{-0.032}$	(-1.6σ)	k_{D}	$0.1420^{+0.0017}_{-0.0017}$	$(+2.8\sigma)$	$\sigma_{\mathrm{s}}(2.33)$	$0.3069^{+0.0050}_{-0.0046}$	$(+0.4\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	$0.439^{+0.017}_{-0.017}$	(-1.6σ)	$100\theta_{\mathrm{D}}$	$0.1594^{+0.0014}_{-0.0013}$	(-6.3σ)	$\chi^2_{\mathrm{lensing}}$	9.1 (ν : 0.6)	
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	$0.593^{+0.016}_{-0.016}$	(-1.5σ)	z_{eq}	3362^{+55}_{-53}	(-1.0σ)	χ^2_{simall}	396.3 (ν : 0.6) (-0.4σ)	
$\sigma_{\mathrm{s}}/h^{0.5}$	$0.967^{+0.024}_{-0.024}$	(-1.6σ)	k_{eq}	$0.01026^{+0.00017}_{-0.00016}$	(-1.0σ)	χ^2_{plikEE}	742.6 (ν : 3.6)	
$r_{\mathrm{drag}}h$	$100.9^{+2.2}_{-2.1}$	$(+1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.010}$	$(+1.3\sigma)$	$\chi^2_{6\mathrm{DF}}$	0.056 (ν : 0.0)	
$\langle d^2 \rangle^{1/2}$	$2.403^{+0.059}_{-0.057}$	(-1.4σ)	$100\theta_{\mathrm{s,eq}}$	$0.4534^{+0.0052}_{-0.0052}$	$(+1.1\sigma)$	χ^2_{MGS}	2.01 (ν : 0.2)	
z_{re}	< 8.43	(-0.1σ)	$H(0.15)$	$73.9^{+1.5}_{-1.5}$	$(+2.2\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	4.3 (ν : 0.5)	
10^9A_{s}	$2.112^{+0.057}_{-0.052}$	$(+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	631^{+14}_{-13}	(-2.1σ)	χ^2_{prior}	0.9 (ν : 1.0) (-1.7σ)	
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.895^{+0.033}_{-0.032}$	$(+0.8\sigma)$	$H(0.38)$	$83.9^{+1.3}_{-1.2}$	$(+2.4\sigma)$	χ^2_{CMB}	1148.1 (ν : 5.3) (-8.0σ)	
D_{40}	1229^{+56}_{-54}	(-0.3σ)	$D_{\mathrm{M}}(0.38)$	1509^{+29}_{-29}	(-2.1σ)	χ^2_{BAO}	6.4 (ν : 0.8)	
D_{220}	5870^{+220}_{-210}	$(+3.7\sigma)$	$H(0.51)$	$90.5^{+1.1}_{-1.1}$	$(+2.6\sigma)$			
D_{810}	2571^{+48}_{-50}	$(+2.5\sigma)$	$D_{\mathrm{M}}(0.51)$	1956^{+35}_{-35}	(-2.2σ)			

$\bar{\chi}^2_{\mathrm{eff}} = 1155.39$; $R - 1 = 0.01205$

2.41 base_CamSpecHM_TE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022423	$0.02242^{+0.00045}_{-0.00046}$ (+1.4 σ)	D_{810}	2547.3	2547^{+50}_{-48} (+0.8 σ)	$H(0.51)$	90.03	$90.04^{+0.58}_{-0.58}$ (+1.6 σ)
$\Omega_c h^2$	0.11784	$0.1179^{+0.0024}_{-0.0023}$ (-1.3 σ)	D_{1420}	824.1	824^{+23}_{-23} (+1.8 σ)	$D_M(0.51)$	1968.0	1968^{+21}_{-20} (-1.6 σ)
$100\theta_{MC}$	1.04128	$1.04131^{+0.00091}_{-0.00093}$ (+1.2 σ)	D_{2000}	233.2	$233.0^{+8.4}_{-8.3}$ (+1.9 σ)	$H(0.61)$	95.58	$95.59^{+0.51}_{-0.50}$ (+1.7 σ)
τ	0.0511	$0.050^{+0.017}_{-0.017}$ (-0.3 σ)	$n_{s,0.002}$	0.9766	$0.976^{+0.020}_{-0.020}$ (+2.3 σ)	$D_M(0.61)$	2291.2	2291^{+23}_{-22} (-1.6 σ)
$\ln(10^{10} A_s)$	3.0345	$3.032^{+0.039}_{-0.039}$ (-0.5 σ)	Y_P	0.245416	$0.24541^{+0.00018}_{-0.00019}$ (+1.3 σ)	$H(2.33)$	235.22	$235.2^{+1.6}_{-1.5}$ (-1.2 σ)
n_s	0.9766	$0.976^{+0.020}_{-0.020}$ (+2.3 σ)	Y_P^{BBN}	0.246743	$0.24674^{+0.00018}_{-0.00019}$ (+1.3 σ)	$D_M(2.33)$	5751.7	5751^{+26}_{-25} (-1.6 σ)
y_{cal}	0.99984	$0.99996^{+0.0048}_{-0.0048}$ (-0.2 σ)	$10^5 D/H$	2.576	$2.577^{+0.086}_{-0.082}$ (-1.4 σ)	$f\sigma_8(0.15)$	0.4471	$0.446^{+0.016}_{-0.016}$ (-1.4 σ)
H_0	68.28	$68.3^{+1.0}_{-1.0}$ (+1.5 σ)	Age/Gyr	13.772	$13.771^{+0.059}_{-0.058}$ (-1.6 σ)	$\sigma_8(0.15)$	0.7435	$0.742^{+0.017}_{-0.018}$ (-0.9 σ)
Ω_Λ	0.6977	$0.698^{+0.013}_{-0.014}$ (+1.4 σ)	z_*	1089.66	$1089.67^{+0.63}_{-0.62}$ (-1.5 σ)	$f\sigma_8(0.38)$	0.4673	$0.467^{+0.014}_{-0.014}$ (-1.4 σ)
Ω_m	0.3023	$0.302^{+0.014}_{-0.013}$ (-1.4 σ)	r_*	144.95	$144.95^{+0.66}_{-0.65}$ (+1.0 σ)	$\sigma_8(0.38)$	0.6601	$0.659^{+0.015}_{-0.016}$ (-0.7 σ)
$\Omega_m h^2$	0.14091	$0.1409^{+0.0023}_{-0.0023}$ (-1.2 σ)	$100\theta_*$	1.04145	$1.04149^{+0.00090}_{-0.00092}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4670	$0.466^{+0.013}_{-0.014}$ (-1.4 σ)
$\Omega_m h^3$	0.09621	$0.0962^{+0.0010}_{-0.0010}$ (+0.7 σ)	$D_M(z_*)/\text{Gpc}$	13.918	$13.918^{+0.066}_{-0.064}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6181	$0.617^{+0.014}_{-0.015}$ (-0.6 σ)
σ_8	0.8036	$0.802^{+0.019}_{-0.020}$ (-1.1 σ)	z_{drag}	1059.89	$1059.9^{+1.0}_{-1.1}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4628	$0.462^{+0.012}_{-0.013}$ (-1.3 σ)
S_8	0.8066	$0.805^{+0.032}_{-0.030}$ (-1.4 σ)	r_{drag}	147.61	$147.61^{+0.75}_{-0.73}$ (+0.8 σ)	$\sigma_8(0.61)$	0.5884	$0.587^{+0.013}_{-0.014}$ (-0.5 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4418	$0.441^{+0.017}_{-0.017}$ (-1.4 σ)	k_D	0.14036	$0.1404^{+0.0010}_{-0.0010}$ (-0.4 σ)	$f\sigma_8(2.33)$	0.2971	$0.2966^{+0.0066}_{-0.0071}$ (-0.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5958	$0.595^{+0.018}_{-0.018}$ (-1.4 σ)	$100\theta_D$	0.16081	$0.16082^{+0.00062}_{-0.00060}$ (-0.9 σ)	$\sigma_8(2.33)$	0.3067	$0.3062^{+0.0068}_{-0.0073}$ (+0.1 σ)
$\sigma_8/h^{0.5}$	0.9725	$0.971^{+0.026}_{-0.027}$ (-1.4 σ)	z_{eq}	3352	3352^{+56}_{-55} (-1.2 σ)	χ^2_{small}	395.71	$396.8 (\nu: 1.2)$ (-0.1 σ)
$r_{drag} h$	100.78	$100.8^{+1.7}_{-1.8}$ (+1.5 σ)	k_{eq}	0.010230	$0.01023^{+0.00017}_{-0.00017}$ (-1.2 σ)	$\chi^2_{CamSpec}$	2576.1	$2580.4 (\nu: 4.2)$
$\langle d^2 \rangle^{1/2}$	2.388	$2.387^{+0.064}_{-0.065}$ (-1.8 σ)	$100\theta_{eq}$	0.8228	$0.823^{+0.010}_{-0.010}$ (+1.3 σ)	χ^2_{6DF}	0.004	$0.040 (\nu: 0.0)$
z_{re}	7.31	$7.1^{+1.7}_{-1.8}$ (-0.5 σ)	$100\theta_{s,eq}$	0.4543	$0.4543^{+0.0053}_{-0.0053}$ (+1.3 σ)	χ^2_{MGS}	1.89	$1.96 (\nu: 0.2)$
$10^9 A_s$	2.079	$2.074^{+0.079}_{-0.085}$ (-0.5 σ)	$H(0.15)$	73.46	$73.47^{+0.89}_{-0.90}$ (+1.6 σ)	$\chi^2_{DR12BAO}$	3.37	$3.93 (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	1.8770	$1.877^{+0.034}_{-0.033}$ (-0.5 σ)	$D_M(0.15)$	635.6	$635.5^{+8.8}_{-8.5}$ (-1.5 σ)	χ^2_{prior}	10.03	$11.0 (\nu: 1.0)$ (+1.0 σ)
D_{40}	1203.3	1206^{+47}_{-47} (-1.8 σ)	$H(0.38)$	83.41	$83.42^{+0.69}_{-0.69}$ (+1.6 σ)	χ^2_{BAO}	5.27	$5.93 (\nu: 0.5)$
D_{220}	5710	5715^{+110}_{-120} (+0.1 σ)	$D_M(0.38)$	1518.1	1518^{+18}_{-17} (-1.5 σ)	χ^2_{CMB}	2971.9	$2977.2 (\nu: 5.3)$ (+325.0 σ)

Best-fit $\chi^2_{eff} = 2987.15$; $\bar{\chi}^2_{eff} = 2994.10$; $R - 1 = 0.00951$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.89 DR12BAO: 3.37 CMB - small_100x143_offlike5_EE_Aplanck_B: 395.71 CamSpec like_10.7HM_1400_unified: 2576.15

2.42 base_CamSpecHM_TE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02245^{+0.00044}_{-0.00045} \quad (+1.5\sigma)$	D_{1420}	$827^{+20}_{-19} \quad (+2.4\sigma)$	$H(0.61)$	$95.58^{+0.50}_{-0.49} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0022}_{-0.0022} \quad (-1.2\sigma)$	D_{2000}	$234.1^{+7.4}_{-7.0} \quad (+2.5\sigma)$	$D_M(0.61)$	$2292^{+21}_{-22} \quad (-1.5\sigma)$
$100\theta_{MC}$	$1.04128^{+0.00092}_{-0.00092} \quad (+1.1\sigma)$	$n_{s,0.002}$	$0.976^{+0.019}_{-0.020} \quad (+2.4\sigma)$	$H(2.33)$	$235.4^{+1.4}_{-1.4} \quad (-1.0\sigma)$
τ	$0.052^{+0.014}_{-0.015} \quad (+0.0\sigma)$	Y_P	$0.24542^{+0.00017}_{-0.00018} \quad (+1.4\sigma)$	$D_M(2.33)$	$5751^{+24}_{-25} \quad (-1.6\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.030}_{-0.030} \quad (+0.0\sigma)$	Y_P^{BBN}	$0.24675^{+0.00017}_{-0.00018} \quad (+1.4\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.012}_{-0.012} \quad (-1.2\sigma)$
n_s	$0.976^{+0.019}_{-0.020} \quad (+2.4\sigma)$	$10^5 D/H$	$2.572^{+0.084}_{-0.079} \quad (-1.5\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.012}_{-0.012} \quad (-0.4\sigma)$
y_{cal}	$1.0002^{+0.0048}_{-0.0049} \quad (-0.1\sigma)$	Age/Gyr	$13.771^{+0.056}_{-0.056} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.010}_{-0.010} \quad (-1.1\sigma)$
H_0	$68.21^{+0.99}_{-0.98} \quad (+1.5\sigma)$	z_*	$1089.66^{+0.64}_{-0.61} \quad (-1.6\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.011} \quad (-0.1\sigma)$
Ω_Λ	$0.696^{+0.012}_{-0.013} \quad (+1.3\sigma)$	r_*	$144.87^{+0.58}_{-0.58} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4692^{+0.0091}_{-0.0093} \quad (-1.0\sigma)$
Ω_m	$0.304^{+0.013}_{-0.012} \quad (-1.3\sigma)$	$100\theta_*$	$1.04146^{+0.00090}_{-0.00091} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.010}_{-0.010} \quad (+0.0\sigma)$
$\Omega_m h^2$	$0.1412^{+0.0021}_{-0.0021} \quad (-1.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.910^{+0.058}_{-0.057} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4649^{+0.0085}_{-0.0088} \quad (-0.9\sigma)$
$\Omega_m h^3$	$0.09631^{+0.00094}_{-0.00096} \quad (+0.9\sigma)$	z_{drag}	$1059.98^{+0.99}_{-1.0} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0097}_{-0.010} \quad (+0.1\sigma)$
σ_8	$0.807^{+0.013}_{-0.014} \quad (-0.6\sigma)$	r_{drag}	$147.51^{+0.66}_{-0.64} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0051}_{-0.0051} \quad (+0.4\sigma)$
S_8	$0.811^{+0.023}_{-0.023} \quad (-1.2\sigma)$	k_D	$0.14048^{+0.00091}_{-0.00090} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3076^{+0.0054}_{-0.0055} \quad (+0.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.013}_{-0.013} \quad (-1.2\sigma)$	$100\theta_D$	$0.16077^{+0.00059}_{-0.00056} \quad (-1.1\sigma)$	$\chi^2_{lensing}$	$9.6 \quad (\nu: 0.6)$
$\sigma_8 \Omega_m^{0.25}$	$0.599^{+0.012}_{-0.013} \quad (-1.0\sigma)$	z_{eq}	$3359^{+51}_{-50} \quad (-1.1\sigma)$	χ^2_{small}	$396.6 \quad (\nu: 0.7) \quad (-0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.977^{+0.018}_{-0.019} \quad (-1.0\sigma)$	k_{eq}	$0.01025^{+0.00016}_{-0.00015} \quad (-1.1\sigma)$	$\chi^2_{CamSpec}$	$2580.2 \quad (\nu: 3.8)$
$r_{drag} h$	$100.6^{+1.7}_{-1.7} \quad (+1.3\sigma)$	$100\theta_{eq}$	$0.8217^{+0.0094}_{-0.0094} \quad (+1.2\sigma)$	χ^2_{6DF}	$0.032 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.399^{+0.057}_{-0.055} \quad (-1.5\sigma)$	$100\theta_{s,eq}$	$0.4537^{+0.0049}_{-0.0048} \quad (+1.2\sigma)$	χ^2_{MGS}	$1.85 \quad (\nu: 0.1)$
z_{re}	$7.4^{+1.5}_{-1.5} \quad (-0.1\sigma)$	$H(0.15)$	$73.41^{+0.87}_{-0.84} \quad (+1.5\sigma)$	$\chi^2_{DR12BAO}$	$3.91 \quad (\nu: 0.3)$
$10^9 A_s$	$2.092^{+0.063}_{-0.063} \quad (+0.0\sigma)$	$D_M(0.15)$	$636.1^{+8.3}_{-8.3} \quad (-1.5\sigma)$	χ^2_{prior}	$11.0 \quad (\nu: 1.0) \quad (+1.0\sigma)$
$10^9 A_s e^{-2\tau}$	$1.884^{+0.026}_{-0.026} \quad (+0.0\sigma)$	$H(0.38)$	$83.39^{+0.68}_{-0.65} \quad (+1.5\sigma)$	χ^2_{CMB}	$2986.4 \quad (\nu: 5.3) \quad (+326.7\sigma)$
D_{40}	$1210^{+47}_{-47} \quad (-1.6\sigma)$	$D_M(0.38)$	$1519^{+17}_{-17} \quad (-1.5\sigma)$	χ^2_{BAO}	$5.79 \quad (\nu: 0.3)$
D_{220}	$5731^{+110}_{-110} \quad (+0.4\sigma)$	$H(0.51)$	$90.02^{+0.57}_{-0.57} \quad (+1.6\sigma)$		
D_{810}	$2556^{+41}_{-40} \quad (+1.4\sigma)$	$D_M(0.51)$	$1969^{+20}_{-20} \quad (-1.5\sigma)$		

$\bar{\chi}^2_{eff} = 3003.21; R - 1 = 0.01219$

2.43 base_CamSpecHM_TE_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00045}_{-0.00046} \quad (+1.4\sigma)$	D_{810}	$2549^{+49}_{-49} \quad (+0.9\sigma)$	$H(0.51)$	$90.06^{+0.58}_{-0.57} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0024}_{-0.0023} \quad (-1.3\sigma)$	D_{1420}	$824^{+23}_{-23} \quad (+2.0\sigma)$	$D_M(0.51)$	$1967^{+21}_{-21} \quad (-1.6\sigma)$
$100\theta_{MC}$	$1.04131^{+0.00091}_{-0.00092} \quad (+1.2\sigma)$	D_{2000}	$233.4^{+8.3}_{-8.2} \quad (+2.1\sigma)$	$H(0.61)$	$95.60^{+0.51}_{-0.50} \quad (+1.7\sigma)$
τ	$0.0528^{+0.012}_{-0.0096} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.976^{+0.020}_{-0.020} \quad (+2.4\sigma)$	$D_M(0.61)$	$2291^{+23}_{-22} \quad (-1.6\sigma)$
$\ln(10^{10} A_s)$	$3.038^{+0.031}_{-0.029} \quad (-0.1\sigma)$	Y_P	$0.24542^{+0.00018}_{-0.00019} \quad (+1.3\sigma)$	$H(2.33)$	$235.2^{+1.6}_{-1.6} \quad (-1.2\sigma)$
n_s	$0.976^{+0.020}_{-0.020} \quad (+2.4\sigma)$	Y_P^{BBN}	$0.24674^{+0.00018}_{-0.00019} \quad (+1.3\sigma)$	$D_M(2.33)$	$5751^{+25}_{-25} \quad (-1.7\sigma)$
y_{cal}	$0.99998^{+0.0047}_{-0.0048} \quad (-0.2\sigma)$	$10^5 D/H$	$2.575^{+0.086}_{-0.081} \quad (-1.4\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.016}_{-0.015} \quad (-1.3\sigma)$
H_0	$68.3^{+1.0}_{-1.0} \quad (+1.6\sigma)$	Age/Gyr	$13.770^{+0.059}_{-0.058} \quad (-1.6\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.015}_{-0.014} \quad (-0.6\sigma)$
Ω_Λ	$0.698^{+0.013}_{-0.014} \quad (+1.4\sigma)$	z_*	$1089.66^{+0.63}_{-0.62} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.014}_{-0.013} \quad (-1.2\sigma)$
Ω_m	$0.302^{+0.014}_{-0.013} \quad (-1.4\sigma)$	r_*	$144.95^{+0.67}_{-0.65} \quad (+1.0\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.013}_{-0.012} \quad (-0.3\sigma)$
$\Omega_m h^2$	$0.1409^{+0.0024}_{-0.0023} \quad (-1.3\sigma)$	$100\theta_*$	$1.04149^{+0.00091}_{-0.00091} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.012}_{-0.012} \quad (-1.2\sigma)$
$\Omega_m h^3$	$0.0962^{+0.0010}_{-0.0011} \quad (+0.8\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.918^{+0.066}_{-0.064} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.012}_{-0.011} \quad (-0.2\sigma)$
σ_8	$0.805^{+0.017}_{-0.016} \quad (-0.8\sigma)$	z_{drag}	$1059.9^{+1.0}_{-1.1} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.011}_{-0.011} \quad (-1.1\sigma)$
S_8	$0.808^{+0.030}_{-0.029} \quad (-1.3\sigma)$	r_{drag}	$147.60^{+0.76}_{-0.73} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.012}_{-0.011} \quad (-0.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.442^{+0.017}_{-0.016} \quad (-1.3\sigma)$	k_D	$0.14037^{+0.00099}_{-0.0010} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0059}_{-0.0053} \quad (+0.2\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.597^{+0.017}_{-0.016} \quad (-1.2\sigma)$	$100\theta_D$	$0.16081^{+0.00062}_{-0.00059} \quad (-1.0\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0062}_{-0.0055} \quad (+0.5\sigma)$
$\sigma_8/h^{0.5}$	$0.974^{+0.024}_{-0.023} \quad (-1.2\sigma)$	z_{eq}	$3352^{+57}_{-56} \quad (-1.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.5) \quad (-0.3\sigma)$
$r_{drag} h$	$100.8^{+1.7}_{-1.8} \quad (+1.5\sigma)$	k_{eq}	$0.01023^{+0.00017}_{-0.00017} \quad (-1.3\sigma)$	$\chi_{CamSpec}^2$	$2580.4 \quad (\nu: 4.2)$
$\langle d^2 \rangle^{1/2}$	$2.393^{+0.061}_{-0.058} \quad (-1.6\sigma)$	$100\theta_{eq}$	$0.823^{+0.010}_{-0.010} \quad (+1.4\sigma)$	χ_{6DF}^2	$0.040 \quad (\nu: 0.0)$
z_{re}	$< 8.55 \quad (-0.0\sigma)$	$100\theta_{s,eq}$	$0.4544^{+0.0053}_{-0.0054} \quad (+1.3\sigma)$	χ_{MGS}^2	$1.98 \quad (\nu: 0.2)$
$10^9 A_s$	$2.087^{+0.065}_{-0.060} \quad (-0.1\sigma)$	$H(0.15)$	$73.49^{+0.89}_{-0.90} \quad (+1.6\sigma)$	$\chi_{DR12BAO}^2$	$3.92 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.878^{+0.034}_{-0.033} \quad (-0.4\sigma)$	$D_M(0.15)$	$635.4^{+8.8}_{-8.5} \quad (-1.5\sigma)$	χ_{prior}^2	$11.0 \quad (\nu: 1.0) \quad (+1.0\sigma)$
D_{40}	$1206^{+47}_{-47} \quad (-1.8\sigma)$	$H(0.38)$	$83.43^{+0.69}_{-0.69} \quad (+1.6\sigma)$	χ_{BAO}^2	$5.94 \quad (\nu: 0.5)$
D_{220}	$5716^{+110}_{-120} \quad (+0.1\sigma)$	$D_M(0.38)$	$1518^{+18}_{-17} \quad (-1.6\sigma)$	χ_{CMB}^2	$2976.8 \quad (\nu: 4.8) \quad (+325.0\sigma)$
$\bar{\chi}_{eff}^2 = 2993.70; R - 1 = 0.01568$					

2.44 base_CamSpecHM_TE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02245^{+0.00044}_{-0.00044} \quad (+1.5\sigma)$	D_{1420}	$827^{+20}_{-19} \quad (+2.4\sigma)$	$H(0.61)$	$95.59^{+0.50}_{-0.48} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0022}_{-0.0022} \quad (-1.2\sigma)$	D_{2000}	$234.1^{+7.3}_{-7.1} \quad (+2.5\sigma)$	$D_M(0.61)$	$2292^{+21}_{-22} \quad (-1.5\sigma)$
$100\theta_{MC}$	$1.04128^{+0.00092}_{-0.00090} \quad (+1.1\sigma)$	$n_{s,0.002}$	$0.976^{+0.019}_{-0.020} \quad (+2.4\sigma)$	$H(2.33)$	$235.4^{+1.4}_{-1.4} \quad (-1.1\sigma)$
τ	$0.054^{+0.012}_{-0.010} \quad (+0.2\sigma)$	Y_P	$0.24542^{+0.00017}_{-0.00018} \quad (+1.4\sigma)$	$D_M(2.33)$	$5751^{+24}_{-25} \quad (-1.6\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.026}_{-0.024} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24675^{+0.00017}_{-0.00018} \quad (+1.4\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.012}_{-0.012} \quad (-1.1\sigma)$
n_s	$0.976^{+0.019}_{-0.020} \quad (+2.4\sigma)$	$10^5 D/H$	$2.572^{+0.083}_{-0.078} \quad (-1.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
y_{cal}	$1.0002^{+0.0047}_{-0.0048} \quad (-0.1\sigma)$	Age/Gyr	$13.770^{+0.055}_{-0.056} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.4700^{+0.0099}_{-0.0098} \quad (-1.0\sigma)$
H_0	$68.24^{+0.99}_{-0.96} \quad (+1.5\sigma)$	z_*	$1089.65^{+0.64}_{-0.61} \quad (-1.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0095} \quad (+0.0\sigma)$
Ω_Λ	$0.697^{+0.012}_{-0.013} \quad (+1.4\sigma)$	r_*	$144.88^{+0.58}_{-0.57} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.4696^{+0.0089}_{-0.0088} \quad (-0.9\sigma)$
Ω_m	$0.303^{+0.013}_{-0.012} \quad (-1.4\sigma)$	$100\theta_*$	$1.04146^{+0.00092}_{-0.00090} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0095}_{-0.0089} \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1411^{+0.0021}_{-0.0021} \quad (-1.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.911^{+0.057}_{-0.057} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4653^{+0.0083}_{-0.0082} \quad (-0.9\sigma)$
$\Omega_m h^3$	$0.09630^{+0.00094}_{-0.00095} \quad (+0.9\sigma)$	z_{drag}	$1059.97^{+0.99}_{-1.0} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0092}_{-0.0085} \quad (+0.3\sigma)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.5\sigma)$	r_{drag}	$147.53^{+0.66}_{-0.63} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0048}_{-0.0043} \quad (+0.5\sigma)$
S_8	$0.812^{+0.023}_{-0.023} \quad (-1.2\sigma)$	k_D	$0.14047^{+0.00087}_{-0.00090} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3080^{+0.0051}_{-0.0047} \quad (+0.8\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.013}_{-0.013} \quad (-1.2\sigma)$	$100\theta_D$	$0.16077^{+0.00059}_{-0.00056} \quad (-1.1\sigma)$	$\chi^2_{lensing}$	$9.5 \quad (\nu: 0.5)$
$\sigma_8 \Omega_m^{0.25}$	$0.599^{+0.012}_{-0.012} \quad (-1.0\sigma)$	z_{eq}	$3357^{+50}_{-50} \quad (-1.1\sigma)$	χ^2_{small}	$396.5 \quad (\nu: 0.6) \quad (-0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.978^{+0.017}_{-0.017} \quad (-0.9\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00015} \quad (-1.1\sigma)$	$\chi^2_{CamSpec}$	$2580.1 \quad (\nu: 3.6)$
$r_{drag} h$	$100.7^{+1.6}_{-1.6} \quad (+1.4\sigma)$	$100\theta_{eq}$	$0.8220^{+0.0093}_{-0.0094} \quad (+1.2\sigma)$	χ^2_{6DF}	$0.032 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.401^{+0.056}_{-0.052} \quad (-1.4\sigma)$	$100\theta_{s,eq}$	$0.4539^{+0.0048}_{-0.0048} \quad (+1.2\sigma)$	χ^2_{MGS}	$1.88 \quad (\nu: 0.1)$
z_{re}	$< 8.61 \quad (+0.1\sigma)$	$H(0.15)$	$73.43^{+0.86}_{-0.84} \quad (+1.5\sigma)$	$\chi^2_{DR12BAO}$	$3.88 \quad (\nu: 0.3)$
$10^9 A_s$	$2.098^{+0.055}_{-0.050} \quad (+0.2\sigma)$	$D_M(0.15)$	$635.9^{+8.2}_{-8.3} \quad (-1.5\sigma)$	χ^2_{prior}	$11.0 \quad (\nu: 1.0) \quad (+1.0\sigma)$
$10^9 A_s e^{-2\tau}$	$1.884^{+0.026}_{-0.026} \quad (-0.0\sigma)$	$H(0.38)$	$83.40^{+0.68}_{-0.64} \quad (+1.6\sigma)$	χ^2_{CMB}	$2986.1 \quad (\nu: 4.7) \quad (+326.7\sigma)$
D_{40}	$1209^{+47}_{-47} \quad (-1.6\sigma)$	$D_M(0.38)$	$1519^{+17}_{-17} \quad (-1.5\sigma)$	χ^2_{BAO}	$5.79 \quad (\nu: 0.3)$
D_{220}	$5730^{+110}_{-110} \quad (+0.4\sigma)$	$H(0.51)$	$90.03^{+0.57}_{-0.54} \quad (+1.6\sigma)$		
D_{810}	$2555^{+41}_{-40} \quad (+1.4\sigma)$	$D_M(0.51)$	$1969^{+20}_{-20} \quad (-1.5\sigma)$		

$\bar{\chi}^2_{eff} = 3002.87; R - 1 = 0.01685$

2.45 base_CamSpecHM_EE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02359	$0.0235^{+0.0013}_{-0.0012}$ (+6.5 σ)	D_{810}	2607	2605^{+65}_{-65} (+4.9 σ)	$H(0.51)$	90.47	$90.5^{+1.2}_{-1.1}$ (+2.6 σ)
$\Omega_c h^2$	0.11770	$0.1178^{+0.0028}_{-0.0028}$ (−1.4 σ)	D_{1420}	845.0	844^{+28}_{-28} (+5.8 σ)	$D_M(0.51)$	1957.7	1958^{+36}_{-35} (−2.1 σ)
$100\theta_{MC}$	1.03937	$1.0395^{+0.0016}_{-0.0015}$ (−2.8 σ)	D_{2000}	240.8	240^{+10}_{-10} (+6.1 σ)	$H(0.61)$	96.03	$96.0^{+1.1}_{-1.0}$ (+2.9 σ)
τ	0.0511	$0.051^{+0.016}_{-0.016}$ (−0.1 σ)	$n_{s,0.002}$	0.9701	$0.970^{+0.018}_{-0.018}$ (+1.3 σ)	$D_M(0.61)$	2279.5	2280^{+39}_{-39} (−2.1 σ)
$\ln(10^{10} A_s)$	3.0603	$3.059^{+0.040}_{-0.042}$ (+1.1 σ)	Y_P	0.245904	$0.24587^{+0.00049}_{-0.00048}$ (+6.0 σ)	$H(2.33)$	236.12	$236.1^{+1.9}_{-2.0}$ (−0.5 σ)
n_s	0.9701	$0.970^{+0.018}_{-0.018}$ (+1.3 σ)	Y_P^{BBN}	0.247232	$0.24720^{+0.00049}_{-0.00048}$ (+6.0 σ)	$D_M(2.33)$	5726	5727^{+55}_{-58} (−3.1 σ)
y_{cal}	1.00012	$1.0001^{+0.0048}_{-0.0048}$ (−0.1 σ)	$10^5 D/H$	2.373	$2.38^{+0.21}_{-0.20}$ (−5.9 σ)	$f\sigma_8(0.15)$	0.4469	$0.447^{+0.019}_{-0.019}$ (−1.4 σ)
H_0	68.66	$68.6^{+1.6}_{-1.6}$ (+1.9 σ)	Age/Gyr	13.710	$13.71^{+0.13}_{-0.14}$ (−3.2 σ)	$\sigma_8(0.15)$	0.7447	$0.745^{+0.017}_{-0.017}$ (−0.6 σ)
Ω_Λ	0.6989	$0.699^{+0.017}_{-0.018}$ (+1.5 σ)	z_*	1088.26	$1088.3^{+1.5}_{-1.5}$ (−4.8 σ)	$f\sigma_8(0.38)$	0.4675	$0.468^{+0.016}_{-0.016}$ (−1.3 σ)
Ω_m	0.3011	$0.301^{+0.018}_{-0.017}$ (−1.5 σ)	r_*	144.09	$144.1^{+1.0}_{-1.0}$ (−0.7 σ)	$\sigma_8(0.38)$	0.6613	$0.661^{+0.015}_{-0.015}$ (−0.3 σ)
$\Omega_m h^2$	0.14194	$0.1419^{+0.0027}_{-0.0028}$ (−0.7 σ)	$100\theta_*$	1.03943	$1.0395^{+0.0016}_{-0.0015}$ (−3.2 σ)	$f\sigma_8(0.51)$	0.4673	$0.467^{+0.014}_{-0.015}$ (−1.2 σ)
$\Omega_m h^3$	0.09746	$0.0974^{+0.0024}_{-0.0022}$ (+3.4 σ)	$D_M(z_*)/\text{Gpc}$	13.862	$13.86^{+0.10}_{-0.099}$ (−0.3 σ)	$\sigma_8(0.51)$	0.6193	$0.619^{+0.014}_{-0.014}$ (−0.2 σ)
σ_8	0.8048	$0.805^{+0.020}_{-0.019}$ (−0.8 σ)	z_{drag}	1062.57	$1062.4^{+2.8}_{-2.7}$ (+6.6 σ)	$f\sigma_8(0.61)$	0.4632	$0.463^{+0.013}_{-0.013}$ (−1.1 σ)
S_8	0.8062	$0.807^{+0.036}_{-0.036}$ (−1.4 σ)	r_{drag}	146.35	$146.4^{+1.3}_{-1.4}$ (−1.7 σ)	$\sigma_8(0.61)$	0.5896	$0.590^{+0.013}_{-0.013}$ (−0.1 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4416	$0.442^{+0.020}_{-0.020}$ (−1.4 σ)	k_D	0.14253	$0.1424^{+0.0022}_{-0.0022}$ (+3.6 σ)	$f\sigma_8(2.33)$	0.2977	$0.2977^{+0.0065}_{-0.0065}$ (+0.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5961	$0.596^{+0.020}_{-0.020}$ (−1.3 σ)	$100\theta_D$	0.15901	$0.1591^{+0.0016}_{-0.0015}$ (−7.4 σ)	$\sigma_8(2.33)$	0.3074	$0.3073^{+0.0066}_{-0.0069}$ (+0.6 σ)
$\sigma_8/h^{0.5}$	0.9712	$0.972^{+0.029}_{-0.029}$ (−1.3 σ)	z_{eq}	3377	3377^{+64}_{-66} (−0.7 σ)	χ_{small}^2	395.59	$396.7 (\nu: 1.0)$ (−0.2 σ)
$r_{drag} h$	100.49	$100.5^{+2.2}_{-2.2}$ (+1.3 σ)	k_{eq}	0.010306	$0.01031^{+0.00020}_{-0.00020}$ (−0.7 σ)	$\chi_{CamSpec}^2$	1886.67	$1890.8 (\nu: 4.1)$
$\langle d^2 \rangle^{1/2}$	2.427	$2.427^{+0.067}_{-0.069}$ (−0.7 σ)	$100\theta_{eq}$	0.8201	$0.820^{+0.012}_{-0.011}$ (+1.0 σ)	χ_{6DF}^2	0.000	$0.053 (\nu: 0.0)$
z_{re}	7.07	$7.1^{+1.6}_{-1.6}$ (−0.5 σ)	$100\theta_{s,eq}$	0.4520	$0.4520^{+0.0062}_{-0.0059}$ (+0.8 σ)	χ_{MGS}^2	1.68	$1.75 (\nu: 0.2)$
$10^9 A_s$	2.133	$2.132^{+0.087}_{-0.087}$ (+1.2 σ)	$H(0.15)$	73.86	$73.8^{+1.5}_{-1.5}$ (+2.0 σ)	$\chi_{DR12BAO}^2$	3.85	$4.6 (\nu: 1.0)$
$10^9 A_s e^{-2\tau}$	1.9260	$1.924^{+0.046}_{-0.047}$ (+2.9 σ)	$D_M(0.15)$	632.1	632^{+14}_{-14} (−1.9 σ)	χ_{prior}^2	10.03	$11.0 (\nu: 0.9)$ (+1.0 σ)
D_{40}	1260	1259^{+58}_{-60} (+1.7 σ)	$H(0.38)$	83.83	$83.8^{+1.3}_{-1.2}$ (+2.3 σ)	χ_{BAO}^2	5.52	$6.4 (\nu: 0.8)$
D_{220}	6001	5991^{+260}_{-260} (+6.6 σ)	$D_M(0.38)$	1510.0	1511^{+29}_{-29} (−2.0 σ)	χ_{CMB}^2	2282.3	$2287.4 (\nu: 5.1)$ (+199.4 σ)

Best-fit $\chi_{\text{eff}}^2 = 2297.82$; $\bar{\chi}_{\text{eff}}^2 = 2304.89$; $R - 1 = 0.00669$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.85 CMB - small_100x143_offlike5_EE_Aplanck_B: 395.59 CamSpec like_10.7HM_1400_unified: 1886.67

2.46 base_CamSpecHM_EE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.0233^{+0.0011}_{-0.0010} \quad (+5.2\sigma)$	D_{1420}	$835^{+22}_{-22} \quad (+4.0\sigma)$	$H(0.61)$	$95.9^{+1.0}_{-0.98} \quad (+2.4\sigma)$
$\Omega_c h^2$	$0.1172^{+0.0026}_{-0.0026} \quad (-1.7\sigma)$	D_{2000}	$237.0^{+8.1}_{-8.0} \quad (+4.2\sigma)$	$D_M(0.61)$	$2282^{+38}_{-39} \quad (-2.0\sigma)$
$100\theta_{MC}$	$1.0395^{+0.0016}_{-0.0015} \quad (-2.6\sigma)$	$n_{s,0.002}$	$0.969^{+0.018}_{-0.018} \quad (+1.1\sigma)$	$H(2.33)$	$235.5^{+1.5}_{-1.6} \quad (-1.0\sigma)$
τ	$0.049^{+0.014}_{-0.017} \quad (-0.4\sigma)$	Y_P	$0.24576^{+0.00040}_{-0.00042} \quad (+4.8\sigma)$	$D_M(2.33)$	$5737^{+52}_{-52} \quad (-2.5\sigma)$
$\ln(10^{10} A_s)$	$3.045^{+0.029}_{-0.032} \quad (+0.3\sigma)$	Y_P^{BBN}	$0.24708^{+0.00040}_{-0.00042} \quad (+4.8\sigma)$	$f\sigma_8(0.15)$	$0.442^{+0.017}_{-0.017} \quad (-1.8\sigma)$
n_s	$0.969^{+0.018}_{-0.018} \quad (+1.1\sigma)$	$10^5 D/H$	$2.43^{+0.18}_{-0.18} \quad (-4.8\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.013}_{-0.014} \quad (-1.4\sigma)$
y_{cal}	$0.9998^{+0.0047}_{-0.0046} \quad (-0.2\sigma)$	Age/Gyr	$13.74^{+0.12}_{-0.12} \quad (-2.5\sigma)$	$f\sigma_8(0.38)$	$0.463^{+0.014}_{-0.014} \quad (-1.8\sigma)$
H_0	$68.6^{+1.6}_{-1.6} \quad (+1.9\sigma)$	z_*	$1088.6^{+1.4}_{-1.3} \quad (-4.1\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.011}_{-0.012} \quad (-1.2\sigma)$
Ω_Λ	$0.700^{+0.017}_{-0.017} \quad (+1.6\sigma)$	r_*	$144.48^{+0.75}_{-0.76} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.012}_{-0.012} \quad (-1.8\sigma)$
Ω_m	$0.300^{+0.017}_{-0.017} \quad (-1.6\sigma)$	$100\theta_*$	$1.0396^{+0.0016}_{-0.0015} \quad (-2.9\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.010}_{-0.011} \quad (-1.1\sigma)$
$\Omega_m h^2$	$0.1411^{+0.0023}_{-0.0023} \quad (-1.2\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.897^{+0.077}_{-0.077} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.011}_{-0.011} \quad (-1.8\sigma)$
$\Omega_m h^3$	$0.0968^{+0.0020}_{-0.0019} \quad (+2.0\sigma)$	z_{drag}	$1061.7^{+2.3}_{-2.2} \quad (+5.1\sigma)$	$\sigma_8(0.61)$	$0.5849^{+0.0099}_{-0.011} \quad (-1.0\sigma)$
σ_8	$0.798^{+0.015}_{-0.015} \quad (-1.6\sigma)$	r_{drag}	$146.9^{+1.0}_{-1.0} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2954^{+0.0049}_{-0.0054} \quad (-0.7\sigma)$
S_8	$0.798^{+0.033}_{-0.033} \quad (-1.7\sigma)$	k_D	$0.1417^{+0.0017}_{-0.0017} \quad (+2.3\sigma)$	$\sigma_8(2.33)$	$0.3051^{+0.0052}_{-0.0057} \quad (-0.3\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.437^{+0.018}_{-0.018} \quad (-1.7\sigma)$	$100\theta_D$	$0.1595^{+0.0013}_{-0.0013} \quad (-6.0\sigma)$	$\chi^2_{lensing}$	$9.3 \quad (\nu: 1.0)$
$\sigma_8 \Omega_m^{0.25}$	$0.590^{+0.017}_{-0.017} \quad (-1.8\sigma)$	z_{eq}	$3356^{+54}_{-54} \quad (-1.2\sigma)$	χ^2_{small}	$396.7 \quad (\nu: 0.9) \quad (-0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.963^{+0.025}_{-0.025} \quad (-1.8\sigma)$	k_{eq}	$0.01024^{+0.00017}_{-0.00017} \quad (-1.2\sigma)$	$\chi^2_{CamSpec}$	$1890.9 \quad (\nu: 3.7)$
$r_{drag} h$	$100.8^{+2.2}_{-2.1} \quad (+1.4\sigma)$	$100\theta_{eq}$	$0.823^{+0.010}_{-0.011} \quad (+1.4\sigma)$	χ^2_{6DF}	$0.052 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.408^{+0.058}_{-0.057} \quad (-1.2\sigma)$	$100\theta_{s,eq}$	$0.4538^{+0.0052}_{-0.0052} \quad (+1.2\sigma)$	χ^2_{MGS}	$1.93 \quad (\nu: 0.2)$
z_{re}	$6.8^{+1.6}_{-1.7} \quad (-0.8\sigma)$	$H(0.15)$	$73.8^{+1.5}_{-1.4} \quad (+2.0\sigma)$	$\chi^2_{DR12BAO}$	$4.3 \quad (\nu: 0.6)$
$10^9 A_s$	$2.101^{+0.063}_{-0.067} \quad (+0.3\sigma)$	$D_M(0.15)$	$633^{+14}_{-14} \quad (-1.9\sigma)$	χ^2_{prior}	$11.0 \quad (\nu: 1.0) \quad (+1.0\sigma)$
$10^9 A_s e^{-2\tau}$	$1.906^{+0.034}_{-0.032} \quad (+1.6\sigma)$	$H(0.38)$	$83.7^{+1.3}_{-1.2} \quad (+2.1\sigma)$	χ^2_{CMB}	$2296.9 \quad (\nu: 5.2) \quad (+201.2\sigma)$
D_{40}	$1249^{+56}_{-54} \quad (+1.0\sigma)$	$D_M(0.38)$	$1512^{+29}_{-29} \quad (-1.9\sigma)$	χ^2_{BAO}	$6.3 \quad (\nu: 0.7)$
D_{220}	$5930^{+220}_{-210} \quad (+5.2\sigma)$	$H(0.51)$	$90.3^{+1.1}_{-1.1} \quad (+2.3\sigma)$		
D_{810}	$2582^{+50}_{-49} \quad (+3.3\sigma)$	$D_M(0.51)$	$1960^{+35}_{-35} \quad (-2.0\sigma)$		

$\bar{\chi}^2_{eff} = 2314.19; R - 1 = 0.00959$

2.47 base_CamSpecHM_EE_lowE_BAO_post_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_b h^2$	$0.0235^{+0.0013}_{-0.0012}$	(+6.4 σ)	D_{810}	2603^{+65}_{-64}	(+4.9 σ)	$H(0.51)$	$90.4^{+1.2}_{-1.1}$	(+2.5 σ)
$\Omega_c h^2$	$0.1177^{+0.0028}_{-0.0028}$	(−1.4 σ)	D_{1420}	843^{+28}_{-28}	(+5.7 σ)	$D_M(0.51)$	1959^{+35}_{-35}	(−2.0 σ)
$100\theta_{MC}$	$1.0395^{+0.0015}_{-0.0015}$	(−2.8 σ)	D_{2000}	240^{+10}_{-10}	(+6.0 σ)	$H(0.61)$	$96.0^{+1.1}_{-1.0}$	(+2.8 σ)
τ	$0.0543^{+0.012}_{-0.0095}$	(+0.3 σ)	$n_{s,0.002}$	$0.970^{+0.018}_{-0.018}$	(+1.4 σ)	$D_M(0.61)$	2281^{+39}_{-39}	(−2.1 σ)
$\ln(10^{10} A_s)$	$3.065^{+0.036}_{-0.033}$	(+1.5 σ)	Y_P	$0.24586^{+0.00049}_{-0.00048}$	(+5.9 σ)	$H(2.33)$	$236.1^{+1.9}_{-2.0}$	(−0.5 σ)
n_s	$0.970^{+0.018}_{-0.018}$	(+1.4 σ)	Y_P^{BBN}	$0.24719^{+0.00049}_{-0.00049}$	(+5.9 σ)	$D_M(2.33)$	5727^{+55}_{-58}	(−3.1 σ)
y_{cal}	$1.0001^{+0.0047}_{-0.0048}$	(−0.1 σ)	$10^5 D/H$	$2.39^{+0.21}_{-0.20}$	(−5.8 σ)	$f\sigma_8(0.15)$	$0.449^{+0.018}_{-0.018}$	(−1.2 σ)
H_0	$68.6^{+1.6}_{-1.6}$	(+1.9 σ)	Age/Gyr	$13.71^{+0.13}_{-0.14}$	(−3.2 σ)	$\sigma_8(0.15)$	$0.747^{+0.016}_{-0.015}$	(−0.3 σ)
Ω_Λ	$0.699^{+0.017}_{-0.018}$	(+1.5 σ)	z_*	$1088.4^{+1.5}_{-1.5}$	(−4.8 σ)	$f\sigma_8(0.38)$	$0.469^{+0.015}_{-0.015}$	(−1.1 σ)
Ω_m	$0.301^{+0.018}_{-0.017}$	(−1.5 σ)	r_*	$144.1^{+1.0}_{-1.0}$	(−0.7 σ)	$\sigma_8(0.38)$	$0.663^{+0.013}_{-0.012}$	(+0.0 σ)
$\Omega_m h^2$	$0.1419^{+0.0026}_{-0.0028}$	(−0.8 σ)	$100\theta_*$	$1.0395^{+0.0016}_{-0.0015}$	(−3.2 σ)	$f\sigma_8(0.51)$	$0.469^{+0.014}_{-0.013}$	(−1.0 σ)
$\Omega_m h^3$	$0.0974^{+0.0024}_{-0.0022}$	(+3.3 σ)	$D_M(z_*)/\text{Gpc}$	$13.87^{+0.10}_{-0.099}$	(−0.3 σ)	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.011}$	(+0.2 σ)
σ_8	$0.807^{+0.018}_{-0.017}$	(−0.5 σ)	z_{drag}	$1062.4^{+2.8}_{-2.6}$	(+6.5 σ)	$f\sigma_8(0.61)$	$0.465^{+0.013}_{-0.012}$	(−1.0 σ)
S_8	$0.809^{+0.035}_{-0.034}$	(−1.3 σ)	r_{drag}	$146.4^{+1.3}_{-1.4}$	(−1.6 σ)	$\sigma_8(0.61)$	$0.591^{+0.012}_{-0.011}$	(+0.3 σ)
$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.019}_{-0.019}$	(−1.3 σ)	k_D	$0.1424^{+0.0022}_{-0.0022}$	(+3.5 σ)	$f\sigma_8(2.33)$	$0.2986^{+0.0057}_{-0.0055}$	(+0.6 σ)
$\sigma_8 \Omega_m^{0.25}$	$0.598^{+0.019}_{-0.018}$	(−1.1 σ)	$100\theta_D$	$0.1591^{+0.0016}_{-0.0015}$	(−7.3 σ)	$\sigma_8(2.33)$	$0.3083^{+0.0061}_{-0.0055}$	(+0.9 σ)
$\sigma_8/h^{0.5}$	$0.975^{+0.027}_{-0.026}$	(−1.1 σ)	z_{eq}	3376^{+63}_{-67}	(−0.8 σ)	χ^2_{simall}	$396.4 (\nu: 0.8)$	(−0.3 σ)
$r_{drag} h$	$100.5^{+2.2}_{-2.2}$	(+1.3 σ)	k_{eq}	$0.01030^{+0.00019}_{-0.00020}$	(−0.8 σ)	$\chi^2_{CamSpec}$	$1890.7 (\nu: 4.0)$	
$\langle d^2 \rangle^{1/2}$	$2.434^{+0.064}_{-0.064}$	(−0.5 σ)	$100\theta_{eq}$	$0.820^{+0.012}_{-0.011}$	(+1.0 σ)	χ^2_{6DF}	$0.052 (\nu: 0.0)$	
z_{re}	< 8.44	(−0.1 σ)	$100\theta_{s,eq}$	$0.4521^{+0.0061}_{-0.0058}$	(+0.8 σ)	χ^2_{MGS}	$1.75 (\nu: 0.2)$	
$10^9 A_s$	$2.144^{+0.079}_{-0.070}$	(+1.5 σ)	$H(0.15)$	$73.8^{+1.5}_{-1.5}$	(+2.0 σ)	$\chi^2_{DR12BAO}$	$4.6 (\nu: 1.0)$	
$10^9 A_s e^{-2\tau}$	$1.923^{+0.046}_{-0.047}$	(+2.9 σ)	$D_M(0.15)$	632^{+14}_{-14}	(−1.9 σ)	χ^2_{prior}	$11.0 (\nu: 0.9)$	(+1.0 σ)
D_{40}	1259^{+58}_{-60}	(+1.6 σ)	$H(0.38)$	$83.8^{+1.3}_{-1.2}$	(+2.3 σ)	χ^2_{BAO}	$6.4 (\nu: 0.8)$	
D_{220}	5986^{+260}_{-260}	(+6.5 σ)	$D_M(0.38)$	1511^{+29}_{-29}	(−2.0 σ)	χ^2_{CMB}	$2287.1 (\nu: 4.7)$	(+199.4 σ)
$\bar{\chi}^2_{eff} = 2304.51; R - 1 = 0.01190$								

2.48 base_CamSpecHM_EE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_b h^2$	$0.0232^{+0.0010}_{-0.0010}$	$(+4.9\sigma)$	D_{1420}	833^{+21}_{-22}	$(+3.7\sigma)$	$H(0.61)$	$95.82^{+0.98}_{-0.98}$	$(+2.3\sigma)$
$\Omega_c h^2$	$0.1171^{+0.0027}_{-0.0026}$	(-1.7σ)	D_{2000}	$236.5^{+7.9}_{-7.9}$	$(+3.9\sigma)$	$D_M(0.61)$	2283^{+38}_{-36}	(-2.0σ)
$100\theta_{MC}$	$1.0395^{+0.0014}_{-0.0015}$	(-2.6σ)	$n_{s,0.002}$	$0.969^{+0.018}_{-0.018}$	$(+1.2\sigma)$	$H(2.33)$	$235.3^{+1.5}_{-1.5}$	(-1.1σ)
τ	$0.0526^{+0.010}_{-0.0082}$	$(+0.0\sigma)$	Y_P	$0.24573^{+0.00038}_{-0.00041}$	$(+4.5\sigma)$	$D_M(2.33)$	5739^{+51}_{-50}	(-2.4σ)
$\ln(10^{10} A_s)$	$3.051^{+0.025}_{-0.023}$	$(+0.6\sigma)$	Y_P^{BBN}	$0.24706^{+0.00039}_{-0.00041}$	$(+4.5\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.017}_{-0.016}$	(-1.7σ)
n_s	$0.969^{+0.018}_{-0.018}$	$(+1.2\sigma)$	$10^5 D/H$	$2.44^{+0.18}_{-0.17}$	(-4.5σ)	$\sigma_8(0.15)$	$0.741^{+0.012}_{-0.012}$	(-1.1σ)
y_{cal}	$0.9997^{+0.0045}_{-0.0045}$	(-0.3σ)	Age/Gyr	$13.74^{+0.12}_{-0.11}$	(-2.4σ)	$f\sigma_8(0.38)$	$0.464^{+0.014}_{-0.014}$	(-1.6σ)
H_0	$68.6^{+1.5}_{-1.6}$	$(+1.9\sigma)$	z_*	$1088.7^{+1.4}_{-1.3}$	(-4.0σ)	$\sigma_8(0.38)$	$0.658^{+0.010}_{-0.0094}$	(-0.8σ)
Ω_Λ	$0.700^{+0.016}_{-0.017}$	$(+1.6\sigma)$	r_*	$144.56^{+0.73}_{-0.71}$	$(+0.2\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.012}_{-0.012}$	(-1.6σ)
Ω_m	$0.300^{+0.017}_{-0.016}$	(-1.6σ)	$100\theta_*$	$1.0396^{+0.0015}_{-0.0015}$	(-2.9σ)	$\sigma_8(0.51)$	$0.6164^{+0.0092}_{-0.0087}$	(-0.7σ)
$\Omega_m h^2$	$0.1409^{+0.0022}_{-0.0022}$	(-1.2σ)	$D_M(z_*)/\text{Gpc}$	$13.905^{+0.076}_{-0.075}$	$(+0.6\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.010}_{-0.011}$	(-1.6σ)
$\Omega_m h^3$	$0.0967^{+0.0019}_{-0.0019}$	$(+1.7\sigma)$	z_{drag}	$1061.6^{+2.2}_{-2.2}$	$(+4.8\sigma)$	$\sigma_8(0.61)$	$0.5868^{+0.0087}_{-0.0081}$	(-0.6σ)
σ_8	$0.800^{+0.014}_{-0.013}$	(-1.3σ)	r_{drag}	$146.96^{+0.96}_{-0.95}$	(-0.5σ)	$f\sigma_8(2.33)$	$0.2964^{+0.0044}_{-0.0040}$	(-0.3σ)
S_8	$0.800^{+0.034}_{-0.032}$	(-1.7σ)	k_D	$0.1416^{+0.0016}_{-0.0016}$	$(+2.0\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0046}_{-0.0043}$	$(+0.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.018}_{-0.017}$	(-1.7σ)	$100\theta_D$	$0.1596^{+0.0013}_{-0.0013}$	(-5.6σ)	$\chi^2_{lensing}$	$9.4 (\nu: 1.1)$	
$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.016}_{-0.016}$	(-1.6σ)	z_{eq}	3352^{+53}_{-53}	(-1.2σ)	χ^2_{simall}	$396.15 (\nu: 0.3) (-0.5\sigma)$	
$\sigma_8/h^{0.5}$	$0.966^{+0.024}_{-0.025}$	(-1.6σ)	k_{eq}	$0.01023^{+0.00016}_{-0.00016}$	(-1.2σ)	$\chi^2_{CamSpec}$	$1890.9 (\nu: 3.8)$	
$r_{drag} h$	$100.8^{+2.1}_{-2.1}$	$(+1.5\sigma)$	$100\theta_{eq}$	$0.824^{+0.010}_{-0.011}$	$(+1.4\sigma)$	χ^2_{6DF}	$0.052 (\nu: 0.0)$	
$\langle d^2 \rangle^{1/2}$	$2.414^{+0.056}_{-0.054}$	(-1.1σ)	$100\theta_{s,eq}$	$0.4541^{+0.0051}_{-0.0052}$	$(+1.3\sigma)$	χ^2_{MGS}	$1.96 (\nu: 0.2)$	
z_{re}	< 8.24	(-0.3σ)	$H(0.15)$	$73.8^{+1.4}_{-1.4}$	$(+1.9\sigma)$	$\chi^2_{DR12BAO}$	$4.3 (\nu: 0.5)$	
$10^9 A_s$	$2.114^{+0.054}_{-0.049}$	$(+0.6\sigma)$	$D_M(0.15)$	633^{+14}_{-13}	(-1.9σ)	χ^2_{prior}	$11.0 (\nu: 0.8) (+1.0\sigma)$	
$10^9 A_s e^{-2\tau}$	$1.903^{+0.032}_{-0.031}$	$(+1.4\sigma)$	$H(0.38)$	$83.7^{+1.2}_{-1.2}$	$(+2.1\sigma)$	χ^2_{CMB}	$2296.5 (\nu: 5.0) (+201.1\sigma)$	
D_{40}	1246^{+53}_{-53}	$(+0.8\sigma)$	$D_M(0.38)$	1512^{+29}_{-27}	(-1.9σ)	χ^2_{BAO}	$6.3 (\nu: 0.7)$	
D_{220}	5914^{+210}_{-210}	$(+4.8\sigma)$	$H(0.51)$	$90.3^{+1.0}_{-1.1}$	$(+2.2\sigma)$			
D_{810}	2577^{+46}_{-48}	$(+3.0\sigma)$	$D_M(0.51)$	1961^{+35}_{-33}	(-1.9σ)			

$\bar{\chi}^2_{eff} = 2313.75$; $R - 1 = 0.00861$

2.49 base_plikHM_TE_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022450	$0.02246^{+0.00049}_{-0.00049}$ (+1.6 σ)	$\langle d^2 \rangle^{1/2}$	2.430	$2.427^{+0.066}_{-0.067}$ (−0.7 σ)	$H(0.15)$	72.97	$73.0^{+1.4}_{-1.3}$ (+1.0 σ)
$\Omega_c h^2$	0.11952	$0.1195^{+0.0032}_{-0.0034}$ (−0.6 σ)	z_{re}	7.53	$7.5^{+1.5}_{-1.6}$ (+0.0 σ)	$D_{\text{M}}(0.15)$	640.6	640^{+13}_{-13} (−0.9 σ)
$100\theta_{\text{MC}}$	1.04120	$1.04120^{+0.00096}_{-0.00095}$ (+0.9 σ)	$10^9 A_{\text{s}}$	2.082	$2.083^{+0.064}_{-0.061}$ (−0.3 σ)	$H(0.38)$	83.09	$83.1^{+1.0}_{-0.96}$ (+1.1 σ)
τ	0.0531	$0.053^{+0.015}_{-0.015}$ (+0.1 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8725	$1.872^{+0.027}_{-0.027}$ (−0.9 σ)	$D_{\text{M}}(0.38)$	1527.7	1527^{+26}_{-27} (−1.0 σ)
$\ln(10^{10} A_{\text{s}})$	3.0360	$3.036^{+0.030}_{-0.030}$ (−0.3 σ)	D_{40}	1227.4	1224^{+49}_{-50} (−0.6 σ)	$H(0.51)$	89.81	$89.84^{+0.84}_{-0.78}$ (+1.2 σ)
n_{s}	0.9645	$0.966^{+0.022}_{-0.022}$ (+0.6 σ)	D_{220}	5722	5716^{+110}_{-110} (+0.1 σ)	$D_{\text{M}}(0.51)$	1979.1	1978^{+30}_{-32} (−1.0 σ)
y_{cal}	1.00049	$1.0004^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{810}	2526.5	2527^{+44}_{-42} (−0.7 σ)	$H(0.61)$	95.44	$95.46^{+0.69}_{-0.64}$ (+1.3 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.076}$	D_{1420}	813.1	814^{+22}_{-21} (−0.1 σ)	$D_{\text{M}}(0.61)$	2302.9	2302^{+33}_{-34} (−1.0 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.136^{+0.059}_{-0.057}$	D_{2000}	229.6	$229.9^{+8.1}_{-7.7}$ (+0.2 σ)	$H(2.33)$	236.35	$236.3^{+2.0}_{-2.0}$ (−0.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.16}$	$n_{\text{s},0.002}$	0.9645	$0.966^{+0.022}_{-0.022}$ (+0.6 σ)	$D_{\text{M}}(2.33)$	5755.5	5755^{+31}_{-33} (−1.4 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	Y_{P}	0.245426	$0.24543^{+0.00020}_{-0.00020}$ (+1.5 σ)	$f\sigma_8(0.15)$	0.4543	$0.454^{+0.016}_{-0.017}$ (−0.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	$Y_{\text{P}}^{\text{BBN}}$	0.246753	$0.24675^{+0.00020}_{-0.00020}$ (+1.5 σ)	$\sigma_8(0.15)$	0.7448	$0.745^{+0.012}_{-0.012}$ (−0.6 σ)
A_{217}^{dustTE}	2.06	$2.06^{+0.53}_{-0.52}$	10^5D/H	2.571	$2.570^{+0.091}_{-0.089}$ (−1.5 σ)	$f\sigma_8(0.38)$	0.4726	$0.473^{+0.013}_{-0.013}$ (−0.8 σ)
c_{100}	1.00017	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	Age/Gyr	13.779	$13.777^{+0.071}_{-0.073}$ (−1.4 σ)	$\sigma_8(0.38)$	0.6603	$0.660^{+0.011}_{-0.011}$ (−0.4 σ)
c_{217}	0.99800	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	z_*	1089.78	$1089.76^{+0.79}_{-0.80}$ (−1.3 σ)	$f\sigma_8(0.51)$	0.4712	$0.471^{+0.011}_{-0.012}$ (−0.8 σ)
H_0	67.68	$67.7^{+1.6}_{-1.5}$ (+0.9 σ)	r_*	144.49	$144.50^{+0.77}_{-0.74}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6179	$0.618^{+0.011}_{-0.010}$ (−0.4 σ)
Ω_{Λ}	0.6886	$0.689^{+0.020}_{-0.020}$ (+0.7 σ)	$100\theta_*$	1.04137	$1.04138^{+0.00096}_{-0.00094}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4663	$0.4663^{+0.0098}_{-0.010}$ (−0.7 σ)
Ω_{m}	0.3114	$0.311^{+0.020}_{-0.020}$ (−0.7 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.875	$13.876^{+0.072}_{-0.071}$ (−0.0 σ)	$\sigma_8(0.61)$	0.5879	$0.588^{+0.010}_{-0.0098}$ (−0.3 σ)
$\Omega_{\text{m}} h^2$	0.14262	$0.1426^{+0.0031}_{-0.0031}$ (−0.4 σ)	z_{drag}	1060.09	$1060.1^{+1.0}_{-1.1}$ (+1.6 σ)	$f\sigma_8(2.33)$	0.2964	$0.2966^{+0.0054}_{-0.0052}$ (−0.2 σ)
$\Omega_{\text{m}} h^3$	0.09653	$0.09654^{+0.00099}_{-0.00099}$ (+1.4 σ)	r_{drag}	147.13	$147.13^{+0.80}_{-0.76}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3056	$0.3058^{+0.0061}_{-0.0058}$ (−0.0 σ)
σ_8	0.8060	$0.806^{+0.014}_{-0.014}$ (−0.6 σ)	k_{D}	0.14089	$0.14089^{+0.00094}_{-0.00099}$ (+0.7 σ)	χ^2_{lensing}	9.54	10.4 (ν : 1.6)
S_8	0.8212	$0.821^{+0.033}_{-0.034}$ (−0.8 σ)	$100\theta_{\text{D}}$	0.16071	$0.16070^{+0.00062}_{-0.00060}$ (−1.4 σ)	χ^2_{small}	395.85	396.8 (ν : 1.2) (−0.1 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4498	$0.450^{+0.018}_{-0.019}$ (−0.8 σ)	z_{eq}	3393	3392^{+73}_{-75} (−0.4 σ)	χ^2_{plikTE}	854.4	860.7 (ν : 7.0)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6021	$0.602^{+0.016}_{-0.016}$ (−0.8 σ)	k_{eq}	0.010355	$0.01035^{+0.00022}_{-0.00023}$ (−0.4 σ)	χ^2_{prior}	0.5	7.4 (ν : 6.8) (+0.0 σ)
$\sigma_8/h^{0.5}$	0.9798	$0.980^{+0.021}_{-0.022}$ (−0.8 σ)	$100\theta_{\text{eq}}$	0.8154	$0.816^{+0.015}_{-0.014}$ (+0.5 σ)	χ^2_{CMB}	1259.8	1268.0 (ν : 8.3) (+13.8 σ)
$r_{\text{drag}} h$	99.58	$99.6^{+2.7}_{-2.5}$ (+0.7 σ)	$100\theta_{\text{s,eq}}$	0.4504	$0.4506^{+0.0074}_{-0.0070}$ (+0.5 σ)			

Best-fit $\chi^2_{\text{eff}} = 1260.24$; $\bar{\chi}^2_{\text{eff}} = 1275.40$; $R - 1 = 0.00470$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.54 simall_100x143_offlike5_EE_Aplanck_B: 395.85 plik_rd12_HM_v22_TE: 854.38

2.50 base_plikHM_TE_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02247^{+0.00049}_{-0.00049} \quad (+1.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.066}_{-0.066} \quad (-0.7\sigma)$	$H(0.15)$	$73.0^{+1.4}_{-1.3} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1194^{+0.0032}_{-0.0033} \quad (-0.6\sigma)$	z_{re}	$< 8.80 \quad (+0.2\sigma)$	$D_{\text{M}}(0.15)$	$640^{+13}_{-13} \quad (-1.0\sigma)$
$100\theta_{\text{MC}}$	$1.04121^{+0.00096}_{-0.00094} \quad (+0.9\sigma)$	$10^9 A_{\text{s}}$	$2.088^{+0.057}_{-0.053} \quad (-0.1\sigma)$	$H(0.38)$	$83.1^{+1.0}_{-0.94} \quad (+1.1\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.871^{+0.027}_{-0.027} \quad (-1.0\sigma)$	$D_{\text{M}}(0.38)$	$1527^{+25}_{-27} \quad (-1.0\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.039^{+0.027}_{-0.026} \quad (-0.1\sigma)$	D_{40}	$1223^{+48}_{-49} \quad (-0.7\sigma)$	$H(0.51)$	$89.86^{+0.83}_{-0.77} \quad (+1.2\sigma)$
n_{s}	$0.966^{+0.022}_{-0.021} \quad (+0.6\sigma)$	D_{220}	$5715^{+110}_{-110} \quad (+0.0\sigma)$	$D_{\text{M}}(0.51)$	$1978^{+30}_{-31} \quad (-1.0\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	D_{810}	$2526^{+44}_{-42} \quad (-0.7\sigma)$	$H(0.61)$	$95.47^{+0.69}_{-0.63} \quad (+1.3\sigma)$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.076}$	D_{1420}	$814^{+22}_{-21} \quad (-0.1\sigma)$	$D_{\text{M}}(0.61)$	$2301^{+32}_{-34} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.136^{+0.059}_{-0.057}$	D_{2000}	$229.9^{+8.0}_{-7.6} \quad (+0.2\sigma)$	$H(2.33)$	$236.3^{+1.9}_{-2.0} \quad (-0.4\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$n_{\text{s},0.002}$	$0.966^{+0.022}_{-0.021} \quad (+0.6\sigma)$	$D_{\text{M}}(2.33)$	$5754^{+31}_{-32} \quad (-1.4\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	Y_{P}	$0.24543^{+0.00020}_{-0.00020} \quad (+1.5\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.016}_{-0.017} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24676^{+0.00020}_{-0.00020} \quad (+1.5\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.012}_{-0.011} \quad (-0.5\sigma)$
A_{217}^{dustTE}	$2.06^{+0.53}_{-0.52}$	10^5D/H	$2.569^{+0.092}_{-0.089} \quad (-1.5\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.013} \quad (-0.7\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	Age/Gyr	$13.776^{+0.070}_{-0.073} \quad (-1.5\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.0097} \quad (-0.3\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	z_*	$1089.75^{+0.78}_{-0.80} \quad (-1.4\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.012} \quad (-0.7\sigma)$
H_0	$67.8^{+1.6}_{-1.5} \quad (+1.0\sigma)$	r_*	$144.52^{+0.76}_{-0.72} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.010}_{-0.0090} \quad (-0.3\sigma)$
Ω_{Λ}	$0.689^{+0.020}_{-0.020} \quad (+0.8\sigma)$	$100\theta_*$	$1.04138^{+0.00096}_{-0.00093} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.4665^{+0.0097}_{-0.010} \quad (-0.7\sigma)$
Ω_{m}	$0.311^{+0.020}_{-0.020} \quad (-0.8\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.878^{+0.071}_{-0.069} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.5888^{+0.0098}_{-0.0087} \quad (-0.2\sigma)$
$\Omega_{\text{m}} h^2$	$0.1425^{+0.0030}_{-0.0031} \quad (-0.5\sigma)$	z_{drag}	$1060.1^{+1.0}_{-1.1} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0050}_{-0.0047} \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.0965^{+0.0010}_{-0.00098} \quad (+1.4\sigma)$	r_{drag}	$147.16^{+0.79}_{-0.74} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0055}_{-0.0053} \quad (+0.1\sigma)$
σ_8	$0.807^{+0.013}_{-0.013} \quad (-0.5\sigma)$	k_{D}	$0.14087^{+0.00093}_{-0.00099} \quad (+0.6\sigma)$	χ_{lensing}^2	$10.3 \quad (\nu: 1.6)$
S_8	$0.821^{+0.032}_{-0.034} \quad (-0.8\sigma)$	$100\theta_{\text{D}}$	$0.16070^{+0.00062}_{-0.00060} \quad (-1.4\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.2) \quad (-0.1\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.018}_{-0.019} \quad (-0.8\sigma)$	z_{eq}	$3389^{+72}_{-74} \quad (-0.5\sigma)$	χ_{plikTE}^2	$860.6 \quad (\nu: 6.8)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.602^{+0.015}_{-0.016} \quad (-0.7\sigma)$	k_{eq}	$0.01034^{+0.00022}_{-0.00023} \quad (-0.5\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.980^{+0.021}_{-0.022} \quad (-0.8\sigma)$	$100\theta_{\text{eq}}$	$0.816^{+0.014}_{-0.013} \quad (+0.6\sigma)$	χ_{CMB}^2	$1267.7 \quad (\nu: 8.0) \quad (+13.7\sigma)$
$r_{\text{drag}} h$	$99.7^{+2.6}_{-2.5} \quad (+0.8\sigma)$	$100\theta_{\text{s,eq}}$	$0.4508^{+0.0073}_{-0.0068} \quad (+0.5\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1275.15; R - 1 = 0.00477$

2.51 base_plikHM_EE_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02393	$0.0240^{+0.0021}_{-0.0019}$ (+8.6 σ)	D_{220}	5958	5969^{+330}_{-320} (+6.1 σ)	$H(0.38)$	84.66	$84.8^{+2.9}_{-2.7}$ (+4.1 σ)
$\Omega_c h^2$	0.1157	$0.1155^{+0.0061}_{-0.0059}$ (-2.4 σ)	D_{810}	2588	2590^{+67}_{-71} (+3.9 σ)	$D_M(0.38)$	1489	1487^{+66}_{-65} (-3.5 σ)
$100\theta_{MC}$	1.03995	$1.0400^{+0.0016}_{-0.0016}$ (-1.7 σ)	D_{1420}	843.0	844^{+33}_{-34} (+5.8 σ)	$H(0.51)$	91.16	$91.3^{+2.6}_{-2.4}$ (+4.5 σ)
τ	0.0529	$0.053^{+0.016}_{-0.017}$ (+0.1 σ)	D_{2000}	240.9	241^{+13}_{-13} (+6.5 σ)	$D_M(0.51)$	1933	1930^{+79}_{-79} (-3.6 σ)
$\ln(10^{10} A_s)$	3.0513	$3.052^{+0.036}_{-0.037}$ (+0.7 σ)	$n_{s,0.002}$	0.9790	$0.980^{+0.025}_{-0.025}$ (+3.1 σ)	$H(0.61)$	96.62	$96.7^{+2.3}_{-2.1}$ (+4.9 σ)
n_s	0.9790	$0.980^{+0.025}_{-0.025}$ (+3.1 σ)	Y_P	0.24602	$0.24605^{+0.00078}_{-0.00076}$ (+7.8 σ)	$D_M(0.61)$	2253	2250^{+87}_{-87} (-3.7 σ)
y_{cal}	0.99998	$0.99996^{+0.0050}_{-0.0050}$ (-0.2 σ)	Y_P^{BBN}	0.24735	$0.24738^{+0.00079}_{-0.00076}$ (+7.8 σ)	$H(2.33)$	235.17	$235.2^{+2.5}_{-2.3}$ (-1.2 σ)
H_0	69.88	$70.0^{+3.9}_{-3.8}$ (+3.5 σ)	$10^5 D/H$	2.319	$2.31^{+0.32}_{-0.30}$ (-7.6 σ)	$D_M(2.33)$	5699	5693^{+100}_{-110} (-5.2 σ)
Ω_Λ	0.7128	$0.713^{+0.038}_{-0.042}$ (+2.6 σ)	Age/Gyr	13.650	$13.64^{+0.23}_{-0.24}$ (-5.2 σ)	$f\sigma_8(0.15)$	0.4327	$0.432^{+0.036}_{-0.036}$ (-2.6 σ)
Ω_m	0.2872	$0.287^{+0.042}_{-0.038}$ (-2.6 σ)	z_*	1087.72	$1087.7^{+2.7}_{-2.5}$ (-6.5 σ)	$\sigma_8(0.15)$	0.7376	$0.737^{+0.015}_{-0.017}$ (-1.7 σ)
$\Omega_m h^2$	0.14023	$0.1402^{+0.0045}_{-0.0043}$ (-1.6 σ)	r_*	144.36	$144.33^{+0.80}_{-0.78}$ (-0.3 σ)	$f\sigma_8(0.38)$	0.4560	$0.455^{+0.027}_{-0.029}$ (-2.6 σ)
$\Omega_m h^3$	0.09799	$0.0982^{+0.0032}_{-0.0029}$ (+5.0 σ)	$100\theta_*$	1.03998	$1.0400^{+0.0016}_{-0.0016}$ (-2.1 σ)	$\sigma_8(0.38)$	0.6565	$0.656^{+0.012}_{-0.012}$ (-1.2 σ)
σ_8	0.7956	$0.795^{+0.019}_{-0.021}$ (-1.9 σ)	$D_M(z_*)/\text{Gpc}$	13.881	$13.878^{+0.080}_{-0.079}$ (-0.0 σ)	$f\sigma_8(0.51)$	0.4575	$0.456^{+0.023}_{-0.024}$ (-2.6 σ)
S_8	0.778	$0.777^{+0.071}_{-0.069}$ (-2.6 σ)	z_{drag}	1063.14	$1063.3^{+4.1}_{-3.9}$ (+8.5 σ)	$\sigma_8(0.51)$	0.6155	$0.615^{+0.011}_{-0.011}$ (-0.9 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4263	$0.425^{+0.039}_{-0.038}$ (-2.6 σ)	r_{drag}	146.53	$146.5^{+1.0}_{-1.1}$ (-1.5 σ)	$f\sigma_8(0.61)$	0.4545	$0.454^{+0.019}_{-0.021}$ (-2.5 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5824	$0.581^{+0.032}_{-0.033}$ (-2.5 σ)	k_D	0.14255	$0.1426^{+0.0022}_{-0.0022}$ (+4.0 σ)	$\sigma_8(0.61)$	0.5864	$0.586^{+0.010}_{-0.010}$ (-0.8 σ)
$\sigma_8/h^{0.5}$	0.9517	$0.950^{+0.046}_{-0.048}$ (-2.7 σ)	$100\theta_D$	0.15876	$0.1587^{+0.0022}_{-0.0020}$ (-8.8 σ)	$f\sigma_8(2.33)$	0.2967	$0.2965^{+0.0053}_{-0.0053}$ (-0.2 σ)
$r_{drag} h$	102.4	$102.6^{+5.4}_{-5.3}$ (+2.6 σ)	z_{eq}	3336	3335^{+110}_{-100} (-1.6 σ)	$\sigma_8(2.33)$	0.3070	$0.3069^{+0.0062}_{-0.0064}$ (+0.4 σ)
$\langle d^2 \rangle^{1/2}$	2.375	$2.372^{+0.093}_{-0.095}$ (-2.2 σ)	k_{eq}	0.010181	$0.01018^{+0.00033}_{-0.00032}$ (-1.6 σ)	$\chi^2_{lensing}$	8.16	9.2 (ν : 0.6)
z_{re}	7.15	$7.1^{+1.4}_{-1.7}$ (-0.5 σ)	$100\theta_{eq}$	0.8290	$0.830^{+0.025}_{-0.024}$ (+2.1 σ)	χ^2_{small}	395.58	396.6 (ν : 0.9) (-0.2 σ)
$10^9 A_s$	2.114	$2.115^{+0.077}_{-0.077}$ (+0.7 σ)	$100\theta_{s,eq}$	0.4564	$0.457^{+0.011}_{-0.011}$ (+1.8 σ)	χ^2_{plikEE}	738.95	742.9 (ν : 3.5)
$10^9 A_s e^{-2\tau}$	1.9019	$1.903^{+0.036}_{-0.037}$ (+1.4 σ)	$H(0.15)$	74.93	$75.1^{+3.5}_{-3.4}$ (+3.6 σ)	χ^2_{prior}	0.00	1.0 (ν : 1.1) (-1.7 σ)
D_{40}	1231	1231^{+54}_{-53} (-0.2 σ)	$D_M(0.15)$	622.1	621^{+32}_{-31} (-3.3 σ)	χ^2_{CMB}	1142.7	1148.7 (ν : 5.6) (-7.9 σ)

Best-fit $\chi^2_{eff} = 1142.70$; $\bar{\chi}^2_{eff} = 1149.74$; $R - 1 = 0.00580$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.16 simall_100x143_offlike5_EE_Aplanck_B: 395.58 plik_rd12_HM_v22_EE: 738.95

2.52 base_plikHM_EE_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0240^{+0.0020}_{-0.0019} \quad (+8.7\sigma)$	D_{220}	$5967^{+330}_{-320} \quad (+6.1\sigma)$	$H(0.38)$	$84.9^{+2.9}_{-2.8} \quad (+4.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1152^{+0.0060}_{-0.0059} \quad (-2.6\sigma)$	D_{810}	$2589^{+66}_{-71} \quad (+3.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1485^{+67}_{-65} \quad (-3.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0400^{+0.0016}_{-0.0016} \quad (-1.6\sigma)$	D_{1420}	$844^{+33}_{-35} \quad (+5.8\sigma)$	$H(0.51)$	$91.4^{+2.6}_{-2.4} \quad (+4.6\sigma)$
τ	$0.056^{+0.012}_{-0.011} \quad (+0.5\sigma)$	D_{2000}	$241^{+12}_{-13} \quad (+6.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1928^{+80}_{-78} \quad (-3.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.057^{+0.033}_{-0.030} \quad (+1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.981^{+0.025}_{-0.025} \quad (+3.2\sigma)$	$H(0.61)$	$96.8^{+2.3}_{-2.1} \quad (+5.1\sigma)$
n_{s}	$0.981^{+0.025}_{-0.025} \quad (+3.2\sigma)$	Y_{P}	$0.24605^{+0.00078}_{-0.00077} \quad (+7.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2247^{+88}_{-86} \quad (-3.8\sigma)$
y_{cal}	$0.9999^{+0.0050}_{-0.0050} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24738^{+0.00079}_{-0.00078} \quad (+7.9\sigma)$	$H(2.33)$	$235.0^{+2.4}_{-2.3} \quad (-1.3\sigma)$
H_0	$70.2^{+3.9}_{-3.8} \quad (+3.6\sigma)$	$10^5D/\mathrm{H}$	$2.31^{+0.33}_{-0.30} \quad (-7.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5692^{+100}_{-110} \quad (-5.3\sigma)$
Ω_{Λ}	$0.715^{+0.039}_{-0.041} \quad (+2.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.64^{+0.24}_{-0.24} \quad (-5.3\sigma)$	$f\sigma_8(0.15)$	$0.431^{+0.037}_{-0.036} \quad (-2.7\sigma)$
Ω_{m}	$0.285^{+0.041}_{-0.039} \quad (-2.7\sigma)$	z_*	$1087.6^{+2.7}_{-2.5} \quad (-6.6\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.015}_{-0.016} \quad (-1.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1399^{+0.0044}_{-0.0042} \quad (-1.7\sigma)$	r_*	$144.39^{+0.77}_{-0.75} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.455^{+0.028}_{-0.029} \quad (-2.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0981^{+0.0032}_{-0.0029} \quad (+4.9\sigma)$	$100\theta_*$	$1.0400^{+0.0016}_{-0.0016} \quad (-2.1\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.011}_{-0.011} \quad (-1.0\sigma)$
σ_8	$0.796^{+0.019}_{-0.021} \quad (-1.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.883^{+0.077}_{-0.076} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.457^{+0.023}_{-0.024} \quad (-2.5\sigma)$
S_8	$0.776^{+0.072}_{-0.069} \quad (-2.7\sigma)$	z_{drag}	$1063.3^{+4.1}_{-4.0} \quad (+8.6\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.010}_{-0.0096} \quad (-0.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.425^{+0.039}_{-0.038} \quad (-2.7\sigma)$	r_{drag}	$146.5^{+1.0}_{-1.1} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.454^{+0.020}_{-0.021} \quad (-2.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.581^{+0.033}_{-0.033} \quad (-2.5\sigma)$	k_{D}	$0.1426^{+0.0022}_{-0.0022} \quad (+3.9\sigma)$	$\sigma_8(0.61)$	$0.5873^{+0.0093}_{-0.0087} \quad (-0.5\sigma)$
$\sigma_8/h^{0.5}$	$0.951^{+0.047}_{-0.048} \quad (-2.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1587^{+0.0022}_{-0.0020} \quad (-8.8\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0048}_{-0.0044} \quad (+0.1\sigma)$
$r_{\mathrm{drag}}h$	$102.8^{+5.4}_{-5.3} \quad (+2.7\sigma)$	z_{eq}	$3328^{+100}_{-100} \quad (-1.7\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0056}_{-0.0056} \quad (+0.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.373^{+0.094}_{-0.093} \quad (-2.1\sigma)$	k_{eq}	$0.01016^{+0.00032}_{-0.00031} \quad (-1.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.2 \quad (\nu: 0.6)$
z_{re}	$< 8.39 \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.831^{+0.024}_{-0.024} \quad (+2.3\sigma)$	χ^2_{simall}	$396.3 \quad (\nu: 0.6) \quad (-0.4\sigma)$
10^9A_{s}	$2.126^{+0.071}_{-0.064} \quad (+1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.457^{+0.011}_{-0.011} \quad (+2.0\sigma)$	χ^2_{plikEE}	$742.9 \quad (\nu: 3.5)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.901^{+0.037}_{-0.037} \quad (+1.2\sigma)$	$H(0.15)$	$75.2^{+3.5}_{-3.4} \quad (+3.8\sigma)$	χ^2_{prior}	$1.0 \quad (\nu: 1.1) \quad (-1.7\sigma)$
D_{40}	$1229^{+53}_{-54} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$620^{+32}_{-31} \quad (-3.5\sigma)$	χ^2_{CMB}	$1148.3 \quad (\nu: 5.3) \quad (-8.0\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 1149.40$; $R - 1 = 0.00683$

2.53 base_CamSpecHM_TE_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02247	$0.02248^{+0.00051}_{-0.00050}$ (+1.6 σ)	D_{220}	5733	5734^{+110}_{-110} (+0.5 σ)	$H(0.38)$	83.45	$83.5^{+1.0}_{-0.98}$ (+1.7 σ)
$\Omega_c h^2$	0.11787	$0.1179^{+0.0033}_{-0.0032}$ (−1.3 σ)	D_{810}	2557.1	2557^{+43}_{-43} (+1.5 σ)	$D_M(0.38)$	1517.4	1517^{+26}_{-26} (−1.6 σ)
$100\theta_{MC}$	1.04129	$1.04130^{+0.00096}_{-0.00096}$ (+1.1 σ)	D_{1420}	827.6	827^{+21}_{-22} (+2.5 σ)	$H(0.51)$	90.07	$90.08^{+0.82}_{-0.80}$ (+1.7 σ)
τ	0.0528	$0.053^{+0.015}_{-0.015}$ (+0.1 σ)	D_{2000}	234.4	$234.3^{+7.9}_{-7.9}$ (+2.7 σ)	$D_M(0.51)$	1967.1	1967^{+31}_{-30} (−1.6 σ)
$\ln(10^{10} A_s)$	3.0418	$3.041^{+0.030}_{-0.030}$ (+0.0 σ)	$n_{s,0.002}$	0.9770	$0.977^{+0.022}_{-0.022}$ (+2.5 σ)	$H(0.61)$	95.62	$95.63^{+0.69}_{-0.67}$ (+1.8 σ)
n_s	0.9770	$0.977^{+0.022}_{-0.022}$ (+2.5 σ)	Y_P	0.245433	$0.24543^{+0.00021}_{-0.00020}$ (+1.5 σ)	$D_M(0.61)$	2290.2	2290^{+33}_{-33} (−1.6 σ)
y_{cal}	1.00021	$1.0001^{+0.0050}_{-0.0049}$ (−0.1 σ)	Y_P^{BBN}	0.246759	$0.24676^{+0.00021}_{-0.00021}$ (+1.5 σ)	$H(2.33)$	235.28	$235.3^{+2.0}_{-1.9}$ (−1.1 σ)
H_0	68.31	$68.3^{+1.5}_{-1.5}$ (+1.6 σ)	$10^5 D/H$	2.568	$2.567^{+0.093}_{-0.091}$ (−1.6 σ)	$D_M(2.33)$	5749.6	5749^{+32}_{-32} (−1.8 σ)
Ω_Λ	0.6979	$0.698^{+0.019}_{-0.020}$ (+1.4 σ)	Age/Gyr	13.767	$13.766^{+0.072}_{-0.073}$ (−1.7 σ)	$f\sigma_8(0.15)$	0.4486	$0.448^{+0.017}_{-0.016}$ (−1.3 σ)
Ω_m	0.3021	$0.302^{+0.020}_{-0.019}$ (−1.4 σ)	z_*	1089.61	$1089.61^{+0.81}_{-0.78}$ (−1.7 σ)	$\sigma_8(0.15)$	0.7463	$0.746^{+0.012}_{-0.013}$ (−0.4 σ)
$\Omega_m h^2$	0.14098	$0.1410^{+0.0031}_{-0.0030}$ (−1.2 σ)	r_*	144.91	$144.91^{+0.76}_{-0.75}$ (+0.9 σ)	$f\sigma_8(0.38)$	0.4690	$0.469^{+0.013}_{-0.013}$ (−1.2 σ)
$\Omega_m h^3$	0.09631	$0.0963^{+0.0010}_{-0.00099}$ (+1.0 σ)	$100\theta_*$	1.04147	$1.04147^{+0.00095}_{-0.00095}$ (+1.1 σ)	$\sigma_8(0.38)$	0.6625	$0.662^{+0.011}_{-0.011}$ (−0.1 σ)
σ_8	0.8066	$0.806^{+0.014}_{-0.014}$ (−0.6 σ)	$D_M(z_*)/\text{Gpc}$	13.914	$13.914^{+0.072}_{-0.072}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4687	$0.468^{+0.012}_{-0.012}$ (−1.1 σ)
S_8	0.8094	$0.809^{+0.034}_{-0.032}$ (−1.3 σ)	z_{drag}	1060.01	$1060.0^{+1.1}_{-1.1}$ (+1.4 σ)	$\sigma_8(0.51)$	0.6205	$0.620^{+0.011}_{-0.011}$ (−0.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4433	$0.443^{+0.018}_{-0.018}$ (−1.3 σ)	r_{drag}	147.55	$147.54^{+0.78}_{-0.78}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4645	$0.464^{+0.010}_{-0.010}$ (−1.0 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5980	$0.598^{+0.016}_{-0.016}$ (−1.1 σ)	k_D	0.14046	$0.14047^{+0.00099}_{-0.00097}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5906	$0.590^{+0.010}_{-0.010}$ (+0.1 σ)
$\sigma_8/h^{0.5}$	0.9759	$0.975^{+0.022}_{-0.022}$ (−1.1 σ)	$100\theta_D$	0.16075	$0.16075^{+0.00063}_{-0.00061}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.2982	$0.2981^{+0.0053}_{-0.0053}$ (+0.4 σ)
$r_{drag} h$	100.80	$100.8^{+2.6}_{-2.6}$ (+1.5 σ)	z_{eq}	3354	3354^{+74}_{-72} (−1.2 σ)	$\sigma_8(2.33)$	0.3078	$0.3077^{+0.0059}_{-0.0059}$ (+0.7 σ)
$\langle d^2 \rangle^{1/2}$	2.396	$2.396^{+0.066}_{-0.065}$ (−1.5 σ)	k_{eq}	0.010235	$0.01024^{+0.00022}_{-0.00022}$ (−1.2 σ)	$\chi^2_{lensing}$	8.95	9.7 (ν : 0.8)
z_{re}	7.48	$7.4^{+1.5}_{-1.6}$ (−0.1 σ)	$100\theta_{eq}$	0.8227	$0.823^{+0.014}_{-0.014}$ (+1.3 σ)	χ^2_{small}	395.77	396.7 (ν : 0.9) (−0.1 σ)
$10^9 A_s$	2.094	$2.093^{+0.064}_{-0.063}$ (+0.0 σ)	$100\theta_{s,eq}$	0.4542	$0.4542^{+0.0072}_{-0.0071}$ (+1.3 σ)	$\chi^2_{CamSpec}$	2576.3	2580.7 (ν : 4.3)
$10^9 A_s e^{-2\tau}$	1.8842	$1.884^{+0.027}_{-0.027}$ (−0.0 σ)	$H(0.15)$	73.50	$73.5^{+1.3}_{-1.3}$ (+1.6 σ)	χ^2_{prior}	10.04	11.0 (ν : 1.1) (+1.0 σ)
D_{40}	1208	1208^{+51}_{-50} (−1.7 σ)	$D_M(0.15)$	635.3	635^{+13}_{-13} (−1.6 σ)	χ^2_{CMB}	2981.0	2987.1 (ν : 5.9) (+326.8 σ)

Best-fit $\chi^2_{eff} = 2991.07$; $\bar{\chi}^2_{eff} = 2998.15$; $R - 1 = 0.00781$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.95 small_100x143_offlike5_EE_Aplanck_B: 395.77 CamSpec like_10.7HM_1400_unified: 2576.31

2.54 base_CamSpecHM_TE_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02248^{+0.00051}_{-0.00050} \quad (+1.7\sigma)$	D_{220}	$5732^{+110}_{-110} \quad (+0.5\sigma)$	$H(0.38)$	$83.49^{+0.99}_{-0.98} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1177^{+0.0032}_{-0.0032} \quad (-1.4\sigma)$	D_{810}	$2556^{+42}_{-42} \quad (+1.4\sigma)$	$D_M(0.38)$	$1516^{+26}_{-25} \quad (-1.6\sigma)$
$100\theta_{MC}$	$1.04131^{+0.00096}_{-0.00096} \quad (+1.2\sigma)$	D_{1420}	$827^{+21}_{-21} \quad (+2.5\sigma)$	$H(0.51)$	$90.11^{+0.82}_{-0.80} \quad (+1.8\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.3\sigma)$	D_{2000}	$234.4^{+7.9}_{-7.8} \quad (+2.7\sigma)$	$D_M(0.51)$	$1966^{+31}_{-30} \quad (-1.7\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.026}_{-0.025} \quad (+0.2\sigma)$	$n_{s,0.002}$	$0.977^{+0.022}_{-0.022} \quad (+2.6\sigma)$	$H(0.61)$	$95.65^{+0.69}_{-0.67} \quad (+1.8\sigma)$
n_s	$0.977^{+0.022}_{-0.022} \quad (+2.6\sigma)$	Y_P	$0.24544^{+0.00021}_{-0.00020} \quad (+1.5\sigma)$	$D_M(0.61)$	$2289^{+33}_{-33} \quad (-1.7\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0049} \quad (-0.1\sigma)$	Y_P^{BBN}	$0.24676^{+0.00021}_{-0.00020} \quad (+1.5\sigma)$	$H(2.33)$	$235.2^{+1.9}_{-1.9} \quad (-1.2\sigma)$
H_0	$68.4^{+1.5}_{-1.5} \quad (+1.6\sigma)$	$10^5 D/H$	$2.566^{+0.093}_{-0.091} \quad (-1.6\sigma)$	$D_M(2.33)$	$5748^{+32}_{-32} \quad (-1.8\sigma)$
Ω_Λ	$0.699^{+0.019}_{-0.020} \quad (+1.5\sigma)$	Age/Gyr	$13.765^{+0.072}_{-0.073} \quad (-1.8\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.017}_{-0.017} \quad (-1.3\sigma)$
Ω_m	$0.301^{+0.020}_{-0.019} \quad (-1.5\sigma)$	z_*	$1089.59^{+0.81}_{-0.78} \quad (-1.8\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.011} \quad (-0.3\sigma)$
$\Omega_m h^2$	$0.1409^{+0.0030}_{-0.0030} \quad (-1.3\sigma)$	r_*	$144.93^{+0.75}_{-0.74} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.469^{+0.013}_{-0.013} \quad (-1.1\sigma)$
$\Omega_m h^3$	$0.0963^{+0.0010}_{-0.00099} \quad (+0.9\sigma)$	$100\theta_*$	$1.04148^{+0.00095}_{-0.00095} \quad (+1.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0096} \quad (+0.0\sigma)$
σ_8	$0.807^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_M(z_*)/Gpc$	$13.916^{+0.071}_{-0.071} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.011}_{-0.012} \quad (-1.1\sigma)$
S_8	$0.809^{+0.034}_{-0.032} \quad (-1.3\sigma)$	z_{drag}	$1060.0^{+1.1}_{-1.1} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0099}_{-0.0090} \quad (+0.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.019}_{-0.018} \quad (-1.3\sigma)$	r_{drag}	$147.57^{+0.77}_{-0.78} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.010}_{-0.010} \quad (-1.0\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.598^{+0.016}_{-0.016} \quad (-1.1\sigma)$	k_D	$0.14045^{+0.00099}_{-0.00097} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0095}_{-0.0086} \quad (+0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.976^{+0.022}_{-0.022} \quad (-1.0\sigma)$	$100\theta_D$	$0.16074^{+0.00063}_{-0.00061} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0050}_{-0.0044} \quad (+0.6\sigma)$
$r_{drag} h$	$100.9^{+2.6}_{-2.6} \quad (+1.5\sigma)$	z_{eq}	$3351^{+72}_{-72} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3082^{+0.0053}_{-0.0051} \quad (+0.9\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.397^{+0.066}_{-0.064} \quad (-1.5\sigma)$	k_{eq}	$0.01023^{+0.00022}_{-0.00022} \quad (-1.3\sigma)$	$\chi^2_{lensing}$	$9.7 \quad (\nu: 0.8)$
z_{re}	$< 8.72 \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.823^{+0.014}_{-0.014} \quad (+1.4\sigma)$	χ^2_{small}	$396.6 \quad (\nu: 0.8) \quad (-0.2\sigma)$
$10^9 A_s$	$2.100^{+0.056}_{-0.052} \quad (+0.2\sigma)$	$100\theta_{s,eq}$	$0.4545^{+0.0072}_{-0.0071} \quad (+1.4\sigma)$	$\chi^2_{CamSpec}$	$2580.6 \quad (\nu: 4.2)$
$10^9 A_s e^{-2\tau}$	$1.883^{+0.027}_{-0.027} \quad (-0.1\sigma)$	$H(0.15)$	$73.6^{+1.3}_{-1.3} \quad (+1.7\sigma)$	χ^2_{prior}	$11.0 \quad (\nu: 1.1) \quad (+1.0\sigma)$
D_{40}	$1207^{+50}_{-49} \quad (-1.7\sigma)$	$D_M(0.15)$	$635^{+13}_{-12} \quad (-1.6\sigma)$	χ^2_{CMB}	$2986.8 \quad (\nu: 5.5) \quad (+326.8\sigma)$

$$\bar{\chi}^2_{eff} = 2997.86; R - 1 = 0.00847$$

2.55 base_CamSpecHM_EE_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02359	$0.0236^{+0.0019}_{-0.0018}$ (+6.7 σ)	D_{220}	5980	5980^{+320}_{-310} (+6.4 σ)	$H(0.38)$	84.21	$84.2^{+2.8}_{-2.6}$ (+3.0 σ)
$\Omega_c h^2$	0.1160	$0.1162^{+0.0060}_{-0.0058}$ (−2.1 σ)	D_{810}	2590	2591^{+66}_{-66} (+4.0 σ)	$D_M(0.38)$	1499	1501^{+65}_{-63} (−2.6 σ)
$100\theta_{MC}$	1.03953	$1.0395^{+0.0017}_{-0.0016}$ (−2.6 σ)	D_{1420}	839.4	839^{+32}_{-32} (+4.9 σ)	$H(0.51)$	90.74	$90.7^{+2.4}_{-2.2}$ (+3.2 σ)
τ	0.0500	$0.049^{+0.017}_{-0.019}$ (−0.4 σ)	D_{2000}	238.9	239^{+12}_{-12} (+5.2 σ)	$D_M(0.51)$	1945	1947^{+78}_{-76} (−2.7 σ)
$\ln(10^{10} A_s)$	3.0489	$3.047^{+0.037}_{-0.039}$ (+0.4 σ)	$n_{s,0.002}$	0.9718	$0.972^{+0.024}_{-0.024}$ (+1.6 σ)	$H(0.61)$	96.22	$96.2^{+2.2}_{-1.9}$ (+3.5 σ)
n_s	0.9718	$0.972^{+0.024}_{-0.024}$ (+1.6 σ)	Y_P	0.24590	$0.24588^{+0.00076}_{-0.00075}$ (+6.1 σ)	$D_M(0.61)$	2266	2268^{+85}_{-84} (−2.7 σ)
y_{cal}	0.99978	$0.9999^{+0.0048}_{-0.0048}$ (−0.2 σ)	Y_P^{BBN}	0.24723	$0.24721^{+0.00076}_{-0.00075}$ (+6.1 σ)	$H(2.33)$	235.02	$235.1^{+2.6}_{-2.3}$ (−1.2 σ)
H_0	69.33	$69.3^{+3.8}_{-3.7}$ (+2.6 σ)	$10^5 D/H$	2.373	$2.38^{+0.32}_{-0.29}$ (−6.0 σ)	$D_M(2.33)$	5719	5719^{+96}_{-100} (−3.6 σ)
Ω_Λ	0.7082	$0.707^{+0.039}_{-0.040}$ (+2.1 σ)	Age/Gyr	13.698	$13.70^{+0.22}_{-0.23}$ (−3.6 σ)	$f\sigma_8(0.15)$	0.4353	$0.436^{+0.036}_{-0.034}$ (−2.3 σ)
Ω_m	0.2918	$0.293^{+0.040}_{-0.039}$ (−2.1 σ)	z_*	1088.12	$1088.2^{+2.6}_{-2.5}$ (−5.2 σ)	$\sigma_8(0.15)$	0.7364	$0.736^{+0.015}_{-0.017}$ (−1.8 σ)
$\Omega_m h^2$	0.14024	$0.1404^{+0.0046}_{-0.0043}$ (−1.5 σ)	r_*	144.53	$144.49^{+0.80}_{-0.80}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4576	$0.458^{+0.027}_{-0.027}$ (−2.3 σ)
$\Omega_m h^3$	0.09723	$0.0973^{+0.0030}_{-0.0027}$ (+3.0 σ)	$100\theta_*$	1.03959	$1.0396^{+0.0016}_{-0.0016}$ (−3.0 σ)	$\sigma_8(0.38)$	0.6549	$0.654^{+0.012}_{-0.013}$ (−1.5 σ)
σ_8	0.7948	$0.794^{+0.019}_{-0.021}$ (−2.0 σ)	$D_M(z_*)/\text{Gpc}$	13.903	$13.899^{+0.079}_{-0.080}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4585	$0.458^{+0.022}_{-0.023}$ (−2.3 σ)
S_8	0.784	$0.785^{+0.071}_{-0.067}$ (−2.3 σ)	z_{drag}	1062.45	$1062.4^{+3.8}_{-3.7}$ (+6.6 σ)	$\sigma_8(0.51)$	0.6138	$0.613^{+0.011}_{-0.012}$ (−1.3 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4293	$0.430^{+0.039}_{-0.036}$ (−2.3 σ)	r_{drag}	146.80	$146.8^{+1.0}_{-1.1}$ (−0.9 σ)	$f\sigma_8(0.61)$	0.4552	$0.455^{+0.019}_{-0.020}$ (−2.3 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5841	$0.584^{+0.032}_{-0.032}$ (−2.3 σ)	k_D	0.14204	$0.1420^{+0.0021}_{-0.0021}$ (+2.9 σ)	$\sigma_8(0.61)$	0.5846	$0.584^{+0.010}_{-0.011}$ (−1.2 σ)
$\sigma_8/h^{0.5}$	0.9545	$0.954^{+0.045}_{-0.046}$ (−2.4 σ)	$100\theta_D$	0.15909	$0.1591^{+0.0021}_{-0.0020}$ (−7.2 σ)	$f\sigma_8(2.33)$	0.2956	$0.2952^{+0.0054}_{-0.0056}$ (−0.7 σ)
$r_{drag} h$	101.8	$101.7^{+5.2}_{-5.2}$ (+2.0 σ)	z_{eq}	3336	3340^{+110}_{-100} (−1.5 σ)	$\sigma_8(2.33)$	0.3056	$0.3052^{+0.0065}_{-0.0066}$ (−0.2 σ)
$\langle d^2 \rangle^{1/2}$	2.393	$2.392^{+0.091}_{-0.090}$ (−1.6 σ)	k_{eq}	0.010182	$0.01019^{+0.00033}_{-0.00031}$ (−1.5 σ)	$\chi^2_{lensing}$	8.34	9.4 (ν : 1.0)
z_{re}	6.93	$6.8^{+1.7}_{-1.8}$ (−0.9 σ)	$100\theta_{eq}$	0.8277	$0.827^{+0.024}_{-0.024}$ (+1.8 σ)	χ^2_{simall}	395.63	396.8 (ν : 1.4) (−0.1 σ)
$10^9 A_s$	2.109	$2.105^{+0.078}_{-0.080}$ (+0.4 σ)	$100\theta_{s,eq}$	0.4559	$0.456^{+0.011}_{-0.011}$ (+1.6 σ)	$\chi^2_{CamSpec}$	1887.5	1891.5 (ν : 4.2)
$10^9 A_s e^{-2\tau}$	1.9083	$1.910^{+0.037}_{-0.035}$ (+1.9 σ)	$H(0.15)$	74.41	$74.4^{+3.4}_{-3.3}$ (+2.7 σ)	χ^2_{prior}	10.04	11.0 (ν : 0.9) (+1.0 σ)
D_{40}	1249	1249^{+54}_{-53} (+1.0 σ)	$D_M(0.15)$	626.7	627^{+32}_{-30} (−2.6 σ)	χ^2_{CMB}	2291.5	2297.7 (ν : 6.4) (+201.3 σ)

Best-fit $\chi^2_{eff} = 2301.54$; $\bar{\chi}^2_{eff} = 2308.71$; $R - 1 = 0.00642$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.34 simall_100x143_offlike5_EE_Aplanck_B: 395.63 CamSpec like_10.7HM_1400_unified: 1887.54

2.56 base_CamSpecHM_EE_lowE_lensing_post_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_{\mathrm{b}}h^2$	$0.0236^{+0.0019}_{-0.0018}$	$(+6.7\sigma)$	D_{220}	5975^{+310}_{-300}	$(+6.2\sigma)$	$H(0.38)$	$84.3^{+2.8}_{-2.5}$	$(+3.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1158^{+0.0057}_{-0.0056}$	(-2.3σ)	D_{810}	2589^{+66}_{-65}	$(+3.8\sigma)$	$D_{\mathrm{M}}(0.38)$	1498^{+62}_{-64}	(-2.8σ)
$100\theta_{\mathrm{MC}}$	$1.0396^{+0.0017}_{-0.0016}$	(-2.6σ)	D_{1420}	839^{+32}_{-32}	$(+4.8\sigma)$	$H(0.51)$	$90.8^{+2.4}_{-2.3}$	$(+3.4\sigma)$
τ	$0.0535^{+0.012}_{-0.0099}$	$(+0.2\sigma)$	D_{2000}	239^{+12}_{-12}	$(+5.2\sigma)$	$D_{\mathrm{M}}(0.51)$	1944^{+74}_{-77}	(-2.9σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.055^{+0.033}_{-0.028}$	$(+0.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.973^{+0.024}_{-0.024}$	$(+1.9\sigma)$	$H(0.61)$	$96.3^{+2.1}_{-2.0}$	$(+3.6\sigma)$
n_{s}	$0.973^{+0.024}_{-0.024}$	$(+1.9\sigma)$	Y_{P}	$0.24588^{+0.00076}_{-0.00073}$	$(+6.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2265^{+81}_{-85}	(-2.9σ)
y_{cal}	$0.9998^{+0.0049}_{-0.0048}$	(-0.2σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24721^{+0.00076}_{-0.00074}$	$(+6.1\sigma)$	$H(2.33)$	$234.9^{+2.4}_{-2.2}$	(-1.4σ)
H_0	$69.4^{+3.8}_{-3.5}$	$(+2.8\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.38^{+0.31}_{-0.29}$	(-6.0σ)	$D_{\mathrm{M}}(2.33)$	5718^{+95}_{-100}	(-3.7σ)
Ω_{Λ}	$0.709^{+0.037}_{-0.040}$	$(+2.3\sigma)$	Age/Gyr	$13.70^{+0.22}_{-0.23}$	(-3.7σ)	$f\sigma_8(0.15)$	$0.436^{+0.034}_{-0.034}$	(-2.3σ)
Ω_{m}	$0.291^{+0.040}_{-0.037}$	(-2.3σ)	z_*	$1088.1^{+2.6}_{-2.5}$	(-5.3σ)	$\sigma_8(0.15)$	$0.738^{+0.014}_{-0.015}$	(-1.5σ)
$\Omega_{\mathrm{m}}h^2$	$0.1400^{+0.0043}_{-0.0041}$	(-1.7σ)	r_*	$144.58^{+0.77}_{-0.75}$	$(+0.2\sigma)$	$f\sigma_8(0.38)$	$0.458^{+0.026}_{-0.027}$	(-2.3σ)
$\Omega_{\mathrm{m}}h^3$	$0.0972^{+0.0029}_{-0.0028}$	$(+2.9\sigma)$	$100\theta_*$	$1.0396^{+0.0016}_{-0.0016}$	(-2.9σ)	$\sigma_8(0.38)$	$0.656^{+0.010}_{-0.011}$	(-1.1σ)
σ_8	$0.796^{+0.018}_{-0.020}$	(-1.7σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.907^{+0.078}_{-0.077}$	$(+0.7\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.022}_{-0.023}$	(-2.2σ)
S_8	$0.785^{+0.068}_{-0.067}$	(-2.3σ)	z_{drag}	$1062.4^{+3.8}_{-3.7}$	$(+6.5\sigma)$	$\sigma_8(0.51)$	$0.6153^{+0.0097}_{-0.0093}$	(-0.9σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.430^{+0.037}_{-0.037}$	(-2.3σ)	r_{drag}	$146.9^{+1.0}_{-1.0}$	(-0.7σ)	$f\sigma_8(0.61)$	$0.456^{+0.019}_{-0.020}$	(-2.2σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.585^{+0.031}_{-0.032}$	(-2.2σ)	k_{D}	$0.1419^{+0.0021}_{-0.0021}$	$(+2.7\sigma)$	$\sigma_8(0.61)$	$0.5861^{+0.0090}_{-0.0085}$	(-0.7σ)
$\sigma_8/h^{0.5}$	$0.956^{+0.044}_{-0.046}$	(-2.3σ)	$100\theta_{\mathrm{D}}$	$0.1592^{+0.0021}_{-0.0019}$	(-7.2σ)	$f\sigma_8(2.33)$	$0.2964^{+0.0048}_{-0.0044}$	(-0.3σ)
$r_{\mathrm{drag}}h$	$102.0^{+5.2}_{-4.9}$	$(+2.2\sigma)$	z_{eq}	3331^{+100}_{-99}	(-1.7σ)	$\sigma_8(2.33)$	$0.3065^{+0.0058}_{-0.0053}$	$(+0.2\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.396^{+0.088}_{-0.089}$	(-1.5σ)	k_{eq}	$0.01017^{+0.00031}_{-0.00030}$	(-1.7σ)	$\chi^2_{\mathrm{lensing}}$	$9.4 (\nu: 1.1)$	
z_{re}	< 8.24	(-0.3σ)	$100\theta_{\mathrm{eq}}$	$0.829^{+0.023}_{-0.023}$	$(+2.0\sigma)$	χ^2_{small}	$396.18 (\nu: 0.4) (-0.5\sigma)$	
$10^9 A_{\mathrm{s}}$	$2.122^{+0.066}_{-0.062}$	$(+0.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.011}_{-0.011}$	$(+1.8\sigma)$	$\chi^2_{\mathrm{CamSpec}}$	$1891.6 (\nu: 4.2)$	
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.907^{+0.036}_{-0.034}$	$(+1.6\sigma)$	$H(0.15)$	$74.5^{+3.4}_{-3.1}$	$(+2.9\sigma)$	χ^2_{prior}	$11.0 (\nu: 0.9) (+1.0\sigma)$	
D_{40}	1247^{+53}_{-53}	$(+0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	626^{+30}_{-30}	(-2.7σ)	χ^2_{CMB}	$2297.2 (\nu: 5.5) (+201.2\sigma)$	

$$\bar{\chi}^2_{\mathrm{eff}} = 2308.23; R - 1 = 0.00344$$

2.57 base_plikHM_TE_lowE_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022450	$0.02245^{+0.00041}_{-0.00041}$ (+1.5 σ)	z_{re}	7.56	$7.7^{+1.5}_{-1.5}$ (+0.2 σ)	$H(0.38)$	83.21	$83.22^{+0.66}_{-0.66}$ (+1.2 σ)
$\Omega_c h^2$	0.11900	$0.1190^{+0.0022}_{-0.0022}$ (−0.8 σ)	$10^9 A_s$	2.082	$2.086^{+0.063}_{-0.060}$ (−0.2 σ)	$D_M(0.38)$	1524.3	1524^{+17}_{-17} (−1.2 σ)
$100\theta_{\text{MC}}$	1.04127	$1.04128^{+0.00092}_{-0.00093}$ (+1.1 σ)	$10^9 A_s e^{-2\tau}$	1.8709	$1.870^{+0.027}_{-0.026}$ (−1.0 σ)	$H(0.51)$	89.90	$89.91^{+0.55}_{-0.55}$ (+1.3 σ)
τ	0.0535	$0.055^{+0.015}_{-0.014}$ (+0.3 σ)	D_{40}	1223.3	1224^{+47}_{-46} (−0.7 σ)	$D_M(0.51)$	1975.1	1975^{+20}_{-20} (−1.2 σ)
$\ln(10^{10} A_s)$	3.0359	$3.038^{+0.030}_{-0.029}$ (−0.2 σ)	D_{220}	5720	5720^{+110}_{-110} (+0.2 σ)	$H(0.61)$	95.500	$95.51^{+0.48}_{-0.48}$ (+1.4 σ)
n_s	0.9664	$0.966^{+0.019}_{-0.019}$ (+0.7 σ)	D_{810}	2527.6	2527^{+41}_{-40} (−0.7 σ)	$D_M(0.61)$	2298.7	2298^{+22}_{-22} (−1.2 σ)
y_{cal}	1.00065	$1.0005^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{1420}	814.0	814^{+19}_{-20} (−0.1 σ)	$H(2.33)$	236.01	$236.0^{+1.4}_{-1.4}$ (−0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.075}$	D_{2000}	229.9	$229.8^{+7.1}_{-7.1}$ (+0.2 σ)	$D_M(2.33)$	5753.4	5753^{+20}_{-24} (−1.5 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.137	$0.136^{+0.058}_{-0.058}$	$n_{s,0.002}$	0.9664	$0.966^{+0.019}_{-0.019}$ (+0.7 σ)	$f\sigma_8(0.15)$	0.4517	$0.452^{+0.012}_{-0.012}$ (−1.0 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.477	$0.48^{+0.17}_{-0.17}$	Y_P	0.245426	$0.24543^{+0.00016}_{-0.00016}$ (+1.4 σ)	$\sigma_8(0.15)$	0.7440	$0.745^{+0.012}_{-0.012}$ (−0.6 σ)
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	Y_P^{BBN}	0.246753	$0.24675^{+0.00016}_{-0.00017}$ (+1.4 σ)	$f\sigma_8(0.38)$	0.4706	$0.471^{+0.010}_{-0.010}$ (−0.9 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.661	$0.66^{+0.15}_{-0.16}$	10^5D/H	2.571	$2.571^{+0.077}_{-0.073}$ (−1.5 σ)	$\sigma_8(0.38)$	0.6599	$0.660^{+0.011}_{-0.011}$ (−0.4 σ)
A_{217}^{dustTE}	2.06	$2.06^{+0.53}_{-0.53}$	Age/Gyr	13.775	$13.774^{+0.056}_{-0.055}$ (−1.5 σ)	$f\sigma_8(0.51)$	0.4696	$0.4700^{+0.0095}_{-0.0093}$ (−0.9 σ)
c_{100}	1.00018	$1.0002^{+0.0014}_{-0.0013}$ (+0.9 σ)	z_*	1089.73	$1089.73^{+0.59}_{-0.57}$ (−1.4 σ)	$\sigma_8(0.51)$	0.6177	$0.618^{+0.011}_{-0.010}$ (−0.4 σ)
c_{217}	0.99800	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	r_*	144.63	$144.63^{+0.58}_{-0.58}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4649	$0.4653^{+0.0088}_{-0.0087}$ (−0.9 σ)
H_0	67.89	$67.9^{+1.0}_{-0.99}$ (+1.1 σ)	$100\theta_*$	1.04144	$1.04145^{+0.00092}_{-0.00092}$ (+1.0 σ)	$\sigma_8(0.61)$	0.5878	$0.588^{+0.010}_{-0.0096}$ (−0.3 σ)
Ω_Λ	0.6917	$0.692^{+0.013}_{-0.013}$ (+1.0 σ)	$D_M(z_*)/\text{Gpc}$	13.887	$13.888^{+0.057}_{-0.058}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2965	$0.2968^{+0.0052}_{-0.0050}$ (−0.1 σ)
Ω_m	0.3083	$0.308^{+0.013}_{-0.013}$ (−1.0 σ)	z_{drag}	1060.05	$1060.06^{+0.91}_{-0.92}$ (+1.4 σ)	$\sigma_8(2.33)$	0.3058	$0.3061^{+0.0055}_{-0.0053}$ (+0.1 σ)
$\Omega_m h^2$	0.14209	$0.1421^{+0.0022}_{-0.0022}$ (−0.7 σ)	r_{drag}	147.27	$147.27^{+0.64}_{-0.64}$ (+0.1 σ)	χ^2_{lensing}	9.99	10.5 (ν : 1.7)
$\Omega_m h^3$	0.09646	$0.09647^{+0.00093}_{-0.00093}$ (+1.3 σ)	k_D	0.14074	$0.14074^{+0.00087}_{-0.00087}$ (+0.4 σ)	χ^2_{simall}	395.87	396.9 (ν : 1.4) (−0.0 σ)
σ_8	0.8049	$0.806^{+0.014}_{-0.013}$ (−0.7 σ)	$100\theta_D$	0.16073	$0.16073^{+0.00055}_{-0.00054}$ (−1.3 σ)	χ^2_{plikTE}	854.0	860.0 (ν : 6.2)
S_8	0.8159	$0.816^{+0.024}_{-0.023}$ (−1.0 σ)	z_{eq}	3380	3380^{+51}_{-52} (−0.7 σ)	$\chi^2_{6\text{DF}}$	0.011	0.041 (ν : 0.0)
$\sigma_8 \Omega_m^{0.5}$	0.4469	$0.447^{+0.013}_{-0.013}$ (−1.0 σ)	k_{eq}	0.010316	$0.01032^{+0.00016}_{-0.00016}$ (−0.7 σ)	χ^2_{MGS}	1.41	1.48 (ν : 0.1)
$\sigma_8 \Omega_m^{0.25}$	0.5997	$0.600^{+0.013}_{-0.013}$ (−0.9 σ)	$100\theta_{\text{eq}}$	0.8178	$0.8179^{+0.0096}_{-0.0093}$ (+0.8 σ)	χ^2_{DR12BAO}	3.93	4.4 (ν : 0.7)
$\sigma_8/h^{0.5}$	0.9768	$0.978^{+0.019}_{-0.018}$ (−1.0 σ)	$100\theta_{s,\text{eq}}$	0.45166	$0.4517^{+0.0050}_{-0.0048}$ (+0.7 σ)	χ^2_{prior}	0.8	7.8 (ν : 6.8) (+0.1 σ)
$r_{\text{drag}} h$	99.98	$100.0^{+1.7}_{-1.7}$ (+1.0 σ)	$H(0.15)$	73.14	$73.16^{+0.87}_{-0.86}$ (+1.2 σ)	χ^2_{CMB}	1259.9	1267.4 (ν : 7.2) (+13.7 σ)
$\langle d^2 \rangle^{1/2}$	2.421	$2.423^{+0.056}_{-0.054}$ (−0.8 σ)	$D_M(0.15)$	638.8	$638.7^{+8.5}_{-8.4}$ (−1.1 σ)	χ^2_{BAO}	5.34	5.90 (ν : 0.5)

Best-fit $\chi^2_{\text{eff}} = 1265.98$; $\bar{\chi}^2_{\text{eff}} = 1281.13$; $R - 1 = 0.00651$

χ^2_{eff} : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.92 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 9.99 simall_100x143_offlike5_EE_Aplanck_B: 395.87 plik_rd12_HM_v22_TE: 854.02

2.58 base_plikHM_EE_lowE_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02276	$0.02275^{+0.00071}_{-0.00072}$ (+2.9 σ)	D_{1420}	826.3	826^{+19}_{-19} (+2.2 σ)	$H(0.61)$	95.49	$95.48^{+0.70}_{-0.70}$ (+1.3 σ)
$\Omega_c h^2$	0.11823	$0.1183^{+0.0025}_{-0.0025}$ (-1.1 σ)	D_{2000}	234.3	$234.2^{+7.1}_{-6.9}$ (+2.6 σ)	$D_M(0.61)$	2297.3	2298^{+28}_{-28} (-1.2 σ)
$100\theta_{MC}$	1.03995	$1.0400^{+0.0015}_{-0.0016}$ (-1.7 σ)	$n_{s,0.002}$	0.9735	$0.973^{+0.019}_{-0.019}$ (+1.9 σ)	$H(2.33)$	235.69	$235.7^{+1.6}_{-1.6}$ (-0.8 σ)
τ	0.0522	$0.052^{+0.015}_{-0.015}$ (-0.0 σ)	Y_P	0.245541	$0.24555^{+0.00030}_{-0.00029}$ (+2.7 σ)	$D_M(2.33)$	5755.0	5755^{+37}_{-37} (-1.4 σ)
$\ln(10^{10} A_s)$	3.0407	$3.040^{+0.029}_{-0.030}$ (-0.0 σ)	Y_P^{BBN}	0.246868	$0.24687^{+0.00030}_{-0.00029}$ (+2.7 σ)	$f\sigma_8(0.15)$	0.4500	$0.450^{+0.014}_{-0.014}$ (-1.1 σ)
n_s	0.9735	$0.973^{+0.019}_{-0.019}$ (+1.9 σ)	$10^5 D/H$	2.516	$2.52^{+0.13}_{-0.12}$ (-2.8 σ)	$\sigma_8(0.15)$	0.7433	$0.743^{+0.013}_{-0.013}$ (-0.8 σ)
y_{cal}	1.00004	$1.0000^{+0.0048}_{-0.0049}$ (-0.1 σ)	Age/Gyr	13.779	$13.780^{+0.086}_{-0.085}$ (-1.4 σ)	$f\sigma_8(0.38)$	0.4693	$0.469^{+0.012}_{-0.012}$ (-1.1 σ)
H_0	67.98	$68.0^{+1.2}_{-1.2}$ (+1.2 σ)	z_*	1089.28	$1089.3^{+1.0}_{-0.94}$ (-2.4 σ)	$\sigma_8(0.38)$	0.6594	$0.659^{+0.011}_{-0.011}$ (-0.7 σ)
Ω_Λ	0.6935	$0.693^{+0.014}_{-0.015}$ (+1.1 σ)	r_*	144.59	$144.59^{+0.67}_{-0.67}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4685	$0.468^{+0.011}_{-0.011}$ (-1.1 σ)
Ω_m	0.3065	$0.307^{+0.015}_{-0.014}$ (-1.1 σ)	$100\theta_*$	1.04010	$1.0401^{+0.0015}_{-0.0016}$ (-1.9 σ)	$\sigma_8(0.51)$	0.6173	$0.617^{+0.011}_{-0.010}$ (-0.6 σ)
$\Omega_m h^2$	0.14163	$0.1417^{+0.0023}_{-0.0023}$ (-0.9 σ)	$D_M(z_*)/\text{Gpc}$	13.902	$13.902^{+0.072}_{-0.072}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4639	$0.464^{+0.010}_{-0.010}$ (-1.1 σ)
$\Omega_m h^3$	0.09628	$0.0963^{+0.0015}_{-0.0014}$ (+0.8 σ)	z_{drag}	1060.70	$1060.7^{+1.6}_{-1.6}$ (+2.8 σ)	$\sigma_8(0.61)$	0.5875	$0.587^{+0.010}_{-0.0099}$ (-0.5 σ)
σ_8	0.8038	$0.804^{+0.015}_{-0.014}$ (-0.9 σ)	r_{drag}	147.13	$147.13^{+0.82}_{-0.82}$ (-0.2 σ)	$f\sigma_8(2.33)$	0.2964	$0.2963^{+0.0052}_{-0.0050}$ (-0.3 σ)
S_8	0.8125	$0.813^{+0.028}_{-0.028}$ (-1.1 σ)	k_D	0.14112	$0.1411^{+0.0013}_{-0.0013}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3058	$0.3057^{+0.0055}_{-0.0053}$ (-0.1 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4450	$0.445^{+0.015}_{-0.015}$ (-1.1 σ)	$100\theta_D$	0.16013	$0.16015^{+0.00099}_{-0.00094}$ (-3.4 σ)	$\chi^2_{lensing}$	8.54	9.3 (ν : 0.5)
$\sigma_8 \Omega_m^{0.25}$	0.5981	$0.598^{+0.015}_{-0.015}$ (-1.1 σ)	z_{eq}	3369	3370^{+56}_{-55} (-0.9 σ)	χ^2_{simall}	395.71	396.7 (ν : 0.9) (-0.2 σ)
$\sigma_8/h^{0.5}$	0.9749	$0.975^{+0.022}_{-0.022}$ (-1.1 σ)	k_{eq}	0.010283	$0.01029^{+0.00017}_{-0.00017}$ (-0.9 σ)	χ^2_{plikEE}	740.14	743.4 (ν : 3.4)
$r_{drag} h$	100.02	$99.99^{+1.9}_{-1.8}$ (+1.0 σ)	$100\theta_{eq}$	0.8196	$0.819^{+0.010}_{-0.010}$ (+1.0 σ)	χ^2_{6DF}	0.0099	0.048 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.407	$2.407^{+0.058}_{-0.059}$ (-1.3 σ)	$100\theta_{s,eq}$	0.4523	$0.4523^{+0.0052}_{-0.0051}$ (+0.9 σ)	χ^2_{MGS}	1.41	1.46 (ν : 0.1)
z_{re}	7.35	$7.3^{+1.5}_{-1.7}$ (-0.2 σ)	$H(0.15)$	73.21	$73.2^{+1.1}_{-1.1}$ (+1.2 σ)	$\chi^2_{DR12BAO}$	4.10	4.7 (ν : 1.1)
$10^9 A_s$	2.092	$2.091^{+0.062}_{-0.061}$ (-0.0 σ)	$D_M(0.15)$	638.1	638^{+11}_{-10} (-1.2 σ)	χ^2_{prior}	1.27	2.7 (ν : 2.6) (-1.2 σ)
$10^9 A_s e^{-2\tau}$	1.8847	$1.884^{+0.029}_{-0.029}$ (-0.0 σ)	$H(0.38)$	83.24	$83.23^{+0.87}_{-0.87}$ (+1.3 σ)	χ^2_{CMB}	1144.4	1149.3 (ν : 5.6) (-7.8 σ)
D_{40}	1217	1218^{+52}_{-51} (-1.0 σ)	$D_M(0.38)$	1523.0	1523^{+22}_{-21} (-1.2 σ)	χ^2_{BAO}	5.52	6.2 (ν : 0.7)
D_{220}	5770	5769^{+170}_{-170} (+1.3 σ)	$H(0.51)$	89.91	$89.90^{+0.77}_{-0.77}$ (+1.3 σ)			
D_{810}	2553.4	2552^{+42}_{-42} (+1.2 σ)	$D_M(0.51)$	1973.7	1974^{+26}_{-25} (-1.2 σ)			

Best-fit $\chi^2_{eff} = 1151.17$; $\bar{\chi}^2_{eff} = 1158.27$; $R - 1 = 0.00909$

χ^2_{eff} : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 4.10 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.54 simall_100x143_offlike5_EE_Aplanck_B: 395.71 plik_rd12_HM_v22_EE: 740.14

2.59 base_CamSpecHM_TE_lowE_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022416	$0.02240^{+0.00041}_{-0.00040}$ (+1.3 σ)	D_{1420}	825.5	825^{+19}_{-19} (+2.1 σ)	$H(0.61)$	95.551	$95.54^{+0.48}_{-0.48}$ (+1.5 σ)
$\Omega_c h^2$	0.11819	$0.1182^{+0.0022}_{-0.0021}$ (-1.2 σ)	D_{2000}	233.6	$233.5^{+7.1}_{-7.1}$ (+2.2 σ)	$D_M(0.61)$	2293.6	2294^{+22}_{-21} (-1.4 σ)
$100\theta_{MC}$	1.04130	$1.04127^{+0.00093}_{-0.00092}$ (+1.1 σ)	$n_{s,0.002}$	0.9746	$0.975^{+0.019}_{-0.019}$ (+2.2 σ)	$H(2.33)$	235.45	$235.4^{+1.4}_{-1.4}$ (-1.0 σ)
τ	0.0520	$0.052^{+0.014}_{-0.015}$ (+0.0 σ)	Y_P	0.245414	$0.24541^{+0.00016}_{-0.00016}$ (+1.2 σ)	$D_M(2.33)$	5752.6	5753^{+24}_{-24} (-1.5 σ)
$\ln(10^{10} A_s)$	3.0401	$3.041^{+0.029}_{-0.029}$ (+0.0 σ)	Y_P^{BBN}	0.246740	$0.24673^{+0.00016}_{-0.00017}$ (+1.2 σ)	$f\sigma_8(0.15)$	0.4499	$0.450^{+0.012}_{-0.012}$ (-1.1 σ)
n_s	0.9746	$0.975^{+0.019}_{-0.019}$ (+2.2 σ)	$10^5 D/H$	2.577	$2.580^{+0.076}_{-0.074}$ (-1.3 σ)	$\sigma_8(0.15)$	0.7460	$0.746^{+0.012}_{-0.012}$ (-0.4 σ)
y_{cal}	1.00021	$1.0001^{+0.0047}_{-0.0048}$ (-0.1 σ)	Age/Gyr	13.774	$13.776^{+0.055}_{-0.055}$ (-1.5 σ)	$f\sigma_8(0.38)$	0.4698	$0.470^{+0.010}_{-0.010}$ (-1.0 σ)
H_0	68.16	$68.15^{+0.97}_{-0.99}$ (+1.4 σ)	z_*	1089.70	$1089.72^{+0.58}_{-0.58}$ (-1.4 σ)	$\sigma_8(0.38)$	0.6621	$0.662^{+0.011}_{-0.011}$ (-0.1 σ)
Ω_Λ	0.6959	$0.696^{+0.012}_{-0.013}$ (+1.3 σ)	r_*	144.86	$144.88^{+0.57}_{-0.58}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4693	$0.4694^{+0.0095}_{-0.0094}$ (-1.0 σ)
Ω_m	0.3041	$0.304^{+0.013}_{-0.012}$ (-1.3 σ)	$100\theta_*$	1.04148	$1.04145^{+0.00093}_{-0.00091}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6199	$0.620^{+0.010}_{-0.010}$ (-0.0 σ)
$\Omega_m h^2$	0.14125	$0.1412^{+0.0021}_{-0.0021}$ (-1.1 σ)	$D_M(z_*)/\text{Gpc}$	13.910	$13.911^{+0.057}_{-0.058}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4649	$0.4651^{+0.0088}_{-0.0087}$ (-0.9 σ)
$\Omega_m h^3$	0.09627	$0.09624^{+0.00094}_{-0.00092}$ (+0.8 σ)	z_{drag}	1059.89	$1059.88^{+0.93}_{-0.90}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5901	$0.5903^{+0.0098}_{-0.0095}$ (+0.1 σ)
σ_8	0.8065	$0.807^{+0.013}_{-0.013}$ (-0.6 σ)	r_{drag}	147.52	$147.54^{+0.64}_{-0.64}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.2978	$0.2979^{+0.0050}_{-0.0049}$ (+0.3 σ)
S_8	0.8119	$0.812^{+0.024}_{-0.023}$ (-1.1 σ)	k_D	0.14045	$0.14042^{+0.00088}_{-0.00086}$ (-0.2 σ)	$\sigma_8(2.33)$	0.3074	$0.3075^{+0.0053}_{-0.0052}$ (+0.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4447	$0.445^{+0.013}_{-0.013}$ (-1.1 σ)	$100\theta_D$	0.16081	$0.16083^{+0.00054}_{-0.00054}$ (-0.9 σ)	$\chi^2_{lensing}$	8.95	9.6 (ν : 0.6)
$\sigma_8 \Omega_m^{0.25}$	0.5989	$0.599^{+0.013}_{-0.013}$ (-1.0 σ)	z_{eq}	3360	3359^{+51}_{-50} (-1.1 σ)	χ^2_{small}	395.71	396.7 (ν : 0.8) (-0.2 σ)
$\sigma_8/h^{0.5}$	0.9769	$0.977^{+0.019}_{-0.019}$ (-1.0 σ)	k_{eq}	0.010255	$0.01025^{+0.00016}_{-0.00015}$ (-1.1 σ)	$\chi^2_{CamSpec}$	2576.42	2580.2 (ν : 3.6)
$r_{drag} h$	100.55	$100.5^{+1.7}_{-1.7}$ (+1.3 σ)	$100\theta_{eq}$	0.8213	$0.8214^{+0.0094}_{-0.0094}$ (+1.2 σ)	χ^2_{6DF}	0.000	0.030 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.402	$2.403^{+0.056}_{-0.056}$ (-1.4 σ)	$100\theta_{s,eq}$	0.45354	$0.4536^{+0.0049}_{-0.0048}$ (+1.2 σ)	χ^2_{MGS}	1.75	1.80 (ν : 0.1)
z_{re}	7.41	$7.4^{+1.4}_{-1.6}$ (-0.1 σ)	$H(0.15)$	73.36	$73.35^{+0.85}_{-0.86}$ (+1.4 σ)	$\chi^2_{DR12BAO}$	3.44	3.91 (ν : 0.3)
$10^9 A_s$	2.091	$2.092^{+0.061}_{-0.059}$ (+0.0 σ)	$D_M(0.15)$	636.6	$636.7^{+8.5}_{-8.2}$ (-1.4 σ)	χ^2_{prior}	10.22	11.3 (ν : 1.0) (+1.1 σ)
$10^9 A_s e^{-2\tau}$	1.8842	$1.884^{+0.026}_{-0.026}$ (-0.1 σ)	$H(0.38)$	83.34	$83.33^{+0.65}_{-0.66}$ (+1.5 σ)	χ^2_{CMB}	2981.1	2986.5 (ν : 5.2) (+326.7 σ)
D_{40}	1212.4	1212^{+48}_{-47} (-1.4 σ)	$D_M(0.38)$	1520.0	1520^{+17}_{-17} (-1.4 σ)	χ^2_{BAO}	5.19	5.74 (ν : 0.3)
D_{220}	5733	5729^{+110}_{-110} (+0.4 σ)	$H(0.51)$	89.99	$89.98^{+0.55}_{-0.55}$ (+1.5 σ)			
D_{810}	2554.2	2553^{+39}_{-40} (+1.2 σ)	$D_M(0.51)$	1970.3	1971^{+20}_{-20} (-1.4 σ)			

Best-fit $\chi^2_{eff} = 2996.49$; $\bar{\chi}^2_{eff} = 3003.53$; $R - 1 = 0.00799$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.44 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.95 small_100x143_offlike5_EE_Aplanck_B: 395.71 CamSpec like_10.7HM_1400_unified: 2576.42

2.60 base_CamSpecHM_EE_lowE_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02269	$0.02268^{+0.00073}_{-0.00072}$ (+2.6 σ)	D_{1420}	825.9	827^{+20}_{-19} (+2.4 σ)	$H(0.61)$	95.37	$95.36^{+0.73}_{-0.68}$ (+1.0 σ)
$\Omega_c h^2$	0.11790	$0.1179^{+0.0026}_{-0.0025}$ (-1.3 σ)	D_{2000}	233.6	$233.8^{+7.1}_{-7.0}$ (+2.4 σ)	$D_M(0.61)$	2300.1	2301^{+28}_{-29} (-1.1 σ)
$100\theta_{MC}$	1.03957	$1.0395^{+0.0015}_{-0.0015}$ (-2.6 σ)	$n_{s,0.002}$	0.9678	$0.968^{+0.019}_{-0.019}$ (+1.0 σ)	$H(2.33)$	235.36	$235.4^{+1.6}_{-1.6}$ (-1.1 σ)
τ	0.0499	$0.049^{+0.015}_{-0.016}$ (-0.4 σ)	Y_P	0.245511	$0.24552^{+0.00031}_{-0.00030}$ (+2.4 σ)	$D_M(2.33)$	5762.5	5763^{+36}_{-38} (-0.9 σ)
$\ln(10^{10} A_s)$	3.0408	$3.040^{+0.029}_{-0.031}$ (-0.0 σ)	Y_P^{BBN}	0.246838	$0.24684^{+0.00031}_{-0.00030}$ (+2.4 σ)	$f\sigma_8(0.15)$	0.4482	$0.448^{+0.015}_{-0.015}$ (-1.3 σ)
n_s	0.9678	$0.968^{+0.019}_{-0.019}$ (+1.0 σ)	$10^5 D/H$	2.529	$2.53^{+0.13}_{-0.13}$ (-2.5 σ)	$\sigma_8(0.15)$	0.7407	$0.740^{+0.013}_{-0.014}$ (-1.2 σ)
y_{cal}	0.9997	$0.9999^{+0.0051}_{-0.0049}$ (-0.2 σ)	Age/Gyr	13.797	$13.799^{+0.084}_{-0.088}$ (-0.9 σ)	$f\sigma_8(0.38)$	0.4675	$0.468^{+0.012}_{-0.012}$ (-1.3 σ)
H_0	67.90	$67.9^{+1.2}_{-1.2}$ (+1.1 σ)	z_*	1089.35	$1089.36^{+0.99}_{-0.97}$ (-2.3 σ)	$\sigma_8(0.38)$	0.6571	$0.657^{+0.011}_{-0.012}$ (-1.0 σ)
Ω_Λ	0.6937	$0.693^{+0.014}_{-0.015}$ (+1.1 σ)	r_*	144.73	$144.73^{+0.67}_{-0.68}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4668	$0.467^{+0.011}_{-0.011}$ (-1.3 σ)
Ω_m	0.3063	$0.307^{+0.015}_{-0.014}$ (-1.1 σ)	$100\theta_*$	1.03972	$1.0397^{+0.0015}_{-0.0015}$ (-2.8 σ)	$\sigma_8(0.51)$	0.6152	$0.615^{+0.010}_{-0.011}$ (-0.9 σ)
$\Omega_m h^2$	0.14123	$0.1413^{+0.0024}_{-0.0023}$ (-1.1 σ)	$D_M(z_*)/\text{Gpc}$	13.920	$13.921^{+0.070}_{-0.073}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4622	$0.462^{+0.010}_{-0.010}$ (-1.3 σ)
$\Omega_m h^3$	0.09590	$0.0959^{+0.0015}_{-0.0014}$ (-0.0 σ)	z_{drag}	1060.51	$1060.5^{+1.6}_{-1.6}$ (+2.4 σ)	$\sigma_8(0.61)$	0.5855	$0.5853^{+0.0099}_{-0.010}$ (-0.9 σ)
σ_8	0.8010	$0.801^{+0.015}_{-0.015}$ (-1.2 σ)	r_{drag}	147.30	$147.30^{+0.82}_{-0.83}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2954	$0.2953^{+0.0050}_{-0.0052}$ (-0.7 σ)
S_8	0.8093	$0.810^{+0.029}_{-0.028}$ (-1.2 σ)	k_D	0.14089	$0.1409^{+0.0013}_{-0.0013}$ (+0.6 σ)	$\sigma_8(2.33)$	0.3048	$0.3047^{+0.0053}_{-0.0054}$ (-0.4 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4433	$0.443^{+0.016}_{-0.015}$ (-1.2 σ)	$100\theta_D$	0.16019	$0.1602^{+0.0010}_{-0.00096}$ (-3.3 σ)	$\chi^2_{lensing}$	8.37	9.1 (ν : 0.6)
$\sigma_8 \Omega_m^{0.25}$	0.5959	$0.596^{+0.015}_{-0.015}$ (-1.3 σ)	z_{eq}	3360	3360^{+57}_{-55} (-1.1 σ)	χ^2_{small}	395.66	396.7 (ν : 1.0) (-0.2 σ)
$\sigma_8/h^{0.5}$	0.9720	$0.972^{+0.022}_{-0.022}$ (-1.3 σ)	k_{eq}	0.010254	$0.01026^{+0.00017}_{-0.00017}$ (-1.1 σ)	$\chi^2_{CamSpec}$	1888.5	1891.7 (ν : 4.0)
$r_{drag} h$	100.02	$99.98^{+1.9}_{-1.9}$ (+1.0 σ)	$100\theta_{eq}$	0.8208	$0.821^{+0.010}_{-0.010}$ (+1.1 σ)	χ^2_{6DF}	0.0098	0.049 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.416	$2.415^{+0.059}_{-0.058}$ (-1.0 σ)	$100\theta_{s,eq}$	0.4530	$0.4530^{+0.0052}_{-0.0053}$ (+1.0 σ)	χ^2_{MGS}	1.41	1.46 (ν : 0.1)
z_{re}	7.12	$7.0^{+1.6}_{-1.6}$ (-0.6 σ)	$H(0.15)$	73.12	$73.1^{+1.1}_{-1.1}$ (+1.1 σ)	$\chi^2_{DR12BAO}$	4.12	4.8 (ν : 1.1)
$10^9 A_s$	2.092	$2.090^{+0.062}_{-0.063}$ (-0.0 σ)	$D_M(0.15)$	638.8	639^{+11}_{-11} (-1.1 σ)	χ^2_{prior}	10.99	12.5 (ν : 2.4) (+1.4 σ)
$10^9 A_s e^{-2\tau}$	1.8935	$1.895^{+0.030}_{-0.029}$ (+0.8 σ)	$H(0.38)$	83.14	$83.12^{+0.90}_{-0.85}$ (+1.1 σ)	χ^2_{CMB}	2292.6	2297.5 (ν : 5.7) (+201.3 σ)
D_{40}	1237	1237^{+53}_{-51} (+0.2 σ)	$D_M(0.38)$	1524.8	1525^{+22}_{-22} (-1.1 σ)	χ^2_{BAO}	5.53	6.3 (ν : 0.7)
D_{220}	5829	5829^{+170}_{-170} (+2.8 σ)	$H(0.51)$	89.79	$89.78^{+0.79}_{-0.74}$ (+1.0 σ)			
D_{810}	2561.5	2563^{+43}_{-42} (+1.9 σ)	$D_M(0.51)$	1976.0	1977^{+26}_{-26} (-1.1 σ)			

Best-fit $\chi^2_{eff} = 2309.08$; $\bar{\chi}^2_{eff} = 2316.30$; $R - 1 = 0.00893$

χ^2_{eff} : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 4.12 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.37 small_100x143_offlike5_EE_Aplanck_B: 395.66 CamSpec like_10.7HM_1400_unified: 1888.53

2.61 base_plikHM_TE_lowE_lensing_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022415	$0.02242^{+0.00044}_{-0.00043}$ (+1.4 σ)	$\langle d^2 \rangle^{1/2}$	2.431	$2.432^{+0.062}_{-0.064}$ (−0.6 σ)	$H(0.15)$	72.91	$72.9^{+1.2}_{-1.2}$ (+0.8 σ)
$\Omega_c h^2$	0.11958	$0.1196^{+0.0031}_{-0.0032}$ (−0.5 σ)	z_{re}	7.53	$7.5^{+1.5}_{-1.6}$ (+0.0 σ)	$D_{\text{M}}(0.15)$	641.1	641^{+12}_{-12} (−0.8 σ)
$100\theta_{\text{MC}}$	1.04117	$1.04119^{+0.00096}_{-0.00096}$ (+0.9 σ)	$10^9 A_{\text{s}}$	2.081	$2.082^{+0.062}_{-0.061}$ (−0.3 σ)	$H(0.38)$	83.04	$83.05^{+0.93}_{-0.87}$ (+0.9 σ)
τ	0.0530	$0.053^{+0.016}_{-0.015}$ (+0.1 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8717	$1.871^{+0.026}_{-0.026}$ (−0.9 σ)	$D_{\text{M}}(0.38)$	1528.8	1529^{+24}_{-24} (−0.8 σ)
$\ln(10^{10} A_{\text{s}})$	3.0355	$3.036^{+0.029}_{-0.030}$ (−0.3 σ)	D_{40}	1226.6	1227^{+50}_{-49} (−0.4 σ)	$H(0.51)$	89.77	$89.78^{+0.75}_{-0.70}$ (+1.0 σ)
n_{s}	0.9645	$0.964^{+0.022}_{-0.021}$ (+0.3 σ)	D_{220}	5716	5715^{+110}_{-110} (+0.0 σ)	$D_{\text{M}}(0.51)$	1980.4	1981^{+28}_{-29} (−0.9 σ)
y_{cal}	1.00049	$1.0004^{+0.0049}_{-0.0048}$ (+0.0 σ)	D_{810}	2525.2	2524^{+42}_{-42} (−0.9 σ)	$H(0.61)$	95.40	$95.41^{+0.62}_{-0.58}$ (+1.1 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.076}_{-0.075}$	D_{1420}	812.5	812^{+21}_{-20} (−0.4 σ)	$D_{\text{M}}(0.61)$	2304.4	2305^{+30}_{-31} (−0.9 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.137	$0.137^{+0.058}_{-0.058}$	D_{2000}	229.4	$229.3^{+7.5}_{-7.3}$ (−0.1 σ)	$H(2.33)$	236.35	$236.4^{+1.9}_{-1.9}$ (−0.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.477	$0.48^{+0.17}_{-0.16}$	$n_{\text{s},0.002}$	0.9645	$0.964^{+0.022}_{-0.021}$ (+0.3 σ)	$D_{\text{M}}(2.33)$	5757.6	5757^{+28}_{-29} (−1.3 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	Y_{P}	0.245413	$0.24541^{+0.00017}_{-0.00018}$ (+1.3 σ)	$f\sigma_8(0.15)$	0.4547	$0.455^{+0.015}_{-0.016}$ (−0.7 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	$Y_{\text{P}}^{\text{BBN}}$	0.246740	$0.24674^{+0.00017}_{-0.00018}$ (+1.3 σ)	$\sigma_8(0.15)$	0.7448	$0.745^{+0.012}_{-0.012}$ (−0.6 σ)
A_{217}^{dustTE}	2.07	$2.06^{+0.53}_{-0.52}$	10^5D/H	2.577	$2.578^{+0.081}_{-0.080}$ (−1.3 σ)	$f\sigma_8(0.38)$	0.4729	$0.473^{+0.012}_{-0.013}$ (−0.7 σ)
c_{100}	1.00023	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	Age/Gyr	13.784	$13.783^{+0.064}_{-0.066}$ (−1.3 σ)	$\sigma_8(0.38)$	0.6602	$0.660^{+0.011}_{-0.011}$ (−0.5 σ)
c_{217}	0.99800	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	z_*	1089.83	$1089.83^{+0.70}_{-0.72}$ (−1.1 σ)	$f\sigma_8(0.51)$	0.4714	$0.472^{+0.010}_{-0.011}$ (−0.7 σ)
H_0	67.62	$67.6^{+1.4}_{-1.4}$ (+0.8 σ)	r_*	144.51	$144.49^{+0.75}_{-0.72}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6178	$0.618^{+0.010}_{-0.010}$ (−0.4 σ)
Ω_{Λ}	0.6881	$0.688^{+0.019}_{-0.019}$ (+0.7 σ)	$100\theta_*$	1.04135	$1.04136^{+0.00094}_{-0.00095}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4665	$0.4666^{+0.0093}_{-0.0098}$ (−0.7 σ)
Ω_{m}	0.3119	$0.312^{+0.019}_{-0.019}$ (−0.7 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.877	$13.875^{+0.071}_{-0.069}$ (−0.0 σ)	$\sigma_8(0.61)$	0.5878	$0.5880^{+0.0096}_{-0.0096}$ (−0.4 σ)
$\Omega_{\text{m}} h^2$	0.14264	$0.1427^{+0.0030}_{-0.0030}$ (−0.4 σ)	z_{drag}	1060.01	$1060.01^{+0.95}_{-0.92}$ (+1.4 σ)	$f\sigma_8(2.33)$	0.2964	$0.2964^{+0.0052}_{-0.0051}$ (−0.2 σ)
$\Omega_{\text{m}} h^3$	0.09645	$0.09647^{+0.00094}_{-0.00092}$ (+1.3 σ)	r_{drag}	147.15	$147.14^{+0.76}_{-0.75}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3055	$0.3056^{+0.0058}_{-0.0055}$ (−0.1 σ)
σ_8	0.8061	$0.806^{+0.013}_{-0.013}$ (−0.6 σ)	k_{D}	0.14084	$0.14085^{+0.00091}_{-0.00091}$ (+0.6 σ)	χ^2_{lensing}	9.61	10.3 (ν : 1.4)
S_8	0.8220	$0.823^{+0.031}_{-0.031}$ (−0.7 σ)	$100\theta_{\text{D}}$	0.16075	$0.16075^{+0.00054}_{-0.00054}$ (−1.2 σ)	χ^2_{simall}	395.85	396.9 (ν : 1.2) (−0.1 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4502	$0.451^{+0.017}_{-0.017}$ (−0.7 σ)	z_{eq}	3393	3394^{+72}_{-73} (−0.4 σ)	χ^2_{plikTE}	854.3	860.6 (ν : 6.7)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6024	$0.603^{+0.015}_{-0.015}$ (−0.7 σ)	k_{eq}	0.010356	$0.01036^{+0.00022}_{-0.00022}$ (−0.4 σ)	χ^2_{prior}	0.7	7.9 (ν : 6.9) (+0.2 σ)
$\sigma_8/h^{0.5}$	0.9803	$0.981^{+0.020}_{-0.021}$ (−0.8 σ)	$100\theta_{\text{eq}}$	0.8152	$0.815^{+0.014}_{-0.013}$ (+0.5 σ)	χ^2_{CMB}	1259.8	1267.7 (ν : 7.6) (+13.7 σ)
$r_{\text{drag}} h$	99.51	$99.5^{+2.5}_{-2.4}$ (+0.6 σ)	$100\theta_{\text{s,eq}}$	0.4504	$0.4503^{+0.0071}_{-0.0068}$ (+0.4 σ)			

Best-fit $\chi^2_{\text{eff}} = 1260.45$; $\bar{\chi}^2_{\text{eff}} = 1275.56$; $R - 1 = 0.00845$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.61 simall_100x143_offlike5_EE_Aplanck_B: 395.85 plik_rd12_HM_v22_TE: 854.31

2.62 base_plikHM_EE_lowE_lensing_CookeDH

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_b h^2$	0.02256	$0.02255^{+0.00085}_{-0.00086}$	$(+2.0\sigma)$	D_{220}	5747	5745^{+180}_{-180}	$(+0.8\sigma)$	$H(0.38)$	82.80	$82.8^{+1.4}_{-1.4}$	$(+0.5\sigma)$
$\Omega_c h^2$	0.11950	$0.1196^{+0.0039}_{-0.0038}$	(-0.5σ)	D_{810}	2546.2	2546^{+45}_{-44}	$(+0.7\sigma)$	$D_M(0.38)$	1534.6	1536^{+36}_{-34}	(-0.4σ)
$100\theta_{MC}$	1.03980	$1.0397^{+0.0016}_{-0.0016}$	(-2.2σ)	D_{1420}	821.9	822^{+22}_{-21}	$(+1.4\sigma)$	$H(0.51)$	89.55	$89.5^{+1.1}_{-1.2}$	$(+0.5\sigma)$
τ	0.0504	$0.050^{+0.016}_{-0.016}$	(-0.3σ)	D_{2000}	232.6	$232.6^{+8.0}_{-7.9}$	$(+1.7\sigma)$	$D_M(0.51)$	1987.4	1989^{+43}_{-41}	(-0.4σ)
$\ln(10^{10} A_s)$	3.0373	$3.036^{+0.031}_{-0.031}$	(-0.3σ)	$n_{s,0.002}$	0.9689	$0.969^{+0.022}_{-0.021}$	$(+1.1\sigma)$	$H(0.61)$	95.20	$95.18^{+0.99}_{-0.98}$	$(+0.5\sigma)$
n_s	0.9689	$0.969^{+0.022}_{-0.021}$	$(+1.1\sigma)$	Y_P	0.245467	$0.24547^{+0.00036}_{-0.00038}$	$(+1.8\sigma)$	$D_M(0.61)$	2312.1	2313^{+47}_{-44}	(-0.4σ)
y_{cal}	0.99990	$0.9999^{+0.0049}_{-0.0050}$	(-0.2σ)	Y_P^{BBN}	0.246794	$0.24679^{+0.00037}_{-0.00038}$	$(+1.8\sigma)$	$H(2.33)$	236.32	$236.4^{+2.2}_{-2.1}$	(-0.3σ)
H_0	67.31	$67.3^{+2.0}_{-2.0}$	$(+0.4\sigma)$	$10^5 D/H$	2.551	$2.55^{+0.16}_{-0.15}$	(-1.9σ)	$D_M(2.33)$	5768.6	5770^{+50}_{-49}	(-0.5σ)
Ω_Λ	0.6851	$0.684^{+0.024}_{-0.026}$	$(+0.4\sigma)$	Age/Gyr	13.809	$13.81^{+0.12}_{-0.11}$	(-0.5σ)	$f\sigma_8(0.15)$	0.4566	$0.457^{+0.021}_{-0.021}$	(-0.6σ)
Ω_m	0.3149	$0.316^{+0.026}_{-0.024}$	(-0.4σ)	z_*	1089.63	$1089.7^{+1.3}_{-1.3}$	(-1.6σ)	$\sigma_8(0.15)$	0.7445	$0.744^{+0.013}_{-0.013}$	(-0.7σ)
$\Omega_m h^2$	0.14271	$0.1428^{+0.0034}_{-0.0034}$	(-0.3σ)	r_*	144.41	$144.40^{+0.78}_{-0.78}$	(-0.1σ)	$f\sigma_8(0.38)$	0.4741	$0.474^{+0.016}_{-0.016}$	(-0.6σ)
$\Omega_m h^3$	0.09606	$0.0960^{+0.0015}_{-0.0015}$	$(+0.3\sigma)$	$100\theta_*$	1.03996	$1.0399^{+0.0016}_{-0.0016}$	(-2.3σ)	$\sigma_8(0.38)$	0.6596	$0.659^{+0.011}_{-0.011}$	(-0.7σ)
σ_8	0.8060	$0.806^{+0.015}_{-0.015}$	(-0.7σ)	$D_M(z_*)/\text{Gpc}$	13.886	$13.885^{+0.078}_{-0.079}$	$(+0.2\sigma)$	$f\sigma_8(0.51)$	0.4723	$0.472^{+0.014}_{-0.014}$	(-0.6σ)
S_8	0.8259	$0.827^{+0.043}_{-0.042}$	(-0.5σ)	z_{drag}	1060.35	$1060.3^{+1.8}_{-1.8}$	$(+2.0\sigma)$	$\sigma_8(0.51)$	0.6171	$0.617^{+0.010}_{-0.010}$	(-0.7σ)
$\sigma_8 \Omega_m^{0.5}$	0.4524	$0.453^{+0.023}_{-0.023}$	(-0.5σ)	r_{drag}	147.01	$147.00^{+0.85}_{-0.83}$	(-0.4σ)	$f\sigma_8(0.61)$	0.4671	$0.467^{+0.012}_{-0.012}$	(-0.6σ)
$\sigma_8 \Omega_m^{0.25}$	0.6038	$0.604^{+0.020}_{-0.020}$	(-0.6σ)	k_D	0.14110	$0.1411^{+0.0012}_{-0.0013}$	$(+1.1\sigma)$	$\sigma_8(0.61)$	0.5871	$0.587^{+0.010}_{-0.0097}$	(-0.6σ)
$\sigma_8/h^{0.5}$	0.9824	$0.982^{+0.028}_{-0.028}$	(-0.6σ)	$100\theta_D$	0.16033	$0.1604^{+0.0011}_{-0.0010}$	(-2.7σ)	$f\sigma_8(2.33)$	0.2959	$0.2956^{+0.0053}_{-0.0052}$	(-0.6σ)
$r_{drag} h$	98.96	$98.9^{+3.1}_{-3.1}$	$(+0.3\sigma)$	z_{eq}	3395	3397^{+82}_{-81}	(-0.3σ)	$\sigma_8(2.33)$	0.3049	$0.3046^{+0.0059}_{-0.0057}$	(-0.5σ)
$\langle d^2 \rangle^{1/2}$	2.426	$2.425^{+0.071}_{-0.070}$	(-0.8σ)	k_{eq}	0.010361	$0.01037^{+0.00025}_{-0.00025}$	(-0.3σ)	$\chi^2_{lensing}$	8.67	$9.6 (\nu: 0.8)$	
z_{re}	7.23	$7.1^{+1.5}_{-1.7}$	(-0.5σ)	$100\theta_{eq}$	0.8143	$0.814^{+0.016}_{-0.016}$	$(+0.3\sigma)$	χ^2_{small}	395.68	$396.7 (\nu: 1.0) \quad (-0.2\sigma)$	
$10^9 A_s$	2.085	$2.082^{+0.065}_{-0.064}$	(-0.3σ)	$100\theta_{s,eq}$	0.4497	$0.4495^{+0.0080}_{-0.0079}$	$(+0.3\sigma)$	χ^2_{plikEE}	740.29	$743.7 (\nu: 3.9)$	
$10^9 A_s e^{-2\tau}$	1.8851	$1.885^{+0.029}_{-0.030}$	$(+0.1\sigma)$	$H(0.15)$	72.63	$72.6^{+1.7}_{-1.8}$	$(+0.4\sigma)$	χ^2_{prior}	0.53	$2.3 (\nu: 2.4) \quad (-1.4\sigma)$	
D_{40}	1223	1223^{+53}_{-54}	(-0.7σ)	$D_M(0.15)$	643.8	644^{+18}_{-17}	(-0.4σ)	χ^2_{CMB}	1144.6	$1150.0 (\nu: 6.4) \quad (-7.7\sigma)$	

Best-fit $\chi^2_{eff} = 1145.17$; $\bar{\chi}^2_{eff} = 1152.26$; $R - 1 = 0.00449$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.67 small_100x143_offlike5_EE_Aplanck_B: 395.68 plik_rd12_HM_v22_EE: 740.29

2.63 base_CamSpecHM_TE_lowE_lensing_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022406	$0.02242^{+0.00045}_{-0.00046}$ (+1.4 σ)	D_{220}	5730	5729^{+120}_{-120} (+0.4 σ)	$H(0.38)$	83.35	$83.40^{+0.91}_{-0.92}$ (+1.6 σ)
$\Omega_c h^2$	0.11806	$0.1180^{+0.0032}_{-0.0031}$ (−1.3 σ)	D_{810}	2554.0	2554^{+42}_{-42} (+1.3 σ)	$D_M(0.38)$	1519.6	1519^{+25}_{-24} (−1.5 σ)
$100\theta_{MC}$	1.04126	$1.04129^{+0.00094}_{-0.0010}$ (+1.1 σ)	D_{1420}	825.6	826^{+20}_{-21} (+2.2 σ)	$H(0.51)$	89.99	$90.03^{+0.74}_{-0.74}$ (+1.6 σ)
τ	0.0521	$0.053^{+0.016}_{-0.015}$ (+0.1 σ)	D_{2000}	233.6	$233.7^{+7.5}_{-7.7}$ (+2.3 σ)	$D_M(0.51)$	1969.8	1969^{+29}_{-28} (−1.5 σ)
$\ln(10^{10} A_s)$	3.0398	$3.041^{+0.032}_{-0.030}$ (+0.0 σ)	$n_{s,0.002}$	0.9752	$0.976^{+0.021}_{-0.022}$ (+2.3 σ)	$H(0.61)$	95.55	$95.58^{+0.62}_{-0.61}$ (+1.6 σ)
n_s	0.9752	$0.976^{+0.021}_{-0.022}$ (+2.3 σ)	Y_P	0.245410	$0.24541^{+0.00017}_{-0.00019}$ (+1.3 σ)	$D_M(0.61)$	2293.2	2292^{+31}_{-30} (−1.5 σ)
y_{cal}	1.00019	$1.0002^{+0.0049}_{-0.0048}$ (−0.1 σ)	Y_P^{BBN}	0.246736	$0.24674^{+0.00017}_{-0.00019}$ (+1.3 σ)	$H(2.33)$	235.35	$235.3^{+2.0}_{-1.9}$ (−1.1 σ)
H_0	68.19	$68.2^{+1.4}_{-1.4}$ (+1.5 σ)	$10^5 D/H$	2.579	$2.578^{+0.086}_{-0.081}$ (−1.3 σ)	$D_M(2.33)$	5753.0	5752^{+29}_{-29} (−1.6 σ)
Ω_Λ	0.6965	$0.697^{+0.018}_{-0.019}$ (+1.4 σ)	Age/Gyr	13.775	$13.773^{+0.066}_{-0.065}$ (−1.6 σ)	$f\sigma_8(0.15)$	0.4493	$0.449^{+0.016}_{-0.016}$ (−1.2 σ)
Ω_m	0.3035	$0.303^{+0.019}_{-0.018}$ (−1.4 σ)	z_*	1089.70	$1089.68^{+0.73}_{-0.70}$ (−1.5 σ)	$\sigma_8(0.15)$	0.7457	$0.746^{+0.013}_{-0.013}$ (−0.4 σ)
$\Omega_m h^2$	0.14111	$0.1410^{+0.0031}_{-0.0029}$ (−1.2 σ)	r_*	144.91	$144.93^{+0.76}_{-0.76}$ (+1.0 σ)	$f\sigma_8(0.38)$	0.4693	$0.469^{+0.013}_{-0.013}$ (−1.1 σ)
$\Omega_m h^3$	0.09622	$0.09623^{+0.00097}_{-0.00095}$ (+0.7 σ)	$100\theta_*$	1.04144	$1.04147^{+0.00093}_{-0.00099}$ (+1.1 σ)	$\sigma_8(0.38)$	0.6619	$0.662^{+0.011}_{-0.011}$ (−0.2 σ)
σ_8	0.8061	$0.806^{+0.014}_{-0.014}$ (−0.6 σ)	$D_M(z_*)/\text{Gpc}$	13.914	$13.916^{+0.071}_{-0.072}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4689	$0.469^{+0.011}_{-0.011}$ (−1.1 σ)
S_8	0.8108	$0.810^{+0.032}_{-0.031}$ (−1.2 σ)	z_{drag}	1059.89	$1059.90^{+0.95}_{-0.99}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6198	$0.620^{+0.011}_{-0.010}$ (−0.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4441	$0.444^{+0.017}_{-0.017}$ (−1.2 σ)	r_{drag}	147.57	$147.58^{+0.79}_{-0.79}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4646	$0.4644^{+0.0099}_{-0.010}$ (−1.0 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5983	$0.598^{+0.015}_{-0.015}$ (−1.1 σ)	k_D	0.14039	$0.14038^{+0.00096}_{-0.00095}$ (−0.3 σ)	$\sigma_8(0.61)$	0.5899	$0.590^{+0.011}_{-0.010}$ (+0.1 σ)
$\sigma_8/h^{0.5}$	0.9762	$0.976^{+0.021}_{-0.022}$ (−1.1 σ)	$100\theta_D$	0.16082	$0.16082^{+0.00059}_{-0.00056}$ (−1.0 σ)	$f\sigma_8(2.33)$	0.2978	$0.2979^{+0.0055}_{-0.0052}$ (+0.4 σ)
$r_{drag} h$	100.62	$100.7^{+2.5}_{-2.5}$ (+1.4 σ)	z_{eq}	3357	3354^{+73}_{-70} (−1.2 σ)	$\sigma_8(2.33)$	0.3074	$0.3076^{+0.0060}_{-0.0057}$ (+0.6 σ)
$\langle d^2 \rangle^{1/2}$	2.400	$2.399^{+0.067}_{-0.063}$ (−1.5 σ)	k_{eq}	0.010245	$0.01024^{+0.00022}_{-0.00022}$ (−1.2 σ)	$\chi^2_{lensing}$	9.01	9.7 (ν : 0.8)
z_{re}	7.41	$7.5^{+1.6}_{-1.6}$ (−0.1 σ)	$100\theta_{eq}$	0.8219	$0.822^{+0.014}_{-0.014}$ (+1.3 σ)	χ^2_{small}	395.72	396.8 (ν : 1.1) (−0.1 σ)
$10^9 A_s$	2.090	$2.092^{+0.068}_{-0.062}$ (+0.0 σ)	$100\theta_{s,eq}$	0.4539	$0.4541^{+0.0070}_{-0.0071}$ (+1.3 σ)	$\chi^2_{CamSpec}$	2576.4	2580.6 (ν : 4.3)
$10^9 A_s e^{-2\tau}$	1.8833	$1.883^{+0.027}_{-0.026}$ (−0.1 σ)	$H(0.15)$	73.38	$73.4^{+1.2}_{-1.2}$ (+1.5 σ)	χ^2_{prior}	10.20	11.4 (ν : 1.1) (+1.1 σ)
D_{40}	1211	1210^{+52}_{-50} (−1.6 σ)	$D_M(0.15)$	636.4	636^{+12}_{-12} (−1.5 σ)	χ^2_{CMB}	2981.1	2987.1 (ν : 6.3) (+326.9 σ)

Best-fit $\chi^2_{eff} = 2991.29$; $\bar{\chi}^2_{eff} = 2998.52$; $R - 1 = 0.00490$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.01 small_100x143_offlike5_EE_Aplanck_B: 395.72 CamSpec like_10.7HM_1400_unified: 2576.36

2.64 base_CamSpecHM_EE_lowE_lensing_CookeDH

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_b h^2$	0.02249	$0.02251^{+0.00083}_{-0.00085}$	(+1.8 σ)	D_{220}	5810	5809^{+180}_{-180}	(+2.3 σ)	$H(0.38)$	82.69	$82.7^{+1.4}_{-1.3}$	(+0.4 σ)
$\Omega_c h^2$	0.11913	$0.1191^{+0.0040}_{-0.0040}$	(−0.7 σ)	D_{810}	2556.5	2558^{+45}_{-44}	(+1.6 σ)	$D_M(0.38)$	1536.6	1536^{+36}_{-35}	(−0.4 σ)
$100\theta_{MC}$	1.03932	$1.0394^{+0.0016}_{-0.0015}$	(−3.0 σ)	D_{1420}	822.4	823^{+22}_{-22}	(+1.7 σ)	$H(0.51)$	89.43	$89.5^{+1.2}_{-1.1}$	(+0.3 σ)
τ	0.0479	$0.047^{+0.016}_{-0.017}$	(−0.7 σ)	D_{2000}	232.2	$232.5^{+8.0}_{-7.9}$	(+1.6 σ)	$D_M(0.51)$	1990.0	1989^{+43}_{-42}	(−0.4 σ)
$\ln(10^{10} A_s)$	3.0378	$3.036^{+0.030}_{-0.032}$	(−0.3 σ)	$n_{s,0.002}$	0.9637	$0.965^{+0.021}_{-0.021}$	(+0.3 σ)	$H(0.61)$	95.06	$95.1^{+1.0}_{-0.95}$	(+0.2 σ)
n_s	0.9637	$0.965^{+0.021}_{-0.021}$	(+0.3 σ)	Y_P	0.245443	$0.24545^{+0.00036}_{-0.00038}$	(+1.6 σ)	$D_M(0.61)$	2315.2	2314^{+46}_{-45}	(−0.4 σ)
y_{cal}	0.99982	$0.9998^{+0.0050}_{-0.0049}$	(−0.2 σ)	Y_P^{BBN}	0.246769	$0.24677^{+0.00036}_{-0.00038}$	(+1.6 σ)	$H(2.33)$	235.96	$236.0^{+2.2}_{-2.2}$	(−0.6 σ)
H_0	67.23	$67.3^{+2.0}_{-2.0}$	(+0.4 σ)	$10^5 D/H$	2.563	$2.56^{+0.16}_{-0.15}$	(−1.7 σ)	$D_M(2.33)$	5776.8	5776^{+49}_{-49}	(−0.1 σ)
Ω_Λ	0.6852	$0.685^{+0.025}_{-0.027}$	(+0.5 σ)	Age/Gyr	13.829	$13.83^{+0.11}_{-0.11}$	(−0.1 σ)	$f\sigma_8(0.15)$	0.4550	$0.454^{+0.022}_{-0.022}$	(−0.8 σ)
Ω_m	0.3148	$0.315^{+0.027}_{-0.025}$	(−0.5 σ)	z_*	1089.69	$1089.7^{+1.3}_{-1.2}$	(−1.5 σ)	$\sigma_8(0.15)$	0.7420	$0.741^{+0.013}_{-0.013}$	(−1.1 σ)
$\Omega_m h^2$	0.14227	$0.1422^{+0.0035}_{-0.0035}$	(−0.6 σ)	r_*	144.56	$144.56^{+0.81}_{-0.78}$	(+0.2 σ)	$f\sigma_8(0.38)$	0.4724	$0.472^{+0.017}_{-0.017}$	(−0.8 σ)
$\Omega_m h^3$	0.09565	$0.0957^{+0.0015}_{-0.0015}$	(−0.5 σ)	$100\theta_*$	1.03950	$1.0395^{+0.0016}_{-0.0015}$	(−3.1 σ)	$\sigma_8(0.38)$	0.6573	$0.657^{+0.011}_{-0.011}$	(−1.1 σ)
σ_8	0.8033	$0.802^{+0.015}_{-0.015}$	(−1.0 σ)	$D_M(z_*)/\text{Gpc}$	13.907	$13.907^{+0.081}_{-0.079}$	(+0.7 σ)	$f\sigma_8(0.51)$	0.4706	$0.470^{+0.014}_{-0.014}$	(−0.9 σ)
S_8	0.8228	$0.822^{+0.044}_{-0.043}$	(−0.7 σ)	z_{drag}	1060.16	$1060.2^{+1.7}_{-1.8}$	(+1.7 σ)	$\sigma_8(0.51)$	0.6150	$0.614^{+0.011}_{-0.011}$	(−1.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4507	$0.450^{+0.024}_{-0.023}$	(−0.7 σ)	r_{drag}	147.18	$147.18^{+0.87}_{-0.84}$	(−0.1 σ)	$f\sigma_8(0.61)$	0.4655	$0.465^{+0.012}_{-0.012}$	(−0.9 σ)
$\sigma_8 \Omega_m^{0.25}$	0.6017	$0.601^{+0.020}_{-0.020}$	(−0.9 σ)	k_D	0.14086	$0.1409^{+0.0012}_{-0.0013}$	(+0.6 σ)	$\sigma_8(0.61)$	0.5851	$0.585^{+0.010}_{-0.010}$	(−1.0 σ)
$\sigma_8/h^{0.5}$	0.9797	$0.979^{+0.028}_{-0.028}$	(−0.9 σ)	$100\theta_D$	0.16037	$0.1604^{+0.0011}_{-0.0010}$	(−2.6 σ)	$f\sigma_8(2.33)$	0.2949	$0.2947^{+0.0053}_{-0.0053}$	(−0.9 σ)
$r_{drag} h$	98.95	$99.0^{+3.2}_{-3.1}$	(+0.3 σ)	z_{eq}	3384	3384^{+84}_{-84}	(−0.6 σ)	$\sigma_8(2.33)$	0.3039	$0.3037^{+0.0059}_{-0.0059}$	(−0.8 σ)
$\langle d^2 \rangle^{1/2}$	2.435	$2.430^{+0.070}_{-0.070}$	(−0.6 σ)	k_{eq}	0.010329	$0.01033^{+0.00026}_{-0.00026}$	(−0.6 σ)	$\chi^2_{lensing}$	8.77	9.6 (ν : 1.2)	
z_{re}	6.98	$6.8^{+1.7}_{-1.8}$	(−0.8 σ)	$100\theta_{eq}$	0.8156	$0.816^{+0.017}_{-0.016}$	(+0.6 σ)	χ^2_{small}	395.72	396.8 (ν : 1.2) (−0.1 σ)	
$10^9 A_s$	2.086	$2.082^{+0.064}_{-0.065}$	(−0.3 σ)	$100\theta_{s,eq}$	0.4505	$0.4506^{+0.0084}_{-0.0081}$	(+0.5 σ)	$\chi^2_{CamSpec}$	1888.2	1891.6 (ν : 3.8)	
$10^9 A_s e^{-2\tau}$	1.8953	$1.896^{+0.029}_{-0.029}$	(+0.8 σ)	$H(0.15)$	72.54	$72.6^{+1.8}_{-1.8}$	(+0.4 σ)	χ^2_{prior}	10.38	12.2 (ν : 2.1) (+1.3 σ)	
D_{40}	1243	1241^{+53}_{-51}	(+0.5 σ)	$D_M(0.15)$	644.6	644^{+18}_{-17}	(−0.4 σ)	χ^2_{CMB}	2292.7	2298.0 (ν : 5.4) (+201.4 σ)	

Best-fit $\chi^2_{eff} = 2303.11$; $\bar{\chi}^2_{eff} = 2310.16$; $R - 1 = 0.00957$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.77 small_100x143_offlike5_EE_Aplanck_B: 395.72 CamSpec like_10.7HM_1400_unified: 1888.23

2.65 base_plikHM_TT_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02250	$0.02238^{+0.00054}_{-0.00052}$ (+1.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6370	$0.630^{+0.031}_{-0.032}$ (+1.6 σ)	$H(0.15)$	73.68	$73.3^{+2.0}_{-1.9}$ (+1.4 σ)
$\Omega_c h^2$	0.11728	$0.1181^{+0.0050}_{-0.0049}$ (−1.2 σ)	$\sigma_8/h^{0.5}$	1.041	$1.028^{+0.049}_{-0.052}$ (+2.2 σ)	$D_M(0.15)$	633.5	637^{+19}_{-19} (−1.3 σ)
$100\theta_{MC}$	1.04124	$1.0411^{+0.0010}_{-0.0010}$ (+0.8 σ)	$r_{drag}h$	101.20	$100.6^{+4.0}_{-3.9}$ (+1.3 σ)	$H(0.38)$	83.57	$83.3^{+1.5}_{-1.4}$ (+1.4 σ)
τ	0.126	$0.108^{+0.062}_{-0.065}$ (+6.9 σ)	$\langle d^2 \rangle^{1/2}$	2.564	$2.54^{+0.11}_{-0.12}$ (+2.3 σ)	$D_M(0.38)$	1513.9	1521^{+38}_{-38} (−1.4 σ)
$\ln(10^{10} A_s)$	3.180	$3.15^{+0.12}_{-0.12}$ (+6.4 σ)	z_{re}	13.8	$12.3^{+4.9}_{-5.4}$ (+5.8 σ)	$H(0.51)$	90.16	$90.0^{+1.2}_{-1.1}$ (+1.4 σ)
n_s	0.9756	$0.971^{+0.015}_{-0.015}$ (+1.5 σ)	$10^9 A_s$	2.405	$2.33^{+0.28}_{-0.28}$ (+6.9 σ)	$D_M(0.51)$	1963.1	1971^{+45}_{-45} (−1.4 σ)
y_{cal}	1.00013	$1.0003^{+0.0050}_{-0.0049}$ (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8693	$1.872^{+0.029}_{-0.029}$ (−0.9 σ)	$H(0.61)$	95.68	$95.51^{+0.96}_{-0.88}$ (+1.4 σ)
A_{217}^{CIB}	42.8	46^{+10}_{-10} (−0.3 σ)	D_{40}	1238.9	1240^{+32}_{-31} (+0.4 σ)	$D_M(0.61)$	2285.9	2295^{+48}_{-49} (−1.4 σ)
$\xi^{tSZ \times CIB}$	0.99	—	D_{220}	5715	5718^{+83}_{-81} (+0.1 σ)	$H(2.33)$	234.92	$235.3^{+2.9}_{-2.9}$ (−1.1 σ)
A_{143}^{tSZ}	6.86	$5.5^{+3.7}_{-3.8}$ (+0.2 σ)	D_{810}	2531.7	2531^{+28}_{-27} (−0.4 σ)	$D_M(2.33)$	5747.6	5755^{+40}_{-42} (−1.4 σ)
A_{100}^{PS}	240	254^{+60}_{-60} (−0.3 σ)	D_{1420}	817.1	815^{+10}_{-10} (+0.2 σ)	$f\sigma_8(0.15)$	0.4770	$0.473^{+0.026}_{-0.026}$ (+0.8 σ)
A_{143}^{PS}	50.5	44^{+20}_{-20} (−0.6 σ)	D_{2000}	232.59	$231.4^{+4.1}_{-4.1}$ (+1.0 σ)	$\sigma_8(0.15)$	0.7973	$0.785^{+0.042}_{-0.044}$ (+4.8 σ)
$A_{143 \times 217}^{PS}$	58.0	42^{+20}_{-20} (−0.2 σ)	$n_{s,0.002}$	0.9756	$0.971^{+0.015}_{-0.015}$ (+1.5 σ)	$f\sigma_8(0.38)$	0.4994	$0.494^{+0.024}_{-0.025}$ (+1.5 σ)
A_{217}^{PS}	123.8	115^{+20}_{-20} (+0.0 σ)	Y_P	0.245443	$0.24540^{+0.00022}_{-0.00023}$ (+1.1 σ)	$\sigma_8(0.38)$	0.7082	$0.697^{+0.039}_{-0.040}$ (+5.6 σ)
A^{kSZ}	0.00	< 7.59 (−0.3 σ)	Y_P^{BBN}	0.246770	$0.24672^{+0.00022}_{-0.00023}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4995	$0.494^{+0.024}_{-0.025}$ (+2.0 σ)
A_{100}^{dustTT}	8.74	$8.8^{+3.6}_{-3.6}$ (−0.1 σ)	$10^5 D/H$	2.563	$2.584^{+0.099}_{-0.099}$ (−1.2 σ)	$\sigma_8(0.51)$	0.6634	$0.652^{+0.037}_{-0.038}$ (+5.9 σ)
A_{143}^{dustTT}	10.66	$10.5^{+3.5}_{-3.5}$ (−0.1 σ)	Age/Gyr	13.764	$13.781^{+0.089}_{-0.091}$ (−1.3 σ)	$f\sigma_8(0.61)$	0.4953	$0.489^{+0.024}_{-0.025}$ (+2.4 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.1^{+6.4}_{-6.5}$ (−0.1 σ)	z_*	1089.53	$1089.7^{+1.0}_{-0.99}$ (−1.4 σ)	$\sigma_8(0.61)$	0.6316	$0.621^{+0.036}_{-0.037}$ (+6.1 σ)
A_{217}^{dustTT}	96.2	94^{+10}_{-10} (+0.1 σ)	r_*	145.04	$144.9^{+1.1}_{-1.1}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3190	$0.313^{+0.019}_{-0.019}$ (+6.4 σ)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_*$	1.04141	$1.04131^{+0.00099}_{-0.00099}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3295	$0.323^{+0.020}_{-0.021}$ (+6.6 σ)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.927	$13.918^{+0.097}_{-0.098}$ (+0.9 σ)	f_{2000}^{143}	26.1	28^{+7}_{-7} (−1.0 σ)
H_0	68.53	$68.1^{+2.3}_{-2.2}$ (+1.4 σ)	z_{drag}	1060.05	$1059.8^{+1.1}_{-1.0}$ (+1.0 σ)	$f_{2000}^{143 \times 217}$	30.11	31^{+5}_{-5} (−1.2 σ)
Ω_Λ	0.7010	$0.696^{+0.029}_{-0.031}$ (+1.3 σ)	r_{drag}	147.67	$147.6^{+1.0}_{-1.0}$ (+0.8 σ)	f_{2000}^{217}	104.67	$106.1^{+4.4}_{-4.4}$ (−1.1 σ)
Ω_m	0.2990	$0.304^{+0.031}_{-0.029}$ (−1.3 σ)	k_D	0.14035	$0.1403^{+0.0010}_{-0.0010}$ (−0.4 σ)	χ_{lowl}^2	24.89	25.0 (ν : 1.5) (+0.9 σ)
$\Omega_m h^2$	0.14042	$0.1411^{+0.0047}_{-0.0046}$ (−1.2 σ)	$100\theta_D$	0.16072	$0.16084^{+0.00057}_{-0.00057}$ (−0.9 σ)	χ_{plik}^2	753.5	768.0 (ν : 16.1) (−0.6 σ)
$\Omega_m h^3$	0.09623	$0.09610^{+0.00094}_{-0.00093}$ (+0.5 σ)	z_{eq}	3340	3356^{+110}_{-110} (−1.2 σ)	χ_{prior}^2	1.1	7.2 (ν : 6.5) (−0.0 σ)
σ_8	0.8614	$0.849^{+0.044}_{-0.046}$ (+4.1 σ)	k_{eq}	0.010195	$0.01024^{+0.00034}_{-0.00033}$ (−1.2 σ)	χ_{CMB}^2	778.4	793.0 (ν : 15.1) (−72.7 σ)
S_8	0.860	$0.854^{+0.050}_{-0.050}$ (+0.6 σ)	$100\theta_{eq}$	0.8251	$0.822^{+0.022}_{-0.021}$ (+1.2 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4710	$0.468^{+0.027}_{-0.027}$ (+0.6 σ)	$100\theta_{s,eq}$	0.4555	$0.454^{+0.011}_{-0.011}$ (+1.2 σ)			

Best-fit $\chi_{eff}^2 = 779.48$; $\bar{\chi}_{eff}^2 = 800.20$; $R - 1 = 0.00744$

χ_{eff}^2 : CMB - commander_dx12_v3_2_29: 24.89 plik_rd12_HM_v22_TT: 753.54

2.66 base_plikHM_TTTEEE_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022555	$0.02251^{+0.00032}_{-0.00032}$ (+1.8 σ)	$\Omega_{\text{m}}h^3$	0.09646	$0.09641^{+0.00057}_{-0.00059}$ (+1.1 σ)	$100\theta_{\text{eq}}$	0.8205	$0.820^{+0.013}_{-0.013}$ (+1.0 σ)
$\Omega_{\text{c}}h^2$	0.11829	$0.1185^{+0.0030}_{-0.0030}$ (−1.0 σ)	σ_8	0.8551	$0.848^{+0.035}_{-0.037}$ (+4.1 σ)	$100\theta_{\text{s,eq}}$	0.4530	$0.4526^{+0.0067}_{-0.0065}$ (+0.9 σ)
$100\theta_{\text{MC}}$	1.04110	$1.04108^{+0.00063}_{-0.00064}$ (+0.7 σ)	S_8	0.8614	$0.857^{+0.036}_{-0.037}$ (+0.7 σ)	$H(0.15)$	73.38	$73.3^{+1.2}_{-1.2}$ (+1.3 σ)
τ	0.1141	$0.106^{+0.046}_{-0.049}$ (+6.7 σ)	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4718	$0.469^{+0.020}_{-0.020}$ (+0.7 σ)	$D_{\text{M}}(0.15)$	636.4	637^{+12}_{-12} (−1.3 σ)
$\ln(10^{10}A_{\text{s}})$	3.160	$3.143^{+0.089}_{-0.095}$ (+6.2 σ)	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6352	$0.631^{+0.024}_{-0.026}$ (+1.7 σ)	$H(0.38)$	83.38	$83.31^{+0.88}_{-0.85}$ (+1.4 σ)
n_{s}	0.9730	$0.971^{+0.010}_{-0.010}$ (+1.4 σ)	$\sigma_8/h^{0.5}$	1.0356	$1.028^{+0.040}_{-0.042}$ (+2.2 σ)	$D_{\text{M}}(0.38)$	1519.6	1522^{+23}_{-23} (−1.3 σ)
y_{cal}	1.00020	$1.0003^{+0.0048}_{-0.0048}$ (−0.1 σ)	$r_{\text{drag}}h$	100.44	$100.3^{+2.4}_{-2.3}$ (+1.1 σ)	$H(0.51)$	90.03	$89.97^{+0.70}_{-0.67}$ (+1.5 σ)
A_{217}^{CIB}	42.5	45^{+10}_{-10} (−0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.554	$2.541^{+0.094}_{-0.10}$ (+2.3 σ)	$D_{\text{M}}(0.51)$	1969.6	1972^{+27}_{-27} (−1.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	1.00	—	z_{re}	12.90	$12.2^{+3.8}_{-4.0}$ (+5.7 σ)	$H(0.61)$	95.60	$95.55^{+0.56}_{-0.54}$ (+1.5 σ)
A_{143}^{tSZ}	6.85	$5.7^{+3.6}_{-3.6}$ (+0.3 σ)	$10^9 A_{\text{s}}$	2.356	$2.32^{+0.21}_{-0.21}$ (+6.6 σ)	$D_{\text{M}}(0.61)$	2292.8	2295^{+29}_{-30} (−1.3 σ)
A_{100}^{PS}	239	251^{+50}_{-50} (−0.4 σ)	$10^9 A_{\text{s}}e^{-2\tau}$	1.8754	$1.875^{+0.024}_{-0.024}$ (−0.7 σ)	$H(2.33)$	235.64	$235.7^{+1.8}_{-1.8}$ (−0.8 σ)
A_{143}^{PS}	49.7	43^{+20}_{-20} (−0.8 σ)	D_{40}	1239.7	1241^{+27}_{-27} (+0.5 σ)	$D_{\text{M}}(2.33)$	5749.3	5752^{+24}_{-24} (−1.6 σ)
$A_{143 \times 217}^{\text{PS}}$	57.7	42^{+20}_{-20} (−0.2 σ)	D_{220}	5728	5731^{+75}_{-75} (+0.4 σ)	$f\sigma_8(0.15)$	0.4773	$0.474^{+0.019}_{-0.020}$ (+0.9 σ)
A_{217}^{PS}	124.3	116^{+20}_{-20} (+0.1 σ)	D_{810}	2535.6	2534^{+27}_{-26} (−0.2 σ)	$\sigma_8(0.15)$	0.7909	$0.785^{+0.033}_{-0.035}$ (+4.7 σ)
A^{kSZ}	0.00	< 7.01 (−0.4 σ)	D_{1420}	818.3	$816.7^{+9.1}_{-9.1}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4983	$0.495^{+0.019}_{-0.020}$ (+1.6 σ)
A_{100}^{dustTT}	8.68	$8.8^{+3.7}_{-3.6}$ (−0.1 σ)	D_{2000}	232.84	$232.0^{+3.2}_{-3.3}$ (+1.4 σ)	$\sigma_8(0.38)$	0.7019	$0.696^{+0.030}_{-0.031}$ (+5.5 σ)
A_{143}^{dustTT}	10.72	$10.6^{+3.5}_{-3.5}$ (−0.0 σ)	$n_{\text{s},0.002}$	0.9730	$0.971^{+0.010}_{-0.010}$ (+1.4 σ)	$f\sigma_8(0.51)$	0.4977	$0.494^{+0.019}_{-0.020}$ (+2.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.2^{+6.4}_{-6.4}$ (−0.0 σ)	Y_{P}	0.245464	$0.24545^{+0.00012}_{-0.00012}$ (+1.7 σ)	$\sigma_8(0.51)$	0.6572	$0.652^{+0.029}_{-0.030}$ (+5.8 σ)
A_{217}^{dustTT}	95.5	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246791	$0.24678^{+0.00012}_{-0.00012}$ (+1.7 σ)	$f\sigma_8(0.61)$	0.4930	$0.489^{+0.019}_{-0.020}$ (+2.5 σ)
A_{100}^{dustTE}	0.113	$0.113^{+0.075}_{-0.075}$	10^5D/H	2.552	$2.560^{+0.059}_{-0.057}$ (−1.8 σ)	$\sigma_8(0.61)$	0.6255	$0.620^{+0.028}_{-0.029}$ (+5.9 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.134^{+0.058}_{-0.057}$	Age/Gyr	13.766	$13.772^{+0.054}_{-0.054}$ (−1.6 σ)	$f\sigma_8(2.33)$	0.3157	$0.313^{+0.014}_{-0.015}$ (+6.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.477	$0.48^{+0.17}_{-0.16}$	z_*	1089.54	$1089.61^{+0.61}_{-0.59}$ (−1.7 σ)	$\sigma_8(2.33)$	0.3258	$0.323^{+0.015}_{-0.016}$ (+6.4 σ)
A_{143}^{dustTE}	0.221	$0.22^{+0.10}_{-0.10}$	r_*	144.73	$144.71^{+0.65}_{-0.65}$ (+0.5 σ)	f_{2000}^{143}	25.7	27^{+6}_{-6} (−1.4 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	1.04127	$1.04125^{+0.00063}_{-0.00063}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	29.78	30^{+4}_{-4} (−1.6 σ)
A_{217}^{dustTE}	2.06	$2.07^{+0.52}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.900	$13.897^{+0.060}_{-0.060}$ (+0.5 σ)	f_{2000}^{217}	104.53	$105.4^{+3.8}_{-3.7}$ (−1.4 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.24	$1060.16^{+0.61}_{-0.61}$ (+1.7 σ)	χ_{lowl}^2	24.77	25.0 (ν : 1.0) (+0.8 σ)
c_{217}	0.99812	$0.9981^{+0.0012}_{-0.0012}$ (−0.2 σ)	r_{drag}	147.34	$147.33^{+0.63}_{-0.63}$ (+0.2 σ)	χ_{plik}^2	2337.6	2354.2 (ν : 17.3) (+290.4 σ)
H_0	68.17	$68.1^{+1.4}_{-1.4}$ (+1.3 σ)	k_{D}	0.14075	$0.14073^{+0.00065}_{-0.00064}$ (+0.3 σ)	χ_{prior}^2	1.3	11.3 (ν : 10.0) (+1.1 σ)
Ω_{Λ}	0.6955	$0.694^{+0.018}_{-0.018}$ (+1.1 σ)	$100\theta_{\text{D}}$	0.160589	$0.16064^{+0.00036}_{-0.00035}$ (−1.6 σ)	χ_{CMB}^2	2362.3	2379.2 (ν : 16.7) (+216.1 σ)
Ω_{m}	0.3045	$0.306^{+0.018}_{-0.018}$ (−1.1 σ)	z_{eq}	3366	3370^{+67}_{-67} (−0.9 σ)			
$\Omega_{\text{m}}h^2$	0.14149	$0.1417^{+0.0028}_{-0.0028}$ (−0.9 σ)	k_{eq}	0.010273	$0.01029^{+0.00020}_{-0.00021}$ (−0.9 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2363.64$; $\bar{\chi}_{\text{eff}}^2 = 2390.54$; $R - 1 = 0.00817$

χ_{eff}^2 : CMB - commander_dx12.v3.2.29: 24.77 plik_rd12_HM.v22b_TTTEEE: 2337.58

2.67 base_CamSpecHM_TT_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02253	$0.02242^{+0.00054}_{-0.00054}$ (+1.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4693	$0.468^{+0.027}_{-0.027}$ (+0.6 σ)	$100\theta_{s,eq}$	0.4563	$0.455^{+0.011}_{-0.011}$ (+1.4 σ)
$\Omega_c h^2$	0.1169	$0.1177^{+0.0052}_{-0.0050}$ (−1.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6359	$0.631^{+0.030}_{-0.032}$ (+1.7 σ)	$H(0.15)$	73.84	$73.5^{+2.1}_{-2.0}$ (+1.6 σ)
$100\theta_{MC}$	1.04132	$1.0412^{+0.0010}_{-0.0010}$ (+1.0 σ)	$\sigma_8/h^{0.5}$	1.039	$1.030^{+0.049}_{-0.052}$ (+2.3 σ)	$D_M(0.15)$	631.9	635^{+20}_{-19} (−1.5 σ)
τ	0.128	$0.113^{+0.063}_{-0.069}$ (+7.6 σ)	$r_{drag}h$	101.52	$100.9^{+4.1}_{-4.1}$ (+1.5 σ)	$H(0.38)$	83.69	$83.4^{+1.5}_{-1.5}$ (+1.6 σ)
$\ln(10^{10}A_s)$	3.183	$3.15^{+0.12}_{-0.13}$ (+6.9 σ)	$\langle d^2 \rangle^{1/2}$	2.560	$2.54^{+0.11}_{-0.12}$ (+2.3 σ)	$D_M(0.38)$	1510.7	1518^{+40}_{-39} (−1.6 σ)
n_s	0.9775	$0.973^{+0.016}_{-0.016}$ (+1.9 σ)	z_{re}	14.0	$12.7^{+4.9}_{-5.4}$ (+6.3 σ)	$H(0.51)$	90.26	$90.1^{+1.2}_{-1.2}$ (+1.7 σ)
y_{cal}	1.00018	$1.0003^{+0.0048}_{-0.0048}$ (−0.0 σ)	$10^9 A_s$	2.411	$2.35^{+0.29}_{-0.29}$ (+7.4 σ)	$D_M(0.51)$	1959.3	1967^{+47}_{-46} (−1.6 σ)
A_{100}^{PS}	219	233^{+50}_{-50} (−1.1 σ)	$10^9 A_s e^{-2\tau}$	1.8656	$1.868^{+0.030}_{-0.030}$ (−1.2 σ)	$H(0.61)$	95.76	$95.60^{+0.99}_{-0.92}$ (+1.7 σ)
A_{143}^{PS}	45.0	36^{+20}_{-20} (−1.7 σ)	D_{40}	1234.6	1237^{+32}_{-31} (+0.2 σ)	$D_M(0.61)$	2282	2291^{+51}_{-50} (−1.6 σ)
A_{217}^{PS}	109.7	104^{+30}_{-30} (−1.1 σ)	D_{220}	5706	5708^{+80}_{-81} (−0.1 σ)	$H(2.33)$	234.71	$235.1^{+3.0}_{-2.9}$ (−1.2 σ)
A_{217}^{CIB}	37.6	38^{+10}_{-10} (−1.5 σ)	D_{810}	2529.3	2528^{+27}_{-27} (−0.6 σ)	$D_M(2.33)$	5744.2	5752^{+41}_{-43} (−1.6 σ)
A_{143}^{tSZ}	6.20	< 7.57 (−0.5 σ)	D_{1420}	817.0	815^{+10}_{-10} (+0.1 σ)	$f\sigma_8(0.15)$	0.4754	$0.473^{+0.026}_{-0.026}$ (+0.8 σ)
$r_{143 \times 217}^{PS}$	0.807	$0.67^{+0.26}_{-0.27}$	D_{2000}	232.68	$231.6^{+4.2}_{-4.3}$ (+1.1 σ)	$\sigma_8(0.15)$	0.7978	$0.788^{+0.042}_{-0.045}$ (+5.1 σ)
$r_{143 \times 217}^{CIB}$	0.70	—	$n_{s,0.002}$	0.9775	$0.973^{+0.016}_{-0.016}$ (+1.9 σ)	$f\sigma_8(0.38)$	0.4984	$0.495^{+0.024}_{-0.025}$ (+1.6 σ)
$\xi^{tSZ \times CIB}$	0.96	—	Y_P	0.245453	$0.24541^{+0.00022}_{-0.00023}$ (+1.3 σ)	$\sigma_8(0.38)$	0.7089	$0.700^{+0.039}_{-0.042}$ (+6.0 σ)
A^{kSZ}	0.1	—	Y_P^{BBN}	0.246780	$0.24674^{+0.00022}_{-0.00023}$ (+1.3 σ)	$f\sigma_8(0.51)$	0.4988	$0.495^{+0.024}_{-0.025}$ (+2.1 σ)
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.39}$	$10^5 D/H$	2.557	$2.58^{+0.10}_{-0.098}$ (−1.4 σ)	$\sigma_8(0.51)$	0.6642	$0.655^{+0.037}_{-0.040}$ (+6.4 σ)
A_{143}^{dust}	0.962	$0.96^{+0.35}_{-0.35}$	Age/Gyr	13.756	$13.773^{+0.092}_{-0.093}$ (−1.6 σ)	$f\sigma_8(0.61)$	0.4948	$0.490^{+0.024}_{-0.025}$ (+2.6 σ)
A_{217}^{dust}	0.978	$0.98^{+0.20}_{-0.20}$	z_*	1089.46	$1089.7^{+1.0}_{-1.0}$ (−1.6 σ)	$\sigma_8(0.61)$	0.6324	$0.624^{+0.036}_{-0.039}$ (+6.6 σ)
$A_{143 \times 217}^{dust}$	1.030	$1.02^{+0.32}_{-0.32}$	r_*	145.12	$145.0^{+1.1}_{-1.1}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3195	$0.315^{+0.019}_{-0.020}$ (+7.0 σ)
c_{100}	0.99783	$0.9975^{+0.0021}_{-0.0021}$ (−3.5 σ)	$100\theta_*$	1.04150	$1.0414^{+0.0010}_{-0.0010}$ (+0.9 σ)	$\sigma_8(2.33)$	0.3302	$0.325^{+0.021}_{-0.022}$ (+7.2 σ)
c_{217}	1.00070	$1.0009^{+0.0031}_{-0.0031}$ (+4.3 σ)	$D_M(z_*)/\text{Gpc}$	13.934	$13.922^{+0.098}_{-0.10}$ (+1.0 σ)	f_{2000}^{143}	25.9	27^{+7}_{-7} (−1.3 σ)
H_0	68.72	$68.3^{+2.4}_{-2.4}$ (+1.6 σ)	z_{drag}	1060.09	$1059.9^{+1.0}_{-1.0}$ (+1.1 σ)	f_{2000}^{217}	103.94	$105.3^{+4.7}_{-4.7}$ (−1.5 σ)
Ω_Λ	0.7034	$0.698^{+0.029}_{-0.032}$ (+1.4 σ)	r_{drag}	147.74	$147.6^{+1.0}_{-1.1}$ (+0.9 σ)	$f_{2000}^{143 \times 217}$	29.3	30^{+5}_{-5} (−1.6 σ)
Ω_m	0.2966	$0.302^{+0.032}_{-0.029}$ (−1.4 σ)	k_D	0.14030	$0.1403^{+0.0011}_{-0.0010}$ (−0.4 σ)	χ_{lowl}^2	24.50	$24.8 (\nu: 1.4)$ (+0.7 σ)
$\Omega_m h^2$	0.14008	$0.1408^{+0.0048}_{-0.0046}$ (−1.3 σ)	$100\theta_D$	0.16071	$0.16081^{+0.00059}_{-0.00057}$ (−1.0 σ)	$\chi_{CamSpec}^2$	7046.4	$7060.1 (\nu: 15.0)$
$\Omega_m h^3$	0.09626	$0.09616^{+0.00097}_{-0.00092}$ (+0.6 σ)	z_{eq}	3332	3349^{+110}_{-110} (−1.3 σ)	χ_{prior}^2	1.4	$7.4 (\nu: 5.6)$ (+0.0 σ)
σ_8	0.8616	$0.851^{+0.044}_{-0.048}$ (+4.4 σ)	k_{eq}	0.010170	$0.01022^{+0.00035}_{-0.00034}$ (−1.3 σ)	χ_{CMB}^2	7070.9	$7084.8 (\nu: 14.5)$ (+1073.1 σ)
S_8	0.8568	$0.854^{+0.050}_{-0.049}$ (+0.6 σ)	$100\theta_{eq}$	0.8268	$0.824^{+0.022}_{-0.022}$ (+1.4 σ)			

Best-fit $\chi_{eff}^2 = 7072.29$; $\bar{\chi}_{eff}^2 = 7092.24$; $R - 1 = 0.00797$

χ_{eff}^2 : CMB - commander_dx12_v3_2_29: 24.50 CamSpec like_10.7HM: 7046.38

2.68 base_CamSpecHM_TTTEEE_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022467	$0.02243^{+0.00038}_{-0.00035}$ (+1.4 σ)	S_8	0.8498	$0.846^{+0.041}_{-0.041}$ (+0.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.4533	$0.4530^{+0.0068}_{-0.0067}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.11820	$0.1184^{+0.0031}_{-0.0030}$ (−1.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4655	$0.463^{+0.022}_{-0.022}$ (+0.2 σ)	$H(0.15)$	73.32	$73.2^{+1.2}_{-1.2}$ (+1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04104	$1.04102^{+0.00064}_{-0.00066}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6265	$0.623^{+0.029}_{-0.029}$ (+1.0 σ)	$D_{\mathrm{M}}(0.15)$	637.0	638^{+12}_{-12} (−1.2 σ)
τ	0.101	$0.094^{+0.055}_{-0.057}$ (+5.2 σ)	$\sigma_8/h^{0.5}$	1.0219	$1.015^{+0.047}_{-0.048}$ (+1.4 σ)	$H(0.38)$	83.31	$83.25^{+0.93}_{-0.88}$ (+1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.132	$3.12^{+0.11}_{-0.11}$ (+4.7 σ)	$r_{\mathrm{drag}}h$	100.44	$100.3^{+2.5}_{-2.4}$ (+1.1 σ)	$D_{\mathrm{M}}(0.38)$	1520.8	1523^{+24}_{-24} (−1.2 σ)
n_{s}	0.9723	$0.971^{+0.011}_{-0.010}$ (+1.4 σ)	$\langle d^2 \rangle^{1/2}$	2.521	$2.51^{+0.11}_{-0.11}$ (+1.4 σ)	$H(0.51)$	89.96	$89.91^{+0.74}_{-0.70}$ (+1.3 σ)
y_{cal}	1.00023	$1.0002^{+0.0049}_{-0.0047}$ (−0.1 σ)	z_{re}	11.89	$11.2^{+4.6}_{-5.0}$ (+4.4 σ)	$D_{\mathrm{M}}(0.51)$	1971.2	1973^{+28}_{-29} (−1.3 σ)
A_{100}^{PS}	221.6	234^{+50}_{-50} (−1.1 σ)	$10^9 A_{\mathrm{s}}$	2.293	$2.26^{+0.25}_{-0.24}$ (+5.0 σ)	$H(0.61)$	95.53	$95.48^{+0.60}_{-0.56}$ (+1.4 σ)
A_{143}^{PS}	48.3	37^{+20}_{-20} (−1.6 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8726	$1.872^{+0.024}_{-0.023}$ (−0.9 σ)	$D_{\mathrm{M}}(0.61)$	2294.6	2297^{+30}_{-31} (−1.3 σ)
A_{217}^{PS}	108.5	104^{+30}_{-30} (−1.0 σ)	D_{40}	1231.7	1233^{+28}_{-26} (−0.1 σ)	$H(2.33)$	235.48	$235.6^{+1.8}_{-1.8}$ (−0.9 σ)
A_{217}^{CIB}	38.8	38^{+10}_{-10} (−1.5 σ)	D_{220}	5716	5716^{+74}_{-73} (+0.1 σ)	$D_{\mathrm{M}}(2.33)$	5753.6	5756^{+26}_{-27} (−1.3 σ)
A_{143}^{tSZ}	6.38	< 7.53 (−0.5 σ)	D_{810}	2532.6	2531^{+27}_{-26} (−0.4 σ)	$f\sigma_8(0.15)$	0.4708	$0.468^{+0.022}_{-0.022}$ (+0.4 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.768	$0.67^{+0.26}_{-0.26}$	D_{1420}	816.9	$815.5^{+9.4}_{-9.2}$ (+0.2 σ)	$\sigma_8(0.15)$	0.7800	$0.774^{+0.039}_{-0.040}$ (+3.4 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.84	—	D_{2000}	231.94	$231.3^{+3.4}_{-3.4}$ (+1.0 σ)	$f\sigma_8(0.38)$	0.4915	$0.489^{+0.022}_{-0.023}$ (+0.9 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.96	—	$n_{\mathrm{s},0.002}$	0.9723	$0.971^{+0.011}_{-0.010}$ (+1.4 σ)	$\sigma_8(0.38)$	0.6922	$0.687^{+0.036}_{-0.036}$ (+4.0 σ)
A^{kSZ}	0.0	—	Y_{P}	0.245433	$0.24542^{+0.00014}_{-0.00014}$ (+1.3 σ)	$f\sigma_8(0.51)$	0.4909	$0.488^{+0.023}_{-0.023}$ (+1.3 σ)
A_{100}^{dust}	1.000	$1.00^{+0.39}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246759	$0.24674^{+0.00014}_{-0.00014}$ (+1.3 σ)	$\sigma_8(0.51)$	0.6481	$0.643^{+0.034}_{-0.034}$ (+4.2 σ)
A_{143}^{dust}	0.960	$0.95^{+0.34}_{-0.35}$	$10^5\mathrm{D}/\mathrm{H}$	2.568	$2.575^{+0.066}_{-0.067}$ (−1.4 σ)	$f\sigma_8(0.61)$	0.4863	$0.483^{+0.022}_{-0.023}$ (+1.6 σ)
A_{217}^{dust}	0.993	$0.98^{+0.20}_{-0.20}$	Age/Gyr	13.776	$13.781^{+0.057}_{-0.059}$ (−1.3 σ)	$\sigma_8(0.61)$	0.6169	$0.612^{+0.033}_{-0.033}$ (+4.4 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.008	$1.01^{+0.32}_{-0.32}$	z_*	1089.64	$1089.70^{+0.64}_{-0.66}$ (−1.5 σ)	$f\sigma_8(2.33)$	0.3114	$0.309^{+0.017}_{-0.017}$ (+4.7 σ)
c_{100}	0.99782	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_*	144.82	$144.81^{+0.66}_{-0.66}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3213	$0.319^{+0.018}_{-0.018}$ (+4.8 σ)
c_{217}	1.00104	$1.0009^{+0.0032}_{-0.0031}$ (+4.3 σ)	$100\theta_*$	1.04122	$1.04120^{+0.00063}_{-0.00064}$ (+0.5 σ)	f_{2000}^{143}	27.4	28^{+6}_{-6} (−1.2 σ)
c_{TE}	0.9932	$0.994^{+0.011}_{-0.010}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.909	$13.908^{+0.061}_{-0.061}$ (+0.7 σ)	f_{2000}^{217}	104.79	$105.5^{+4.2}_{-4.2}$ (−1.4 σ)
c_{EE}	0.9906	$0.9907^{+0.0097}_{-0.0097}$	z_{drag}	1060.05	$1059.96^{+0.74}_{-0.67}$ (+1.2 σ)	$f_{2000}^{143\times 217}$	30.07	31^{+4}_{-5} (−1.5 σ)
H_0	68.11	$68.0^{+1.4}_{-1.4}$ (+1.2 σ)	r_{drag}	147.46	$147.46^{+0.65}_{-0.63}$ (+0.5 σ)	χ_{lowl}^2	23.92	24.1 (ν : 0.9) (+0.2 σ)
Ω_{Λ}	0.6954	$0.694^{+0.018}_{-0.019}$ (+1.1 σ)	k_{D}	0.14055	$0.14053^{+0.00066}_{-0.00068}$ (−0.0 σ)	$\chi_{\mathrm{CamSpec}}^2$	11496.2	11512.2 (ν : 16.0)
Ω_{m}	0.3046	$0.306^{+0.019}_{-0.018}$ (−1.1 σ)	$100\theta_{\mathrm{D}}$	0.160702	$0.16075^{+0.00040}_{-0.00041}$ (−1.2 σ)	χ_{prior}^2	1.9	7.8 (ν : 5.7) (+0.1 σ)
$\Omega_{\mathrm{m}}h^2$	0.14131	$0.1415^{+0.0029}_{-0.0028}$ (−1.0 σ)	z_{eq}	3361	3365^{+69}_{-68} (−1.0 σ)	χ_{CMB}^2	11520.1	11536.3 (ν : 15.7) (+1883.7 σ)
$\Omega_{\mathrm{m}}h^3$	0.09625	$0.09620^{+0.00062}_{-0.00063}$ (+0.7 σ)	k_{eq}	0.010259	$0.01027^{+0.00021}_{-0.00021}$ (−1.0 σ)			
σ_8	0.8434	$0.837^{+0.042}_{-0.042}$ (+2.9 σ)	$100\theta_{\mathrm{eq}}$	0.8210	$0.820^{+0.013}_{-0.013}$ (+1.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11522.05$; $\bar{\chi}_{\mathrm{eff}}^2 = 11544.10$; $R - 1 = 0.00836$

χ_{eff}^2 : CMB - commander_dx12.v3.2.29: 23.92 CamSpec like_10.7HM_1400_unified: 11496.23

2.69 base_plikHM_TT_lowl_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02240	$0.02232^{+0.00053}_{-0.00051}$ (+0.9 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6118	$0.611^{+0.015}_{-0.016}$ (+0.0 σ)	$H(0.15)$	73.60	$73.4^{+2.0}_{-2.0}$ (+1.4 σ)
$\Omega_c h^2$	0.1172	$0.1178^{+0.0051}_{-0.0049}$ (−1.4 σ)	$\sigma_8/h^{0.5}$	0.9997	$0.998^{+0.024}_{-0.024}$ (+0.3 σ)	$D_M(0.15)$	634.2	637^{+20}_{-19} (−1.4 σ)
$100\theta_{MC}$	1.04117	$1.0411^{+0.0010}_{-0.00098}$ (+0.7 σ)	$r_{drag}h$	101.17	$100.7^{+4.1}_{-4.0}$ (+1.4 σ)	$H(0.38)$	83.49	$83.3^{+1.5}_{-1.4}$ (+1.4 σ)
τ	0.0862	$0.080^{+0.048}_{-0.048}$ (+3.5 σ)	$\langle d^2 \rangle^{1/2}$	2.469	$2.468^{+0.057}_{-0.060}$ (+0.4 σ)	$D_M(0.38)$	1515.4	1521^{+39}_{-39} (−1.4 σ)
$\ln(10^{10} A_s)$	3.100	$3.089^{+0.086}_{-0.087}$ (+3.0 σ)	z_{re}	10.61	$9.98^{+4.1}_{-4.4}$ (+3.0 σ)	$H(0.51)$	90.08	$89.9^{+1.2}_{-1.1}$ (+1.4 σ)
n_s	0.9733	$0.970^{+0.015}_{-0.015}$ (+1.3 σ)	$10^9 A_s$	2.220	$2.20^{+0.20}_{-0.18}$ (+3.1 σ)	$D_M(0.51)$	1965.0	1971^{+46}_{-46} (−1.4 σ)
y_{cal}	1.00008	$1.0002^{+0.0049}_{-0.0050}$ (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8685	$1.870^{+0.030}_{-0.030}$ (−1.0 σ)	$H(0.61)$	95.60	$95.49^{+0.98}_{-0.89}$ (+1.4 σ)
A_{217}^{CIB}	45.6	47^{+10}_{-10} (−0.1 σ)	D_{40}	1221.5	1227^{+26}_{-25} (−0.4 σ)	$D_M(0.61)$	2288	2295^{+50}_{-50} (−1.4 σ)
$\xi^{tSZ \times CIB}$	0.73	—	D_{220}	5716	5718^{+81}_{-82} (+0.1 σ)	$H(2.33)$	234.79	$235.1^{+3.0}_{-2.9}$ (−1.3 σ)
A_{143}^{tSZ}	6.92	$5.3^{+3.7}_{-4.0}$ (+0.1 σ)	D_{810}	2532.4	2531^{+28}_{-28} (−0.4 σ)	$D_M(2.33)$	5752.2	5758^{+40}_{-43} (−1.2 σ)
A_{100}^{PS}	246	260^{+60}_{-60} (−0.1 σ)	D_{1420}	816.7	815^{+10}_{-10} (+0.1 σ)	$f\sigma_8(0.15)$	0.4582	$0.459^{+0.016}_{-0.017}$ (−0.4 σ)
A_{143}^{PS}	51.3	47^{+20}_{-20} (−0.3 σ)	D_{2000}	231.32	$230.5^{+3.9}_{-3.8}$ (+0.5 σ)	$\sigma_8(0.15)$	0.7656	$0.762^{+0.025}_{-0.025}$ (+1.7 σ)
$A_{143 \times 217}^{PS}$	54.7	42^{+20}_{-20} (−0.1 σ)	$n_{s,0.002}$	0.9733	$0.970^{+0.015}_{-0.015}$ (+1.3 σ)	$f\sigma_8(0.38)$	0.4797	$0.479^{+0.013}_{-0.013}$ (−0.1 σ)
A_{217}^{PS}	122.1	115^{+20}_{-20} (−0.0 σ)	Y_P	0.245408	$0.24537^{+0.00021}_{-0.00023}$ (+0.9 σ)	$\sigma_8(0.38)$	0.6800	$0.677^{+0.025}_{-0.025}$ (+2.2 σ)
A^{kSZ}	0.01	< 8.20 (−0.1 σ)	Y_P^{BBN}	0.246735	$0.24670^{+0.00021}_{-0.00023}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4798	$0.479^{+0.012}_{-0.012}$ (+0.2 σ)
A_{100}^{dustTT}	8.87	$9.0^{+3.6}_{-3.5}$ (+0.0 σ)	$10^5 D/H$	2.579	$2.595^{+0.098}_{-0.096}$ (−0.9 σ)	$\sigma_8(0.51)$	0.6369	$0.634^{+0.025}_{-0.024}$ (+2.4 σ)
A_{143}^{dustTT}	10.79	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	Age/Gyr	13.774	$13.787^{+0.088}_{-0.093}$ (−1.2 σ)	$f\sigma_8(0.61)$	0.4757	$0.475^{+0.012}_{-0.012}$ (+0.4 σ)
$A_{143 \times 217}^{dustTT}$	19.8	$18.3^{+6.4}_{-6.5}$ (−0.0 σ)	z_*	1089.63	$1089.8^{+1.0}_{-1.0}$ (−1.3 σ)	$\sigma_8(0.61)$	0.6064	$0.603^{+0.024}_{-0.024}$ (+2.6 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.0 σ)	r_*	145.13	$145.0^{+1.1}_{-1.1}$ (+1.2 σ)	$f\sigma_8(2.33)$	0.3063	$0.304^{+0.013}_{-0.013}$ (+2.9 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_*$	1.04136	$1.0413^{+0.0010}_{-0.00096}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3163	$0.314^{+0.015}_{-0.015}$ (+3.1 σ)
c_{217}	0.99822	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.936	$13.929^{+0.097}_{-0.099}$ (+1.2 σ)	f_{2000}^{143}	28.3	30^{+6}_{-6} (−0.5 σ)
H_0	68.45	$68.2^{+2.4}_{-2.3}$ (+1.4 σ)	z_{drag}	1059.82	$1059.7^{+1.0}_{-0.99}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	31.73	32^{+4}_{-4} (−0.6 σ)
Ω_Λ	0.7006	$0.697^{+0.029}_{-0.032}$ (+1.3 σ)	r_{drag}	147.79	$147.7^{+1.0}_{-1.0}$ (+1.1 σ)	f_{2000}^{217}	106.10	$107.1^{+4.1}_{-4.2}$ (−0.6 σ)
Ω_m	0.2994	$0.303^{+0.032}_{-0.029}$ (−1.3 σ)	k_D	0.14015	$0.1402^{+0.0010}_{-0.0010}$ (−0.7 σ)	$\chi^2_{lensing}$	9.11	9.8 (ν : 1.3)
$\Omega_m h^2$	0.14027	$0.1408^{+0.0048}_{-0.0046}$ (−1.3 σ)	$100\theta_D$	0.16084	$0.16093^{+0.00057}_{-0.00055}$ (−0.5 σ)	χ^2_{lowl}	22.92	23.5 (ν : 0.5) (−0.3 σ)
$\Omega_m h^3$	0.09602	$0.09594^{+0.00092}_{-0.00090}$ (+0.1 σ)	z_{eq}	3337	3349^{+110}_{-110} (−1.3 σ)	χ^2_{plik}	757.8	770.5 (ν : 15.4) (−0.2 σ)
σ_8	0.8271	$0.824^{+0.025}_{-0.025}$ (+1.3 σ)	k_{eq}	0.010184	$0.01022^{+0.00035}_{-0.00033}$ (−1.3 σ)	χ^2_{prior}	1.2	7.4 (ν : 6.9) (+0.0 σ)
S_8	0.8262	$0.828^{+0.034}_{-0.033}$ (−0.5 σ)	$100\theta_{eq}$	0.8255	$0.823^{+0.022}_{-0.022}$ (+1.4 σ)	χ^2_{CMB}	789.8	803.7 (ν : 15.1) (−70.8 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4526	$0.454^{+0.018}_{-0.018}$ (−0.5 σ)	$100\theta_{s,eq}$	0.4557	$0.455^{+0.011}_{-0.011}$ (+1.4 σ)			

Best-fit $\chi^2_{eff} = 791.01$; $\bar{\chi}^2_{eff} = 811.06$; $R - 1 = 0.00623$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.11 commander_dx12_v3_2_29: 22.92 plik_rd12_HM_v22_TT: 757.77

2.70 base_plikHM_TT_lowl_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022337	$0.02230^{+0.00039}_{-0.00040}$ (+0.8 σ)	$\sigma_8/h^{0.5}$	0.9986	$0.998^{+0.024}_{-0.024}$ (+0.3 σ)	$H(0.38)$	83.27	$83.23^{+0.77}_{-0.75}$ (+1.3 σ)
$\Omega_c h^2$	0.11798	$0.1180^{+0.0025}_{-0.0026}$ (−1.2 σ)	$r_{\text{drag}} h$	100.56	$100.5^{+2.0}_{-2.0}$ (+1.3 σ)	$D_M(0.38)$	1521.3	1522^{+20}_{-20} (−1.3 σ)
$100\theta_{\text{MC}}$	1.04110	$1.04108^{+0.00083}_{-0.00081}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.468	$2.468^{+0.056}_{-0.060}$ (+0.4 σ)	$H(0.51)$	89.91	$89.87^{+0.63}_{-0.61}$ (+1.2 σ)
τ	0.0794	$0.078^{+0.033}_{-0.032}$ (+3.2 σ)	z_{re}	10.05	$9.9^{+2.8}_{-3.1}$ (+2.9 σ)	$D_M(0.51)$	1971.9	1973^{+24}_{-24} (−1.3 σ)
$\ln(10^{10} A_s)$	3.088	$3.085^{+0.059}_{-0.060}$ (+2.7 σ)	$10^9 A_s$	2.193	$2.19^{+0.13}_{-0.13}$ (+2.8 σ)	$H(0.61)$	95.46	$95.43^{+0.53}_{-0.52}$ (+1.2 σ)
n_s	0.9705	$0.9694^{+0.0093}_{-0.0090}$ (+1.2 σ)	$10^9 A_s e^{-2\tau}$	1.8710	$1.872^{+0.024}_{-0.023}$ (−0.9 σ)	$D_M(0.61)$	2295.6	2297^{+26}_{-26} (−1.3 σ)
y_{cal}	0.9999	$1.0002^{+0.0049}_{-0.0051}$ (−0.1 σ)	D_{40}	1224.4	1227^{+24}_{-23} (−0.4 σ)	$H(2.33)$	235.21	$235.2^{+1.6}_{-1.6}$ (−1.2 σ)
A_{217}^{CIB}	47.7	47^{+10}_{-10} (−0.1 σ)	D_{220}	5714	5718^{+80}_{-81} (+0.1 σ)	$D_M(2.33)$	5757.9	5760^{+26}_{-26} (−1.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.39	—	D_{810}	2531.6	2531^{+27}_{-28} (−0.4 σ)	$f\sigma_8(0.15)$	0.4596	$0.459^{+0.013}_{-0.013}$ (−0.3 σ)
A_{143}^{tSZ}	7.07	$5.3^{+3.8}_{-3.9}$ (+0.1 σ)	D_{1420}	815.5	$814.8^{+9.8}_{-10}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7623	$0.761^{+0.020}_{-0.021}$ (+1.6 σ)
A_{100}^{PS}	251	260^{+50}_{-60} (−0.1 σ)	D_{2000}	230.70	$230.4^{+3.4}_{-3.6}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4800	$0.480^{+0.012}_{-0.012}$ (−0.0 σ)
A_{143}^{PS}	48.0	47^{+20}_{-20} (−0.3 σ)	$n_{s,0.002}$	0.9705	$0.9694^{+0.0093}_{-0.0090}$ (+1.2 σ)	$\sigma_8(0.38)$	0.6766	$0.676^{+0.019}_{-0.019}$ (+2.1 σ)
$A_{143 \times 217}^{\text{PS}}$	47.2	43^{+20}_{-20} (−0.1 σ)	Y_P	0.245382	$0.24536^{+0.00016}_{-0.00017}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4795	$0.479^{+0.012}_{-0.012}$ (+0.2 σ)
A_{217}^{PS}	119.1	115^{+20}_{-20} (−0.0 σ)	Y_P^{BBN}	0.246709	$0.24669^{+0.00016}_{-0.00017}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6335	$0.633^{+0.018}_{-0.018}$ (+2.3 σ)
A^{kSZ}	0.01	< 8.27 (−0.1 σ)	$10^5 \text{D}/\text{H}$	2.592	$2.599^{+0.076}_{-0.071}$ (−0.8 σ)	$f\sigma_8(0.61)$	0.4750	$0.475^{+0.012}_{-0.012}$ (+0.4 σ)
A_{100}^{dustTT}	8.87	$8.9^{+3.7}_{-3.6}$ (−0.0 σ)	Age/Gyr	13.787	$13.791^{+0.059}_{-0.058}$ (−1.1 σ)	$\sigma_8(0.61)$	0.6030	$0.602^{+0.018}_{-0.018}$ (+2.4 σ)
A_{143}^{dustTT}	10.80	$10.7^{+3.6}_{-3.5}$ (+0.0 σ)	z_*	1089.79	$1089.84^{+0.62}_{-0.61}$ (−1.1 σ)	$f\sigma_8(2.33)$	0.3044	$0.3039^{+0.0092}_{-0.0091}$ (+2.7 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.2^{+6.4}_{-6.6}$ (−0.0 σ)	r_*	144.98	$144.99^{+0.63}_{-0.61}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3141	$0.3136^{+0.0099}_{-0.0099}$ (+2.9 σ)
A_{217}^{dustTT}	94.7	93^{+10}_{-10} (+0.0 σ)	$100\theta_*$	1.04129	$1.04127^{+0.00082}_{-0.00080}$ (+0.6 σ)	f_{2000}^{143}	29.2	30^{+6}_{-6} (−0.4 σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.923	$13.924^{+0.060}_{-0.059}$ (+1.1 σ)	$f_{2000}^{143 \times 217}$	32.29	33^{+4}_{-4} (−0.5 σ)
c_{217}	0.99823	$0.9982^{+0.0013}_{-0.0012}$ (−0.1 σ)	z_{drag}	1059.70	$1059.64^{+0.87}_{-0.89}$ (+0.5 σ)	f_{2000}^{217}	106.73	$107.2^{+3.9}_{-3.8}$ (−0.5 σ)
H_0	68.10	$68.0^{+1.2}_{-1.2}$ (+1.3 σ)	r_{drag}	147.67	$147.69^{+0.67}_{-0.65}$ (+1.0 σ)	χ^2_{lensing}	9.05	9.8 (ν : 1.2)
Ω_Λ	0.6961	$0.695^{+0.015}_{-0.016}$ (+1.2 σ)	k_D	0.14024	$0.14019^{+0.00083}_{-0.00086}$ (−0.7 σ)	χ^2_{lowl}	23.17	23.42 (ν : 0.4) (−0.4 σ)
Ω_m	0.3039	$0.305^{+0.016}_{-0.015}$ (−1.2 σ)	$100\theta_D$	0.16089	$0.16094^{+0.00052}_{-0.00050}$ (−0.5 σ)	χ^2_{plik}	757.5	769.8 (ν : 14.2) (−0.3 σ)
$\Omega_m h^2$	0.14096	$0.1410^{+0.0024}_{-0.0025}$ (−1.2 σ)	z_{eq}	3353	3354^{+57}_{-59} (−1.2 σ)	$\chi^2_{6\text{DF}}$	0.000	0.043 (ν : 0.0)
$\Omega_m h^3$	0.09600	$0.09593^{+0.00090}_{-0.00090}$ (+0.1 σ)	k_{eq}	0.010234	$0.01024^{+0.00017}_{-0.00018}$ (−1.2 σ)	χ^2_{MGS}	1.75	1.78 (ν : 0.2)
σ_8	0.8241	$0.823^{+0.021}_{-0.021}$ (+1.3 σ)	$100\theta_{\text{eq}}$	0.8222	$0.822^{+0.011}_{-0.011}$ (+1.2 σ)	χ^2_{DR12BAO}	3.43	4.1 (ν : 0.6)
S_8	0.8295	$0.829^{+0.024}_{-0.024}$ (−0.4 σ)	$100\theta_{s,\text{eq}}$	0.4541	$0.4540^{+0.0057}_{-0.0055}$ (+1.2 σ)	χ^2_{prior}	1.4	7.4 (ν : 6.7) (+0.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4543	$0.454^{+0.013}_{-0.013}$ (−0.4 σ)	$H(0.15)$	73.30	$73.2^{+1.0}_{-1.0}$ (+1.3 σ)	χ^2_{CMB}	789.7	803.0 (ν : 13.8) (−70.9 σ)
$\sigma_8 \Omega_m^{0.25}$	0.6119	$0.611^{+0.015}_{-0.015}$ (+0.0 σ)	$D_M(0.15)$	637.1	$637.7^{+9.9}_{-9.9}$ (−1.3 σ)	χ^2_{BAO}	5.18	6.0 (ν : 0.6)

Best-fit $\chi^2_{\text{eff}} = 796.25$; $\bar{\chi}^2_{\text{eff}} = 816.31$; $R - 1 = 0.00781$
 χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.43 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.05 commander_dx12_v3.2.29: 23.17 plik_rd12_HM.v22.TT: 757.49

2.71 base_plikHM_TT_lowl_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02235^{+0.00052}_{-0.00048} \quad (+1.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.612^{+0.015}_{-0.015} \quad (+0.0\sigma)$	$H(0.15)$	$73.5^{+1.9}_{-1.8} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1175^{+0.0044}_{-0.0047} \quad (-1.5\sigma)$	$\sigma_8/h^{0.5}$	$0.999^{+0.024}_{-0.023} \quad (+0.4\sigma)$	$D_M(0.15)$	$636^{+17}_{-19} \quad (-1.5\sigma)$
$100\theta_{MC}$	$1.0411^{+0.0010}_{-0.00095} \quad (+0.8\sigma)$	$r_{drag} h$	$100.9^{+3.7}_{-3.6} \quad (+1.5\sigma)$	$H(0.38)$	$83.4^{+1.4}_{-1.3} \quad (+1.6\sigma)$
τ	$0.084^{+0.042}_{-0.039} \quad (+3.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.471^{+0.056}_{-0.056} \quad (+0.4\sigma)$	$D_M(0.38)$	$1518^{+34}_{-38} \quad (-1.5\sigma)$
$\ln(10^{10} A_s)$	$3.095^{+0.075}_{-0.070} \quad (+3.3\sigma)$	z_{re}	$10.3^{+3.2}_{-3.7} \quad (+3.4\sigma)$	$H(0.51)$	$90.0^{+1.1}_{-1.0} \quad (+1.5\sigma)$
n_s	$0.971^{+0.014}_{-0.013} \quad (+1.5\sigma)$	$10^9 A_s$	$2.21^{+0.17}_{-0.15} \quad (+3.5\sigma)$	$D_M(0.51)$	$1968^{+40}_{-44} \quad (-1.5\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0050} \quad (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.869^{+0.028}_{-0.029} \quad (-1.1\sigma)$	$H(0.61)$	$95.54^{+0.89}_{-0.84} \quad (+1.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{40}	$1226^{+26}_{-25} \quad (-0.5\sigma)$	$D_M(0.61)$	$2292^{+44}_{-46} \quad (-1.5\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5718^{+81}_{-82} \quad (+0.1\sigma)$	$H(2.33)$	$234.9^{+2.6}_{-2.7} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0} \quad (+0.1\sigma)$	D_{810}	$2530^{+28}_{-28} \quad (-0.4\sigma)$	$D_M(2.33)$	$5755^{+38}_{-39} \quad (-1.4\sigma)$
A_{100}^{PS}	$259^{+60}_{-60} \quad (-0.2\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.016}_{-0.017} \quad (-0.4\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{2000}	$230.6^{+3.8}_{-3.8} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.764^{+0.022}_{-0.021} \quad (+1.9\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.971^{+0.014}_{-0.013} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.013}_{-0.013} \quad (-0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	Y_P	$0.24538^{+0.00020}_{-0.00021} \quad (+1.0\sigma)$	$\sigma_8(0.38)$	$0.678^{+0.022}_{-0.021} \quad (+2.5\sigma)$
A^{kSZ}	$< 8.15 \quad (-0.1\sigma)$	Y_P^{BBN}	$0.24671^{+0.00020}_{-0.00021} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.012}_{-0.011} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$10^5 D/H$	$2.591^{+0.092}_{-0.094} \quad (-1.0\sigma)$	$\sigma_8(0.51)$	$0.635^{+0.021}_{-0.020} \quad (+2.7\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.782^{+0.084}_{-0.087} \quad (-1.3\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.011}_{-0.011} \quad (+0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	z_*	$1089.74^{+0.90}_{-0.97} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.605^{+0.021}_{-0.020} \quad (+2.9\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$145.1^{+1.0}_{-0.96} \quad (+1.3\sigma)$	$f\sigma_8(2.33)$	$0.305^{+0.011}_{-0.011} \quad (+3.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.04133^{+0.00099}_{-0.00093} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.315^{+0.013}_{-0.012} \quad (+3.5\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.934^{+0.094}_{-0.088} \quad (+1.3\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
H_0	$68.3^{+2.2}_{-2.1} \quad (+1.6\sigma)$	z_{drag}	$1059.70^{+0.99}_{-0.95} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
Ω_Λ	$0.698^{+0.028}_{-0.027} \quad (+1.5\sigma)$	r_{drag}	$147.8^{+1.0}_{-0.94} \quad (+1.2\sigma)$	f_{2000}^{217}	$106.9^{+4.0}_{-4.1} \quad (-0.6\sigma)$
Ω_m	$0.302^{+0.027}_{-0.028} \quad (-1.5\sigma)$	k_D	$0.14012^{+0.00098}_{-0.0010} \quad (-0.8\sigma)$	$\chi^2_{lensing}$	$9.8 \quad (\nu: 1.3)$
$\Omega_m h^2$	$0.1405^{+0.0041}_{-0.0044} \quad (-1.5\sigma)$	$100\theta_D$	$0.16091^{+0.00055}_{-0.00055} \quad (-0.6\sigma)$	χ^2_{lowl}	$23.40 \quad (\nu: 0.5) \quad (-0.4\sigma)$
$\Omega_m h^3$	$0.09595^{+0.00092}_{-0.00090} \quad (+0.1\sigma)$	z_{eq}	$3342^{+98}_{-100} \quad (-1.5\sigma)$	χ^2_{plik}	$770.3 \quad (\nu: 15.3) \quad (-0.2\sigma)$
σ_8	$0.825^{+0.023}_{-0.022} \quad (+1.5\sigma)$	k_{eq}	$0.01020^{+0.00030}_{-0.00032} \quad (-1.5\sigma)$	χ^2_{prior}	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
S_8	$0.827^{+0.033}_{-0.033} \quad (-0.5\sigma)$	$100\theta_{eq}$	$0.824^{+0.021}_{-0.019} \quad (+1.5\sigma)$	χ^2_{CMB}	$803.5 \quad (\nu: 14.7) \quad (-70.8\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$100\theta_{s,eq}$	$0.455^{+0.011}_{-0.0096} \quad (+1.5\sigma)$		

$\bar{\chi}^2_{eff} = 810.86; R - 1 = 0.00629$

2.72 base_plikHM_TT_lowl_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00039}_{-0.00040} \quad (+0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.998^{+0.024}_{-0.023} \quad (+0.3\sigma)$	$H(0.38)$	$83.24^{+0.76}_{-0.73} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0024}_{-0.0025} \quad (-1.3\sigma)$	$r_{\text{drag}} h$	$100.5^{+2.0}_{-1.9} \quad (+1.3\sigma)$	$D_M(0.38)$	$1522^{+19}_{-20} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04108^{+0.00083}_{-0.00081} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.469^{+0.055}_{-0.056} \quad (+0.4\sigma)$	$H(0.51)$	$89.88^{+0.63}_{-0.60} \quad (+1.3\sigma)$
τ	$0.079^{+0.030}_{-0.030} \quad (+3.3\sigma)$	z_{re}	$9.9^{+2.7}_{-2.7} \quad (+3.0\sigma)$	$D_M(0.51)$	$1973^{+23}_{-23} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.087^{+0.057}_{-0.054} \quad (+2.8\sigma)$	$10^9 A_s$	$2.19^{+0.12}_{-0.12} \quad (+2.9\sigma)$	$H(0.61)$	$95.44^{+0.53}_{-0.51} \quad (+1.2\sigma)$
n_s	$0.9695^{+0.0092}_{-0.0088} \quad (+1.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.023}_{-0.023} \quad (-0.9\sigma)$	$D_M(0.61)$	$2297^{+25}_{-25} \quad (-1.3\sigma)$
y_{cal}	$1.0002^{+0.0050}_{-0.0051} \quad (-0.1\sigma)$	D_{40}	$1227^{+24}_{-23} \quad (-0.4\sigma)$	$H(2.33)$	$235.2^{+1.5}_{-1.6} \quad (-1.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5718^{+81}_{-81} \quad (+0.1\sigma)$	$D_M(2.33)$	$5760^{+26}_{-26} \quad (-1.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	$2531^{+28}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.3^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{1420}	$814.8^{+9.8}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.762^{+0.020}_{-0.019} \quad (+1.7\sigma)$
A_{100}^{PS}	$260^{+50}_{-60} \quad (-0.1\sigma)$	D_{2000}	$230.4^{+3.4}_{-3.6} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.012}_{-0.012} \quad (-0.0\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.3\sigma)$	$n_{s,0.002}$	$0.9695^{+0.0092}_{-0.0088} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	$0.676^{+0.019}_{-0.017} \quad (+2.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24537^{+0.00016}_{-0.00017} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.011}_{-0.011} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24669^{+0.00016}_{-0.00017} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.633^{+0.017}_{-0.017} \quad (+2.3\sigma)$
A^{kSZ}	$< 8.27 \quad (-0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.599^{+0.076}_{-0.071} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.011}_{-0.011} \quad (+0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	Age/Gyr	$13.791^{+0.059}_{-0.058} \quad (-1.1\sigma)$	$\sigma_8(0.61)$	$0.602^{+0.016}_{-0.016} \quad (+2.5\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	z_*	$1089.83^{+0.61}_{-0.60} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.3041^{+0.0090}_{-0.0083} \quad (+2.8\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.2^{+6.4}_{-6.6} \quad (-0.0\sigma)$	r_*	$145.00^{+0.62}_{-0.61} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3138^{+0.0097}_{-0.0090} \quad (+3.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04128^{+0.00082}_{-0.00080} \quad (+0.7\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.925^{+0.060}_{-0.058} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	z_{drag}	$1059.64^{+0.87}_{-0.89} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.2^{+3.8}_{-3.8} \quad (-0.5\sigma)$
H_0	$68.1^{+1.2}_{-1.1} \quad (+1.3\sigma)$	r_{drag}	$147.69^{+0.67}_{-0.65} \quad (+1.0\sigma)$	χ_{lensing}^2	$9.8 \quad (\nu: 1.2)$
Ω_Λ	$0.696^{+0.015}_{-0.015} \quad (+1.3\sigma)$	k_{D}	$0.14018^{+0.00083}_{-0.00086} \quad (-0.7\sigma)$	χ_{lowl}^2	$23.43 \quad (\nu: 0.4) \quad (-0.4\sigma)$
Ω_{m}	$0.304^{+0.015}_{-0.015} \quad (-1.3\sigma)$	$100\theta_{\text{D}}$	$0.16094^{+0.00051}_{-0.00050} \quad (-0.5\sigma)$	χ_{plik}^2	$769.7 \quad (\nu: 14.0) \quad (-0.3\sigma)$
$\Omega_{\text{m}} h^2$	$0.1410^{+0.0023}_{-0.0024} \quad (-1.2\sigma)$	z_{eq}	$3353^{+56}_{-58} \quad (-1.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.041 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09593^{+0.00090}_{-0.00090} \quad (+0.1\sigma)$	k_{eq}	$0.01023^{+0.00017}_{-0.00018} \quad (-1.2\sigma)$	χ_{MGS}^2	$1.79 \quad (\nu: 0.2)$
σ_8	$0.823^{+0.021}_{-0.020} \quad (+1.3\sigma)$	$100\theta_{\text{eq}}$	$0.822^{+0.011}_{-0.010} \quad (+1.3\sigma)$	χ_{DR12BAO}^2	$4.1 \quad (\nu: 0.5)$
S_8	$0.829^{+0.024}_{-0.024} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.4541^{+0.0057}_{-0.0054} \quad (+1.3\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.454^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-0.97} \quad (+1.3\sigma)$	χ_{CMB}^2	$802.9 \quad (\nu: 13.6) \quad (-70.9\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.612^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$D_M(0.15)$	$637.5^{+9.6}_{-9.8} \quad (-1.3\sigma)$	χ_{BAO}^2	$5.9 \quad (\nu: 0.5)$
$\bar{\chi}_{\text{eff}}^2 = 816.23; R - 1 = 0.00814$					

2.73 base_plikHM_TTTEEE_lowl_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022525	$0.02249^{+0.00032}_{-0.00032}$ (+1.7 σ)	$\Omega_{\mathrm{m}}h^3$	0.09639	$0.09635^{+0.00057}_{-0.00058}$ (+1.0 σ)	$100\theta_{\mathrm{eq}}$	0.8208	$0.820^{+0.013}_{-0.013}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.11824	$0.1184^{+0.0031}_{-0.0030}$ (−1.1 σ)	σ_8	0.8270	$0.825^{+0.021}_{-0.022}$ (+1.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.4532	$0.4528^{+0.0066}_{-0.0068}$ (+1.0 σ)
$100\theta_{\mathrm{MC}}$	1.04111	$1.04108^{+0.00063}_{-0.00063}$ (+0.7 σ)	S_8	0.8330	$0.833^{+0.026}_{-0.024}$ (−0.3 σ)	$H(0.15)$	73.37	$73.3^{+1.2}_{-1.2}$ (+1.3 σ)
τ	0.0816	$0.079^{+0.034}_{-0.035}$ (+3.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4562	$0.456^{+0.014}_{-0.013}$ (−0.3 σ)	$D_{\mathrm{M}}(0.15)$	636.5	637^{+12}_{-12} (−1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.094	$3.089^{+0.062}_{-0.064}$ (+2.9 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6143	$0.613^{+0.015}_{-0.014}$ (+0.2 σ)	$H(0.38)$	83.37	$83.30^{+0.88}_{-0.87}$ (+1.4 σ)
n_{s}	0.9716	$0.9696^{+0.0098}_{-0.0099}$ (+1.2 σ)	$\sigma_8/h^{0.5}$	1.0017	$0.9999^{+0.024}_{-0.023}$ (+0.4 σ)	$D_{\mathrm{M}}(0.38)$	1519.8	1522^{+24}_{-23} (−1.3 σ)
y_{cal}	1.00002	$1.0002^{+0.0049}_{-0.0049}$ (−0.1 σ)	$r_{\mathrm{drag}}h$	100.46	$100.3^{+2.4}_{-2.4}$ (+1.2 σ)	$H(0.51)$	90.02	$89.96^{+0.70}_{-0.68}$ (+1.5 σ)
A_{217}^{CIB}	44.3	46^{+10}_{-10} (−0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.474	$2.474^{+0.056}_{-0.057}$ (+0.5 σ)	$D_{\mathrm{M}}(0.51)$	1969.9	1972^{+28}_{-27} (−1.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.85	—	z_{re}	10.19	$9.9^{+3.0}_{-3.2}$ (+2.9 σ)	$H(0.61)$	95.58	$95.54^{+0.57}_{-0.55}$ (+1.5 σ)
A_{143}^{tSZ}	7.04	$5.7^{+3.8}_{-3.7}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}$	2.206	$2.20^{+0.14}_{-0.14}$ (+3.0 σ)	$D_{\mathrm{M}}(0.61)$	2293.1	2295^{+30}_{-30} (−1.3 σ)
A_{100}^{PS}	244	255^{+50}_{-50} (−0.3 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8739	$1.874^{+0.025}_{-0.024}$ (−0.7 σ)	$H(2.33)$	235.57	$235.7^{+1.8}_{-1.7}$ (−0.8 σ)
A_{143}^{PS}	50.9	44^{+20}_{-20} (−0.6 σ)	D_{40}	1225.0	1229^{+23}_{-23} (−0.3 σ)	$D_{\mathrm{M}}(2.33)$	5750.5	5753^{+25}_{-25} (−1.5 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	56.3	42^{+20}_{-20} (−0.2 σ)	D_{220}	5727	5731^{+77}_{-75} (+0.4 σ)	$f\sigma_8(0.15)$	0.4615	$0.461^{+0.013}_{-0.013}$ (−0.2 σ)
A_{217}^{PS}	122.8	115^{+20}_{-20} (−0.0 σ)	D_{810}	2535.5	2534^{+27}_{-27} (−0.2 σ)	$\sigma_8(0.15)$	0.7649	$0.763^{+0.021}_{-0.021}$ (+1.8 σ)
A^{kSZ}	0.01	< 7.51 (−0.3 σ)	D_{1420}	818.2	$816.8^{+9.1}_{-9.2}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4819	$0.481^{+0.012}_{-0.011}$ (+0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.79	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	D_{2000}	231.99	$231.4^{+3.0}_{-3.1}$ (+1.0 σ)	$\sigma_8(0.38)$	0.6788	$0.677^{+0.019}_{-0.020}$ (+2.3 σ)
$A_{143}^{\mathrm{dustTT}}$	11.02	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9716	$0.9696^{+0.0098}_{-0.0099}$ (+1.2 σ)	$f\sigma_8(0.51)$	0.4813	$0.480^{+0.011}_{-0.011}$ (+0.4 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.3	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	Y_{P}	0.245453	$0.24544^{+0.00012}_{-0.00012}$ (+1.6 σ)	$\sigma_8(0.51)$	0.6356	$0.634^{+0.019}_{-0.019}$ (+2.5 σ)
$A_{217}^{\mathrm{dustTT}}$	95.8	94^{+10}_{-10} (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246780	$0.24677^{+0.00012}_{-0.00013}$ (+1.6 σ)	$f\sigma_8(0.61)$	0.4768	$0.476^{+0.011}_{-0.011}$ (+0.6 σ)
$A_{100}^{\mathrm{dustTE}}$	0.113	$0.114^{+0.075}_{-0.075}$	$10^5 \mathrm{D}/\mathrm{H}$	2.558	$2.564^{+0.059}_{-0.058}$ (−1.7 σ)	$\sigma_8(0.61)$	0.6050	$0.603^{+0.018}_{-0.018}$ (+2.6 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.134^{+0.056}_{-0.057}$	Age/Gyr	13.769	$13.774^{+0.054}_{-0.054}$ (−1.5 σ)	$f\sigma_8(2.33)$	0.3053	$0.3044^{+0.0096}_{-0.0097}$ (+2.9 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.57	$1089.63^{+0.62}_{-0.60}$ (−1.6 σ)	$\sigma_8(2.33)$	0.3151	$0.314^{+0.011}_{-0.011}$ (+3.1 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.10}$	r_*	144.77	$144.74^{+0.64}_{-0.67}$ (+0.6 σ)	f_{2000}^{143}	27.3	28^{+5}_{-6} (−0.9 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.665	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	1.04127	$1.04125^{+0.00062}_{-0.00062}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	30.95	31^{+4}_{-4} (−1.1 σ)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.07^{+0.53}_{-0.52}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.903	$13.901^{+0.059}_{-0.062}$ (+0.5 σ)	f_{2000}^{217}	105.43	$106.2^{+3.7}_{-3.7}$ (−1.0 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.16	$1060.11^{+0.63}_{-0.63}$ (+1.6 σ)	$\chi_{\mathrm{lensing}}^2$	9.66	10.1 (ν : 1.8)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.39	$147.37^{+0.63}_{-0.64}$ (+0.3 σ)	χ_{lowl}^2	23.14	23.54 (ν : 0.4) (−0.3 σ)
H_0	68.16	$68.1^{+1.4}_{-1.4}$ (+1.3 σ)	k_{D}	0.14067	$0.14066^{+0.00065}_{-0.00063}$ (+0.2 σ)	χ_{plik}^2	2342.0	2357.3 (ν : 18.1) (+291.0 σ)
Ω_{Λ}	0.6956	$0.694^{+0.018}_{-0.019}$ (+1.2 σ)	$100\theta_{\mathrm{D}}$	0.160631	$0.16067^{+0.00036}_{-0.00035}$ (−1.5 σ)	χ_{prior}^2	1.5	11.5 (ν : 10.3) (+1.1 σ)
Ω_{m}	0.3044	$0.306^{+0.019}_{-0.018}$ (−1.2 σ)	z_{eq}	3364	3368^{+70}_{-66} (−0.9 σ)	χ_{CMB}^2	2374.8	2391.0 (ν : 17.1) (+218.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.14141	$0.1416^{+0.0029}_{-0.0028}$ (−0.9 σ)	k_{eq}	0.010267	$0.01028^{+0.00021}_{-0.00020}$ (−0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2376.35$; $\bar{\chi}_{\mathrm{eff}}^2 = 2402.48$; $R - 1 = 0.01194$

χ_{eff}^2 : CMB - smicadx12-Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.66 commander_dx12_v3_2_29: 23.14 plik_rd12_HM_v22b_TTTEEE: 2342.04

2.74 base_plikHM_TTTEEE_lowl_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022524	$0.02250^{+0.00028}_{-0.00028}$ (+1.7 σ)	σ_8	0.8263	$0.825^{+0.021}_{-0.021}$ (+1.5 σ)	$H(0.15)$	73.37	$73.33^{+0.82}_{-0.83}$ (+1.4 σ)
$\Omega_c h^2$	0.11825	$0.1183^{+0.0021}_{-0.0021}$ (−1.1 σ)	S_8	0.8324	$0.832^{+0.022}_{-0.022}$ (−0.3 σ)	$D_M(0.15)$	636.6	$637.0^{+8.2}_{-8.0}$ (−1.3 σ)
$100\theta_{MC}$	1.04110	$1.04109^{+0.00057}_{-0.00059}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4559	$0.456^{+0.012}_{-0.012}$ (−0.3 σ)	$H(0.38)$	83.36	$83.33^{+0.61}_{-0.61}$ (+1.4 σ)
τ	0.0808	$0.080^{+0.029}_{-0.030}$ (+3.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6138	$0.613^{+0.015}_{-0.014}$ (+0.2 σ)	$D_M(0.38)$	1519.9	1521^{+16}_{-16} (−1.4 σ)
$\ln(10^{10} A_s)$	3.092	$3.090^{+0.054}_{-0.057}$ (+3.0 σ)	$\sigma_8/h^{0.5}$	1.0009	$0.9998^{+0.024}_{-0.024}$ (+0.4 σ)	$H(0.51)$	90.011	$89.98^{+0.50}_{-0.50}$ (+1.5 σ)
n_s	0.9715	$0.9699^{+0.0080}_{-0.0080}$ (+1.3 σ)	$r_{drag} h$	100.45	$100.4^{+1.7}_{-1.7}$ (+1.2 σ)	$D_M(0.51)$	1970.0	1971^{+19}_{-19} (−1.4 σ)
y_{cal}	1.0000	$1.0002^{+0.0050}_{-0.0050}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.472	$2.474^{+0.056}_{-0.057}$ (+0.5 σ)	$H(0.61)$	95.579	$95.56^{+0.41}_{-0.41}$ (+1.6 σ)
A_{217}^{CIB}	44.7	46^{+10}_{-10} (−0.3 σ)	z_{re}	10.12	$9.98^{+2.6}_{-2.7}$ (+3.0 σ)	$D_M(0.61)$	2293.3	2294^{+21}_{-21} (−1.4 σ)
$\xi^{tSZ \times CIB}$	0.79	—	$10^9 A_s$	2.202	$2.20^{+0.12}_{-0.12}$ (+3.1 σ)	$H(2.33)$	235.58	$235.6^{+1.3}_{-1.3}$ (−0.9 σ)
A_{143}^{tSZ}	7.06	$5.7^{+3.8}_{-3.7}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8738	$1.874^{+0.022}_{-0.022}$ (−0.8 σ)	$D_M(2.33)$	5750.7	5752^{+19}_{-19} (−1.6 σ)
A_{100}^{PS}	245	254^{+50}_{-50} (−0.3 σ)	D_{40}	1224.8	1229^{+22}_{-22} (−0.3 σ)	$f\sigma_8(0.15)$	0.4612	$0.461^{+0.012}_{-0.012}$ (−0.2 σ)
A_{143}^{PS}	49.9	44^{+20}_{-20} (−0.6 σ)	D_{220}	5727	5731^{+76}_{-74} (+0.4 σ)	$\sigma_8(0.15)$	0.7643	$0.763^{+0.019}_{-0.020}$ (+1.9 σ)
$A_{143 \times 217}^{PS}$	54.8	42^{+20}_{-20} (−0.2 σ)	D_{810}	2535.4	2534^{+27}_{-26} (−0.2 σ)	$f\sigma_8(0.38)$	0.4815	$0.481^{+0.012}_{-0.011}$ (+0.1 σ)
A_{217}^{PS}	122.3	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.1	$816.8^{+9.1}_{-9.2}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6783	$0.677^{+0.018}_{-0.018}$ (+2.3 σ)
A^{kSZ}	0.00	< 7.43 (−0.3 σ)	D_{2000}	231.95	$231.4^{+3.0}_{-3.0}$ (+1.0 σ)	$f\sigma_8(0.51)$	0.4809	$0.480^{+0.011}_{-0.011}$ (+0.4 σ)
A_{100}^{dustTT}	8.85	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$n_{s,0.002}$	0.9715	$0.9699^{+0.0080}_{-0.0080}$ (+1.3 σ)	$\sigma_8(0.51)$	0.6351	$0.634^{+0.017}_{-0.017}$ (+2.5 σ)
A_{143}^{dustTT}	11.07	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P	0.245453	$0.24544^{+0.00010}_{-0.00011}$ (+1.6 σ)	$f\sigma_8(0.61)$	0.4764	$0.476^{+0.011}_{-0.011}$ (+0.6 σ)
$A_{143 \times 217}^{dustTT}$	20.2	$18.6^{+6.3}_{-6.3}$ (+0.1 σ)	Y_P^{BBN}	0.246780	$0.24677^{+0.00010}_{-0.00011}$ (+1.6 σ)	$\sigma_8(0.61)$	0.6045	$0.604^{+0.016}_{-0.017}$ (+2.7 σ)
A_{217}^{dustTT}	95.6	94^{+10}_{-10} (+0.1 σ)	$10^5 D/H$	2.558	$2.562^{+0.051}_{-0.050}$ (−1.7 σ)	$f\sigma_8(2.33)$	0.3051	$0.3046^{+0.0084}_{-0.0087}$ (+3.0 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.076}_{-0.074}$	Age/Gyr	13.7693	$13.772^{+0.043}_{-0.042}$ (−1.6 σ)	$\sigma_8(2.33)$	0.3149	$0.3143^{+0.0089}_{-0.0092}$ (+3.2 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.134^{+0.055}_{-0.057}$	z_*	1089.575	$1089.61^{+0.47}_{-0.46}$ (−1.7 σ)	f_{2000}^{143}	27.3	28^{+5}_{-6} (−0.9 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.17}_{-0.16}$	r_*	144.766	$144.77^{+0.48}_{-0.48}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	30.96	31^{+4}_{-4} (−1.1 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04127	$1.04126^{+0.00056}_{-0.00058}$ (+0.6 σ)	f_{2000}^{217}	105.48	$106.2^{+3.5}_{-3.5}$ (−1.0 σ)
$A_{143 \times 217}^{dustTE}$	0.663	$0.66^{+0.16}_{-0.15}$	$D_M(z_*)/\text{Gpc}$	13.9029	$13.903^{+0.046}_{-0.045}$ (+0.6 σ)	$\chi^2_{lensing}$	9.54	10.1 (ν : 1.7)
A_{217}^{dustTE}	2.06	$2.06^{+0.54}_{-0.53}$	z_{drag}	1060.16	$1060.11^{+0.58}_{-0.56}$ (+1.6 σ)	χ^2_{lowl}	23.12	23.49 (ν : 0.4) (−0.3 σ)
c_{100}	0.99971	$0.9996^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.384	$147.39^{+0.48}_{-0.49}$ (+0.4 σ)	χ^2_{plik}	2342.2	2356.8 (ν : 17.7) (+290.9 σ)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_D	0.14067	$0.14065^{+0.00056}_{-0.00055}$ (+0.2 σ)	χ^2_{6DF}	0.000	0.030 (ν : 0.0)
H_0	68.16	$68.11^{+0.96}_{-0.97}$ (+1.3 σ)	$100\theta_D$	0.160632	$0.16066^{+0.00033}_{-0.00033}$ (−1.5 σ)	χ^2_{MGS}	1.68	1.70 (ν : 0.1)
Ω_Λ	0.6956	$0.695^{+0.012}_{-0.013}$ (+1.2 σ)	z_{eq}	3364.1	3365^{+48}_{-47} (−1.0 σ)	$\chi^2_{DR12BAO}$	3.52	4.03 (ν : 0.4)
Ω_m	0.3044	$0.305^{+0.013}_{-0.012}$ (−1.2 σ)	k_{eq}	0.010268	$0.01027^{+0.00015}_{-0.00014}$ (−1.0 σ)	χ^2_{prior}	1.5	11.5 (ν : 10.2) (+1.1 σ)
$\Omega_m h^2$	0.14142	$0.1415^{+0.0020}_{-0.0020}$ (−1.0 σ)	$100\theta_{eq}$	0.8207	$0.8205^{+0.0092}_{-0.0091}$ (+1.1 σ)	χ^2_{CMB}	2374.8	2390.4 (ν : 16.5) (+218.2 σ)
$\Omega_m h^3$	0.09639	$0.09635^{+0.00056}_{-0.00058}$ (+1.0 σ)	$100\theta_{s,eq}$	0.45315	$0.4530^{+0.0047}_{-0.0047}$ (+1.0 σ)	χ^2_{BAO}	5.20	5.77 (ν : 0.3)

Best-fit $\chi^2_{eff} = 2381.55$; $\bar{\chi}^2_{eff} = 2407.65$; $R - 1 = 0.01895$
 χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.52 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.54 commander_dx12_v3.2.29: 23.12 plik_rd12_HM_v22b_TTTEEE: 2342.15

2.75 base_plikHM_TTTEEE_lowl_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02250^{+0.00032}_{-0.00031} \quad (+1.7\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09635^{+0.00057}_{-0.00058} \quad (+1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.013}_{-0.013} \quad (+1.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1184^{+0.0030}_{-0.0029} \quad (-1.1\sigma)$	σ_8	$0.826^{+0.021}_{-0.020} \quad (+1.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4529^{+0.0065}_{-0.0065} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04108^{+0.00063}_{-0.00063} \quad (+0.7\sigma)$	S_8	$0.833^{+0.026}_{-0.024} \quad (-0.3\sigma)$	$H(0.15)$	$73.3^{+1.2}_{-1.1} \quad (+1.4\sigma)$
τ	$0.080^{+0.032}_{-0.032} \quad (+3.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.014}_{-0.013} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+11}_{-11} \quad (-1.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.090^{+0.061}_{-0.057} \quad (+3.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.015}_{-0.014} \quad (+0.2\sigma)$	$H(0.38)$	$83.32^{+0.87}_{-0.83} \quad (+1.4\sigma)$
n_{s}	$0.9698^{+0.0097}_{-0.0097} \quad (+1.3\sigma)$	$\sigma_8/h^{0.5}$	$1.000^{+0.023}_{-0.022} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+23}_{-23} \quad (-1.3\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0049} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$100.4^{+2.4}_{-2.3} \quad (+1.2\sigma)$	$H(0.51)$	$89.98^{+0.69}_{-0.66} \quad (+1.5\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.475^{+0.055}_{-0.054} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1971^{+27}_{-27} \quad (-1.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$9.99^{+2.8}_{-2.9} \quad (+3.0\sigma)$	$H(0.61)$	$95.55^{+0.56}_{-0.53} \quad (+1.5\sigma)$
A_{143}^{tSZ}	$5.7^{+3.8}_{-3.7} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.20^{+0.13}_{-0.13} \quad (+3.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+29}_{-29} \quad (-1.4\sigma)$
A_{100}^{PS}	$255^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.024}_{-0.024} \quad (-0.8\sigma)$	$H(2.33)$	$235.6^{+1.8}_{-1.7} \quad (-0.9\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.7\sigma)$	D_{40}	$1229^{+23}_{-23} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5752^{+24}_{-24} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5731^{+77}_{-74} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.013}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.763^{+0.020}_{-0.019} \quad (+1.9\sigma)$
A^{kSZ}	$< 7.51 \quad (-0.3\sigma)$	D_{1420}	$816.7^{+9.1}_{-9.2} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.012}_{-0.011} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.0}_{-3.1} \quad (+1.0\sigma)$	$\sigma_8(0.38)$	$0.677^{+0.018}_{-0.018} \quad (+2.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9698^{+0.0097}_{-0.0097} \quad (+1.3\sigma)$	$f\sigma_8(0.51)$	$0.481^{+0.011}_{-0.011} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.24544^{+0.00012}_{-0.00012} \quad (+1.6\sigma)$	$\sigma_8(0.51)$	$0.634^{+0.017}_{-0.017} \quad (+2.6\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00012}_{-0.00012} \quad (+1.6\sigma)$	$f\sigma_8(0.61)$	$0.476^{+0.011}_{-0.011} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.074}_{-0.074}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.563^{+0.058}_{-0.057} \quad (-1.7\sigma)$	$\sigma_8(0.61)$	$0.604^{+0.017}_{-0.017} \quad (+2.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.056}_{-0.057}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.773^{+0.053}_{-0.054} \quad (-1.6\sigma)$	$f\sigma_8(2.33)$	$0.3047^{+0.0089}_{-0.0089} \quad (+3.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.62^{+0.59}_{-0.59} \quad (-1.7\sigma)$	$\sigma_8(2.33)$	$0.3144^{+0.0098}_{-0.0097} \quad (+3.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.10}$	r_*	$144.76^{+0.63}_{-0.64} \quad (+0.6\sigma)$	f_{2000}^{143}	$28^{+5}_{-5} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	$1.04125^{+0.00062}_{-0.00062} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-1.1\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.53}_{-0.52}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.902^{+0.059}_{-0.059} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.2^{+3.7}_{-3.6} \quad (-1.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.11^{+0.62}_{-0.60} \quad (+1.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.1 \quad (\nu: 1.8)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.38^{+0.62}_{-0.62} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.54 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$68.1^{+1.4}_{-1.3} \quad (+1.3\sigma)$	k_{D}	$0.14066^{+0.00064}_{-0.00062} \quad (+0.2\sigma)$	χ_{plik}^2	$2357.2 \quad (\nu: 17.9) \quad (+290.9\sigma)$
Ω_{Λ}	$0.695^{+0.018}_{-0.018} \quad (+1.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16066^{+0.00035}_{-0.00035} \quad (-1.5\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
Ω_{m}	$0.305^{+0.018}_{-0.018} \quad (-1.2\sigma)$	z_{eq}	$3366^{+67}_{-65} \quad (-0.9\sigma)$	χ_{CMB}^2	$2390.8 \quad (\nu: 16.8) \quad (+218.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1415^{+0.0028}_{-0.0027} \quad (-0.9\sigma)$	k_{eq}	$0.01027^{+0.00020}_{-0.00020} \quad (-0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2402.35; R - 1 = 0.01200$$

2.76 base_plikHM_TTTEEE_lowl_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02250^{+0.00028}_{-0.00027} \quad (+1.7\sigma)$	σ_8	$0.825^{+0.020}_{-0.020} \quad (+1.5\sigma)$	$H(0.15)$	$73.33^{+0.82}_{-0.81} \quad (+1.4\sigma)$
$\Omega_c h^2$	$0.1183^{+0.0021}_{-0.0021} \quad (-1.1\sigma)$	S_8	$0.832^{+0.022}_{-0.022} \quad (-0.3\sigma)$	$D_M(0.15)$	$636.9^{+8.0}_{-7.9} \quad (-1.4\sigma)$
$100\theta_{MC}$	$1.04109^{+0.00058}_{-0.00059} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.456^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$H(0.38)$	$83.33^{+0.61}_{-0.60} \quad (+1.5\sigma)$
τ	$0.080^{+0.029}_{-0.029} \quad (+3.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.613^{+0.015}_{-0.014} \quad (+0.2\sigma)$	$D_M(0.38)$	$1521^{+16}_{-16} \quad (-1.4\sigma)$
$\ln(10^{10} A_s)$	$3.090^{+0.053}_{-0.053} \quad (+3.0\sigma)$	$\sigma_8/h^{0.5}$	$1.000^{+0.023}_{-0.022} \quad (+0.5\sigma)$	$H(0.51)$	$89.99^{+0.49}_{-0.49} \quad (+1.5\sigma)$
n_s	$0.9699^{+0.0079}_{-0.0080} \quad (+1.3\sigma)$	$r_{drag} h$	$100.4^{+1.7}_{-1.6} \quad (+1.2\sigma)$	$D_M(0.51)$	$1971^{+19}_{-19} \quad (-1.4\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0050} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.474^{+0.055}_{-0.055} \quad (+0.5\sigma)$	$H(0.61)$	$95.56^{+0.41}_{-0.40} \quad (+1.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	z_{re}	$10.0^{+2.4}_{-2.7} \quad (+3.1\sigma)$	$D_M(0.61)$	$2294^{+21}_{-20} \quad (-1.4\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.20^{+0.12}_{-0.12} \quad (+3.1\sigma)$	$H(2.33)$	$235.6^{+1.3}_{-1.2} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.7^{+3.8}_{-3.7} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.874^{+0.022}_{-0.022} \quad (-0.8\sigma)$	$D_M(2.33)$	$5752^{+19}_{-19} \quad (-1.6\sigma)$
A_{100}^{PS}	$254^{+50}_{-50} \quad (-0.3\sigma)$	D_{40}	$1229^{+22}_{-22} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.012}_{-0.011} \quad (-0.2\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.6\sigma)$	D_{220}	$5731^{+76}_{-74} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.763^{+0.019}_{-0.019} \quad (+1.9\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.011}_{-0.011} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$816.8^{+9.1}_{-9.2} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.677^{+0.018}_{-0.017} \quad (+2.4\sigma)$
A^{kSZ}	$< 7.38 \quad (-0.3\sigma)$	D_{2000}	$231.4^{+3.0}_{-3.0} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.481^{+0.011}_{-0.011} \quad (+0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9699^{+0.0079}_{-0.0080} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.634^{+0.017}_{-0.016} \quad (+2.6\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P	$0.24544^{+0.00010}_{-0.00011} \quad (+1.6\sigma)$	$f\sigma_8(0.61)$	$0.476^{+0.011}_{-0.011} \quad (+0.6\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.3}_{-6.4} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.24677^{+0.00010}_{-0.00011} \quad (+1.6\sigma)$	$\sigma_8(0.61)$	$0.604^{+0.016}_{-0.016} \quad (+2.7\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 D/H$	$2.562^{+0.050}_{-0.050} \quad (-1.7\sigma)$	$f\sigma_8(2.33)$	$0.3047^{+0.0083}_{-0.0082} \quad (+3.0\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.074}$	Age/Gyr	$13.772^{+0.043}_{-0.042} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.3144^{+0.0088}_{-0.0088} \quad (+3.2\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.134^{+0.055}_{-0.057}$	z_*	$1089.61^{+0.46}_{-0.45} \quad (-1.7\sigma)$	f_{2000}^{143}	$28^{+5}_{-6} \quad (-1.0\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.16}$	r_*	$144.77^{+0.48}_{-0.48} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-1.1\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04127^{+0.00056}_{-0.00058} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.2^{+3.5}_{-3.5} \quad (-1.0\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.15}$	$D_M(z_*)/\text{Gpc}$	$13.903^{+0.045}_{-0.045} \quad (+0.6\sigma)$	$\chi_{lensing}^2$	$10.1 \quad (\nu: 1.8)$
A_{217}^{dustTE}	$2.06^{+0.54}_{-0.54}$	z_{drag}	$1060.12^{+0.58}_{-0.56} \quad (+1.6\sigma)$	χ_{lowl}^2	$23.49 \quad (\nu: 0.4) \quad (-0.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.39^{+0.48}_{-0.49} \quad (+0.4\sigma)$	χ_{plik}^2	$2356.8 \quad (\nu: 17.6) \quad (+290.9\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_D	$0.14064^{+0.00056}_{-0.00055} \quad (+0.2\sigma)$	χ_{6DF}^2	$0.030 \quad (\nu: 0.0)$
H_0	$68.12^{+0.95}_{-0.95} \quad (+1.4\sigma)$	$100\theta_D$	$0.16066^{+0.00033}_{-0.00033} \quad (-1.5\sigma)$	χ_{MGS}^2	$1.71 \quad (\nu: 0.1)$
Ω_Λ	$0.695^{+0.012}_{-0.013} \quad (+1.2\sigma)$	z_{eq}	$3365^{+48}_{-47} \quad (-1.0\sigma)$	$\chi_{DR12BAO}^2$	$4.02 \quad (\nu: 0.4)$
Ω_m	$0.305^{+0.013}_{-0.012} \quad (-1.2\sigma)$	k_{eq}	$0.01027^{+0.00014}_{-0.00014} \quad (-1.0\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.1) \quad (+1.1\sigma)$
$\Omega_m h^2$	$0.1415^{+0.0020}_{-0.0020} \quad (-1.0\sigma)$	$100\theta_{eq}$	$0.8205^{+0.0092}_{-0.0090} \quad (+1.1\sigma)$	χ_{CMB}^2	$2390.4 \quad (\nu: 16.4) \quad (+218.2\sigma)$
$\Omega_m h^3$	$0.09635^{+0.00056}_{-0.00058} \quad (+1.0\sigma)$	$100\theta_{s,eq}$	$0.4531^{+0.0047}_{-0.0046} \quad (+1.0\sigma)$	χ_{BAO}^2	$5.76 \quad (\nu: 0.3)$

$$\bar{\chi}_{eff}^2 = 2407.58; R - 1 = 0.01869$$

2.77 base_plikHM_TT_lowl_reion

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022143	$0.02212^{+0.00043}_{-0.00042}$ (+0.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6115	$0.612^{+0.023}_{-0.023}$ (+0.1 σ)	$H(0.15)$	72.26	$72.3^{+1.6}_{-1.5}$ (+0.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.12065	$0.1206^{+0.0041}_{-0.0041}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9937	$0.995^{+0.031}_{-0.031}$ (+0.1 σ)	$D_{\mathrm{M}}(0.15)$	647.5	647^{+15}_{-16} (−0.0 σ)
$100\theta_{\mathrm{MC}}$	1.04077	$1.04079^{+0.00093}_{-0.00094}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	98.44	$98.5^{+3.2}_{-3.1}$ (+0.0 σ)	$H(0.38)$	82.53	$82.5^{+1.1}_{-1.1}$ (+0.0 σ)
τ	0.0526	$0.055^{+0.015}_{-0.013}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.453	$2.459^{+0.074}_{-0.074}$ (+0.1 σ)	$D_{\mathrm{M}}(0.38)$	1542.0	1542^{+31}_{-31} (−0.0 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0417	$3.046^{+0.032}_{-0.029}$ (+0.3 σ)	z_{re}	7.57	< 9.21 (+0.3 σ)	$H(0.51)$	89.33	$89.34^{+0.89}_{-0.82}$ (+0.0 σ)
n_{s}	0.9636	$0.963^{+0.011}_{-0.011}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}$	2.094	$2.103^{+0.069}_{-0.061}$ (+0.3 σ)	$D_{\mathrm{M}}(0.51)$	1996.1	1996^{+36}_{-36} (−0.0 σ)
y_{cal}	1.00035	$1.0003^{+0.0048}_{-0.0049}$ (−0.0 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8850	$1.884^{+0.027}_{-0.027}$ (−0.0 σ)	$H(0.61)$	95.02	$95.02^{+0.72}_{-0.66}$ (+0.0 σ)
A_{217}^{CIB}	48.3	48^{+10}_{-10} (−0.0 σ)	D_{40}	1231.5	1234^{+30}_{-30} (+0.0 σ)	$D_{\mathrm{M}}(0.61)$	2321.6	2321^{+38}_{-39} (−0.0 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.37	—	D_{220}	5711	5712^{+81}_{-81} (−0.0 σ)	$H(2.33)$	236.75	$236.7^{+2.5}_{-2.5}$ (−0.0 σ)
A_{143}^{tSZ}	7.03	$5.1^{+3.8}_{-3.9}$ (+0.0 σ)	D_{810}	2538.0	2536^{+27}_{-27} (−0.0 σ)	$D_{\mathrm{M}}(2.33)$	5776.8	5777^{+31}_{-33} (−0.0 σ)
A_{100}^{PS}	253	263^{+50}_{-60} (−0.0 σ)	D_{1420}	815.5	$814.3^{+9.9}_{-10}$ (−0.0 σ)	$f\sigma_8(0.15)$	0.4640	$0.464^{+0.024}_{-0.024}$ (+0.1 σ)
A_{143}^{PS}	50.3	49^{+20}_{-20} (−0.0 σ)	D_{2000}	229.99	$229.6^{+3.5}_{-3.5}$ (+0.0 σ)	$\sigma_8(0.15)$	0.7501	$0.751^{+0.015}_{-0.014}$ (+0.3 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	48.4	44^{+20}_{-20} (+0.0 σ)	$n_{\mathrm{s},0.002}$	0.9636	$0.963^{+0.011}_{-0.011}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4803	$0.481^{+0.019}_{-0.019}$ (+0.1 σ)
A_{217}^{PS}	120.1	115^{+20}_{-20} (+0.0 σ)	Y_{P}	0.245302	$0.24529^{+0.00017}_{-0.00020}$ (+0.0 σ)	$\sigma_8(0.38)$	0.6639	$0.665^{+0.012}_{-0.011}$ (+0.3 σ)
A^{kSZ}	0.00	< 8.40 (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246628	$0.24662^{+0.00017}_{-0.00020}$ (+0.0 σ)	$f\sigma_8(0.51)$	0.4779	$0.478^{+0.016}_{-0.016}$ (+0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.89	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.629	$2.633^{+0.081}_{-0.079}$ (−0.0 σ)	$\sigma_8(0.51)$	0.6209	$0.622^{+0.011}_{-0.010}$ (+0.3 σ)
$A_{143}^{\mathrm{dustTT}}$	10.84	$10.7^{+3.6}_{-3.5}$ (−0.0 σ)	Age/Gyr	13.828	$13.828^{+0.071}_{-0.073}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4721	$0.473^{+0.014}_{-0.014}$ (+0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.3^{+6.4}_{-6.5}$ (+0.0 σ)	z_*	1090.27	$1090.29^{+0.77}_{-0.79}$ (−0.0 σ)	$\sigma_8(0.61)$	0.5905	$0.591^{+0.010}_{-0.0094}$ (+0.3 σ)
$A_{217}^{\mathrm{dustTT}}$	94.9	93^{+10}_{-10} (+0.0 σ)	r_*	144.44	$144.47^{+0.94}_{-0.92}$ (+0.0 σ)	$f\sigma_8(2.33)$	0.29739	$0.2979^{+0.0050}_{-0.0045}$ (+0.3 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_*$	1.04097	$1.04100^{+0.00092}_{-0.00093}$ (+0.0 σ)	$\sigma_8(2.33)$	0.30621	$0.3067^{+0.0052}_{-0.0047}$ (+0.3 σ)
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.875	$13.878^{+0.087}_{-0.085}$ (+0.0 σ)	f_{2000}^{143}	30.4	31^{+6}_{-6} (−0.0 σ)
H_0	66.89	$66.9^{+1.8}_{-1.8}$ (+0.0 σ)	z_{drag}	1059.44	$1059.41^{+0.87}_{-0.89}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	33.29	34^{+4}_{-4} (−0.0 σ)
Ω_{Λ}	0.6794	$0.680^{+0.025}_{-0.026}$ (+0.0 σ)	r_{drag}	147.17	$147.22^{+0.94}_{-0.92}$ (+0.0 σ)	f_{2000}^{217}	107.68	$108.1^{+3.7}_{-3.7}$ (−0.0 σ)
Ω_{m}	0.3206	$0.320^{+0.026}_{-0.025}$ (−0.0 σ)	k_{D}	0.14061	$0.1405^{+0.0010}_{-0.0010}$ (+0.0 σ)	χ_{lowl}^2	23.60	23.9 (ν : 0.9) (+0.0 σ)
$\Omega_{\mathrm{m}}h^2$	0.14344	$0.1433^{+0.0039}_{-0.0039}$ (−0.0 σ)	$100\theta_{\mathrm{D}}$	0.16103	$0.16107^{+0.00051}_{-0.00051}$ (−0.0 σ)	χ_{plik}^2	758.7	771.1 (ν : 14.8) (−0.1 σ)
$\Omega_{\mathrm{m}}h^3$	0.09594	$0.09590^{+0.00091}_{-0.00088}$ (+0.0 σ)	z_{eq}	3412	3410^{+93}_{-93} (−0.0 σ)	χ_{prior}^2	1.7	8.5 (ν : 8.1) (+0.3 σ)
σ_8	0.8127	$0.814^{+0.018}_{-0.017}$ (+0.2 σ)	k_{eq}	0.010415	$0.01041^{+0.00028}_{-0.00028}$ (−0.0 σ)	χ_{CMB}^2	782.3	795.0 (ν : 14.4) (−72.3 σ)
S_8	0.8401	$0.841^{+0.047}_{-0.046}$ (+0.1 σ)	$100\theta_{\mathrm{eq}}$	0.8107	$0.811^{+0.018}_{-0.017}$ (+0.0 σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4602	$0.461^{+0.026}_{-0.025}$ (+0.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.4482	$0.4485^{+0.0091}_{-0.0088}$ (+0.0 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 784.00$; $\bar{\chi}_{\mathrm{eff}}^2 = 803.49$; $R - 1 = 0.00586$

χ_{eff}^2 : CMB - commander_dx12_v3_2_29: 23.60 plik_rd12_HM_v22_TT: 758.75

2.78 base_plikHM_TT_lowl_reion_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022226	$0.02222^{+0.00038}_{-0.00038}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9823	$0.984^{+0.024}_{-0.022}$ (−0.5 σ)	$H(0.38)$	82.96	$82.97^{+0.71}_{-0.69}$ (+0.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.11895	$0.1190^{+0.0024}_{-0.0024}$ (−0.8 σ)	$r_{\mathrm{drag}}h$	99.76	$99.8^{+1.8}_{-1.8}$ (+0.8 σ)	$D_{\mathrm{M}}(0.38)$	1529.6	1529^{+18}_{-19} (−0.8 σ)
$100\theta_{\mathrm{MC}}$	1.04096	$1.04101^{+0.00083}_{-0.00084}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.427	$2.434^{+0.057}_{-0.054}$ (−0.5 σ)	$H(0.51)$	89.66	$89.67^{+0.58}_{-0.56}$ (+0.8 σ)
τ	0.0542	$0.056^{+0.016}_{-0.014}$ (+0.5 σ)	z_{re}	7.69	< 9.39 (+0.5 σ)	$D_{\mathrm{M}}(0.51)$	1981.7	1981^{+22}_{-22} (−0.8 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0410	$3.045^{+0.035}_{-0.031}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}$	2.093	$2.102^{+0.074}_{-0.065}$ (+0.3 σ)	$H(0.61)$	95.264	$95.27^{+0.49}_{-0.48}$ (+0.8 σ)
n_{s}	0.9674	$0.9666^{+0.0083}_{-0.0081}$ (+0.7 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8776	$1.877^{+0.023}_{-0.023}$ (−0.5 σ)	$D_{\mathrm{M}}(0.61)$	2306.1	2306^{+23}_{-24} (−0.8 σ)
y_{cal}	1.00044	$1.0004^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{40}	1223.2	1226^{+25}_{-26} (−0.5 σ)	$H(2.33)$	235.73	$235.7^{+1.5}_{-1.5}$ (−0.8 σ)
A_{217}^{CIB}	48.7	48^{+10}_{-10} (−0.0 σ)	D_{220}	5717	5719^{+81}_{-80} (+0.1 σ)	$D_{\mathrm{M}}(2.33)$	5766.8	5766^{+24}_{-25} (−0.7 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.35	—	D_{810}	2536.8	2535^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.15)$	0.4545	$0.455^{+0.015}_{-0.015}$ (−0.7 σ)
A_{143}^{tSZ}	7.08	$5.1^{+3.7}_{-3.7}$ (+0.0 σ)	D_{1420}	816.3	$815.2^{+9.6}_{-9.9}$ (+0.2 σ)	$\sigma_8(0.15)$	0.7465	$0.748^{+0.014}_{-0.013}$ (−0.2 σ)
A_{100}^{PS}	253	263^{+60}_{-50} (−0.0 σ)	D_{2000}	230.27	$229.9^{+3.4}_{-3.4}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4731	$0.474^{+0.013}_{-0.013}$ (−0.6 σ)
A_{143}^{PS}	49.2	48^{+20}_{-20} (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9674	$0.9666^{+0.0083}_{-0.0081}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6619	$0.663^{+0.012}_{-0.011}$ (+0.0 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	47.4	43^{+20}_{-20} (−0.0 σ)	Y_{P}	0.245337	$0.24533^{+0.00016}_{-0.00016}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4719	$0.473^{+0.012}_{-0.011}$ (−0.6 σ)
A_{217}^{PS}	119.1	115^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246663	$0.24666^{+0.00016}_{-0.00016}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6195	$0.621^{+0.011}_{-0.010}$ (+0.1 σ)
A^{kSZ}	0.02	< 8.42 (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.613	$2.614^{+0.073}_{-0.070}$ (−0.5 σ)	$f\sigma_8(0.61)$	0.4670	$0.468^{+0.011}_{-0.010}$ (−0.5 σ)
$A_{100}^{\mathrm{dustTT}}$	8.92	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Age/Gyr	13.806	$13.805^{+0.054}_{-0.056}$ (−0.7 σ)	$\sigma_8(0.61)$	0.5895	$0.591^{+0.011}_{-0.0096}$ (+0.1 σ)
$A_{143}^{\mathrm{dustTT}}$	10.78	$10.8^{+3.5}_{-3.6}$ (+0.0 σ)	z_*	1090.01	$1090.02^{+0.58}_{-0.57}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.2973	$0.2978^{+0.0054}_{-0.0048}$ (+0.3 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.4	$18.3^{+6.3}_{-6.5}$ (+0.0 σ)	r_*	144.81	$144.82^{+0.65}_{-0.63}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3065	$0.3071^{+0.0055}_{-0.0050}$ (+0.5 σ)
$A_{217}^{\mathrm{dustTT}}$	94.5	93^{+10}_{-10} (+0.0 σ)	$100\theta_*$	1.04117	$1.04121^{+0.00082}_{-0.00083}$ (+0.5 σ)	f_{2000}^{143}	30.1	31^{+5}_{-6} (−0.1 σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.909	$13.908^{+0.062}_{-0.061}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	33.08	33^{+4}_{-4} (−0.2 σ)
c_{217}	0.99823	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.51	$1059.51^{+0.88}_{-0.88}$ (+0.3 σ)	f_{2000}^{217}	107.48	$107.9^{+3.7}_{-3.7}$ (−0.1 σ)
H_0	67.62	$67.6^{+1.1}_{-1.1}$ (+0.8 σ)	r_{drag}	147.53	$147.54^{+0.69}_{-0.68}$ (+0.7 σ)	χ_{lowl}^2	22.83	23.15 (ν : 0.4) (−0.6 σ)
Ω_{Λ}	0.6898	$0.690^{+0.014}_{-0.014}$ (+0.8 σ)	k_{D}	0.14029	$0.14028^{+0.00087}_{-0.00087}$ (−0.5 σ)	χ_{plik}^2	760.0	771.7 (ν : 15.0) (+0.1 σ)
Ω_{m}	0.3102	$0.310^{+0.014}_{-0.014}$ (−0.8 σ)	$100\theta_{\mathrm{D}}$	0.16100	$0.16102^{+0.00052}_{-0.00049}$ (−0.2 σ)	$\chi_{6\mathrm{DF}}^2$	0.022	0.058 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.14182	$0.1418^{+0.0023}_{-0.0024}$ (−0.8 σ)	z_{eq}	3374	3374^{+56}_{-56} (−0.8 σ)	χ_{MGS}^2	1.28	1.36 (ν : 0.1)
$\Omega_{\mathrm{m}}h^3$	0.09590	$0.09591^{+0.00091}_{-0.00089}$ (+0.0 σ)	k_{eq}	0.010297	$0.01030^{+0.00017}_{-0.00017}$ (−0.8 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.19	4.8 (ν : 1.3)
σ_8	0.8078	$0.809^{+0.016}_{-0.015}$ (−0.3 σ)	$100\theta_{\mathrm{eq}}$	0.8181	$0.818^{+0.011}_{-0.010}$ (+0.8 σ)	χ_{prior}^2	1.8	8.7 (ν : 8.3) (+0.4 σ)
S_8	0.8213	$0.823^{+0.030}_{-0.029}$ (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.4520	$0.4520^{+0.0055}_{-0.0053}$ (+0.8 σ)	χ_{BAO}^2	5.50	6.2 (ν : 0.9)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4499	$0.451^{+0.016}_{-0.016}$ (−0.7 σ)	$H(0.15)$	72.88	$72.89^{+0.94}_{-0.91}$ (+0.8 σ)	χ_{CMB}^2	782.9	794.9 (ν : 14.0) (−72.4 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6028	$0.604^{+0.016}_{-0.016}$ (−0.6 σ)	$D_{\mathrm{M}}(0.15)$	641.2	$641.2^{+9.1}_{-9.2}$ (−0.8 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 790.20$; $\bar{\chi}_{\mathrm{eff}}^2 = 809.76$; $R - 1 = 0.01181$

χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.19 CMB - commander_dx12_v3.2.29: 22.83 plik_rd12_HM_v22_TT: 760.03

2.79 base_plikHM_TTTEEE_lowl_reion

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022381	$0.02237^{+0.00030}_{-0.00029}$ (+1.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.09636	$0.09634^{+0.00056}_{-0.00057}$ (+1.0 σ)	$100\theta_{\mathrm{eq}}$	0.8126	$0.813^{+0.011}_{-0.011}$ (+0.2 σ)
$\Omega_{\mathrm{c}}h^2$	0.12016	$0.1201^{+0.0027}_{-0.0026}$ (−0.3 σ)	σ_8	0.8138	$0.814^{+0.016}_{-0.014}$ (+0.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.4490	$0.4492^{+0.0058}_{-0.0058}$ (+0.2 σ)
$100\theta_{\mathrm{MC}}$	1.04089	$1.04092^{+0.00062}_{-0.00065}$ (+0.3 σ)	S_8	0.8355	$0.835^{+0.033}_{-0.031}$ (−0.2 σ)	$H(0.15)$	72.63	$72.7^{+1.0}_{-1.0}$ (+0.5 σ)
τ	0.0561	$0.057^{+0.016}_{-0.014}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4576	$0.457^{+0.018}_{-0.017}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	643.9	644^{+10}_{-10} (−0.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0488	$3.050^{+0.034}_{-0.031}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6102	$0.610^{+0.017}_{-0.016}$ (−0.1 σ)	$H(0.38)$	82.83	$82.85^{+0.76}_{-0.73}$ (+0.6 σ)
n_{s}	0.9661	$0.9650^{+0.0085}_{-0.0086}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9920	$0.992^{+0.024}_{-0.023}$ (−0.0 σ)	$D_{\mathrm{M}}(0.38)$	1534.4	1534^{+21}_{-21} (−0.5 σ)
y_{cal}	1.00066	$1.0006^{+0.0048}_{-0.0050}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	98.95	$99.0^{+2.1}_{-2.1}$ (+0.3 σ)	$H(0.51)$	89.60	$89.61^{+0.60}_{-0.58}$ (+0.7 σ)
A_{217}^{CIB}	46.2	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.450	$2.454^{+0.059}_{-0.057}$ (−0.0 σ)	$D_{\mathrm{M}}(0.51)$	1987.0	1987^{+24}_{-24} (−0.5 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.61	—	z_{re}	7.86	< 9.40 (+0.6 σ)	$H(0.61)$	95.264	$95.27^{+0.48}_{-0.47}$ (+0.7 σ)
A_{143}^{tSZ}	7.10	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_{\mathrm{s}}$	2.109	$2.113^{+0.072}_{-0.064}$ (+0.6 σ)	$D_{\mathrm{M}}(0.61)$	2311.5	2311^{+26}_{-26} (−0.5 σ)
A_{100}^{PS}	248	258^{+50}_{-50} (−0.2 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8852	$1.884^{+0.023}_{-0.023}$ (−0.0 σ)	$H(2.33)$	236.68	$236.6^{+1.6}_{-1.6}$ (−0.1 σ)
A_{143}^{PS}	49.9	46^{+20}_{-20} (−0.4 σ)	D_{40}	1229.9	1233^{+25}_{-25} (−0.1 σ)	$D_{\mathrm{M}}(2.33)$	5763.9	5764^{+22}_{-22} (−0.8 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	52.0	43^{+20}_{-20} (−0.1 σ)	D_{220}	5731	5733^{+75}_{-78} (+0.5 σ)	$f\sigma_8(0.15)$	0.4618	$0.462^{+0.017}_{-0.016}$ (−0.2 σ)
A_{217}^{PS}	121.5	115^{+20}_{-20} (+0.0 σ)	D_{810}	2542.1	2539^{+26}_{-27} (+0.2 σ)	$\sigma_8(0.15)$	0.7515	$0.752^{+0.014}_{-0.013}$ (+0.3 σ)
A^{kSZ}	0.00	< 7.97 (−0.2 σ)	D_{1420}	818.7	$817.3^{+9.2}_{-9.4}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.4792	$0.479^{+0.014}_{-0.013}$ (−0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	D_{2000}	231.45	$231.0^{+3.1}_{-3.1}$ (+0.8 σ)	$\sigma_8(0.38)$	0.6657	$0.666^{+0.012}_{-0.011}$ (+0.5 σ)
$A_{143}^{\mathrm{dustTT}}$	11.05	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9661	$0.9650^{+0.0085}_{-0.0086}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4772	$0.477^{+0.012}_{-0.012}$ (−0.0 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.1	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	Y_{P}	0.245400	$0.24539^{+0.00011}_{-0.00012}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6228	$0.623^{+0.011}_{-0.010}$ (+0.5 σ)
$A_{217}^{\mathrm{dustTT}}$	95.4	94^{+10}_{-10} (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246726	$0.24672^{+0.00011}_{-0.00012}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4719	$0.472^{+0.011}_{-0.011}$ (+0.0 σ)
$A_{100}^{\mathrm{dustTE}}$	0.113	$0.114^{+0.074}_{-0.075}$	$10^5 \mathrm{D}/\mathrm{H}$	2.583	$2.586^{+0.055}_{-0.054}$ (−1.1 σ)	$\sigma_8(0.61)$	0.5924	$0.593^{+0.010}_{-0.0095}$ (+0.5 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.058}_{-0.057}$	Age/Gyr	13.7978	$13.798^{+0.048}_{-0.049}$ (−0.9 σ)	$f\sigma_8(2.33)$	0.29852	$0.2986^{+0.0051}_{-0.0047}$ (+0.6 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	z_*	1089.92	$1089.93^{+0.54}_{-0.54}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3076	$0.3077^{+0.0054}_{-0.0049}$ (+0.7 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.11}_{-0.10}$	r_*	144.38	$144.41^{+0.58}_{-0.59}$ (−0.1 σ)	f_{2000}^{143}	28.6	29^{+5}_{-5} (−0.6 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.667	$0.67^{+0.15}_{-0.16}$	$100\theta_*$	1.04108	$1.04110^{+0.00061}_{-0.00064}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	31.93	32^{+4}_{-4} (−0.7 σ)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.09^{+0.52}_{-0.52}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.868	$13.871^{+0.054}_{-0.055}$ (−0.2 σ)	f_{2000}^{217}	106.50	$107.0^{+3.4}_{-3.4}$ (−0.6 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.97	$1059.94^{+0.60}_{-0.58}$ (+1.2 σ)	χ_{lowl}^2	23.30	23.63 (ν : 0.5) (−0.2 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.04	$147.07^{+0.58}_{-0.58}$ (−0.3 σ)	χ_{plik}^2	2344.4	2359.0 (ν : 16.4) (+291.3 σ)
H_0	67.30	$67.3^{+1.2}_{-1.2}$ (+0.5 σ)	k_{D}	0.14093	$0.14089^{+0.00061}_{-0.00062}$ (+0.7 σ)	χ_{prior}^2	2.4	13.2 (ν : 12.2) (+1.6 σ)
Ω_{Λ}	0.6838	$0.684^{+0.016}_{-0.017}$ (+0.4 σ)	$100\theta_{\mathrm{D}}$	0.160734	$0.16076^{+0.00034}_{-0.00034}$ (−1.2 σ)	χ_{CMB}^2	2367.7	2382.7 (ν : 16.2) (+216.8 σ)
Ω_{m}	0.3162	$0.316^{+0.017}_{-0.016}$ (−0.4 σ)	z_{eq}	3406	3404^{+61}_{-59} (−0.1 σ)			
$\Omega_{\mathrm{m}}h^2$	0.14319	$0.1431^{+0.0025}_{-0.0025}$ (−0.1 σ)	k_{eq}	0.010397	$0.01039^{+0.00019}_{-0.00018}$ (−0.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2370.13$; $\bar{\chi}_{\mathrm{eff}}^2 = 2395.81$; $R - 1 = 0.00802$

χ_{eff}^2 : CMB - commander_dx12.v3.2.29: 23.30 plik_rd12_HM.v22b_TTTEEE: 2344.42

2.80 base_plikHM_TTTEEE_lowl_reion_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022447	$0.02243^{+0.00027}_{-0.00026}$ (+1.4 σ)	σ_8	0.8123	$0.812^{+0.015}_{-0.014}$ (+0.0 σ)	$H(0.15)$	72.98	$72.97^{+0.77}_{-0.75}$ (+0.9 σ)
$\Omega_c h^2$	0.11928	$0.1193^{+0.0020}_{-0.0020}$ (−0.7 σ)	S_8	0.8265	$0.826^{+0.025}_{-0.025}$ (−0.6 σ)	$D_M(0.15)$	640.4	$640.5^{+7.5}_{-7.6}$ (−0.9 σ)
$100\theta_{MC}$	1.04102	$1.04102^{+0.00059}_{-0.00058}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4527	$0.453^{+0.014}_{-0.013}$ (−0.6 σ)	$H(0.38)$	83.08	$83.07^{+0.58}_{-0.55}$ (+1.0 σ)
τ	0.0584	$0.058^{+0.017}_{-0.015}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6064	$0.606^{+0.014}_{-0.013}$ (−0.4 σ)	$D_M(0.38)$	1527.5	1528^{+15}_{-15} (−0.9 σ)
$\ln(10^{10} A_s)$	3.0512	$3.051^{+0.034}_{-0.032}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9872	$0.987^{+0.022}_{-0.020}$ (−0.4 σ)	$H(0.51)$	89.798	$89.79^{+0.47}_{-0.44}$ (+1.1 σ)
n_s	0.9681	$0.9669^{+0.0073}_{-0.0073}$ (+0.8 σ)	$r_{drag} h$	99.66	$99.7^{+1.5}_{-1.5}$ (+0.7 σ)	$D_M(0.51)$	1978.9	1979^{+17}_{-18} (−0.9 σ)
y_{cal}	1.00049	$1.0007^{+0.0048}_{-0.0051}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.440	$2.442^{+0.053}_{-0.049}$ (−0.3 σ)	$H(0.61)$	95.415	$95.40^{+0.39}_{-0.37}$ (+1.1 σ)
A_{217}^{CIB}	46.1	47^{+10}_{-10} (−0.2 σ)	z_{re}	8.07	< 9.50 (+0.7 σ)	$D_M(0.61)$	2302.9	2303^{+19}_{-19} (−0.9 σ)
$\xi^{tSZ \times CIB}$	0.62	—	$10^9 A_s$	2.114	$2.113^{+0.073}_{-0.067}$ (+0.6 σ)	$H(2.33)$	236.17	$236.1^{+1.2}_{-1.2}$ (−0.5 σ)
A_{143}^{tSZ}	7.11	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8808	$1.880^{+0.022}_{-0.022}$ (−0.3 σ)	$D_M(2.33)$	5757.4	5758^{+17}_{-18} (−1.2 σ)
A_{100}^{PS}	248	258^{+60}_{-50} (−0.2 σ)	D_{40}	1225.8	1229^{+24}_{-24} (−0.3 σ)	$f\sigma_8(0.15)$	0.4574	$0.457^{+0.013}_{-0.013}$ (−0.5 σ)
A_{143}^{PS}	49.5	45^{+20}_{-20} (−0.5 σ)	D_{220}	5734	5737^{+74}_{-78} (+0.6 σ)	$\sigma_8(0.15)$	0.7507	$0.750^{+0.014}_{-0.013}$ (+0.1 σ)
$A_{143 \times 217}^{PS}$	52.0	42^{+20}_{-20} (−0.2 σ)	D_{810}	2540.6	2539^{+26}_{-27} (+0.2 σ)	$f\sigma_8(0.38)$	0.4760	$0.476^{+0.012}_{-0.011}$ (−0.4 σ)
A_{217}^{PS}	121.3	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.9	$817.8^{+9.2}_{-9.2}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6655	$0.665^{+0.012}_{-0.011}$ (+0.3 σ)
A^{kSZ}	0.00	< 7.98 (−0.2 σ)	D_{2000}	231.61	$231.2^{+3.0}_{-3.0}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4747	$0.474^{+0.011}_{-0.0099}$ (−0.4 σ)
A_{100}^{dustTT}	8.82	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$n_{s,0.002}$	0.9681	$0.9669^{+0.0073}_{-0.0073}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6229	$0.622^{+0.011}_{-0.010}$ (+0.4 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.4}_{-3.4}$ (+0.1 σ)	Y_P	0.245425	$0.245415^{+0.000098}_{-0.00010}$ (+1.3 σ)	$f\sigma_8(0.61)$	0.4698	$0.4695^{+0.0099}_{-0.0096}$ (−0.3 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.6^{+6.3}_{-6.5}$ (+0.1 σ)	Y_P^{BBN}	0.246752	$0.246742^{+0.000098}_{-0.00010}$ (+1.3 σ)	$\sigma_8(0.61)$	0.5927	$0.592^{+0.010}_{-0.0097}$ (+0.5 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.0 σ)	$10^5 D/H$	2.5714	$2.576^{+0.049}_{-0.047}$ (−1.4 σ)	$f\sigma_8(2.33)$	0.2989	$0.2987^{+0.0052}_{-0.0049}$ (+0.6 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.076}_{-0.075}$	Age/Gyr	13.7837	$13.786^{+0.039}_{-0.040}$ (−1.2 σ)	$\sigma_8(2.33)$	0.3082	$0.3080^{+0.0055}_{-0.0050}$ (+0.8 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.134^{+0.059}_{-0.058}$	z_*	1089.761	$1089.79^{+0.43}_{-0.44}$ (−1.3 σ)	f_{2000}^{143}	28.3	29^{+5}_{-5} (−0.7 σ)
$A_{100 \times 217}^{dustTE}$	0.479	$0.48^{+0.17}_{-0.17}$	r_*	144.558	$144.58^{+0.46}_{-0.46}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	31.72	32^{+4}_{-4} (−0.8 σ)
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04120	$1.04120^{+0.00058}_{-0.00057}$ (+0.5 σ)	f_{2000}^{217}	106.27	$106.8^{+3.4}_{-3.4}$ (−0.7 σ)
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.15}_{-0.15}$	$D_M(z_*)/\text{Gpc}$	13.8838	$13.886^{+0.044}_{-0.044}$ (+0.2 σ)	χ_{lowl}^2	22.97	23.23 ($\nu: 0.4$) (−0.5 σ)
A_{217}^{dustTE}	2.08	$2.07^{+0.54}_{-0.51}$	z_{drag}	1060.05	$1060.01^{+0.57}_{-0.57}$ (+1.3 σ)	χ_{plik}^2	2344.8	2359.2 ($\nu: 16.2$) (+291.3 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.197	$147.22^{+0.48}_{-0.47}$ (+0.0 σ)	χ_{6DF}^2	0.029	0.054 ($\nu: 0.0$)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_D	0.14081	$0.14077^{+0.00056}_{-0.00056}$ (+0.4 σ)	χ_{MGS}^2	1.22	1.28 ($\nu: 0.1$)
H_0	67.70	$67.69^{+0.90}_{-0.87}$ (+0.9 σ)	$100\theta_D$	0.160692	$0.16072^{+0.00034}_{-0.00033}$ (−1.3 σ)	$\chi_{DR12BAO}^2$	4.42	4.8 ($\nu: 1.0$)
Ω_Λ	0.6894	$0.689^{+0.012}_{-0.012}$ (+0.8 σ)	z_{eq}	3386.9	3386^{+45}_{-44} (−0.5 σ)	χ_{prior}^2	2.8	13.5 ($\nu: 12.8$) (+1.7 σ)
Ω_m	0.3106	$0.311^{+0.012}_{-0.012}$ (−0.8 σ)	k_{eq}	0.010337	$0.01033^{+0.00014}_{-0.00013}$ (−0.5 σ)	χ_{BAO}^2	5.66	6.1 ($\nu: 0.6$)
$\Omega_m h^2$	0.14237	$0.1423^{+0.0019}_{-0.0018}$ (−0.5 σ)	$100\theta_{eq}$	0.8163	$0.8165^{+0.0084}_{-0.0084}$ (+0.6 σ)	χ_{CMB}^2	2367.8	2382.4 ($\nu: 15.4$) (+216.7 σ)
$\Omega_m h^3$	0.09639	$0.09635^{+0.00057}_{-0.00056}$ (+1.0 σ)	$100\theta_{s,eq}$	0.45091	$0.4510^{+0.0043}_{-0.0043}$ (+0.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2376.23$; $\bar{\chi}_{\text{eff}}^2 = 2402.05$; $R - 1 = 0.01766$

χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.42 CMB - commander_dx12_v3.2.29: 22.97 plik_rd12_HM_v22b_TTTEEE: 2344.84

2.81 base_plikHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022174	$0.02214^{+0.00041}_{-0.00039}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6085	$0.609^{+0.015}_{-0.015}$ (−0.2 σ)	$H(0.15)$	72.46	$72.4^{+1.2}_{-1.2}$ (+0.2 σ)
$\Omega_c h^2$	0.12010	$0.1202^{+0.0030}_{-0.0031}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	0.9896	$0.990^{+0.020}_{-0.020}$ (−0.2 σ)	$D_M(0.15)$	645.5	646^{+12}_{-12} (−0.2 σ)
$100\theta_{MC}$	1.04083	$1.04080^{+0.00090}_{-0.00088}$ (+0.1 σ)	$r_{drag}h$	98.86	$98.8^{+2.4}_{-2.3}$ (+0.2 σ)	$H(0.38)$	82.67	$82.62^{+0.88}_{-0.85}$ (+0.2 σ)
τ	0.0527	$0.052^{+0.016}_{-0.016}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4428	$2.447^{+0.048}_{-0.048}$ (−0.2 σ)	$D_M(0.38)$	1538.0	1539^{+24}_{-24} (−0.2 σ)
$\ln(10^{10} A_s)$	3.0404	$3.040^{+0.030}_{-0.030}$ (−0.0 σ)	z_{re}	7.55	$7.5^{+1.6}_{-1.6}$ (+0.0 σ)	$H(0.51)$	89.44	$89.40^{+0.71}_{-0.68}$ (+0.2 σ)
n_s	0.9653	$0.9634^{+0.0093}_{-0.0095}$ (+0.1 σ)	$10^9 A_s$	2.091	$2.091^{+0.064}_{-0.062}$ (−0.0 σ)	$D_M(0.51)$	1991.4	1993^{+28}_{-28} (−0.2 σ)
y_{cal}	1.00033	$1.0005^{+0.0048}_{-0.0048}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8823	$1.882^{+0.022}_{-0.022}$ (−0.1 σ)	$H(0.61)$	95.10	$95.06^{+0.58}_{-0.56}$ (+0.2 σ)
A_{217}^{CIB}	47.9	48^{+10}_{-10} (+0.0 σ)	D_{40}	1227.4	1232^{+25}_{-24} (−0.1 σ)	$D_M(0.61)$	2316.6	2318^{+30}_{-30} (−0.2 σ)
$\xi^{tSZ \times CIB}$	0.44	—	D_{220}	5710	5716^{+79}_{-79} (+0.1 σ)	$H(2.33)$	236.43	$236.4^{+1.9}_{-1.9}$ (−0.2 σ)
A_{143}^{tSZ}	6.92	$5.0^{+3.8}_{-4.0}$ (−0.0 σ)	D_{810}	2537.7	2536^{+26}_{-26} (−0.0 σ)	$D_M(2.33)$	5773.5	5775^{+27}_{-28} (−0.1 σ)
A_{100}^{PS}	254	264^{+60}_{-50} (+0.0 σ)	D_{1420}	816.0	815^{+10}_{-10} (+0.0 σ)	$f\sigma_8(0.15)$	0.4608	$0.461^{+0.016}_{-0.016}$ (−0.2 σ)
A_{143}^{PS}	51.1	49^{+20}_{-20} (−0.0 σ)	D_{2000}	230.18	$229.6^{+3.5}_{-3.5}$ (+0.0 σ)	$\sigma_8(0.15)$	0.7486	$0.748^{+0.011}_{-0.011}$ (−0.1 σ)
$A_{143 \times 217}^{PS}$	49.9	43^{+20}_{-20} (−0.0 σ)	$n_{s,0.002}$	0.9653	$0.9634^{+0.0093}_{-0.0095}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4778	$0.478^{+0.012}_{-0.012}$ (−0.2 σ)
A_{217}^{PS}	120.7	115^{+20}_{-20} (−0.0 σ)	Y_P	0.245315	$0.24530^{+0.00017}_{-0.00019}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6630	$0.6625^{+0.0099}_{-0.0097}$ (−0.1 σ)
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246641	$0.24662^{+0.00017}_{-0.00019}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4757	$0.476^{+0.010}_{-0.010}$ (−0.2 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	$10^5 D/H$	2.623	$2.630^{+0.076}_{-0.076}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6202	$0.6197^{+0.0093}_{-0.0091}$ (−0.1 σ)
A_{143}^{dustTT}	10.80	$10.7^{+3.5}_{-3.5}$ (−0.0 σ)	Age/Gyr	13.821	$13.825^{+0.062}_{-0.063}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4703	$0.4702^{+0.0091}_{-0.0093}$ (−0.2 σ)
$A_{143 \times 217}^{dustTT}$	19.5	$18.3^{+6.5}_{-6.6}$ (−0.0 σ)	z_*	1090.18	$1090.23^{+0.67}_{-0.68}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5900	$0.5895^{+0.0090}_{-0.0087}$ (−0.1 σ)
A_{217}^{dustTT}	94.8	93^{+10}_{-10} (−0.0 σ)	r_*	144.55	$144.56^{+0.73}_{-0.71}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.29724	$0.2970^{+0.0048}_{-0.0046}$ (−0.0 σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_*$	1.04103	$1.04101^{+0.00088}_{-0.00087}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3062	$0.3059^{+0.0053}_{-0.0051}$ (+0.0 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.886	$13.886^{+0.068}_{-0.067}$ (+0.2 σ)	f_{2000}^{143}	30.2	31^{+6}_{-6} (+0.0 σ)
H_0	67.12	$67.1^{+1.4}_{-1.4}$ (+0.2 σ)	z_{drag}	1059.47	$1059.41^{+0.87}_{-0.85}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	33.12	34^{+4}_{-4} (+0.0 σ)
Ω_Λ	0.6828	$0.682^{+0.019}_{-0.019}$ (+0.2 σ)	r_{drag}	147.28	$147.30^{+0.75}_{-0.73}$ (+0.2 σ)	f_{2000}^{217}	107.51	$108.2^{+3.7}_{-3.8}$ (+0.0 σ)
Ω_m	0.3172	$0.318^{+0.019}_{-0.019}$ (−0.2 σ)	k_D	0.14051	$0.14047^{+0.00087}_{-0.00087}$ (−0.2 σ)	$\chi^2_{lensing}$	8.90	9.45 (ν : 0.4)
$\Omega_m h^2$	0.14292	$0.1430^{+0.0029}_{-0.0029}$ (−0.2 σ)	$100\theta_D$	0.16101	$0.16106^{+0.00049}_{-0.00051}$ (−0.0 σ)	χ^2_{small}	395.86	396.9 (ν : 1.3) (−0.0 σ)
$\Omega_m h^3$	0.09594	$0.09587^{+0.00089}_{-0.00087}$ (−0.0 σ)	z_{eq}	3400	3401^{+69}_{-70} (−0.2 σ)	χ^2_{lowl}	23.23	23.7 (ν : 0.5) (−0.2 σ)
σ_8	0.8108	$0.810^{+0.012}_{-0.012}$ (−0.2 σ)	k_{eq}	0.010377	$0.01038^{+0.00021}_{-0.00021}$ (−0.2 σ)	χ^2_{plik}	759.3	771.1 (ν : 13.6) (−0.1 σ)
S_8	0.8337	$0.834^{+0.032}_{-0.031}$ (−0.2 σ)	$100\theta_{eq}$	0.8131	$0.813^{+0.013}_{-0.013}$ (+0.2 σ)	χ^2_{prior}	1.3	7.3 (ν : 6.7) (−0.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4566	$0.457^{+0.017}_{-0.017}$ (−0.2 σ)	$100\theta_{s,eq}$	0.4494	$0.4493^{+0.0068}_{-0.0065}$ (+0.2 σ)	χ^2_{CMB}	1187.3	1201.1 (ν : 14.9) (+1.6 σ)

Best-fit $\chi^2_{eff} = 1188.57$; $\bar{\chi}^2_{eff} = 1208.41$; $R - 1 = 0.00560$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.90 simall_100x143_offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3.2_29: 23.23 plik_rd12_HM_v22_TT: 759.32

2.82 base_plikHM_TT_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022224	$0.02221^{+0.00038}_{-0.00036}$ (+0.4 σ)	$r_{\mathrm{drag}} h$	99.65	$99.6^{+1.7}_{-1.6}$ (+0.7 σ)	$H(0.51)$	89.63	$89.63^{+0.52}_{-0.52}$ (+0.7 σ)
$\Omega_{\mathrm{c}} h^2$	0.11909	$0.1191^{+0.0021}_{-0.0021}$ (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4309	$2.436^{+0.042}_{-0.042}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1982.8	1983^{+20}_{-20} (−0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04093	$1.04097^{+0.00085}_{-0.00083}$ (+0.4 σ)	z_{re}	7.71	$7.8^{+1.5}_{-1.5}$ (+0.3 σ)	$H(0.61)$	95.244	$95.24^{+0.45}_{-0.45}$ (+0.7 σ)
τ	0.0544	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	$10^9 A_{\mathrm{s}}$	2.095	$2.099^{+0.063}_{-0.060}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2307.4	2308^{+21}_{-21} (−0.7 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0421	$3.044^{+0.030}_{-0.029}$ (+0.2 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8788	$1.879^{+0.021}_{-0.021}$ (−0.4 σ)	$H(2.33)$	235.81	$235.8^{+1.4}_{-1.4}$ (−0.7 σ)
n_{s}	0.9669	$0.9659^{+0.0078}_{-0.0080}$ (+0.6 σ)	D_{40}	1225.0	1228^{+24}_{-22} (−0.4 σ)	$D_{\mathrm{M}}(2.33)$	5767.6	5768^{+23}_{-23} (−0.6 σ)
y_{cal}	1.00051	$1.0007^{+0.0050}_{-0.0048}$ (+0.1 σ)	D_{220}	5720	5724^{+79}_{-74} (+0.3 σ)	$f\sigma_8(0.15)$	0.4555	$0.456^{+0.012}_{-0.012}$ (−0.6 σ)
A_{217}^{CIB}	48.5	48^{+10}_{-10} (−0.0 σ)	D_{810}	2537.5	2537^{+27}_{-26} (+0.0 σ)	$\sigma_8(0.15)$	0.7471	$0.748^{+0.011}_{-0.011}$ (−0.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.33	—	D_{1420}	816.4	$815.6^{+9.6}_{-9.9}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4739	$0.4744^{+0.0099}_{-0.0098}$ (−0.6 σ)
A_{143}^{tSZ}	7.04	$5.1^{+3.8}_{-4.0}$ (+0.0 σ)	D_{2000}	230.29	$230.0^{+3.4}_{-3.4}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6623	$0.663^{+0.010}_{-0.0096}$ (−0.1 σ)
A_{100}^{PS}	253	263^{+60}_{-50} (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9669	$0.9659^{+0.0078}_{-0.0080}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4726	$0.4730^{+0.0089}_{-0.0088}$ (−0.5 σ)
A_{143}^{PS}	49.0	49^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245336	$0.24533^{+0.00015}_{-0.00017}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6198	$0.6203^{+0.0094}_{-0.0090}$ (+0.0 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	46.8	43^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246662	$0.24665^{+0.00015}_{-0.00017}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4676	$0.4680^{+0.0083}_{-0.0080}$ (−0.5 σ)
A_{217}^{PS}	119.3	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.613	$2.617^{+0.069}_{-0.071}$ (−0.4 σ)	$\sigma_8(0.61)$	0.5898	$0.5902^{+0.0090}_{-0.0086}$ (+0.1 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.808	$13.809^{+0.053}_{-0.052}$ (−0.6 σ)	$f\sigma_8(2.33)$	0.29740	$0.2976^{+0.0047}_{-0.0044}$ (+0.2 σ)
$A_{100}^{\mathrm{dustTT}}$	8.84	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	z_*	1090.03	$1090.05^{+0.54}_{-0.55}$ (−0.6 σ)	$\sigma_8(2.33)$	0.30663	$0.3068^{+0.0051}_{-0.0047}$ (+0.4 σ)
$A_{143}^{\mathrm{dustTT}}$	10.77	$10.7^{+3.6}_{-3.5}$ (−0.0 σ)	r_*	144.78	$144.78^{+0.56}_{-0.56}$ (+0.7 σ)	f_{2000}^{143}	30.1	31^{+6}_{-6} (−0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.4	$18.3^{+6.6}_{-6.6}$ (+0.0 σ)	$100\theta_*$	1.04113	$1.04117^{+0.00084}_{-0.00081}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	33.01	33^{+4}_{-4} (−0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94.5	93^{+10}_{-10} (+0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.906	$13.906^{+0.056}_{-0.056}$ (+0.6 σ)	f_{2000}^{217}	107.49	$107.9^{+3.6}_{-3.8}$ (−0.1 σ)
c_{100}	0.99966	$0.9996^{+0.0013}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.51	$1059.49^{+0.86}_{-0.82}$ (+0.2 σ)	$\chi_{\mathrm{lensing}}^2$	8.87	9.26 (ν : 0.2)
c_{217}	0.99822	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.50	$147.50^{+0.63}_{-0.63}$ (+0.6 σ)	χ_{small}^2	396.09	397.1 (ν : 1.7) (+0.1 σ)
H_0	67.56	$67.54^{+0.95}_{-0.95}$ (+0.7 σ)	k_{D}	0.14033	$0.14031^{+0.00085}_{-0.00083}$ (−0.5 σ)	χ_{lowl}^2	22.96	23.24 (ν : 0.4) (−0.5 σ)
Ω_{Λ}	0.6890	$0.689^{+0.013}_{-0.013}$ (+0.7 σ)	$100\theta_{\mathrm{D}}$	0.160992	$0.16102^{+0.00048}_{-0.00050}$ (−0.2 σ)	χ_{plik}^2	759.8	771.6 (ν : 13.7) (+0.0 σ)
Ω_{m}	0.3110	$0.311^{+0.013}_{-0.013}$ (−0.7 σ)	z_{eq}	3376.9	3378^{+49}_{-49} (−0.7 σ)	$\chi_{6\mathrm{DF}}^2$	0.029	0.060 (ν : 0.0)
$\Omega_{\mathrm{m}} h^2$	0.14196	$0.1420^{+0.0020}_{-0.0021}$ (−0.7 σ)	k_{eq}	0.010307	$0.01031^{+0.00015}_{-0.00015}$ (−0.7 σ)	χ_{MGS}^2	1.22	1.27 (ν : 0.1)
$\Omega_{\mathrm{m}} h^3$	0.09590	$0.09590^{+0.00090}_{-0.00085}$ (+0.0 σ)	$100\theta_{\mathrm{eq}}$	0.8174	$0.8173^{+0.0092}_{-0.0089}$ (+0.7 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.37	4.9 (ν : 1.2)
σ_8	0.8085	$0.809^{+0.012}_{-0.012}$ (−0.3 σ)	$100\theta_{\mathrm{s,eq}}$	0.45166	$0.4516^{+0.0048}_{-0.0046}$ (+0.7 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.6) (−0.0 σ)
S_8	0.8232	$0.824^{+0.023}_{-0.023}$ (−0.6 σ)	$H(0.15)$	72.83	$72.82^{+0.83}_{-0.82}$ (+0.7 σ)	χ_{CMB}^2	1187.7	1201.2 (ν : 14.7) (+1.6 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4509	$0.451^{+0.013}_{-0.013}$ (−0.6 σ)	$D_{\mathrm{M}}(0.15)$	641.7	$641.9^{+8.2}_{-8.1}$ (−0.7 σ)	χ_{BAO}^2	5.62	6.2 (ν : 0.8)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6038	$0.604^{+0.012}_{-0.012}$ (−0.6 σ)	$H(0.38)$	82.93	$82.92^{+0.64}_{-0.62}$ (+0.7 σ)			
$\sigma_8/h^{0.5}$	0.9836	$0.985^{+0.018}_{-0.017}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1530.6	1531^{+17}_{-17} (−0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1194.68$; $\bar{\chi}_{\mathrm{eff}}^2 = 1214.73$; $R - 1 = 0.01723$

χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.37 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p.teb_consext8: 8.88 small_100x143_offlike5_EE_Aplanck_B: 396.09 commander_dx12.v3.2.29: 22.96 plik_rd12_HM.v22_TT: 759.80

2.83 base_plikHM_TT_lowl_lowE_lensing_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022349	$0.02232^{+0.00036}_{-0.00039}$ (+0.9 σ)	$\sigma_8/h^{0.5}$	0.9794	$0.980^{+0.020}_{-0.019}$ (−0.8 σ)	$H(0.38)$	83.24	$83.24^{+0.82}_{-0.82}$ (+1.3 σ)
$\Omega_c h^2$	0.11826	$0.1181^{+0.0029}_{-0.0030}$ (−1.2 σ)	$r_{\text{drag}} h$	100.39	$100.5^{+2.3}_{-2.2}$ (+1.3 σ)	$D_M(0.38)$	1522.4	1522^{+22}_{-21} (−1.3 σ)
$100\theta_{\text{MC}}$	1.04115	$1.04115^{+0.00089}_{-0.00087}$ (+0.8 σ)	$\langle d^2 \rangle^{1/2}$	2.4224	$2.425^{+0.047}_{-0.044}$ (−0.8 σ)	$H(0.51)$	89.89	$89.89^{+0.69}_{-0.66}$ (+1.3 σ)
τ	0.0572	$0.058^{+0.016}_{-0.015}$ (+0.8 σ)	z_{re}	7.95	$8.0^{+1.5}_{-1.6}$ (+0.7 σ)	$D_M(0.51)$	1973.2	1973^{+26}_{-25} (−1.3 σ)
$\ln(10^{10} A_s)$	3.0466	$3.048^{+0.029}_{-0.031}$ (+0.5 σ)	$10^9 A_s$	2.104	$2.109^{+0.063}_{-0.064}$ (+0.5 σ)	$H(0.61)$	95.46	$95.45^{+0.57}_{-0.55}$ (+1.3 σ)
n_s	0.9692	$0.9685^{+0.0097}_{-0.0093}$ (+1.0 σ)	$10^9 A_s e^{-2\tau}$	1.8770	$1.876^{+0.021}_{-0.021}$ (−0.6 σ)	$D_M(0.61)$	2296.9	2297^{+28}_{-27} (−1.3 σ)
y_{cal}	1.00071	$1.0010^{+0.0049}_{-0.0048}$ (+0.3 σ)	D_{40}	1222.6	1225^{+24}_{-23} (−0.6 σ)	$H(2.33)$	235.41	$235.3^{+1.8}_{-1.8}$ (−1.1 σ)
A_{217}^{CIB}	47.7	47^{+10}_{-10} (−0.1 σ)	D_{220}	5733	5735^{+75}_{-75} (+0.5 σ)	$D_M(2.33)$	5757.4	5758^{+26}_{-26} (−1.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.47	—	D_{810}	2539.5	2538^{+26}_{-25} (+0.2 σ)	$f\sigma_8(0.15)$	0.4514	$0.451^{+0.015}_{-0.014}$ (−1.0 σ)
A_{143}^{tSZ}	6.91	$5.2^{+3.7}_{-4.0}$ (+0.1 σ)	D_{1420}	818.0	$817.1^{+9.3}_{-9.9}$ (+0.5 σ)	$\sigma_8(0.15)$	0.7471	$0.747^{+0.011}_{-0.011}$ (−0.2 σ)
A_{100}^{PS}	252	262^{+50}_{-50} (−0.1 σ)	D_{2000}	231.02	$230.7^{+3.4}_{-3.5}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.4711	$0.471^{+0.012}_{-0.011}$ (−0.9 σ)
A_{143}^{PS}	49.9	48^{+20}_{-20} (−0.2 σ)	$n_{s,0.002}$	0.9692	$0.9685^{+0.0097}_{-0.0093}$ (+1.0 σ)	$\sigma_8(0.38)$	0.6629	$0.6632^{+0.0097}_{-0.0096}$ (+0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	49.6	43^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245387	$0.24537^{+0.00015}_{-0.00016}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4704	$0.470^{+0.010}_{-0.0096}$ (−0.9 σ)
A_{217}^{PS}	120.0	115^{+20}_{-20} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246714	$0.24670^{+0.00015}_{-0.00016}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6207	$0.6210^{+0.0094}_{-0.0093}$ (+0.1 σ)
A^{kSZ}	0.00	< 8.39 (−0.1 σ)	$10^5 \text{D}/\text{H}$	2.589	$2.596^{+0.073}_{-0.069}$ (−0.9 σ)	$f\sigma_8(0.61)$	0.4660	$0.4660^{+0.0092}_{-0.0087}$ (−0.8 σ)
A_{100}^{dustTT}	8.88	$9.0^{+3.5}_{-3.6}$ (+0.0 σ)	Age/Gyr	13.785	$13.788^{+0.059}_{-0.060}$ (−1.2 σ)	$\sigma_8(0.61)$	0.5908	$0.5911^{+0.0091}_{-0.0090}$ (+0.2 σ)
A_{143}^{dustTT}	10.90	$10.7^{+3.7}_{-3.5}$ (−0.0 σ)	z_*	1089.80	$1089.83^{+0.63}_{-0.61}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.29813	$0.2983^{+0.0047}_{-0.0047}$ (+0.5 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$18.3^{+6.5}_{-6.8}$ (+0.0 σ)	r_*	144.90	$144.96^{+0.68}_{-0.71}$ (+1.0 σ)	$\sigma_8(2.33)$	0.3076	$0.3078^{+0.0053}_{-0.0050}$ (+0.7 σ)
A_{217}^{dustTT}	94.9	94^{+20}_{-10} (+0.0 σ)	$100\theta_*$	1.04134	$1.04134^{+0.00089}_{-0.00086}$ (+0.8 σ)	f_{2000}^{143}	29.4	30^{+6}_{-6} (−0.3 σ)
c_{100}	0.99969	$0.9997^{+0.0014}_{-0.0013}$ (+0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.915	$13.920^{+0.063}_{-0.068}$ (+1.0 σ)	$f_{2000}^{143 \times 217}$	32.55	33^{+4}_{-4} (−0.4 σ)
c_{217}	0.99826	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.78	$1059.68^{+0.83}_{-0.85}$ (+0.6 σ)	f_{2000}^{217}	107.04	$107.5^{+3.8}_{-3.7}$ (−0.3 σ)
H_0	68.03	$68.0^{+1.3}_{-1.3}$ (+1.3 σ)	r_{drag}	147.57	$147.65^{+0.69}_{-0.75}$ (+0.9 σ)	χ_{lensing}^2	8.98	9.5 (ν : 0.6)
Ω_Λ	0.6948	$0.695^{+0.017}_{-0.017}$ (+1.2 σ)	k_{D}	0.14034	$0.14024^{+0.00091}_{-0.00085}$ (−0.6 σ)	χ_{simall}^2	396.58	397.8 (ν : 2.7) (+0.5 σ)
Ω_{m}	0.3052	$0.305^{+0.017}_{-0.017}$ (−1.2 σ)	$100\theta_{\text{D}}$	0.16088	$0.16093^{+0.00050}_{-0.00050}$ (−0.5 σ)	χ_{lowl}^2	22.68	22.87 (ν : 0.4) (−0.8 σ)
$\Omega_{\text{m}} h^2$	0.14126	$0.1411^{+0.0027}_{-0.0028}$ (−1.2 σ)	z_{eq}	3360	3357^{+66}_{-66} (−1.2 σ)	χ_{plik}^2	760.9	772.9 (ν : 15.1) (+0.3 σ)
$\Omega_{\text{m}} h^3$	0.09609	$0.09601^{+0.00085}_{-0.00084}$ (+0.3 σ)	k_{eq}	0.010256	$0.01024^{+0.00020}_{-0.00020}$ (−1.2 σ)	χ_{H073p45}^2	10.7	10.8 (ν : 3.5)
σ_8	0.8078	$0.808^{+0.012}_{-0.013}$ (−0.4 σ)	$100\theta_{\text{eq}}$	0.8210	$0.822^{+0.013}_{-0.012}$ (+1.2 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.4) (+0.0 σ)
S_8	0.8149	$0.815^{+0.029}_{-0.029}$ (−1.0 σ)	$100\theta_{\text{s,eq}}$	0.4534	$0.4538^{+0.0067}_{-0.0063}$ (+1.2 σ)	χ_{CMB}^2	1189.1	1203.1 (ν : 17.5) (+2.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4463	$0.446^{+0.016}_{-0.016}$ (−1.0 σ)	$H(0.15)$	73.24	$73.3^{+1.1}_{-1.1}$ (+1.3 σ)			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6005	$0.600^{+0.014}_{-0.013}$ (−0.9 σ)	$D_M(0.15)$	637.7	638^{+11}_{-11} (−1.3 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1201.06$; $\bar{\chi}_{\text{eff}}^2 = 1221.17$; $R - 1 = 0.06771$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.98 simall_100x143_offlike5_EE_Aplanck_B: 396.58 commander_dx12_v3.2_29: 22.68 plik_rd12_HM.v22_TT: 760.89 Hubble - H073p45: 10.67

2.84 base_plikHM_TT_lowl_lowE_lensing_post_BAO_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022352	$0.02231^{+0.00036}_{-0.00037}$ (+0.9 σ)	$r_{\text{drag}} h$	100.44	$100.4^{+1.7}_{-1.6}$ (+1.2 σ)	$H(0.51)$	89.90	$89.87^{+0.55}_{-0.51}$ (+1.3 σ)
$\Omega_c h^2$	0.11819	$0.1182^{+0.0021}_{-0.0021}$ (−1.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4196	$2.425^{+0.042}_{-0.041}$ (−0.8 σ)	$D_M(0.51)$	1972.7	1973^{+19}_{-19} (−1.2 σ)
$100\theta_{\text{MC}}$	1.04113	$1.04114^{+0.00085}_{-0.00080}$ (+0.8 σ)	z_{re}	7.91	$8.0^{+1.4}_{-1.5}$ (+0.6 σ)	$H(0.61)$	95.466	$95.44^{+0.46}_{-0.44}$ (+1.2 σ)
τ	0.0569	$0.058^{+0.015}_{-0.015}$ (+0.7 σ)	$10^9 A_s$	2.103	$2.108^{+0.062}_{-0.062}$ (+0.5 σ)	$D_M(0.61)$	2296.4	2297^{+21}_{-21} (−1.3 σ)
$\ln(10^{10} A_s)$	3.0460	$3.048^{+0.029}_{-0.030}$ (+0.5 σ)	$10^9 A_s e^{-2\tau}$	1.8769	$1.876^{+0.021}_{-0.019}$ (−0.6 σ)	$H(2.33)$	235.37	$235.3^{+1.4}_{-1.4}$ (−1.1 σ)
n_s	0.9698	$0.9684^{+0.0082}_{-0.0080}$ (+1.0 σ)	D_{40}	1221.0	1225^{+23}_{-23} (−0.6 σ)	$D_M(2.33)$	5757.3	5759^{+22}_{-23} (−1.2 σ)
y_{cal}	1.00084	$1.0010^{+0.0050}_{-0.0048}$ (+0.2 σ)	D_{220}	5732	5735^{+77}_{-73} (+0.5 σ)	$f\sigma_8(0.15)$	0.4509	$0.451^{+0.012}_{-0.012}$ (−1.0 σ)
A_{217}^{CIB}	46.5	48^{+10}_{-10} (−0.0 σ)	D_{810}	2540.2	2538^{+27}_{-25} (+0.1 σ)	$\sigma_8(0.15)$	0.7468	$0.747^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.61	—	D_{1420}	818.5	$817.0^{+9.4}_{-9.6}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4707	$0.4711^{+0.0097}_{-0.010}$ (−0.9 σ)
A_{143}^{tSZ}	6.92	$5.3^{+3.7}_{-4.0}$ (+0.1 σ)	D_{2000}	231.19	$230.6^{+3.3}_{-3.3}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6627	$0.663^{+0.010}_{-0.010}$ (+0.0 σ)
A_{100}^{PS}	250	261^{+60}_{-50} (−0.1 σ)	$n_{s,0.002}$	0.9698	$0.9684^{+0.0082}_{-0.0080}$ (+1.0 σ)	$f\sigma_8(0.51)$	0.4701	$0.4705^{+0.0088}_{-0.0088}$ (−0.8 σ)
A_{143}^{PS}	51.7	48^{+20}_{-20} (−0.2 σ)	Y_{P}	0.245388	$0.24537^{+0.00015}_{-0.00015}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6205	$0.6209^{+0.0095}_{-0.0094}$ (+0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	52.9	43^{+20}_{-20} (−0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246715	$0.24670^{+0.00015}_{-0.00015}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4657	$0.4660^{+0.0082}_{-0.0082}$ (−0.8 σ)
A_{217}^{PS}	121.7	115^{+20}_{-20} (−0.0 σ)	10^5D/H	2.589	$2.597^{+0.070}_{-0.066}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5906	$0.5910^{+0.0091}_{-0.0090}$ (+0.2 σ)
A^{kSZ}	0.03	< 8.27 (−0.1 σ)	Age/Gyr	13.785	$13.789^{+0.051}_{-0.052}$ (−1.1 σ)	$f\sigma_8(2.33)$	0.29806	$0.2982^{+0.0047}_{-0.0046}$ (+0.5 σ)
A_{100}^{dustTT}	8.87	$8.9^{+3.4}_{-3.5}$ (−0.0 σ)	z_*	1089.79	$1089.84^{+0.53}_{-0.54}$ (−1.1 σ)	$\sigma_8(2.33)$	0.30759	$0.3078^{+0.0049}_{-0.0048}$ (+0.7 σ)
A_{143}^{dustTT}	10.81	$10.7^{+3.8}_{-3.5}$ (−0.0 σ)	r_*	144.92	$144.95^{+0.57}_{-0.59}$ (+1.0 σ)	f_{2000}^{143}	29.3	30^{+6}_{-6} (−0.3 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.9	$18.3^{+6.6}_{-6.6}$ (+0.0 σ)	$100\theta_*$	1.04133	$1.04134^{+0.00086}_{-0.00080}$ (+0.8 σ)	$f_{2000}^{143 \times 217}$	32.46	33^{+4}_{-4} (−0.3 σ)
A_{217}^{dustTT}	95.6	93^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.916	$13.919^{+0.055}_{-0.058}$ (+0.9 σ)	f_{2000}^{217}	106.92	$107.6^{+3.8}_{-3.7}$ (−0.3 σ)
c_{100}	0.99969	$0.9997^{+0.0013}_{-0.0013}$ (+0.1 σ)	z_{drag}	1059.78	$1059.67^{+0.84}_{-0.84}$ (+0.6 σ)	χ^2_{lensing}	9.06	9.43 (ν : 0.5)
c_{217}	0.99824	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_{drag}	147.59	$147.64^{+0.62}_{-0.66}$ (+0.9 σ)	χ^2_{small}	396.46	397.7 (ν : 2.4) (+0.4 σ)
H_0	68.05	$68.02^{+0.97}_{-0.93}$ (+1.3 σ)	k_{D}	0.14033	$0.14024^{+0.00087}_{-0.00083}$ (−0.6 σ)	χ^2_{lowl}	22.53	22.87 (ν : 0.3) (−0.8 σ)
Ω_Λ	0.6952	$0.695^{+0.013}_{-0.012}$ (+1.2 σ)	$100\theta_{\text{D}}$	0.16087	$0.16093^{+0.00050}_{-0.00050}$ (−0.5 σ)	χ^2_{plik}	761.2	772.6 (ν : 14.2) (+0.2 σ)
Ω_{m}	0.3048	$0.305^{+0.012}_{-0.013}$ (−1.2 σ)	z_{eq}	3358	3357^{+50}_{-50} (−1.1 σ)	χ^2_{H073p45}	10.57	10.8 (ν : 1.8)
$\Omega_{\text{m}} h^2$	0.14118	$0.1411^{+0.0021}_{-0.0021}$ (−1.1 σ)	k_{eq}	0.010250	$0.01025^{+0.00015}_{-0.00015}$ (−1.1 σ)	$\chi^2_{6\text{DF}}$	0.000	0.029 (ν : 0.0)
$\Omega_{\text{m}} h^3$	0.09608	$0.09601^{+0.00086}_{-0.00085}$ (+0.3 σ)	$100\theta_{\text{eq}}$	0.8213	$0.8214^{+0.0093}_{-0.0092}$ (+1.2 σ)	χ^2_{MGS}	1.68	1.73 (ν : 0.1)
σ_8	0.8075	$0.808^{+0.012}_{-0.012}$ (−0.4 σ)	$100\theta_{\text{s,eq}}$	0.45359	$0.4537^{+0.0048}_{-0.0048}$ (+1.2 σ)	χ^2_{DR12BAO}	3.50	3.96 (ν : 0.3)
S_8	0.8140	$0.815^{+0.023}_{-0.023}$ (−1.0 σ)	$H(0.15)$	73.26	$73.23^{+0.85}_{-0.81}$ (+1.3 σ)	χ^2_{prior}	1.3	7.4 (ν : 6.5) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4458	$0.446^{+0.013}_{-0.012}$ (−1.0 σ)	$D_M(0.15)$	637.5	$637.8^{+8.0}_{-8.2}$ (−1.2 σ)	χ^2_{CMB}	1189.2	1202.6 (ν : 15.5) (+1.9 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6000	$0.601^{+0.012}_{-0.012}$ (−0.9 σ)	$H(0.38)$	83.25	$83.23^{+0.65}_{-0.61}$ (+1.3 σ)	χ^2_{BAO}	5.17	5.71 (ν : 0.3)
$\sigma_8/h^{0.5}$	0.9788	$0.980^{+0.018}_{-0.017}$ (−0.8 σ)	$D_M(0.38)$	1522.0	1523^{+16}_{-17} (−1.2 σ)			

Best-fit $\chi^2_{\text{eff}} = 1206.21$; $\bar{\chi}^2_{\text{eff}} = 1226.45$; $R - 1 = 0.05385$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.50 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p_teb_consext8: 9.06 small_100x143_offlike5_EE_Aplanck_B: 396.46 commander_dx12_v3_2_29: 22.54 plik_rd12_HM_v22_TT: 761.15 Hubble - H073p45: 10.57

2.85 base_plikHM_TT_lowl_lowE_lensing_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022191	$0.02217^{+0.00041}_{-0.00038}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9871	$0.987^{+0.019}_{-0.019}$ (−0.3 σ)	$H(0.38)$	82.76	$82.75^{+0.82}_{-0.78}$ (+0.4 σ)
$\Omega_c h^2$	0.11977	$0.1197^{+0.0027}_{-0.0028}$ (−0.4 σ)	$r_{\text{drag}} h$	99.13	$99.2^{+2.2}_{-2.1}$ (+0.4 σ)	$D_M(0.38)$	1535.4	1536^{+22}_{-22} (−0.4 σ)
$100\theta_{\text{MC}}$	1.04089	$1.04087^{+0.00088}_{-0.00087}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4391	$2.442^{+0.046}_{-0.047}$ (−0.3 σ)	$H(0.51)$	89.51	$89.50^{+0.66}_{-0.64}$ (+0.4 σ)
τ	0.0527	$0.054^{+0.016}_{-0.015}$ (+0.2 σ)	z_{re}	7.55	$7.6^{+1.5}_{-1.6}$ (+0.2 σ)	$D_M(0.51)$	1988.4	1989^{+25}_{-26} (−0.4 σ)
$\ln(10^{10} A_s)$	3.0404	$3.042^{+0.030}_{-0.029}$ (+0.1 σ)	$10^9 A_s$	2.091	$2.094^{+0.064}_{-0.061}$ (+0.1 σ)	$H(0.61)$	95.15	$95.14^{+0.55}_{-0.53}$ (+0.4 σ)
n_s	0.9654	$0.9645^{+0.0090}_{-0.0090}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8820	$1.881^{+0.022}_{-0.021}$ (−0.2 σ)	$D_M(0.61)$	2313.3	2314^{+27}_{-28} (−0.4 σ)
y_{cal}	1.00064	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{40}	1228.3	1230^{+24}_{-24} (−0.2 σ)	$H(2.33)$	236.23	$236.2^{+1.7}_{-1.7}$ (−0.4 σ)
A_{217}^{CIB}	49.8	48^{+10}_{-10} (+0.0 σ)	D_{220}	5719	5720^{+78}_{-77} (+0.2 σ)	$D_M(2.33)$	5771.1	5772^{+26}_{-26} (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.14	—	D_{810}	2538.4	2537^{+26}_{-26} (+0.0 σ)	$f\sigma_8(0.15)$	0.4588	$0.459^{+0.015}_{-0.015}$ (−0.4 σ)
A_{143}^{tSZ}	7.12	$5.1^{+3.8}_{-4.0}$ (+0.0 σ)	D_{1420}	816.2	$815.1^{+9.8}_{-10}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7478	$0.748^{+0.011}_{-0.011}$ (−0.2 σ)
A_{100}^{PS}	256	263^{+60}_{-50} (−0.0 σ)	D_{2000}	230.19	$229.8^{+3.5}_{-3.4}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4763	$0.476^{+0.011}_{-0.012}$ (−0.4 σ)
A_{143}^{PS}	46.5	49^{+20}_{-20} (−0.0 σ)	$n_{s,0.002}$	0.9654	$0.9645^{+0.0090}_{-0.0090}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6625	$0.6626^{+0.0099}_{-0.0096}$ (−0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	42.0	43^{+20}_{-20} (−0.0 σ)	Y_P	0.245322	$0.24531^{+0.00016}_{-0.00018}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4745	$0.475^{+0.010}_{-0.0098}$ (−0.3 σ)
A_{217}^{PS}	117.3	115^{+20}_{-20} (−0.0 σ)	Y_P^{BBN}	0.246648	$0.24664^{+0.00016}_{-0.00018}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6198	$0.6200^{+0.0094}_{-0.0090}$ (−0.0 σ)
A^{kSZ}	0.0	—	$10^5 \text{D}/\text{H}$	2.620	$2.624^{+0.073}_{-0.075}$ (−0.3 σ)	$f\sigma_8(0.61)$	0.4692	$0.4693^{+0.0091}_{-0.0089}$ (−0.3 σ)
A_{100}^{dustTT}	8.87	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	Age/Gyr	13.815	$13.818^{+0.060}_{-0.060}$ (−0.3 σ)	$\sigma_8(0.61)$	0.5897	$0.5898^{+0.0091}_{-0.0087}$ (−0.0 σ)
A_{143}^{dustTT}	10.79	$10.7^{+3.6}_{-3.5}$ (−0.0 σ)	z_*	1090.13	$1090.15^{+0.62}_{-0.63}$ (−0.4 σ)	$f\sigma_8(2.33)$	0.29719	$0.2973^{+0.0048}_{-0.0045}$ (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.0	$18.3^{+6.6}_{-6.6}$ (−0.0 σ)	r_*	144.63	$144.65^{+0.68}_{-0.66}$ (+0.4 σ)	$\sigma_8(2.33)$	0.3062	$0.3063^{+0.0052}_{-0.0048}$ (+0.2 σ)
A_{217}^{dustTT}	94.0	93^{+10}_{-10} (−0.0 σ)	$100\theta_*$	1.04110	$1.04107^{+0.00087}_{-0.00086}$ (+0.2 σ)	f_{2000}^{143}	30.4	31^{+6}_{-6} (−0.0 σ)
c_{100}	0.99962	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.892	$13.895^{+0.065}_{-0.062}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	33.15	33^{+4}_{-4} (−0.1 σ)
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.51	$1059.45^{+0.86}_{-0.82}$ (+0.1 σ)	f_{2000}^{217}	107.72	$108.0^{+3.6}_{-3.8}$ (−0.1 σ)
H_0	67.28	$67.3^{+1.3}_{-1.2}$ (+0.4 σ)	r_{drag}	147.35	$147.39^{+0.72}_{-0.69}$ (+0.4 σ)	χ^2_{lensing}	8.84	9.35 (ν : 0.3)
Ω_Λ	0.6849	$0.685^{+0.017}_{-0.017}$ (+0.4 σ)	k_D	0.14045	$0.14040^{+0.00086}_{-0.00087}$ (−0.3 σ)	χ^2_{simall}	395.87	397.0 (ν : 1.5) (+0.0 σ)
Ω_m	0.3151	$0.315^{+0.017}_{-0.017}$ (−0.4 σ)	$100\theta_D$	0.161012	$0.16104^{+0.00049}_{-0.00050}$ (−0.1 σ)	χ^2_{lowl}	23.23	23.48 (ν : 0.5) (−0.3 σ)
$\Omega_m h^2$	0.14261	$0.1425^{+0.0026}_{-0.0027}$ (−0.4 σ)	z_{eq}	3392	3391^{+63}_{-65} (−0.4 σ)	χ^2_{plik}	759.1	771.3 (ν : 13.7) (−0.0 σ)
$\Omega_m h^3$	0.09594	$0.09589^{+0.00090}_{-0.00086}$ (−0.0 σ)	k_{eq}	0.010354	$0.01035^{+0.00019}_{-0.00020}$ (−0.4 σ)	χ^2_{JLA}	1035.26	1035.42 (ν : 0.2)
σ_8	0.8097	$0.810^{+0.013}_{-0.012}$ (−0.2 σ)	$100\theta_{\text{eq}}$	0.8145	$0.815^{+0.012}_{-0.012}$ (+0.4 σ)	χ^2_{prior}	1.6	7.3 (ν : 6.7) (−0.0 σ)
S_8	0.8298	$0.830^{+0.029}_{-0.029}$ (−0.4 σ)	$100\theta_{s,\text{eq}}$	0.4502	$0.4503^{+0.0063}_{-0.0060}$ (+0.4 σ)	χ^2_{CMB}	1187.1	1201.1 (ν : 14.8) (+1.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4545	$0.455^{+0.016}_{-0.016}$ (−0.4 σ)	$H(0.15)$	72.59	$72.6^{+1.1}_{-1.1}$ (+0.4 σ)			
$\sigma_8 \Omega_m^{0.25}$	0.6066	$0.607^{+0.014}_{-0.014}$ (−0.4 σ)	$D_M(0.15)$	644.1	644^{+11}_{-11} (−0.4 σ)			

Best-fit $\chi^2_{\text{eff}} = 2223.87$; $\bar{\chi}^2_{\text{eff}} = 2243.81$; $R - 1 = 0.01128$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.84 simall_100x143_offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3.2_29: 23.23 plik_rd12_HM.v22_TT: 759.12 SN - JLA Pantheon18: 1035.26

2.86 base_plikHM_TT_lowl_lowE_lensing_post_BAO_JLA_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022347	$0.02232^{+0.00036}_{-0.00037}$ (+0.9 σ)	$r_{\mathrm{drag}} h$	100.44	$100.5^{+1.7}_{-1.6}$ (+1.3 σ)	$H(0.51)$	89.89	$89.89^{+0.54}_{-0.50}$ (+1.3 σ)
$\Omega_{\mathrm{c}} h^2$	0.11818	$0.1181^{+0.0021}_{-0.0021}$ (−1.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4228	$2.425^{+0.042}_{-0.040}$ (−0.8 σ)	$D_{\mathrm{M}}(0.51)$	1972.9	1973^{+19}_{-19} (−1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04112	$1.04115^{+0.00085}_{-0.00081}$ (+0.8 σ)	z_{re}	8.05	$8.0^{+1.4}_{-1.5}$ (+0.7 σ)	$H(0.61)$	95.459	$95.45^{+0.48}_{-0.44}$ (+1.3 σ)
τ	0.0582	$0.058^{+0.015}_{-0.015}$ (+0.8 σ)	$10^9 A_{\mathrm{s}}$	2.108	$2.108^{+0.061}_{-0.063}$ (+0.5 σ)	$D_{\mathrm{M}}(0.61)$	2296.6	2297^{+20}_{-21} (−1.3 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0485	$3.048^{+0.029}_{-0.030}$ (+0.5 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8765	$1.876^{+0.021}_{-0.019}$ (−0.6 σ)	$H(2.33)$	235.35	$235.3^{+1.4}_{-1.3}$ (−1.1 σ)
n_{s}	0.9697	$0.9685^{+0.0081}_{-0.0080}$ (+1.0 σ)	D_{40}	1221.3	1224^{+23}_{-23} (−0.6 σ)	$D_{\mathrm{M}}(2.33)$	5757.7	5758^{+22}_{-23} (−1.2 σ)
y_{cal}	1.00072	$1.0010^{+0.0050}_{-0.0048}$ (+0.2 σ)	D_{220}	5731	5735^{+77}_{-73} (+0.5 σ)	$f\sigma_8(0.15)$	0.4515	$0.451^{+0.012}_{-0.012}$ (−1.0 σ)
A_{217}^{CIB}	47.0	48^{+10}_{-10} (−0.0 σ)	D_{810}	2539.5	2538^{+27}_{-25} (+0.1 σ)	$\sigma_8(0.15)$	0.7477	$0.747^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.53	—	D_{1420}	818.2	$817.1^{+9.3}_{-9.5}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4713	$0.4709^{+0.0097}_{-0.0099}$ (−0.9 σ)
A_{143}^{tSZ}	6.96	$5.3^{+3.6}_{-4.0}$ (+0.1 σ)	D_{2000}	231.11	$230.6^{+3.2}_{-3.3}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6635	$0.663^{+0.010}_{-0.010}$ (+0.0 σ)
A_{100}^{PS}	251	261^{+50}_{-50} (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9697	$0.9685^{+0.0081}_{-0.0080}$ (+1.0 σ)	$f\sigma_8(0.51)$	0.4707	$0.4703^{+0.0088}_{-0.0089}$ (−0.9 σ)
A_{143}^{PS}	50.3	48^{+20}_{-20} (−0.2 σ)	Y_{P}	0.245386	$0.24537^{+0.00014}_{-0.00015}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6213	$0.6209^{+0.0095}_{-0.0094}$ (+0.1 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	50.9	43^{+20}_{-20} (−0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246713	$0.24670^{+0.00015}_{-0.00015}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4662	$0.4659^{+0.0082}_{-0.0081}$ (−0.8 σ)
A_{217}^{PS}	121.0	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.590	$2.596^{+0.070}_{-0.065}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5913	$0.5910^{+0.0092}_{-0.0091}$ (+0.2 σ)
A^{kSZ}	0.01	< 8.27 (−0.1 σ)	Age/Gyr	13.786	$13.788^{+0.051}_{-0.051}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.29842	$0.2983^{+0.0046}_{-0.0046}$ (+0.5 σ)
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.4}_{-3.5}$ (−0.0 σ)	z_*	1089.79	$1089.83^{+0.53}_{-0.54}$ (−1.2 σ)	$\sigma_8(2.33)$	0.30795	$0.3078^{+0.0048}_{-0.0049}$ (+0.7 σ)
$A_{143}^{\mathrm{dustTT}}$	10.74	$10.7^{+3.8}_{-3.5}$ (−0.0 σ)	r_*	144.92	$144.96^{+0.56}_{-0.59}$ (+1.0 σ)	f_{2000}^{143}	29.2	30^{+6}_{-6} (−0.3 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.6	$18.3^{+6.6}_{-6.6}$ (+0.0 σ)	$100\theta_*$	1.04131	$1.04134^{+0.00085}_{-0.00080}$ (+0.8 σ)	$f_{2000}^{143 \times 217}$	32.38	33^{+4}_{-4} (−0.3 σ)
$A_{217}^{\mathrm{dustTT}}$	95.1	93^{+10}_{-10} (+0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.917	$13.921^{+0.055}_{-0.057}$ (+1.0 σ)	f_{2000}^{217}	106.89	$107.5^{+3.8}_{-3.7}$ (−0.3 σ)
c_{100}	0.99968	$0.9997^{+0.0013}_{-0.0013}$ (+0.1 σ)	z_{drag}	1059.74	$1059.67^{+0.83}_{-0.85}$ (+0.6 σ)	$\chi_{\mathrm{lensing}}^2$	8.94	9.44 (ν : 0.5)
c_{217}	0.99823	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_{drag}	147.60	$147.65^{+0.62}_{-0.66}$ (+0.9 σ)	χ_{small}^2	396.83	397.7 (ν : 2.5) (+0.4 σ)
H_0	68.05	$68.05^{+0.96}_{-0.92}$ (+1.3 σ)	k_{D}	0.14031	$0.14023^{+0.00086}_{-0.00083}$ (−0.6 σ)	χ_{lowl}^2	22.59	22.85 (ν : 0.3) (−0.8 σ)
Ω_{Λ}	0.6951	$0.695^{+0.013}_{-0.012}$ (+1.2 σ)	$100\theta_{\mathrm{D}}$	0.16088	$0.16093^{+0.00050}_{-0.00050}$ (−0.5 σ)	χ_{plik}^2	760.8	772.7 (ν : 14.2) (+0.2 σ)
Ω_{m}	0.3049	$0.305^{+0.012}_{-0.013}$ (−1.2 σ)	z_{eq}	3358.1	3356^{+50}_{-49} (−1.2 σ)	$\chi_{\mathrm{H073p45}}^2$	10.60	10.7 (ν : 1.7)
$\Omega_{\mathrm{m}} h^2$	0.14117	$0.1411^{+0.0021}_{-0.0020}$ (−1.2 σ)	k_{eq}	0.010249	$0.01024^{+0.00015}_{-0.00015}$ (−1.2 σ)	χ_{JLA}^2	706.592	706.62 (ν : 0.0)
$\Omega_{\mathrm{m}} h^3$	0.09606	$0.09601^{+0.00086}_{-0.00085}$ (+0.3 σ)	$100\theta_{\mathrm{eq}}$	0.8214	$0.8217^{+0.0092}_{-0.0091}$ (+1.2 σ)	χ_{6DF}^2	0.000	0.028 (ν : 0.0)
σ_8	0.8085	$0.808^{+0.012}_{-0.012}$ (−0.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.45361	$0.4538^{+0.0047}_{-0.0047}$ (+1.2 σ)	χ_{MGS}^2	1.68	1.76 (ν : 0.1)
S_8	0.8150	$0.814^{+0.023}_{-0.023}$ (−1.1 σ)	$H(0.15)$	73.25	$73.26^{+0.83}_{-0.79}$ (+1.3 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.50	3.92 (ν : 0.3)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4464	$0.446^{+0.012}_{-0.012}$ (−1.1 σ)	$D_{\mathrm{M}}(0.15)$	637.6	$637.6^{+7.8}_{-8.0}$ (−1.3 σ)	χ_{prior}^2	1.3	7.4 (ν : 6.5) (+0.0 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6008	$0.600^{+0.012}_{-0.012}$ (−0.9 σ)	$H(0.38)$	83.25	$83.24^{+0.63}_{-0.60}$ (+1.3 σ)	χ_{CMB}^2	1189.2	1202.7 (ν : 15.5) (+1.9 σ)
$\sigma_8/h^{0.5}$	0.9801	$0.979^{+0.017}_{-0.018}$ (−0.8 σ)	$D_{\mathrm{M}}(0.38)$	1522.2	1522^{+16}_{-16} (−1.3 σ)	χ_{BAO}^2	5.17	5.70 (ν : 0.3)

Best-fit $\chi_{\mathrm{eff}}^2 = 1912.81$; $\bar{\chi}_{\mathrm{eff}}^2 = 1933.05$; $R - 1 = 0.05858$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.50 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p.teb_consext8: 8.94 small_100x143.offlike5_EE_Aplanck_B: 396.83 commander_dx12.v3.2.29: 22.59 plik_rd12_HM.v22_TT: 760.83 Hubble - H073p45: 10.60 SN - JLA December_2013: 706.59

2.87 base_plikHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022241	$0.02222^{+0.00038}_{-0.00036}$ (+0.5 σ)	$r_{\text{drag}} h$	99.87	$99.8^{+1.6}_{-1.5}$ (+0.8 σ)	$H(0.51)$	89.70	$89.66^{+0.51}_{-0.50}$ (+0.8 σ)
$\Omega_c h^2$	0.11884	$0.1190^{+0.0020}_{-0.0021}$ (−0.8 σ)	$\langle d^2 \rangle^{1/2}$	2.4298	$2.434^{+0.042}_{-0.042}$ (−0.5 σ)	$D_{\text{M}}(0.51)$	1980.2	1982^{+19}_{-19} (−0.8 σ)
$100\theta_{\text{MC}}$	1.04103	$1.04099^{+0.00085}_{-0.00082}$ (+0.5 σ)	z_{re}	7.86	$7.8^{+1.4}_{-1.5}$ (+0.4 σ)	$H(0.61)$	95.300	$95.26^{+0.44}_{-0.43}$ (+0.7 σ)
τ	0.0560	$0.056^{+0.015}_{-0.014}$ (+0.4 σ)	$10^9 A_{\text{s}}$	2.101	$2.100^{+0.062}_{-0.060}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2304.5	2306^{+21}_{-20} (−0.8 σ)
$\ln(10^{10} A_{\text{s}})$	3.0450	$3.044^{+0.029}_{-0.029}$ (+0.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8783	$1.879^{+0.021}_{-0.020}$ (−0.4 σ)	$H(2.33)$	235.68	$235.7^{+1.3}_{-1.3}$ (−0.8 σ)
n_{s}	0.9679	$0.9663^{+0.0078}_{-0.0079}$ (+0.6 σ)	D_{40}	1223.6	1227^{+23}_{-22} (−0.4 σ)	$D_{\text{M}}(2.33)$	5765.0	5767^{+22}_{-22} (−0.7 σ)
y_{cal}	1.00073	$1.0008^{+0.0050}_{-0.0048}$ (+0.1 σ)	D_{220}	5721	5725^{+79}_{-73} (+0.3 σ)	$f\sigma_8(0.15)$	0.4548	$0.455^{+0.012}_{-0.011}$ (−0.7 σ)
A_{217}^{CIB}	48.6	48^{+10}_{-10} (−0.0 σ)	D_{810}	2538.4	2537^{+27}_{-26} (+0.1 σ)	$\sigma_8(0.15)$	0.7479	$0.748^{+0.011}_{-0.011}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.30	—	D_{1420}	817.0	$815.8^{+9.7}_{-9.9}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4736	$0.4738^{+0.0096}_{-0.0096}$ (−0.6 σ)
A_{143}^{tSZ}	7.09	$5.1^{+3.8}_{-4.0}$ (+0.0 σ)	D_{2000}	230.54	$230.1^{+3.4}_{-3.4}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6632	$0.663^{+0.010}_{-0.0096}$ (−0.1 σ)
A_{100}^{PS}	253	263^{+60}_{-60} (−0.0 σ)	$n_{\text{s},0.002}$	0.9679	$0.9663^{+0.0078}_{-0.0079}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4724	$0.4726^{+0.0087}_{-0.0085}$ (−0.6 σ)
A_{143}^{PS}	48.1	49^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245343	$0.24533^{+0.00015}_{-0.00016}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6207	$0.6203^{+0.0094}_{-0.0090}$ (+0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	45.8	43^{+20}_{-20} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246669	$0.24666^{+0.00015}_{-0.00016}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4676	$0.4677^{+0.0082}_{-0.0080}$ (−0.5 σ)
A_{217}^{PS}	119.0	115^{+20}_{-20} (−0.0 σ)	$10^5 \text{D}/\text{H}$	2.610	$2.615^{+0.069}_{-0.070}$ (−0.5 σ)	$\sigma_8(0.61)$	0.5907	$0.5903^{+0.0090}_{-0.0086}$ (+0.1 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.802	$13.806^{+0.052}_{-0.051}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.29793	$0.2977^{+0.0047}_{-0.0044}$ (+0.2 σ)
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	z_*	1089.98	$1090.02^{+0.53}_{-0.54}$ (−0.7 σ)	$\sigma_8(2.33)$	0.30724	$0.3069^{+0.0051}_{-0.0047}$ (+0.4 σ)
A_{143}^{dustTT}	10.81	$10.7^{+3.6}_{-3.5}$ (−0.0 σ)	r_*	144.83	$144.81^{+0.55}_{-0.55}$ (+0.7 σ)	f_{2000}^{143}	30.0	31^{+6}_{-6} (−0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.3^{+6.6}_{-6.6}$ (+0.0 σ)	$100\theta_*$	1.04123	$1.04119^{+0.00084}_{-0.00080}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	32.95	33^{+4}_{-4} (−0.1 σ)
A_{217}^{dustTT}	94.7	93^{+10}_{-10} (+0.0 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.909	$13.908^{+0.055}_{-0.056}$ (+0.7 σ)	f_{2000}^{217}	107.50	$107.9^{+3.6}_{-3.8}$ (−0.1 σ)
c_{100}	0.99963	$0.9996^{+0.0013}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.55	$1059.51^{+0.88}_{-0.84}$ (+0.3 σ)	χ^2_{lensing}	8.88	9.27 (ν : 0.3)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.54	$147.53^{+0.62}_{-0.63}$ (+0.7 σ)	χ^2_{small}	396.37	397.2 (ν : 1.8) (+0.1 σ)
H_0	67.69	$67.61^{+0.93}_{-0.92}$ (+0.8 σ)	k_{D}	0.14029	$0.14028^{+0.00085}_{-0.00082}$ (−0.5 σ)	χ^2_{lowl}	22.81	23.17 (ν : 0.4) (−0.6 σ)
Ω_{Λ}	0.6907	$0.690^{+0.012}_{-0.012}$ (+0.8 σ)	$100\theta_{\text{D}}$	0.160991	$0.16102^{+0.00048}_{-0.00050}$ (−0.2 σ)	χ^2_{plik}	759.8	771.7 (ν : 13.7) (+0.1 σ)
Ω_{m}	0.3093	$0.310^{+0.012}_{-0.012}$ (−0.8 σ)	z_{eq}	3371.5	3374^{+48}_{-48} (−0.8 σ)	χ^2_{JLA}	1034.95	1035.08 (ν : 0.0)
$\Omega_{\text{m}} h^2$	0.14173	$0.1418^{+0.0020}_{-0.0020}$ (−0.8 σ)	k_{eq}	0.010290	$0.01030^{+0.00015}_{-0.00015}$ (−0.8 σ)	$\chi^2_{6\text{DF}}$	0.016	0.049 (ν : 0.0)
$\Omega_{\text{m}} h^3$	0.09594	$0.09590^{+0.00090}_{-0.00085}$ (+0.0 σ)	$100\theta_{\text{eq}}$	0.8185	$0.8180^{+0.0090}_{-0.0087}$ (+0.8 σ)	χ^2_{MGS}	1.34	1.33 (ν : 0.1)
σ_8	0.8091	$0.809^{+0.012}_{-0.012}$ (−0.3 σ)	$100\theta_{\text{s,eq}}$	0.45222	$0.4520^{+0.0046}_{-0.0045}$ (+0.8 σ)	χ^2_{DR12BAO}	4.03	4.6 (ν : 0.9)
S_8	0.8216	$0.823^{+0.022}_{-0.022}$ (−0.7 σ)	$H(0.15)$	72.94	$72.88^{+0.80}_{-0.80}$ (+0.8 σ)	χ^2_{prior}	1.5	7.3 (ν : 6.6) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4500	$0.451^{+0.012}_{-0.012}$ (−0.7 σ)	$D_{\text{M}}(0.15)$	640.6	$641.3^{+7.9}_{-7.9}$ (−0.8 σ)	χ^2_{CMB}	1187.9	1201.4 (ν : 14.7) (+1.7 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6034	$0.604^{+0.012}_{-0.012}$ (−0.6 σ)	$H(0.38)$	83.01	$82.96^{+0.61}_{-0.61}$ (+0.8 σ)	χ^2_{BAO}	5.39	6.0 (ν : 0.6)
$\sigma_8/h^{0.5}$	0.9835	$0.984^{+0.018}_{-0.017}$ (−0.6 σ)	$D_{\text{M}}(0.38)$	1528.3	1530^{+16}_{-16} (−0.8 σ)			

Best-fit $\chi^2_{\text{eff}} = 2229.71$; $\bar{\chi}^2_{\text{eff}} = 2249.77$; $R - 1 = 0.01879$

χ^2_{eff} : BAO - 6DF: 0.02 MGS: 1.34 DR12BAO: 4.03 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.88 small_100x143_offlike5_EE_Aplanck_B: 396.37 commander_dx12_v3_2_29: 22.81 plik_rd12_HM_v22_TT: 759.79 SN - JLA Pantheon18: 1034.95

2.88 base_plikHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022359	$0.02232^{+0.00036}_{-0.00037}$ (+0.9 σ)	$r_{\text{drag}} h$	100.56	$100.5^{+1.7}_{-1.5}$ (+1.3 σ)	$H(0.51)$	89.93	$89.89^{+0.54}_{-0.49}$ (+1.3 σ)
$\Omega_c h^2$	0.11802	$0.1181^{+0.0021}_{-0.0021}$ (−1.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4217	$2.424^{+0.042}_{-0.040}$ (−0.8 σ)	$D_M(0.51)$	1971.5	1973^{+18}_{-19} (−1.3 σ)
$100\theta_{\text{MC}}$	1.04113	$1.04115^{+0.00085}_{-0.00080}$ (+0.8 σ)	z_{re}	8.07	$8.0^{+1.4}_{-1.5}$ (+0.7 σ)	$H(0.61)$	95.484	$95.45^{+0.48}_{-0.43}$ (+1.3 σ)
τ	0.0585	$0.058^{+0.015}_{-0.015}$ (+0.8 σ)	$10^9 A_s$	2.109	$2.108^{+0.062}_{-0.063}$ (+0.5 σ)	$D_M(0.61)$	2295.1	2297^{+20}_{-21} (−1.3 σ)
$\ln(10^{10} A_s)$	3.0489	$3.048^{+0.029}_{-0.030}$ (+0.5 σ)	$10^9 A_s e^{-2\tau}$	1.8763	$1.876^{+0.022}_{-0.019}$ (−0.6 σ)	$H(2.33)$	235.26	$235.3^{+1.4}_{-1.3}$ (−1.1 σ)
n_s	0.9697	$0.9685^{+0.0080}_{-0.0079}$ (+1.0 σ)	D_{40}	1222.0	1224^{+23}_{-23} (−0.6 σ)	$D_M(2.33)$	5756.6	5758^{+22}_{-23} (−1.2 σ)
y_{cal}	1.00094	$1.0010^{+0.0050}_{-0.0048}$ (+0.2 σ)	D_{220}	5735	5735^{+77}_{-73} (+0.5 σ)	$f\sigma_8(0.15)$	0.4507	$0.451^{+0.011}_{-0.012}$ (−1.0 σ)
A_{217}^{CIB}	48.1	48^{+10}_{-10} (−0.0 σ)	D_{810}	2539.7	2538^{+27}_{-25} (+0.1 σ)	$\sigma_8(0.15)$	0.7474	$0.747^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.38	—	D_{1420}	818.2	$817.1^{+9.3}_{-9.5}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4706	$0.4708^{+0.0096}_{-0.0098}$ (−0.9 σ)
A_{143}^{tSZ}	7.00	$5.3^{+3.6}_{-4.0}$ (+0.1 σ)	D_{2000}	231.09	$230.6^{+3.2}_{-3.3}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6634	$0.663^{+0.010}_{-0.010}$ (+0.0 σ)
A_{100}^{PS}	253	261^{+60}_{-50} (−0.1 σ)	$n_{s,0.002}$	0.9697	$0.9685^{+0.0080}_{-0.0079}$ (+1.0 σ)	$f\sigma_8(0.51)$	0.4701	$0.4703^{+0.0088}_{-0.0088}$ (−0.9 σ)
A_{143}^{PS}	48.6	48^{+20}_{-20} (−0.2 σ)	Y_{P}	0.245391	$0.24537^{+0.00014}_{-0.00015}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6211	$0.6209^{+0.0095}_{-0.0095}$ (+0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	47.3	43^{+20}_{-20} (−0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246718	$0.24670^{+0.00014}_{-0.00015}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4658	$0.4659^{+0.0081}_{-0.0081}$ (−0.8 σ)
A_{217}^{PS}	119.4	115^{+20}_{-20} (−0.0 σ)	10^5D/H	2.588	$2.596^{+0.070}_{-0.065}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5912	$0.5910^{+0.0092}_{-0.0091}$ (+0.2 σ)
A^{kSZ}	0.00	< 8.27 (−0.1 σ)	Age/Gyr	13.784	$13.788^{+0.051}_{-0.051}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.29841	$0.2983^{+0.0046}_{-0.0046}$ (+0.5 σ)
A_{100}^{dustTT}	8.87	$8.9^{+3.4}_{-3.5}$ (−0.0 σ)	z_*	1089.76	$1089.82^{+0.52}_{-0.54}$ (−1.2 σ)	$\sigma_8(2.33)$	0.30799	$0.3078^{+0.0048}_{-0.0048}$ (+0.7 σ)
A_{143}^{dustTT}	10.83	$10.7^{+3.8}_{-3.5}$ (−0.0 σ)	r_*	144.95	$144.96^{+0.56}_{-0.57}$ (+1.1 σ)	f_{2000}^{143}	29.5	30^{+6}_{-6} (−0.3 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.3^{+6.7}_{-6.6}$ (+0.0 σ)	$100\theta_*$	1.04132	$1.04134^{+0.00085}_{-0.00080}$ (+0.8 σ)	$f_{2000}^{143 \times 217}$	32.52	33^{+4}_{-4} (−0.3 σ)
A_{217}^{dustTT}	94.6	93^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.920	$13.921^{+0.054}_{-0.057}$ (+1.0 σ)	f_{2000}^{217}	107.11	$107.5^{+3.8}_{-3.7}$ (−0.3 σ)
c_{100}	0.99967	$0.9997^{+0.0013}_{-0.0013}$ (+0.1 σ)	z_{drag}	1059.78	$1059.67^{+0.83}_{-0.85}$ (+0.6 σ)	χ^2_{lensing}	9.00	9.44 (ν : 0.5)
c_{217}	0.99823	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_{drag}	147.63	$147.65^{+0.61}_{-0.65}$ (+0.9 σ)	χ^2_{small}	396.89	397.7 (ν : 2.5) (+0.4 σ)
H_0	68.12	$68.06^{+0.94}_{-0.90}$ (+1.3 σ)	k_{D}	0.14029	$0.14023^{+0.00086}_{-0.00083}$ (−0.6 σ)	χ^2_{lowl}	22.60	22.85 (ν : 0.3) (−0.8 σ)
Ω_Λ	0.6961	$0.695^{+0.012}_{-0.012}$ (+1.2 σ)	$100\theta_{\text{D}}$	0.16087	$0.16093^{+0.00050}_{-0.00050}$ (−0.5 σ)	χ^2_{plik}	760.8	772.7 (ν : 14.1) (+0.2 σ)
Ω_{m}	0.3039	$0.305^{+0.012}_{-0.012}$ (−1.2 σ)	z_{eq}	3354.6	3356^{+49}_{-48} (−1.2 σ)	χ^2_{H073p45}	10.33	10.6 (ν : 1.7)
$\Omega_{\text{m}} h^2$	0.14102	$0.1411^{+0.0020}_{-0.0020}$ (−1.2 σ)	k_{eq}	0.010239	$0.01024^{+0.00015}_{-0.00015}$ (−1.2 σ)	χ^2_{JLA}	1034.786	1034.88 (ν : 0.0)
$\Omega_{\text{m}} h^3$	0.09606	$0.09601^{+0.00086}_{-0.00085}$ (+0.3 σ)	$100\theta_{\text{eq}}$	0.8220	$0.8218^{+0.0090}_{-0.0089}$ (+1.2 σ)	$\chi^2_{6\text{DF}}$	0.000	0.027 (ν : 0.0)
σ_8	0.8080	$0.808^{+0.012}_{-0.012}$ (−0.4 σ)	$100\theta_{\text{s,eq}}$	0.45395	$0.4538^{+0.0047}_{-0.0046}$ (+1.2 σ)	χ^2_{MGS}	1.75	1.76 (ν : 0.1)
S_8	0.8133	$0.814^{+0.022}_{-0.022}$ (−1.1 σ)	$H(0.15)$	73.31	$73.26^{+0.82}_{-0.78}$ (+1.3 σ)	χ^2_{DR12BAO}	3.44	3.89 (ν : 0.3)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4455	$0.446^{+0.012}_{-0.012}$ (−1.1 σ)	$D_M(0.15)$	637.0	$637.5^{+7.7}_{-7.9}$ (−1.3 σ)	χ^2_{prior}	1.4	7.4 (ν : 6.5) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6000	$0.600^{+0.012}_{-0.012}$ (−0.9 σ)	$H(0.38)$	83.29	$83.25^{+0.63}_{-0.59}$ (+1.3 σ)	χ^2_{CMB}	1189.3	1202.7 (ν : 15.4) (+1.9 σ)
$\sigma_8/h^{0.5}$	0.9790	$0.979^{+0.017}_{-0.018}$ (−0.8 σ)	$D_M(0.38)$	1521.0	1522^{+16}_{-16} (−1.3 σ)	χ^2_{BAO}	5.18	5.68 (ν : 0.2)

Best-fit $\chi^2_{\text{eff}} = 2241.01$; $\bar{\chi}^2_{\text{eff}} = 2261.26$; $R - 1 = 0.05989$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.44 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p.teb_consext8: 9.00 small_100x143_offlike5_EE_Aplanck_B: 396.89 commander_dx12_v3_2_29: 22.60 plik_rd12_HM_v22_TT: 760.84 Hubble - H073p45: 10.33 SN - JLA Pantheon18: 1034.79

2.89 base_plikHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02215^{+0.00041}_{-0.00038} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$H(0.15)$	$72.5^{+1.2}_{-1.1} \quad (+0.3\sigma)$
$\Omega_c h^2$	$0.1201^{+0.0029}_{-0.0030} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.020} \quad (-0.2\sigma)$	$D_M(0.15)$	$646^{+11}_{-11} \quad (-0.3\sigma)$
$100\theta_{MC}$	$1.04082^{+0.00089}_{-0.00088} \quad (+0.1\sigma)$	$r_{drag} h$	$98.9^{+2.3}_{-2.3} \quad (+0.3\sigma)$	$H(0.38)$	$82.66^{+0.86}_{-0.82} \quad (+0.2\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.048}_{-0.048} \quad (-0.1\sigma)$	$D_M(0.38)$	$1538^{+23}_{-23} \quad (-0.3\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.026}_{-0.024} \quad (+0.1\sigma)$	z_{re}	$< 8.85 \quad (+0.2\sigma)$	$H(0.51)$	$89.43^{+0.70}_{-0.66} \quad (+0.2\sigma)$
n_s	$0.9638^{+0.0091}_{-0.0092} \quad (+0.2\sigma)$	$10^9 A_s$	$2.096^{+0.056}_{-0.050} \quad (+0.1\sigma)$	$D_M(0.51)$	$1992^{+27}_{-27} \quad (-0.3\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.882^{+0.021}_{-0.022} \quad (-0.2\sigma)$	$H(0.61)$	$95.08^{+0.58}_{-0.55} \quad (+0.2\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{40}	$1232^{+25}_{-24} \quad (-0.1\sigma)$	$D_M(0.61)$	$2317^{+29}_{-29} \quad (-0.3\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5716^{+79}_{-79} \quad (+0.1\sigma)$	$H(2.33)$	$236.4^{+1.8}_{-1.8} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-4.0} \quad (-0.0\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$D_M(2.33)$	$5775^{+27}_{-28} \quad (-0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-50} \quad (+0.0\sigma)$	D_{1420}	$815^{+10}_{-9.9} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.6^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0097} \quad (-0.0\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9638^{+0.0091}_{-0.0092} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.24530^{+0.00017}_{-0.00018} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6633^{+0.0093}_{-0.0080} \quad (+0.0\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24663^{+0.00017}_{-0.00018} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.010} \quad (-0.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$10^5 D/H$	$2.628^{+0.074}_{-0.076} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0083}_{-0.0077} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.823^{+0.062}_{-0.062} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.4705^{+0.0090}_{-0.0091} \quad (-0.2\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.2^{+6.5}_{-6.6} \quad (-0.0\sigma)$	z_*	$1090.21^{+0.65}_{-0.66} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5903^{+0.0080}_{-0.0074} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	r_*	$144.59^{+0.72}_{-0.69} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0042}_{-0.0038} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.04103^{+0.00088}_{-0.00087} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0046}_{-0.0041} \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.889^{+0.068}_{-0.065} \quad (+0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$67.1^{+1.3}_{-1.3} \quad (+0.3\sigma)$	z_{drag}	$1059.42^{+0.85}_{-0.82} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.0\sigma)$
Ω_Λ	$0.683^{+0.018}_{-0.019} \quad (+0.3\sigma)$	r_{drag}	$147.32^{+0.75}_{-0.72} \quad (+0.2\sigma)$	f_{2000}^{217}	$108.1^{+3.7}_{-3.8} \quad (-0.0\sigma)$
Ω_m	$0.317^{+0.019}_{-0.018} \quad (-0.3\sigma)$	k_D	$0.14045^{+0.00087}_{-0.00087} \quad (-0.2\sigma)$	$\chi^2_{lensing}$	$9.42 \quad (\nu: 0.4)$
$\Omega_m h^2$	$0.1429^{+0.0028}_{-0.0029} \quad (-0.3\sigma)$	$100\theta_D$	$0.16106^{+0.00049}_{-0.00051} \quad (-0.1\sigma)$	χ^2_{small}	$396.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
$\Omega_m h^3$	$0.09588^{+0.00090}_{-0.00087} \quad (-0.0\sigma)$	z_{eq}	$3398^{+67}_{-69} \quad (-0.3\sigma)$	χ^2_{lowl}	$23.7 \quad (\nu: 0.5) \quad (-0.2\sigma)$
σ_8	$0.811^{+0.012}_{-0.011} \quad (-0.1\sigma)$	k_{eq}	$0.01037^{+0.00020}_{-0.00021} \quad (-0.3\sigma)$	χ^2_{plik}	$771.0 \quad (\nu: 13.7) \quad (-0.1\sigma)$
S_8	$0.834^{+0.031}_{-0.031} \quad (-0.2\sigma)$	$100\theta_{eq}$	$0.813^{+0.013}_{-0.012} \quad (+0.3\sigma)$	χ^2_{prior}	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.457^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$100\theta_{s,eq}$	$0.4496^{+0.0067}_{-0.0063} \quad (+0.3\sigma)$	χ^2_{CMB}	$1200.9 \quad (\nu: 14.7) \quad (+1.6\sigma)$

$\bar{\chi}^2_{eff} = 1208.16; R - 1 = 0.00659$

2.90 base_plikHM_TT_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00038}_{-0.00036} \quad (+0.4\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$H(0.51)$	$89.63^{+0.52}_{-0.52} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.041}_{-0.042} \quad (-0.5\sigma)$	$D_M(0.51)$	$1983^{+20}_{-20} \quad (-0.7\sigma)$
$100\theta_{\text{MC}}$	$1.04098^{+0.00085}_{-0.00083} \quad (+0.4\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$H(0.61)$	$95.24^{+0.45}_{-0.44} \quad (+0.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$10^9 A_s$	$2.101^{+0.058}_{-0.052} \quad (+0.3\sigma)$	$D_M(0.61)$	$2307^{+21}_{-21} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.045^{+0.027}_{-0.025} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$H(2.33)$	$235.8^{+1.3}_{-1.4} \quad (-0.7\sigma)$
n_s	$0.9660^{+0.0078}_{-0.0080} \quad (+0.6\sigma)$	D_{40}	$1228^{+24}_{-22} \quad (-0.4\sigma)$	$D_M(2.33)$	$5768^{+23}_{-23} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5724^{+79}_{-73} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.0097} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.6^{+9.7}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.4745^{+0.0099}_{-0.0097} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$230.0^{+3.4}_{-3.4} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6632^{+0.0098}_{-0.0084} \quad (+0.0\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.0\sigma)$	$n_{\text{s},0.002}$	$0.9660^{+0.0078}_{-0.0080} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4732^{+0.0088}_{-0.0084} \quad (-0.5\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24533^{+0.00015}_{-0.00016} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0091}_{-0.0079} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24665^{+0.00015}_{-0.00017} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4682^{+0.0082}_{-0.0076} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.616^{+0.069}_{-0.071} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0087}_{-0.0075} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.808^{+0.053}_{-0.052} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0043}_{-0.0039} \quad (+0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	$1090.05^{+0.54}_{-0.54} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0046}_{-0.0042} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.79^{+0.55}_{-0.55} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.6}_{-6.6} \quad (-0.0\sigma)$	$100\theta_*$	$1.04118^{+0.00084}_{-0.00081} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.906^{+0.055}_{-0.056} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.9^{+3.6}_{-3.8} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.50^{+0.86}_{-0.82} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.22 \quad (\nu: 0.2)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.51^{+0.63}_{-0.63} \quad (+0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
H_0	$67.56^{+0.94}_{-0.94} \quad (+0.7\sigma)$	k_{D}	$0.14030^{+0.00085}_{-0.00083} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.24 \quad (\nu: 0.4) \quad (-0.5\sigma)$
Ω_Λ	$0.689^{+0.013}_{-0.013} \quad (+0.8\sigma)$	$100\theta_{\text{D}}$	$0.16102^{+0.00048}_{-0.00050} \quad (-0.2\sigma)$	χ_{plik}^2	$771.5 \quad (\nu: 13.6) \quad (+0.0\sigma)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.8\sigma)$	z_{eq}	$3377^{+48}_{-49} \quad (-0.7\sigma)$	$\chi_{6\text{DF}}^2$	$0.057 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0020}_{-0.0021} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.28 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^3$	$0.09590^{+0.00091}_{-0.00086} \quad (+0.0\sigma)$	$100\theta_{\text{eq}}$	$0.8175^{+0.0092}_{-0.0088} \quad (+0.7\sigma)$	χ_{DR12BAO}^2	$4.8 \quad (\nu: 1.1)$
σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4517^{+0.0048}_{-0.0046} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
S_8	$0.824^{+0.023}_{-0.023} \quad (-0.6\sigma)$	$H(0.15)$	$72.83^{+0.83}_{-0.82} \quad (+0.7\sigma)$	χ_{CMB}^2	$1201.1 \quad (\nu: 14.5) \quad (+1.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_M(0.15)$	$641.8^{+8.1}_{-8.0} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.605^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$H(0.38)$	$82.93^{+0.63}_{-0.62} \quad (+0.7\sigma)$		
$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.016} \quad (-0.5\sigma)$	$D_M(0.38)$	$1531^{+17}_{-16} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1214.57; R - 1 = 0.01797$$

2.91 base_plikHM_TT_lowl_lowE_lensing_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02232^{+0.00036}_{-0.00039} \quad (+0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.020}_{-0.019} \quad (-0.8\sigma)$	$H(0.38)$	$83.25^{+0.81}_{-0.81} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0028}_{-0.0029} \quad (-1.2\sigma)$	$r_{\text{drag}} h$	$100.5^{+2.3}_{-2.2} \quad (+1.3\sigma)$	$D_M(0.38)$	$1522^{+22}_{-21} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04116^{+0.00089}_{-0.00087} \quad (+0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.046}_{-0.043} \quad (-0.8\sigma)$	$H(0.51)$	$89.90^{+0.69}_{-0.66} \quad (+1.3\sigma)$
τ	$0.059^{+0.015}_{-0.014} \quad (+0.8\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.7\sigma)$	$D_M(0.51)$	$1973^{+26}_{-25} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.029}_{-0.027} \quad (+0.5\sigma)$	$10^9 A_s$	$2.110^{+0.061}_{-0.056} \quad (+0.5\sigma)$	$H(0.61)$	$95.46^{+0.56}_{-0.55} \quad (+1.3\sigma)$
n_s	$0.9686^{+0.0096}_{-0.0092} \quad (+1.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$D_M(0.61)$	$2296^{+28}_{-27} \quad (-1.3\sigma)$
y_{cal}	$1.0010^{+0.0049}_{-0.0048} \quad (+0.3\sigma)$	D_{40}	$1224^{+24}_{-23} \quad (-0.6\sigma)$	$H(2.33)$	$235.3^{+1.8}_{-1.8} \quad (-1.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5735^{+75}_{-75} \quad (+0.5\sigma)$	$D_M(2.33)$	$5758^{+26}_{-26} \quad (-1.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	$2538^{+26}_{-25} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.015}_{-0.014} \quad (-1.0\sigma)$
A_{143}^{tSZ}	$5.2^{+3.7}_{-4.0} \quad (+0.1\sigma)$	D_{1420}	$817.1^{+9.3}_{-9.9} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{100}^{PS}	$262^{+50}_{-50} \quad (-0.1\sigma)$	D_{2000}	$230.7^{+3.4}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.011} \quad (-0.9\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.9686^{+0.0096}_{-0.0092} \quad (+1.1\sigma)$	$\sigma_8(0.38)$	$0.6635^{+0.0095}_{-0.0087} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24537^{+0.00015}_{-0.00016} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.010}_{-0.0096} \quad (-0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24670^{+0.00015}_{-0.00016} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6212^{+0.0091}_{-0.0083} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.38 \quad (-0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.596^{+0.072}_{-0.069} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.4660^{+0.0092}_{-0.0087} \quad (-0.8\sigma)$
A_{100}^{dustTT}	$9.0^{+3.5}_{-3.6} \quad (+0.0\sigma)$	Age/Gyr	$13.787^{+0.059}_{-0.059} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0089}_{-0.0080} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.7^{+3.7}_{-3.5} \quad (-0.0\sigma)$	z_*	$1089.82^{+0.63}_{-0.60} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0045}_{-0.0042} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.8} \quad (+0.0\sigma)$	r_*	$144.96^{+0.68}_{-0.70} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3080^{+0.0052}_{-0.0046} \quad (+0.8\sigma)$
A_{217}^{dustTT}	$93^{+20}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04135^{+0.00088}_{-0.00086} \quad (+0.8\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0014}_{-0.0013} \quad (+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.921^{+0.063}_{-0.067} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.68^{+0.83}_{-0.85} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.5^{+3.9}_{-3.7} \quad (-0.3\sigma)$
H_0	$68.1^{+1.3}_{-1.3} \quad (+1.3\sigma)$	r_{drag}	$147.65^{+0.70}_{-0.75} \quad (+0.9\sigma)$	χ_{lensing}^2	$9.5 \quad (\nu: 0.5)$
Ω_Λ	$0.695^{+0.017}_{-0.017} \quad (+1.2\sigma)$	k_{D}	$0.14023^{+0.00091}_{-0.00085} \quad (-0.6\sigma)$	χ_{small}^2	$397.8 \quad (\nu: 2.8) \quad (+0.5\sigma)$
Ω_{m}	$0.305^{+0.017}_{-0.017} \quad (-1.2\sigma)$	$100\theta_{\text{D}}$	$0.16093^{+0.00050}_{-0.00050} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.86 \quad (\nu: 0.4) \quad (-0.8\sigma)$
$\Omega_{\text{m}} h^2$	$0.1411^{+0.0027}_{-0.0027} \quad (-1.2\sigma)$	z_{eq}	$3356^{+65}_{-66} \quad (-1.2\sigma)$	χ_{plik}^2	$772.9 \quad (\nu: 15.2) \quad (+0.3\sigma)$
$\Omega_{\text{m}} h^3$	$0.09601^{+0.00085}_{-0.00085} \quad (+0.3\sigma)$	k_{eq}	$0.01024^{+0.00020}_{-0.00020} \quad (-1.2\sigma)$	χ_{H073p45}^2	$10.7 \quad (\nu: 3.4)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{\text{eq}}$	$0.822^{+0.013}_{-0.012} \quad (+1.2\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.4) \quad (+0.0\sigma)$
S_8	$0.814^{+0.029}_{-0.029} \quad (-1.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.4539^{+0.0067}_{-0.0063} \quad (+1.2\sigma)$	χ_{CMB}^2	$1203.0 \quad (\nu: 17.5) \quad (+2.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.446^{+0.016}_{-0.016} \quad (-1.0\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.1} \quad (+1.3\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.014}_{-0.013} \quad (-0.9\sigma)$	$D_M(0.15)$	$637^{+11}_{-10} \quad (-1.3\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1221.07; R - 1 = 0.06981$

2.92 base_plikHM_TT_lowl_lowE_lensing_post_BAO_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02231^{+0.00036}_{-0.00037} \quad (+0.9\sigma)$	$r_{\text{drag}} h$	$100.4^{+1.7}_{-1.6} \quad (+1.2\sigma)$	$H(0.51)$	$89.88^{+0.55}_{-0.51} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0021}_{-0.0021} \quad (-1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.042}_{-0.041} \quad (-0.7\sigma)$	$D_M(0.51)$	$1973^{+19}_{-20} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04115^{+0.00085}_{-0.00080} \quad (+0.8\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.7\sigma)$	$H(0.61)$	$95.44^{+0.49}_{-0.44} \quad (+1.2\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$10^9 A_s$	$2.109^{+0.060}_{-0.055} \quad (+0.5\sigma)$	$D_M(0.61)$	$2297^{+21}_{-21} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.028}_{-0.027} \quad (+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.021}_{-0.019} \quad (-0.6\sigma)$	$H(2.33)$	$235.3^{+1.4}_{-1.4} \quad (-1.1\sigma)$
n_s	$0.9684^{+0.0081}_{-0.0080} \quad (+1.0\sigma)$	D_{40}	$1225^{+23}_{-23} \quad (-0.6\sigma)$	$D_M(2.33)$	$5759^{+22}_{-23} \quad (-1.2\sigma)$
y_{cal}	$1.0010^{+0.0050}_{-0.0048} \quad (+0.2\sigma)$	D_{220}	$5734^{+78}_{-73} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.012}_{-0.012} \quad (-1.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2538^{+26}_{-25} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$817.0^{+9.4}_{-9.6} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4712^{+0.0097}_{-0.0098} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.3^{+3.6}_{-4.0} \quad (+0.1\sigma)$	D_{2000}	$230.6^{+3.3}_{-3.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0088} \quad (+0.0\sigma)$
A_{100}^{PS}	$261^{+60}_{-50} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9684^{+0.0081}_{-0.0080} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.4706^{+0.0088}_{-0.0087} \quad (-0.8\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.24537^{+0.00015}_{-0.00015} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0093}_{-0.0084} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24670^{+0.00015}_{-0.00015} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.4661^{+0.0081}_{-0.0078} \quad (-0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 D/H$	$2.597^{+0.070}_{-0.066} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0090}_{-0.0080} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.26 \quad (-0.1\sigma)$	Age/Gyr	$13.789^{+0.051}_{-0.052} \quad (-1.1\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0046}_{-0.0041} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.4}_{-3.5} \quad (-0.0\sigma)$	z_*	$1089.83^{+0.53}_{-0.54} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3079^{+0.0048}_{-0.0044} \quad (+0.8\sigma)$
A_{143}^{dustTT}	$10.7^{+3.8}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.95^{+0.57}_{-0.59} \quad (+1.0\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.6}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04134^{+0.00085}_{-0.00080} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.920^{+0.055}_{-0.058} \quad (+1.0\sigma)$	f_{2000}^{217}	$107.5^{+3.8}_{-3.7} \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	z_{drag}	$1059.67^{+0.84}_{-0.84} \quad (+0.6\sigma)$	χ_{lensing}^2	$9.39 \quad (\nu: 0.4)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.64^{+0.62}_{-0.66} \quad (+0.9\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 2.5) \quad (+0.4\sigma)$
H_0	$68.03^{+0.96}_{-0.92} \quad (+1.3\sigma)$	k_{D}	$0.14024^{+0.00087}_{-0.00083} \quad (-0.6\sigma)$	χ_{lowl}^2	$22.87 \quad (\nu: 0.3) \quad (-0.8\sigma)$
Ω_Λ	$0.695^{+0.013}_{-0.012} \quad (+1.2\sigma)$	$100\theta_{\text{D}}$	$0.16093^{+0.00050}_{-0.00051} \quad (-0.5\sigma)$	χ_{plik}^2	$772.6 \quad (\nu: 14.1) \quad (+0.2\sigma)$
Ω_{m}	$0.305^{+0.012}_{-0.013} \quad (-1.2\sigma)$	z_{eq}	$3357^{+50}_{-49} \quad (-1.1\sigma)$	χ_{H073p45}^2	$10.7 \quad (\nu: 1.8)$
$\Omega_{\text{m}} h^2$	$0.1411^{+0.0021}_{-0.0021} \quad (-1.1\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00015} \quad (-1.1\sigma)$	$\chi_{6\text{DF}}^2$	$0.029 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09601^{+0.00086}_{-0.00085} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.8215^{+0.0093}_{-0.0091} \quad (+1.2\sigma)$	χ_{MGS}^2	$1.74 \quad (\nu: 0.1)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4537^{+0.0048}_{-0.0047} \quad (+1.2\sigma)$	χ_{DR12BAO}^2	$3.94 \quad (\nu: 0.3)$
S_8	$0.815^{+0.023}_{-0.023} \quad (-1.0\sigma)$	$H(0.15)$	$73.24^{+0.84}_{-0.80} \quad (+1.3\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.5) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.446^{+0.013}_{-0.013} \quad (-1.0\sigma)$	$D_M(0.15)$	$637.7^{+7.9}_{-8.1} \quad (-1.3\sigma)$	χ_{CMB}^2	$1202.5 \quad (\nu: 15.3) \quad (+1.9\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.601^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$H(0.38)$	$83.23^{+0.65}_{-0.61} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.71 \quad (\nu: 0.3)$
$\sigma_8/h^{0.5}$	$0.980^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$D_M(0.38)$	$1523^{+16}_{-16} \quad (-1.3\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1226.35; R - 1 = 0.05547$$

2.93 base_plikHM_TT_lowl_lowE_lensing_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02218^{+0.00040}_{-0.00038} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.019}_{-0.019} \quad (-0.3\sigma)$	$H(0.38)$	$82.77^{+0.80}_{-0.77} \quad (+0.5\sigma)$
$\Omega_c h^2$	$0.1196^{+0.0027}_{-0.0028} \quad (-0.5\sigma)$	$r_{\text{drag}} h$	$99.2^{+2.2}_{-2.1} \quad (+0.5\sigma)$	$D_M(0.38)$	$1535^{+21}_{-22} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	$1.04088^{+0.00088}_{-0.00088} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.046}_{-0.047} \quad (-0.3\sigma)$	$H(0.51)$	$89.52^{+0.65}_{-0.63} \quad (+0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.3\sigma)$	z_{re}	$< 8.95 \quad (+0.3\sigma)$	$D_M(0.51)$	$1988^{+25}_{-25} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.027}_{-0.024} \quad (+0.2\sigma)$	$10^9 A_s$	$2.099^{+0.057}_{-0.051} \quad (+0.2\sigma)$	$H(0.61)$	$95.15^{+0.55}_{-0.53} \quad (+0.4\sigma)$
n_s	$0.9648^{+0.0088}_{-0.0089} \quad (+0.4\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.022}_{-0.021} \quad (-0.3\sigma)$	$D_M(0.61)$	$2313^{+27}_{-27} \quad (-0.5\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{40}	$1230^{+24}_{-23} \quad (-0.2\sigma)$	$H(2.33)$	$236.1^{+1.7}_{-1.7} \quad (-0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{220}	$5720^{+78}_{-76} \quad (+0.2\sigma)$	$D_M(2.33)$	$5771^{+26}_{-26} \quad (-0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.015}_{-0.015} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{1420}	$815.0^{+9.9}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0097} \quad (-0.1\sigma)$
A_{100}^{PS}	$263^{+60}_{-50} \quad (-0.0\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.012}_{-0.011} \quad (-0.3\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9648^{+0.0088}_{-0.0089} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6632^{+0.0095}_{-0.0081} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24531^{+0.00016}_{-0.00018} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4747^{+0.0099}_{-0.0098} \quad (-0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00016}_{-0.00018} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0090}_{-0.0076} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.623^{+0.072}_{-0.075} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.4695^{+0.0090}_{-0.0087} \quad (-0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.817^{+0.059}_{-0.059} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0082}_{-0.0075} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	$1090.14^{+0.61}_{-0.63} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0043}_{-0.0039} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.6}_{-6.6} \quad (-0.0\sigma)$	r_*	$144.67^{+0.67}_{-0.65} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0047}_{-0.0042} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.04108^{+0.00087}_{-0.00086} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.896^{+0.065}_{-0.061} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.46^{+0.85}_{-0.83} \quad (+0.2\sigma)$	f_{2000}^{217}	$108.0^{+3.6}_{-3.8} \quad (-0.1\sigma)$
H_0	$67.3^{+1.3}_{-1.2} \quad (+0.5\sigma)$	r_{drag}	$147.40^{+0.72}_{-0.68} \quad (+0.4\sigma)$	χ_{lensing}^2	$9.32 \quad (\nu: 0.3)$
Ω_Λ	$0.685^{+0.017}_{-0.017} \quad (+0.5\sigma)$	k_{D}	$0.14039^{+0.00087}_{-0.00087} \quad (-0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
Ω_{m}	$0.315^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$100\theta_{\text{D}}$	$0.16104^{+0.00048}_{-0.00050} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.47 \quad (\nu: 0.5) \quad (-0.3\sigma)$
$\Omega_{\text{m}} h^2$	$0.1425^{+0.0026}_{-0.0027} \quad (-0.5\sigma)$	z_{eq}	$3389^{+61}_{-64} \quad (-0.5\sigma)$	χ_{plik}^2	$771.2 \quad (\nu: 13.7) \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.09589^{+0.00090}_{-0.00086} \quad (+0.0\sigma)$	k_{eq}	$0.01034^{+0.00019}_{-0.00020} \quad (-0.5\sigma)$	χ_{JLA}^2	$1035.38 \quad (\nu: 0.2)$
σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.012}_{-0.011} \quad (+0.5\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
S_8	$0.830^{+0.029}_{-0.029} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.4505^{+0.0062}_{-0.0059} \quad (+0.5\sigma)$	χ_{CMB}^2	$1200.9 \quad (\nu: 14.6) \quad (+1.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.455^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$H(0.15)$	$72.6^{+1.1}_{-1.0} \quad (+0.5\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.607^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$D_M(0.15)$	$644^{+11}_{-11} \quad (-0.5\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2243.62; R - 1 = 0.01253$$

2.94 base_plikHM_TT_lowl_lowE_lensing_post_BAO_JLA_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02232^{+0.00036}_{-0.00037} \quad (+0.9\sigma)$	$r_{\text{drag}} h$	$100.5^{+1.7}_{-1.6} \quad (+1.3\sigma)$	$H(0.51)$	$89.89^{+0.54}_{-0.50} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0021}_{-0.0021} \quad (-1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.042}_{-0.040} \quad (-0.8\sigma)$	$D_M(0.51)$	$1973^{+19}_{-19} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04115^{+0.00085}_{-0.00081} \quad (+0.8\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.7\sigma)$	$H(0.61)$	$95.45^{+0.48}_{-0.44} \quad (+1.3\sigma)$
τ	$0.059^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$10^9 A_s$	$2.110^{+0.061}_{-0.056} \quad (+0.5\sigma)$	$D_M(0.61)$	$2296^{+20}_{-21} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.029}_{-0.027} \quad (+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.021}_{-0.019} \quad (-0.6\sigma)$	$H(2.33)$	$235.3^{+1.4}_{-1.4} \quad (-1.1\sigma)$
n_s	$0.9686^{+0.0082}_{-0.0080} \quad (+1.0\sigma)$	D_{40}	$1224^{+23}_{-23} \quad (-0.6\sigma)$	$D_M(2.33)$	$5758^{+22}_{-23} \quad (-1.2\sigma)$
y_{cal}	$1.0010^{+0.0050}_{-0.0048} \quad (+0.2\sigma)$	D_{220}	$5735^{+77}_{-73} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.012}_{-0.012} \quad (-1.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2538^{+26}_{-25} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$817.0^{+9.3}_{-9.6} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4710^{+0.0097}_{-0.0098} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.3^{+3.6}_{-4.0} \quad (+0.1\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0089} \quad (+0.0\sigma)$
A_{100}^{PS}	$261^{+60}_{-50} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9686^{+0.0082}_{-0.0080} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.4704^{+0.0087}_{-0.0085} \quad (-0.8\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.24537^{+0.00014}_{-0.00015} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0093}_{-0.0084} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24670^{+0.00015}_{-0.00015} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.4660^{+0.0081}_{-0.0077} \quad (-0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 D/H$	$2.596^{+0.070}_{-0.065} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0090}_{-0.0081} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.26 \quad (-0.1\sigma)$	Age/Gyr	$13.788^{+0.051}_{-0.051} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0045}_{-0.0041} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.4}_{-3.5} \quad (-0.0\sigma)$	z_*	$1089.82^{+0.53}_{-0.54} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3079^{+0.0048}_{-0.0044} \quad (+0.8\sigma)$
A_{143}^{dustTT}	$10.7^{+3.8}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.96^{+0.56}_{-0.58} \quad (+1.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.7}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04134^{+0.00085}_{-0.00080} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.921^{+0.055}_{-0.058} \quad (+1.0\sigma)$	f_{2000}^{217}	$107.5^{+3.8}_{-3.7} \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	z_{drag}	$1059.67^{+0.83}_{-0.85} \quad (+0.6\sigma)$	χ^2_{lensing}	$9.41 \quad (\nu: 0.4)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.65^{+0.62}_{-0.66} \quad (+0.9\sigma)$	χ^2_{small}	$397.7 \quad (\nu: 2.5) \quad (+0.4\sigma)$
H_0	$68.06^{+0.95}_{-0.91} \quad (+1.3\sigma)$	k_{D}	$0.14023^{+0.00087}_{-0.00083} \quad (-0.6\sigma)$	χ^2_{lowl}	$22.85 \quad (\nu: 0.3) \quad (-0.8\sigma)$
Ω_Λ	$0.695^{+0.012}_{-0.012} \quad (+1.2\sigma)$	$100\theta_{\text{D}}$	$0.16093^{+0.00050}_{-0.00050} \quad (-0.5\sigma)$	χ^2_{plik}	$772.6 \quad (\nu: 14.1) \quad (+0.2\sigma)$
Ω_{m}	$0.305^{+0.012}_{-0.012} \quad (-1.2\sigma)$	z_{eq}	$3356^{+49}_{-48} \quad (-1.2\sigma)$	χ^2_{H073p45}	$10.6 \quad (\nu: 1.7)$
$\Omega_{\text{m}} h^2$	$0.1411^{+0.0021}_{-0.0020} \quad (-1.2\sigma)$	k_{eq}	$0.01024^{+0.00015}_{-0.00015} \quad (-1.2\sigma)$	χ^2_{JLA}	$706.62 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09601^{+0.00086}_{-0.00085} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.8218^{+0.0092}_{-0.0091} \quad (+1.2\sigma)$	$\chi^2_{6\text{DF}}$	$0.028 \quad (\nu: 0.0)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4538^{+0.0047}_{-0.0047} \quad (+1.2\sigma)$	χ^2_{MGS}	$1.77 \quad (\nu: 0.1)$
S_8	$0.814^{+0.023}_{-0.023} \quad (-1.0\sigma)$	$H(0.15)$	$73.26^{+0.82}_{-0.79} \quad (+1.3\sigma)$	χ^2_{DR12BAO}	$3.91 \quad (\nu: 0.3)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.446^{+0.012}_{-0.012} \quad (-1.0\sigma)$	$D_M(0.15)$	$637.5^{+7.8}_{-8.0} \quad (-1.3\sigma)$	χ^2_{prior}	$7.4 \quad (\nu: 6.5) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$H(0.38)$	$83.25^{+0.64}_{-0.60} \quad (+1.3\sigma)$	χ^2_{CMB}	$1202.6 \quad (\nu: 15.3) \quad (+1.9\sigma)$
$\sigma_8/h^{0.5}$	$0.980^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$D_M(0.38)$	$1522^{+16}_{-16} \quad (-1.3\sigma)$	χ^2_{BAO}	$5.70 \quad (\nu: 0.3)$

$$\bar{\chi}^2_{\text{eff}} = 1932.95; R - 1 = 0.06025$$

2.95 base_plikHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02222^{+0.00038}_{-0.00036} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.6}_{-1.5} \quad (+0.8\sigma)$	$H(0.51)$	$89.67^{+0.51}_{-0.50} \quad (+0.8\sigma)$
$\Omega_c h^2$	$0.1190^{+0.0020}_{-0.0021} \quad (-0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.041}_{-0.041} \quad (-0.5\sigma)$	$D_M(0.51)$	$1982^{+19}_{-19} \quad (-0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04099^{+0.00084}_{-0.00082} \quad (+0.5\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$H(0.61)$	$95.27^{+0.44}_{-0.43} \quad (+0.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$10^9 A_s$	$2.102^{+0.060}_{-0.051} \quad (+0.3\sigma)$	$D_M(0.61)$	$2306^{+20}_{-20} \quad (-0.8\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.028}_{-0.024} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.878^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$H(2.33)$	$235.7^{+1.3}_{-1.3} \quad (-0.8\sigma)$
n_s	$0.9664^{+0.0077}_{-0.0079} \quad (+0.7\sigma)$	D_{40}	$1227^{+23}_{-22} \quad (-0.4\sigma)$	$D_M(2.33)$	$5767^{+22}_{-22} \quad (-0.7\sigma)$
y_{cal}	$1.0008^{+0.0050}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5725^{+79}_{-73} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.012}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.0097} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.7^{+9.7}_{-9.9} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4740^{+0.0095}_{-0.0095} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$230.1^{+3.4}_{-3.4} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6632^{+0.0098}_{-0.0084} \quad (+0.0\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9664^{+0.0077}_{-0.0079} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.4728^{+0.0086}_{-0.0083} \quad (-0.6\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24533^{+0.00015}_{-0.00016} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6207^{+0.0091}_{-0.0079} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00015}_{-0.00016} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4679^{+0.0081}_{-0.0076} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.614^{+0.069}_{-0.070} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0087}_{-0.0076} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.806^{+0.051}_{-0.051} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0044}_{-0.0040} \quad (+0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	$1090.02^{+0.53}_{-0.54} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0047}_{-0.0042} \quad (+0.5\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.82^{+0.56}_{-0.55} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.6}_{-6.6} \quad (+0.0\sigma)$	$100\theta_*$	$1.04119^{+0.00084}_{-0.00081} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.909^{+0.054}_{-0.056} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.9^{+3.6}_{-3.8} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0013}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.51^{+0.88}_{-0.84} \quad (+0.3\sigma)$	χ_{lensing}^2	$9.23 \quad (\nu: 0.2)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.54^{+0.62}_{-0.63} \quad (+0.7\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.8) \quad (+0.1\sigma)$
H_0	$67.63^{+0.92}_{-0.91} \quad (+0.8\sigma)$	k_{D}	$0.14028^{+0.00086}_{-0.00082} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.18 \quad (\nu: 0.4) \quad (-0.6\sigma)$
Ω_Λ	$0.690^{+0.012}_{-0.012} \quad (+0.8\sigma)$	$100\theta_{\text{D}}$	$0.16101^{+0.00048}_{-0.00050} \quad (-0.2\sigma)$	χ_{plik}^2	$771.6 \quad (\nu: 13.6) \quad (+0.0\sigma)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.8\sigma)$	z_{eq}	$3374^{+47}_{-48} \quad (-0.8\sigma)$	χ_{JLA}^2	$1035.07 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1418^{+0.0020}_{-0.0020} \quad (-0.8\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00015} \quad (-0.8\sigma)$	$\chi_{6\text{DF}}^2$	$0.048 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09590^{+0.00090}_{-0.00086} \quad (+0.0\sigma)$	$100\theta_{\text{eq}}$	$0.8181^{+0.0090}_{-0.0086} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4520^{+0.0046}_{-0.0045} \quad (+0.8\sigma)$	χ_{DR12BAO}^2	$4.6 \quad (\nu: 0.9)$
S_8	$0.823^{+0.023}_{-0.022} \quad (-0.7\sigma)$	$H(0.15)$	$72.89^{+0.80}_{-0.79} \quad (+0.8\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$D_M(0.15)$	$641.2^{+7.8}_{-7.8} \quad (-0.8\sigma)$	χ_{CMB}^2	$1201.2 \quad (\nu: 14.5) \quad (+1.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.38)$	$82.97^{+0.61}_{-0.60} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.5)$
$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.016} \quad (-0.5\sigma)$	$D_M(0.38)$	$1530^{+16}_{-16} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2249.62; R - 1 = 0.01932$$

2.96 base_plikHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02232^{+0.00036}_{-0.00037} \quad (+0.9\sigma)$	$r_{\text{drag}} h$	$100.5^{+1.6}_{-1.5} \quad (+1.3\sigma)$	$H(0.51)$	$89.89^{+0.54}_{-0.49} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0020}_{-0.0021} \quad (-1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.041}_{-0.040} \quad (-0.8\sigma)$	$D_M(0.51)$	$1973^{+18}_{-19} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04115^{+0.00085}_{-0.00081} \quad (+0.8\sigma)$	z_{re}	$8.1^{+1.4}_{-1.3} \quad (+0.7\sigma)$	$H(0.61)$	$95.45^{+0.47}_{-0.43} \quad (+1.3\sigma)$
τ	$0.059^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$10^9 A_s$	$2.110^{+0.061}_{-0.056} \quad (+0.5\sigma)$	$D_M(0.61)$	$2296^{+20}_{-21} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.028}_{-0.027} \quad (+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.021}_{-0.019} \quad (-0.6\sigma)$	$H(2.33)$	$235.3^{+1.3}_{-1.3} \quad (-1.1\sigma)$
n_s	$0.9686^{+0.0080}_{-0.0080} \quad (+1.1\sigma)$	D_{40}	$1224^{+23}_{-23} \quad (-0.6\sigma)$	$D_M(2.33)$	$5758^{+22}_{-23} \quad (-1.2\sigma)$
y_{cal}	$1.0010^{+0.0050}_{-0.0048} \quad (+0.2\sigma)$	D_{220}	$5735^{+77}_{-73} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.011}_{-0.012} \quad (-1.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2538^{+26}_{-25} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$817.1^{+9.3}_{-9.5} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4709^{+0.0096}_{-0.0097} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.3^{+3.6}_{-4.0} \quad (+0.1\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0089} \quad (+0.0\sigma)$
A_{100}^{PS}	$261^{+60}_{-50} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9686^{+0.0080}_{-0.0080} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.4704^{+0.0087}_{-0.0085} \quad (-0.9\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.24537^{+0.00014}_{-0.00015} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0094}_{-0.0084} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24670^{+0.00014}_{-0.00015} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.4660^{+0.0080}_{-0.0077} \quad (-0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 D/H$	$2.596^{+0.070}_{-0.065} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0090}_{-0.0081} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.26 \quad (-0.1\sigma)$	Age/Gyr	$13.788^{+0.051}_{-0.051} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0045}_{-0.0041} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.4}_{-3.5} \quad (-0.0\sigma)$	z_*	$1089.82^{+0.52}_{-0.54} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3079^{+0.0047}_{-0.0044} \quad (+0.8\sigma)$
A_{143}^{dustTT}	$10.7^{+3.8}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.97^{+0.55}_{-0.57} \quad (+1.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.7}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04135^{+0.00085}_{-0.00080} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.921^{+0.055}_{-0.058} \quad (+1.0\sigma)$	f_{2000}^{217}	$107.5^{+3.8}_{-3.7} \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	z_{drag}	$1059.68^{+0.83}_{-0.85} \quad (+0.6\sigma)$	χ_{lensing}^2	$9.41 \quad (\nu: 0.4)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.66^{+0.62}_{-0.65} \quad (+0.9\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 2.5) \quad (+0.4\sigma)$
H_0	$68.07^{+0.93}_{-0.89} \quad (+1.3\sigma)$	k_D	$0.14023^{+0.00087}_{-0.00084} \quad (-0.6\sigma)$	χ_{lowl}^2	$22.85 \quad (\nu: 0.3) \quad (-0.8\sigma)$
Ω_Λ	$0.695^{+0.012}_{-0.012} \quad (+1.3\sigma)$	$100\theta_D$	$0.16093^{+0.00050}_{-0.00050} \quad (-0.5\sigma)$	χ_{plik}^2	$772.6 \quad (\nu: 14.0) \quad (+0.2\sigma)$
Ω_m	$0.305^{+0.012}_{-0.012} \quad (-1.3\sigma)$	z_{eq}	$3355^{+48}_{-48} \quad (-1.2\sigma)$	χ_{H073p45}^2	$10.6 \quad (\nu: 1.7)$
$\Omega_m h^2$	$0.1411^{+0.0020}_{-0.0020} \quad (-1.2\sigma)$	k_{eq}	$0.01024^{+0.00015}_{-0.00015} \quad (-1.2\sigma)$	χ_{JLA}^2	$1034.87 \quad (\nu: 0.0)$
$\Omega_m h^3$	$0.09601^{+0.00086}_{-0.00085} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.8218^{+0.0090}_{-0.0089} \quad (+1.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.027 \quad (\nu: 0.0)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.4539^{+0.0046}_{-0.0046} \quad (+1.2\sigma)$	χ_{MGS}^2	$1.77 \quad (\nu: 0.1)$
S_8	$0.814^{+0.022}_{-0.023} \quad (-1.1\sigma)$	$H(0.15)$	$73.27^{+0.81}_{-0.78} \quad (+1.3\sigma)$	χ_{DR12BAO}^2	$3.88 \quad (\nu: 0.3)$
$\sigma_8 \Omega_m^{0.5}$	$0.446^{+0.012}_{-0.012} \quad (-1.1\sigma)$	$D_M(0.15)$	$637.4^{+7.6}_{-7.8} \quad (-1.3\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.5) \quad (+0.0\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.600^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$H(0.38)$	$83.25^{+0.63}_{-0.59} \quad (+1.3\sigma)$	χ_{CMB}^2	$1202.6 \quad (\nu: 15.2) \quad (+1.9\sigma)$
$\sigma_8/h^{0.5}$	$0.980^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$D_M(0.38)$	$1522^{+15}_{-16} \quad (-1.3\sigma)$	χ_{BAO}^2	$5.68 \quad (\nu: 0.2)$

$$\bar{\chi}_{\text{eff}}^2 = 2261.17; R - 1 = 0.06158$$

2.97 base_plikHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022383	$0.02237^{+0.00029}_{-0.00028}$ $(+1.2\sigma)$	$\Omega_{\text{m}}h^3$	0.09636	$0.09633^{+0.00056}_{-0.00061}$ $(+1.0\sigma)$	$100\theta_{\text{eq}}$	0.8128	$0.8134^{+0.0099}_{-0.0098}$ $(+0.3\sigma)$
$\Omega_{\text{c}}h^2$	0.12011	$0.1200^{+0.0023}_{-0.0023}$ (-0.3σ)	σ_8	0.8120	$0.811^{+0.012}_{-0.012}$ (-0.1σ)	$100\theta_{\text{s,eq}}$	0.4491	$0.4494^{+0.0051}_{-0.0050}$ $(+0.2\sigma)$
$100\theta_{\text{MC}}$	1.04091	$1.04092^{+0.00059}_{-0.00063}$ $(+0.3\sigma)$	S_8	0.8331	$0.832^{+0.025}_{-0.025}$ (-0.3σ)	$H(0.15)$	72.65	$72.68^{+0.90}_{-0.91}$ $(+0.6\sigma)$
τ	0.0543	$0.054^{+0.015}_{-0.014}$ $(+0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4563	$0.455^{+0.014}_{-0.014}$ (-0.3σ)	$D_{\text{M}}(0.15)$	643.7	$643.4^{+9.2}_{-8.9}$ (-0.5σ)
$\ln(10^{10}A_{\text{s}})$	3.0448	$3.044^{+0.028}_{-0.027}$ $(+0.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6087	$0.608^{+0.013}_{-0.013}$ (-0.3σ)	$H(0.38)$	82.85	$82.87^{+0.66}_{-0.66}$ $(+0.6\sigma)$
n_{s}	0.9660	$0.9649^{+0.0082}_{-0.0082}$ $(+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9897	$0.988^{+0.018}_{-0.018}$ (-0.3σ)	$D_{\text{M}}(0.38)$	1534.0	1533^{+18}_{-18} (-0.6σ)
y_{cal}	1.00044	$1.0006^{+0.0048}_{-0.0048}$ $(+0.1\sigma)$	$r_{\text{drag}}h$	99.00	$99.1^{+1.8}_{-1.8}$ $(+0.4\sigma)$	$H(0.51)$	89.61	$89.63^{+0.52}_{-0.53}$ $(+0.7\sigma)$
A_{217}^{CIB}	46.1	47^{+10}_{-10} (-0.1σ)	$\langle d^2 \rangle^{1/2}$	2.4449	$2.446^{+0.043}_{-0.044}$ (-0.2σ)	$D_{\text{M}}(0.51)$	1986.5	1986^{+22}_{-21} (-0.6σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.66	—	z_{re}	7.68	$7.7^{+1.4}_{-1.5}$ $(+0.2\sigma)$	$H(0.61)$	95.272	$95.28^{+0.43}_{-0.43}$ $(+0.8\sigma)$
A_{143}^{tSZ}	7.08	$5.4^{+3.8}_{-3.8}$ $(+0.2\sigma)$	$10^9 A_{\text{s}}$	2.101	$2.100^{+0.060}_{-0.057}$ $(+0.2\sigma)$	$D_{\text{M}}(0.61)$	2311.0	2310^{+23}_{-22} (-0.6σ)
A_{100}^{PS}	248	260^{+50}_{-50} (-0.1σ)	$10^9 A_{\text{s}}e^{-2\tau}$	1.8843	$1.883^{+0.021}_{-0.021}$ (-0.1σ)	$H(2.33)$	236.64	$236.6^{+1.4}_{-1.4}$ (-0.1σ)
A_{143}^{PS}	50.7	46^{+20}_{-20} (-0.4σ)	D_{40}	1229.0	1232^{+23}_{-23} (-0.1σ)	$D_{\text{M}}(2.33)$	5763.6	5763^{+20}_{-20} (-0.9σ)
$A_{143 \times 217}^{\text{PS}}$	53.3	42^{+20}_{-20} (-0.1σ)	D_{220}	5730	5736^{+77}_{-74} $(+0.5\sigma)$	$f\sigma_8(0.15)$	0.4606	$0.460^{+0.013}_{-0.013}$ (-0.3σ)
A_{217}^{PS}	121.9	115^{+20}_{-20} (-0.0σ)	D_{810}	2541.3	2539^{+26}_{-26} $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7499	$0.749^{+0.011}_{-0.010}$ (-0.0σ)
A^{kSZ}	0.00	< 8.16 (-0.1σ)	D_{1420}	818.4	$817.2^{+9.5}_{-9.4}$ $(+0.6\sigma)$	$f\sigma_8(0.38)$	0.4780	$0.477^{+0.010}_{-0.010}$ (-0.3σ)
A_{100}^{dustTT}	8.80	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	D_{2000}	231.33	$230.9^{+3.1}_{-3.1}$ $(+0.7\sigma)$	$\sigma_8(0.38)$	0.6643	$0.6637^{+0.0094}_{-0.0091}$ $(+0.1\sigma)$
A_{143}^{dustTT}	11.01	$10.9^{+3.5}_{-3.4}$ $(+0.1\sigma)$	$n_{\text{s},0.002}$	0.9660	$0.9649^{+0.0082}_{-0.0082}$ $(+0.4\sigma)$	$f\sigma_8(0.51)$	0.4761	$0.4754^{+0.0090}_{-0.0093}$ (-0.2σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.6^{+6.4}_{-6.4}$ $(+0.1\sigma)$	Y_{P}	0.245401	$0.24539^{+0.00011}_{-0.00011}$ $(+1.1\sigma)$	$\sigma_8(0.51)$	0.6214	$0.6209^{+0.0088}_{-0.0085}$ $(+0.1\sigma)$
A_{217}^{dustTT}	95.5	94^{+10}_{-10} $(+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	0.246727	$0.24672^{+0.00011}_{-0.00012}$ $(+1.1\sigma)$	$f\sigma_8(0.61)$	0.4707	$0.4701^{+0.0082}_{-0.0083}$ (-0.2σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.074}$	10^5D/H	2.583	$2.585^{+0.053}_{-0.051}$ (-1.2σ)	$\sigma_8(0.61)$	0.5912	$0.5907^{+0.0085}_{-0.0081}$ $(+0.2\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.057}_{-0.058}$	Age/Gyr	13.7971	$13.797^{+0.046}_{-0.045}$ (-0.9σ)	$f\sigma_8(2.33)$	0.29792	$0.2977^{+0.0044}_{-0.0042}$ $(+0.3\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.17}$	z_*	1089.914	$1089.92^{+0.50}_{-0.49}$ (-0.9σ)	$\sigma_8(2.33)$	0.30695	$0.3068^{+0.0048}_{-0.0045}$ $(+0.3\sigma)$
A_{143}^{dustTE}	0.225	$0.23^{+0.11}_{-0.11}$	r_*	144.39	$144.43^{+0.53}_{-0.52}$ (-0.1σ)	f_{2000}^{143}	28.6	30^{+5}_{-5} (-0.5σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	1.04109	$1.04110^{+0.00059}_{-0.00062}$ $(+0.3\sigma)$	$f_{2000}^{143 \times 217}$	31.97	32^{+4}_{-4} (-0.6σ)
A_{217}^{dustTE}	2.08	$2.09^{+0.54}_{-0.54}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.8696	$13.873^{+0.049}_{-0.048}$ (-0.1σ)	f_{2000}^{217}	106.46	$107.1^{+3.4}_{-3.5}$ (-0.6σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	z_{drag}	1059.97	$1059.94^{+0.60}_{-0.58}$ $(+1.2\sigma)$	χ_{lensing}^2	8.87	9.23 $(\nu: 0.2)$
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	r_{drag}	147.05	$147.09^{+0.53}_{-0.51}$ (-0.2σ)	χ_{small}^2	396.05	397.0 $(\nu: 1.4)$ $(+0.0\sigma)$
H_0	67.32	$67.4^{+1.0}_{-1.1}$ $(+0.5\sigma)$	k_{D}	0.14092	$0.14087^{+0.00057}_{-0.00061}$ $(+0.6\sigma)$	χ_{lowl}^2	23.25	23.53 $(\nu: 0.4)$ (-0.3σ)
Ω_{Λ}	0.6842	$0.685^{+0.014}_{-0.015}$ $(+0.4\sigma)$	$100\theta_{\text{D}}$	0.160734	$0.16076^{+0.00034}_{-0.00034}$ (-1.2σ)	χ_{plik}^2	2344.9	2359.4 $(\nu: 16.3)$ $(+291.3\sigma)$
Ω_{m}	0.3158	$0.315^{+0.015}_{-0.014}$ (-0.4σ)	z_{eq}	3405	3402^{+53}_{-52} (-0.2σ)	χ_{prior}^2	1.5	11.5 $(\nu: 9.9)$ $(+1.1\sigma)$
$\Omega_{\text{m}}h^2$	0.14314	$0.1430^{+0.0022}_{-0.0022}$ (-0.2σ)	k_{eq}	0.010393	$0.01038^{+0.00016}_{-0.00016}$ (-0.2σ)	χ_{CMB}^2	2773.1	2789.2 $(\nu: 16.9)$ $(+290.8\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 2774.63$; $\bar{\chi}_{\text{eff}}^2 = 2800.69$; $R - 1 = 0.01032$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.87 small_100x143_offlike5_EE_Aplanck_B: 396.05 commander_dx12_v3.2_29: 23.25 plik_rd12_HM_v22b_TTTEEE: 2344.93

2.98 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022447	$0.02242^{+0.00026}_{-0.00027}$ (+1.4 σ)	S_8	0.8253	$0.825^{+0.021}_{-0.021}$ (−0.6 σ)	$H(0.38)$	83.08	$83.05^{+0.51}_{-0.52}$ (+1.0 σ)
$\Omega_c h^2$	0.11928	$0.1193^{+0.0018}_{-0.0018}$ (−0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4520	$0.452^{+0.011}_{-0.011}$ (−0.6 σ)	$D_M(0.38)$	1527.5	1528^{+14}_{-14} (−0.9 σ)
$100\theta_{MC}$	1.04101	$1.04101^{+0.00055}_{-0.00059}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6055	$0.605^{+0.011}_{-0.011}$ (−0.5 σ)	$H(0.51)$	89.797	$89.77^{+0.42}_{-0.43}$ (+1.0 σ)
τ	0.0568	$0.056^{+0.014}_{-0.013}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9857	$0.985^{+0.017}_{-0.017}$ (−0.5 σ)	$D_M(0.51)$	1978.9	1980^{+16}_{-16} (−0.9 σ)
$\ln(10^{10} A_s)$	3.0480	$3.047^{+0.028}_{-0.027}$ (+0.4 σ)	$r_{drag} h$	99.66	$99.6^{+1.4}_{-1.4}$ (+0.7 σ)	$H(0.61)$	95.414	$95.39^{+0.35}_{-0.36}$ (+1.1 σ)
n_s	0.9682	$0.9665^{+0.0076}_{-0.0073}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4356	$2.438^{+0.040}_{-0.042}$ (−0.4 σ)	$D_M(0.61)$	2302.9	2304^{+18}_{-18} (−0.9 σ)
y_{cal}	1.00047	$1.0008^{+0.0048}_{-0.0047}$ (+0.1 σ)	z_{re}	7.90	$7.8^{+1.4}_{-1.4}$ (+0.4 σ)	$H(2.33)$	236.17	$236.2^{+1.1}_{-1.1}$ (−0.4 σ)
A_{217}^{CIB}	45.6	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.107	$2.105^{+0.059}_{-0.056}$ (+0.4 σ)	$D_M(2.33)$	5757.5	5759^{+18}_{-16} (−1.2 σ)
$\xi^{tSZ \times CIB}$	0.71	—	$10^9 A_s e^{-2\tau}$	1.8811	$1.881^{+0.021}_{-0.020}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4567	$0.456^{+0.011}_{-0.011}$ (−0.6 σ)
A_{143}^{tSZ}	7.06	$5.4^{+3.7}_{-4.0}$ (+0.2 σ)	D_{40}	1225.0	1229^{+23}_{-23} (−0.3 σ)	$\sigma_8(0.15)$	0.7495	$0.749^{+0.011}_{-0.010}$ (−0.1 σ)
A_{100}^{PS}	247	259^{+50}_{-60} (−0.2 σ)	D_{220}	5734	5741^{+78}_{-76} (+0.7 σ)	$f\sigma_8(0.38)$	0.4752	$0.4749^{+0.0092}_{-0.0092}$ (−0.5 σ)
A_{143}^{PS}	50.6	46^{+20}_{-20} (−0.4 σ)	D_{810}	2541.2	2540^{+26}_{-26} (+0.3 σ)	$\sigma_8(0.38)$	0.6645	$0.6637^{+0.0095}_{-0.0090}$ (+0.1 σ)
$A_{143 \times 217}^{PS}$	54.1	42^{+20}_{-20} (−0.1 σ)	D_{1420}	819.2	$817.9^{+9.2}_{-9.2}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4739	$0.4736^{+0.0084}_{-0.0084}$ (−0.5 σ)
A_{217}^{PS}	122.3	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.67	$231.1^{+3.0}_{-3.1}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6219	$0.6212^{+0.0088}_{-0.0084}$ (+0.2 σ)
A^{kSZ}	0.01	< 8.22 (−0.2 σ)	$n_{s,0.002}$	0.9682	$0.9665^{+0.0076}_{-0.0073}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4690	$0.4686^{+0.0079}_{-0.0079}$ (−0.4 σ)
A_{100}^{dustTT}	8.78	$8.9^{+3.5}_{-3.5}$ (−0.0 σ)	Y_P	0.245425	$0.245414^{+0.000095}_{-0.00011}$ (+1.3 σ)	$\sigma_8(0.61)$	0.5918	$0.5911^{+0.0084}_{-0.0081}$ (+0.2 σ)
A_{143}^{dustTT}	10.97	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246752	$0.246740^{+0.000096}_{-0.00011}$ (+1.3 σ)	$f\sigma_8(2.33)$	0.29841	$0.2980^{+0.0043}_{-0.0042}$ (+0.4 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.5^{+6.6}_{-6.6}$ (+0.1 σ)	$10^5 D/H$	2.5713	$2.576^{+0.051}_{-0.046}$ (−1.4 σ)	$\sigma_8(2.33)$	0.30769	$0.3073^{+0.0046}_{-0.0044}$ (+0.5 σ)
A_{217}^{dustTT}	95.3	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7839	$13.787^{+0.040}_{-0.037}$ (−1.2 σ)	f_{2000}^{143}	28.2	29^{+5}_{-5} (−0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.073}$	z_*	1089.760	$1089.80^{+0.42}_{-0.41}$ (−1.2 σ)	$f_{2000}^{143 \times 217}$	31.63	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	144.559	$144.57^{+0.44}_{-0.42}$ (+0.2 σ)	f_{2000}^{217}	106.20	$106.9^{+3.4}_{-3.5}$ (−0.6 σ)
$A_{100 \times 217}^{dustTE}$	0.483	$0.48^{+0.16}_{-0.16}$	$100\theta_*$	1.04119	$1.04119^{+0.00055}_{-0.00058}$ (+0.5 σ)	$\chi_{lensing}^2$	8.73	9.10 (ν : 0.2)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8840	$13.885^{+0.042}_{-0.040}$ (+0.2 σ)	χ_{small}^2	396.52	397.2 (ν : 1.7) (+0.1 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.16}$	z_{drag}	1060.05	$1060.01^{+0.54}_{-0.57}$ (+1.3 σ)	χ_{lowl}^2	22.90	23.25 (ν : 0.3) (−0.5 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.54}_{-0.53}$	r_{drag}	147.198	$147.21^{+0.46}_{-0.44}$ (+0.0 σ)	χ_{plik}^2	2345.3	2359.6 (ν : 16.9) (+291.4 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14081	$0.14078^{+0.00054}_{-0.00058}$ (+0.4 σ)	χ_{6DF}^2	0.029	0.053 (ν : 0.0)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160690	$0.16072^{+0.00033}_{-0.00033}$ (−1.3 σ)	χ_{MGS}^2	1.22	1.24 (ν : 0.1)
H_0	67.70	$67.66^{+0.80}_{-0.81}$ (+0.9 σ)	z_{eq}	3386.8	3387^{+41}_{-41} (−0.5 σ)	$\chi_{DR12BAO}^2$	4.42	4.8 (ν : 0.9)
Ω_Λ	0.6894	$0.689^{+0.011}_{-0.011}$ (+0.8 σ)	k_{eq}	0.010337	$0.01034^{+0.00012}_{-0.00013}$ (−0.5 σ)	χ_{prior}^2	1.6	11.5 (ν : 10.1) (+1.1 σ)
Ω_m	0.3106	$0.311^{+0.011}_{-0.011}$ (−0.8 σ)	$100\theta_{eq}$	0.8163	$0.8162^{+0.0077}_{-0.0077}$ (+0.6 σ)	χ_{CMB}^2	2773.5	2789.2 (ν : 17.2) (+290.8 σ)
$\Omega_m h^2$	0.14237	$0.1424^{+0.0017}_{-0.0017}$ (−0.5 σ)	$100\theta_{s,eq}$	0.45092	$0.4509^{+0.0040}_{-0.0039}$ (+0.6 σ)	χ_{BAO}^2	5.67	6.1 (ν : 0.5)
$\Omega_m h^3$	0.09639	$0.09635^{+0.00056}_{-0.00060}$ (+1.0 σ)	$H(0.15)$	72.98	$72.94^{+0.70}_{-0.70}$ (+0.9 σ)			
σ_8	0.8110	$0.810^{+0.012}_{-0.012}$ (−0.2 σ)	$D_M(0.15)$	640.4	$640.8^{+7.0}_{-6.8}$ (−0.9 σ)			

Best-fit $\chi_{eff}^2 = 2780.70$; $\bar{\chi}_{eff}^2 = 2806.84$; $R - 1 = 0.01508$

χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.42 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.73 small_100x143.offlike5_EE_Aplanck_B: 396.52 commander_dx12.v3.2.29: 22.90 plik_rd12_HM_v22b_TTTEEE: 2345.32

2.99 base_plikHM_TTTEEE_lowl_lowE_lensing_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022506	$0.02248^{+0.00029}_{-0.00028}$ $(+1.7\sigma)$	σ_8	0.8103	$0.809^{+0.012}_{-0.012}$ (-0.3σ)	$H(0.15)$	73.24	$73.17^{+0.90}_{-0.85}$ $(+1.2\sigma)$
$\Omega_c h^2$	0.11866	$0.1188^{+0.0022}_{-0.0023}$ (-0.9σ)	S_8	0.8193	$0.820^{+0.024}_{-0.024}$ (-0.8σ)	$D_M(0.15)$	637.9	$638.5^{+8.4}_{-8.8}$ (-1.2σ)
$100\theta_{MC}$	1.04111	$1.04109^{+0.00065}_{-0.00061}$ $(+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4487	$0.449^{+0.013}_{-0.013}$ (-0.8σ)	$H(0.38)$	83.27	$83.22^{+0.66}_{-0.63}$ $(+1.3\sigma)$
τ	0.0587	$0.058^{+0.015}_{-0.014}$ $(+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6030	$0.603^{+0.012}_{-0.012}$ (-0.7σ)	$D_M(0.38)$	1522.4	1524^{+17}_{-18} (-1.2σ)
$\ln(10^{10} A_s)$	3.0509	$3.049^{+0.029}_{-0.027}$ $(+0.5\sigma)$	$\sigma_8/h^{0.5}$	0.9826	$0.982^{+0.018}_{-0.017}$ (-0.7σ)	$H(0.51)$	89.95	$89.91^{+0.54}_{-0.50}$ $(+1.3\sigma)$
n_s	0.9695	$0.9679^{+0.0086}_{-0.0080}$ $(+0.9\sigma)$	$r_{drag} h$	100.16	$100.0^{+1.8}_{-1.7}$ $(+1.0\sigma)$	$D_M(0.51)$	1972.9	1974^{+20}_{-21} (-1.2σ)
y_{cal}	1.00073	$1.0008^{+0.0048}_{-0.0049}$ $(+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4299	$2.432^{+0.043}_{-0.043}$ (-0.6σ)	$H(0.61)$	95.534	$95.50^{+0.43}_{-0.42}$ $(+1.4\sigma)$
A_{217}^{CIB}	45.8	47^{+10}_{-10} (-0.2σ)	z_{re}	8.07	$7.9^{+1.4}_{-1.4}$ $(+0.5\sigma)$	$D_M(0.61)$	2296.4	2298^{+21}_{-22} (-1.2σ)
$\xi^{tSZ \times CIB}$	0.61	—	$10^9 A_s$	2.113	$2.109^{+0.062}_{-0.057}$ $(+0.5\sigma)$	$H(2.33)$	235.83	$235.9^{+1.3}_{-1.3}$ (-0.6σ)
A_{143}^{tSZ}	7.08	$5.5^{+3.9}_{-3.8}$ $(+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	1.8793	$1.879^{+0.021}_{-0.021}$ (-0.4σ)	$D_M(2.33)$	5752.2	5754^{+21}_{-20} (-1.5σ)
A_{100}^{PS}	248	258^{+50}_{-50} (-0.2σ)	D_{40}	1223.8	1227^{+24}_{-22} (-0.4σ)	$f\sigma_8(0.15)$	0.4537	$0.454^{+0.012}_{-0.012}$ (-0.8σ)
A_{143}^{PS}	48.8	45^{+10}_{-10} (-0.5σ)	D_{220}	5743	5746^{+76}_{-76} $(+0.8\sigma)$	$\sigma_8(0.15)$	0.7493	$0.748^{+0.011}_{-0.011}$ (-0.1σ)
$A_{143 \times 217}^{PS}$	51.2	42^{+20}_{-20} (-0.2σ)	D_{810}	2541.8	2540^{+26}_{-27} $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4731	$0.473^{+0.010}_{-0.0097}$ (-0.7σ)
A_{217}^{PS}	121.4	115^{+20}_{-20} (-0.0σ)	D_{1420}	819.8	$818.6^{+9.4}_{-9.4}$ $(+0.8\sigma)$	$\sigma_8(0.38)$	0.6647	$0.6638^{+0.0091}_{-0.0091}$ $(+0.1\sigma)$
A^{kSZ}	0.01	< 8.10 (-0.2σ)	D_{2000}	231.94	$231.4^{+3.1}_{-3.1}$ $(+1.1\sigma)$	$f\sigma_8(0.51)$	0.4723	$0.4721^{+0.0090}_{-0.0085}$ (-0.6σ)
A_{100}^{dustTT}	8.85	$8.8^{+3.5}_{-3.6}$ (-0.1σ)	$n_{s,0.002}$	0.9695	$0.9679^{+0.0086}_{-0.0080}$ $(+0.9\sigma)$	$\sigma_8(0.51)$	0.6223	$0.6214^{+0.0084}_{-0.0084}$ $(+0.2\sigma)$
A_{143}^{dustTT}	10.96	$10.9^{+3.5}_{-3.4}$ $(+0.1\sigma)$	Y_P	0.245447	$0.24544^{+0.00011}_{-0.00011}$ $(+1.6\sigma)$	$f\sigma_8(0.61)$	0.4677	$0.4674^{+0.0083}_{-0.0079}$ (-0.6σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.5^{+6.5}_{-6.7}$ $(+0.1\sigma)$	Y_P^{BBN}	0.246774	$0.24676^{+0.00011}_{-0.00011}$ $(+1.6\sigma)$	$\sigma_8(0.61)$	0.5922	$0.5914^{+0.0083}_{-0.0081}$ $(+0.3\sigma)$
A_{217}^{dustTT}	95.4	93^{+10}_{-10} $(+0.0\sigma)$	$10^5 D/H$	2.561	$2.565^{+0.052}_{-0.052}$ (-1.6σ)	$f\sigma_8(2.33)$	0.29880	$0.2983^{+0.0043}_{-0.0042}$ $(+0.5\sigma)$
A_{100}^{dustTE}	0.113	$0.113^{+0.078}_{-0.073}$	Age/Gyr	13.7724	$13.776^{+0.044}_{-0.047}$ (-1.5σ)	$\sigma_8(2.33)$	0.30826	$0.3077^{+0.0048}_{-0.0046}$ $(+0.7\sigma)$
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.057}$	z_*	1089.632	$1089.68^{+0.48}_{-0.49}$ (-1.5σ)	f_{2000}^{143}	28.1	29^{+6}_{-5} (-0.7σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.16}_{-0.16}$	r_*	144.674	$144.66^{+0.48}_{-0.49}$ $(+0.4\sigma)$	$f_{2000}^{143 \times 217}$	31.45	32^{+4}_{-4} (-0.9σ)
A_{143}^{dustTE}	0.224	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	1.04128	$1.04127^{+0.00062}_{-0.00060}$ $(+0.6\sigma)$	f_{2000}^{217}	106.15	$106.7^{+3.5}_{-3.6}$ (-0.8σ)
$A_{143 \times 217}^{dustTE}$	0.662	$0.67^{+0.16}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.8939	$13.892^{+0.045}_{-0.046}$ $(+0.3\sigma)$	$\chi^2_{lensing}$	8.71	$9.17 (\nu: 0.3)$
A_{217}^{dustTE}	2.07	$2.07^{+0.54}_{-0.52}$	z_{drag}	1060.16	$1060.11^{+0.59}_{-0.60}$ $(+1.6\sigma)$	χ^2_{small}	396.93	$397.5 (\nu: 2.2)$ $(+0.3\sigma)$
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	r_{drag}	147.295	$147.28^{+0.49}_{-0.49}$ $(+0.2\sigma)$	χ^2_{lowl}	22.73	$23.05 (\nu: 0.4)$ (-0.7σ)
c_{217}	0.99817	$0.9982^{+0.0013}_{-0.0012}$ (-0.1σ)	k_D	0.14075	$0.14075^{+0.00056}_{-0.00060}$ $(+0.4\sigma)$	χ^2_{plik}	2346.0	$2360.5 (\nu: 18.4)$ $(+291.5\sigma)$
H_0	68.00	$67.9^{+1.1}_{-0.99}$ $(+1.1\sigma)$	$100\theta_D$	0.160643	$0.16067^{+0.00034}_{-0.00032}$ (-1.5σ)	$\chi^2_{H073p45}$	10.77	$11.2 (\nu: 2.1)$
Ω_Λ	0.6933	$0.692^{+0.014}_{-0.013}$ $(+1.0\sigma)$	z_{eq}	3373.4	3376^{+49}_{-50} (-0.7σ)	χ^2_{prior}	1.6	$11.6 (\nu: 10.3)$ $(+1.2\sigma)$
Ω_m	0.3067	$0.308^{+0.013}_{-0.014}$ (-1.0σ)	k_{eq}	0.010296	$0.01030^{+0.00015}_{-0.00015}$ (-0.7σ)	χ^2_{CMB}	2774.3	$2790.2 (\nu: 18.8)$ $(+291.0\sigma)$
$\Omega_m h^2$	0.14181	$0.1419^{+0.0020}_{-0.0021}$ (-0.7σ)	$100\theta_{eq}$	0.8190	$0.8184^{+0.0098}_{-0.0092}$ $(+0.8\sigma)$			
$\Omega_m h^3$	0.09643	$0.09641^{+0.00057}_{-0.00058}$ $(+1.1\sigma)$	$100\theta_{s,eq}$	0.45226	$0.4520^{+0.0050}_{-0.0047}$ $(+0.8\sigma)$			

Best-fit $\chi^2_{eff} = 2786.73$; $\bar{\chi}^2_{eff} = 2812.97$; $R - 1 = 0.03088$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.71 small_100x143_offlike5_EE_Aplanck_B: 396.93 commander_dx12_v3.2.29: 22.73 plik_rd12_HM_v22b_TTTEEE: 2345.95 Hubble - H073p45: 10.77

2.100 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022515	$0.02249^{+0.00026}_{-0.00026}$ (+1.7 σ)	S_8	0.8172	$0.818^{+0.021}_{-0.020}$ (−0.9 σ)	$H(0.38)$	83.29	$83.27^{+0.53}_{-0.51}$ (+1.3 σ)
$\Omega_c h^2$	0.11857	$0.1186^{+0.0017}_{-0.0018}$ (−1.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4476	$0.448^{+0.011}_{-0.011}$ (−0.9 σ)	$D_M(0.38)$	1521.9	1522^{+14}_{-14} (−1.3 σ)
$100\theta_{MC}$	1.04109	$1.04112^{+0.00058}_{-0.00058}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6017	$0.602^{+0.012}_{-0.011}$ (−0.8 σ)	$H(0.51)$	89.961	$89.95^{+0.43}_{-0.41}$ (+1.4 σ)
τ	0.0573	$0.058^{+0.015}_{-0.014}$ (+0.7 σ)	$\sigma_8/h^{0.5}$	0.9807	$0.981^{+0.017}_{-0.016}$ (−0.7 σ)	$D_M(0.51)$	1972.3	1973^{+16}_{-17} (−1.3 σ)
$\ln(10^{10} A_s)$	3.0482	$3.049^{+0.029}_{-0.027}$ (+0.5 σ)	$r_{drag} h$	100.22	$100.2^{+1.4}_{-1.3}$ (+1.1 σ)	$H(0.61)$	95.544	$95.53^{+0.36}_{-0.35}$ (+1.5 σ)
n_s	0.9697	$0.9682^{+0.0074}_{-0.0073}$ (+1.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4254	$2.430^{+0.040}_{-0.040}$ (−0.6 σ)	$D_M(0.61)$	2295.7	2296^{+17}_{-18} (−1.3 σ)
y_{cal}	1.00084	$1.0008^{+0.0047}_{-0.0048}$ (+0.2 σ)	z_{re}	7.93	$8.0^{+1.4}_{-1.4}$ (+0.6 σ)	$H(2.33)$	235.78	$235.8^{+1.1}_{-1.1}$ (−0.7 σ)
A_{217}^{CIB}	45.7	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.108	$2.110^{+0.061}_{-0.057}$ (+0.5 σ)	$D_M(2.33)$	5751.9	5753^{+17}_{-17} (−1.5 σ)
$\xi^{tSZ \times CIB}$	0.68	—	$10^9 A_s e^{-2\tau}$	1.8794	$1.879^{+0.021}_{-0.020}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4526	$0.453^{+0.011}_{-0.011}$ (−0.9 σ)
A_{143}^{tSZ}	7.12	$5.5^{+4.0}_{-3.8}$ (+0.2 σ)	D_{40}	1223.2	1226^{+23}_{-22} (−0.5 σ)	$\sigma_8(0.15)$	0.7480	$0.748^{+0.011}_{-0.010}$ (−0.1 σ)
A_{100}^{PS}	246	258^{+50}_{-50} (−0.2 σ)	D_{220}	5745	5747^{+75}_{-75} (+0.8 σ)	$f\sigma_8(0.38)$	0.4721	$0.4724^{+0.0093}_{-0.0090}$ (−0.8 σ)
A_{143}^{PS}	49.7	45^{+10}_{-10} (−0.5 σ)	D_{810}	2542.5	2540^{+25}_{-26} (+0.3 σ)	$\sigma_8(0.38)$	0.6637	$0.6637^{+0.0092}_{-0.0090}$ (+0.1 σ)
$A_{143 \times 217}^{PS}$	53.0	42^{+20}_{-20} (−0.2 σ)	D_{1420}	820.1	$818.7^{+9.1}_{-9.2}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4713	$0.4716^{+0.0084}_{-0.0082}$ (−0.7 σ)
A_{217}^{PS}	121.8	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.02	$231.5^{+2.9}_{-3.1}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6213	$0.6214^{+0.0085}_{-0.0084}$ (+0.2 σ)
A^{kSZ}	0.01	< 8.16 (−0.2 σ)	$n_{s,0.002}$	0.9697	$0.9682^{+0.0074}_{-0.0073}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4668	$0.4670^{+0.0079}_{-0.0077}$ (−0.6 σ)
A_{100}^{dustTT}	8.81	$8.8^{+3.4}_{-3.4}$ (−0.1 σ)	Y_P	0.245450	$0.245441^{+0.000095}_{-0.00010}$ (+1.6 σ)	$\sigma_8(0.61)$	0.5913	$0.5914^{+0.0083}_{-0.0081}$ (+0.3 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246777	$0.246768^{+0.000095}_{-0.00010}$ (+1.6 σ)	$f\sigma_8(2.33)$	0.29837	$0.2984^{+0.0043}_{-0.0042}$ (+0.5 σ)
$A_{143 \times 217}^{dustTT}$	20.1	$18.5^{+6.5}_{-6.7}$ (+0.1 σ)	$10^5 D/H$	2.5593	$2.563^{+0.048}_{-0.046}$ (−1.7 σ)	$\sigma_8(2.33)$	0.30784	$0.3078^{+0.0046}_{-0.0044}$ (+0.7 σ)
A_{217}^{dustTT}	95.4	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7717	$13.773^{+0.038}_{-0.038}$ (−1.6 σ)	f_{2000}^{143}	28.0	29^{+5}_{-5} (−0.8 σ)
A_{100}^{dustTE}	0.113	$0.113^{+0.078}_{-0.073}$	z_*	1089.614	$1089.65^{+0.41}_{-0.42}$ (−1.6 σ)	$f_{2000}^{143 \times 217}$	31.49	32^{+4}_{-4} (−0.9 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.059}_{-0.057}$	r_*	144.691	$144.69^{+0.42}_{-0.41}$ (+0.5 σ)	f_{2000}^{217}	106.12	$106.7^{+3.5}_{-3.4}$ (−0.8 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.16}_{-0.15}$	$100\theta_*$	1.04126	$1.04129^{+0.00057}_{-0.00057}$ (+0.7 σ)	$\chi^2_{lensing}$	8.79	9.15 (ν : 0.3)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8958	$13.895^{+0.041}_{-0.040}$ (+0.4 σ)	χ^2_{small}	396.58	397.6 (ν : 2.2) (+0.3 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.17}$	z_{drag}	1060.16	$1060.12^{+0.54}_{-0.57}$ (+1.6 σ)	χ^2_{lowl}	22.65	22.98 (ν : 0.3) (−0.7 σ)
A_{217}^{dustTE}	2.08	$2.07^{+0.54}_{-0.53}$	r_{drag}	147.310	$147.32^{+0.45}_{-0.44}$ (+0.2 σ)	χ^2_{plik}	2346.5	2360.5 (ν : 18.1) (+291.5 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14075	$0.14072^{+0.00055}_{-0.00058}$ (+0.3 σ)	$\chi^2_{H073p45}$	10.64	10.8 (ν : 1.3)
c_{217}	0.99817	$0.9982^{+0.0013}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160632	$0.16066^{+0.00033}_{-0.00031}$ (−1.5 σ)	χ^2_{6DF}	0.0029	0.024 (ν : 0.0)
H_0	68.04	$68.01^{+0.84}_{-0.80}$ (+1.2 σ)	z_{eq}	3371.4	3372^{+40}_{-40} (−0.8 σ)	χ^2_{MGS}	1.54	1.57 (ν : 0.1)
Ω_Λ	0.6938	$0.693^{+0.011}_{-0.011}$ (+1.1 σ)	k_{eq}	0.010290	$0.01029^{+0.00012}_{-0.00012}$ (−0.8 σ)	$\chi^2_{DR12BAO}$	3.70	4.05 (ν : 0.3)
Ω_m	0.3062	$0.307^{+0.011}_{-0.011}$ (−1.1 σ)	$100\theta_{eq}$	0.8194	$0.8192^{+0.0078}_{-0.0074}$ (+0.9 σ)	χ^2_{prior}	1.7	11.6 (ν : 10.3) (+1.2 σ)
$\Omega_m h^2$	0.14173	$0.1418^{+0.0017}_{-0.0017}$ (−0.8 σ)	$100\theta_{s,eq}$	0.45245	$0.4524^{+0.0040}_{-0.0038}$ (+0.9 σ)	χ^2_{CMB}	2774.5	2790.2 (ν : 18.3) (+291.0 σ)
$\Omega_m h^3$	0.09642	$0.09641^{+0.00056}_{-0.00057}$ (+1.1 σ)	$H(0.15)$	73.26	$73.24^{+0.72}_{-0.68}$ (+1.3 σ)	χ^2_{BAO}	5.24	5.64 (ν : 0.2)
σ_8	0.8089	$0.809^{+0.012}_{-0.012}$ (−0.3 σ)	$D_M(0.15)$	637.6	$637.9^{+6.8}_{-7.0}$ (−1.2 σ)			

Best-fit $\chi^2_{eff} = 2792.01$; $\bar{\chi}^2_{eff} = 2818.25$; $R - 1 = 0.03699$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 3.70 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.79 small_100x143.offlike5_EE_Aplanck_B: 396.58 commander_dx12.v3.2.29: 22.66 plik_rd12_HM_v22b_TTTEEE: 2346.46 Hubble - H073p45: 10.64

2.101 base_plikHM_TTTEEE_lowl_lowE_lensing_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022400	$0.02239^{+0.00028}_{-0.00028}$ (+1.3 σ)	σ_8	0.8112	$0.811^{+0.012}_{-0.012}$ (−0.1 σ)	$H(0.15)$	72.77	$72.78^{+0.84}_{-0.87}$ (+0.7 σ)
$\Omega_c h^2$	0.11977	$0.1197^{+0.0022}_{-0.0021}$ (−0.4 σ)	S_8	0.8296	$0.829^{+0.024}_{-0.024}$ (−0.4 σ)	$D_M(0.15)$	642.4	$642.4^{+8.8}_{-8.2}$ (−0.7 σ)
$100\theta_{MC}$	1.04094	$1.04095^{+0.00059}_{-0.00062}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4544	$0.454^{+0.013}_{-0.013}$ (−0.4 σ)	$H(0.38)$	82.93	$82.94^{+0.61}_{-0.63}$ (+0.7 σ)
τ	0.0549	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6071	$0.607^{+0.012}_{-0.012}$ (−0.4 σ)	$D_M(0.38)$	1531.6	1531^{+18}_{-17} (−0.7 σ)
$\ln(10^{10} A_s)$	3.0453	$3.045^{+0.028}_{-0.027}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9876	$0.987^{+0.018}_{-0.018}$ (−0.4 σ)	$H(0.51)$	89.679	$89.68^{+0.48}_{-0.51}$ (+0.8 σ)
n_s	0.9664	$0.9655^{+0.0081}_{-0.0080}$ (+0.5 σ)	$r_{drag} h$	99.25	$99.3^{+1.7}_{-1.7}$ (+0.5 σ)	$D_M(0.51)$	1983.7	1984^{+21}_{-20} (−0.7 σ)
y_{cal}	1.00064	$1.0007^{+0.0048}_{-0.0047}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4413	$2.443^{+0.042}_{-0.043}$ (−0.3 σ)	$H(0.61)$	95.320	$95.32^{+0.40}_{-0.42}$ (+0.9 σ)
A_{217}^{CIB}	47.2	47^{+10}_{-10} (−0.1 σ)	z_{re}	7.73	$7.7^{+1.4}_{-1.4}$ (+0.3 σ)	$D_M(0.61)$	2308.0	2308^{+22}_{-21} (−0.7 σ)
$\xi^{tSZ \times CIB}$	0.45	—	$10^9 A_s$	2.102	$2.102^{+0.059}_{-0.057}$ (+0.3 σ)	$H(2.33)$	236.44	$236.4^{+1.3}_{-1.3}$ (−0.2 σ)
A_{143}^{tSZ}	7.20	$5.4^{+3.7}_{-4.0}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8832	$1.883^{+0.021}_{-0.021}$ (−0.1 σ)	$D_M(2.33)$	5761.6	5762^{+20}_{-19} (−1.0 σ)
A_{100}^{PS}	250	259^{+50}_{-60} (−0.2 σ)	D_{40}	1228.7	1231^{+23}_{-23} (−0.2 σ)	$f\sigma_8(0.15)$	0.4588	$0.458^{+0.012}_{-0.012}$ (−0.4 σ)
A_{143}^{PS}	47.7	46^{+20}_{-20} (−0.4 σ)	D_{220}	5735	5738^{+78}_{-75} (+0.6 σ)	$\sigma_8(0.15)$	0.7493	$0.749^{+0.011}_{-0.010}$ (−0.0 σ)
$A_{143 \times 217}^{PS}$	47.9	42^{+20}_{-20} (−0.1 σ)	D_{810}	2541.2	2540^{+26}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4766	$0.4763^{+0.0099}_{-0.010}$ (−0.4 σ)
A_{217}^{PS}	119.7	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.5	$817.5^{+9.5}_{-9.3}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6640	$0.6637^{+0.0094}_{-0.0090}$ (+0.1 σ)
A^{kSZ}	0.00	< 8.22 (−0.1 σ)	D_{2000}	231.33	$231.0^{+3.1}_{-3.1}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4750	$0.4747^{+0.0088}_{-0.0090}$ (−0.3 σ)
A_{100}^{dustTT}	8.83	$8.9^{+3.5}_{-3.5}$ (−0.0 σ)	$n_{s,0.002}$	0.9664	$0.9655^{+0.0081}_{-0.0080}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6213	$0.6210^{+0.0088}_{-0.0085}$ (+0.2 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P	0.245407	$0.24540^{+0.00010}_{-0.00011}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4698	$0.4695^{+0.0081}_{-0.0083}$ (−0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.8	$18.5^{+6.5}_{-6.5}$ (+0.1 σ)	Y_P^{BBN}	0.246734	$0.24673^{+0.00010}_{-0.00011}$ (+1.2 σ)	$\sigma_8(0.61)$	0.5911	$0.5909^{+0.0084}_{-0.0081}$ (+0.2 σ)
A_{217}^{dustTT}	95.0	93^{+10}_{-10} (+0.0 σ)	$10^5 D/H$	2.580	$2.582^{+0.053}_{-0.050}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.29794	$0.2978^{+0.0044}_{-0.0041}$ (+0.3 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.074}$	Age/Gyr	13.7930	$13.793^{+0.045}_{-0.042}$ (−1.0 σ)	$\sigma_8(2.33)$	0.30707	$0.3070^{+0.0047}_{-0.0045}$ (+0.4 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.057}_{-0.059}$	z_*	1089.862	$1089.87^{+0.47}_{-0.46}$ (−1.1 σ)	f_{2000}^{143}	28.8	30^{+5}_{-5} (−0.6 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	r_*	144.47	$144.48^{+0.50}_{-0.50}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	31.98	32^{+4}_{-4} (−0.7 σ)
A_{143}^{dustTE}	0.223	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	1.04112	$1.04113^{+0.00059}_{-0.00061}$ (+0.3 σ)	f_{2000}^{217}	106.61	$107.0^{+3.4}_{-3.5}$ (−0.6 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	13.8761	$13.877^{+0.046}_{-0.046}$ (−0.0 σ)	$\chi^2_{lensing}$	8.77	9.17 (ν : 0.2)
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.53}$	z_{drag}	1059.97	$1059.97^{+0.57}_{-0.61}$ (+1.3 σ)	χ^2_{small}	396.16	397.1 (ν : 1.5) (+0.1 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.12	$147.14^{+0.51}_{-0.50}$ (−0.2 σ)	χ^2_{lowl}	23.18	23.42 (ν : 0.4) (−0.4 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_D	0.14086	$0.14084^{+0.00057}_{-0.00060}$ (+0.6 σ)	χ^2_{plik}	2344.9	2359.5 (ν : 16.8) (+291.4 σ)
H_0	67.46	$67.48^{+0.97}_{-1.0}$ (+0.7 σ)	$100\theta_D$	0.160728	$0.16074^{+0.00033}_{-0.00033}$ (−1.2 σ)	χ^2_{JLA}	1035.18	1035.27 (ν : 0.1)
Ω_Λ	0.6862	$0.686^{+0.013}_{-0.014}$ (+0.6 σ)	z_{eq}	3397.5	3396^{+50}_{-49} (−0.3 σ)	χ^2_{prior}	1.7	11.5 (ν : 10.0) (+1.1 σ)
Ω_m	0.3138	$0.314^{+0.014}_{-0.013}$ (−0.6 σ)	k_{eq}	0.010369	$0.01037^{+0.00015}_{-0.00015}$ (−0.3 σ)	χ^2_{CMB}	2773.0	2789.2 (ν : 17.2) (+290.8 σ)
$\Omega_m h^2$	0.14282	$0.1428^{+0.0021}_{-0.0020}$ (−0.3 σ)	$100\theta_{eq}$	0.8142	$0.8144^{+0.0092}_{-0.0094}$ (+0.4 σ)			
$\Omega_m h^3$	0.09635	$0.09633^{+0.00056}_{-0.00061}$ (+1.0 σ)	$100\theta_{s,eq}$	0.44985	$0.4500^{+0.0047}_{-0.0048}$ (+0.4 σ)			

Best-fit $\chi^2_{eff} = 3809.84$; $\bar{\chi}^2_{eff} = 3835.97$; $R - 1 = 0.01281$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.77 small_100x143_offlike5_EE_Aplanck_B: 396.16 commander_dx12_v3.2.29: 23.18 plik_rd12_HM_v22b_TTTEEE: 2344.85 SN - JLA Pantheon18: 1035.18

2.102 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_JLA_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022522	$0.02250^{+0.00026}_{-0.00026}$ (+1.7 σ)	S_8	0.8169	$0.817^{+0.021}_{-0.020}$ (−0.9 σ)	$H(0.38)$	83.33	$83.29^{+0.51}_{-0.51}$ (+1.4 σ)
$\Omega_c h^2$	0.11843	$0.1186^{+0.0017}_{-0.0018}$ (−1.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4474	$0.448^{+0.011}_{-0.011}$ (−0.9 σ)	$D_M(0.38)$	1520.8	1522^{+13}_{-14} (−1.3 σ)
$100\theta_{MC}$	1.04111	$1.04112^{+0.00058}_{-0.00058}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6019	$0.602^{+0.011}_{-0.011}$ (−0.8 σ)	$H(0.51)$	89.991	$89.96^{+0.42}_{-0.41}$ (+1.4 σ)
τ	0.0588	$0.058^{+0.014}_{-0.014}$ (+0.7 σ)	$\sigma_8/h^{0.5}$	0.9812	$0.981^{+0.017}_{-0.016}$ (−0.7 σ)	$D_M(0.51)$	1971.1	1972^{+16}_{-16} (−1.3 σ)
$\ln(10^{10} A_s)$	3.0511	$3.049^{+0.029}_{-0.027}$ (+0.5 σ)	$r_{drag} h$	100.33	$100.2^{+1.5}_{-1.3}$ (+1.1 σ)	$H(0.61)$	95.567	$95.54^{+0.36}_{-0.35}$ (+1.5 σ)
n_s	0.9700	$0.9684^{+0.0074}_{-0.0073}$ (+1.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4267	$2.429^{+0.040}_{-0.041}$ (−0.7 σ)	$D_M(0.61)$	2294.4	2296^{+17}_{-17} (−1.3 σ)
y_{cal}	1.00101	$1.0008^{+0.0047}_{-0.0048}$ (+0.2 σ)	z_{re}	8.07	$8.0^{+1.3}_{-1.4}$ (+0.6 σ)	$H(2.33)$	235.69	$235.8^{+1.1}_{-1.0}$ (−0.7 σ)
A_{217}^{CIB}	45.6	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.114	$2.110^{+0.061}_{-0.057}$ (+0.5 σ)	$D_M(2.33)$	5751.0	5752^{+17}_{-17} (−1.6 σ)
$\xi^{tSZ \times CIB}$	0.67	—	$10^9 A_s e^{-2\tau}$	1.8793	$1.879^{+0.021}_{-0.020}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4525	$0.453^{+0.011}_{-0.011}$ (−0.9 σ)
A_{143}^{tSZ}	7.15	$5.5^{+4.0}_{-3.8}$ (+0.2 σ)	D_{40}	1223.3	1226^{+23}_{-22} (−0.5 σ)	$\sigma_8(0.15)$	0.7488	$0.748^{+0.011}_{-0.010}$ (−0.1 σ)
A_{100}^{PS}	247	258^{+50}_{-50} (−0.2 σ)	D_{220}	5747	5747^{+75}_{-76} (+0.8 σ)	$f\sigma_8(0.38)$	0.4722	$0.4722^{+0.0092}_{-0.0089}$ (−0.8 σ)
A_{143}^{PS}	49.8	45^{+10}_{-10} (−0.5 σ)	D_{810}	2542.8	2540^{+25}_{-27} (+0.3 σ)	$\sigma_8(0.38)$	0.6644	$0.6637^{+0.0091}_{-0.0090}$ (+0.1 σ)
$A_{143 \times 217}^{PS}$	52.8	42^{+20}_{-20} (−0.2 σ)	D_{1420}	820.3	$818.7^{+9.0}_{-9.3}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4715	$0.4714^{+0.0084}_{-0.0081}$ (−0.7 σ)
A_{217}^{PS}	121.8	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.10	$231.5^{+2.9}_{-3.1}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6221	$0.6214^{+0.0085}_{-0.0084}$ (+0.2 σ)
A^{kSZ}	0.00	< 8.16 (−0.2 σ)	$n_{s,0.002}$	0.9700	$0.9684^{+0.0074}_{-0.0073}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4671	$0.4669^{+0.0078}_{-0.0076}$ (−0.7 σ)
A_{100}^{dustTT}	8.81	$8.8^{+3.4}_{-3.4}$ (−0.1 σ)	Y_P	0.245452	$0.245442^{+0.000096}_{-0.00010}$ (+1.6 σ)	$\sigma_8(0.61)$	0.5921	$0.5914^{+0.0083}_{-0.0081}$ (+0.3 σ)
A_{143}^{dustTT}	11.06	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246779	$0.246769^{+0.000096}_{-0.00010}$ (+1.6 σ)	$f\sigma_8(2.33)$	0.29879	$0.2984^{+0.0043}_{-0.0041}$ (+0.5 σ)
$A_{143 \times 217}^{dustTT}$	20.2	$18.5^{+6.5}_{-6.7}$ (+0.1 σ)	$10^5 D/H$	2.5580	$2.563^{+0.048}_{-0.046}$ (−1.7 σ)	$\sigma_8(2.33)$	0.30831	$0.3079^{+0.0046}_{-0.0044}$ (+0.7 σ)
A_{217}^{dustTT}	95.8	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7698	$13.773^{+0.038}_{-0.038}$ (−1.6 σ)	f_{2000}^{143}	28.1	29^{+5}_{-5} (−0.8 σ)
A_{100}^{dustTE}	0.114	$0.113^{+0.078}_{-0.073}$	z_*	1089.592	$1089.64^{+0.41}_{-0.42}$ (−1.6 σ)	$f_{2000}^{143 \times 217}$	31.50	32^{+4}_{-4} (−0.9 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.059}_{-0.057}$	r_*	144.722	$144.70^{+0.41}_{-0.41}$ (+0.5 σ)	f_{2000}^{217}	106.14	$106.7^{+3.5}_{-3.4}$ (−0.8 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.16}_{-0.15}$	$100\theta_*$	1.04128	$1.04129^{+0.00058}_{-0.00058}$ (+0.7 σ)	$\chi^2_{lensing}$	8.75	9.16 (ν : 0.3)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8984	$13.896^{+0.040}_{-0.040}$ (+0.4 σ)	χ^2_{small}	396.93	397.6 (ν : 2.3) (+0.4 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.17}$	z_{drag}	1060.16	$1060.13^{+0.57}_{-0.58}$ (+1.6 σ)	χ^2_{lowl}	22.63	22.96 (ν : 0.3) (−0.7 σ)
A_{217}^{dustTE}	2.07	$2.06^{+0.54}_{-0.53}$	r_{drag}	147.339	$147.33^{+0.45}_{-0.44}$ (+0.2 σ)	χ^2_{plik}	2346.4	2360.6 (ν : 18.1) (+291.6 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14072	$0.14071^{+0.00055}_{-0.00058}$ (+0.3 σ)	$\chi^2_{H073p45}$	10.40	10.7 (ν : 1.3)
c_{217}	0.99817	$0.9982^{+0.0013}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160630	$0.16066^{+0.00033}_{-0.00031}$ (−1.5 σ)	χ^2_{JLA}	706.600	706.64 (ν : 0.0)
H_0	68.10	$68.03^{+0.82}_{-0.78}$ (+1.3 σ)	z_{eq}	3368.3	3371^{+39}_{-40} (−0.8 σ)	χ^2_{6DF}	0.00098	0.023 (ν : 0.0)
Ω_Λ	0.6947	$0.694^{+0.011}_{-0.010}$ (+1.1 σ)	k_{eq}	0.010280	$0.01029^{+0.00012}_{-0.00012}$ (−0.8 σ)	χ^2_{MGS}	1.61	1.59 (ν : 0.1)
Ω_m	0.3053	$0.306^{+0.010}_{-0.011}$ (−1.1 σ)	$100\theta_{eq}$	0.8200	$0.8194^{+0.0078}_{-0.0074}$ (+1.0 σ)	$\chi^2_{DR12BAO}$	3.60	4.01 (ν : 0.3)
$\Omega_m h^2$	0.14160	$0.1417^{+0.0017}_{-0.0017}$ (−0.8 σ)	$100\theta_{s,eq}$	0.45276	$0.4525^{+0.0040}_{-0.0038}$ (+0.9 σ)	χ^2_{prior}	1.7	11.6 (ν : 10.4) (+1.2 σ)
$\Omega_m h^3$	0.09642	$0.09641^{+0.00057}_{-0.00057}$ (+1.1 σ)	$H(0.15)$	73.32	$73.26^{+0.71}_{-0.68}$ (+1.3 σ)	χ^2_{CMB}	2774.7	2790.3 (ν : 18.3) (+291.0 σ)
σ_8	0.8097	$0.809^{+0.012}_{-0.012}$ (−0.3 σ)	$D_M(0.15)$	637.1	$637.7^{+6.7}_{-7.0}$ (−1.3 σ)	χ^2_{BAO}	5.21	5.62 (ν : 0.2)

Best-fit $\chi^2_{eff} = 3498.60$; $\bar{\chi}^2_{eff} = 3524.87$; $R - 1 = 0.03975$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 3.60 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.75 small_100x143.offlike5_EE_Aplanck_B: 396.93 commander_dx12.v3.2.29: 22.63 plik_rd12_HM_v22b_TTTEEE: 2346.36 Hubble - H073p45: 10.40 SN - JLA December_2013: 706.60

2.103 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022451	$0.02243^{+0.00025}_{-0.00027}$ (+1.4 σ)	S_8	0.8237	$0.824^{+0.020}_{-0.020}$ (−0.7 σ)	$H(0.38)$	83.12	$83.09^{+0.51}_{-0.51}$ (+1.0 σ)
$\Omega_c h^2$	0.11913	$0.1192^{+0.0017}_{-0.0018}$ (−0.7 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4511	$0.451^{+0.011}_{-0.011}$ (−0.7 σ)	$D_M(0.38)$	1526.6	1527^{+14}_{-13} (−0.9 σ)
$100\theta_{MC}$	1.04102	$1.04102^{+0.00055}_{-0.00059}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6047	$0.605^{+0.011}_{-0.012}$ (−0.5 σ)	$H(0.51)$	89.821	$89.80^{+0.41}_{-0.42}$ (+1.1 σ)
τ	0.0568	$0.056^{+0.014}_{-0.013}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9847	$0.984^{+0.017}_{-0.017}$ (−0.5 σ)	$D_M(0.51)$	1977.8	1979^{+16}_{-16} (−1.0 σ)
$\ln(10^{10} A_s)$	3.0482	$3.047^{+0.028}_{-0.027}$ (+0.4 σ)	$r_{drag} h$	99.77	$99.7^{+1.3}_{-1.3}$ (+0.8 σ)	$H(0.61)$	95.431	$95.41^{+0.34}_{-0.35}$ (+1.1 σ)
n_s	0.9682	$0.9668^{+0.0075}_{-0.0072}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4343	$2.437^{+0.040}_{-0.042}$ (−0.5 σ)	$D_M(0.61)$	2301.7	2303^{+17}_{-17} (−1.0 σ)
y_{cal}	1.00085	$1.0008^{+0.0048}_{-0.0047}$ (+0.1 σ)	z_{re}	7.90	$7.8^{+1.4}_{-1.4}$ (+0.4 σ)	$H(2.33)$	236.07	$236.1^{+1.1}_{-1.1}$ (−0.5 σ)
A_{217}^{CIB}	46.6	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.108	$2.105^{+0.059}_{-0.056}$ (+0.4 σ)	$D_M(2.33)$	5756.9	5758^{+17}_{-16} (−1.2 σ)
$\xi^{tSZ \times CIB}$	0.56	—	$10^9 A_s e^{-2\tau}$	1.8813	$1.881^{+0.020}_{-0.020}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4559	$0.456^{+0.010}_{-0.010}$ (−0.6 σ)
A_{143}^{tSZ}	7.16	$5.4^{+3.7}_{-4.0}$ (+0.2 σ)	D_{40}	1225.7	1229^{+23}_{-23} (−0.3 σ)	$\sigma_8(0.15)$	0.7492	$0.749^{+0.011}_{-0.010}$ (−0.1 σ)
A_{100}^{PS}	249	259^{+60}_{-60} (−0.2 σ)	D_{220}	5739	5741^{+77}_{-76} (+0.7 σ)	$f\sigma_8(0.38)$	0.4746	$0.4745^{+0.0090}_{-0.0092}$ (−0.6 σ)
A_{143}^{PS}	48.8	46^{+20}_{-20} (−0.4 σ)	D_{810}	2542.0	2540^{+26}_{-26} (+0.3 σ)	$\sigma_8(0.38)$	0.6643	$0.6637^{+0.0095}_{-0.0090}$ (+0.1 σ)
$A_{143 \times 217}^{PS}$	50.4	42^{+20}_{-20} (−0.1 σ)	D_{1420}	819.4	$818.0^{+9.2}_{-9.1}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4734	$0.4732^{+0.0083}_{-0.0085}$ (−0.5 σ)
A_{217}^{PS}	120.6	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.70	$231.2^{+3.0}_{-3.1}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6218	$0.6212^{+0.0088}_{-0.0084}$ (+0.2 σ)
A^{kSZ}	0.00	< 8.21 (−0.2 σ)	$n_{s,0.002}$	0.9682	$0.9668^{+0.0075}_{-0.0072}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4686	$0.4684^{+0.0078}_{-0.0079}$ (−0.4 σ)
A_{100}^{dustTT}	8.84	$8.9^{+3.5}_{-3.5}$ (−0.0 σ)	Y_P	0.245427	$0.245417^{+0.000094}_{-0.00011}$ (+1.4 σ)	$\sigma_8(0.61)$	0.5917	$0.5911^{+0.0084}_{-0.0080}$ (+0.2 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246753	$0.246744^{+0.000094}_{-0.00011}$ (+1.4 σ)	$f\sigma_8(2.33)$	0.29839	$0.2981^{+0.0043}_{-0.0042}$ (+0.4 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.5^{+6.6}_{-6.7}$ (+0.1 σ)	$10^5 D/H$	2.5706	$2.575^{+0.050}_{-0.045}$ (−1.4 σ)	$\sigma_8(2.33)$	0.30771	$0.3074^{+0.0046}_{-0.0044}$ (+0.6 σ)
A_{217}^{dustTT}	95.2	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7827	$13.785^{+0.040}_{-0.036}$ (−1.2 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (−0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.073}$	z_*	1089.742	$1089.78^{+0.41}_{-0.41}$ (−1.3 σ)	$f_{2000}^{143 \times 217}$	31.78	32^{+4}_{-4} (−0.8 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.058}_{-0.058}$	r_*	144.595	$144.59^{+0.43}_{-0.41}$ (+0.3 σ)	f_{2000}^{217}	106.41	$106.9^{+3.4}_{-3.4}$ (−0.7 σ)
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.16}_{-0.16}$	$100\theta_*$	1.04120	$1.04120^{+0.00054}_{-0.00058}$ (+0.5 σ)	$\chi_{lensing}^2$	8.72	9.10 (ν : 0.2)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8874	$13.887^{+0.041}_{-0.040}$ (+0.2 σ)	χ_{small}^2	396.52	397.2 (ν : 1.8) (+0.2 σ)
$A_{143 \times 217}^{dustTE}$	0.665	$0.67^{+0.16}_{-0.16}$	z_{drag}	1060.05	$1060.02^{+0.56}_{-0.58}$ (+1.4 σ)	χ_{lowl}^2	22.88	23.20 (ν : 0.3) (−0.5 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.54}_{-0.53}$	r_{drag}	147.233	$147.23^{+0.46}_{-0.43}$ (+0.0 σ)	χ_{plik}^2	2345.3	2359.7 (ν : 17.0) (+291.4 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14078	$0.14076^{+0.00054}_{-0.00058}$ (+0.4 σ)	χ_{JLA}^2	1034.974	1035.06 (ν : 0.0)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160690	$0.16072^{+0.00033}_{-0.00032}$ (−1.3 σ)	χ_{6DF}^2	0.022	0.046 (ν : 0.0)
H_0	67.76	$67.72^{+0.78}_{-0.78}$ (+0.9 σ)	z_{eq}	3383.3	3385^{+39}_{-40} (−0.6 σ)	χ_{MGS}^2	1.28	1.29 (ν : 0.1)
Ω_Λ	0.6902	$0.690^{+0.010}_{-0.011}$ (+0.8 σ)	k_{eq}	0.010326	$0.01033^{+0.00012}_{-0.00012}$ (−0.6 σ)	$\chi_{DR12BAO}^2$	4.24	4.7 (ν : 0.7)
Ω_m	0.3098	$0.310^{+0.011}_{-0.010}$ (−0.8 σ)	$100\theta_{eq}$	0.8170	$0.8167^{+0.0076}_{-0.0073}$ (+0.6 σ)	χ_{prior}^2	1.8	11.5 (ν : 10.1) (+1.1 σ)
$\Omega_m h^2$	0.14222	$0.1423^{+0.0016}_{-0.0017}$ (−0.6 σ)	$100\theta_{s,eq}$	0.45125	$0.4511^{+0.0039}_{-0.0038}$ (+0.6 σ)	χ_{CMB}^2	2773.4	2789.3 (ν : 17.2) (+290.8 σ)
$\Omega_m h^3$	0.09637	$0.09635^{+0.00056}_{-0.00058}$ (+1.0 σ)	$H(0.15)$	73.03	$72.99^{+0.67}_{-0.68}$ (+0.9 σ)	χ_{BAO}^2	5.55	6.00 (ν : 0.4)
σ_8	0.8106	$0.810^{+0.012}_{-0.012}$ (−0.2 σ)	$D_M(0.15)$	639.9	$640.3^{+6.7}_{-6.6}$ (−0.9 σ)			

Best-fit $\chi_{eff}^2 = 3815.67$; $\bar{\chi}_{eff}^2 = 3841.86$; $R - 1 = 0.01667$

χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.24 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.72 small_100x143.offlike5_EE_Aplanck_B: 396.52 commander_dx12.v3.2.29: 22.88 plik_rd12_HM_v22b_TTTEEE: 2345.27 SN - JLA Pantheon18: 1034.97

2.104 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022510	$0.02250^{+0.00026}_{-0.00026}$ (+1.7 σ)	S_8	0.8183	$0.817^{+0.020}_{-0.020}$ (−0.9 σ)	$H(0.38)$	83.29	$83.29^{+0.51}_{-0.49}$ (+1.4 σ)
$\Omega_c h^2$	0.11858	$0.1186^{+0.0017}_{-0.0018}$ (−1.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4482	$0.448^{+0.011}_{-0.011}$ (−0.9 σ)	$D_M(0.38)$	1521.9	1522^{+13}_{-14} (−1.3 σ)
$100\theta_{MC}$	1.04112	$1.04113^{+0.00058}_{-0.00058}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6025	$0.602^{+0.011}_{-0.011}$ (−0.8 σ)	$H(0.51)$	89.962	$89.96^{+0.42}_{-0.41}$ (+1.4 σ)
τ	0.0586	$0.058^{+0.014}_{-0.014}$ (+0.7 σ)	$\sigma_8/h^{0.5}$	0.9819	$0.981^{+0.017}_{-0.016}$ (−0.8 σ)	$D_M(0.51)$	1972.3	1972^{+16}_{-16} (−1.3 σ)
$\ln(10^{10} A_s)$	3.0505	$3.049^{+0.029}_{-0.027}$ (+0.5 σ)	$r_{drag} h$	100.22	$100.2^{+1.4}_{-1.3}$ (+1.1 σ)	$H(0.61)$	95.544	$95.54^{+0.36}_{-0.35}$ (+1.5 σ)
n_s	0.9697	$0.9684^{+0.0073}_{-0.0073}$ (+1.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4281	$2.429^{+0.040}_{-0.041}$ (−0.7 σ)	$D_M(0.61)$	2295.7	2296^{+17}_{-17} (−1.3 σ)
y_{cal}	1.00076	$1.0008^{+0.0047}_{-0.0048}$ (+0.2 σ)	z_{re}	8.06	$8.0^{+1.3}_{-1.4}$ (+0.6 σ)	$H(2.33)$	235.78	$235.8^{+1.0}_{-1.0}$ (−0.8 σ)
A_{217}^{CIB}	46.0	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.113	$2.110^{+0.061}_{-0.057}$ (+0.5 σ)	$D_M(2.33)$	5751.9	5752^{+17}_{-17} (−1.6 σ)
$\xi^{tSZ \times CIB}$	0.62	—	$10^9 A_s e^{-2\tau}$	1.8790	$1.878^{+0.021}_{-0.020}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4532	$0.453^{+0.010}_{-0.010}$ (−0.9 σ)
A_{143}^{tSZ}	7.13	$5.5^{+4.0}_{-3.8}$ (+0.2 σ)	D_{40}	1223.1	1226^{+23}_{-22} (−0.5 σ)	$\sigma_8(0.15)$	0.7490	$0.748^{+0.011}_{-0.010}$ (−0.2 σ)
A_{100}^{PS}	248	258^{+50}_{-50} (−0.2 σ)	D_{220}	5742	5747^{+75}_{-76} (+0.8 σ)	$f\sigma_8(0.38)$	0.4727	$0.4721^{+0.0091}_{-0.0088}$ (−0.8 σ)
A_{143}^{PS}	48.9	45^{+10}_{-10} (−0.5 σ)	D_{810}	2541.7	2540^{+25}_{-27} (+0.3 σ)	$\sigma_8(0.38)$	0.6645	$0.6637^{+0.0091}_{-0.0090}$ (+0.1 σ)
$A_{143 \times 217}^{PS}$	51.5	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.9	$818.7^{+9.0}_{-9.3}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4719	$0.4714^{+0.0084}_{-0.0081}$ (−0.7 σ)
A_{217}^{PS}	121.2	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.96	$231.5^{+2.8}_{-3.1}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6221	$0.6214^{+0.0085}_{-0.0084}$ (+0.2 σ)
A^{kSZ}	0.00	< 8.16 (−0.2 σ)	$n_{s,0.002}$	0.9697	$0.9684^{+0.0073}_{-0.0073}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4674	$0.4668^{+0.0077}_{-0.0076}$ (−0.7 σ)
A_{100}^{dustTT}	8.81	$8.8^{+3.4}_{-3.4}$ (−0.1 σ)	Y_P	0.245448	$0.245443^{+0.000095}_{-0.000099}$ (+1.6 σ)	$\sigma_8(0.61)$	0.5921	$0.5914^{+0.0082}_{-0.0081}$ (+0.3 σ)
A_{143}^{dustTT}	11.03	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246775	$0.246770^{+0.000095}_{-0.00010}$ (+1.6 σ)	$f\sigma_8(2.33)$	0.29874	$0.2984^{+0.0043}_{-0.0041}$ (+0.5 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.5^{+6.5}_{-6.7}$ (+0.1 σ)	$10^5 D/H$	2.5602	$2.562^{+0.047}_{-0.046}$ (−1.7 σ)	$\sigma_8(2.33)$	0.30822	$0.3079^{+0.0046}_{-0.0044}$ (+0.8 σ)
A_{217}^{dustTT}	95.3	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7716	$13.772^{+0.038}_{-0.037}$ (−1.6 σ)	f_{2000}^{143}	28.1	29^{+5}_{-5} (−0.8 σ)
A_{100}^{dustTE}	0.115	$0.113^{+0.078}_{-0.073}$	z_*	1089.621	$1089.63^{+0.40}_{-0.42}$ (−1.6 σ)	$f_{2000}^{143 \times 217}$	31.51	32^{+4}_{-4} (−0.9 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.059}_{-0.057}$	r_*	144.693	$144.71^{+0.41}_{-0.41}$ (+0.5 σ)	f_{2000}^{217}	106.16	$106.7^{+3.5}_{-3.4}$ (−0.8 σ)
$A_{100 \times 217}^{dustTE}$	0.478	$0.48^{+0.16}_{-0.15}$	$100\theta_*$	1.04128	$1.04130^{+0.00057}_{-0.00057}$ (+0.7 σ)	$\chi^2_{lensing}$	8.74	9.16 (ν : 0.3)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8957	$13.897^{+0.040}_{-0.040}$ (+0.4 σ)	χ^2_{small}	396.92	397.6 (ν : 2.3) (+0.4 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.17}$	z_{drag}	1060.16	$1060.13^{+0.57}_{-0.58}$ (+1.6 σ)	χ^2_{lowl}	22.67	22.95 (ν : 0.3) (−0.7 σ)
A_{217}^{dustTE}	2.07	$2.06^{+0.54}_{-0.53}$	r_{drag}	147.313	$147.33^{+0.45}_{-0.43}$ (+0.3 σ)	χ^2_{plik}	2346.2	2360.6 (ν : 18.1) (+291.6 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14074	$0.14071^{+0.00055}_{-0.00059}$ (+0.3 σ)	$\chi^2_{H073p45}$	10.64	10.7 (ν : 1.2)
c_{217}	0.99818	$0.9982^{+0.0013}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160642	$0.16066^{+0.00033}_{-0.00031}$ (−1.5 σ)	χ^2_{JLA}	1034.843	1034.90 (ν : 0.0)
H_0	68.04	$68.04^{+0.81}_{-0.77}$ (+1.3 σ)	z_{eq}	3371.5	3371^{+39}_{-40} (−0.9 σ)	χ^2_{6DF}	0.0029	0.022 (ν : 0.0)
Ω_Λ	0.6938	$0.694^{+0.010}_{-0.010}$ (+1.1 σ)	k_{eq}	0.010290	$0.01029^{+0.00012}_{-0.00012}$ (−0.9 σ)	χ^2_{MGS}	1.54	1.60 (ν : 0.1)
Ω_m	0.3062	$0.306^{+0.010}_{-0.010}$ (−1.1 σ)	$100\theta_{eq}$	0.8194	$0.8195^{+0.0077}_{-0.0073}$ (+1.0 σ)	$\chi^2_{DR12BAO}$	3.69	3.98 (ν : 0.3)
$\Omega_m h^2$	0.14173	$0.1417^{+0.0016}_{-0.0017}$ (−0.9 σ)	$100\theta_{s,eq}$	0.45245	$0.4525^{+0.0040}_{-0.0037}$ (+0.9 σ)	χ^2_{prior}	1.6	11.6 (ν : 10.4) (+1.2 σ)
$\Omega_m h^3$	0.09643	$0.09641^{+0.00057}_{-0.00057}$ (+1.1 σ)	$H(0.15)$	73.26	$73.27^{+0.70}_{-0.67}$ (+1.3 σ)	χ^2_{CMB}	2774.5	2790.3 (ν : 18.3) (+291.0 σ)
σ_8	0.8099	$0.809^{+0.012}_{-0.012}$ (−0.3 σ)	$D_M(0.15)$	637.6	$637.6^{+6.6}_{-6.9}$ (−1.3 σ)	χ^2_{BAO}	5.23	5.60 (ν : 0.1)

Best-fit $\chi^2_{eff} = 3826.83$; $\bar{\chi}^2_{eff} = 3853.09$; $R - 1 = 0.04098$
 χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 3.69 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.74 small_100x143.offlike5_EE_Aplanck_B: 396.92 commander_dx12.v3.2.29: 22.68 plik_rd12_HM_v22b_TTTEEE: 2346.18 Hubble - H073p45: 10.64 SN - JLA Pantheon18: 1034.84

2.105 base_plikHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02238^{+0.00028}_{-0.00028} \quad (+1.2\sigma)$	$\Omega_{\text{m}}h^3$	$0.09633^{+0.00056}_{-0.00061} \quad (+1.0\sigma)$	$100\theta_{\text{eq}}$	$0.8136^{+0.0098}_{-0.0097} \quad (+0.3\sigma)$
$\Omega_{\text{c}}h^2$	$0.1199^{+0.0023}_{-0.0023} \quad (-0.3\sigma)$	σ_8	$0.812^{+0.012}_{-0.011} \quad (-0.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.4495^{+0.0050}_{-0.0050} \quad (+0.3\sigma)$
$100\theta_{\text{MC}}$	$1.04092^{+0.00059}_{-0.00063} \quad (+0.3\sigma)$	S_8	$0.832^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$H(0.15)$	$72.70^{+0.89}_{-0.91} \quad (+0.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$D_{\text{M}}(0.15)$	$643.2^{+9.2}_{-8.7} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.046^{+0.026}_{-0.024} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.608^{+0.013}_{-0.013} \quad (-0.3\sigma)$	$H(0.38)$	$82.88^{+0.65}_{-0.66} \quad (+0.6\sigma)$
n_{s}	$0.9650^{+0.0082}_{-0.0082} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.018}_{-0.018} \quad (-0.3\sigma)$	$D_{\text{M}}(0.38)$	$1533^{+18}_{-18} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	$r_{\text{drag}}h$	$99.1^{+1.8}_{-1.8} \quad (+0.4\sigma)$	$H(0.51)$	$89.64^{+0.51}_{-0.52} \quad (+0.7\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.043}_{-0.042} \quad (-0.2\sigma)$	$D_{\text{M}}(0.51)$	$1985^{+21}_{-20} \quad (-0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$7.8^{+1.1}_{-1.3} \quad (+0.3\sigma)$	$H(0.61)$	$95.29^{+0.43}_{-0.43} \quad (+0.8\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\text{s}}$	$2.103^{+0.054}_{-0.050} \quad (+0.3\sigma)$	$D_{\text{M}}(0.61)$	$2310^{+23}_{-22} \quad (-0.6\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.1\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.883^{+0.021}_{-0.021} \quad (-0.1\sigma)$	$H(2.33)$	$236.5^{+1.4}_{-1.4} \quad (-0.1\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{40}	$1232^{+23}_{-23} \quad (-0.1\sigma)$	$D_{\text{M}}(2.33)$	$5763^{+20}_{-20} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5735^{+78}_{-74} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.010}_{-0.0094} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.14 \quad (-0.1\sigma)$	D_{1420}	$817.2^{+9.5}_{-9.4} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$230.9^{+3.1}_{-3.2} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.6641^{+0.0087}_{-0.0083} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.9650^{+0.0082}_{-0.0082} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4755^{+0.0089}_{-0.0090} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0081}_{-0.0077} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24672^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.4703^{+0.0081}_{-0.0081} \quad (-0.2\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.074}$	10^5D/H	$2.585^{+0.053}_{-0.051} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0077}_{-0.0073} \quad (+0.3\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.058}$	Age/Gyr	$13.796^{+0.045}_{-0.044} \quad (-0.9\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0040}_{-0.0037} \quad (+0.3\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.91^{+0.49}_{-0.49} \quad (-1.0\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0043}_{-0.0040} \quad (+0.4\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_*	$144.44^{+0.52}_{-0.51} \quad (-0.0\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	$1.04110^{+0.00058}_{-0.00062} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.09^{+0.54}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.874^{+0.049}_{-0.048} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.0^{+3.4}_{-3.5} \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.95^{+0.59}_{-0.59} \quad (+1.2\sigma)$	χ_{lensing}^2	$9.22 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.10^{+0.53}_{-0.51} \quad (-0.2\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.4) \quad (-0.0\sigma)$
H_0	$67.4^{+1.0}_{-1.1} \quad (+0.6\sigma)$	k_{D}	$0.14086^{+0.00058}_{-0.00060} \quad (+0.6\sigma)$	χ_{lowl}^2	$23.53 \quad (\nu: 0.4) \quad (-0.3\sigma)$
Ω_{Λ}	$0.685^{+0.014}_{-0.015} \quad (+0.5\sigma)$	$100\theta_{\text{D}}$	$0.16075^{+0.00034}_{-0.00034} \quad (-1.2\sigma)$	χ_{plik}^2	$2359.3 \quad (\nu: 16.3) \quad (+291.3\sigma)$
Ω_{m}	$0.315^{+0.015}_{-0.014} \quad (-0.5\sigma)$	z_{eq}	$3401^{+52}_{-52} \quad (-0.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.0) \quad (+1.1\sigma)$
$\Omega_{\text{m}}h^2$	$0.1430^{+0.0022}_{-0.0022} \quad (-0.2\sigma)$	k_{eq}	$0.01038^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	χ_{CMB}^2	$2789.0 \quad (\nu: 16.6) \quad (+290.8\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 2800.50; R - 1 = 0.01006$$

2.106 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02242^{+0.00026}_{-0.00027} \quad (+1.4\sigma)$	S_8	$0.825^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$H(0.38)$	$83.06^{+0.51}_{-0.51} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1193^{+0.0018}_{-0.0018} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$D_M(0.38)$	$1528^{+14}_{-14} \quad (-0.9\sigma)$
$100\theta_{MC}$	$1.04101^{+0.00055}_{-0.00059} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$H(0.51)$	$89.78^{+0.41}_{-0.42} \quad (+1.0\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.016} \quad (-0.5\sigma)$	$D_M(0.51)$	$1980^{+16}_{-16} \quad (-0.9\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$r_{drag} h$	$99.6^{+1.4}_{-1.4} \quad (+0.7\sigma)$	$H(0.61)$	$95.39^{+0.35}_{-0.36} \quad (+1.1\sigma)$
n_s	$0.9666^{+0.0076}_{-0.0073} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.040}_{-0.040} \quad (-0.4\sigma)$	$D_M(0.61)$	$2304^{+18}_{-17} \quad (-0.9\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$H(2.33)$	$236.2^{+1.1}_{-1.1} \quad (-0.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.106^{+0.055}_{-0.052} \quad (+0.4\sigma)$	$D_M(2.33)$	$5759^{+17}_{-16} \quad (-1.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.881^{+0.020}_{-0.020} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-4.0} \quad (+0.2\sigma)$	D_{40}	$1229^{+23}_{-23} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0098} \quad (-0.0\sigma)$
A_{100}^{PS}	$259^{+50}_{-60} \quad (-0.2\sigma)$	D_{220}	$5740^{+78}_{-76} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.4751^{+0.0091}_{-0.0092} \quad (-0.5\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{810}	$2540^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0093}_{-0.0085} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.8^{+9.2}_{-9.1} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.4737^{+0.0083}_{-0.0082} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.1^{+3.0}_{-3.1} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0086}_{-0.0078} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.22 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.9666^{+0.0076}_{-0.0073} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4688^{+0.0078}_{-0.0076} \quad (-0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Y_P	$0.245414^{+0.000095}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0082}_{-0.0074} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.246741^{+0.000095}_{-0.00011} \quad (+1.3\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0040}_{-0.0039} \quad (+0.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.5}_{-6.6} \quad (+0.1\sigma)$	$10^5 D/H$	$2.576^{+0.050}_{-0.046} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0044}_{-0.0039} \quad (+0.6\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.786^{+0.040}_{-0.037} \quad (-1.2\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.073}$	z_*	$1089.79^{+0.42}_{-0.40} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.059}$	r_*	$144.57^{+0.44}_{-0.42} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.9^{+3.4}_{-3.5} \quad (-0.6\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	$1.04119^{+0.00055}_{-0.00058} \quad (+0.5\sigma)$	$\chi^2_{lensing}$	$9.08 \quad (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.885^{+0.042}_{-0.040} \quad (+0.2\sigma)$	χ^2_{small}	$397.2 \quad (\nu: 1.7) \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1060.01^{+0.53}_{-0.57} \quad (+1.3\sigma)$	χ^2_{lowl}	$23.25 \quad (\nu: 0.3) \quad (-0.5\sigma)$
A_{217}^{dustTE}	$2.08^{+0.54}_{-0.53}$	r_{drag}	$147.22^{+0.46}_{-0.44} \quad (+0.0\sigma)$	χ^2_{plik}	$2359.5 \quad (\nu: 16.8) \quad (+291.4\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14078^{+0.00054}_{-0.00058} \quad (+0.4\sigma)$	χ^2_{6DF}	$0.052 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16072^{+0.00033}_{-0.00033} \quad (-1.3\sigma)$	χ^2_{MGS}	$1.25 \quad (\nu: 0.1)$
H_0	$67.67^{+0.79}_{-0.80} \quad (+0.9\sigma)$	z_{eq}	$3387^{+41}_{-41} \quad (-0.5\sigma)$	$\chi^2_{DR12BAO}$	$4.8 \quad (\nu: 0.8)$
Ω_Λ	$0.689^{+0.011}_{-0.011} \quad (+0.8\sigma)$	k_{eq}	$0.01034^{+0.00012}_{-0.00012} \quad (-0.5\sigma)$	χ^2_{prior}	$11.5 \quad (\nu: 10.1) \quad (+1.1\sigma)$
Ω_m	$0.311^{+0.011}_{-0.011} \quad (-0.8\sigma)$	$100\theta_{eq}$	$0.8163^{+0.0077}_{-0.0076} \quad (+0.6\sigma)$	χ^2_{CMB}	$2789.1 \quad (\nu: 16.9) \quad (+290.8\sigma)$
$\Omega_m h^2$	$0.1424^{+0.0017}_{-0.0017} \quad (-0.5\sigma)$	$100\theta_{s,eq}$	$0.4509^{+0.0040}_{-0.0039} \quad (+0.6\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 0.5)$
$\Omega_m h^3$	$0.09635^{+0.00057}_{-0.00060} \quad (+1.0\sigma)$	$H(0.15)$	$72.95^{+0.70}_{-0.69} \quad (+0.9\sigma)$		
σ_8	$0.811^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$D_M(0.15)$	$640.7^{+6.9}_{-6.7} \quad (-0.9\sigma)$		

$\bar{\chi}^2_{eff} = 2806.72; R - 1 = 0.01624$

2.107 base_plikHM_TTTEEE_lowl_lowE_lensing_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02248^{+0.00029}_{-0.00028} (+1.7\sigma)$	σ_8	$0.810^{+0.012}_{-0.011} (-0.2\sigma)$	$H(0.15)$	$73.18^{+0.90}_{-0.84} (+1.2\sigma)$
$\Omega_c h^2$	$0.1188^{+0.0021}_{-0.0023} (-0.9\sigma)$	S_8	$0.820^{+0.024}_{-0.024} (-0.8\sigma)$	$D_M(0.15)$	$638.4^{+8.3}_{-8.7} (-1.2\sigma)$
$100\theta_{MC}$	$1.04110^{+0.00065}_{-0.00061} (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.013}_{-0.013} (-0.8\sigma)$	$H(0.38)$	$83.23^{+0.65}_{-0.62} (+1.3\sigma)$
τ	$0.058^{+0.014}_{-0.013} (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.012}_{-0.012} (-0.7\sigma)$	$D_M(0.38)$	$1524^{+17}_{-18} (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.027}_{-0.026} (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.018}_{-0.017} (-0.7\sigma)$	$H(0.51)$	$89.91^{+0.53}_{-0.49} (+1.3\sigma)$
n_s	$0.9679^{+0.0086}_{-0.0079} (+0.9\sigma)$	$r_{drag} h$	$100.1^{+1.8}_{-1.7} (+1.0\sigma)$	$D_M(0.51)$	$1974^{+20}_{-21} (-1.2\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0049} (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.042}_{-0.042} (-0.6\sigma)$	$H(0.61)$	$95.51^{+0.43}_{-0.41} (+1.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} (-0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} (+0.6\sigma)$	$D_M(0.61)$	$2298^{+21}_{-22} (-1.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.110^{+0.057}_{-0.054} (+0.5\sigma)$	$H(2.33)$	$235.9^{+1.3}_{-1.3} (-0.7\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.021}_{-0.021} (-0.4\sigma)$	$D_M(2.33)$	$5754^{+20}_{-20} (-1.5\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} (-0.2\sigma)$	D_{40}	$1227^{+24}_{-22} (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.012}_{-0.012} (-0.8\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} (-0.5\sigma)$	D_{220}	$5746^{+76}_{-76} (+0.8\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.010} (-0.1\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} (-0.2\sigma)$	D_{810}	$2540^{+26}_{-26} (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.010}_{-0.0098} (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} (-0.0\sigma)$	D_{1420}	$818.6^{+9.4}_{-9.3} (+0.8\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0089}_{-0.0087} (+0.1\sigma)$
A^{kSZ}	$< 8.09 (-0.2\sigma)$	D_{2000}	$231.5^{+3.1}_{-3.1} (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.4722^{+0.0090}_{-0.0086} (-0.6\sigma)$
A_{100}^{dustTT}	$8.8^{+3.4}_{-3.5} (-0.1\sigma)$	$n_{s,0.002}$	$0.9679^{+0.0086}_{-0.0079} (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6216^{+0.0083}_{-0.0079} (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} (+0.1\sigma)$	Y_P	$0.24544^{+0.00011}_{-0.00011} (+1.6\sigma)$	$f\sigma_8(0.61)$	$0.4675^{+0.0080}_{-0.0081} (-0.6\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.5}_{-6.7} (+0.1\sigma)$	Y_P^{BBN}	$0.24676^{+0.00011}_{-0.00011} (+1.6\sigma)$	$\sigma_8(0.61)$	$0.5916^{+0.0081}_{-0.0076} (+0.3\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} (+0.0\sigma)$	$10^5 D/H$	$2.565^{+0.052}_{-0.051} (-1.6\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0042}_{-0.0039} (+0.5\sigma)$
A_{100}^{dustTE}	$0.114^{+0.077}_{-0.073}$	Age/Gyr	$13.776^{+0.044}_{-0.047} (-1.5\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0046}_{-0.0041} (+0.7\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.057}$	z_*	$1089.67^{+0.47}_{-0.48} (-1.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} (-0.7\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.16}$	r_*	$144.66^{+0.48}_{-0.49} (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} (-0.9\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04127^{+0.00062}_{-0.00060} (+0.6\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.6} (-0.8\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.893^{+0.045}_{-0.046} (+0.3\sigma)$	$\chi_{lensing}^2$	$9.15 (\nu: 0.2)$
A_{217}^{dustTE}	$2.06^{+0.55}_{-0.52}$	z_{drag}	$1060.11^{+0.58}_{-0.60} (+1.6\sigma)$	χ_{small}^2	$397.5 (\nu: 2.2) (+0.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} (+0.1\sigma)$	r_{drag}	$147.29^{+0.49}_{-0.49} (+0.2\sigma)$	χ_{lowl}^2	$23.05 (\nu: 0.4) (-0.7\sigma)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} (-0.1\sigma)$	k_D	$0.14075^{+0.00057}_{-0.00060} (+0.4\sigma)$	χ_{plik}^2	$2360.4 (\nu: 18.4) (+291.5\sigma)$
H_0	$67.9^{+1.1}_{-0.97} (+1.2\sigma)$	$100\theta_D$	$0.16067^{+0.00034}_{-0.00032} (-1.5\sigma)$	$\chi_{H073p45}^2$	$11.1 (\nu: 2.0)$
Ω_Λ	$0.692^{+0.014}_{-0.013} (+1.0\sigma)$	z_{eq}	$3376^{+48}_{-50} (-0.7\sigma)$	χ_{prior}^2	$11.6 (\nu: 10.4) (+1.2\sigma)$
Ω_m	$0.308^{+0.013}_{-0.014} (-1.0\sigma)$	k_{eq}	$0.01030^{+0.00015}_{-0.00015} (-0.7\sigma)$	χ_{CMB}^2	$2790.1 (\nu: 18.7) (+291.0\sigma)$
$\Omega_m h^2$	$0.1419^{+0.0020}_{-0.0021} (-0.7\sigma)$	$100\theta_{eq}$	$0.8185^{+0.0099}_{-0.0091} (+0.9\sigma)$		
$\Omega_m h^3$	$0.09641^{+0.00057}_{-0.00058} (+1.1\sigma)$	$100\theta_{s,eq}$	$0.4520^{+0.0049}_{-0.0047} (+0.8\sigma)$		

$$\bar{\chi}_{eff}^2 = 2812.87; R - 1 = 0.03339$$

2.108 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02249^{+0.00026}_{-0.00026} \quad (+1.7\sigma)$	S_8	$0.818^{+0.021}_{-0.020} \quad (-0.9\sigma)$	$H(0.38)$	$83.28^{+0.52}_{-0.51} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0017}_{-0.0018} \quad (-1.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.011}_{-0.011} \quad (-0.9\sigma)$	$D_M(0.38)$	$1522^{+13}_{-14} \quad (-1.3\sigma)$
$100\theta_{MC}$	$1.04112^{+0.00058}_{-0.00058} \quad (+0.8\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.602^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.51)$	$89.95^{+0.43}_{-0.41} \quad (+1.4\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.017}_{-0.016} \quad (-0.7\sigma)$	$D_M(0.51)$	$1973^{+16}_{-17} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.027}_{-0.026} \quad (+0.6\sigma)$	$r_{drag} h$	$100.2^{+1.5}_{-1.3} \quad (+1.1\sigma)$	$H(0.61)$	$95.53^{+0.36}_{-0.35} \quad (+1.5\sigma)$
n_s	$0.9683^{+0.0073}_{-0.0073} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.040}_{-0.040} \quad (-0.6\sigma)$	$D_M(0.61)$	$2296^{+17}_{-18} \quad (-1.3\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0048} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+0.6\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.1} \quad (-0.7\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.111^{+0.057}_{-0.055} \quad (+0.6\sigma)$	$D_M(2.33)$	$5752^{+17}_{-17} \quad (-1.5\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.879^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.011}_{-0.011} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.5^{+4.0}_{-3.9} \quad (+0.2\sigma)$	D_{40}	$1226^{+23}_{-22} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.010} \quad (-0.1\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5747^{+75}_{-75} \quad (+0.8\sigma)$	$f\sigma_8(0.38)$	$0.4725^{+0.0092}_{-0.0088} \quad (-0.8\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.5\sigma)$	D_{810}	$2540^{+25}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6639^{+0.0091}_{-0.0087} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.7^{+9.1}_{-9.1} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4717^{+0.0083}_{-0.0081} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+2.9}_{-3.1} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0084}_{-0.0081} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.16 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.9683^{+0.0073}_{-0.0073} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4671^{+0.0076}_{-0.0077} \quad (-0.6\sigma)$
A_{100}^{dustTT}	$8.8^{+3.4}_{-3.4} \quad (-0.1\sigma)$	Y_P	$0.245441^{+0.000095}_{-0.00010} \quad (+1.6\sigma)$	$\sigma_8(0.61)$	$0.5915^{+0.0081}_{-0.0077} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.246768^{+0.000095}_{-0.00010} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0042}_{-0.0039} \quad (+0.6\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.5}_{-6.7} \quad (+0.1\sigma)$	$10^5 D/H$	$2.563^{+0.048}_{-0.046} \quad (-1.7\sigma)$	$\sigma_8(2.33)$	$0.3079^{+0.0044}_{-0.0042} \quad (+0.8\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.773^{+0.039}_{-0.038} \quad (-1.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
A_{100}^{dustTE}	$0.114^{+0.078}_{-0.073}$	z_*	$1089.65^{+0.41}_{-0.42} \quad (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.059}_{-0.057}$	r_*	$144.69^{+0.42}_{-0.41} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.15}$	$100\theta_*$	$1.04129^{+0.00058}_{-0.00057} \quad (+0.7\sigma)$	$\chi^2_{lensing}$	$9.13 \quad (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.896^{+0.040}_{-0.040} \quad (+0.4\sigma)$	χ^2_{small}	$397.6 \quad (\nu: 2.3) \quad (+0.4\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.17}$	z_{drag}	$1060.12^{+0.57}_{-0.57} \quad (+1.6\sigma)$	χ^2_{lowl}	$22.98 \quad (\nu: 0.3) \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.06^{+0.54}_{-0.53}$	r_{drag}	$147.32^{+0.45}_{-0.44} \quad (+0.2\sigma)$	χ^2_{plik}	$2360.5 \quad (\nu: 17.9) \quad (+291.5\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14072^{+0.00055}_{-0.00059} \quad (+0.3\sigma)$	$\chi^2_{H073p45}$	$10.8 \quad (\nu: 1.3)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16066^{+0.00033}_{-0.00031} \quad (-1.5\sigma)$	χ^2_{6DF}	$0.024 \quad (\nu: 0.0)$
H_0	$68.01^{+0.84}_{-0.79} \quad (+1.2\sigma)$	z_{eq}	$3372^{+39}_{-41} \quad (-0.8\sigma)$	χ^2_{MGS}	$1.57 \quad (\nu: 0.1)$
Ω_Λ	$0.693^{+0.011}_{-0.010} \quad (+1.1\sigma)$	k_{eq}	$0.01029^{+0.00012}_{-0.00012} \quad (-0.8\sigma)$	$\chi^2_{DR12BAO}$	$4.04 \quad (\nu: 0.3)$
Ω_m	$0.307^{+0.010}_{-0.011} \quad (-1.1\sigma)$	$100\theta_{eq}$	$0.8192^{+0.0078}_{-0.0074} \quad (+0.9\sigma)$	χ^2_{prior}	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
$\Omega_m h^2$	$0.1418^{+0.0016}_{-0.0017} \quad (-0.8\sigma)$	$100\theta_{s,eq}$	$0.4524^{+0.0041}_{-0.0038} \quad (+0.9\sigma)$	χ^2_{CMB}	$2790.1 \quad (\nu: 18.0) \quad (+291.0\sigma)$
$\Omega_m h^3$	$0.09641^{+0.00057}_{-0.00057} \quad (+1.1\sigma)$	$H(0.15)$	$73.24^{+0.72}_{-0.68} \quad (+1.3\sigma)$	χ^2_{BAO}	$5.64 \quad (\nu: 0.2)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$D_M(0.15)$	$637.8^{+6.7}_{-7.1} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{eff} = 2818.15; R - 1 = 0.03902$

2.109 base_plikHM_TTTEEE_lowl_lowE_lensing_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00027}_{-0.00028} \quad (+1.3\sigma)$	σ_8	$0.811^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$H(0.15)$	$72.80^{+0.83}_{-0.85} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1197^{+0.0022}_{-0.0021} \quad (-0.5\sigma)$	S_8	$0.829^{+0.024}_{-0.024} \quad (-0.4\sigma)$	$D_M(0.15)$	$642.2^{+8.5}_{-8.2} \quad (-0.7\sigma)$
$100\theta_{MC}$	$1.04095^{+0.00059}_{-0.00062} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.454^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.38)$	$82.95^{+0.60}_{-0.62} \quad (+0.8\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$D_M(0.38)$	$1531^{+17}_{-16} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.026}_{-0.024} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.017}_{-0.018} \quad (-0.3\sigma)$	$H(0.51)$	$89.69^{+0.48}_{-0.50} \quad (+0.8\sigma)$
n_s	$0.9656^{+0.0081}_{-0.0080} \quad (+0.5\sigma)$	$r_{drag} h$	$99.3^{+1.6}_{-1.7} \quad (+0.5\sigma)$	$D_M(0.51)$	$1983^{+20}_{-19} \quad (-0.7\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.444^{+0.042}_{-0.042} \quad (-0.3\sigma)$	$H(0.61)$	$95.33^{+0.40}_{-0.41} \quad (+0.9\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$D_M(0.61)$	$2307^{+21}_{-21} \quad (-0.7\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.105^{+0.054}_{-0.051} \quad (+0.4\sigma)$	$H(2.33)$	$236.4^{+1.3}_{-1.3} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-4.0} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.882^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$D_M(2.33)$	$5761^{+20}_{-19} \quad (-1.0\sigma)$
A_{100}^{PS}	$259^{+50}_{-60} \quad (-0.2\sigma)$	D_{40}	$1231^{+23}_{-24} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.012}_{-0.012} \quad (-0.4\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{220}	$5737^{+79}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0097} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.4765^{+0.0098}_{-0.010} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.4^{+9.3}_{-9.2} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6641^{+0.0091}_{-0.0082} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.22 \quad (-0.1\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4748^{+0.0088}_{-0.0089} \quad (-0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.5} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9656^{+0.0081}_{-0.0080} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0085}_{-0.0076} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_P	$0.24540^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.4697^{+0.0079}_{-0.0081} \quad (-0.3\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.6}_{-6.5} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.24673^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0081}_{-0.0072} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 D/H$	$2.581^{+0.052}_{-0.049} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0040}_{-0.0038} \quad (+0.4\sigma)$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.073}$	Age/Gyr	$13.793^{+0.045}_{-0.042} \quad (-1.0\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0043}_{-0.0040} \quad (+0.5\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.059}$	z_*	$1089.86^{+0.47}_{-0.46} \quad (-1.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.49^{+0.50}_{-0.49} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04113^{+0.00058}_{-0.00061} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.0^{+3.4}_{-3.5} \quad (-0.6\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$13.878^{+0.046}_{-0.046} \quad (+0.0\sigma)$	$\chi_{lensing}^2$	$9.16 \quad (\nu: 0.2)$
A_{217}^{dustTE}	$2.08^{+0.54}_{-0.53}$	z_{drag}	$1059.97^{+0.57}_{-0.57} \quad (+1.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.5) \quad (+0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.14^{+0.50}_{-0.50} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.42 \quad (\nu: 0.4) \quad (-0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_D	$0.14083^{+0.00057}_{-0.00060} \quad (+0.5\sigma)$	χ_{plik}^2	$2359.4 \quad (\nu: 16.8) \quad (+291.3\sigma)$
H_0	$67.50^{+0.96}_{-0.98} \quad (+0.7\sigma)$	$100\theta_D$	$0.16074^{+0.00033}_{-0.00033} \quad (-1.3\sigma)$	χ_{JLA}^2	$1035.25 \quad (\nu: 0.1)$
Ω_Λ	$0.687^{+0.013}_{-0.014} \quad (+0.6\sigma)$	z_{eq}	$3396^{+48}_{-48} \quad (-0.3\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.0) \quad (+1.1\sigma)$
Ω_m	$0.313^{+0.014}_{-0.013} \quad (-0.6\sigma)$	k_{eq}	$0.01036^{+0.00015}_{-0.00015} \quad (-0.3\sigma)$	χ_{CMB}^2	$2789.0 \quad (\nu: 17.0) \quad (+290.8\sigma)$
$\Omega_m h^2$	$0.1427^{+0.0020}_{-0.0020} \quad (-0.3\sigma)$	$100\theta_{eq}$	$0.8146^{+0.0092}_{-0.0092} \quad (+0.4\sigma)$		
$\Omega_m h^3$	$0.09634^{+0.00056}_{-0.00061} \quad (+1.0\sigma)$	$100\theta_{s,eq}$	$0.4501^{+0.0047}_{-0.0047} \quad (+0.4\sigma)$		

$$\bar{\chi}_{eff}^2 = 3835.82; R - 1 = 0.01272$$

2.110 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_JLA_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02250^{+0.00026}_{-0.00026} \quad (+1.7\sigma)$	S_8	$0.818^{+0.021}_{-0.020} \quad (-0.9\sigma)$	$H(0.38)$	$83.29^{+0.51}_{-0.50} \quad (+1.4\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0017}_{-0.0018} \quad (-1.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.011}_{-0.011} \quad (-0.9\sigma)$	$D_M(0.38)$	$1522^{+13}_{-14} \quad (-1.3\sigma)$
$100\theta_{MC}$	$1.04112^{+0.00058}_{-0.00058} \quad (+0.8\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.602^{+0.011}_{-0.011} \quad (-0.8\sigma)$	$H(0.51)$	$89.96^{+0.42}_{-0.41} \quad (+1.4\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.017}_{-0.016} \quad (-0.7\sigma)$	$D_M(0.51)$	$1972^{+16}_{-16} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.027}_{-0.026} \quad (+0.6\sigma)$	$r_{drag} h$	$100.2^{+1.5}_{-1.3} \quad (+1.1\sigma)$	$H(0.61)$	$95.54^{+0.36}_{-0.35} \quad (+1.5\sigma)$
n_s	$0.9684^{+0.0072}_{-0.0073} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.039}_{-0.039} \quad (-0.6\sigma)$	$D_M(0.61)$	$2296^{+17}_{-17} \quad (-1.3\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0048} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+0.6\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.0} \quad (-0.8\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.111^{+0.057}_{-0.055} \quad (+0.6\sigma)$	$D_M(2.33)$	$5752^{+17}_{-17} \quad (-1.6\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.878^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.011}_{-0.011} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.5^{+4.0}_{-3.9} \quad (+0.2\sigma)$	D_{40}	$1226^{+23}_{-22} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.010} \quad (-0.1\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5747^{+75}_{-76} \quad (+0.8\sigma)$	$f\sigma_8(0.38)$	$0.4723^{+0.0092}_{-0.0087} \quad (-0.8\sigma)$
A_{143}^{PS}	$45^{+10}_{-10} \quad (-0.5\sigma)$	D_{810}	$2540^{+25}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6639^{+0.0090}_{-0.0087} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.7^{+9.1}_{-9.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4715^{+0.0083}_{-0.0079} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+2.8}_{-3.1} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0084}_{-0.0081} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.13 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.9684^{+0.0072}_{-0.0073} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4670^{+0.0077}_{-0.0072} \quad (-0.6\sigma)$
A_{100}^{dustTT}	$8.8^{+3.4}_{-3.4} \quad (-0.1\sigma)$	Y_P	$0.245443^{+0.000096}_{-0.00010} \quad (+1.6\sigma)$	$\sigma_8(0.61)$	$0.5916^{+0.0081}_{-0.0077} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.246769^{+0.000096}_{-0.00010} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0042}_{-0.0039} \quad (+0.6\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.5}_{-6.7} \quad (+0.1\sigma)$	$10^5 D/H$	$2.563^{+0.047}_{-0.046} \quad (-1.7\sigma)$	$\sigma_8(2.33)$	$0.3080^{+0.0045}_{-0.0041} \quad (+0.8\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.772^{+0.038}_{-0.038} \quad (-1.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
A_{100}^{dustTE}	$0.114^{+0.078}_{-0.073}$	z_*	$1089.64^{+0.41}_{-0.42} \quad (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.059}_{-0.057}$	r_*	$144.70^{+0.41}_{-0.41} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.6^{+3.5}_{-3.4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.15}$	$100\theta_*$	$1.04130^{+0.00058}_{-0.00058} \quad (+0.7\sigma)$	$\chi^2_{lensing}$	$9.13 \quad (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.896^{+0.040}_{-0.040} \quad (+0.4\sigma)$	χ^2_{small}	$397.6 \quad (\nu: 2.3) \quad (+0.4\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.17}$	z_{drag}	$1060.13^{+0.57}_{-0.58} \quad (+1.6\sigma)$	χ^2_{lowl}	$22.96 \quad (\nu: 0.3) \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.06^{+0.54}_{-0.53}$	r_{drag}	$147.33^{+0.45}_{-0.43} \quad (+0.2\sigma)$	χ^2_{plik}	$2360.5 \quad (\nu: 18.0) \quad (+291.5\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14071^{+0.00055}_{-0.00059} \quad (+0.3\sigma)$	$\chi^2_{H073p45}$	$10.7 \quad (\nu: 1.2)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16066^{+0.00033}_{-0.00031} \quad (-1.5\sigma)$	χ^2_{JLA}	$706.64 \quad (\nu: 0.0)$
H_0	$68.03^{+0.83}_{-0.78} \quad (+1.3\sigma)$	z_{eq}	$3371^{+39}_{-40} \quad (-0.8\sigma)$	χ^2_{6DF}	$0.023 \quad (\nu: 0.0)$
Ω_Λ	$0.694^{+0.011}_{-0.010} \quad (+1.1\sigma)$	k_{eq}	$0.01029^{+0.00012}_{-0.00012} \quad (-0.8\sigma)$	χ^2_{MGS}	$1.60 \quad (\nu: 0.1)$
Ω_m	$0.306^{+0.010}_{-0.011} \quad (-1.1\sigma)$	$100\theta_{eq}$	$0.8194^{+0.0077}_{-0.0074} \quad (+1.0\sigma)$	$\chi^2_{DR12BAO}$	$4.00 \quad (\nu: 0.3)$
$\Omega_m h^2$	$0.1417^{+0.0016}_{-0.0017} \quad (-0.8\sigma)$	$100\theta_{s,eq}$	$0.4525^{+0.0040}_{-0.0038} \quad (+0.9\sigma)$	χ^2_{prior}	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
$\Omega_m h^3$	$0.09641^{+0.00057}_{-0.00057} \quad (+1.1\sigma)$	$H(0.15)$	$73.26^{+0.71}_{-0.67} \quad (+1.3\sigma)$	χ^2_{CMB}	$2790.2 \quad (\nu: 18.1) \quad (+291.0\sigma)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$D_M(0.15)$	$637.6^{+6.6}_{-7.0} \quad (-1.3\sigma)$	χ^2_{BAO}	$5.62 \quad (\nu: 0.2)$

$$\bar{\chi}^2_{eff} = 3524.78; R - 1 = 0.04178$$

2.111 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00025}_{-0.00027} (+1.4\sigma)$	S_8	$0.824^{+0.020}_{-0.020} (-0.6\sigma)$	$H(0.38)$	$83.09^{+0.50}_{-0.50} (+1.0\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0017}_{-0.0018} (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.011}_{-0.011} (-0.6\sigma)$	$D_M(0.38)$	$1527^{+13}_{-13} (-1.0\sigma)$
$100\theta_{MC}$	$1.04103^{+0.00055}_{-0.00058} (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.011}_{-0.011} (-0.5\sigma)$	$H(0.51)$	$89.80^{+0.41}_{-0.41} (+1.1\sigma)$
τ	$0.057^{+0.013}_{-0.012} (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} (-0.5\sigma)$	$D_M(0.51)$	$1979^{+16}_{-16} (-1.0\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.027}_{-0.024} (+0.4\sigma)$	$r_{drag} h$	$99.7^{+1.3}_{-1.3} (+0.8\sigma)$	$H(0.61)$	$95.41^{+0.34}_{-0.35} (+1.2\sigma)$
n_s	$0.9668^{+0.0075}_{-0.0072} (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.039}_{-0.040} (-0.4\sigma)$	$D_M(0.61)$	$2303^{+17}_{-17} (-1.0\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0047} (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} (+0.5\sigma)$	$H(2.33)$	$236.1^{+1.1}_{-1.1} (-0.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} (-0.2\sigma)$	$10^9 A_s$	$2.107^{+0.055}_{-0.053} (+0.4\sigma)$	$D_M(2.33)$	$5758^{+17}_{-16} (-1.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.881^{+0.020}_{-0.020} (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.010}_{-0.011} (-0.6\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-4.0} (+0.2\sigma)$	D_{40}	$1229^{+23}_{-23} (-0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0098} (-0.0\sigma)$
A_{100}^{PS}	$259^{+50}_{-60} (-0.2\sigma)$	D_{220}	$5741^{+77}_{-75} (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.4746^{+0.0090}_{-0.0089} (-0.5\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} (-0.4\sigma)$	D_{810}	$2540^{+26}_{-26} (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0093}_{-0.0086} (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} (-0.1\sigma)$	D_{1420}	$817.9^{+9.1}_{-9.1} (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.4734^{+0.0083}_{-0.0082} (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} (-0.0\sigma)$	D_{2000}	$231.2^{+3.0}_{-3.1} (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0086}_{-0.0079} (+0.2\sigma)$
A^{kSZ}	$< 8.21 (-0.2\sigma)$	$n_{s,0.002}$	$0.9668^{+0.0075}_{-0.0072} (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0077}_{-0.0076} (-0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.5} (-0.0\sigma)$	Y_P	$0.245418^{+0.000093}_{-0.00011} (+1.4\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0082}_{-0.0075} (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} (+0.1\sigma)$	Y_P^{BBN}	$0.246744^{+0.000094}_{-0.00011} (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0041}_{-0.0039} (+0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.6}_{-6.7} (+0.1\sigma)$	$10^5 D/H$	$2.575^{+0.050}_{-0.045} (-1.4\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0043}_{-0.0041} (+0.6\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} (+0.0\sigma)$	Age/Gyr	$13.785^{+0.040}_{-0.036} (-1.2\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} (-0.6\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.073}$	z_*	$1089.77^{+0.41}_{-0.40} (-1.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} (-0.8\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.059}_{-0.058}$	r_*	$144.59^{+0.44}_{-0.41} (+0.3\sigma)$	f_{2000}^{217}	$106.9^{+3.4}_{-3.4} (-0.7\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.16}$	$100\theta_*$	$1.04120^{+0.00054}_{-0.00057} (+0.5\sigma)$	$\chi^2_{lensing}$	$9.07 (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.887^{+0.041}_{-0.040} (+0.2\sigma)$	χ^2_{small}	$397.2 (\nu: 1.8) (+0.2\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1060.02^{+0.56}_{-0.59} (+1.4\sigma)$	χ^2_{lowl}	$23.21 (\nu: 0.3) (-0.5\sigma)$
A_{217}^{dustTE}	$2.08^{+0.54}_{-0.54}$	r_{drag}	$147.23^{+0.46}_{-0.43} (+0.1\sigma)$	χ^2_{plik}	$2359.6 (\nu: 16.9) (+291.4\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} (+0.1\sigma)$	k_D	$0.14076^{+0.00054}_{-0.00058} (+0.4\sigma)$	χ^2_{JLA}	$1035.05 (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} (-0.1\sigma)$	$100\theta_D$	$0.16072^{+0.00033}_{-0.00032} (-1.3\sigma)$	χ^2_{6DF}	$0.045 (\nu: 0.0)$
H_0	$67.72^{+0.78}_{-0.77} (+0.9\sigma)$	z_{eq}	$3385^{+39}_{-40} (-0.6\sigma)$	χ^2_{MGS}	$1.30 (\nu: 0.1)$
Ω_Λ	$0.690^{+0.010}_{-0.010} (+0.8\sigma)$	k_{eq}	$0.01033^{+0.00012}_{-0.00012} (-0.6\sigma)$	$\chi^2_{DR12BAO}$	$4.6 (\nu: 0.7)$
Ω_m	$0.310^{+0.010}_{-0.010} (-0.8\sigma)$	$100\theta_{eq}$	$0.8167^{+0.0076}_{-0.0073} (+0.7\sigma)$	χ^2_{prior}	$11.5 (\nu: 10.2) (+1.2\sigma)$
$\Omega_m h^2$	$0.1423^{+0.0016}_{-0.0017} (-0.6\sigma)$	$100\theta_{s,eq}$	$0.4511^{+0.0039}_{-0.0037} (+0.6\sigma)$	χ^2_{CMB}	$2789.2 (\nu: 17.0) (+290.8\sigma)$
$\Omega_m h^3$	$0.09635^{+0.00056}_{-0.00058} (+1.0\sigma)$	$H(0.15)$	$72.99^{+0.67}_{-0.67} (+0.9\sigma)$	χ^2_{BAO}	$5.98 (\nu: 0.4)$
σ_8	$0.810^{+0.012}_{-0.011} (-0.2\sigma)$	$D_M(0.15)$	$640.3^{+6.6}_{-6.5} (-0.9\sigma)$		

$\bar{\chi}^2_{eff} = 3841.74; R - 1 = 0.01810$

2.112 base_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02250^{+0.00026}_{-0.00026} \quad (+1.7\sigma)$	S_8	$0.817^{+0.020}_{-0.020} \quad (-0.9\sigma)$	$H(0.38)$	$83.29^{+0.51}_{-0.49} \quad (+1.4\sigma)$
$\Omega_{\text{c}}h^2$	$0.1186^{+0.0017}_{-0.0018} \quad (-1.0\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.448^{+0.011}_{-0.011} \quad (-0.9\sigma)$	$D_{\text{M}}(0.38)$	$1522^{+13}_{-14} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04113^{+0.00058}_{-0.00058} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.602^{+0.011}_{-0.011} \quad (-0.8\sigma)$	$H(0.51)$	$89.96^{+0.42}_{-0.40} \quad (+1.5\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.017}_{-0.016} \quad (-0.7\sigma)$	$D_{\text{M}}(0.51)$	$1972^{+15}_{-16} \quad (-1.3\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.050^{+0.027}_{-0.026} \quad (+0.6\sigma)$	$r_{\text{drag}}h$	$100.2^{+1.4}_{-1.3} \quad (+1.1\sigma)$	$H(0.61)$	$95.54^{+0.35}_{-0.34} \quad (+1.5\sigma)$
n_{s}	$0.9684^{+0.0072}_{-0.0073} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.039}_{-0.039} \quad (-0.7\sigma)$	$D_{\text{M}}(0.61)$	$2296^{+17}_{-17} \quad (-1.3\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0047} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+0.6\sigma)$	$H(2.33)$	$235.8^{+1.0}_{-1.0} \quad (-0.8\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\text{s}}$	$2.111^{+0.057}_{-0.055} \quad (+0.6\sigma)$	$D_{\text{M}}(2.33)$	$5752^{+17}_{-16} \quad (-1.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.010}_{-0.011} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.5^{+4.0}_{-3.9} \quad (+0.2\sigma)$	D_{40}	$1226^{+23}_{-22} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.0099} \quad (-0.1\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5747^{+75}_{-76} \quad (+0.8\sigma)$	$f\sigma_8(0.38)$	$0.4722^{+0.0091}_{-0.0086} \quad (-0.8\sigma)$
A_{143}^{PS}	$45^{+10}_{-10} \quad (-0.5\sigma)$	D_{810}	$2540^{+25}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6639^{+0.0090}_{-0.0087} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.7^{+9.0}_{-9.1} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4715^{+0.0083}_{-0.0079} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+2.8}_{-3.1} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0084}_{-0.0081} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.16 \quad (-0.2\sigma)$	$n_{\text{s},0.002}$	$0.9684^{+0.0072}_{-0.0073} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4669^{+0.0077}_{-0.0072} \quad (-0.6\sigma)$
A_{100}^{dustTT}	$8.8^{+3.4}_{-3.4} \quad (-0.1\sigma)$	Y_{P}	$0.245443^{+0.000095}_{-0.000099} \quad (+1.6\sigma)$	$\sigma_8(0.61)$	$0.5916^{+0.0081}_{-0.0078} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.246770^{+0.000095}_{-0.00010} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0042}_{-0.0039} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.5}_{-6.7} \quad (+0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.562^{+0.047}_{-0.046} \quad (-1.7\sigma)$	$\sigma_8(2.33)$	$0.3080^{+0.0045}_{-0.0041} \quad (+0.8\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.772^{+0.038}_{-0.037} \quad (-1.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
A_{100}^{dustTE}	$0.114^{+0.078}_{-0.072}$	z_*	$1089.63^{+0.40}_{-0.41} \quad (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.057}$	r_*	$144.71^{+0.41}_{-0.40} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.6^{+3.5}_{-3.4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.15}$	$100\theta_*$	$1.04130^{+0.00057}_{-0.00057} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.13 \quad (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.897^{+0.039}_{-0.040} \quad (+0.4\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 2.3) \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.17}$	z_{drag}	$1060.13^{+0.57}_{-0.58} \quad (+1.6\sigma)$	χ_{lowl}^2	$22.95 \quad (\nu: 0.3) \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.06^{+0.54}_{-0.53}$	r_{drag}	$147.33^{+0.44}_{-0.43} \quad (+0.3\sigma)$	χ_{plik}^2	$2360.6 \quad (\nu: 18.0) \quad (+291.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14071^{+0.00055}_{-0.00059} \quad (+0.3\sigma)$	χ_{H073p45}^2	$10.7 \quad (\nu: 1.2)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\text{D}}$	$0.16066^{+0.00033}_{-0.00031} \quad (-1.6\sigma)$	χ_{JLA}^2	$1034.89 \quad (\nu: 0.0)$
H_0	$68.04^{+0.81}_{-0.77} \quad (+1.3\sigma)$	z_{eq}	$3371^{+39}_{-40} \quad (-0.9\sigma)$	χ_{6DF}^2	$0.022 \quad (\nu: 0.0)$
Ω_{Λ}	$0.694^{+0.011}_{-0.010} \quad (+1.1\sigma)$	k_{eq}	$0.01029^{+0.00012}_{-0.00012} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.60 \quad (\nu: 0.1)$
Ω_{m}	$0.306^{+0.010}_{-0.011} \quad (-1.1\sigma)$	$100\theta_{\text{eq}}$	$0.8195^{+0.0077}_{-0.0072} \quad (+1.0\sigma)$	χ_{DR12BAO}^2	$3.97 \quad (\nu: 0.3)$
$\Omega_{\text{m}}h^2$	$0.1417^{+0.0016}_{-0.0017} \quad (-0.9\sigma)$	$100\theta_{\text{s,eq}}$	$0.4525^{+0.0040}_{-0.0037} \quad (+0.9\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
$\Omega_{\text{m}}h^3$	$0.09641^{+0.00057}_{-0.00057} \quad (+1.1\sigma)$	$H(0.15)$	$73.27^{+0.70}_{-0.66} \quad (+1.3\sigma)$	χ_{CMB}^2	$2790.2 \quad (\nu: 18.1) \quad (+291.0\sigma)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$D_{\text{M}}(0.15)$	$637.6^{+6.5}_{-6.8} \quad (-1.3\sigma)$	χ_{BAO}^2	$5.60 \quad (\nu: 0.1)$

$\bar{\chi}_{\text{eff}}^2 = 3853.01; R - 1 = 0.04302$

2.113 base_CamSpecHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022129	$0.02215^{+0.00040}_{-0.00039}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6087	$0.609^{+0.015}_{-0.015}$ (-0.2σ)	$D_{\mathrm{M}}(0.15)$	646.2	646^{+12}_{-12} (-0.2σ)
$\Omega_{\mathrm{c}}h^2$	0.12025	$0.1203^{+0.0030}_{-0.0031}$ (-0.2σ)	$\sigma_8/h^{0.5}$	0.9897	$0.990^{+0.021}_{-0.021}$ (-0.2σ)	$H(0.38)$	82.61	$82.63^{+0.87}_{-0.85}$ $(+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	1.04085	$1.04085^{+0.00089}_{-0.00089}$ $(+0.2\sigma)$	$r_{\mathrm{drag}}h$	98.75	$98.8^{+2.4}_{-2.3}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	1539.4	1539^{+24}_{-24} (-0.2σ)
τ	0.0525	$0.053^{+0.016}_{-0.015}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4456	$2.446^{+0.049}_{-0.049}$ (-0.2σ)	$H(0.51)$	89.39	$89.41^{+0.71}_{-0.68}$ $(+0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0388	$3.039^{+0.030}_{-0.029}$ (-0.1σ)	z_{re}	7.55	$7.5^{+1.5}_{-1.6}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	1993.1	1993^{+28}_{-28} (-0.2σ)
n_{s}	0.9638	$0.9639^{+0.0096}_{-0.0095}$ $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.088	$2.090^{+0.064}_{-0.060}$ (-0.1σ)	$H(0.61)$	95.06	$95.08^{+0.58}_{-0.56}$ $(+0.2\sigma)$
y_{cal}	1.00036	$1.0004^{+0.0049}_{-0.0049}$ (-0.0σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8799	$1.880^{+0.022}_{-0.022}$ (-0.3σ)	$D_{\mathrm{M}}(0.61)$	2318.4	2318^{+30}_{-30} (-0.2σ)
A_{100}^{PS}	242.2	243^{+50}_{-50} (-0.7σ)	D_{40}	1228.9	1229^{+25}_{-25} (-0.3σ)	$H(2.33)$	236.48	$236.5^{+1.8}_{-1.9}$ (-0.2σ)
A_{143}^{PS}	39.7	41^{+20}_{-20} (-1.0σ)	D_{220}	5704	5706^{+82}_{-81} (-0.2σ)	$D_{\mathrm{M}}(2.33)$	5775.5	5775^{+27}_{-28} (-0.2σ)
A_{217}^{PS}	99.6	101^{+30}_{-30} (-1.4σ)	D_{810}	2532.9	2533^{+27}_{-27} (-0.2σ)	$f\sigma_8(0.15)$	0.4612	$0.461^{+0.016}_{-0.016}$ (-0.2σ)
A_{217}^{CIB}	44.4	41^{+10}_{-10} (-1.0σ)	D_{1420}	813.7	814^{+10}_{-10} (-0.1σ)	$\sigma_8(0.15)$	0.7482	$0.748^{+0.011}_{-0.011}$ (-0.1σ)
A_{143}^{tSZ}	5.12	< 7.42 (-0.7σ)	D_{2000}	229.35	$229.5^{+3.6}_{-3.5}$ (-0.0σ)	$f\sigma_8(0.38)$	0.4780	$0.478^{+0.012}_{-0.013}$ (-0.2σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.571	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9638	$0.9639^{+0.0096}_{-0.0095}$ $(+0.2\sigma)$	$\sigma_8(0.38)$	0.6625	$0.6626^{+0.0099}_{-0.0096}$ (-0.1σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.71	—	Y_{P}	0.245296	$0.24530^{+0.00016}_{-0.00019}$ $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4758	$0.476^{+0.010}_{-0.011}$ (-0.2σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.06	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246622	$0.24663^{+0.00016}_{-0.00019}$ $(+0.1\sigma)$	$\sigma_8(0.51)$	0.6197	$0.6198^{+0.0094}_{-0.0089}$ (-0.1σ)
A^{kSZ}	2.5	—	$10^5 \mathrm{D}/\mathrm{H}$	2.632	$2.628^{+0.076}_{-0.074}$ (-0.1σ)	$f\sigma_8(0.61)$	0.4703	$0.4704^{+0.0094}_{-0.0096}$ (-0.2σ)
A_{100}^{dust}	1.011	$1.01^{+0.39}_{-0.39}$	Age/Gyr	13.825	$13.823^{+0.062}_{-0.063}$ (-0.2σ)	$\sigma_8(0.61)$	0.5895	$0.5896^{+0.0090}_{-0.0086}$ (-0.1σ)
A_{143}^{dust}	0.989	$0.98^{+0.35}_{-0.34}$	z_*	1090.25	$1090.23^{+0.67}_{-0.67}$ (-0.2σ)	$f\sigma_8(2.33)$	0.29694	$0.2970^{+0.0047}_{-0.0045}$ (-0.0σ)
A_{217}^{dust}	0.962	$0.97^{+0.20}_{-0.20}$	r_*	144.55	$144.54^{+0.71}_{-0.70}$ $(+0.2\sigma)$	$\sigma_8(2.33)$	0.3058	$0.3059^{+0.0052}_{-0.0049}$ $(+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.008	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04106	$1.04105^{+0.00087}_{-0.00087}$ $(+0.2\sigma)$	f_{2000}^{143}	31.4	31^{+6}_{-6} (-0.1σ)
c_{100}	0.99746	$0.9975^{+0.0021}_{-0.0021}$ (-3.5σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.885	$13.884^{+0.066}_{-0.066}$ $(+0.1\sigma)$	f_{2000}^{217}	107.78	$107.6^{+4.0}_{-4.0}$ (-0.3σ)
c_{217}	1.00134	$1.0012^{+0.0031}_{-0.0030}$ $(+4.7\sigma)$	z_{drag}	1059.40	$1059.44^{+0.84}_{-0.88}$ $(+0.1\sigma)$	$f_{2000}^{143 \times 217}$	33.18	33^{+4}_{-4} (-0.3σ)
H_0	67.04	$67.1^{+1.4}_{-1.4}$ $(+0.2\sigma)$	r_{drag}	147.29	$147.27^{+0.72}_{-0.73}$ $(+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.91	9.52 $(\nu: 0.4)$
Ω_{Λ}	0.6818	$0.682^{+0.019}_{-0.019}$ $(+0.2\sigma)$	k_{D}	0.14047	$0.14050^{+0.00086}_{-0.00086}$ (-0.1σ)	χ_{small}^2	395.87	396.9 $(\nu: 1.3)$ (-0.0σ)
Ω_{m}	0.3182	$0.318^{+0.019}_{-0.019}$ (-0.2σ)	$100\theta_{\mathrm{D}}$	0.16108	$0.16105^{+0.00051}_{-0.00049}$ (-0.1σ)	χ_{lowl}^2	23.42	23.5 $(\nu: 0.5)$ (-0.3σ)
$\Omega_{\mathrm{m}}h^2$	0.14303	$0.1431^{+0.0029}_{-0.0029}$ (-0.2σ)	z_{eq}	3403	3403^{+69}_{-69} (-0.2σ)	$\chi_{\mathrm{CamSpec}}^2$	7050.2	7062.7 $(\nu: 13.0)$
$\Omega_{\mathrm{m}}h^3$	0.09589	$0.09592^{+0.00086}_{-0.00084}$ $(+0.1\sigma)$	k_{eq}	0.010385	$0.01039^{+0.00021}_{-0.00021}$ (-0.2σ)	χ_{prior}^2	2.3	7.6 $(\nu: 6.0)$ $(+0.1\sigma)$
σ_8	0.8104	$0.811^{+0.013}_{-0.013}$ (-0.1σ)	$100\theta_{\mathrm{eq}}$	0.8125	$0.813^{+0.013}_{-0.013}$ $(+0.2\sigma)$	χ_{CMB}^2	7478.4	7492.6 $(\nu: 14.3)$ $(+1147.3\sigma)$
S_8	0.8346	$0.835^{+0.032}_{-0.032}$ (-0.2σ)	$100\theta_{\mathrm{s,eq}}$	0.4492	$0.4491^{+0.0067}_{-0.0065}$ $(+0.2\sigma)$			
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4571	$0.457^{+0.018}_{-0.017}$ (-0.2σ)	$H(0.15)$	72.39	$72.4^{+1.2}_{-1.2}$ $(+0.2\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 7480.67$; $\bar{\chi}_{\mathrm{eff}}^2 = 7500.24$; $R - 1 = 0.00500$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.91 small_100x143_offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3.2_29: 23.42 CamSpec like_10.7HM: 7050.18

2.114 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00037}_{-0.00037} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+17}_{-17} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.6}_{-1.7} \quad (+0.7\sigma)$	$H(0.51)$	$89.65^{+0.54}_{-0.53} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04102^{+0.00081}_{-0.00082} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.042}_{-0.042} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1983^{+20}_{-20} \quad (-0.8\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.4\sigma)$	z_{re}	$7.8^{+1.5}_{-1.5} \quad (+0.4\sigma)$	$H(0.61)$	$95.26^{+0.46}_{-0.45} \quad (+0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.030}_{-0.029} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.064}_{-0.059} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+22}_{-22} \quad (-0.8\sigma)$
n_{s}	$0.9665^{+0.0081}_{-0.0081} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0048} \quad (+0.1\sigma)$	D_{40}	$1225^{+24}_{-23} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+23}_{-23} \quad (-0.7\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5714^{+80}_{-78} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815.1^{+9.9}_{-9.8} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.010}_{-0.0099} \quad (-0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$229.9^{+3.5}_{-3.4} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0098} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.9665^{+0.0081}_{-0.0081} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.4729^{+0.0090}_{-0.0091} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	Y_{P}	$0.24533^{+0.00015}_{-0.00016} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6202^{+0.0096}_{-0.0093} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00015}_{-0.00016} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4679^{+0.0084}_{-0.0084} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.614^{+0.071}_{-0.068} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0092}_{-0.0088} \quad (+0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.806^{+0.053}_{-0.053} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0048}_{-0.0044} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.40}$	z_*	$1090.03^{+0.56}_{-0.56} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3068^{+0.0051}_{-0.0047} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	r_*	$144.77^{+0.55}_{-0.56} \quad (+0.6\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04122^{+0.00080}_{-0.00082} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.4^{+4.1}_{-4.0} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.903^{+0.055}_{-0.056} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.53^{+0.82}_{-0.86} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.39 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.48^{+0.62}_{-0.61} \quad (+0.6\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.8) \quad (+0.1\sigma)$
H_0	$67.57^{+0.97}_{-0.97} \quad (+0.8\sigma)$	k_{D}	$0.14034^{+0.00081}_{-0.00081} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.04 \quad (\nu: 0.4) \quad (-0.7\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00049}_{-0.00049} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.1 \quad (\nu: 13.4)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.7\sigma)$	z_{eq}	$3378^{+50}_{-49} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.059 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.28 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09595^{+0.00086}_{-0.00082} \quad (+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8173^{+0.0093}_{-0.0092} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.2)$
σ_8	$0.809^{+0.013}_{-0.012} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0048}_{-0.0047} \quad (+0.7\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.0) \quad (+0.1\sigma)$
S_8	$0.824^{+0.024}_{-0.023} \quad (-0.7\sigma)$	$H(0.15)$	$72.84^{+0.85}_{-0.84} \quad (+0.8\sigma)$	χ_{CMB}^2	$7492.7 \quad (\nu: 14.3) \quad (+1147.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.7^{+8.4}_{-8.3} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.38)$	$82.94^{+0.65}_{-0.63} \quad (+0.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7506.48; R - 1 = 0.00781$

2.115 base_CamSpecHM_TT_lowl_lowE_lensing_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00035}_{-0.00039} \quad (+1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.015}_{-0.016} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-11} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0031}_{-0.0029} \quad (-1.2\sigma)$	$\sigma_8 / h^{0.5}$	$0.979^{+0.021}_{-0.023} \quad (-0.9\sigma)$	$H(0.38)$	$83.27^{+0.87}_{-0.91} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04121^{+0.00088}_{-0.00087} \quad (+0.9\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.3}_{-2.5} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+25}_{-23} \quad (-1.3\sigma)$
τ	$0.058^{+0.018}_{-0.015} \quad (+0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.048}_{-0.051} \quad (-0.8\sigma)$	$H(0.51)$	$89.91^{+0.71}_{-0.72} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.031}_{-0.029} \quad (+0.4\sigma)$	z_{re}	$8.0^{+1.6}_{-1.5} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+29}_{-27} \quad (-1.3\sigma)$
n_{s}	$0.969^{+0.010}_{-0.0094} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.066}_{-0.061} \quad (+0.4\sigma)$	$H(0.61)$	$95.48^{+0.60}_{-0.58} \quad (+1.3\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0046} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.873^{+0.023}_{-0.024} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+31}_{-29} \quad (-1.3\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1221^{+24}_{-26} \quad (-0.8\sigma)$	$H(2.33)$	$235.3^{+1.8}_{-1.8} \quad (-1.1\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5724^{+80}_{-78} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+27}_{-27} \quad (-1.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2535^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.015}_{-0.017} \quad (-1.0\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$816.4^{+9.9}_{-9.8} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.6\sigma)$	D_{2000}	$230.5^{+3.4}_{-3.5} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.014} \quad (-1.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.24}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.969^{+0.010}_{-0.0094} \quad (+1.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0098} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00014}_{-0.00016} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.010}_{-0.012} \quad (-0.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00014}_{-0.00016} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6207^{+0.0095}_{-0.0094} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.593^{+0.071}_{-0.067} \quad (-1.0\sigma)$	$f\sigma_8(0.61)$	$0.4657^{+0.0094}_{-0.011} \quad (-0.8\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.785^{+0.060}_{-0.060} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.5908^{+0.0094}_{-0.0090} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.33}$	z_*	$1089.81^{+0.63}_{-0.59} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0050}_{-0.0046} \quad (+0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.94^{+0.71}_{-0.75} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0058}_{-0.0050} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.30}$	$100\theta_*$	$1.04140^{+0.00087}_{-0.00087} \quad (+0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.918^{+0.073}_{-0.066} \quad (+0.9\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.0} \quad (-0.6\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.72^{+0.81}_{-0.83} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
H_0	$68.1^{+1.3}_{-1.4} \quad (+1.3\sigma)$	r_{drag}	$147.62^{+0.76}_{-0.77} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.8 \quad (\nu: 1.0)$
Ω_{Λ}	$0.695^{+0.017}_{-0.019} \quad (+1.2\sigma)$	k_{D}	$0.14028^{+0.00086}_{-0.00095} \quad (-0.5\sigma)$	χ_{small}^2	$397.8 \quad (\nu: 3.4) \quad (+0.5\sigma)$
Ω_{m}	$0.305^{+0.019}_{-0.017} \quad (-1.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16092^{+0.00050}_{-0.00047} \quad (-0.6\sigma)$	χ_{lowl}^2	$22.68 \quad (\nu: 0.4) \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0030}_{-0.0028} \quad (-1.1\sigma)$	z_{eq}	$3357^{+72}_{-66} \quad (-1.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.4 \quad (\nu: 15.2)$
$\Omega_{\mathrm{m}} h^3$	$0.09607^{+0.00082}_{-0.00083} \quad (+0.4\sigma)$	k_{eq}	$0.01025^{+0.00022}_{-0.00020} \quad (-1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.7 \quad (\nu: 3.6)$
σ_8	$0.808^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.013}_{-0.014} \quad (+1.2\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 5.9) \quad (+0.0\sigma)$
S_8	$0.814^{+0.030}_{-0.035} \quad (-1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4537^{+0.0065}_{-0.0071} \quad (+1.2\sigma)$	χ_{CMB}^2	$7494.8 \quad (\nu: 19.7) \quad (+1147.7\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.446^{+0.017}_{-0.019} \quad (-1.1\sigma)$	$H(0.15)$	$73.3^{+1.2}_{-1.2} \quad (+1.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7512.86; R - 1 = 0.03322$

2.116 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02233^{+0.00034}_{-0.00037} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.017}_{-0.018} \quad (-0.8\sigma)$	$D_M(0.38)$	$1522^{+16}_{-16} \quad (-1.3\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0021}_{-0.0019} \quad (-1.2\sigma)$	$r_{\text{drag}} h$	$100.4^{+1.6}_{-1.6} \quad (+1.2\sigma)$	$H(0.51)$	$89.90^{+0.51}_{-0.51} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04119^{+0.00078}_{-0.00080} \quad (+0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.043}_{-0.043} \quad (-0.8\sigma)$	$D_M(0.51)$	$1973^{+19}_{-18} \quad (-1.3\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.8\sigma)$	z_{re}	$8.0^{+1.4}_{-1.4} \quad (+0.6\sigma)$	$H(0.61)$	$95.46^{+0.45}_{-0.44} \quad (+1.3\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.030}_{-0.029} \quad (+0.4\sigma)$	$10^9 A_s$	$2.106^{+0.064}_{-0.061} \quad (+0.4\sigma)$	$D_M(0.61)$	$2297^{+21}_{-20} \quad (-1.3\sigma)$
n_s	$0.9690^{+0.0078}_{-0.0081} \quad (+1.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.874^{+0.021}_{-0.020} \quad (-0.8\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.2} \quad (-1.1\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0047} \quad (+0.2\sigma)$	D_{40}	$1222^{+23}_{-23} \quad (-0.8\sigma)$	$D_M(2.33)$	$5758^{+22}_{-22} \quad (-1.2\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5725^{+78}_{-79} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.012}_{-0.012} \quad (-1.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$816.5^{+9.9}_{-9.8} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.4710^{+0.0098}_{-0.0098} \quad (-0.9\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.5^{+3.4}_{-3.4} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0099} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.6\sigma)$	$n_{\text{s},0.002}$	$0.9690^{+0.0078}_{-0.0081} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.4704^{+0.0088}_{-0.0090} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.24}_{-0.25}$	Y_{P}	$0.24538^{+0.00014}_{-0.00015} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6208^{+0.0096}_{-0.0093} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24670^{+0.00014}_{-0.00015} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.4659^{+0.0083}_{-0.0083} \quad (-0.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.593^{+0.068}_{-0.066} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.5909^{+0.0092}_{-0.0089} \quad (+0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.786^{+0.051}_{-0.050} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0047}_{-0.0045} \quad (+0.5\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	z_*	$1089.81^{+0.54}_{-0.50} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0050}_{-0.0048} \quad (+0.7\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.33}$	r_*	$144.92^{+0.53}_{-0.54} \quad (+1.0\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	$1.04138^{+0.00076}_{-0.00080} \quad (+0.9\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.0} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$13.917^{+0.054}_{-0.055} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	z_{drag}	$1059.72^{+0.79}_{-0.81} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.6 \quad (\nu: 0.6)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.61^{+0.59}_{-0.61} \quad (+0.8\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 2.6) \quad (+0.4\sigma)$
H_0	$68.04^{+0.91}_{-0.93} \quad (+1.3\sigma)$	k_{D}	$0.14029^{+0.00079}_{-0.00080} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.69 \quad (\nu: 0.3) \quad (-0.9\sigma)$
Ω_Λ	$0.695^{+0.012}_{-0.012} \quad (+1.2\sigma)$	$100\theta_{\text{D}}$	$0.16091^{+0.00051}_{-0.00047} \quad (-0.6\sigma)$	χ_{CamSpec}^2	$7064.2 \quad (\nu: 14.4)$
Ω_{m}	$0.305^{+0.012}_{-0.012} \quad (-1.2\sigma)$	z_{eq}	$3359^{+48}_{-45} \quad (-1.1\sigma)$	χ_{H073p45}^2	$10.7 \quad (\nu: 1.7)$
$\Omega_{\text{m}} h^2$	$0.1412^{+0.0020}_{-0.0019} \quad (-1.1\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00014} \quad (-1.1\sigma)$	$\chi_{6\text{DF}}^2$	$0.027 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09607^{+0.00082}_{-0.00083} \quad (+0.4\sigma)$	$100\theta_{\text{eq}}$	$0.8213^{+0.0083}_{-0.0088} \quad (+1.2\sigma)$	χ_{MGS}^2	$1.73 \quad (\nu: 0.1)$
σ_8	$0.808^{+0.013}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4536^{+0.0043}_{-0.0046} \quad (+1.2\sigma)$	χ_{DR12BAO}^2	$3.91 \quad (\nu: 0.3)$
S_8	$0.815^{+0.022}_{-0.022} \quad (-1.0\sigma)$	$H(0.15)$	$73.25^{+0.80}_{-0.81} \quad (+1.3\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 6.0) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.446^{+0.012}_{-0.012} \quad (-1.0\sigma)$	$D_M(0.15)$	$637.6^{+7.9}_{-7.7} \quad (-1.3\sigma)$	χ_{CMB}^2	$7494.2 \quad (\nu: 15.8) \quad (+1147.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$H(0.38)$	$83.25^{+0.61}_{-0.61} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.67 \quad (\nu: 0.2)$
$\bar{\chi}_{\text{eff}}^2 = 7518.00; R - 1 = 0.02714$					

2.117 base_CamSpecHM_TT_lowl_lowE_lensing_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022170	$0.02218^{+0.00039}_{-0.00039}$ $(+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6073	$0.607^{+0.015}_{-0.014}$ (-0.4σ)	$D_M(0.15)$	644.4	644^{+11}_{-11} (-0.4σ)
$\Omega_c h^2$	0.11983	$0.1198^{+0.0028}_{-0.0028}$ (-0.4σ)	$\sigma_8/h^{0.5}$	0.9882	$0.987^{+0.020}_{-0.020}$ (-0.3σ)	$H(0.38)$	82.74	$82.76^{+0.83}_{-0.80}$ $(+0.4\sigma)$
$100\theta_{MC}$	1.04091	$1.04092^{+0.00086}_{-0.00086}$ $(+0.3\sigma)$	$r_{drag}h$	99.09	$99.1^{+2.2}_{-2.2}$ $(+0.4\sigma)$	$D_M(0.38)$	1535.9	1535^{+22}_{-22} (-0.4σ)
τ	0.0541	$0.054^{+0.016}_{-0.015}$ $(+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4421	$2.441^{+0.048}_{-0.047}$ (-0.4σ)	$H(0.51)$	89.49	$89.51^{+0.67}_{-0.64}$ $(+0.4\sigma)$
$\ln(10^{10} A_s)$	3.0416	$3.041^{+0.030}_{-0.029}$ $(+0.0\sigma)$	z_{re}	7.70	$7.7^{+1.5}_{-1.5}$ $(+0.2\sigma)$	$D_M(0.51)$	1989.0	1988^{+26}_{-26} (-0.4σ)
n_s	0.9650	$0.9651^{+0.0091}_{-0.0089}$ $(+0.4\sigma)$	$10^9 A_s$	2.094	$2.093^{+0.064}_{-0.060}$ $(+0.0\sigma)$	$H(0.61)$	95.14	$95.16^{+0.56}_{-0.54}$ $(+0.4\sigma)$
y_{cal}	1.00058	$1.0005^{+0.0049}_{-0.0048}$ $(+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8792	$1.879^{+0.022}_{-0.021}$ (-0.4σ)	$D_M(0.61)$	2314.0	2313^{+28}_{-28} (-0.4σ)
A_{100}^{PS}	239.9	243^{+50}_{-50} (-0.7σ)	D_{40}	1227.5	1228^{+25}_{-24} (-0.4σ)	$H(2.33)$	236.25	$236.2^{+1.7}_{-1.7}$ (-0.4σ)
A_{143}^{PS}	40.1	41^{+20}_{-20} (-1.0σ)	D_{220}	5709	5710^{+82}_{-79} (-0.1σ)	$D_M(2.33)$	5771.9	5771^{+26}_{-27} (-0.4σ)
A_{217}^{PS}	100.0	101^{+30}_{-30} (-1.4σ)	D_{810}	2534.1	2534^{+27}_{-26} (-0.2σ)	$f\sigma_8(0.15)$	0.4594	$0.459^{+0.015}_{-0.015}$ (-0.4σ)
A_{217}^{CIB}	45.1	41^{+10}_{-10} (-1.0σ)	D_{1420}	814.6	$815^{+10}_{-9.9}$ $(+0.0\sigma)$	$\sigma_8(0.15)$	0.7484	$0.748^{+0.011}_{-0.011}$ (-0.2σ)
A_{143}^{tSZ}	5.90	< 7.42 (-0.7σ)	D_{2000}	229.69	$229.7^{+3.6}_{-3.5}$ $(+0.1\sigma)$	$f\sigma_8(0.38)$	0.4769	$0.476^{+0.012}_{-0.012}$ (-0.4σ)
$r_{143 \times 217}^{PS}$	0.569	$0.65^{+0.24}_{-0.25}$	$n_{s,0.002}$	0.9650	$0.9651^{+0.0091}_{-0.0089}$ $(+0.4\sigma)$	$\sigma_8(0.38)$	0.6630	$0.663^{+0.010}_{-0.0097}$ (-0.1σ)
$r_{143 \times 217}^{CIB}$	0.78	—	Y_P	0.245314	$0.24532^{+0.00016}_{-0.00017}$ $(+0.3\sigma)$	$f\sigma_8(0.51)$	0.4750	$0.475^{+0.010}_{-0.010}$ (-0.3σ)
$\xi^{tSZ \times CIB}$	0.07	—	Y_P^{BBN}	0.246640	$0.24664^{+0.00016}_{-0.00017}$ $(+0.3\sigma)$	$\sigma_8(0.51)$	0.6203	$0.6200^{+0.0095}_{-0.0091}$ (-0.0σ)
A^{kSZ}	1.3	—	$10^5 D/H$	2.624	$2.621^{+0.075}_{-0.073}$ (-0.3σ)	$f\sigma_8(0.61)$	0.4697	$0.4693^{+0.0092}_{-0.0094}$ (-0.3σ)
A_{100}^{dust}	1.012	$1.01^{+0.39}_{-0.40}$	Age/Gyr	13.817	$13.815^{+0.059}_{-0.060}$ (-0.4σ)	$\sigma_8(0.61)$	0.5901	$0.5898^{+0.0091}_{-0.0087}$ (-0.0σ)
A_{143}^{dust}	0.991	$0.98^{+0.35}_{-0.34}$	z_*	1090.16	$1090.14^{+0.64}_{-0.65}$ (-0.4σ)	$f\sigma_8(2.33)$	0.29738	$0.2973^{+0.0047}_{-0.0045}$ $(+0.1\sigma)$
A_{217}^{dust}	0.967	$0.97^{+0.20}_{-0.20}$	r_*	144.63	$144.63^{+0.67}_{-0.66}$ $(+0.4\sigma)$	$\sigma_8(2.33)$	0.3064	$0.3063^{+0.0052}_{-0.0049}$ $(+0.2\sigma)$
$A_{143 \times 217}^{dust}$	1.000	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04112	$1.04112^{+0.00085}_{-0.00085}$ $(+0.3\sigma)$	f_{2000}^{143}	31.1	31^{+6}_{-6} (-0.2σ)
c_{100}	0.99756	$0.9975^{+0.0021}_{-0.0021}$ (-3.5σ)	$D_M(z_*)/\text{Gpc}$	13.892	$13.892^{+0.063}_{-0.063}$ $(+0.3\sigma)$	f_{2000}^{217}	107.63	$107.5^{+4.0}_{-4.0}$ (-0.3σ)
c_{217}	1.00139	$1.0012^{+0.0031}_{-0.0030}$ $(+4.7\sigma)$	z_{drag}	1059.47	$1059.48^{+0.83}_{-0.85}$ $(+0.2\sigma)$	$f_{2000}^{143 \times 217}$	32.95	33^{+4}_{-4} (-0.3σ)
H_0	67.24	$67.3^{+1.3}_{-1.3}$ $(+0.4\sigma)$	r_{drag}	147.36	$147.36^{+0.70}_{-0.69}$ $(+0.3\sigma)$	$\chi^2_{lensing}$	8.88	9.45 $(\nu: 0.3)$
Ω_Λ	0.6845	$0.685^{+0.017}_{-0.018}$ $(+0.4\sigma)$	k_D	0.14043	$0.14044^{+0.00084}_{-0.00084}$ (-0.2σ)	χ^2_{small}	396.05	397.0 $(\nu: 1.5)$ $(+0.0\sigma)$
Ω_m	0.3155	$0.315^{+0.018}_{-0.017}$ (-0.4σ)	$100\theta_D$	0.161041	$0.16103^{+0.00050}_{-0.00049}$ (-0.2σ)	χ^2_{lowl}	23.24	23.30 $(\nu: 0.5)$ (-0.5σ)
$\Omega_m h^2$	0.14265	$0.1426^{+0.0026}_{-0.0027}$ (-0.4σ)	z_{eq}	3393	3392^{+63}_{-64} (-0.4σ)	$\chi^2_{CamSpec}$	7050.4	7062.8 $(\nu: 13.3)$
$\Omega_m h^3$	0.09592	$0.09594^{+0.00086}_{-0.00083}$ $(+0.1\sigma)$	k_{eq}	0.010357	$0.01035^{+0.00019}_{-0.00020}$ (-0.4σ)	χ^2_{JLA}	1035.29	1035.43 $(\nu: 0.2)$
σ_8	0.8104	$0.810^{+0.013}_{-0.013}$ (-0.2σ)	$100\theta_{eq}$	0.8143	$0.815^{+0.012}_{-0.012}$ $(+0.4\sigma)$	χ^2_{prior}	2.2	7.6 $(\nu: 6.0)$ $(+0.1\sigma)$
S_8	0.8310	$0.830^{+0.030}_{-0.029}$ (-0.4σ)	$100\theta_{s,eq}$	0.4501	$0.4502^{+0.0063}_{-0.0060}$ $(+0.4\sigma)$	χ^2_{CMB}	7478.5	7492.6 $(\nu: 14.3)$ $(+1147.3\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4552	$0.455^{+0.016}_{-0.016}$ (-0.4σ)	$H(0.15)$	72.56	$72.6^{+1.1}_{-1.1}$ $(+0.4\sigma)$			

Best-fit $\chi^2_{eff} = 8516.03$; $\bar{\chi}^2_{eff} = 8535.63$; $R - 1 = 0.00582$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consect8: 8.88 small_100x143_offlike5_EE_Aplanck_B: 396.05 commander_dx12_v3.2.29: 23.24 CamSpec like_10.7HM: 7050.35 SN - JLA Pantheon18: 1035.29

2.118 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_JLA_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00037}_{-0.00037} \quad (+1.0\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+1.6}_{-1.6} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+19}_{-18} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0020}_{-0.0020} \quad (-1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.421^{+0.041}_{-0.043} \quad (-0.9\sigma)$	$H(0.61)$	$95.48^{+0.45}_{-0.45} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04120^{+0.00079}_{-0.00081} \quad (+0.9\sigma)$	z_{re}	$8.0^{+1.4}_{-1.5} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+21}_{-19} \quad (-1.3\sigma)$
τ	$0.058^{+0.015}_{-0.015} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.064}_{-0.062} \quad (+0.4\sigma)$	$H(2.33)$	$235.3^{+1.3}_{-1.3} \quad (-1.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.030}_{-0.030} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.022}_{-0.021} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+22}_{-23} \quad (-1.3\sigma)$
n_{s}	$0.9692^{+0.0078}_{-0.0077} \quad (+1.1\sigma)$	D_{40}	$1221^{+23}_{-23} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.011}_{-0.011} \quad (-1.1\sigma)$
y_{cal}	$1.0008^{+0.0051}_{-0.0050} \quad (+0.2\sigma)$	D_{220}	$5726^{+79}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{810}	$2535^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.4704^{+0.0096}_{-0.0098} \quad (-1.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{1420}	$817^{+10}_{-9.9} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.011} \quad (-0.0\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$230.6^{+3.5}_{-3.6} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4699^{+0.0087}_{-0.0089} \quad (-0.9\sigma)$
A_{217}^{CIB}	$40^{+10}_{-20} \quad (-1.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9692^{+0.0078}_{-0.0077} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0096}_{-0.0098} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.7\sigma)$	Y_{P}	$0.24538^{+0.00014}_{-0.00016} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4655^{+0.0081}_{-0.0083} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00014}_{-0.00016} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.5908^{+0.0092}_{-0.0093} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.070}_{-0.067} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0046}_{-0.0048} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.051}_{-0.052} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0048}_{-0.0049} \quad (+0.7\sigma)$
A^{kSZ}	—	z_*	$1089.79^{+0.53}_{-0.54} \quad (-1.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
A_{100}^{dust}	$1.02^{+0.36}_{-0.39}$	r_*	$144.95^{+0.53}_{-0.54} \quad (+1.0\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.0} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	$100\theta_*$	$1.04139^{+0.00077}_{-0.00081} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.919^{+0.053}_{-0.056} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.7 \quad (\nu: 0.7)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.30}$	z_{drag}	$1059.73^{+0.78}_{-0.83} \quad (+0.7\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 2.5) \quad (+0.4\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0019} \quad (-3.3\sigma)$	r_{drag}	$147.63^{+0.61}_{-0.58} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.66 \quad (\nu: 0.3) \quad (-1.0\sigma)$
c_{217}	$1.0012^{+0.0033}_{-0.0030} \quad (+4.7\sigma)$	k_{D}	$0.14027^{+0.00078}_{-0.00083} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.4 \quad (\nu: 14.7)$
H_0	$68.10^{+0.95}_{-0.93} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16091^{+0.00052}_{-0.00049} \quad (-0.6\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.5 \quad (\nu: 1.7)$
Ω_{Λ}	$0.696^{+0.012}_{-0.012} \quad (+1.3\sigma)$	z_{eq}	$3356^{+48}_{-44} \quad (-1.2\sigma)$	χ_{JLA}^2	$706.61 \quad (\nu: 0.0)$
Ω_{m}	$0.304^{+0.012}_{-0.012} \quad (-1.3\sigma)$	k_{eq}	$0.01024^{+0.00015}_{-0.00014} \quad (-1.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.026 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0020}_{-0.0019} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8218^{+0.0091}_{-0.0086} \quad (+1.2\sigma)$	χ_{MGS}^2	$1.79 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09607^{+0.00084}_{-0.00084} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0045}_{-0.0045} \quad (+1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.85 \quad (\nu: 0.3)$
σ_8	$0.807^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$H(0.15)$	$73.30^{+0.81}_{-0.81} \quad (+1.3\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 6.3) \quad (+0.1\sigma)$
S_8	$0.813^{+0.022}_{-0.022} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.2^{+7.9}_{-7.9} \quad (-1.3\sigma)$	χ_{CMB}^2	$7494.5 \quad (\nu: 16.4) \quad (+1147.7\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.445^{+0.012}_{-0.012} \quad (-1.1\sigma)$	$H(0.38)$	$83.28^{+0.60}_{-0.62} \quad (+1.4\sigma)$	χ_{BAO}^2	$5.67 \quad (\nu: 0.2)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.012}_{-0.012} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+16}_{-16} \quad (-1.3\sigma)$		
$\sigma_8/h^{0.5}$	$0.979^{+0.017}_{-0.018} \quad (-0.9\sigma)$	$H(0.51)$	$89.92^{+0.51}_{-0.52} \quad (+1.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8224.73; R - 1 = 0.08459$$

2.119 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022236	$0.02224^{+0.00037}_{-0.00036}$ $(+0.5\sigma)$	$\sigma_8/h^{0.5}$	0.9832	$0.983^{+0.018}_{-0.017}$ (-0.6σ)	$D_{\mathrm{M}}(0.38)$	1529.2	1529^{+16}_{-16} (-0.8σ)
$\Omega_{\mathrm{c}}h^2$	0.11903	$0.1190^{+0.0021}_{-0.0021}$ (-0.8σ)	$r_{\mathrm{drag}}h$	99.76	$99.8^{+1.6}_{-1.6}$ $(+0.8\sigma)$	$H(0.51)$	89.68	$89.68^{+0.52}_{-0.51}$ $(+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	1.04107	$1.04104^{+0.00080}_{-0.00082}$ $(+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4301	$2.432^{+0.042}_{-0.042}$ (-0.6σ)	$D_{\mathrm{M}}(0.51)$	1981.2	1981^{+19}_{-19} (-0.8σ)
τ	0.0552	$0.056^{+0.015}_{-0.015}$ $(+0.5\sigma)$	z_{re}	7.79	$7.8^{+1.5}_{-1.5}$ $(+0.4\sigma)$	$H(0.61)$	95.290	$95.29^{+0.45}_{-0.44}$ $(+0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0426	$3.044^{+0.030}_{-0.029}$ $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.096	$2.098^{+0.064}_{-0.060}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	2305.5	2306^{+21}_{-21} (-0.8σ)
n_{s}	0.9671	$0.9669^{+0.0080}_{-0.0081}$ $(+0.8\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8768	$1.876^{+0.021}_{-0.020}$ (-0.6σ)	$H(2.33)$	235.80	$235.8^{+1.4}_{-1.3}$ (-0.7σ)
y_{cal}	1.00072	$1.0007^{+0.0050}_{-0.0048}$ $(+0.1\sigma)$	D_{40}	1223.7	1224^{+24}_{-23} (-0.6σ)	$D_{\mathrm{M}}(2.33)$	5765.2	5765^{+23}_{-23} (-0.8σ)
A_{100}^{PS}	237.4	242^{+50}_{-50} (-0.7σ)	D_{220}	5715	5716^{+80}_{-78} $(+0.1\sigma)$	$f\sigma_8(0.15)$	0.4551	$0.455^{+0.012}_{-0.012}$ (-0.7σ)
A_{143}^{PS}	40.1	41^{+20}_{-20} (-1.1σ)	D_{810}	2535.2	2534^{+26}_{-26} (-0.1σ)	$\sigma_8(0.15)$	0.7473	$0.747^{+0.011}_{-0.011}$ (-0.2σ)
A_{217}^{PS}	100.8	101^{+30}_{-30} (-1.4σ)	D_{1420}	815.7	$815.3^{+9.8}_{-9.8}$ $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4736	$0.4737^{+0.0098}_{-0.0099}$ (-0.6σ)
A_{217}^{CIB}	45.8	41^{+10}_{-10} (-1.1σ)	D_{2000}	230.13	$230.0^{+3.4}_{-3.4}$ $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6626	$0.663^{+0.010}_{-0.0098}$ (-0.1σ)
A_{143}^{tSZ}	6.62	< 7.42 (-0.7σ)	$n_{\mathrm{s},0.002}$	0.9671	$0.9669^{+0.0080}_{-0.0081}$ $(+0.8\sigma)$	$f\sigma_8(0.51)$	0.4724	$0.4724^{+0.0088}_{-0.0089}$ (-0.6σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.572	$0.65^{+0.25}_{-0.25}$	Y_{P}	0.245341	$0.24534^{+0.00015}_{-0.00016}$ $(+0.5\sigma)$	$\sigma_8(0.51)$	0.6201	$0.6203^{+0.0097}_{-0.0093}$ $(+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.80	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246667	$0.24666^{+0.00015}_{-0.00016}$ $(+0.5\sigma)$	$f\sigma_8(0.61)$	0.4675	$0.4676^{+0.0082}_{-0.0083}$ (-0.6σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.04	—	$10^5 \mathrm{D}/\mathrm{H}$	2.611	$2.612^{+0.070}_{-0.068}$ (-0.5σ)	$\sigma_8(0.61)$	0.5901	$0.5903^{+0.0092}_{-0.0088}$ $(+0.1\sigma)$
A^{kSZ}	0.0	—	Age/Gyr	13.802	$13.803^{+0.052}_{-0.052}$ (-0.7σ)	$f\sigma_8(2.33)$	0.29759	$0.2977^{+0.0048}_{-0.0045}$ $(+0.2\sigma)$
A_{100}^{dust}	1.007	$1.01^{+0.39}_{-0.39}$	z_*	1090.00	$1090.00^{+0.54}_{-0.55}$ (-0.7σ)	$\sigma_8(2.33)$	0.30686	$0.3069^{+0.0050}_{-0.0047}$ $(+0.4\sigma)$
A_{143}^{dust}	0.988	$0.97^{+0.35}_{-0.34}$	r_*	144.79	$144.80^{+0.55}_{-0.55}$ $(+0.7\sigma)$	f_{2000}^{143}	30.8	30^{+6}_{-6} (-0.3σ)
A_{217}^{dust}	0.965	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	1.04127	$1.04124^{+0.00080}_{-0.00081}$ $(+0.6\sigma)$	f_{2000}^{217}	107.35	$107.3^{+4.1}_{-4.0}$ (-0.4σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.000	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.905	$13.906^{+0.053}_{-0.054}$ $(+0.6\sigma)$	$f_{2000}^{143 \times 217}$	32.66	33^{+4}_{-4} (-0.4σ)
c_{100}	0.99763	$0.9975^{+0.0020}_{-0.0021}$ (-3.4σ)	z_{drag}	1059.55	$1059.55^{+0.84}_{-0.84}$ $(+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	9.02	9.41 $(\nu: 0.4)$
c_{217}	1.00136	$1.0012^{+0.0031}_{-0.0030}$ $(+4.6\sigma)$	r_{drag}	147.50	$147.51^{+0.60}_{-0.60}$ $(+0.6\sigma)$	χ_{small}^2	396.23	397.3 $(\nu: 1.9)$ $(+0.2\sigma)$
H_0	67.64	$67.64^{+0.93}_{-0.93}$ $(+0.8\sigma)$	k_{D}	0.14034	$0.14032^{+0.00081}_{-0.00080}$ (-0.4σ)	χ_{lowl}^2	22.86	22.98 $(\nu: 0.3)$ (-0.7σ)
Ω_{Λ}	0.6898	$0.690^{+0.012}_{-0.013}$ $(+0.8\sigma)$	$100\theta_{\mathrm{D}}$	0.160998	$0.16100^{+0.00050}_{-0.00048}$ (-0.3σ)	$\chi_{\mathrm{CamSpec}}^2$	7051.2	7063.2 $(\nu: 13.5)$
Ω_{m}	0.3102	$0.310^{+0.013}_{-0.012}$ (-0.8σ)	z_{eq}	3375.7	3375^{+49}_{-48} (-0.8σ)	χ_{JLA}^2	1034.99	1035.07 $(\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	0.14191	$0.1419^{+0.0021}_{-0.0020}$ (-0.8σ)	k_{eq}	0.010303	$0.01030^{+0.00015}_{-0.00014}$ (-0.8σ)	χ_{6DF}^2	0.022	0.048 $(\nu: 0.0)$
$\Omega_{\mathrm{m}}h^3$	0.09598	$0.09596^{+0.00085}_{-0.00082}$ $(+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	0.8178	$0.8180^{+0.0090}_{-0.0088}$ $(+0.8\sigma)$	χ_{MGS}^2	1.28	1.35 $(\nu: 0.1)$
σ_8	0.8086	$0.809^{+0.013}_{-0.012}$ (-0.3σ)	$100\theta_{\mathrm{s,eq}}$	0.45183	$0.4519^{+0.0046}_{-0.0046}$ $(+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.18	4.6 $(\nu: 0.9)$
S_8	0.8223	$0.822^{+0.023}_{-0.023}$ (-0.7σ)	$H(0.15)$	72.90	$72.90^{+0.81}_{-0.80}$ $(+0.8\sigma)$	χ_{prior}^2	2.1	7.6 $(\nu: 6.0)$ $(+0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4504	$0.450^{+0.013}_{-0.012}$ (-0.7σ)	$D_{\mathrm{M}}(0.15)$	641.1	$641.1^{+8.0}_{-7.9}$ (-0.8σ)	χ_{CMB}^2	7479.3	7492.9 $(\nu: 14.5)$ $(+1147.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6035	$0.604^{+0.012}_{-0.012}$ (-0.6σ)	$H(0.38)$	82.98	$82.98^{+0.62}_{-0.61}$ $(+0.8\sigma)$	χ_{BAO}^2	5.48	6.0 $(\nu: 0.6)$

Best-fit $\chi_{\mathrm{eff}}^2 = 8521.87$; $\bar{\chi}_{\mathrm{eff}}^2 = 8541.50$; $R - 1 = 0.00920$

χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.18 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p.teb_consext8: 9.02 small_100x143_offlike5_EE_Aplanck_B: 396.23 commander_dx12_v3.2.29: 22.86 CamSpec like_10.7HM: 7051.17 SN - JLA Pantheon18: 1034.99

2.120 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022336	$0.02234^{+0.00034}_{-0.00037}$ (+1.0 σ)	$r_{\text{drag}} h$	100.44	$100.5^{+1.5}_{-1.5}$ (+1.3 σ)	$D_M(0.51)$	1972.8	1972^{+18}_{-18} (−1.3 σ)
$\Omega_c h^2$	0.11821	$0.1181^{+0.0020}_{-0.0019}$ (−1.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4226	$2.422^{+0.043}_{-0.043}$ (−0.8 σ)	$H(0.61)$	95.465	$95.48^{+0.44}_{-0.43}$ (+1.3 σ)
$100\theta_{\text{MC}}$	1.04119	$1.04120^{+0.00077}_{-0.00080}$ (+0.9 σ)	z_{re}	8.05	$8.1^{+1.4}_{-1.4}$ (+0.7 σ)	$D_M(0.61)$	2296.4	2296^{+20}_{-19} (−1.3 σ)
τ	0.0582	$0.058^{+0.015}_{-0.014}$ (+0.8 σ)	$10^9 A_s$	2.106	$2.106^{+0.064}_{-0.060}$ (+0.4 σ)	$H(2.33)$	235.37	$235.3^{+1.3}_{-1.2}$ (−1.1 σ)
$\ln(10^{10} A_s)$	3.0473	$3.047^{+0.030}_{-0.029}$ (+0.4 σ)	$10^9 A_s e^{-2\tau}$	1.8744	$1.874^{+0.021}_{-0.020}$ (−0.8 σ)	$D_M(2.33)$	5757.3	5757^{+22}_{-22} (−1.3 σ)
n_s	0.9692	$0.9692^{+0.0078}_{-0.0080}$ (+1.1 σ)	D_{40}	1221.3	1221^{+23}_{-23} (−0.8 σ)	$f\sigma_8(0.15)$	0.4513	$0.451^{+0.011}_{-0.011}$ (−1.0 σ)
y_{cal}	1.00087	$1.0009^{+0.0048}_{-0.0047}$ (+0.2 σ)	D_{220}	5726	5726^{+78}_{-79} (+0.3 σ)	$\sigma_8(0.15)$	0.7473	$0.747^{+0.012}_{-0.011}$ (−0.3 σ)
A_{100}^{PS}	235.2	241^{+50}_{-50} (−0.8 σ)	D_{810}	2536.3	2535^{+26}_{-26} (−0.1 σ)	$f\sigma_8(0.38)$	0.4710	$0.4707^{+0.0097}_{-0.0096}$ (−1.0 σ)
A_{143}^{PS}	39.5	40^{+20}_{-20} (−1.2 σ)	D_{1420}	816.9	$816.6^{+9.8}_{-9.8}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6632	$0.663^{+0.010}_{-0.0098}$ (−0.0 σ)
A_{217}^{PS}	101.5	102^{+30}_{-30} (−1.3 σ)	D_{2000}	230.67	$230.6^{+3.4}_{-3.4}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4704	$0.4702^{+0.0087}_{-0.0089}$ (−0.9 σ)
A_{217}^{CIB}	44.8	40^{+10}_{-10} (−1.2 σ)	$n_{s,0.002}$	0.9692	$0.9692^{+0.0078}_{-0.0080}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6209	$0.6208^{+0.0096}_{-0.0093}$ (+0.1 σ)
A_{143}^{tSZ}	6.49	< 7.42 (−0.6 σ)	Y_P	0.245382	$0.24538^{+0.00014}_{-0.00015}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4660	$0.4658^{+0.0082}_{-0.0082}$ (−0.8 σ)
$r_{143 \times 217}^{\text{PS}}$	0.590	$0.66^{+0.24}_{-0.25}$	Y_P^{BBN}	0.246708	$0.24671^{+0.00014}_{-0.00015}$ (+1.0 σ)	$\sigma_8(0.61)$	0.5910	$0.5909^{+0.0092}_{-0.0088}$ (+0.2 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.78	—	10^5D/H	2.592	$2.592^{+0.068}_{-0.065}$ (−1.0 σ)	$f\sigma_8(2.33)$	0.29826	$0.2982^{+0.0047}_{-0.0045}$ (+0.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.09	—	Age/Gyr	13.7851	$13.784^{+0.050}_{-0.049}$ (−1.2 σ)	$\sigma_8(2.33)$	0.30778	$0.3078^{+0.0050}_{-0.0048}$ (+0.7 σ)
A^{kSZ}	0.2	—	z_*	1089.81	$1089.80^{+0.53}_{-0.49}$ (−1.2 σ)	f_{2000}^{143}	30.1	30^{+6}_{-6} (−0.4 σ)
A_{100}^{dust}	1.007	$1.02^{+0.39}_{-0.39}$	r_*	144.92	$144.94^{+0.52}_{-0.54}$ (+1.0 σ)	f_{2000}^{217}	107.00	$107.0^{+4.2}_{-4.0}$ (−0.6 σ)
A_{143}^{dust}	0.980	$0.97^{+0.35}_{-0.33}$	$100\theta_*$	1.04138	$1.04139^{+0.00076}_{-0.00080}$ (+0.9 σ)	$f_{2000}^{143 \times 217}$	32.22	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dust}	0.968	$0.97^{+0.21}_{-0.20}$	$D_M(z_*)/\text{Gpc}$	13.916	$13.918^{+0.053}_{-0.054}$ (+0.9 σ)	χ^2_{lensing}	9.17	9.6 (ν : 0.6)
$A_{143 \times 217}^{\text{dust}}$	1.002	$1.02^{+0.32}_{-0.31}$	z_{drag}	1059.74	$1059.73^{+0.78}_{-0.82}$ (+0.7 σ)	χ^2_{small}	396.83	397.7 (ν : 2.6) (+0.5 σ)
c_{100}	0.99765	$0.9976^{+0.0020}_{-0.0020}$ (−3.3 σ)	r_{drag}	147.60	$147.62^{+0.57}_{-0.60}$ (+0.9 σ)	χ^2_{lowl}	22.60	22.66 (ν : 0.3) (−1.0 σ)
c_{217}	1.00136	$1.0012^{+0.0031}_{-0.0030}$ (+4.6 σ)	k_D	0.14030	$0.14028^{+0.00078}_{-0.00081}$ (−0.5 σ)	χ^2_{CamSpec}	7052.0	7064.2 (ν : 14.4)
H_0	68.05	$68.08^{+0.88}_{-0.89}$ (+1.3 σ)	$100\theta_D$	0.160903	$0.16091^{+0.00050}_{-0.00047}$ (−0.6 σ)	χ^2_{H073p45}	10.58	10.5 (ν : 1.6)
Ω_Λ	0.6951	$0.695^{+0.011}_{-0.012}$ (+1.3 σ)	z_{eq}	3358.5	3357^{+47}_{-43} (−1.1 σ)	χ^2_{JLA}	1034.807	1034.87 (ν : 0.0)
Ω_m	0.3049	$0.305^{+0.012}_{-0.011}$ (−1.3 σ)	k_{eq}	0.010251	$0.01025^{+0.00014}_{-0.00013}$ (−1.1 σ)	$\chi^2_{6\text{DF}}$	0.0001	0.025 (ν : 0.0)
$\Omega_m h^2$	0.14119	$0.1411^{+0.0020}_{-0.0018}$ (−1.1 σ)	$100\theta_{\text{eq}}$	0.8213	$0.8216^{+0.0080}_{-0.0085}$ (+1.2 σ)	χ^2_{MGS}	1.68	1.77 (ν : 0.1)
$\Omega_m h^3$	0.09608	$0.09607^{+0.00082}_{-0.00083}$ (+0.4 σ)	$100\theta_{s,\text{eq}}$	0.45359	$0.4538^{+0.0042}_{-0.0044}$ (+1.2 σ)	χ^2_{DR12BAO}	3.49	3.85 (ν : 0.2)
σ_8	0.8080	$0.808^{+0.013}_{-0.012}$ (−0.4 σ)	$H(0.15)$	73.26	$73.28^{+0.77}_{-0.77}$ (+1.3 σ)	χ^2_{prior}	2.1	7.5 (ν : 6.0) (+0.0 σ)
S_8	0.8146	$0.814^{+0.022}_{-0.021}$ (−1.1 σ)	$D_M(0.15)$	637.5	$637.3^{+7.6}_{-7.4}$ (−1.3 σ)	χ^2_{CMB}	7480.6	7494.3 (ν : 15.8) (+1147.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4462	$0.446^{+0.012}_{-0.012}$ (−1.1 σ)	$H(0.38)$	83.25	$83.27^{+0.59}_{-0.59}$ (+1.3 σ)	χ^2_{BAO}	5.16	5.64 (ν : 0.2)
$\sigma_8 \Omega_m^{0.25}$	0.6004	$0.600^{+0.012}_{-0.012}$ (−0.9 σ)	$D_M(0.38)$	1522.1	1522^{+15}_{-15} (−1.3 σ)			
$\sigma_8/h^{0.5}$	0.9795	$0.979^{+0.017}_{-0.018}$ (−0.9 σ)	$H(0.51)$	89.90	$89.91^{+0.50}_{-0.50}$ (+1.3 σ)			

Best-fit $\chi^2_{\text{eff}} = 8533.26$; $\bar{\chi}^2_{\text{eff}} = 8552.81$; $R - 1 = 0.02978$
 χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.49 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p.teb_consext8: 9.17 small_100x143_offlike5_EE_Aplanck_B: 396.83 commander_dx12_v3_2_29: 22.60 CamSpec like_10.7HM: 7051.98 Hubble - H073p45: 10.58 SN - JLA Pantheon18: 1034.81

2.121 base_CamSpecHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02216^{+0.00039}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+12}_{-12} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0030}_{-0.0030} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$H(0.38)$	$82.66^{+0.86}_{-0.83} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04086^{+0.00089}_{-0.00088} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.9^{+2.4}_{-2.3} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1538^{+23}_{-23} \quad (-0.3\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.049}_{-0.048} \quad (-0.2\sigma)$	$H(0.51)$	$89.43^{+0.70}_{-0.67} \quad (+0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.026}_{-0.024} \quad (+0.1\sigma)$	z_{re}	$< 8.86 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1992^{+27}_{-27} \quad (-0.3\sigma)$
n_{s}	$0.9643^{+0.0094}_{-0.0093} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.055}_{-0.050} \quad (+0.1\sigma)$	$H(0.61)$	$95.09^{+0.58}_{-0.55} \quad (+0.2\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.022}_{-0.022} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2317^{+29}_{-29} \quad (-0.3\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1229^{+25}_{-24} \quad (-0.3\sigma)$	$H(2.33)$	$236.4^{+1.8}_{-1.8} \quad (-0.2\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5706^{+82}_{-81} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5774^{+27}_{-28} \quad (-0.2\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0099} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.7\sigma)$	D_{2000}	$229.5^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9643^{+0.0094}_{-0.0093} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6633^{+0.0090}_{-0.0085} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24530^{+0.00016}_{-0.00018} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00016}_{-0.00019} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0084}_{-0.0078} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.627^{+0.075}_{-0.073} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.4706^{+0.0093}_{-0.0096} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.821^{+0.061}_{-0.062} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0080}_{-0.0074} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.21^{+0.66}_{-0.65} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0042}_{-0.0038} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.56^{+0.70}_{-0.69} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0046}_{-0.0042} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04107^{+0.00087}_{-0.00087} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.886^{+0.066}_{-0.065} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.6^{+4.0}_{-4.0} \quad (-0.3\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.45^{+0.83}_{-0.85} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
H_0	$67.1^{+1.4}_{-1.3} \quad (+0.3\sigma)$	r_{drag}	$147.29^{+0.72}_{-0.71} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.49 \quad (\nu: 0.4)$
Ω_{Λ}	$0.682^{+0.018}_{-0.019} \quad (+0.3\sigma)$	k_{D}	$0.14049^{+0.00086}_{-0.00085} \quad (-0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{m}	$0.318^{+0.019}_{-0.018} \quad (-0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16105^{+0.00050}_{-0.00049} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.5) \quad (-0.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1429^{+0.0028}_{-0.0028} \quad (-0.2\sigma)$	z_{eq}	$3401^{+67}_{-68} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.6 \quad (\nu: 13.0)$
$\Omega_{\mathrm{m}} h^3$	$0.09593^{+0.00086}_{-0.00084} \quad (+0.1\sigma)$	k_{eq}	$0.01038^{+0.00020}_{-0.00021} \quad (-0.2\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.811^{+0.012}_{-0.012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.013}_{-0.012} \quad (+0.2\sigma)$	χ_{CMB}^2	$7492.4 \quad (\nu: 13.9) \quad (+1147.3\sigma)$
S_8	$0.835^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4494^{+0.0066}_{-0.0064} \quad (+0.2\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$H(0.15)$	$72.5^{+1.2}_{-1.1} \quad (+0.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7500.01$; $R - 1 = 0.00502$

2.122 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00037}_{-0.00037} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.018}_{-0.017} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+17}_{-17} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$H(0.51)$	$89.66^{+0.54}_{-0.52} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04102^{+0.00080}_{-0.00082} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.042}_{-0.041} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+20}_{-20} \quad (-0.8\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$H(0.61)$	$95.27^{+0.46}_{-0.45} \quad (+0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.027}_{-0.025} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.058}_{-0.053} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+21}_{-21} \quad (-0.8\sigma)$
n_{s}	$0.9667^{+0.0080}_{-0.0081} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$H(2.33)$	$235.8^{+1.4}_{-1.3} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0048} \quad (+0.1\sigma)$	D_{40}	$1225^{+24}_{-23} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+23}_{-23} \quad (-0.7\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5714^{+80}_{-78} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815.1^{+9.9}_{-9.8} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.4744^{+0.0099}_{-0.0099} \quad (-0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$229.9^{+3.5}_{-3.4} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6631^{+0.0099}_{-0.0087} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.9667^{+0.0080}_{-0.0081} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.4731^{+0.0089}_{-0.0088} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	Y_{P}	$0.24533^{+0.00015}_{-0.00016} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0088}_{-0.0083} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00015}_{-0.00016} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4681^{+0.0082}_{-0.0081} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.613^{+0.071}_{-0.068} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0084}_{-0.0079} \quad (+0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.805^{+0.052}_{-0.052} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0043}_{-0.0040} \quad (+0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.40}$	z_*	$1090.03^{+0.56}_{-0.55} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0046}_{-0.0043} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	r_*	$144.77^{+0.55}_{-0.56} \quad (+0.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04122^{+0.00079}_{-0.00081} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.4^{+4.1}_{-4.0} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.904^{+0.055}_{-0.055} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.54^{+0.82}_{-0.86} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.35 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.49^{+0.61}_{-0.61} \quad (+0.6\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.8) \quad (+0.1\sigma)$
H_0	$67.58^{+0.97}_{-0.96} \quad (+0.8\sigma)$	k_{D}	$0.14034^{+0.00081}_{-0.00081} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.04 \quad (\nu: 0.4) \quad (-0.7\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00050}_{-0.00049} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.0 \quad (\nu: 13.4)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.8\sigma)$	z_{eq}	$3378^{+50}_{-49} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09595^{+0.00085}_{-0.00082} \quad (+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0093}_{-0.0091} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.1)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0048}_{-0.0047} \quad (+0.7\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.0) \quad (+0.1\sigma)$
S_8	$0.824^{+0.024}_{-0.023} \quad (-0.6\sigma)$	$H(0.15)$	$72.85^{+0.84}_{-0.83} \quad (+0.8\sigma)$	χ_{CMB}^2	$7492.6 \quad (\nu: 14.1) \quad (+1147.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.5^{+8.3}_{-8.2} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.38)$	$82.95^{+0.64}_{-0.63} \quad (+0.8\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7506.32; R - 1 = 0.00854$

2.123 base_CamSpecHM_TT_lowl_lowE_lensing_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02234^{+0.00035}_{-0.00038} \quad (+1.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.015}_{-0.016} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-11} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1181^{+0.0031}_{-0.0029} \quad (-1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.020}_{-0.023} \quad (-0.9\sigma)$	$H(0.38)$	$83.28^{+0.86}_{-0.90} \quad (+1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04121^{+0.00088}_{-0.00087} \quad (+1.0\sigma)$	$r_{\mathrm{drag}}h$	$100.5^{+2.3}_{-2.5} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+24}_{-23} \quad (-1.3\sigma)$
τ	$0.059^{+0.016}_{-0.015} \quad (+0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.048}_{-0.051} \quad (-0.8\sigma)$	$H(0.51)$	$89.92^{+0.71}_{-0.71} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.048^{+0.030}_{-0.027} \quad (+0.5\sigma)$	z_{re}	$8.1^{+1.4}_{-1.5} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+28}_{-27} \quad (-1.3\sigma)$
n_{s}	$0.9692^{+0.0099}_{-0.0093} \quad (+1.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.107^{+0.063}_{-0.058} \quad (+0.5\sigma)$	$H(0.61)$	$95.48^{+0.59}_{-0.57} \quad (+1.3\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0046} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.873^{+0.023}_{-0.025} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+31}_{-29} \quad (-1.3\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1221^{+24}_{-25} \quad (-0.8\sigma)$	$H(2.33)$	$235.3^{+1.9}_{-1.8} \quad (-1.1\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5724^{+80}_{-78} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+26}_{-27} \quad (-1.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2535^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.015}_{-0.017} \quad (-1.0\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$816.4^{+9.9}_{-9.8} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.6\sigma)$	D_{2000}	$230.5^{+3.4}_{-3.5} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.014} \quad (-1.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.24}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9692^{+0.0099}_{-0.0093} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0094} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00014}_{-0.00015} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.010}_{-0.012} \quad (-0.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00014}_{-0.00016} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0092}_{-0.0085} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.593^{+0.071}_{-0.067} \quad (-1.0\sigma)$	$f\sigma_8(0.61)$	$0.4658^{+0.0097}_{-0.010} \quad (-0.8\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.060}_{-0.061} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0092}_{-0.0082} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.33}$	z_*	$1089.80^{+0.63}_{-0.59} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0047}_{-0.0043} \quad (+0.5\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.95^{+0.71}_{-0.75} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3079^{+0.0051}_{-0.0048} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.30}$	$100\theta_*$	$1.04140^{+0.00087}_{-0.00087} \quad (+0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.918^{+0.073}_{-0.066} \quad (+0.9\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.0} \quad (-0.6\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.72^{+0.75}_{-0.82} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
H_0	$68.1^{+1.3}_{-1.4} \quad (+1.3\sigma)$	r_{drag}	$147.63^{+0.76}_{-0.76} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.8 \quad (\nu: 1.0)$
Ω_{Λ}	$0.695^{+0.017}_{-0.019} \quad (+1.3\sigma)$	k_{D}	$0.14027^{+0.00086}_{-0.00094} \quad (-0.5\sigma)$	χ_{small}^2	$397.9 \quad (\nu: 3.4) \quad (+0.5\sigma)$
Ω_{m}	$0.305^{+0.019}_{-0.017} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16091^{+0.00050}_{-0.00047} \quad (-0.6\sigma)$	χ_{lowl}^2	$22.67 \quad (\nu: 0.4) \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1411^{+0.0030}_{-0.0027} \quad (-1.2\sigma)$	z_{eq}	$3357^{+71}_{-65} \quad (-1.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.4 \quad (\nu: 15.2)$
$\Omega_{\mathrm{m}}h^3$	$0.09607^{+0.00082}_{-0.00083} \quad (+0.4\sigma)$	k_{eq}	$0.01024^{+0.00022}_{-0.00020} \quad (-1.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.6 \quad (\nu: 3.5)$
σ_8	$0.808^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.012}_{-0.014} \quad (+1.2\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 5.9) \quad (+0.0\sigma)$
S_8	$0.814^{+0.030}_{-0.035} \quad (-1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0064}_{-0.0070} \quad (+1.2\sigma)$	χ_{CMB}^2	$7494.7 \quad (\nu: 19.8) \quad (+1147.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.446^{+0.017}_{-0.019} \quad (-1.1\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.2} \quad (+1.3\sigma)$		
$\bar{\chi}_{\mathrm{eff}}^2 = 7512.76; R - 1 = 0.03489$					

2.124 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02233^{+0.00034}_{-0.00036} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$D_M(0.38)$	$1522^{+16}_{-16} \quad (-1.3\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0021}_{-0.0019} \quad (-1.2\sigma)$	$r_{\text{drag}} h$	$100.5^{+1.6}_{-1.6} \quad (+1.2\sigma)$	$H(0.51)$	$89.90^{+0.52}_{-0.51} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04119^{+0.00078}_{-0.00080} \quad (+0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.042}_{-0.042} \quad (-0.8\sigma)$	$D_M(0.51)$	$1973^{+19}_{-18} \quad (-1.3\sigma)$
τ	$0.059^{+0.014}_{-0.013} \quad (+0.8\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.7\sigma)$	$H(0.61)$	$95.47^{+0.45}_{-0.44} \quad (+1.3\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.028}_{-0.027} \quad (+0.4\sigma)$	$10^9 A_s$	$2.107^{+0.060}_{-0.057} \quad (+0.4\sigma)$	$D_M(0.61)$	$2296^{+21}_{-20} \quad (-1.3\sigma)$
n_s	$0.9690^{+0.0078}_{-0.0081} \quad (+1.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.874^{+0.021}_{-0.020} \quad (-0.8\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.2} \quad (-1.1\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0047} \quad (+0.2\sigma)$	D_{40}	$1222^{+23}_{-23} \quad (-0.8\sigma)$	$D_M(2.33)$	$5757^{+22}_{-22} \quad (-1.2\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5725^{+78}_{-79} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.011}_{-0.012} \quad (-1.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$816.5^{+9.9}_{-9.8} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.4711^{+0.0098}_{-0.0098} \quad (-0.9\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.5^{+3.4}_{-3.5} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0092} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.6\sigma)$	$n_{s,0.002}$	$0.9690^{+0.0078}_{-0.0081} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.4705^{+0.0088}_{-0.0090} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.24}_{-0.25}$	Y_{P}	$0.24538^{+0.00014}_{-0.00015} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0094}_{-0.0085} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24670^{+0.00014}_{-0.00015} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.4660^{+0.0082}_{-0.0083} \quad (-0.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.593^{+0.068}_{-0.066} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0090}_{-0.0082} \quad (+0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.785^{+0.051}_{-0.050} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0045}_{-0.0043} \quad (+0.5\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	z_*	$1089.81^{+0.54}_{-0.50} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0047}_{-0.0045} \quad (+0.7\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.33}$	r_*	$144.93^{+0.52}_{-0.54} \quad (+1.0\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	$1.04138^{+0.00076}_{-0.00081} \quad (+0.9\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.0} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$13.917^{+0.053}_{-0.054} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	z_{drag}	$1059.72^{+0.79}_{-0.82} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.6 \quad (\nu: 0.6)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.61^{+0.58}_{-0.61} \quad (+0.8\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 2.6) \quad (+0.4\sigma)$
H_0	$68.05^{+0.90}_{-0.92} \quad (+1.3\sigma)$	k_{D}	$0.14029^{+0.00079}_{-0.00080} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.69 \quad (\nu: 0.3) \quad (-0.9\sigma)$
Ω_Λ	$0.695^{+0.011}_{-0.012} \quad (+1.2\sigma)$	$100\theta_{\text{D}}$	$0.16091^{+0.00051}_{-0.00047} \quad (-0.6\sigma)$	χ_{CamSpec}^2	$7064.1 \quad (\nu: 14.4)$
Ω_{m}	$0.305^{+0.012}_{-0.011} \quad (-1.2\sigma)$	z_{eq}	$3358^{+48}_{-44} \quad (-1.1\sigma)$	χ_{H073p45}^2	$10.6 \quad (\nu: 1.7)$
$\Omega_{\text{m}} h^2$	$0.1412^{+0.0020}_{-0.0018} \quad (-1.1\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00013} \quad (-1.1\sigma)$	$\chi_{6\text{DF}}^2$	$0.027 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09607^{+0.00082}_{-0.00083} \quad (+0.4\sigma)$	$100\theta_{\text{eq}}$	$0.8214^{+0.0082}_{-0.0088} \quad (+1.2\sigma)$	χ_{MGS}^2	$1.74 \quad (\nu: 0.1)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4536^{+0.0043}_{-0.0045} \quad (+1.2\sigma)$	χ_{DR12BAO}^2	$3.90 \quad (\nu: 0.3)$
S_8	$0.815^{+0.022}_{-0.022} \quad (-1.0\sigma)$	$H(0.15)$	$73.26^{+0.79}_{-0.80} \quad (+1.3\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 6.0) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.446^{+0.012}_{-0.012} \quad (-1.0\sigma)$	$D_M(0.15)$	$637.5^{+7.9}_{-7.6} \quad (-1.3\sigma)$	χ_{CMB}^2	$7494.1 \quad (\nu: 15.7) \quad (+1147.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$H(0.38)$	$83.25^{+0.61}_{-0.61} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.67 \quad (\nu: 0.2)$

$\bar{\chi}_{\text{eff}}^2 = 7517.92; R - 1 = 0.02825$

2.125 base_CamSpecHM_TT_lowl_lowE_lensing_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00039}_{-0.00039} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.015}_{-0.014} \quad (-0.3\sigma)$	$D_M(0.15)$	$644^{+11}_{-11} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.1197^{+0.0027}_{-0.0028} \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$H(0.38)$	$82.79^{+0.81}_{-0.78} \quad (+0.5\sigma)$
$100\theta_{MC}$	$1.04093^{+0.00086}_{-0.00087} \quad (+0.3\sigma)$	$r_{drag} h$	$99.2^{+2.2}_{-2.1} \quad (+0.5\sigma)$	$D_M(0.38)$	$1535^{+22}_{-22} \quad (-0.5\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.442^{+0.048}_{-0.047} \quad (-0.3\sigma)$	$H(0.51)$	$89.53^{+0.66}_{-0.64} \quad (+0.5\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.027}_{-0.024} \quad (+0.2\sigma)$	z_{re}	$< 8.95 \quad (+0.3\sigma)$	$D_M(0.51)$	$1988^{+25}_{-26} \quad (-0.5\sigma)$
n_s	$0.9653^{+0.0090}_{-0.0088} \quad (+0.5\sigma)$	$10^9 A_s$	$2.097^{+0.056}_{-0.051} \quad (+0.1\sigma)$	$H(0.61)$	$95.17^{+0.55}_{-0.53} \quad (+0.5\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.878^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$D_M(0.61)$	$2312^{+27}_{-28} \quad (-0.5\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1227^{+24}_{-24} \quad (-0.4\sigma)$	$H(2.33)$	$236.2^{+1.7}_{-1.7} \quad (-0.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5710^{+82}_{-78} \quad (-0.1\sigma)$	$D_M(2.33)$	$5771^{+26}_{-26} \quad (-0.4\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.015}_{-0.015} \quad (-0.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.010} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.7\sigma)$	D_{2000}	$229.7^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.012}_{-0.012} \quad (-0.3\sigma)$
$r_{143 \times 217}^{PS}$	$0.65^{+0.24}_{-0.24}$	$n_{s,0.002}$	$0.9653^{+0.0090}_{-0.0088} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6632^{+0.0096}_{-0.0084} \quad (+0.0\sigma)$
$r_{143 \times 217}^{CIB}$	—	Y_P	$0.24532^{+0.00016}_{-0.00017} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.010}_{-0.010} \quad (-0.3\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P^{BBN}	$0.24664^{+0.00016}_{-0.00017} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0086}_{-0.0080} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.620^{+0.075}_{-0.072} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.4695^{+0.0091}_{-0.0092} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.40}$	Age/Gyr	$13.814^{+0.059}_{-0.060} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0082}_{-0.0076} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	z_*	$1090.12^{+0.63}_{-0.64} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0042}_{-0.0039} \quad (+0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.65^{+0.66}_{-0.66} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0046}_{-0.0042} \quad (+0.3\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04113^{+0.00084}_{-0.00086} \quad (+0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$D_M(z_*)/Gpc$	$13.893^{+0.063}_{-0.063} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-4.0} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.49^{+0.82}_{-0.86} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
H_0	$67.3^{+1.3}_{-1.2} \quad (+0.5\sigma)$	r_{drag}	$147.37^{+0.70}_{-0.69} \quad (+0.3\sigma)$	$\chi_{lensing}^2$	$9.41 \quad (\nu: 0.3)$
Ω_Λ	$0.685^{+0.017}_{-0.017} \quad (+0.5\sigma)$	k_D	$0.14043^{+0.00085}_{-0.00084} \quad (-0.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (+0.0\sigma)$
Ω_m	$0.315^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$100\theta_D$	$0.16102^{+0.00050}_{-0.00049} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.29 \quad (\nu: 0.5) \quad (-0.5\sigma)$
$\Omega_m h^2$	$0.1425^{+0.0026}_{-0.0026} \quad (-0.4\sigma)$	z_{eq}	$3391^{+63}_{-63} \quad (-0.4\sigma)$	$\chi_{CamSpec}^2$	$7062.8 \quad (\nu: 13.3)$
$\Omega_m h^3$	$0.09594^{+0.00086}_{-0.00083} \quad (+0.1\sigma)$	k_{eq}	$0.01035^{+0.00019}_{-0.00019} \quad (-0.4\sigma)$	χ_{JLA}^2	$1035.39 \quad (\nu: 0.2)$
σ_8	$0.810^{+0.012}_{-0.012} \quad (-0.2\sigma)$	$100\theta_{eq}$	$0.815^{+0.012}_{-0.012} \quad (+0.4\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.1) \quad (+0.1\sigma)$
S_8	$0.830^{+0.030}_{-0.029} \quad (-0.4\sigma)$	$100\theta_{s,eq}$	$0.4504^{+0.0062}_{-0.0060} \quad (+0.4\sigma)$	χ_{CMB}^2	$7492.5 \quad (\nu: 14.2) \quad (+1147.3\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.455^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$H(0.15)$	$72.6^{+1.1}_{-1.1} \quad (+0.5\sigma)$		

$\bar{\chi}_{eff}^2 = 8535.44$; $R - 1 = 0.00636$

2.126 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_JLA_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00037}_{-0.00036}$ (+1.0 σ)	$r_{\mathrm{drag}} h$	$100.5^{+1.5}_{-1.6}$ (+1.3 σ)	$D_{\mathrm{M}}(0.51)$	1972^{+19}_{-19} (−1.3 σ)
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0020}_{-0.0020}$ (−1.2 σ)	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.041}_{-0.043}$ (−0.9 σ)	$H(0.61)$	$95.48^{+0.45}_{-0.45}$ (+1.4 σ)
$100\theta_{\mathrm{MC}}$	$1.04120^{+0.00079}_{-0.00081}$ (+0.9 σ)	z_{re}	$8.1^{+1.3}_{-1.4}$ (+0.7 σ)	$D_{\mathrm{M}}(0.61)$	2295^{+21}_{-21} (−1.3 σ)
τ	$0.059^{+0.015}_{-0.013}$ (+0.8 σ)	$10^9 A_{\mathrm{s}}$	$2.107^{+0.060}_{-0.057}$ (+0.4 σ)	$H(2.33)$	$235.3^{+1.3}_{-1.3}$ (−1.1 σ)
$\ln(10^{10} A_{\mathrm{s}})$	$3.048^{+0.029}_{-0.026}$ (+0.4 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.022}_{-0.021}$ (−0.8 σ)	$D_{\mathrm{M}}(2.33)$	5757^{+22}_{-23} (−1.3 σ)
n_{s}	$0.9692^{+0.0079}_{-0.0077}$ (+1.2 σ)	D_{40}	1221^{+24}_{-23} (−0.8 σ)	$f\sigma_8(0.15)$	$0.451^{+0.011}_{-0.012}$ (−1.1 σ)
y_{cal}	$1.0008^{+0.0051}_{-0.0051}$ (+0.2 σ)	D_{220}	5726^{+80}_{-77} (+0.3 σ)	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011}$ (−0.3 σ)
A_{100}^{PS}	242^{+50}_{-50} (−0.8 σ)	D_{810}	2535^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.38)$	$0.4706^{+0.0095}_{-0.0099}$ (−1.0 σ)
A_{143}^{PS}	40^{+20}_{-20} (−1.2 σ)	D_{1420}	$817^{+10}_{-9.9}$ (+0.4 σ)	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0090}$ (−0.0 σ)
A_{217}^{PS}	102^{+30}_{-30} (−1.3 σ)	D_{2000}	$230.6^{+3.5}_{-3.6}$ (+0.6 σ)	$f\sigma_8(0.51)$	$0.4700^{+0.0086}_{-0.0088}$ (−0.9 σ)
A_{217}^{CIB}	40^{+10}_{-20} (−1.2 σ)	$n_{\mathrm{s},0.002}$	$0.9692^{+0.0079}_{-0.0077}$ (+1.2 σ)	$\sigma_8(0.51)$	$0.6209^{+0.0091}_{-0.0088}$ (+0.1 σ)
A_{143}^{tSZ}	< 7.47 (−0.7 σ)	Y_{P}	$0.24538^{+0.00014}_{-0.00015}$ (+1.0 σ)	$f\sigma_8(0.61)$	$0.4657^{+0.0080}_{-0.0080}$ (−0.8 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00014}_{-0.00015}$ (+1.0 σ)	$\sigma_8(0.61)$	$0.5910^{+0.0089}_{-0.0082}$ (+0.2 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.069}_{-0.067}$ (−1.0 σ)	$f\sigma_8(2.33)$	$0.2983^{+0.0045}_{-0.0041}$ (+0.5 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.051}_{-0.052}$ (−1.3 σ)	$\sigma_8(2.33)$	$0.3078^{+0.0047}_{-0.0044}$ (+0.7 σ)
A^{kSZ}	—	z_*	$1089.79^{+0.52}_{-0.54}$ (−1.3 σ)	f_{2000}^{143}	30^{+6}_{-6} (−0.4 σ)
A_{100}^{dust}	$1.02^{+0.36}_{-0.38}$	r_*	$144.95^{+0.52}_{-0.54}$ (+1.0 σ)	f_{2000}^{217}	$107.0^{+4.2}_{-4.0}$ (−0.6 σ)
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	$100\theta_*$	$1.04139^{+0.00077}_{-0.00081}$ (+0.9 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.919^{+0.053}_{-0.055}$ (+0.9 σ)	$\chi_{\mathrm{lensing}}^2$	9.6 (ν : 0.6)
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.30}$	z_{drag}	$1059.73^{+0.78}_{-0.83}$ (+0.7 σ)	χ_{small}^2	397.7 (ν : 2.6) (+0.4 σ)
c_{100}	$0.9976^{+0.0020}_{-0.0019}$ (−3.3 σ)	r_{drag}	$147.64^{+0.61}_{-0.58}$ (+0.9 σ)	χ_{lowl}^2	22.66 (ν : 0.3) (−1.0 σ)
c_{217}	$1.0012^{+0.0033}_{-0.0030}$ (+4.7 σ)	k_{D}	$0.14027^{+0.00075}_{-0.00082}$ (−0.5 σ)	$\chi_{\mathrm{CamSpec}}^2$	7064.4 (ν : 14.7)
H_0	$68.10^{+0.95}_{-0.92}$ (+1.3 σ)	$100\theta_{\mathrm{D}}$	$0.16091^{+0.00051}_{-0.00048}$ (−0.6 σ)	$\chi_{\mathrm{H073p45}}^2$	10.4 (ν : 1.6)
Ω_{Λ}	$0.696^{+0.011}_{-0.012}$ (+1.3 σ)	z_{eq}	3356^{+47}_{-45} (−1.2 σ)	χ_{JLA}^2	706.61 (ν : 0.0)
Ω_{m}	$0.304^{+0.012}_{-0.011}$ (−1.3 σ)	k_{eq}	$0.01024^{+0.00014}_{-0.00014}$ (−1.2 σ)	$\chi_{6\mathrm{DF}}^2$	0.026 (ν : 0.0)
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0020}_{-0.0019}$ (−1.2 σ)	$100\theta_{\mathrm{eq}}$	$0.8219^{+0.0090}_{-0.0086}$ (+1.2 σ)	χ_{MGS}^2	1.80 (ν : 0.1)
$\Omega_{\mathrm{m}} h^3$	$0.09607^{+0.00084}_{-0.00084}$ (+0.4 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4539^{+0.0045}_{-0.0044}$ (+1.2 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.84 (ν : 0.2)
σ_8	$0.808^{+0.013}_{-0.011}$ (−0.5 σ)	$H(0.15)$	$73.31^{+0.83}_{-0.80}$ (+1.3 σ)	χ_{prior}^2	7.5 (ν : 6.4) (+0.1 σ)
S_8	$0.813^{+0.022}_{-0.022}$ (−1.1 σ)	$D_{\mathrm{M}}(0.15)$	$637.1^{+7.9}_{-7.9}$ (−1.3 σ)	χ_{CMB}^2	7494.4 (ν : 16.3) (+1147.6 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.446^{+0.012}_{-0.012}$ (−1.1 σ)	$H(0.38)$	$83.28^{+0.63}_{-0.62}$ (+1.4 σ)	χ_{BAO}^2	5.67 (ν : 0.2)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.012}_{-0.012}$ (−0.9 σ)	$D_{\mathrm{M}}(0.38)$	1521^{+16}_{-16} (−1.3 σ)		
$\sigma_8/h^{0.5}$	$0.979^{+0.017}_{-0.018}$ (−0.9 σ)	$H(0.51)$	$89.92^{+0.51}_{-0.52}$ (+1.4 σ)		

$\bar{\chi}_{\mathrm{eff}}^2 = 8224.63$; $R - 1 = 0.08788$

2.127 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02224^{+0.00037}_{-0.00036}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.017}$ (−0.6 σ)	$D_M(0.38)$	1529^{+16}_{-16} (−0.8 σ)
$\Omega_c h^2$	$0.1190^{+0.0021}_{-0.0021}$ (−0.8 σ)	$r_{\text{drag}} h$	$99.8^{+1.6}_{-1.6}$ (+0.8 σ)	$H(0.51)$	$89.69^{+0.52}_{-0.51}$ (+0.8 σ)
$100\theta_{\text{MC}}$	$1.04104^{+0.00080}_{-0.00082}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.041}_{-0.040}$ (−0.6 σ)	$D_M(0.51)$	1981^{+19}_{-19} (−0.8 σ)
τ	$0.057^{+0.014}_{-0.013}$ (+0.5 σ)	z_{re}	$7.9^{+1.2}_{-1.3}$ (+0.5 σ)	$H(0.61)$	$95.29^{+0.45}_{-0.44}$ (+0.8 σ)
$\ln(10^{10} A_s)$	$3.045^{+0.028}_{-0.026}$ (+0.3 σ)	$10^9 A_s$	$2.101^{+0.058}_{-0.054}$ (+0.3 σ)	$D_M(0.61)$	2305^{+21}_{-21} (−0.8 σ)
n_s	$0.9670^{+0.0079}_{-0.0080}$ (+0.8 σ)	$10^9 A_s e^{-2\tau}$	$1.876^{+0.021}_{-0.020}$ (−0.6 σ)	$H(2.33)$	$235.8^{+1.4}_{-1.3}$ (−0.8 σ)
y_{cal}	$1.0007^{+0.0050}_{-0.0048}$ (+0.1 σ)	D_{40}	1224^{+23}_{-23} (−0.6 σ)	$D_M(2.33)$	5765^{+22}_{-22} (−0.8 σ)
A_{100}^{PS}	242^{+50}_{-50} (−0.8 σ)	D_{220}	5715^{+80}_{-78} (+0.1 σ)	$f\sigma_8(0.15)$	$0.455^{+0.012}_{-0.012}$ (−0.7 σ)
A_{143}^{PS}	41^{+20}_{-20} (−1.1 σ)	D_{810}	2534^{+26}_{-26} (−0.2 σ)	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010}$ (−0.2 σ)
A_{217}^{PS}	101^{+30}_{-30} (−1.3 σ)	D_{1420}	$815^{+10}_{-9.8}$ (+0.2 σ)	$f\sigma_8(0.38)$	$0.4738^{+0.0097}_{-0.0097}$ (−0.6 σ)
A_{217}^{CIB}	41^{+10}_{-10} (−1.1 σ)	D_{2000}	$230.0^{+3.4}_{-3.4}$ (+0.3 σ)	$\sigma_8(0.38)$	$0.6631^{+0.0095}_{-0.0091}$ (−0.0 σ)
A_{143}^{tSZ}	< 7.43 (−0.6 σ)	$n_{s,0.002}$	$0.9670^{+0.0079}_{-0.0080}$ (+0.8 σ)	$f\sigma_8(0.51)$	$0.4726^{+0.0087}_{-0.0088}$ (−0.6 σ)
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.24}_{-0.24}$	Y_{P}	$0.24534^{+0.00015}_{-0.00016}$ (+0.5 σ)	$\sigma_8(0.51)$	$0.6206^{+0.0089}_{-0.0084}$ (+0.1 σ)
$r_{143 \times 217}^{\text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24667^{+0.00015}_{-0.00016}$ (+0.5 σ)	$f\sigma_8(0.61)$	$0.4678^{+0.0081}_{-0.0080}$ (−0.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.611^{+0.070}_{-0.067}$ (−0.6 σ)	$\sigma_8(0.61)$	$0.5906^{+0.0085}_{-0.0080}$ (+0.1 σ)
A^{kSZ}	—	Age/Gyr	$13.803^{+0.052}_{-0.052}$ (−0.7 σ)	$f\sigma_8(2.33)$	$0.2978^{+0.0043}_{-0.0041}$ (+0.3 σ)
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	z_*	$1090.00^{+0.54}_{-0.54}$ (−0.7 σ)	$\sigma_8(2.33)$	$0.3071^{+0.0046}_{-0.0043}$ (+0.5 σ)
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	r_*	$144.80^{+0.55}_{-0.54}$ (+0.7 σ)	f_{2000}^{143}	30^{+6}_{-6} (−0.3 σ)
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04124^{+0.00079}_{-0.00081}$ (+0.6 σ)	f_{2000}^{217}	$107.3^{+4.1}_{-4.0}$ (−0.4 σ)
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$13.907^{+0.053}_{-0.054}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	33^{+4}_{-4} (−0.4 σ)
c_{100}	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	z_{drag}	$1059.55^{+0.84}_{-0.84}$ (+0.4 σ)	χ_{lensing}^2	9.36 (ν : 0.3)
c_{217}	$1.0012^{+0.0031}_{-0.0030}$ (+4.6 σ)	r_{drag}	$147.52^{+0.61}_{-0.60}$ (+0.6 σ)	χ_{small}^2	397.2 (ν : 1.9) (+0.2 σ)
H_0	$67.65^{+0.93}_{-0.92}$ (+0.8 σ)	k_{D}	$0.14032^{+0.00080}_{-0.00080}$ (−0.4 σ)	χ_{lowl}^2	22.98 (ν : 0.3) (−0.7 σ)
Ω_Λ	$0.690^{+0.012}_{-0.012}$ (+0.8 σ)	$100\theta_{\text{D}}$	$0.16100^{+0.00050}_{-0.00048}$ (−0.3 σ)	χ_{CamSpec}^2	7063.2 (ν : 13.5)
Ω_{m}	$0.310^{+0.012}_{-0.012}$ (−0.8 σ)	z_{eq}	3374^{+49}_{-47} (−0.8 σ)	χ_{JLA}^2	1035.06 (ν : 0.0)
$\Omega_{\text{m}} h^2$	$0.1418^{+0.0020}_{-0.0020}$ (−0.8 σ)	k_{eq}	$0.01030^{+0.00015}_{-0.00014}$ (−0.8 σ)	$\chi_{6\text{DF}}^2$	0.046 (ν : 0.0)
$\Omega_{\text{m}} h^3$	$0.09596^{+0.00085}_{-0.00082}$ (+0.2 σ)	$100\theta_{\text{eq}}$	$0.8181^{+0.0089}_{-0.0088}$ (+0.8 σ)	χ_{MGS}^2	1.36 (ν : 0.1)
σ_8	$0.809^{+0.012}_{-0.011}$ (−0.3 σ)	$100\theta_{\text{s,eq}}$	$0.4520^{+0.0047}_{-0.0046}$ (+0.8 σ)	χ_{DR12BAO}^2	4.6 (ν : 0.9)
S_8	$0.822^{+0.023}_{-0.023}$ (−0.7 σ)	$H(0.15)$	$72.91^{+0.81}_{-0.80}$ (+0.8 σ)	χ_{prior}^2	7.6 (ν : 6.0) (+0.1 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.013}_{-0.013}$ (−0.7 σ)	$D_M(0.15)$	$640.9^{+8.0}_{-7.9}$ (−0.8 σ)	χ_{CMB}^2	7492.8 (ν : 14.3) (+1147.3 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.604^{+0.012}_{-0.012}$ (−0.6 σ)	$H(0.38)$	$82.99^{+0.62}_{-0.61}$ (+0.8 σ)	χ_{BAO}^2	6.0 (ν : 0.5)

$\bar{\chi}_{\text{eff}}^2 = 8541.35$; $R - 1 = 0.00983$

2.128 base_CamSpecHM_TT_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00034}_{-0.00036} \quad (+1.0\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+1.5}_{-1.5} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+18}_{-18} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0020}_{-0.0019} \quad (-1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.042}_{-0.042} \quad (-0.8\sigma)$	$H(0.61)$	$95.48^{+0.44}_{-0.43} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04120^{+0.00077}_{-0.00081} \quad (+0.9\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+20}_{-19} \quad (-1.3\sigma)$
τ	$0.059^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.107^{+0.060}_{-0.057} \quad (+0.5\sigma)$	$H(2.33)$	$235.3^{+1.3}_{-1.2} \quad (-1.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.048^{+0.028}_{-0.027} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.021}_{-0.020} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+22}_{-22} \quad (-1.3\sigma)$
n_{s}	$0.9692^{+0.0078}_{-0.0080} \quad (+1.2\sigma)$	D_{40}	$1221^{+23}_{-23} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.011}_{-0.011} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0047} \quad (+0.2\sigma)$	D_{220}	$5726^{+78}_{-79} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.4708^{+0.0096}_{-0.0096} \quad (-0.9\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{1420}	$816.6^{+9.8}_{-9.8} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0092} \quad (+0.0\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$230.6^{+3.4}_{-3.4} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4703^{+0.0086}_{-0.0089} \quad (-0.9\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9692^{+0.0078}_{-0.0080} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0094}_{-0.0086} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.6\sigma)$	Y_{P}	$0.24538^{+0.00014}_{-0.00015} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4659^{+0.0081}_{-0.0082} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.24}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00014}_{-0.00015} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0090}_{-0.0082} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.067}_{-0.065} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0045}_{-0.0043} \quad (+0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.050}_{-0.049} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3079^{+0.0050}_{-0.0044} \quad (+0.8\sigma)$
A^{kSZ}	—	z_*	$1089.80^{+0.51}_{-0.51} \quad (-1.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	r_*	$144.94^{+0.52}_{-0.54} \quad (+1.0\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.0} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.33}$	$100\theta_*$	$1.04139^{+0.00076}_{-0.00081} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.918^{+0.052}_{-0.054} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.6 \quad (\nu: 0.6)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	z_{drag}	$1059.73^{+0.78}_{-0.82} \quad (+0.7\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 2.7) \quad (+0.5\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	r_{drag}	$147.63^{+0.57}_{-0.59} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.66 \quad (\nu: 0.3) \quad (-1.0\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	k_{D}	$0.14028^{+0.00078}_{-0.00081} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.2 \quad (\nu: 14.4)$
H_0	$68.09^{+0.89}_{-0.89} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16091^{+0.00050}_{-0.00047} \quad (-0.6\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.5 \quad (\nu: 1.5)$
Ω_{Λ}	$0.696^{+0.011}_{-0.012} \quad (+1.3\sigma)$	z_{eq}	$3357^{+46}_{-43} \quad (-1.2\sigma)$	χ_{JLA}^2	$1034.87 \quad (\nu: 0.0)$
Ω_{m}	$0.304^{+0.012}_{-0.011} \quad (-1.3\sigma)$	k_{eq}	$0.01024^{+0.00014}_{-0.00013} \quad (-1.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.025 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0019}_{-0.0018} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8217^{+0.0079}_{-0.0084} \quad (+1.2\sigma)$	χ_{MGS}^2	$1.77 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09607^{+0.00082}_{-0.00083} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0042}_{-0.0044} \quad (+1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.84 \quad (\nu: 0.2)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$H(0.15)$	$73.29^{+0.76}_{-0.77} \quad (+1.3\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 6.1) \quad (+0.0\sigma)$
S_8	$0.814^{+0.022}_{-0.022} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.3^{+7.6}_{-7.3} \quad (-1.3\sigma)$	χ_{CMB}^2	$7494.2 \quad (\nu: 15.7) \quad (+1147.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.446^{+0.012}_{-0.012} \quad (-1.1\sigma)$	$H(0.38)$	$83.27^{+0.60}_{-0.59} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.64 \quad (\nu: 0.2)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+15}_{-15} \quad (-1.3\sigma)$		
$\sigma_8/h^{0.5}$	$0.979^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$H(0.51)$	$89.92^{+0.51}_{-0.49} \quad (+1.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 8552.73$; $R - 1 = 0.03088$

2.129 base_CamSpecHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022277	$0.02229^{+0.00030}_{-0.00030}$ (+0.8 σ)	S_8	0.8292	$0.828^{+0.026}_{-0.025}$ (−0.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.4499	$0.4502^{+0.0051}_{-0.0051}$ (+0.4 σ)
$\Omega_{\mathrm{c}}h^2$	0.11981	$0.1197^{+0.0024}_{-0.0023}$ (−0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4542	$0.454^{+0.014}_{-0.013}$ (−0.5 σ)	$H(0.15)$	72.64	$72.70^{+0.89}_{-0.91}$ (+0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04085	$1.04087^{+0.00061}_{-0.00062}$ (+0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6063	$0.606^{+0.013}_{-0.012}$ (−0.4 σ)	$D_{\mathrm{M}}(0.15)$	643.7	$643.2^{+9.2}_{-8.8}$ (−0.6 σ)
τ	0.0529	$0.054^{+0.015}_{-0.014}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9864	$0.986^{+0.018}_{-0.018}$ (−0.4 σ)	$H(0.38)$	82.81	$82.85^{+0.65}_{-0.66}$ (+0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0402	$3.041^{+0.029}_{-0.028}$ (+0.0 σ)	$r_{\mathrm{drag}}h$	99.13	$99.2^{+1.8}_{-1.8}$ (+0.5 σ)	$D_{\mathrm{M}}(0.38)$	1534.4	1533^{+18}_{-18} (−0.6 σ)
n_{s}	0.9653	$0.9656^{+0.0082}_{-0.0082}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4388	$2.438^{+0.043}_{-0.042}$ (−0.4 σ)	$H(0.51)$	89.56	$89.60^{+0.52}_{-0.53}$ (+0.6 σ)
y_{cal}	1.00062	$1.0005^{+0.0049}_{-0.0049}$ (+0.0 σ)	z_{re}	7.56	$7.6^{+1.5}_{-1.5}$ (+0.1 σ)	$D_{\mathrm{M}}(0.51)$	1987.1	1986^{+21}_{-21} (−0.6 σ)
A_{100}^{PS}	234.9	239^{+50}_{-50} (−0.9 σ)	$10^9 A_{\mathrm{s}}$	2.091	$2.092^{+0.062}_{-0.057}$ (+0.0 σ)	$H(0.61)$	95.204	$95.23^{+0.43}_{-0.43}$ (+0.6 σ)
A_{143}^{PS}	46.5	39^{+20}_{-20} (−1.2 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8810	$1.879^{+0.021}_{-0.021}$ (−0.4 σ)	$D_{\mathrm{M}}(0.61)$	2311.9	2310^{+23}_{-22} (−0.6 σ)
A_{217}^{PS}	103.1	102^{+30}_{-30} (−1.2 σ)	D_{40}	1228.3	1227^{+24}_{-23} (−0.4 σ)	$H(2.33)$	236.34	$236.3^{+1.4}_{-1.4}$ (−0.4 σ)
A_{217}^{CIB}	43.3	40^{+10}_{-10} (−1.2 σ)	D_{220}	5722	5720^{+77}_{-77} (+0.2 σ)	$D_{\mathrm{M}}(2.33)$	5768.1	5767^{+20}_{-20} (−0.7 σ)
A_{143}^{tSZ}	6.16	< 7.49 (−0.6 σ)	D_{810}	2537.0	2535^{+26}_{-26} (−0.1 σ)	$f\sigma_8(0.15)$	0.4585	$0.458^{+0.013}_{-0.013}$ (−0.5 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.667	$0.66^{+0.25}_{-0.25}$	D_{1420}	816.1	$815.7^{+9.5}_{-9.4}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7475	$0.747^{+0.011}_{-0.010}$ (−0.2 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.85	—	D_{2000}	230.34	$230.3^{+3.2}_{-3.2}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.4760	$0.476^{+0.010}_{-0.010}$ (−0.4 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.52	—	$n_{\mathrm{s},0.002}$	0.9653	$0.9656^{+0.0082}_{-0.0082}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6623	$0.6622^{+0.0095}_{-0.0091}$ (−0.1 σ)
A^{kSZ}	0.8	—	Y_{P}	0.245358	$0.24536^{+0.00012}_{-0.00012}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4742	$0.4738^{+0.0092}_{-0.0090}$ (−0.4 σ)
A_{100}^{dust}	1.003	$1.01^{+0.38}_{-0.39}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246684	$0.24669^{+0.00012}_{-0.00012}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6196	$0.6196^{+0.0090}_{-0.0085}$ (−0.1 σ)
A_{143}^{dust}	0.978	$0.96^{+0.34}_{-0.35}$	$10^5\mathrm{D}/\mathrm{H}$	2.603	$2.600^{+0.058}_{-0.055}$ (−0.8 σ)	$f\sigma_8(0.61)$	0.4690	$0.4687^{+0.0083}_{-0.0082}$ (−0.4 σ)
A_{217}^{dust}	0.975	$0.97^{+0.21}_{-0.21}$	Age/Gyr	13.8081	$13.805^{+0.045}_{-0.045}$ (−0.7 σ)	$\sigma_8(0.61)$	0.5895	$0.5895^{+0.0086}_{-0.0081}$ (−0.1 σ)
$A_{143\times 217}^{\mathrm{dust}}$	0.996	$1.03^{+0.32}_{-0.32}$	z_*	1090.02	$1089.99^{+0.51}_{-0.50}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.29708	$0.2971^{+0.0045}_{-0.0042}$ (+0.0 σ)
c_{100}	0.99777	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_*	144.55	$144.57^{+0.54}_{-0.53}$ (+0.2 σ)	$\sigma_8(2.33)$	0.30613	$0.3062^{+0.0049}_{-0.0046}$ (+0.1 σ)
c_{217}	1.00133	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	$100\theta_*$	1.04104	$1.04106^{+0.00060}_{-0.00061}$ (+0.2 σ)	f_{2000}^{143}	30.4	30^{+6}_{-6} (−0.5 σ)
c_{TE}	0.9967	$0.9966^{+0.0096}_{-0.0095}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.885	$13.887^{+0.051}_{-0.050}$ (+0.2 σ)	f_{2000}^{217}	106.92	$106.9^{+3.7}_{-3.8}$ (−0.7 σ)
c_{EE}	0.9925	$0.9921^{+0.0097}_{-0.0095}$	z_{drag}	1059.70	$1059.74^{+0.61}_{-0.64}$ (+0.8 σ)	$f_{2000}^{143\times 217}$	32.31	32^{+4}_{-4} (−0.7 σ)
H_0	67.32	$67.4^{+1.0}_{-1.1}$ (+0.6 σ)	r_{drag}	147.25	$147.26^{+0.56}_{-0.54}$ (+0.1 σ)	$\chi_{\mathrm{lensing}}^2$	8.83	9.30 (ν : 0.2)
Ω_{Λ}	0.6851	$0.686^{+0.014}_{-0.015}$ (+0.5 σ)	k_{D}	0.14063	$0.14063^{+0.00064}_{-0.00064}$ (+0.2 σ)	χ_{small}^2	395.87	396.9 (ν : 1.3) (−0.0 σ)
Ω_{m}	0.3149	$0.314^{+0.015}_{-0.014}$ (−0.5 σ)	$100\theta_{\mathrm{D}}$	0.160882	$0.16087^{+0.00038}_{-0.00037}$ (−0.8 σ)	χ_{lowl}^2	23.22	23.22 (ν : 0.4) (−0.5 σ)
$\Omega_{\mathrm{m}}h^2$	0.14273	$0.1426^{+0.0022}_{-0.0022}$ (−0.4 σ)	z_{eq}	3395	3393^{+53}_{-53} (−0.4 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.6	11514.1 (ν : 15.3)
$\Omega_{\mathrm{m}}h^3$	0.09609	$0.09610^{+0.00061}_{-0.00062}$ (+0.5 σ)	k_{eq}	0.010363	$0.01036^{+0.00016}_{-0.00016}$ (−0.4 σ)	χ_{prior}^2	2.1	7.9 (ν : 6.0) (+0.2 σ)
σ_8	0.8093	$0.809^{+0.012}_{-0.012}$ (−0.3 σ)	$100\theta_{\mathrm{eq}}$	0.8142	$0.815^{+0.010}_{-0.010}$ (+0.4 σ)	χ_{CMB}^2	11927.6	11943.6 (ν : 16.5) (+1957.9 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 11929.66$; $\bar{\chi}_{\mathrm{eff}}^2 = 11951.44$; $R - 1 = 0.00801$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.83 small_100x143_offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3_2_29: 23.22 CamSpec like_10.7HM_1400_unified: 11499.65

2.130 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00028}_{-0.00029} \quad (+1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+15}_{-14} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0019}_{-0.0018} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-0.6\sigma)$	$H(0.51)$	$89.73^{+0.43}_{-0.44} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00057}_{-0.00060} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.4}_{-1.4} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+17}_{-16} \quad (-0.9\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.039}_{-0.039} \quad (-0.6\sigma)$	$H(0.61)$	$95.33^{+0.35}_{-0.37} \quad (+0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.029}_{-0.027} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.5}_{-1.4} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+19}_{-18} \quad (-0.9\sigma)$
n_{s}	$0.9671^{+0.0075}_{-0.0075} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.062}_{-0.057} \quad (+0.1\sigma)$	$H(2.33)$	$235.9^{+1.2}_{-1.1} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+18}_{-17} \quad (-0.9\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+23}_{-22} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+75}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.010} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.4735^{+0.0091}_{-0.0090} \quad (-0.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.3^{+9.6}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6623^{+0.0098}_{-0.0089} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.56 \quad (-0.6\sigma)$	D_{2000}	$230.5^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.4722^{+0.0082}_{-0.0082} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9671^{+0.0075}_{-0.0075} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6199^{+0.0091}_{-0.0084} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00010}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4674^{+0.0077}_{-0.0077} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.5899^{+0.0087}_{-0.0081} \quad (+0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.055}_{-0.050} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0045}_{-0.0041} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.796^{+0.041}_{-0.038} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0048}_{-0.0044} \quad (+0.3\sigma)$
A_{143}^{dust}	$0.96^{+0.33}_{-0.33}$	z_*	$1089.88^{+0.45}_{-0.43} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.22}_{-0.21}$	r_*	$144.70^{+0.46}_{-0.45} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.8} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04114^{+0.00056}_{-0.00058} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.044}_{-0.043} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.31 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.79^{+0.60}_{-0.62} \quad (+0.9\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{TE}	$0.9966^{+0.0096}_{-0.0098}$	r_{drag}	$147.38^{+0.49}_{-0.48} \quad (+0.4\sigma)$	χ_{lowl}^2	$22.98 \quad (\nu: 0.3) \quad (-0.7\sigma)$
c_{EE}	$0.9923^{+0.0097}_{-0.0095}$	k_{D}	$0.14054^{+0.00061}_{-0.00061} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.2 \quad (\nu: 15.4)$
H_0	$67.66^{+0.81}_{-0.84} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00038}_{-0.00036} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+0.8\sigma)$	z_{eq}	$3379^{+43}_{-42} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.31 \quad (\nu: 0.1)$
Ω_{m}	$0.310^{+0.011}_{-0.011} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0018}_{-0.0017} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0079}_{-0.0080} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09611^{+0.00061}_{-0.00063} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0041}_{-0.0041} \quad (+0.7\sigma)$	χ_{CMB}^2	$11943.6 \quad (\nu: 16.6) \quad (+1957.9\sigma)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$H(0.15)$	$72.93^{+0.70}_{-0.72} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.00 \quad (\nu: 0.5)$
S_8	$0.822^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.8^{+7.2}_{-6.9} \quad (-0.9\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.38)$	$83.02^{+0.52}_{-0.54} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.40; R - 1 = 0.01372$$

2.131 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02240^{+0.00028}_{-0.00029} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.013}_{-0.013} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$638.3^{+8.6}_{-8.1} \quad (-1.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1185^{+0.0022}_{-0.0022} \quad (-1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$H(0.38)$	$83.21^{+0.61}_{-0.64} \quad (+1.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04105^{+0.00062}_{-0.00066} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.018}_{-0.017} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1523^{+17}_{-16} \quad (-1.2\sigma)$
τ	$0.057^{+0.016}_{-0.014} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$100.2^{+1.8}_{-1.8} \quad (+1.1\sigma)$	$H(0.51)$	$89.88^{+0.50}_{-0.51} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.030}_{-0.029} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.042}_{-0.039} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+20}_{-19} \quad (-1.2\sigma)$
n_{s}	$0.9685^{+0.0078}_{-0.0080} \quad (+1.0\sigma)$	z_{re}	$7.9^{+1.5}_{-1.5} \quad (+0.5\sigma)$	$H(0.61)$	$95.46^{+0.43}_{-0.42} \quad (+1.3\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.065}_{-0.060} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+22}_{-21} \quad (-1.2\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$H(2.33)$	$235.6^{+1.4}_{-1.3} \quad (-0.9\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1223^{+23}_{-23} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+19}_{-21} \quad (-1.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5732^{+74}_{-75} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.012}_{-0.012} \quad (-1.0\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.010} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.61 \quad (-0.5\sigma)$	D_{1420}	$817.2^{+9.0}_{-9.4} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4715^{+0.0099}_{-0.0095} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.25}$	D_{2000}	$230.9^{+3.0}_{-3.2} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0093} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9685^{+0.0078}_{-0.0080} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.4707^{+0.0088}_{-0.0085} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24540^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.6203^{+0.0095}_{-0.0088} \quad (+0.0\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.4661^{+0.0081}_{-0.0078} \quad (-0.8\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.581^{+0.055}_{-0.049} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0091}_{-0.0085} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.044}_{-0.047} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0046}_{-0.0043} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.22}_{-0.20}$	z_*	$1089.75^{+0.49}_{-0.46} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0051}_{-0.0046} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	r_*	$144.81^{+0.49}_{-0.53} \quad (+0.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$100\theta_*$	$1.04123^{+0.00061}_{-0.00065} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.6^{+3.7}_{-3.7} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.907^{+0.048}_{-0.049} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{TE}	$0.9965^{+0.010}_{-0.0097}$	z_{drag}	$1059.89^{+0.61}_{-0.61} \quad (+1.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.46 \quad (\nu: 0.4)$
c_{EE}	$0.9922^{+0.0096}_{-0.0095}$	r_{drag}	$147.47^{+0.52}_{-0.54} \quad (+0.5\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.3) \quad (+0.3\sigma)$
H_0	$67.96^{+0.97}_{-1.0} \quad (+1.2\sigma)$	k_{D}	$0.14049^{+0.00064}_{-0.00062} \quad (-0.1\sigma)$	χ_{lowl}^2	$22.78 \quad (\nu: 0.3) \quad (-0.9\sigma)$
Ω_{Λ}	$0.694^{+0.013}_{-0.014} \quad (+1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00037}_{-0.00036} \quad (-1.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.1 \quad (\nu: 16.8)$
Ω_{m}	$0.306^{+0.014}_{-0.013} \quad (-1.1\sigma)$	z_{eq}	$3366^{+51}_{-48} \quad (-1.0\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$11.0 \quad (\nu: 2.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1415^{+0.0021}_{-0.0020} \quad (-1.0\sigma)$	k_{eq}	$0.01027^{+0.00016}_{-0.00015} \quad (-1.0\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09617^{+0.00060}_{-0.00061} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8200^{+0.0096}_{-0.0096} \quad (+1.0\sigma)$	χ_{CMB}^2	$11944.8 \quad (\nu: 19.6) \quad (+1958.1\sigma)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4529^{+0.0049}_{-0.0049} \quad (+1.0\sigma)$		
S_8	$0.816^{+0.024}_{-0.023} \quad (-1.0\sigma)$	$H(0.15)$	$73.19^{+0.83}_{-0.87} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11963.63; R - 1 = 0.02452$$

2.132 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02240^{+0.00027}_{-0.00028} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.011}_{-0.010} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1523^{+14}_{-13} \quad (-1.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1184^{+0.0018}_{-0.0017} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.017}_{-0.015} \quad (-0.8\sigma)$	$H(0.51)$	$89.90^{+0.41}_{-0.42} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00058}_{-0.00060} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$100.3^{+1.3}_{-1.4} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+16}_{-15} \quad (-1.3\sigma)$
τ	$0.057^{+0.016}_{-0.014} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.039}_{-0.037} \quad (-0.8\sigma)$	$H(0.61)$	$95.47^{+0.34}_{-0.35} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.030}_{-0.029} \quad (+0.3\sigma)$	z_{re}	$7.9^{+1.5}_{-1.4} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+17}_{-17} \quad (-1.3\sigma)$
n_{s}	$0.9688^{+0.0074}_{-0.0075} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.064}_{-0.059} \quad (+0.3\sigma)$	$H(2.33)$	$235.5^{+1.1}_{-1.1} \quad (-0.9\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5756^{+17}_{-16} \quad (-1.3\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1223^{+23}_{-22} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.010}_{-0.0096} \quad (-1.0\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5733^{+74}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.4711^{+0.0089}_{-0.0085} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$817.3^{+9.0}_{-9.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0093} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.67 \quad (-0.5\sigma)$	D_{2000}	$230.9^{+3.0}_{-3.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4704^{+0.0083}_{-0.0077} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9688^{+0.0074}_{-0.0075} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6203^{+0.0095}_{-0.0088} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.245407^{+0.000098}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.4659^{+0.0077}_{-0.0073} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246734^{+0.000099}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0091}_{-0.0085} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.052}_{-0.048} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0047}_{-0.0043} \quad (+0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.783^{+0.039}_{-0.037} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0050}_{-0.0046} \quad (+0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	z_*	$1089.73^{+0.42}_{-0.40} \quad (-1.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.21}$	r_*	$144.83^{+0.44}_{-0.44} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.7} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04124^{+0.00058}_{-0.00060} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.909^{+0.043}_{-0.043} \quad (+0.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.45 \quad (\nu: 0.4)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.90^{+0.61}_{-0.61} \quad (+1.1\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.2) \quad (+0.3\sigma)$
c_{TE}	$0.9965^{+0.010}_{-0.0099}$	r_{drag}	$147.49^{+0.48}_{-0.47} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.72 \quad (\nu: 0.3) \quad (-0.9\sigma)$
c_{EE}	$0.9923^{+0.0095}_{-0.0095}$	k_{D}	$0.14048^{+0.00061}_{-0.00058} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.0 \quad (\nu: 16.1)$
H_0	$68.01^{+0.77}_{-0.80} \quad (+1.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00036}_{-0.00035} \quad (-1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.8 \quad (\nu: 1.2)$
Ω_{Λ}	$0.694^{+0.010}_{-0.011} \quad (+1.2\sigma)$	z_{eq}	$3364^{+41}_{-40} \quad (-1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.021 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.011}_{-0.010} \quad (-1.2\sigma)$	k_{eq}	$0.01027^{+0.00013}_{-0.00012} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.64 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1414^{+0.0017}_{-0.0017} \quad (-1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8204^{+0.0074}_{-0.0077} \quad (+1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.92 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.09617^{+0.00059}_{-0.00061} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4531^{+0.0039}_{-0.0040} \quad (+1.0\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$H(0.15)$	$73.23^{+0.66}_{-0.69} \quad (+1.2\sigma)$	χ_{CMB}^2	$11944.6 \quad (\nu: 17.8) \quad (+1958.0\sigma)$
S_8	$0.815^{+0.020}_{-0.018} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.9^{+6.8}_{-6.5} \quad (-1.2\sigma)$	χ_{BAO}^2	$5.58 \quad (\nu: 0.1)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.011}_{-0.0099} \quad (-1.0\sigma)$	$H(0.38)$	$83.24^{+0.50}_{-0.51} \quad (+1.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11968.81; R - 1 = 0.02105$$

2.133 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022311	$0.02231^{+0.00029}_{-0.00030}$ $(+0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4521	$0.452^{+0.013}_{-0.013}$ (-0.6σ)	$D_{\mathrm{M}}(0.15)$	642.2	$642.3^{+8.6}_{-8.4}$ (-0.7σ)
$\Omega_{\mathrm{c}}h^2$	0.11940	$0.1194^{+0.0022}_{-0.0022}$ (-0.6σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6047	$0.605^{+0.012}_{-0.012}$ (-0.5σ)	$H(0.38)$	82.92	$82.92^{+0.63}_{-0.63}$ $(+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	1.04088	$1.04090^{+0.00060}_{-0.00061}$ $(+0.3\sigma)$	$\sigma_8/h^{0.5}$	0.9844	$0.984^{+0.018}_{-0.017}$ (-0.5σ)	$D_{\mathrm{M}}(0.38)$	1531.3	1531^{+17}_{-17} (-0.7σ)
τ	0.0544	$0.054^{+0.015}_{-0.014}$ $(+0.3\sigma)$	$r_{\mathrm{drag}}h$	99.45	$99.4^{+1.7}_{-1.7}$ $(+0.6\sigma)$	$H(0.51)$	89.65	$89.65^{+0.51}_{-0.50}$ $(+0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0418	$3.042^{+0.029}_{-0.028}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4343	$2.435^{+0.043}_{-0.041}$ (-0.5σ)	$D_{\mathrm{M}}(0.51)$	1983.5	1984^{+20}_{-20} (-0.7σ)
n_{s}	0.9664	$0.9662^{+0.0081}_{-0.0079}$ $(+0.6\sigma)$	z_{re}	7.69	$7.7^{+1.5}_{-1.4}$ $(+0.2\sigma)$	$H(0.61)$	95.271	$95.27^{+0.41}_{-0.41}$ $(+0.8\sigma)$
y_{cal}	1.00056	$1.0006^{+0.0050}_{-0.0049}$ $(+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	2.094	$2.094^{+0.062}_{-0.057}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2308.0	2308^{+22}_{-21} (-0.7σ)
A_{100}^{PS}	234.0	239^{+50}_{-50} (-0.9σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8785	$1.878^{+0.021}_{-0.020}$ (-0.4σ)	$H(2.33)$	236.10	$236.1^{+1.4}_{-1.3}$ (-0.5σ)
A_{143}^{PS}	41.2	39^{+20}_{-20} (-1.2σ)	D_{40}	1225.9	1226^{+23}_{-23} (-0.5σ)	$D_{\mathrm{M}}(2.33)$	5765.3	5765^{+20}_{-19} (-0.8σ)
A_{217}^{PS}	102.2	103^{+30}_{-30} (-1.2σ)	D_{220}	5722	5722^{+76}_{-78} $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4566	$0.457^{+0.012}_{-0.012}$ (-0.6σ)
A_{217}^{CIB}	44.3	40^{+10}_{-10} (-1.2σ)	D_{810}	2535.9	2535^{+26}_{-26} (-0.1σ)	$\sigma_8(0.15)$	0.7473	$0.747^{+0.011}_{-0.010}$ (-0.3σ)
A_{143}^{tSZ}	6.54	< 7.51 (-0.6σ)	D_{1420}	816.2	$816.0^{+9.6}_{-9.5}$ $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4747	$0.475^{+0.010}_{-0.0099}$ (-0.5σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.612	$0.66^{+0.25}_{-0.25}$	D_{2000}	230.41	$230.3^{+3.2}_{-3.2}$ $(+0.4\sigma)$	$\sigma_8(0.38)$	0.6623	$0.6623^{+0.0096}_{-0.0089}$ (-0.1σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.79	—	$n_{\mathrm{s},0.002}$	0.9664	$0.9662^{+0.0081}_{-0.0079}$ $(+0.6\sigma)$	$f\sigma_8(0.51)$	0.4732	$0.4732^{+0.0089}_{-0.0089}$ (-0.5σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.18	—	Y_{P}	0.245372	$0.24537^{+0.00012}_{-0.00012}$ $(+0.9\sigma)$	$\sigma_8(0.51)$	0.6198	$0.6197^{+0.0091}_{-0.0084}$ (-0.1σ)
A^{kSZ}	0.1	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246698	$0.24670^{+0.00012}_{-0.00012}$ $(+0.9\sigma)$	$f\sigma_8(0.61)$	0.4681	$0.4681^{+0.0081}_{-0.0082}$ (-0.5σ)
A_{100}^{dust}	1.004	$1.01^{+0.38}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	2.597	$2.597^{+0.057}_{-0.053}$ (-0.9σ)	$\sigma_8(0.61)$	0.5897	$0.5896^{+0.0086}_{-0.0080}$ (-0.0σ)
A_{143}^{dust}	0.969	$0.96^{+0.33}_{-0.34}$	Age/Gyr	13.8020	$13.802^{+0.045}_{-0.043}$ (-0.8σ)	$f\sigma_8(2.33)$	0.29731	$0.2973^{+0.0045}_{-0.0041}$ $(+0.1\sigma)$
A_{217}^{dust}	0.972	$0.97^{+0.21}_{-0.21}$	z_*	1089.941	$1089.95^{+0.50}_{-0.48}$ (-0.9σ)	$\sigma_8(2.33)$	0.30647	$0.3064^{+0.0049}_{-0.0045}$ $(+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.006	$1.03^{+0.32}_{-0.32}$	r_*	144.63	$144.62^{+0.52}_{-0.52}$ $(+0.3\sigma)$	f_{2000}^{143}	30.0	30^{+6}_{-5} (-0.5σ)
c_{100}	0.99767	$0.9976^{+0.0021}_{-0.0020}$ (-3.3σ)	$100\theta_*$	1.04107	$1.04109^{+0.00059}_{-0.00060}$ $(+0.2\sigma)$	f_{2000}^{217}	106.79	$106.8^{+3.8}_{-3.8}$ (-0.7σ)
c_{217}	1.00131	$1.0011^{+0.0032}_{-0.0031}$ $(+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8926	$13.891^{+0.049}_{-0.049}$ $(+0.3\sigma)$	$f_{2000}^{143 \times 217}$	32.12	32^{+4}_{-4} (-0.7σ)
c_{TE}	0.9967	$0.9966^{+0.0097}_{-0.0096}$	z_{drag}	1059.74	$1059.76^{+0.63}_{-0.67}$ $(+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.86	9.30 $(\nu: 0.3)$
c_{EE}	0.9923	$0.9921^{+0.0097}_{-0.0096}$	r_{drag}	147.32	$147.31^{+0.54}_{-0.53}$ $(+0.2\sigma)$	χ_{small}^2	396.07	397.0 $(\nu: 1.5)$ $(+0.0\sigma)$
H_0	67.50	$67.50^{+0.99}_{-1.0}$ $(+0.7\sigma)$	k_{D}	0.14058	$0.14060^{+0.00063}_{-0.00065}$ $(+0.1\sigma)$	χ_{lowl}^2	23.03	23.13 $(\nu: 0.3)$ (-0.6σ)
Ω_{Λ}	0.6876	$0.687^{+0.013}_{-0.014}$ $(+0.6\sigma)$	$100\theta_{\mathrm{D}}$	0.160852	$0.16086^{+0.00038}_{-0.00036}$ (-0.8σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.5	11514.2 $(\nu: 15.5)$
Ω_{m}	0.3124	$0.313^{+0.014}_{-0.013}$ (-0.6σ)	z_{eq}	3386	3387^{+51}_{-50} (-0.5σ)	χ_{JLA}^2	1035.10	1035.21 $(\nu: 0.1)$
$\Omega_{\mathrm{m}}h^2$	0.14235	$0.1424^{+0.0021}_{-0.0021}$ (-0.5σ)	k_{eq}	0.010336	$0.01034^{+0.00015}_{-0.00015}$ (-0.5σ)	χ_{prior}^2	2.2	7.8 $(\nu: 6.1)$ $(+0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09609	$0.09611^{+0.00061}_{-0.00062}$ $(+0.5\sigma)$	$100\theta_{\mathrm{eq}}$	0.8159	$0.8158^{+0.0096}_{-0.0095}$ $(+0.5\sigma)$	χ_{CMB}^2	11927.5	11943.6 $(\nu: 16.8)$ $(+1957.9\sigma)$
σ_8	0.8088	$0.809^{+0.012}_{-0.012}$ (-0.3σ)	$100\theta_{\mathrm{s,eq}}$	0.45080	$0.4507^{+0.0049}_{-0.0049}$ $(+0.5\sigma)$			
S_8	0.8254	$0.826^{+0.024}_{-0.024}$ (-0.6σ)	$H(0.15)$	72.79	$72.79^{+0.85}_{-0.86}$ $(+0.7\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 12964.78$; $\bar{\chi}_{\mathrm{eff}}^2 = 12986.66$; $R - 1 = 0.01285$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.86 small_100x143_offlike5_EE_Aplanck_B: 396.07 commander_dx12_v3.2_29: 23.03 CamSpec like_10.7HM_1400_unified: 11499.55 SN - JLA Pantheon18: 1035.10

2.134 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_JLA_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02241^{+0.00028}_{-0.00027} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.011}_{-0.011} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+14}_{-13} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1183^{+0.0018}_{-0.0017} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.016}_{-0.015} \quad (-0.8\sigma)$	$H(0.51)$	$89.91^{+0.41}_{-0.41} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00054}_{-0.00062} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$100.3^{+1.3}_{-1.4} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+16}_{-15} \quad (-1.3\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.038}_{-0.038} \quad (-0.8\sigma)$	$H(0.61)$	$95.48^{+0.35}_{-0.35} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.029} \quad (+0.4\sigma)$	z_{re}	$8.0^{+1.4}_{-1.4} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+17}_{-16} \quad (-1.3\sigma)$
n_{s}	$0.9690^{+0.0071}_{-0.0078} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.060}_{-0.060} \quad (+0.4\sigma)$	$H(2.33)$	$235.5^{+1.1}_{-1.1} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0047} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5756^{+17}_{-17} \quad (-1.3\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1222^{+23}_{-22} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.010}_{-0.010} \quad (-1.0\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5732^{+72}_{-74} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2537^{+26}_{-25} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.4711^{+0.0087}_{-0.0086} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$817.5^{+8.8}_{-9.0} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6627^{+0.0099}_{-0.0097} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.83 \quad (-0.5\sigma)$	D_{2000}	$231.0^{+3.0}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4704^{+0.0079}_{-0.0078} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9690^{+0.0071}_{-0.0078} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0094}_{-0.0092} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00010}_{-0.00011} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.4659^{+0.0074}_{-0.0073} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0090}_{-0.0087} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.579^{+0.052}_{-0.051} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0045}_{-0.0044} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.782^{+0.039}_{-0.039} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0048}_{-0.0046} \quad (+0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.32}_{-0.33}$	z_*	$1089.73^{+0.42}_{-0.42} \quad (-1.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.84^{+0.45}_{-0.44} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.8}_{-3.8} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04125^{+0.00054}_{-0.00061} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.045}_{-0.042} \quad (+0.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.46 \quad (\nu: 0.4)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.5\sigma)$	z_{drag}	$1059.90^{+0.65}_{-0.61} \quad (+1.1\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.2) \quad (+0.3\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.010}$	r_{drag}	$147.50^{+0.48}_{-0.48} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.68 \quad (\nu: 0.3) \quad (-0.9\sigma)$
c_{EE}	$0.9923^{+0.0099}_{-0.0098}$	k_{D}	$0.14047^{+0.00063}_{-0.00060} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.3 \quad (\nu: 17.8)$
H_0	$68.03^{+0.76}_{-0.79} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00035}_{-0.00037} \quad (-1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.7 \quad (\nu: 1.2)$
Ω_{Λ}	$0.6944^{+0.0098}_{-0.011} \quad (+1.2\sigma)$	z_{eq}	$3363^{+40}_{-40} \quad (-1.0\sigma)$	χ_{JLA}^2	$706.63 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.011}_{-0.0098} \quad (-1.2\sigma)$	k_{eq}	$0.01026^{+0.00012}_{-0.00012} \quad (-1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.021 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1414^{+0.0017}_{-0.0017} \quad (-1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8206^{+0.0075}_{-0.0076} \quad (+1.1\sigma)$	χ_{MGS}^2	$1.66 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09617^{+0.00064}_{-0.00062} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4532^{+0.0038}_{-0.0039} \quad (+1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.89 \quad (\nu: 0.2)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$H(0.15)$	$73.24^{+0.68}_{-0.68} \quad (+1.3\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.6) \quad (+0.1\sigma)$
S_8	$0.815^{+0.020}_{-0.019} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.7^{+6.7}_{-6.5} \quad (-1.3\sigma)$	χ_{CMB}^2	$11944.9 \quad (\nu: 19.5) \quad (+1958.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.446^{+0.011}_{-0.011} \quad (-1.0\sigma)$	$H(0.38)$	$83.25^{+0.50}_{-0.50} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.57 \quad (\nu: 0.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12675.57; R - 1 = 0.05190$$

2.135 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022352	$0.02234^{+0.00027}_{-0.00028}$ $(+1.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6027	$0.603^{+0.011}_{-0.011}$ (-0.7σ)	$D_M(0.38)$	1528.0	1528^{+14}_{-14} (-0.9σ)
$\Omega_c h^2$	0.11901	$0.1190^{+0.0018}_{-0.0018}$ (-0.8σ)	$\sigma_8/h^{0.5}$	0.9818	$0.982^{+0.016}_{-0.016}$ (-0.7σ)	$H(0.51)$	89.742	$89.75^{+0.41}_{-0.42}$ $(+1.0\sigma)$
$100\theta_{MC}$	1.04094	$1.04096^{+0.00057}_{-0.00059}$ $(+0.4\sigma)$	$r_{drag}h$	99.76	$99.8^{+1.4}_{-1.4}$ $(+0.8\sigma)$	$D_M(0.51)$	1979.7	1979^{+17}_{-16} (-0.9σ)
τ	0.0546	$0.056^{+0.015}_{-0.014}$ $(+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4271	$2.429^{+0.039}_{-0.039}$ (-0.7σ)	$H(0.61)$	95.348	$95.35^{+0.35}_{-0.36}$ $(+1.0\sigma)$
$\ln(10^{10} A_s)$	3.0417	$3.043^{+0.029}_{-0.028}$ $(+0.2\sigma)$	z_{re}	7.70	$7.8^{+1.5}_{-1.4}$ $(+0.3\sigma)$	$D_M(0.61)$	2303.8	2303^{+18}_{-17} (-0.9σ)
n_s	0.9678	$0.9673^{+0.0075}_{-0.0074}$ $(+0.8\sigma)$	$10^9 A_s$	2.094	$2.098^{+0.062}_{-0.057}$ $(+0.2\sigma)$	$H(2.33)$	235.89	$235.8^{+1.1}_{-1.1}$ (-0.7σ)
y_{cal}	1.00063	$1.0007^{+0.0049}_{-0.0049}$ $(+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8776	$1.877^{+0.021}_{-0.020}$ (-0.5σ)	$D_M(2.33)$	5761.8	5762^{+18}_{-16} (-1.0σ)
A_{100}^{PS}	231.5	239^{+50}_{-50} (-0.9σ)	D_{40}	1223.2	1225^{+23}_{-22} (-0.6σ)	$f\sigma_8(0.15)$	0.4544	$0.454^{+0.010}_{-0.010}$ (-0.8σ)
A_{143}^{PS}	47.8	39^{+20}_{-20} (-1.3σ)	D_{220}	5724	5726^{+75}_{-78} $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7466	$0.747^{+0.011}_{-0.010}$ (-0.3σ)
A_{217}^{PS}	104.1	103^{+30}_{-30} (-1.2σ)	D_{810}	2537.0	2536^{+26}_{-26} (-0.0σ)	$f\sigma_8(0.38)$	0.4730	$0.4731^{+0.0090}_{-0.0091}$ (-0.7σ)
A_{217}^{CIB}	42.7	40^{+10}_{-10} (-1.2σ)	D_{1420}	817.1	$816.5^{+9.5}_{-9.5}$ $(+0.4\sigma)$	$\sigma_8(0.38)$	0.6620	$0.6623^{+0.0098}_{-0.0090}$ (-0.1σ)
A_{143}^{tSZ}	6.37	< 7.58 (-0.6σ)	D_{2000}	230.78	$230.5^{+3.1}_{-3.2}$ $(+0.6\sigma)$	$f\sigma_8(0.51)$	0.4718	$0.4719^{+0.0081}_{-0.0081}$ (-0.7σ)
$r_{143 \times 217}^{PS}$	0.695	$0.66^{+0.25}_{-0.25}$	$n_{s,0.002}$	0.9678	$0.9673^{+0.0075}_{-0.0074}$ $(+0.8\sigma)$	$\sigma_8(0.51)$	0.6196	$0.6199^{+0.0092}_{-0.0085}$ (-0.0σ)
$r_{143 \times 217}^{CIB}$	0.87	—	Y_P	0.245389	$0.24538^{+0.00010}_{-0.00012}$ $(+1.0\sigma)$	$f\sigma_8(0.61)$	0.4670	$0.4671^{+0.0076}_{-0.0076}$ (-0.6σ)
$\xi^{tSZ \times CIB}$	0.64	—	Y_P^{BBN}	0.246715	$0.24671^{+0.00010}_{-0.00012}$ $(+1.0\sigma)$	$\sigma_8(0.61)$	0.5896	$0.5899^{+0.0088}_{-0.0081}$ $(+0.0\sigma)$
A^{kSZ}	0.3	—	$10^5 D/H$	2.589	$2.591^{+0.054}_{-0.049}$ (-1.0σ)	$f\sigma_8(2.33)$	0.29735	$0.2975^{+0.0045}_{-0.0041}$ $(+0.2\sigma)$
A_{100}^{dust}	1.013	$1.01^{+0.38}_{-0.39}$	Age/Gyr	13.7944	$13.794^{+0.040}_{-0.038}$ (-1.0σ)	$\sigma_8(2.33)$	0.30662	$0.3068^{+0.0048}_{-0.0043}$ $(+0.4\sigma)$
A_{143}^{dust}	0.980	$0.95^{+0.33}_{-0.33}$	z_*	1089.855	$1089.86^{+0.44}_{-0.42}$ (-1.1σ)	f_{2000}^{143}	29.8	29^{+6}_{-5} (-0.6σ)
A_{217}^{dust}	0.979	$0.97^{+0.22}_{-0.21}$	r_*	144.701	$144.72^{+0.45}_{-0.45}$ $(+0.5\sigma)$	f_{2000}^{217}	106.48	$106.7^{+3.8}_{-3.8}$ (-0.7σ)
$A_{143 \times 217}^{dust}$	0.995	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04113	$1.04115^{+0.00056}_{-0.00059}$ $(+0.4\sigma)$	$f_{2000}^{143 \times 217}$	31.90	32^{+4}_{-4} (-0.8σ)
c_{100}	0.99779	$0.9976^{+0.0021}_{-0.0020}$ (-3.3σ)	$D_M(z_*)/\text{Gpc}$	13.8984	$13.900^{+0.043}_{-0.043}$ $(+0.5\sigma)$	$\chi^2_{lensing}$	8.97	9.32 $(\nu: 0.3)$
c_{217}	1.00131	$1.0011^{+0.0031}_{-0.0030}$ $(+4.5\sigma)$	z_{drag}	1059.82	$1059.80^{+0.59}_{-0.63}$ $(+0.9\sigma)$	χ^2_{small}	396.05	397.1 $(\nu: 1.7)$ $(+0.1\sigma)$
c_{TE}	0.9966	$0.9966^{+0.0096}_{-0.0098}$	r_{drag}	147.374	$147.40^{+0.48}_{-0.48}$ $(+0.4\sigma)$	χ^2_{lowl}	22.77	22.94 $(\nu: 0.3)$ (-0.7σ)
c_{EE}	0.9924	$0.9923^{+0.0097}_{-0.0095}$	k_D	0.14056	$0.14052^{+0.00060}_{-0.00061}$ (-0.0σ)	$\chi^2_{CamSpec}$	11500.2	11514.3 $(\nu: 15.5)$
H_0	67.69	$67.72^{+0.79}_{-0.81}$ $(+0.9\sigma)$	$100\theta_D$	0.160819	$0.16084^{+0.00037}_{-0.00035}$ (-0.9σ)	χ^2_{JLA}	1034.980	1035.03 $(\nu: 0.0)$
Ω_Λ	0.6901	$0.690^{+0.010}_{-0.011}$ $(+0.9\sigma)$	z_{eq}	3378.1	3377^{+41}_{-41} (-0.7σ)	χ^2_{6DF}	0.022	0.040 $(\nu: 0.0)$
Ω_m	0.3099	$0.310^{+0.011}_{-0.010}$ (-0.9σ)	k_{eq}	0.010310	$0.01031^{+0.00013}_{-0.00012}$ (-0.7σ)	χ^2_{MGS}	1.28	1.36 $(\nu: 0.1)$
$\Omega_m h^2$	0.14201	$0.1419^{+0.0017}_{-0.0017}$ (-0.7σ)	$100\theta_{eq}$	0.8176	$0.8179^{+0.0076}_{-0.0077}$ $(+0.8\sigma)$	$\chi^2_{DR12BAO}$	4.23	4.5 $(\nu: 0.7)$
$\Omega_m h^3$	0.09613	$0.09612^{+0.00061}_{-0.00063}$ $(+0.5\sigma)$	$100\theta_{s,eq}$	0.45163	$0.4518^{+0.0039}_{-0.0039}$ $(+0.8\sigma)$	χ^2_{prior}	2.0	7.8 $(\nu: 5.9)$ $(+0.1\sigma)$
σ_8	0.8078	$0.808^{+0.012}_{-0.011}$ (-0.4σ)	$H(0.15)$	72.96	$72.98^{+0.68}_{-0.70}$ $(+0.9\sigma)$	χ^2_{CMB}	11928.0	11943.7 $(\nu: 16.7)$ $(+1957.9\sigma)$
S_8	0.8210	$0.821^{+0.020}_{-0.020}$ (-0.8σ)	$D_M(0.15)$	640.5	$640.4^{+7.0}_{-6.7}$ (-0.9σ)	χ^2_{BAO}	5.53	5.88 $(\nu: 0.4)$
$\sigma_8 \Omega_m^{0.5}$	0.4497	$0.450^{+0.011}_{-0.011}$ (-0.8σ)	$H(0.38)$	83.04	$83.05^{+0.50}_{-0.52}$ $(+1.0\sigma)$			

Best-fit $\chi^2_{eff} = 12970.49$; $\bar{\chi}^2_{eff} = 12992.39$; $R - 1 = 0.01438$
 χ^2_{eff} : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.23 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p_teb_consext8: 8.97 small_100x143_offlike5_EE_Aplanck_B: 396.05 comman-
der_dx12_v3_2_29: 22.77 CamSpec like_10.7HM_1400_unified: 11500.17 SN - JLA Pantheon18: 1034.98

2.136 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02241^{+0.00026}_{-0.00027} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.011}_{-0.010} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+13}_{-13} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1183^{+0.0017}_{-0.0017} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.016}_{-0.015} \quad (-0.9\sigma)$	$H(0.51)$	$89.91^{+0.40}_{-0.41} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00057}_{-0.00060} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$100.4^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+16}_{-15} \quad (-1.3\sigma)$
τ	$0.057^{+0.016}_{-0.014} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.039}_{-0.038} \quad (-0.8\sigma)$	$H(0.61)$	$95.48^{+0.34}_{-0.35} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.030}_{-0.029} \quad (+0.4\sigma)$	z_{re}	$7.9^{+1.5}_{-1.4} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+17}_{-16} \quad (-1.3\sigma)$
n_{s}	$0.9689^{+0.0073}_{-0.0074} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.064}_{-0.060} \quad (+0.4\sigma)$	$H(2.33)$	$235.5^{+1.1}_{-1.1} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5756^{+17}_{-16} \quad (-1.3\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1223^{+23}_{-22} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.010}_{-0.0093} \quad (-1.0\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5733^{+74}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.4709^{+0.0088}_{-0.0084} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$817.4^{+8.9}_{-9.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0093} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.70 \quad (-0.5\sigma)$	D_{2000}	$230.9^{+3.0}_{-3.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4702^{+0.0081}_{-0.0077} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9689^{+0.0073}_{-0.0074} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6203^{+0.0095}_{-0.0088} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.245409^{+0.000098}_{-0.00011} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.4658^{+0.0077}_{-0.0073} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246736^{+0.000098}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0092}_{-0.0085} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.579^{+0.051}_{-0.047} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0047}_{-0.0044} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.782^{+0.039}_{-0.037} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0050}_{-0.0046} \quad (+0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	z_*	$1089.72^{+0.42}_{-0.39} \quad (-1.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.21}$	r_*	$144.84^{+0.43}_{-0.43} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.7} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04125^{+0.00058}_{-0.00060} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.042}_{-0.042} \quad (+0.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.47 \quad (\nu: 0.4)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.90^{+0.60}_{-0.62} \quad (+1.1\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.3) \quad (+0.3\sigma)$
c_{TE}	$0.9965^{+0.010}_{-0.0099}$	r_{drag}	$147.50^{+0.47}_{-0.47} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.70 \quad (\nu: 0.3) \quad (-0.9\sigma)$
c_{EE}	$0.9923^{+0.0095}_{-0.0095}$	k_{D}	$0.14047^{+0.00060}_{-0.00057} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.1 \quad (\nu: 16.1)$
H_0	$68.04^{+0.74}_{-0.78} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16078^{+0.00036}_{-0.00035} \quad (-1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.7 \quad (\nu: 1.2)$
Ω_{Λ}	$0.6946^{+0.0097}_{-0.010} \quad (+1.2\sigma)$	z_{eq}	$3363^{+40}_{-39} \quad (-1.0\sigma)$	χ_{JLA}^2	$1034.87 \quad (\nu: 0.0)$
Ω_{m}	$0.305^{+0.010}_{-0.0097} \quad (-1.2\sigma)$	k_{eq}	$0.01026^{+0.00012}_{-0.00012} \quad (-1.0\sigma)$	χ_{6DF}^2	$0.019 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1414^{+0.0017}_{-0.0016} \quad (-1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8207^{+0.0072}_{-0.0075} \quad (+1.1\sigma)$	χ_{MGS}^2	$1.67 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09617^{+0.00059}_{-0.00061} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4532^{+0.0037}_{-0.0038} \quad (+1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.87 \quad (\nu: 0.2)$
σ_8	$0.807^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$H(0.15)$	$73.25^{+0.64}_{-0.67} \quad (+1.3\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.815^{+0.020}_{-0.018} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.7^{+6.7}_{-6.2} \quad (-1.3\sigma)$	χ_{CMB}^2	$11944.7 \quad (\nu: 17.8) \quad (+1958.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.446^{+0.011}_{-0.0098} \quad (-1.0\sigma)$	$H(0.38)$	$83.26^{+0.48}_{-0.50} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.56 \quad (\nu: 0.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 13003.64; R - 1 = 0.02217$$

2.137 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00030}_{-0.00030} \quad (+0.8\sigma)$	S_8	$0.828^{+0.026}_{-0.025} \quad (-0.5\sigma)$	$100\theta_{s,eq}$	$0.4503^{+0.0051}_{-0.0050} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1196^{+0.0023}_{-0.0023} \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.454^{+0.014}_{-0.013} \quad (-0.5\sigma)$	$H(0.15)$	$72.72^{+0.88}_{-0.89} \quad (+0.6\sigma)$
$100\theta_{MC}$	$1.04087^{+0.00061}_{-0.00061} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.606^{+0.013}_{-0.012} \quad (-0.4\sigma)$	$D_M(0.15)$	$642.9^{+9.0}_{-8.7} \quad (-0.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.017} \quad (-0.4\sigma)$	$H(0.38)$	$82.87^{+0.65}_{-0.65} \quad (+0.6\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.026}_{-0.024} \quad (+0.1\sigma)$	$r_{drag} h$	$99.3^{+1.8}_{-1.8} \quad (+0.5\sigma)$	$D_M(0.38)$	$1533^{+18}_{-17} \quad (-0.6\sigma)$
n_s	$0.9658^{+0.0081}_{-0.0081} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.043}_{-0.042} \quad (-0.4\sigma)$	$H(0.51)$	$89.61^{+0.52}_{-0.52} \quad (+0.7\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	z_{re}	$< 8.88 \quad (+0.3\sigma)$	$D_M(0.51)$	$1985^{+21}_{-20} \quad (-0.6\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s$	$2.096^{+0.055}_{-0.050} \quad (+0.1\sigma)$	$H(0.61)$	$95.24^{+0.42}_{-0.43} \quad (+0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_M(0.61)$	$2310^{+23}_{-22} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1227^{+24}_{-23} \quad (-0.4\sigma)$	$H(2.33)$	$236.2^{+1.4}_{-1.4} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5720^{+77}_{-77} \quad (+0.2\sigma)$	$D_M(2.33)$	$5766^{+20}_{-20} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.6\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.5\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.26}_{-0.25}$	D_{1420}	$815.7^{+9.5}_{-9.4} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.0093} \quad (-0.2\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.3^{+3.3}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.010}_{-0.010} \quad (-0.4\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9658^{+0.0081}_{-0.0081} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6628^{+0.0087}_{-0.0082} \quad (-0.1\sigma)$
A^{kSZ}	—	Y_P	$0.24537^{+0.00011}_{-0.00013} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4741^{+0.0091}_{-0.0088} \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	Y_P^{BBN}	$0.24669^{+0.00011}_{-0.00013} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6202^{+0.0082}_{-0.0076} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	$10^5 D/H$	$2.599^{+0.058}_{-0.054} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0082}_{-0.0079} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.21}$	Age/Gyr	$13.804^{+0.045}_{-0.045} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0078}_{-0.0072} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.32}$	z_*	$1089.98^{+0.51}_{-0.50} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0040}_{-0.0037} \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_*	$144.58^{+0.53}_{-0.52} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0043}_{-0.0040} \quad (+0.2\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_*$	$1.04107^{+0.00060}_{-0.00061} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
c_{TE}	$0.9965^{+0.0095}_{-0.0095}$	$D_M(z_*)/Gpc$	$13.888^{+0.050}_{-0.049} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.9^{+3.7}_{-3.8} \quad (-0.7\sigma)$
c_{EE}	$0.9921^{+0.0096}_{-0.0095}$	z_{drag}	$1059.74^{+0.61}_{-0.65} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
H_0	$67.4^{+1.0}_{-1.0} \quad (+0.6\sigma)$	r_{drag}	$147.27^{+0.55}_{-0.54} \quad (+0.1\sigma)$	$\chi_{lensing}^2$	$9.26 \quad (\nu: 0.2)$
Ω_Λ	$0.686^{+0.014}_{-0.014} \quad (+0.5\sigma)$	k_D	$0.14062^{+0.00063}_{-0.00064} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.1\sigma)$
Ω_m	$0.314^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$100\theta_D$	$0.16086^{+0.00038}_{-0.00037} \quad (-0.8\sigma)$	χ_{lowl}^2	$23.21 \quad (\nu: 0.4) \quad (-0.5\sigma)$
$\Omega_m h^2$	$0.1426^{+0.0022}_{-0.0022} \quad (-0.4\sigma)$	z_{eq}	$3391^{+52}_{-52} \quad (-0.4\sigma)$	$\chi_{CamSpec}^2$	$11514.0 \quad (\nu: 15.1)$
$\Omega_m h^3$	$0.09611^{+0.00061}_{-0.00062} \quad (+0.5\sigma)$	k_{eq}	$0.01035^{+0.00016}_{-0.00016} \quad (-0.4\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.0) \quad (+0.2\sigma)$
σ_8	$0.810^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$100\theta_{eq}$	$0.8150^{+0.0098}_{-0.0098} \quad (+0.5\sigma)$	χ_{CMB}^2	$11943.4 \quad (\nu: 16.0) \quad (+1957.8\sigma)$

$\bar{\chi}_{eff}^2 = 11951.25; R - 1 = 0.00847$

2.138 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00028}_{-0.00029} \quad (+1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+14}_{-14} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0018}_{-0.0018} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-0.6\sigma)$	$H(0.51)$	$89.73^{+0.42}_{-0.43} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00057}_{-0.00059} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.4}_{-1.4} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+17}_{-16} \quad (-0.9\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.039}_{-0.038} \quad (-0.6\sigma)$	$H(0.61)$	$95.34^{+0.35}_{-0.37} \quad (+0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.027}_{-0.025} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+18}_{-18} \quad (-0.9\sigma)$
n_{s}	$0.9671^{+0.0075}_{-0.0075} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.056}_{-0.052} \quad (+0.2\sigma)$	$H(2.33)$	$235.9^{+1.1}_{-1.1} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-17} \quad (-0.9\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+23}_{-22} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.010} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+76}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0093} \quad (-0.2\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.4737^{+0.0090}_{-0.0087} \quad (-0.6\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.3^{+9.6}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6627^{+0.0090}_{-0.0084} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.56 \quad (-0.6\sigma)$	D_{2000}	$230.5^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.4724^{+0.0081}_{-0.0080} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9671^{+0.0075}_{-0.0075} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6202^{+0.0085}_{-0.0079} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00010}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4676^{+0.0075}_{-0.0073} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00010}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0081}_{-0.0075} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.055}_{-0.050} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0041}_{-0.0038} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.796^{+0.041}_{-0.038} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0044}_{-0.0041} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.33}_{-0.33}$	z_*	$1089.88^{+0.45}_{-0.42} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.22}_{-0.20}$	r_*	$144.70^{+0.45}_{-0.45} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04114^{+0.00056}_{-0.00059} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.899^{+0.043}_{-0.043} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.26 \quad (\nu: 0.2)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.79^{+0.60}_{-0.62} \quad (+0.9\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{TE}	$0.9966^{+0.0096}_{-0.0097}$	r_{drag}	$147.38^{+0.48}_{-0.48} \quad (+0.4\sigma)$	χ_{lowl}^2	$22.98 \quad (\nu: 0.3) \quad (-0.7\sigma)$
c_{EE}	$0.9923^{+0.0096}_{-0.0095}$	k_{D}	$0.14054^{+0.00061}_{-0.00061} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.2 \quad (\nu: 15.3)$
H_0	$67.68^{+0.80}_{-0.83} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00038}_{-0.00036} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.045 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+0.8\sigma)$	z_{eq}	$3379^{+42}_{-41} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.32 \quad (\nu: 0.1)$
Ω_{m}	$0.310^{+0.011}_{-0.011} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0018}_{-0.0017} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0078}_{-0.0078} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09611^{+0.00061}_{-0.00063} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0040}_{-0.0040} \quad (+0.7\sigma)$	χ_{CMB}^2	$11943.5 \quad (\nu: 16.3) \quad (+1957.8\sigma)$
σ_8	$0.809^{+0.012}_{-0.010} \quad (-0.3\sigma)$	$H(0.15)$	$72.94^{+0.70}_{-0.72} \quad (+0.9\sigma)$	χ_{BAO}^2	$5.97 \quad (\nu: 0.5)$
S_8	$0.822^{+0.021}_{-0.020} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.7^{+7.2}_{-6.8} \quad (-0.9\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.38)$	$83.03^{+0.52}_{-0.54} \quad (+0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11957.26; R - 1 = 0.01434$

2.139 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02240^{+0.00028}_{-0.00029} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.013}_{-0.012} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$638.2^{+8.5}_{-8.1} \quad (-1.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1184^{+0.0022}_{-0.0022} \quad (-1.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.012}_{-0.011} \quad (-0.8\sigma)$	$H(0.38)$	$83.22^{+0.60}_{-0.63} \quad (+1.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04105^{+0.00062}_{-0.00066} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.017}_{-0.016} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1523^{+17}_{-16} \quad (-1.2\sigma)$
τ	$0.058^{+0.015}_{-0.013} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$100.2^{+1.7}_{-1.7} \quad (+1.1\sigma)$	$H(0.51)$	$89.88^{+0.49}_{-0.51} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.028}_{-0.026} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.041}_{-0.037} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+20}_{-19} \quad (-1.2\sigma)$
n_{s}	$0.9686^{+0.0078}_{-0.0079} \quad (+1.0\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.6\sigma)$	$H(0.61)$	$95.46^{+0.42}_{-0.41} \quad (+1.3\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.059}_{-0.055} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+22}_{-20} \quad (-1.2\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$H(2.33)$	$235.6^{+1.3}_{-1.3} \quad (-0.9\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1223^{+23}_{-23} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+20}_{-19} \quad (-1.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5732^{+75}_{-76} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.012}_{-0.011} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0096} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.61 \quad (-0.5\sigma)$	D_{1420}	$817.2^{+9.0}_{-9.4} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4716^{+0.0099}_{-0.0094} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{2000}	$230.9^{+3.0}_{-3.2} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.6629^{+0.0097}_{-0.0083} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9686^{+0.0078}_{-0.0079} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.4708^{+0.0087}_{-0.0082} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0092}_{-0.0079} \quad (+0.1\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.4663^{+0.0081}_{-0.0075} \quad (-0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.055}_{-0.049} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0084}_{-0.0078} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.045}_{-0.044} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0044}_{-0.0040} \quad (+0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.22}_{-0.20}$	z_*	$1089.75^{+0.48}_{-0.46} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0047}_{-0.0043} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	r_*	$144.81^{+0.49}_{-0.52} \quad (+0.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	$100\theta_*$	$1.04123^{+0.00061}_{-0.00065} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.7} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.908^{+0.048}_{-0.049} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{TE}	$0.9965^{+0.010}_{-0.0098}$	z_{drag}	$1059.89^{+0.61}_{-0.61} \quad (+1.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.41 \quad (\nu: 0.4)$
c_{EE}	$0.9922^{+0.0096}_{-0.0095}$	r_{drag}	$147.47^{+0.52}_{-0.54} \quad (+0.5\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.4) \quad (+0.3\sigma)$
H_0	$67.97^{+0.97}_{-1.0} \quad (+1.2\sigma)$	k_{D}	$0.14049^{+0.00064}_{-0.00062} \quad (-0.1\sigma)$	χ_{lowl}^2	$22.78 \quad (\nu: 0.3) \quad (-0.9\sigma)$
Ω_{Λ}	$0.694^{+0.013}_{-0.014} \quad (+1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00037}_{-0.00036} \quad (-1.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.1 \quad (\nu: 16.8)$
Ω_{m}	$0.306^{+0.014}_{-0.013} \quad (-1.1\sigma)$	z_{eq}	$3366^{+50}_{-47} \quad (-1.0\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$11.0 \quad (\nu: 2.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1415^{+0.0021}_{-0.0020} \quad (-1.0\sigma)$	k_{eq}	$0.01027^{+0.00015}_{-0.00014} \quad (-1.0\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09617^{+0.00060}_{-0.00061} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8201^{+0.0095}_{-0.0095} \quad (+1.0\sigma)$	χ_{CMB}^2	$11944.7 \quad (\nu: 19.5) \quad (+1958.1\sigma)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4529^{+0.0049}_{-0.0048} \quad (+1.0\sigma)$		
S_8	$0.816^{+0.024}_{-0.023} \quad (-1.0\sigma)$	$H(0.15)$	$73.20^{+0.83}_{-0.86} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11963.51; R - 1 = 0.02593$$

2.140 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02241^{+0.00026}_{-0.00028} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.601^{+0.011}_{-0.010} \quad (-0.9\sigma)$	$D_{\text{M}}(0.38)$	$1523^{+14}_{-13} \quad (-1.3\sigma)$
$\Omega_{\text{c}} h^2$	$0.1184^{+0.0018}_{-0.0017} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.016}_{-0.015} \quad (-0.8\sigma)$	$H(0.51)$	$89.90^{+0.41}_{-0.42} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04106^{+0.00057}_{-0.00060} \quad (+0.6\sigma)$	$r_{\text{drag}} h$	$100.3^{+1.3}_{-1.4} \quad (+1.2\sigma)$	$D_{\text{M}}(0.51)$	$1973^{+16}_{-15} \quad (-1.3\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.039}_{-0.036} \quad (-0.8\sigma)$	$H(0.61)$	$95.48^{+0.35}_{-0.35} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.047^{+0.028}_{-0.026} \quad (+0.4\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+0.6\sigma)$	$D_{\text{M}}(0.61)$	$2297^{+17}_{-16} \quad (-1.3\sigma)$
n_{s}	$0.9688^{+0.0073}_{-0.0075} \quad (+1.1\sigma)$	$10^9 A_{\text{s}}$	$2.105^{+0.059}_{-0.055} \quad (+0.4\sigma)$	$H(2.33)$	$235.5^{+1.1}_{-1.1} \quad (-0.9\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.875^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$D_{\text{M}}(2.33)$	$5756^{+17}_{-16} \quad (-1.3\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1223^{+23}_{-22} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.010}_{-0.0094} \quad (-1.0\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5733^{+75}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0095} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.4712^{+0.0088}_{-0.0082} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$817.3^{+9.0}_{-9.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6628^{+0.0097}_{-0.0084} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.67 \quad (-0.5\sigma)$	D_{2000}	$230.9^{+3.0}_{-3.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4705^{+0.0082}_{-0.0075} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.67^{+0.25}_{-0.25}$	$n_{\text{s},0.002}$	$0.9688^{+0.0073}_{-0.0075} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0093}_{-0.0079} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.245408^{+0.000098}_{-0.00011} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.4660^{+0.0076}_{-0.0071} \quad (-0.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.246734^{+0.000098}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0085}_{-0.0079} \quad (+0.2\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.579^{+0.052}_{-0.047} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0043}_{-0.0040} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.39}$	Age/Gyr	$13.783^{+0.039}_{-0.037} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0046}_{-0.0043} \quad (+0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	z_*	$1089.73^{+0.42}_{-0.40} \quad (-1.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.83^{+0.44}_{-0.44} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.7} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04124^{+0.00058}_{-0.00060} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.909^{+0.043}_{-0.043} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.40 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.90^{+0.60}_{-0.62} \quad (+1.1\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.3) \quad (+0.3\sigma)$
c_{TE}	$0.9965^{+0.010}_{-0.0099}$	r_{drag}	$147.49^{+0.47}_{-0.47} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.73 \quad (\nu: 0.3) \quad (-0.9\sigma)$
c_{EE}	$0.9922^{+0.0095}_{-0.0095}$	k_{D}	$0.14048^{+0.00061}_{-0.00057} \quad (-0.1\sigma)$	χ_{CamSpec}^2	$11515.0 \quad (\nu: 16.0)$
H_0	$68.01^{+0.77}_{-0.80} \quad (+1.2\sigma)$	$100\theta_{\text{D}}$	$0.16078^{+0.00036}_{-0.00035} \quad (-1.1\sigma)$	χ_{H073p45}^2	$10.8 \quad (\nu: 1.2)$
Ω_{Λ}	$0.6943^{+0.0099}_{-0.011} \quad (+1.2\sigma)$	z_{eq}	$3364^{+41}_{-40} \quad (-1.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.021 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.011}_{-0.0099} \quad (-1.2\sigma)$	k_{eq}	$0.01027^{+0.00012}_{-0.00012} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.65 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^2$	$0.1414^{+0.0017}_{-0.0017} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.8205^{+0.0074}_{-0.0077} \quad (+1.1\sigma)$	χ_{DR12BAO}^2	$3.91 \quad (\nu: 0.3)$
$\Omega_{\text{m}} h^3$	$0.09617^{+0.00060}_{-0.00061} \quad (+0.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4531^{+0.0038}_{-0.0039} \quad (+1.0\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$H(0.15)$	$73.23^{+0.66}_{-0.69} \quad (+1.3\sigma)$	χ_{CMB}^2	$11944.5 \quad (\nu: 17.6) \quad (+1958.0\sigma)$
S_8	$0.815^{+0.020}_{-0.018} \quad (-1.0\sigma)$	$D_{\text{M}}(0.15)$	$637.8^{+6.8}_{-6.4} \quad (-1.2\sigma)$	χ_{BAO}^2	$5.58 \quad (\nu: 0.1)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.447^{+0.011}_{-0.0099} \quad (-1.0\sigma)$	$H(0.38)$	$83.24^{+0.50}_{-0.51} \quad (+1.3\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 11968.71$; $R - 1 = 0.02252$

2.141 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00029}_{-0.00030}$ (+0.9 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013}$ (−0.6 σ)	$D_{\mathrm{M}}(0.15)$	$642.1^{+8.6}_{-8.3}$ (−0.7 σ)
$\Omega_{\mathrm{c}} h^2$	$0.1194^{+0.0022}_{-0.0022}$ (−0.6 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.012}_{-0.012}$ (−0.5 σ)	$H(0.38)$	$82.93^{+0.62}_{-0.63}$ (+0.7 σ)
$100\theta_{\mathrm{MC}}$	$1.04090^{+0.00060}_{-0.00061}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.017}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1531^{+17}_{-17} (−0.7 σ)
τ	$0.055^{+0.013}_{-0.012}$ (+0.4 σ)	$r_{\mathrm{drag}} h$	$99.5^{+1.7}_{-1.7}$ (+0.6 σ)	$H(0.51)$	$89.66^{+0.50}_{-0.50}$ (+0.8 σ)
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.024}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.042}_{-0.040}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1983^{+20}_{-20} (−0.7 σ)
n_{s}	$0.9663^{+0.0080}_{-0.0078}$ (+0.6 σ)	z_{re}	< 8.93 (+0.3 σ)	$H(0.61)$	$95.28^{+0.41}_{-0.41}$ (+0.8 σ)
y_{cal}	$1.0006^{+0.0050}_{-0.0049}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}$	$2.097^{+0.056}_{-0.051}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2308^{+22}_{-21} (−0.7 σ)
A_{100}^{PS}	239^{+50}_{-50} (−0.9 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.020}$ (−0.4 σ)	$H(2.33)$	$236.1^{+1.3}_{-1.3}$ (−0.5 σ)
A_{143}^{PS}	39^{+20}_{-20} (−1.2 σ)	D_{40}	1226^{+23}_{-23} (−0.5 σ)	$D_{\mathrm{M}}(2.33)$	5765^{+20}_{-19} (−0.8 σ)
A_{217}^{PS}	102^{+30}_{-30} (−1.2 σ)	D_{220}	5722^{+77}_{-78} (+0.2 σ)	$f\sigma_8(0.15)$	$0.457^{+0.012}_{-0.012}$ (−0.6 σ)
A_{217}^{CIB}	40^{+10}_{-10} (−1.2 σ)	D_{810}	2535^{+26}_{-26} (−0.1 σ)	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.0092}$ (−0.2 σ)
A_{143}^{tSZ}	< 7.53 (−0.6 σ)	D_{1420}	$816.0^{+9.7}_{-9.5}$ (+0.3 σ)	$f\sigma_8(0.38)$	$0.4749^{+0.0099}_{-0.0097}$ (−0.5 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	D_{2000}	$230.4^{+3.2}_{-3.2}$ (+0.5 σ)	$\sigma_8(0.38)$	$0.6627^{+0.0088}_{-0.0082}$ (−0.1 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9663^{+0.0080}_{-0.0078}$ (+0.6 σ)	$f\sigma_8(0.51)$	$0.4734^{+0.0088}_{-0.0085}$ (−0.5 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00011}_{-0.00013}$ (+0.9 σ)	$\sigma_8(0.51)$	$0.6202^{+0.0083}_{-0.0077}$ (+0.0 σ)
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00013}$ (+0.9 σ)	$f\sigma_8(0.61)$	$0.4684^{+0.0080}_{-0.0077}$ (−0.4 σ)
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.596^{+0.057}_{-0.053}$ (−0.9 σ)	$\sigma_8(0.61)$	$0.5901^{+0.0079}_{-0.0073}$ (+0.0 σ)
A_{143}^{dust}	$0.96^{+0.33}_{-0.33}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.801^{+0.044}_{-0.042}$ (−0.8 σ)	$f\sigma_8(2.33)$	$0.2975^{+0.0041}_{-0.0038}$ (+0.2 σ)
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	z_*	$1089.94^{+0.50}_{-0.48}$ (−0.9 σ)	$\sigma_8(2.33)$	$0.3067^{+0.0044}_{-0.0040}$ (+0.3 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.63^{+0.52}_{-0.51}$ (+0.4 σ)	f_{2000}^{143}	30^{+6}_{-5} (−0.5 σ)
c_{100}	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	$1.04109^{+0.00059}_{-0.00060}$ (+0.3 σ)	f_{2000}^{217}	$106.8^{+3.8}_{-3.8}$ (−0.7 σ)
c_{217}	$1.0011^{+0.0032}_{-0.0031}$ (+4.5 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.049}_{-0.048}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.7 σ)
c_{TE}	$0.9966^{+0.0097}_{-0.0097}$	z_{drag}	$1059.76^{+0.63}_{-0.63}$ (+0.8 σ)	$\chi_{\mathrm{lensing}}^2$	9.25 (ν : 0.2)
c_{EE}	$0.9921^{+0.0096}_{-0.0096}$	r_{drag}	$147.31^{+0.53}_{-0.53}$ (+0.2 σ)	χ_{small}^2	396.9 (ν : 1.5) (−0.0 σ)
H_0	$67.52^{+0.98}_{-1.0}$ (+0.7 σ)	k_{D}	$0.14059^{+0.00064}_{-0.00064}$ (+0.1 σ)	χ_{lowl}^2	23.12 (ν : 0.3) (−0.6 σ)
Ω_{Λ}	$0.688^{+0.013}_{-0.014}$ (+0.7 σ)	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00038}_{-0.00036}$ (−0.8 σ)	$\chi_{\mathrm{CamSpec}}^2$	11514.1 (ν : 15.4)
Ω_{m}	$0.312^{+0.014}_{-0.013}$ (−0.7 σ)	z_{eq}	3386^{+50}_{-49} (−0.5 σ)	χ_{JLA}^2	1035.20 (ν : 0.1)
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0021}_{-0.0021}$ (−0.5 σ)	k_{eq}	$0.01034^{+0.00015}_{-0.00015}$ (−0.5 σ)	χ_{prior}^2	7.8 (ν : 6.1) (+0.1 σ)
$\Omega_{\mathrm{m}} h^3$	$0.09611^{+0.00061}_{-0.00063}$ (+0.5 σ)	$100\theta_{\mathrm{eq}}$	$0.8160^{+0.0094}_{-0.0095}$ (+0.6 σ)	χ_{CMB}^2	11943.5 (ν : 16.5) (+1957.8 σ)
σ_8	$0.809^{+0.012}_{-0.010}$ (−0.3 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0048}_{-0.0049}$ (+0.5 σ)		
S_8	$0.826^{+0.024}_{-0.023}$ (−0.6 σ)	$H(0.15)$	$72.81^{+0.85}_{-0.85}$ (+0.7 σ)		

$\bar{\chi}_{\mathrm{eff}}^2 = 12986.49$; $R - 1 = 0.01335$

2.142 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_JLA_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02241^{+0.00028}_{-0.00027} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.011}_{-0.010} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+13}_{-13} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1183^{+0.0018}_{-0.0017} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.015}_{-0.015} \quad (-0.8\sigma)$	$H(0.51)$	$89.91^{+0.41}_{-0.41} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00057}_{-0.00060} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$100.3^{+1.4}_{-1.3} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+16}_{-15} \quad (-1.3\sigma)$
τ	$0.058^{+0.015}_{-0.013} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.037}_{-0.036} \quad (-0.8\sigma)$	$H(0.61)$	$95.48^{+0.35}_{-0.35} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.028}_{-0.025} \quad (+0.4\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+17}_{-16} \quad (-1.3\sigma)$
n_{s}	$0.9691^{+0.0071}_{-0.0078} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.058}_{-0.054} \quad (+0.4\sigma)$	$H(2.33)$	$235.5^{+1.1}_{-1.1} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0047} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5756^{+17}_{-17} \quad (-1.3\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1222^{+23}_{-22} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.010}_{-0.0097} \quad (-1.0\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5732^{+74}_{-74} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0095} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2537^{+26}_{-25} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.4712^{+0.0086}_{-0.0084} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$817.5^{+8.8}_{-8.9} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6630^{+0.0098}_{-0.0085} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.84 \quad (-0.5\sigma)$	D_{2000}	$231.0^{+3.0}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4705^{+0.0078}_{-0.0075} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9691^{+0.0071}_{-0.0078} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6207^{+0.0092}_{-0.0080} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00010}_{-0.00011} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.4661^{+0.0073}_{-0.0069} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5908^{+0.0085}_{-0.0079} \quad (+0.2\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.579^{+0.052}_{-0.051} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0043}_{-0.0040} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.782^{+0.039}_{-0.038} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3076^{+0.0046}_{-0.0043} \quad (+0.7\sigma)$
A_{143}^{dust}	$0.95^{+0.32}_{-0.33}$	z_*	$1089.73^{+0.42}_{-0.42} \quad (-1.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.84^{+0.45}_{-0.44} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.8} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04125^{+0.00055}_{-0.00061} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.044}_{-0.042} \quad (+0.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.41 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.5\sigma)$	z_{drag}	$1059.90^{+0.64}_{-0.61} \quad (+1.1\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.3) \quad (+0.3\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.010}$	r_{drag}	$147.50^{+0.48}_{-0.48} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.69 \quad (\nu: 0.3) \quad (-0.9\sigma)$
c_{EE}	$0.9922^{+0.0098}_{-0.0098}$	k_{D}	$0.14047^{+0.00063}_{-0.00060} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.3 \quad (\nu: 17.9)$
H_0	$68.03^{+0.75}_{-0.79} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00035}_{-0.00038} \quad (-1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.7 \quad (\nu: 1.2)$
Ω_{Λ}	$0.694^{+0.010}_{-0.010} \quad (+1.2\sigma)$	z_{eq}	$3363^{+40}_{-40} \quad (-1.0\sigma)$	χ_{JLA}^2	$706.63 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.010}_{-0.010} \quad (-1.2\sigma)$	k_{eq}	$0.01026^{+0.00012}_{-0.00012} \quad (-1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.020 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1414^{+0.0017}_{-0.0017} \quad (-1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8206^{+0.0075}_{-0.0075} \quad (+1.1\sigma)$	χ_{MGS}^2	$1.66 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09617^{+0.00064}_{-0.00062} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4532^{+0.0038}_{-0.0039} \quad (+1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.89 \quad (\nu: 0.2)$
σ_8	$0.808^{+0.012}_{-0.010} \quad (-0.4\sigma)$	$H(0.15)$	$73.25^{+0.67}_{-0.68} \quad (+1.3\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.7) \quad (+0.1\sigma)$
S_8	$0.815^{+0.020}_{-0.019} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.7^{+6.7}_{-6.4} \quad (-1.3\sigma)$	χ_{CMB}^2	$11944.9 \quad (\nu: 19.6) \quad (+1958.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.011}_{-0.010} \quad (-1.0\sigma)$	$H(0.38)$	$83.25^{+0.49}_{-0.50} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.57 \quad (\nu: 0.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12675.50; R - 1 = 0.05354$$

2.143 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02235^{+0.00027}_{-0.00029} \quad (+1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+14}_{-13} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0018}_{-0.0017} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.015} \quad (-0.6\sigma)$	$H(0.51)$	$89.75^{+0.41}_{-0.42} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00057}_{-0.00060} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.3}_{-1.4} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+16}_{-16} \quad (-0.9\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.039}_{-0.037} \quad (-0.6\sigma)$	$H(0.61)$	$95.36^{+0.35}_{-0.36} \quad (+1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.027}_{-0.025} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+18}_{-17} \quad (-0.9\sigma)$
n_{s}	$0.9674^{+0.0076}_{-0.0074} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.057}_{-0.052} \quad (+0.2\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.1} \quad (-0.7\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-16} \quad (-1.0\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+23}_{-22} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.010}_{-0.010} \quad (-0.8\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5726^{+75}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0094} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.4733^{+0.0088}_{-0.0085} \quad (-0.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.4^{+9.5}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6627^{+0.0091}_{-0.0085} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.58 \quad (-0.6\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.2} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4721^{+0.0080}_{-0.0078} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9674^{+0.0076}_{-0.0074} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6203^{+0.0085}_{-0.0079} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00010}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4673^{+0.0074}_{-0.0073} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00010}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0081}_{-0.0076} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.590^{+0.054}_{-0.050} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0041}_{-0.0039} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.794^{+0.040}_{-0.037} \quad (-1.0\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0044}_{-0.0041} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.33}_{-0.33}$	z_*	$1089.86^{+0.44}_{-0.41} \quad (-1.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.22}_{-0.20}$	r_*	$144.73^{+0.44}_{-0.44} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04115^{+0.00056}_{-0.00059} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.043}_{-0.042} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.27 \quad (\nu: 0.2)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.80^{+0.59}_{-0.63} \quad (+0.9\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{TE}	$0.9966^{+0.0096}_{-0.0098}$	r_{drag}	$147.40^{+0.48}_{-0.47} \quad (+0.4\sigma)$	χ_{lowl}^2	$22.94 \quad (\nu: 0.3) \quad (-0.7\sigma)$
c_{EE}	$0.9923^{+0.0097}_{-0.0095}$	k_{D}	$0.14052^{+0.00061}_{-0.00061} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.3 \quad (\nu: 15.4)$
H_0	$67.73^{+0.78}_{-0.81} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00037}_{-0.00035} \quad (-0.9\sigma)$	χ_{JLA}^2	$1035.02 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.010}_{-0.011} \quad (+0.9\sigma)$	z_{eq}	$3376^{+41}_{-40} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.038 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.011}_{-0.010} \quad (-0.9\sigma)$	k_{eq}	$0.01030^{+0.00012}_{-0.00012} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0017}_{-0.0017} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8180^{+0.0076}_{-0.0076} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}} h^3$	$0.09612^{+0.00061}_{-0.00063} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4518^{+0.0039}_{-0.0039} \quad (+0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.809^{+0.012}_{-0.010} \quad (-0.4\sigma)$	$H(0.15)$	$72.98^{+0.68}_{-0.69} \quad (+0.9\sigma)$	χ_{CMB}^2	$11943.6 \quad (\nu: 16.4) \quad (+1957.9\sigma)$
S_8	$0.821^{+0.020}_{-0.020} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.3^{+6.9}_{-6.6} \quad (-0.9\sigma)$	χ_{BAO}^2	$5.86 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-0.8\sigma)$	$H(0.38)$	$83.06^{+0.51}_{-0.52} \quad (+1.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12992.25; R - 1 = 0.01504$$

2.144 base_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_Pantheon18_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02241^{+0.00026}_{-0.00027} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.011}_{-0.0099} \quad (-0.9\sigma)$	$D_{\text{M}}(0.38)$	$1522^{+13}_{-13} \quad (-1.3\sigma)$
$\Omega_{\text{c}} h^2$	$0.1183^{+0.0017}_{-0.0016} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.016}_{-0.015} \quad (-0.8\sigma)$	$H(0.51)$	$89.91^{+0.40}_{-0.41} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04107^{+0.00057}_{-0.00060} \quad (+0.6\sigma)$	$r_{\text{drag}} h$	$100.4^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$D_{\text{M}}(0.51)$	$1973^{+16}_{-15} \quad (-1.3\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.038}_{-0.035} \quad (-0.8\sigma)$	$H(0.61)$	$95.49^{+0.34}_{-0.35} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.047^{+0.028}_{-0.026} \quad (+0.4\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.6\sigma)$	$D_{\text{M}}(0.61)$	$2296^{+17}_{-16} \quad (-1.3\sigma)$
n_{s}	$0.9690^{+0.0073}_{-0.0074} \quad (+1.1\sigma)$	$10^9 A_{\text{s}}$	$2.106^{+0.059}_{-0.055} \quad (+0.4\sigma)$	$H(2.33)$	$235.5^{+1.1}_{-1.1} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.875^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$D_{\text{M}}(2.33)$	$5756^{+17}_{-16} \quad (-1.3\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1223^{+23}_{-22} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.010}_{-0.0093} \quad (-1.0\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5733^{+74}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0095} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.4710^{+0.0088}_{-0.0080} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$817.4^{+9.0}_{-9.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6628^{+0.0098}_{-0.0084} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.70 \quad (-0.5\sigma)$	D_{2000}	$230.9^{+3.0}_{-3.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4704^{+0.0080}_{-0.0074} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.67^{+0.25}_{-0.25}$	$n_{\text{s},0.002}$	$0.9690^{+0.0073}_{-0.0074} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0089}_{-0.0083} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.245409^{+0.000097}_{-0.00011} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.4659^{+0.0076}_{-0.0069} \quad (-0.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.246736^{+0.000098}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0085}_{-0.0079} \quad (+0.2\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.578^{+0.051}_{-0.047} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0043}_{-0.0041} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.39}$	Age/Gyr	$13.782^{+0.039}_{-0.037} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3076^{+0.0046}_{-0.0043} \quad (+0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	z_*	$1089.72^{+0.42}_{-0.39} \quad (-1.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	r_*	$144.84^{+0.43}_{-0.43} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.7} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04125^{+0.00058}_{-0.00060} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.911^{+0.042}_{-0.042} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.42 \quad (\nu: 0.4)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.91^{+0.60}_{-0.62} \quad (+1.1\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.3) \quad (+0.3\sigma)$
c_{TE}	$0.9965^{+0.010}_{-0.0099}$	r_{drag}	$147.50^{+0.46}_{-0.47} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.71 \quad (\nu: 0.3) \quad (-0.9\sigma)$
c_{EE}	$0.9923^{+0.0095}_{-0.0095}$	k_{D}	$0.14047^{+0.00060}_{-0.00057} \quad (-0.1\sigma)$	χ_{CamSpec}^2	$11515.0 \quad (\nu: 16.0)$
H_0	$68.04^{+0.74}_{-0.77} \quad (+1.3\sigma)$	$100\theta_{\text{D}}$	$0.16078^{+0.00036}_{-0.00035} \quad (-1.1\sigma)$	χ_{H073p45}^2	$10.7 \quad (\nu: 1.1)$
Ω_{Λ}	$0.6946^{+0.0097}_{-0.010} \quad (+1.2\sigma)$	z_{eq}	$3362^{+40}_{-39} \quad (-1.0\sigma)$	χ_{JLA}^2	$1034.87 \quad (\nu: 0.0)$
Ω_{m}	$0.305^{+0.010}_{-0.0097} \quad (-1.2\sigma)$	k_{eq}	$0.01026^{+0.00012}_{-0.00012} \quad (-1.0\sigma)$	χ_{6DF}^2	$0.019 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1413^{+0.0017}_{-0.0016} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.8207^{+0.0072}_{-0.0074} \quad (+1.1\sigma)$	χ_{MGS}^2	$1.67 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^3$	$0.09617^{+0.00059}_{-0.00061} \quad (+0.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4532^{+0.0037}_{-0.0038} \quad (+1.1\sigma)$	χ_{DR12BAO}^2	$3.86 \quad (\nu: 0.2)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.5\sigma)$	$H(0.15)$	$73.26^{+0.64}_{-0.67} \quad (+1.3\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.815^{+0.020}_{-0.018} \quad (-1.0\sigma)$	$D_{\text{M}}(0.15)$	$637.6^{+6.6}_{-6.2} \quad (-1.3\sigma)$	χ_{CMB}^2	$11944.6 \quad (\nu: 17.7) \quad (+1958.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.446^{+0.011}_{-0.0096} \quad (-1.0\sigma)$	$H(0.38)$	$83.26^{+0.48}_{-0.50} \quad (+1.3\sigma)$	χ_{BAO}^2	$5.55 \quad (\nu: 0.1)$

$\bar{\chi}_{\text{eff}}^2 = 13003.54; R - 1 = 0.02380$

2.145 base_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022083	$0.02210^{+0.00042}_{-0.00042} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9900	$0.990^{+0.032}_{-0.031} \quad (-0.2\sigma)$	$H(0.15)$	72.29	$72.3^{+1.5}_{-1.5} \quad (+0.1\sigma)$
$\Omega_c h^2$	0.12045	$0.1204^{+0.0042}_{-0.0040} \quad (-0.1\sigma)$	$r_{\text{drag}} h$	98.58	$98.6^{+3.2}_{-3.1} \quad (+0.1\sigma)$	$D_M(0.15)$	647.2	$647^{+16}_{-15} \quad (-0.1\sigma)$
$100\theta_{\text{MC}}$	1.04082	$1.04079^{+0.00093}_{-0.00093} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.448	$2.449^{+0.076}_{-0.073} \quad (-0.1\sigma)$	$H(0.38)$	82.53	$82.6^{+1.1}_{-1.1} \quad (+0.1\sigma)$
τ	0.0511	$0.052^{+0.016}_{-0.015} \quad (-0.0\sigma)$	z_{re}	7.41	$7.5^{+1.6}_{-1.6} \quad (-0.0\sigma)$	$D_M(0.38)$	1541.5	$1541^{+31}_{-30} \quad (-0.1\sigma)$
$\ln(10^{10} A_s)$	3.0368	$3.038^{+0.033}_{-0.031} \quad (-0.2\sigma)$	$10^9 A_s$	2.084	$2.086^{+0.071}_{-0.065} \quad (-0.2\sigma)$	$H(0.51)$	89.32	$89.34^{+0.86}_{-0.85} \quad (+0.0\sigma)$
n_s	0.9623	$0.962^{+0.011}_{-0.011} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8816	$1.880^{+0.027}_{-0.026} \quad (-0.3\sigma)$	$D_M(0.51)$	1995.6	$1995^{+36}_{-35} \quad (-0.1\sigma)$
y_{cal}	1.00048	$1.0004^{+0.0048}_{-0.0047} \quad (-0.0\sigma)$	D_{40}	1232.5	$1232^{+30}_{-29} \quad (-0.1\sigma)$	$H(0.61)$	95.00	$95.02^{+0.69}_{-0.67} \quad (+0.0\sigma)$
A_{100}^{PS}	252	$255^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	5708	$5705^{+78}_{-79} \quad (-0.2\sigma)$	$D_M(0.61)$	2321.1	$2321^{+39}_{-38} \quad (-0.1\sigma)$
A_{143}^{tSZ}	6.20	$< 7.48 \quad (-0.7\sigma)$	D_{810}	2533.2	$2531^{+27}_{-27} \quad (-0.4\sigma)$	$H(2.33)$	236.56	$236.6^{+2.5}_{-2.4} \quad (-0.1\sigma)$
A^{kSZ}	0.3	—	D_{1420}	813.1	$813^{+10}_{-10} \quad (-0.4\sigma)$	$D_M(2.33)$	5778.3	$5778^{+31}_{-32} \quad (-0.0\sigma)$
A_{100}^{dust}	0.988	$1.00^{+0.38}_{-0.38}$	D_{2000}	229.01	$228.9^{+3.6}_{-3.6} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	0.4618	$0.462^{+0.024}_{-0.023} \quad (-0.1\sigma)$
A_{143}^{power}	12.31	$10.4^{+4.9}_{-4.3}$	$n_{s,0.002}$	0.9623	$0.962^{+0.011}_{-0.011} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	0.7476	$0.748^{+0.015}_{-0.015} \quad (-0.2\sigma)$
A_{217}^{power}	11.80	$8.2^{+5.0}_{-4.2}$	Y_P	0.245277	$0.24528^{+0.00017}_{-0.00020} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4783	$0.478^{+0.019}_{-0.019} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{power}}$	8.03	$4.3^{+4.4}_{-4.2}$	Y_P^{BBN}	0.246603	$0.24660^{+0.00017}_{-0.00020} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6618	$0.662^{+0.012}_{-0.012} \quad (-0.2\sigma)$
$\gamma_{143}^{\text{power}}$	1.33	$1.34^{+0.97}_{-0.83}$	$10^5 \text{D}/\text{H}$	2.640	$2.637^{+0.082}_{-0.079} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	0.4760	$0.476^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\gamma_{217}^{\text{power}}$	1.23	> 0.343	Age/Gyr	13.831	$13.830^{+0.070}_{-0.070} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	0.6190	$0.619^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$\gamma_{143 \times 217}^{\text{power}}$	1.17	> 0.374	z_*	1090.33	$1090.30^{+0.81}_{-0.78} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4703	$0.470^{+0.014}_{-0.014} \quad (-0.2\sigma)$
c_{100}	0.99810	$0.9978^{+0.0021}_{-0.0021} \quad (-3.0\sigma)$	r_*	144.53	$144.53^{+0.93}_{-0.94} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	0.5888	$0.589^{+0.010}_{-0.0099} \quad (-0.2\sigma)$
c_{217}	0.99914	$0.9994^{+0.0031}_{-0.0028} \quad (+1.8\sigma)$	$100\theta_*$	1.04103	$1.04100^{+0.00091}_{-0.00092} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2965	$0.2966^{+0.0052}_{-0.0048} \quad (-0.2\sigma)$
H_0	66.93	$66.9^{+1.8}_{-1.8} \quad (+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	13.884	$13.884^{+0.085}_{-0.087} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.3054	$0.3054^{+0.0054}_{-0.0051} \quad (-0.2\sigma)$
Ω_Λ	0.6803	$0.680^{+0.025}_{-0.027} \quad (+0.1\sigma)$	z_{drag}	1059.28	$1059.34^{+0.90}_{-0.86} \quad (-0.1\sigma)$	f_{2000}^{143}	23.8	$24^{+6}_{-6} \quad (-2.6\sigma)$
Ω_m	0.3197	$0.320^{+0.027}_{-0.025} \quad (-0.1\sigma)$	r_{drag}	147.29	$147.28^{+0.93}_{-0.93} \quad (+0.2\sigma)$	f_{2000}^{217}	17.10	$16.9^{+3.9}_{-3.9} \quad (-47.3\sigma)$
$\Omega_m h^2$	0.14318	$0.1432^{+0.0040}_{-0.0038} \quad (-0.1\sigma)$	k_D	0.14043	$0.1405^{+0.0010}_{-0.0010} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	11.55	$11.2^{+4.2}_{-4.1} \quad (-11.0\sigma)$
$\Omega_m h^3$	0.09582	$0.09584^{+0.00090}_{-0.00087} \quad (-0.1\sigma)$	$100\theta_D$	0.16113	$0.16111^{+0.00051}_{-0.00051} \quad (+0.1\sigma)$	χ_{simall}^2	395.79	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
σ_8	0.8099	$0.810^{+0.018}_{-0.018} \quad (-0.2\sigma)$	z_{eq}	3406	$3406^{+95}_{-91} \quad (-0.1\sigma)$	χ_{lowl}^2	23.70	$23.8 \quad (\nu: 0.9) \quad (-0.1\sigma)$
S_8	0.8360	$0.836^{+0.048}_{-0.046} \quad (-0.1\sigma)$	k_{eq}	0.010396	$0.01040^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	χ_{CamSpec}^2	6704.4	$6716.2 \quad (\nu: 13.3)$
$\sigma_8 \Omega_m^{0.5}$	0.4579	$0.458^{+0.026}_{-0.025} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	0.8117	$0.812^{+0.017}_{-0.017} \quad (+0.1\sigma)$	χ_{prior}^2	1.2	$5.3 \quad (\nu: 4.2) \quad (-0.6\sigma)$
$\sigma_8 \Omega_m^{0.25}$	0.6090	$0.609^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$100\theta_{s,\text{eq}}$	0.4488	$0.4488^{+0.0089}_{-0.0090} \quad (+0.1\sigma)$	χ_{CMB}^2	7123.9	$7137.0 \quad (\nu: 13.6) \quad (+1082.6\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 7125.11$; $\bar{\chi}_{\text{eff}}^2 = 7142.20$; $R - 1 = 0.00552$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.79 commander_dx12_v3.2_29: 23.70 CamSpec like_10.7cleaned: 6704.43

2.146 base_lensing_lenspriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02221	$0.02220^{+0.00097}_{-0.00097}$ (+0.4 σ)	D_{810}	2788	2628^{+900}_{-800} (+6.6 σ)	$H(0.38)$	107.7	84^{+30}_{-20} (+1.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.1163	$0.111^{+0.023}_{-0.022}$ (−4.5 σ)	D_{1420}	756	819^{+300}_{-300} (+0.9 σ)	$D_{\mathrm{M}}(0.38)$	1121	1585^{+700}_{-500} (+2.7 σ)
$100\theta_{\mathrm{MC}}$	1.118	$1.032^{+0.097}_{-0.10}$ (−18.2 σ)	D_{2000}	215	264^{+100}_{-100} (+19.1 σ)	$H(0.51)$	112.9	90^{+20}_{-20} (+1.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.262	$3.13^{+0.26}_{-0.27}$ (+5.7 σ)	$n_{\mathrm{s},0.002}$	0.9607	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1475	2047^{+800}_{-600} (+2.8 σ)
n_{s}	0.9607	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	Y_{P}	0.245330	$0.24531^{+0.00042}_{-0.00042}$ (+0.3 σ)	$H(0.61)$	117.3	95^{+20}_{-20} (+1.1 σ)
H_0	96.6	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246656	$0.24664^{+0.00042}_{-0.00043}$ (+0.3 σ)	$D_{\mathrm{M}}(0.61)$	1736	2378^{+900}_{-700} (+2.8 σ)
Ω_{Λ}	0.851	$0.66^{+0.22}_{-0.37}$ (−1.7 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.616	$2.62^{+0.19}_{-0.18}$ (−0.3 σ)	$H(2.33)$	243.6	230^{+24}_{-22} (−5.0 σ)
Ω_{m}	0.149	$0.34^{+0.37}_{-0.22}$ (+1.7 σ)	Age/Gyr	11.74	$14.2^{+3.2}_{-2.8}$ (+9.7 σ)	$D_{\mathrm{M}}(2.33)$	4847	5909^{+1000}_{-1000} (+8.1 σ)
$\Omega_{\mathrm{m}}h^2$	0.1391	$0.134^{+0.023}_{-0.022}$ (−4.7 σ)	z_{*}	1089.79	$1089.4^{+2.4}_{-2.2}$ (−2.3 σ)	$f\sigma_{\mathrm{s}}(0.15)$	0.374	$0.439^{+0.074}_{-0.079}$ (−2.1 σ)
$\Omega_{\mathrm{m}}h^3$	0.1344	$0.093^{+0.049}_{-0.044}$ (−6.5 σ)	r_{*}	145.5	$147.0^{+6.1}_{-6.4}$ (+5.3 σ)	$\sigma_{\mathrm{s}}(0.15)$	0.890	$0.74^{+0.17}_{-0.19}$ (−1.2 σ)
σ_{s}	0.939	$0.80^{+0.16}_{-0.18}$ (−1.3 σ)	$100\theta_{*}$	1.118	$1.032^{+0.097}_{-0.10}$ (−18.6 σ)	$f\sigma_{\mathrm{s}}(0.38)$	0.4315	$0.453^{+0.037}_{-0.038}$ (−2.8 σ)
S_{s}	0.662	$0.80^{+0.20}_{-0.18}$ (−1.5 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.01	$14.3^{+1.9}_{-1.8}$ (+9.5 σ)	$\sigma_{\mathrm{s}}(0.38)$	0.817	$0.66^{+0.17}_{-0.19}$ (−0.7 σ)
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	0.362	$0.440^{+0.11}_{-0.096}$ (−1.5 σ)	z_{drag}	1059.28	$1058.9^{+2.9}_{-2.9}$ (−1.1 σ)	$f\sigma_{\mathrm{s}}(0.51)$	0.4535	$0.453^{+0.038}_{-0.046}$ (−3.0 σ)
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	0.5834	$0.589^{+0.038}_{-0.039}$ (−1.9 σ)	r_{drag}	148.3	$149.8^{+6.3}_{-6.6}$ (+5.4 σ)	$\sigma_{\mathrm{s}}(0.51)$	0.777	$0.62^{+0.17}_{-0.19}$ (−0.3 σ)
$\sigma_{\mathrm{s}}/h^{0.5}$	0.9553	$0.974^{+0.040}_{-0.046}$ (−1.2 σ)	k_{D}	0.1395	$0.1380^{+0.0072}_{-0.0066}$ (−4.9 σ)	$f\sigma_{\mathrm{s}}(0.61)$	0.466	$0.449^{+0.045}_{-0.062}$ (−3.1 σ)
$r_{\mathrm{drag}}h$	143.3	103^{+40}_{-40} (+2.6 σ)	$100\theta_{\mathrm{D}}$	0.1731	$0.160^{+0.015}_{-0.015}$ (−4.1 σ)	$\sigma_{\mathrm{s}}(0.61)$	0.748	$0.59^{+0.17}_{-0.19}$ (−0.0 σ)
$\langle d^2 \rangle^{1/2}$	2.492	$2.50^{+0.11}_{-0.11}$ (+1.3 σ)	z_{eq}	3309	3189^{+600}_{-500} (−4.7 σ)	$f\sigma_{\mathrm{s}}(2.33)$	0.388	$0.299^{+0.095}_{-0.10}$ (+0.7 σ)
z_{re}	7.89	$7.63^{+0.58}_{-0.55}$ (+0.2 σ)	k_{eq}	0.01010	$0.0097^{+0.0017}_{-0.0016}$ (−4.7 σ)	$\sigma_{\mathrm{s}}(2.33)$	0.419	$0.31^{+0.11}_{-0.11}$ (+2.2 σ)
10^9A_{s}	2.61	$2.32^{+0.62}_{-0.58}$ (+6.5 σ)	$100\theta_{\mathrm{eq}}$	0.892	$0.849^{+0.098}_{-0.092}$ (+4.3 σ)	$\chi^2_{\mathrm{lensing}}$	7.49	9.6 (ν : 2.0)
$10^9A_{\mathrm{s}}e^{-2\tau}$	2.34	$2.07^{+0.55}_{-0.52}$ (+14.0 σ)	$100\theta_{\mathrm{s,eq}}$	0.492	$0.468^{+0.052}_{-0.049}$ (+4.2 σ)	χ^2_{prior}	0.00	2.0 (ν : 1.9) (−1.5 σ)
D_{40}	1641	1400^{+400}_{-400} (+10.9 σ)	$H(0.15)$	100.3	74^{+30}_{-30} (+2.1 σ)			
D_{220}	7133	6564^{+2000}_{-2000} (+20.3 σ)	$D_{\mathrm{M}}(0.15)$	457	670^{+300}_{-200} (+2.8 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 7.49$; $\bar{\chi}^2_{\mathrm{eff}} = 11.58$; $R - 1 = 0.00149$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.49

2.147 base_lensing_lenspriors_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02220	$0.02221^{+0.00095}_{-0.00094}$ (+0.4 σ)	D_{810}	2815	2748^{+500}_{-600} (+15.3 σ)	$H(0.38)$	81.0	$81.9^{+8.6}_{-7.7}$ (−1.0 σ)
$\Omega_c h^2$	0.1091	$0.112^{+0.024}_{-0.021}$ (−4.4 σ)	D_{1420}	892	866^{+200}_{-200} (+10.1 σ)	$D_M(0.38)$	1561	1547^{+170}_{-160} (+0.3 σ)
$100\theta_{MC}$	1.0266	$1.031^{+0.047}_{-0.044}$ (−21.0 σ)	D_{2000}	253	253^{+80}_{-60} (+13.2 σ)	$H(0.51)$	87.4	$88.4^{+8.9}_{-8.0}$ (−2.2 σ)
$\ln(10^{10} A_s)$	3.147	$3.13^{+0.18}_{-0.20}$ (+5.5 σ)	$n_{s,0.002}$	0.9609	$0.959^{+0.040}_{-0.041}$ (−0.7 σ)	$D_M(0.51)$	2024	2007^{+220}_{-200} (+0.6 σ)
n_s	0.9609	$0.959^{+0.040}_{-0.041}$ (−0.7 σ)	Y_P	0.245326	$0.24532^{+0.00041}_{-0.00042}$ (+0.3 σ)	$H(0.61)$	92.8	$93.7^{+9.3}_{-8.3}$ (−3.6 σ)
H_0	66.5	67^{+8}_{-7} (+0.4 σ)	Y_P^{BBN}	0.246652	$0.24664^{+0.00041}_{-0.00042}$ (+0.3 σ)	$D_M(0.61)$	2357	2337^{+250}_{-240} (+0.8 σ)
Ω_Λ	0.7016	$0.702^{+0.042}_{-0.045}$ (+1.8 σ)	$10^5 D/H$	2.618	$2.62^{+0.19}_{-0.17}$ (−0.4 σ)	$H(2.33)$	227.7	230^{+20}_{-19} (−5.5 σ)
Ω_m	0.2984	$0.298^{+0.045}_{-0.042}$ (−1.8 σ)	Age/Gyr	14.19	$14.1^{+1.3}_{-1.3}$ (+7.0 σ)	$D_M(2.33)$	5928	5881^{+540}_{-530} (+6.4 σ)
$\Omega_m h^2$	0.1319	$0.134^{+0.024}_{-0.022}$ (−4.5 σ)	z_*	1089.15	$1089.4^{+2.4}_{-2.1}$ (−2.3 σ)	$f\sigma_8(0.15)$	0.4428	$0.443^{+0.031}_{-0.030}$ (−1.7 σ)
$\Omega_m h^3$	0.0877	$0.091^{+0.026}_{-0.023}$ (−11.2 σ)	r_*	147.5	$146.9^{+5.8}_{-6.5}$ (+5.2 σ)	$\sigma_8(0.15)$	0.741	$0.744^{+0.057}_{-0.052}$ (−0.7 σ)
σ_8	0.800	$0.804^{+0.059}_{-0.054}$ (−0.9 σ)	$100\theta_*$	1.0268	$1.031^{+0.047}_{-0.044}$ (−21.4 σ)	$f\sigma_8(0.38)$	0.4638	$0.465^{+0.030}_{-0.028}$ (−1.6 σ)
S_8	0.798	$0.799^{+0.059}_{-0.057}$ (−1.7 σ)	$D_M(z_*)/\text{Gpc}$	14.36	$14.3^{+1.2}_{-1.2}$ (+8.7 σ)	$\sigma_8(0.38)$	0.658	$0.661^{+0.053}_{-0.050}$ (−0.3 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4372	$0.438^{+0.032}_{-0.031}$ (−1.7 σ)	z_{drag}	1058.75	$1058.9^{+2.8}_{-2.9}$ (−1.0 σ)	$f\sigma_8(0.51)$	0.4640	$0.465^{+0.029}_{-0.028}$ (−1.5 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5915	$0.593^{+0.038}_{-0.035}$ (−1.5 σ)	r_{drag}	150.3	$149.7^{+6.1}_{-6.8}$ (+5.2 σ)	$\sigma_8(0.51)$	0.6165	$0.619^{+0.051}_{-0.048}$ (−0.1 σ)
$\sigma_8/h^{0.5}$	0.9815	$0.980^{+0.037}_{-0.038}$ (−0.8 σ)	k_D	0.1374	$0.1381^{+0.0070}_{-0.0067}$ (−4.7 σ)	$f\sigma_8(0.61)$	0.4601	$0.461^{+0.030}_{-0.028}$ (−1.4 σ)
$r_{\text{drag}} h$	99.9	$100.6^{+8.9}_{-8.3}$ (+1.4 σ)	$100\theta_D$	0.1592	$0.1598^{+0.0064}_{-0.0062}$ (−4.9 σ)	$\sigma_8(0.61)$	0.5870	$0.590^{+0.050}_{-0.046}$ (+0.0 σ)
$\langle d^2 \rangle^{1/2}$	2.508	$2.50^{+0.11}_{-0.11}$ (+1.3 σ)	z_{eq}	3136	3196^{+600}_{-500} (−4.5 σ)	$f\sigma_8(2.33)$	0.2966	$0.298^{+0.027}_{-0.025}$ (+0.4 σ)
z_{re}	7.582	$7.63^{+0.51}_{-0.46}$ (+0.2 σ)	k_{eq}	0.00957	$0.0098^{+0.0017}_{-0.0016}$ (−4.5 σ)	$\sigma_8(2.33)$	0.3063	$0.308^{+0.029}_{-0.027}$ (+0.8 σ)
$10^9 A_s$	2.326	$2.30^{+0.45}_{-0.43}$ (+6.0 σ)	$100\theta_{\text{eq}}$	0.852	$0.847^{+0.072}_{-0.073}$ (+4.1 σ)	χ^2_{lensing}	7.59	9.6 (ν : 2.0)
$10^9 A_s e^{-2\tau}$	2.084	$2.06^{+0.40}_{-0.38}$ (+12.9 σ)	$100\theta_{s,\text{eq}}$	0.4693	$0.467^{+0.036}_{-0.037}$ (+4.0 σ)	χ^2_{JLA}	1034.73	1035.7 (ν : 1.0)
D_{40}	1400	1387^{+300}_{-300} (+10.0 σ)	$H(0.15)$	71.5	72^{+8}_{-7} (+0.1 σ)	χ^2_{prior}	0.00	2.0 (ν : 2.0) (−1.4 σ)
D_{220}	6666	6566^{+2000}_{-2000} (+20.3 σ)	$D_M(0.15)$	653	647^{+70}_{-70} (−0.0 σ)			

Best-fit $\chi^2_{\text{eff}} = 1042.33$; $\bar{\chi}^2_{\text{eff}} = 1047.30$; $R - 1 = 0.00566$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.59 SN - JLA Pantheon18: 1034.73

2.148 base_lensing_lenspriors_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00097}_{-0.00098}$ (+0.3 σ)	D_{810}	2732^{+900}_{-800} (+14.2 σ)	$H(0.38)$	84^{+20}_{-20} (+2.4 σ)
$\Omega_{\mathrm{c}}h^2$	$0.107^{+0.020}_{-0.019}$ (−6.5 σ)	D_{1420}	854^{+300}_{-200} (+7.7 σ)	$D_{\mathrm{M}}(0.38)$	1572^{+700}_{-500} (+1.9 σ)
$100\theta_{\mathrm{MC}}$	$1.030^{+0.095}_{-0.10}$ (−22.9 σ)	D_{2000}	276^{+100}_{-100} (+25.7 σ)	$H(0.51)$	90^{+20}_{-20} (+1.8 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.17^{+0.24}_{-0.25}$ (+7.8 σ)	$n_{\mathrm{s},0.002}$	$0.959^{+0.038}_{-0.039}$ (−0.7 σ)	$D_{\mathrm{M}}(0.51)$	2033^{+800}_{-600} (+2.0 σ)
n_{s}	$0.959^{+0.038}_{-0.039}$ (−0.7 σ)	Y_{P}	$0.24531^{+0.00042}_{-0.00043}$ (+0.2 σ)	$H(0.61)$	95^{+20}_{-20} (+0.8 σ)
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00042}_{-0.00043}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2364^{+900}_{-700} (+2.1 σ)
Ω_{Λ}	$0.68^{+0.20}_{-0.36}$ (−0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18}$ (−0.3 σ)	$H(2.33)$	227^{+22}_{-21} (−7.4 σ)
Ω_{m}	$0.32^{+0.36}_{-0.20}$ (+0.1 σ)	$\mathrm{Age}/\mathrm{Gyr}$	$14.2^{+3.3}_{-2.7}$ (+10.9 σ)	$D_{\mathrm{M}}(2.33)$	5925^{+1000}_{-1000} (+9.1 σ)
$\Omega_{\mathrm{m}}h^2$	$0.130^{+0.021}_{-0.019}$ (−6.8 σ)	z_*	$1089.0^{+2.2}_{-2.0}$ (−3.3 σ)	$f\sigma_8(0.15)$	$0.426^{+0.071}_{-0.073}$ (−3.1 σ)
$\Omega_{\mathrm{m}}h^3$	$0.091^{+0.047}_{-0.044}$ (−10.5 σ)	r_*	$148.2^{+5.5}_{-5.8}$ (+7.8 σ)	$\sigma_8(0.15)$	$0.74^{+0.16}_{-0.18}$ (−1.4 σ)
σ_8	$0.80^{+0.15}_{-0.17}$ (−1.8 σ)	$100\theta_*$	$1.030^{+0.095}_{-0.10}$ (−23.3 σ)	$f\sigma_8(0.38)$	$0.444^{+0.032}_{-0.035}$ (−3.7 σ)
S_8	$0.78^{+0.19}_{-0.16}$ (−2.6 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.4^{+1.9}_{-1.7}$ (+12.7 σ)	$\sigma_8(0.38)$	$0.66^{+0.16}_{-0.19}$ (−0.6 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.425^{+0.10}_{-0.088}$ (−2.6 σ)	z_{drag}	$1058.5^{+2.9}_{-2.9}$ (−1.9 σ)	$f\sigma_8(0.51)$	$0.445^{+0.032}_{-0.042}$ (−3.9 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.578^{+0.032}_{-0.032}$ (−2.8 σ)	r_{drag}	$151.0^{+5.8}_{-6.0}$ (+7.9 σ)	$\sigma_8(0.51)$	$0.62^{+0.16}_{-0.19}$ (−0.1 σ)
$\sigma_8/h^{0.5}$	$0.963^{+0.037}_{-0.042}$ (−1.9 σ)	k_{D}	$0.1367^{+0.0064}_{-0.0060}$ (−7.3 σ)	$f\sigma_8(0.61)$	$0.443^{+0.037}_{-0.058}$ (−3.9 σ)
$r_{\mathrm{drag}}h$	105^{+40}_{-40} (+4.0 σ)	$100\theta_{\mathrm{D}}$	$0.160^{+0.014}_{-0.015}$ (−4.7 σ)	$\sigma_8(0.61)$	$0.59^{+0.16}_{-0.18}$ (+0.2 σ)
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.10}_{-0.10}$ (+1.5 σ)	z_{eq}	3086^{+500}_{-500} (−6.8 σ)	$f\sigma_8(2.33)$	$0.300^{+0.091}_{-0.10}$ (+1.3 σ)
z_{re}	$7.56^{+0.54}_{-0.53}$ (+0.1 σ)	k_{eq}	$0.0094^{+0.0015}_{-0.0014}$ (−6.8 σ)	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.12}$ (+3.0 σ)
10^9A_{s}	$2.40^{+0.60}_{-0.57}$ (+8.8 σ)	$100\theta_{\mathrm{eq}}$	$0.867^{+0.089}_{-0.084}$ (+6.4 σ)	$\chi^2_{\mathrm{lensing}}$	11.9 (ν : 2.0)
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.15^{+0.54}_{-0.51}$ (+19.2 σ)	$100\theta_{\mathrm{s,eq}}$	$0.477^{+0.048}_{-0.045}$ (+6.3 σ)	χ^2_{prior}	2.0 (ν : 1.9) (−1.5 σ)
D_{40}	1464^{+400}_{-400} (+15.1 σ)	$H(0.15)$	75^{+30}_{-30} (+2.9 σ)		
D_{220}	6917^{+2000}_{-2000} (+28.7 σ)	$D_{\mathrm{M}}(0.15)$	663^{+400}_{-200} (+1.9 σ)		

$\bar{\chi}^2_{\mathrm{eff}} = 13.89$; $R - 1 = 0.00196$

2.149 base_lensing_lenspriors_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00098}_{-0.00097} \quad (+0.3\sigma)$	D_{810}	$2642^{+1000}_{-900} \quad (+7.7\sigma)$	$H(0.38)$	$84^{+30}_{-20} \quad (+2.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.111^{+0.027}_{-0.024} \quad (-4.6\sigma)$	D_{1420}	$825^{+300}_{-300} \quad (+2.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1584^{+700}_{-500} \quad (+2.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.032^{+0.099}_{-0.10} \quad (-18.9\sigma)$	D_{2000}	$267^{+100}_{-100} \quad (+20.7\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+1.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.14^{+0.28}_{-0.29} \quad (+6.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2046^{+800}_{-600} \quad (+2.7\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$H(0.61)$	$95^{+20}_{-20} \quad (+1.1\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2377^{+900}_{-700} \quad (+2.8\sigma)$
Ω_{Λ}	$0.66^{+0.22}_{-0.37} \quad (-1.5\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$230^{+30}_{-20} \quad (-5.2\sigma)$
Ω_{m}	$0.34^{+0.37}_{-0.22} \quad (+1.5\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.2^{+3.3}_{-2.8} \quad (+9.9\sigma)$	$D_{\mathrm{M}}(2.33)$	$5912^{+1000}_{-1000} \quad (+8.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.134^{+0.027}_{-0.025} \quad (-4.8\sigma)$	z_*	$1089.3^{+2.6}_{-2.4} \quad (-2.4\sigma)$	$f\sigma_8(0.15)$	$0.438^{+0.076}_{-0.081} \quad (-2.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.093^{+0.051}_{-0.045} \quad (-6.6\sigma)$	r_*	$147.1^{+6.9}_{-7.2} \quad (+5.6\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.17}_{-0.19} \quad (-1.1\sigma)$
σ_8	$0.80^{+0.16}_{-0.18} \quad (-1.3\sigma)$	$100\theta_*$	$1.032^{+0.099}_{-0.10} \quad (-19.2\sigma)$	$f\sigma_8(0.38)$	$0.453^{+0.040}_{-0.040} \quad (-2.8\sigma)$
S_8	$0.80^{+0.20}_{-0.18} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.3^{+2.0}_{-1.9} \quad (+9.9\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.17}_{-0.19} \quad (-0.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.439^{+0.11}_{-0.098} \quad (-1.6\sigma)$	z_{drag}	$1058.8^{+3.0}_{-3.1} \quad (-1.2\sigma)$	$f\sigma_8(0.51)$	$0.452^{+0.041}_{-0.046} \quad (-3.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.588^{+0.041}_{-0.043} \quad (-1.9\sigma)$	r_{drag}	$149.9^{+7.2}_{-7.4} \quad (+5.6\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.17}_{-0.19} \quad (-0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.973^{+0.043}_{-0.045} \quad (-1.2\sigma)$	k_{D}	$0.1379^{+0.0080}_{-0.0074} \quad (-5.1\sigma)$	$f\sigma_8(0.61)$	$0.449^{+0.048}_{-0.062} \quad (-3.1\sigma)$
$r_{\mathrm{drag}}h$	$103^{+40}_{-40} \quad (+2.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.160^{+0.015}_{-0.015} \quad (-4.1\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.17}_{-0.19} \quad (+0.0\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.13}_{-0.13} \quad (+1.4\sigma)$	z_{eq}	$3183^{+600}_{-600} \quad (-4.8\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.095}_{-0.10} \quad (+0.8\sigma)$
z_{re}	$7.62^{+0.62}_{-0.60} \quad (+0.1\sigma)$	k_{eq}	$0.0097^{+0.0019}_{-0.0018} \quad (-4.8\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+2.3\sigma)$
10^9A_{s}	$2.33^{+0.69}_{-0.64} \quad (+7.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.85^{+0.11}_{-0.10} \quad (+4.5\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.6 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.09^{+0.62}_{-0.57} \quad (+15.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.469^{+0.057}_{-0.054} \quad (+4.5\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
D_{40}	$1413^{+500}_{-400} \quad (+11.7\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+2.1\sigma)$		
D_{220}	$6635^{+2000}_{-2000} \quad (+22.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$670^{+300}_{-200} \quad (+2.8\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 11.55; R - 1 = 0.00268$$

2.150 base_lensing_lenspriors_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{810}	$2593^{+900}_{-800} \quad (+4.1\sigma)$	$H(0.38)$	$84^{+30}_{-20} \quad (+2.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.113^{+0.024}_{-0.022} \quad (-3.9\sigma)$	D_{1420}	$806^{+300}_{-300} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1585^{+700}_{-500} \quad (+2.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.034^{+0.098}_{-0.10} \quad (-15.4\sigma)$	D_{2000}	$259^{+100}_{-100} \quad (+16.3\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+1.9\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.12^{+0.26}_{-0.27} \quad (+4.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$2047^{+800}_{-600} \quad (+2.7\sigma)$
n_{s}	$0.959^{+0.039}_{-0.039} \quad (-0.6\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$H(0.61)$	$96^{+20}_{-20} \quad (+1.6\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2377^{+900}_{-700} \quad (+2.8\sigma)$
Ω_{Λ}	$0.65^{+0.22}_{-0.37} \quad (-2.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$231^{+24}_{-22} \quad (-4.2\sigma)$
Ω_{m}	$0.35^{+0.37}_{-0.22} \quad (+2.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.1^{+3.2}_{-2.8} \quad (+8.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5896^{+1000}_{-1000} \quad (+7.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.135^{+0.024}_{-0.022} \quad (-4.0\sigma)$	z_*	$1089.5^{+2.4}_{-2.2} \quad (-2.0\sigma)$	$f\sigma_8(0.15)$	$0.441^{+0.074}_{-0.079} \quad (-1.8\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.094^{+0.050}_{-0.045} \quad (-4.7\sigma)$	r_*	$146.7^{+6.1}_{-6.4} \quad (+4.6\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.17}_{-0.19} \quad (-1.1\sigma)$
σ_8	$0.80^{+0.16}_{-0.18} \quad (-1.2\sigma)$	$100\theta_*$	$1.034^{+0.098}_{-0.10} \quad (-15.7\sigma)$	$f\sigma_8(0.38)$	$0.455^{+0.037}_{-0.037} \quad (-2.6\sigma)$
S_8	$0.81^{+0.20}_{-0.18} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.2^{+1.9}_{-1.8} \quad (+8.3\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.17}_{-0.19} \quad (-0.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.443^{+0.11}_{-0.097} \quad (-1.2\sigma)$	z_{drag}	$1059.0^{+2.9}_{-3.0} \quad (-0.9\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.038}_{-0.047} \quad (-2.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.038}_{-0.038} \quad (-1.7\sigma)$	r_{drag}	$149.4^{+6.4}_{-6.6} \quad (+4.6\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.17}_{-0.19} \quad (-0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.976^{+0.040}_{-0.045} \quad (-1.1\sigma)$	k_{D}	$0.1383^{+0.0072}_{-0.0066} \quad (-4.2\sigma)$	$f\sigma_8(0.61)$	$0.451^{+0.046}_{-0.063} \quad (-2.9\sigma)$
$r_{\mathrm{drag}}h$	$102^{+40}_{-40} \quad (+2.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.160^{+0.015}_{-0.015} \quad (-3.4\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.17}_{-0.19} \quad (-0.0\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.11}_{-0.11} \quad (+1.2\sigma)$	z_{eq}	$3220^{+600}_{-500} \quad (-4.0\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.095}_{-0.10} \quad (+0.7\sigma)$
z_{re}	$7.66^{+0.58}_{-0.56} \quad (+0.2\sigma)$	k_{eq}	$0.0098^{+0.0017}_{-0.0016} \quad (-4.0\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+2.1\sigma)$
10^9A_{s}	$2.29^{+0.62}_{-0.58} \quad (+5.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.844^{+0.097}_{-0.093} \quad (+3.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$7.5 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.05^{+0.55}_{-0.52} \quad (+12.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.465^{+0.051}_{-0.049} \quad (+3.7\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 1.9) \quad (-1.5\sigma)$
D_{40}	$1381^{+400}_{-400} \quad (+9.7\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+2.1\sigma)$		
D_{220}	$6452^{+2000}_{-2000} \quad (+17.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$671^{+300}_{-200} \quad (+2.9\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 9.48; R - 1 = 0.00229$

2.151 base_lensing_lenspriors_post_ptt

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.0222^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	D_{810}	$3025^{+1000}_{-1000} \quad (+35.4\sigma)$	$H(0.38)$	$82^{+30}_{-20} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.099^{+0.023}_{-0.022} \quad (-10.2\sigma)$	D_{1420}	$964^{+300}_{-300} \quad (+29.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1600^{+700}_{-500} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.02^{+0.10}_{-0.10} \quad (-50.6\sigma)$	D_{2000}	$324^{+200}_{-100} \quad (+52.3\sigma)$	$H(0.51)$	$88^{+20}_{-20} \quad (-2.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.27^{+0.25}_{-0.27} \quad (+13.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2071^{+800}_{-600} \quad (+4.1\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	Y_{P}	$0.24530^{+0.00045}_{-0.00044} \quad (+0.2\sigma)$	$H(0.61)$	$93^{+20}_{-20} \quad (-5.3\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00045}_{-0.00044} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2410^{+900}_{-700} \quad (+4.4\sigma)$
Ω_{Λ}	$0.69^{+0.20}_{-0.34} \quad (+0.8\sigma)$	$10^5 D/H$	$2.63^{+0.20}_{-0.19} \quad (-0.2\sigma)$	$H(2.33)$	$221^{+24}_{-24} \quad (-12.6\sigma)$
Ω_{m}	$0.31^{+0.34}_{-0.20} \quad (-0.8\sigma)$	Age/Gyr	$14.6^{+3.0}_{-3.0} \quad (+20.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$6070^{+1000}_{-1000} \quad (+17.9\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.122^{+0.023}_{-0.022} \quad (-10.7\sigma)$	z_*	$1088.3^{+2.4}_{-2.3} \quad (-5.0\sigma)$	$f\sigma_8(0.15)$	$0.419^{+0.079}_{-0.081} \quad (-3.7\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.084^{+0.047}_{-0.041} \quad (-25.0\sigma)$	r_*	$150.4^{+6.5}_{-6.7} \quad (+12.5\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.17}_{-0.18} \quad (-1.6\sigma)$
σ_8	$0.79^{+0.16}_{-0.17} \quad (-2.0\sigma)$	$100\theta_*$	$1.02^{+0.10}_{-0.10} \quad (-51.4\sigma)$	$f\sigma_8(0.38)$	$0.440^{+0.039}_{-0.047} \quad (-4.2\sigma)$
S_8	$0.76^{+0.20}_{-0.17} \quad (-3.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.8^{+1.9}_{-1.8} \quad (+22.0\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.18}_{-0.19} \quad (-0.7\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.418^{+0.11}_{-0.095} \quad (-3.2\sigma)$	z_{drag}	$1057.9^{+3.0}_{-3.0} \quad (-3.2\sigma)$	$f\sigma_8(0.51)$	$0.442^{+0.038}_{-0.039} \quad (-4.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.572^{+0.042}_{-0.044} \quad (-3.3\sigma)$	r_{drag}	$153.3^{+6.8}_{-7.0} \quad (+12.7\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.18}_{-0.18} \quad (-0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.968^{+0.046}_{-0.056} \quad (-1.6\sigma)$	k_{D}	$0.1344^{+0.0071}_{-0.0070} \quad (-11.7\sigma)$	$f\sigma_8(0.61)$	$0.440^{+0.044}_{-0.050} \quad (-4.4\sigma)$
$r_{\mathrm{drag}} h$	$105^{+40}_{-40} \quad (+3.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.158^{+0.015}_{-0.015} \quad (-11.0\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.18}_{-0.18} \quad (+0.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.58^{+0.13}_{-0.13} \quad (+3.4\sigma)$	z_{eq}	$2904^{+500}_{-500} \quad (-10.7\sigma)$	$f\sigma_8(2.33)$	$0.301^{+0.094}_{-0.099} \quad (+1.4\sigma)$
z_{re}	$7.40^{+0.59}_{-0.56} \quad (-0.1\sigma)$	k_{eq}	$0.0089^{+0.0017}_{-0.0016} \quad (-10.7\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+3.3\sigma)$
$10^9 A_{\mathrm{s}}$	$2.65^{+0.68}_{-0.67} \quad (+16.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.898^{+0.099}_{-0.10} \quad (+9.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$11.0 \quad (\nu: 1.9)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$2.38^{+0.61}_{-0.60} \quad (+36.2\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.493^{+0.052}_{-0.053} \quad (+9.8\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.1) \quad (-1.4\sigma)$
D_{40}	$1645^{+500}_{-500} \quad (+27.0\sigma)$	$H(0.15)$	$73^{+30}_{-30} \quad (+1.2\sigma)$		
D_{220}	$7958^{+3000}_{-2000} \quad (+53.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$673^{+300}_{-200} \quad (+3.2\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 13.04; R - 1 = 0.02912$

2.152 base_lensing_lenspriors_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00096}_{-0.00098} \quad (+0.3\sigma)$	D_{810}	$2552^{+800}_{-800} \quad (+1.1\sigma)$	$H(0.38)$	$84^{+30}_{-20} \quad (+2.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.113^{+0.025}_{-0.021} \quad (-3.9\sigma)$	D_{1420}	$793^{+300}_{-300} \quad (-4.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1582^{+700}_{-500} \quad (+2.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.034^{+0.098}_{-0.10} \quad (-14.5\sigma)$	D_{2000}	$254^{+100}_{-100} \quad (+13.8\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+2.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.11^{+0.26}_{-0.27} \quad (+3.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.038}_{-0.039} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$2043^{+800}_{-600} \quad (+2.5\sigma)$
n_{s}	$0.959^{+0.038}_{-0.039} \quad (-0.6\sigma)$	Y_{P}	$0.24531^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$H(0.61)$	$96^{+20}_{-20} \quad (+1.9\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2372^{+900}_{-700} \quad (+2.5\sigma)$
Ω_{Λ}	$0.65^{+0.22}_{-0.37} \quad (-1.9\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$231^{+25}_{-23} \quad (-4.2\sigma)$
Ω_{m}	$0.35^{+0.37}_{-0.22} \quad (+1.9\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.1^{+3.2}_{-2.8} \quad (+8.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5890^{+1000}_{-1000} \quad (+6.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.135^{+0.024}_{-0.022} \quad (-4.1\sigma)$	z_*	$1089.5^{+2.4}_{-2.2} \quad (-2.0\sigma)$	$f\sigma_8(0.15)$	$0.437^{+0.074}_{-0.078} \quad (-2.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.094^{+0.051}_{-0.045} \quad (-4.3\sigma)$	r_*	$146.7^{+6.2}_{-6.4} \quad (+4.6\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.17}_{-0.19} \quad (-1.8\sigma)$
σ_8	$0.79^{+0.16}_{-0.18} \quad (-1.9\sigma)$	$100\theta_*$	$1.034^{+0.098}_{-0.10} \quad (-14.7\sigma)$	$f\sigma_8(0.38)$	$0.451^{+0.037}_{-0.038} \quad (-3.0\sigma)$
S_8	$0.80^{+0.20}_{-0.18} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.2^{+1.9}_{-1.8} \quad (+8.2\sigma)$	$\sigma_8(0.38)$	$0.65^{+0.17}_{-0.19} \quad (-1.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.439^{+0.11}_{-0.096} \quad (-1.6\sigma)$	z_{drag}	$1058.9^{+2.9}_{-2.9} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.450^{+0.038}_{-0.047} \quad (-3.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.586^{+0.038}_{-0.038} \quad (-2.1\sigma)$	r_{drag}	$149.5^{+6.4}_{-6.7} \quad (+4.7\sigma)$	$\sigma_8(0.51)$	$0.61^{+0.17}_{-0.19} \quad (-1.1\sigma)$
$\sigma_8/h^{0.5}$	$0.967^{+0.039}_{-0.044} \quad (-1.6\sigma)$	k_{D}	$0.1383^{+0.0072}_{-0.0066} \quad (-4.3\sigma)$	$f\sigma_8(0.61)$	$0.447^{+0.046}_{-0.063} \quad (-3.4\sigma)$
$r_{\mathrm{drag}}h$	$103^{+40}_{-40} \quad (+2.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.160^{+0.015}_{-0.015} \quad (-3.1\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.17}_{-0.19} \quad (-0.8\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.48^{+0.10}_{-0.10} \quad (+0.6\sigma)$	z_{eq}	$3219^{+600}_{-500} \quad (-4.1\sigma)$	$f\sigma_8(2.33)$	$0.297^{+0.095}_{-0.10} \quad (-0.1\sigma)$
z_{re}	$7.66^{+0.58}_{-0.56} \quad (+0.2\sigma)$	k_{eq}	$0.0098^{+0.0018}_{-0.0016} \quad (-4.1\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+1.3\sigma)$
10^9A_{s}	$2.25^{+0.60}_{-0.57} \quad (+4.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.844^{+0.097}_{-0.093} \quad (+3.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.8 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.02^{+0.54}_{-0.51} \quad (+9.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.465^{+0.052}_{-0.049} \quad (+3.8\sigma)$	χ^2_{prior}	$1.9 \quad (\nu: 1.9) \quad (-1.5\sigma)$
D_{40}	$1359^{+400}_{-400} \quad (+8.2\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+2.2\sigma)$		
D_{220}	$6347^{+2000}_{-2000} \quad (+15.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$669^{+300}_{-200} \quad (+2.7\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 11.76; R - 1 = 0.00271$$

2.153 base_lensing_lenspriors_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02218^{+0.00096}_{-0.00098} \quad (+0.3\sigma)$	D_{810}	$2653^{+800}_{-800} \quad (+8.4\sigma)$	$H(0.38)$	$84^{+20}_{-20} \quad (+2.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.108^{+0.022}_{-0.019} \quad (-5.9\sigma)$	D_{1420}	$828^{+300}_{-200} \quad (+2.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1570^{+700}_{-500} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.032^{+0.095}_{-0.10} \quad (-19.2\sigma)$	D_{2000}	$266^{+100}_{-100} \quad (+20.3\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+2.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.14^{+0.24}_{-0.25} \quad (+6.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.038}_{-0.039} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$2030^{+800}_{-600} \quad (+1.8\sigma)$
n_{s}	$0.959^{+0.038}_{-0.039} \quad (-0.7\sigma)$	Y_{P}	$0.24530^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$H(0.61)$	$96^{+20}_{-20} \quad (+1.5\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2360^{+900}_{-700} \quad (+1.9\sigma)$
Ω_{Λ}	$0.68^{+0.20}_{-0.36} \quad (-0.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.2\sigma)$	$H(2.33)$	$228^{+23}_{-21} \quad (-6.6\sigma)$
Ω_{m}	$0.32^{+0.36}_{-0.20} \quad (+0.3\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.2^{+3.3}_{-2.7} \quad (+9.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5907^{+1000}_{-1000} \quad (+7.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.131^{+0.022}_{-0.019} \quad (-6.2\sigma)$	z_*	$1089.1^{+2.2}_{-2.1} \quad (-2.9\sigma)$	$f\sigma_8(0.15)$	$0.425^{+0.071}_{-0.073} \quad (-3.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.092^{+0.047}_{-0.044} \quad (-8.4\sigma)$	r_*	$147.8^{+5.6}_{-5.8} \quad (+7.1\sigma)$	$\sigma_8(0.15)$	$0.73^{+0.16}_{-0.18} \quad (-2.1\sigma)$
σ_8	$0.79^{+0.15}_{-0.17} \quad (-2.3\sigma)$	$100\theta_*$	$1.032^{+0.095}_{-0.10} \quad (-19.6\sigma)$	$f\sigma_8(0.38)$	$0.442^{+0.032}_{-0.035} \quad (-3.9\sigma)$
S_8	$0.78^{+0.19}_{-0.16} \quad (-2.7\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.4^{+1.9}_{-1.7} \quad (+11.4\sigma)$	$\sigma_8(0.38)$	$0.65^{+0.16}_{-0.19} \quad (-1.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.424^{+0.10}_{-0.088} \quad (-2.7\sigma)$	z_{drag}	$1058.6^{+2.9}_{-2.8} \quad (-1.7\sigma)$	$f\sigma_8(0.51)$	$0.443^{+0.032}_{-0.042} \quad (-4.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.575^{+0.032}_{-0.032} \quad (-3.1\sigma)$	r_{drag}	$150.6^{+5.8}_{-6.0} \quad (+7.2\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.16}_{-0.19} \quad (-0.9\sigma)$
$\sigma_8/h^{0.5}$	$0.957^{+0.036}_{-0.040} \quad (-2.3\sigma)$	k_{D}	$0.1371^{+0.0065}_{-0.0061} \quad (-6.6\sigma)$	$f\sigma_8(0.61)$	$0.441^{+0.038}_{-0.060} \quad (-4.2\sigma)$
$r_{\mathrm{drag}}h$	$105^{+40}_{-40} \quad (+3.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.160^{+0.014}_{-0.015} \quad (-3.8\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.16}_{-0.18} \quad (-0.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.484^{+0.099}_{-0.10} \quad (+0.8\sigma)$	z_{eq}	$3117^{+500}_{-500} \quad (-6.2\sigma)$	$f\sigma_8(2.33)$	$0.298^{+0.091}_{-0.10} \quad (+0.4\sigma)$
z_{re}	$7.58^{+0.54}_{-0.54} \quad (+0.1\sigma)$	k_{eq}	$0.0095^{+0.0016}_{-0.0014} \quad (-6.2\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+2.1\sigma)$
10^9A_{s}	$2.33^{+0.60}_{-0.53} \quad (+6.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.862^{+0.089}_{-0.085} \quad (+5.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.1 \quad (\nu: 2.0)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.08^{+0.54}_{-0.47} \quad (+14.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.475^{+0.048}_{-0.045} \quad (+5.8\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 1.9) \quad (-1.5\sigma)$
D_{40}	$1420^{+400}_{-400} \quad (+12.2\sigma)$	$H(0.15)$	$75^{+30}_{-30} \quad (+3.0\sigma)$		
D_{220}	$6682^{+2000}_{-2000} \quad (+23.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$662^{+400}_{-200} \quad (+1.8\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 14.06; R - 1 = 0.00285$$

2.154 base_lensing_lenspriors_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{810}	$2557^{+900}_{-800} \quad (+1.5\sigma)$	$H(0.38)$	$84^{+30}_{-20} \quad (+2.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.115^{+0.024}_{-0.023} \quad (-2.8\sigma)$	D_{1420}	$793^{+300}_{-300} \quad (-4.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1582^{+700}_{-500} \quad (+2.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.036^{+0.096}_{-0.099} \quad (-9.8\sigma)$	D_{2000}	$252^{+100}_{-100} \quad (+12.6\sigma)$	$H(0.51)$	$91^{+20}_{-20} \quad (+2.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.11^{+0.26}_{-0.26} \quad (+4.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2041^{+800}_{-600} \quad (+2.4\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$H(0.61)$	$96^{+20}_{-20} \quad (+2.8\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2370^{+900}_{-700} \quad (+2.4\sigma)$
Ω_{Λ}	$0.65^{+0.23}_{-0.40} \quad (-2.5\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$233^{+24}_{-22} \quad (-2.8\sigma)$
Ω_{m}	$0.35^{+0.40}_{-0.23} \quad (+2.5\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.1^{+3.2}_{-2.7} \quad (+6.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5866^{+1000}_{-1000} \quad (+5.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.138^{+0.024}_{-0.023} \quad (-2.9\sigma)$	z_*	$1089.7^{+2.5}_{-2.2} \quad (-1.5\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.076}_{-0.082} \quad (-1.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.095^{+0.051}_{-0.045} \quad (-1.4\sigma)$	r_*	$146.0^{+6.2}_{-6.4} \quad (+3.3\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.17}_{-0.19} \quad (-0.6\sigma)$
σ_8	$0.81^{+0.16}_{-0.18} \quad (-0.7\sigma)$	$100\theta_*$	$1.036^{+0.096}_{-0.099} \quad (-10.0\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.038}_{-0.039} \quad (-2.1\sigma)$
S_8	$0.82^{+0.21}_{-0.18} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.1^{+1.9}_{-1.8} \quad (+6.1\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.17}_{-0.19} \quad (-0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.45^{+0.11}_{-0.10} \quad (-0.8\sigma)$	z_{drag}	$1059.1^{+2.9}_{-3.0} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.458^{+0.040}_{-0.047} \quad (-2.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.597^{+0.039}_{-0.041} \quad (-1.2\sigma)$	r_{drag}	$148.8^{+6.4}_{-6.5} \quad (+3.3\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.17}_{-0.19} \quad (+0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.981^{+0.042}_{-0.047} \quad (-0.7\sigma)$	k_{D}	$0.1390^{+0.0072}_{-0.0067} \quad (-3.0\sigma)$	$f\sigma_8(0.61)$	$0.454^{+0.046}_{-0.064} \quad (-2.4\sigma)$
$r_{\mathrm{drag}}h$	$102^{+40}_{-40} \quad (+2.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.160^{+0.015}_{-0.015} \quad (-2.2\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.17}_{-0.19} \quad (+0.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.11}_{-0.11} \quad (+1.1\sigma)$	z_{eq}	$3274^{+600}_{-500} \quad (-2.9\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.095}_{-0.10} \quad (+1.1\sigma)$
z_{re}	$7.70^{+0.58}_{-0.56} \quad (+0.2\sigma)$	k_{eq}	$0.00999^{+0.0018}_{-0.0017} \quad (-2.9\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+2.3\sigma)$
10^9A_{s}	$2.26^{+0.61}_{-0.57} \quad (+4.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.836^{+0.10}_{-0.093} \quad (+2.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$10.1 \quad (\nu: 1.8)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.02^{+0.55}_{-0.51} \quad (+10.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.461^{+0.053}_{-0.049} \quad (+2.8\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
D_{40}	$1357^{+400}_{-400} \quad (+8.1\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+2.2\sigma)$		
D_{220}	$6306^{+2000}_{-2000} \quad (+14.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$670^{+300}_{-200} \quad (+2.8\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 12.03; R - 1 = 0.00429$$

2.155 base_lensing_lenspriors_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00098}_{-0.00097} \quad (+0.3\sigma)$	D_{810}	$2618^{+900}_{-800} \quad (+5.9\sigma)$	$H(0.38)$	$83^{+30}_{-20} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.111^{+0.024}_{-0.022} \quad (-4.5\sigma)$	D_{1420}	$816^{+300}_{-300} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1592^{+700}_{-500} \quad (+3.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.031^{+0.099}_{-0.10} \quad (-20.3\sigma)$	D_{2000}	$264^{+100}_{-100} \quad (+19.2\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+1.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.13^{+0.26}_{-0.27} \quad (+5.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.038}_{-0.039} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$2055^{+800}_{-600} \quad (+3.2\sigma)$
n_{s}	$0.959^{+0.038}_{-0.039} \quad (-0.6\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$H(0.61)$	$95^{+20}_{-20} \quad (+0.5\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2387^{+900}_{-700} \quad (+3.3\sigma)$
Ω_{Λ}	$0.65^{+0.22}_{-0.38} \quad (-1.9\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$230^{+24}_{-22} \quad (-5.1\sigma)$
Ω_{m}	$0.35^{+0.37}_{-0.22} \quad (+1.9\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.2^{+3.2}_{-2.8} \quad (+10.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5923^{+1000}_{-1000} \quad (+8.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.134^{+0.025}_{-0.021} \quad (-4.7\sigma)$	z_*	$1089.4^{+2.4}_{-2.2} \quad (-2.3\sigma)$	$f\sigma_8(0.15)$	$0.439^{+0.074}_{-0.078} \quad (-2.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.092^{+0.050}_{-0.044} \quad (-7.5\sigma)$	r_*	$147.0^{+6.1}_{-6.4} \quad (+5.4\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.17}_{-0.19} \quad (-1.5\sigma)$
σ_8	$0.80^{+0.16}_{-0.18} \quad (-1.6\sigma)$	$100\theta_*$	$1.031^{+0.099}_{-0.10} \quad (-20.7\sigma)$	$f\sigma_8(0.38)$	$0.453^{+0.037}_{-0.037} \quad (-2.8\sigma)$
S_8	$0.81^{+0.20}_{-0.18} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.3^{+1.9}_{-1.8} \quad (+9.8\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.17}_{-0.19} \quad (-1.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.11}_{-0.096} \quad (-1.4\sigma)$	z_{drag}	$1058.8^{+2.9}_{-3.0} \quad (-1.2\sigma)$	$f\sigma_8(0.51)$	$0.452^{+0.038}_{-0.046} \quad (-3.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.589^{+0.038}_{-0.038} \quad (-1.9\sigma)$	r_{drag}	$149.8^{+6.3}_{-6.6} \quad (+5.5\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.17}_{-0.19} \quad (-0.7\sigma)$
$\sigma_8/h^{0.5}$	$0.973^{+0.040}_{-0.045} \quad (-1.2\sigma)$	k_{D}	$0.1379^{+0.0072}_{-0.0066} \quad (-5.0\sigma)$	$f\sigma_8(0.61)$	$0.448^{+0.045}_{-0.062} \quad (-3.2\sigma)$
$r_{\mathrm{drag}}h$	$102^{+40}_{-40} \quad (+2.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.160^{+0.015}_{-0.015} \quad (-4.6\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.17}_{-0.18} \quad (-0.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.11}_{-0.11} \quad (+1.3\sigma)$	z_{eq}	$3187^{+600}_{-500} \quad (-4.7\sigma)$	$f\sigma_8(2.33)$	$0.298^{+0.096}_{-0.10} \quad (+0.3\sigma)$
z_{re}	$7.63^{+0.59}_{-0.57} \quad (+0.2\sigma)$	k_{eq}	$0.0097^{+0.0018}_{-0.0015} \quad (-4.7\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+1.6\sigma)$
10^9A_{s}	$2.31^{+0.62}_{-0.58} \quad (+6.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.848^{+0.096}_{-0.094} \quad (+4.2\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.6 \quad (\nu: 2.0)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.07^{+0.55}_{-0.52} \quad (+13.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.467^{+0.051}_{-0.050} \quad (+4.2\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 1.9) \quad (-1.5\sigma)$
D_{40}	$1396^{+400}_{-400} \quad (+10.7\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+1.7\sigma)$		
D_{220}	$6548^{+2000}_{-2000} \quad (+19.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$673^{+300}_{-200} \quad (+3.2\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 11.57; R - 1 = 0.00392$$

2.156 base_lensing_lenspriors_post_agr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02218^{+0.00098}_{-0.00098} \quad (+0.3\sigma)$	D_{810}	$2731^{+900}_{-800} \quad (+14.1\sigma)$	$H(0.38)$	$84^{+30}_{-20} \quad (+1.9\sigma)$
$\Omega_c h^2$	$0.107^{+0.021}_{-0.019} \quad (-6.7\sigma)$	D_{1420}	$855^{+300}_{-200} \quad (+7.9\sigma)$	$D_M(0.38)$	$1579^{+700}_{-500} \quad (+2.3\sigma)$
$100\theta_{MC}$	$1.029^{+0.096}_{-0.10} \quad (-25.8\sigma)$	D_{2000}	$277^{+100}_{-100} \quad (+26.6\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+1.1\sigma)$
$\ln(10^{10} A_s)$	$3.17^{+0.24}_{-0.25} \quad (+7.8\sigma)$	$n_{s,0.002}$	$0.959^{+0.038}_{-0.039} \quad (-0.7\sigma)$	$D_M(0.51)$	$2041^{+800}_{-600} \quad (+2.4\sigma)$
n_s	$0.959^{+0.038}_{-0.039} \quad (-0.7\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$H(0.61)$	$95^{+20}_{-20} \quad (-0.0\sigma)$
H_0	—	Y_P^{BBN}	$0.24663^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$D_M(0.61)$	$2373^{+900}_{-700} \quad (+2.6\sigma)$
Ω_Λ	$0.68^{+0.20}_{-0.35} \quad (-0.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$227^{+22}_{-21} \quad (-7.7\sigma)$
Ω_m	$0.32^{+0.35}_{-0.20} \quad (+0.2\sigma)$	Age/Gyr	$14.3^{+3.3}_{-2.8} \quad (+12.0\sigma)$	$D_M(2.33)$	$5943^{+1000}_{-1000} \quad (+10.1\sigma)$
$\Omega_m h^2$	$0.129^{+0.021}_{-0.019} \quad (-7.0\sigma)$	z_*	$1088.9^{+2.2}_{-2.0} \quad (-3.3\sigma)$	$f\sigma_8(0.15)$	$0.425^{+0.071}_{-0.073} \quad (-3.2\sigma)$
$\Omega_m h^3$	$0.090^{+0.047}_{-0.043} \quad (-11.9\sigma)$	r_*	$148.3^{+5.6}_{-5.8} \quad (+8.0\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.16}_{-0.18} \quad (-1.8\sigma)$
σ_8	$0.79^{+0.15}_{-0.17} \quad (-2.1\sigma)$	$100\theta_*$	$1.029^{+0.096}_{-0.10} \quad (-26.3\sigma)$	$f\sigma_8(0.38)$	$0.443^{+0.032}_{-0.034} \quad (-3.8\sigma)$
S_8	$0.78^{+0.19}_{-0.16} \quad (-2.6\sigma)$	$D_M(z_*)/Gpc$	$14.5^{+2.0}_{-1.7} \quad (+13.4\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.17}_{-0.19} \quad (-1.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.425^{+0.10}_{-0.088} \quad (-2.6\sigma)$	z_{drag}	$1058.5^{+2.9}_{-2.8} \quad (-2.0\sigma)$	$f\sigma_8(0.51)$	$0.445^{+0.031}_{-0.042} \quad (-4.0\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.577^{+0.031}_{-0.032} \quad (-2.9\sigma)$	r_{drag}	$151.1^{+5.9}_{-6.0} \quad (+8.2\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.17}_{-0.19} \quad (-0.6\sigma)$
$\sigma_8/h^{0.5}$	$0.962^{+0.036}_{-0.041} \quad (-1.9\sigma)$	k_D	$0.1366^{+0.0064}_{-0.0061} \quad (-7.5\sigma)$	$f\sigma_8(0.61)$	$0.442^{+0.037}_{-0.058} \quad (-4.1\sigma)$
$r_{drag} h$	$104^{+40}_{-40} \quad (+3.7\sigma)$	$100\theta_D$	$0.160^{+0.015}_{-0.015} \quad (-5.4\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.16}_{-0.18} \quad (-0.2\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.10} \quad (+1.5\sigma)$	z_{eq}	$3077^{+500}_{-400} \quad (-7.0\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.092}_{-0.10} \quad (+0.8\sigma)$
z_{re}	$7.55^{+0.54}_{-0.55} \quad (+0.1\sigma)$	k_{eq}	$0.0094^{+0.0016}_{-0.0014} \quad (-7.0\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+2.5\sigma)$
$10^9 A_s$	$2.40^{+0.62}_{-0.54} \quad (+8.8\sigma)$	$100\theta_{eq}$	$0.868^{+0.089}_{-0.084} \quad (+6.5\sigma)$	$\chi^2_{lensing}$	$12.0 \quad (\nu: 2.1)$
$10^9 A_s e^{-2\tau}$	$2.15^{+0.55}_{-0.48} \quad (+19.2\sigma)$	$100\theta_{s,eq}$	$0.478^{+0.047}_{-0.045} \quad (+6.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 1.9) \quad (-1.5\sigma)$
D_{40}	$1466^{+400}_{-400} \quad (+15.2\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+2.5\sigma)$		
D_{220}	$6931^{+2000}_{-2000} \quad (+29.0\sigma)$	$D_M(0.15)$	$665^{+400}_{-200} \quad (+2.2\sigma)$		

$\bar{\chi}^2_{eff} = 13.97; R - 1 = 0.00539$

2.157 base_lensing_lenspriors_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{810}	$2645^{+900}_{-800} \quad (+7.8\sigma)$	$H(0.38)$	$83^{+30}_{-20} \quad (+1.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.110^{+0.023}_{-0.022} \quad (-4.9\sigma)$	D_{1420}	$825^{+300}_{-300} \quad (+2.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1588^{+700}_{-500} \quad (+2.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.031^{+0.097}_{-0.10} \quad (-20.9\sigma)$	D_{2000}	$266^{+100}_{-100} \quad (+20.5\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+1.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.14^{+0.26}_{-0.27} \quad (+6.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2051^{+800}_{-600} \quad (+2.9\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.5\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$H(0.61)$	$95^{+20}_{-20} \quad (+0.5\sigma)$
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2382^{+900}_{-700} \quad (+3.0\sigma)$
Ω_{Λ}	$0.66^{+0.22}_{-0.37} \quad (-1.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$230^{+24}_{-22} \quad (-5.5\sigma)$
Ω_{m}	$0.34^{+0.37}_{-0.22} \quad (+1.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.2^{+3.2}_{-2.8} \quad (+10.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5923^{+1000}_{-1000} \quad (+8.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.133^{+0.023}_{-0.022} \quad (-5.1\sigma)$	z_*	$1089.3^{+2.4}_{-2.2} \quad (-2.5\sigma)$	$f\sigma_8(0.15)$	$0.437^{+0.076}_{-0.081} \quad (-2.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.092^{+0.049}_{-0.044} \quad (-8.2\sigma)$	r_*	$147.3^{+6.0}_{-6.4} \quad (+5.8\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.16}_{-0.19} \quad (-1.5\sigma)$
σ_8	$0.80^{+0.16}_{-0.17} \quad (-1.6\sigma)$	$100\theta_*$	$1.031^{+0.097}_{-0.10} \quad (-21.3\sigma)$	$f\sigma_8(0.38)$	$0.452^{+0.039}_{-0.040} \quad (-3.0\sigma)$
S_8	$0.80^{+0.20}_{-0.18} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.3^{+1.9}_{-1.8} \quad (+10.4\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.17}_{-0.19} \quad (-1.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.438^{+0.11}_{-0.098} \quad (-1.6\sigma)$	z_{drag}	$1058.8^{+2.9}_{-3.0} \quad (-1.3\sigma)$	$f\sigma_8(0.51)$	$0.451^{+0.038}_{-0.045} \quad (-3.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.587^{+0.039}_{-0.040} \quad (-2.1\sigma)$	r_{drag}	$150.0^{+6.3}_{-6.6} \quad (+5.9\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.17}_{-0.19} \quad (-0.6\sigma)$
$\sigma_8/h^{0.5}$	$0.972^{+0.042}_{-0.048} \quad (-1.3\sigma)$	k_{D}	$0.1377^{+0.0072}_{-0.0066} \quad (-5.4\sigma)$	$f\sigma_8(0.61)$	$0.448^{+0.045}_{-0.061} \quad (-3.3\sigma)$
$r_{\mathrm{drag}}h$	$103^{+40}_{-40} \quad (+2.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.160^{+0.015}_{-0.015} \quad (-4.7\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.17}_{-0.18} \quad (-0.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.11} \quad (+1.4\sigma)$	z_{eq}	$3168^{+600}_{-500} \quad (-5.1\sigma)$	$f\sigma_8(2.33)$	$0.298^{+0.094}_{-0.10} \quad (+0.4\sigma)$
z_{re}	$7.61^{+0.58}_{-0.55} \quad (+0.1\sigma)$	k_{eq}	$0.0097^{+0.0017}_{-0.0016} \quad (-5.1\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+1.9\sigma)$
10^9A_{s}	$2.33^{+0.62}_{-0.58} \quad (+6.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.852^{+0.099}_{-0.094} \quad (+4.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.6 \quad (\nu: 2.0)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.09^{+0.56}_{-0.52} \quad (+14.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.469^{+0.053}_{-0.050} \quad (+4.6\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 1.9) \quad (-1.5\sigma)$
D_{40}	$1410^{+400}_{-400} \quad (+11.6\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+1.9\sigma)$		
D_{220}	$6626^{+2000}_{-2000} \quad (+21.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$671^{+300}_{-200} \quad (+3.0\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 11.52; R - 1 = 0.00192$$

2.158 base_lensing_lenspriors_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00097}_{-0.00098}$ (+0.3 σ)	D_{810}	2761^{+900}_{-900} (+16.3 σ)	$H(0.38)$	84^{+20}_{-20} (+2.3 σ)
$\Omega_{\mathrm{c}}h^2$	$0.106^{+0.020}_{-0.019}$ (−7.1 σ)	D_{1420}	865^{+300}_{-200} (+9.8 σ)	$D_{\mathrm{M}}(0.38)$	1572^{+700}_{-500} (+1.9 σ)
$100\theta_{\mathrm{MC}}$	$1.029^{+0.094}_{-0.10}$ (−25.6 σ)	D_{2000}	280^{+100}_{-100} (+27.9 σ)	$H(0.51)$	90^{+20}_{-20} (+1.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.18^{+0.24}_{-0.25}$ (+8.3 σ)	$n_{\mathrm{s},0.002}$	$0.959^{+0.038}_{-0.040}$ (−0.6 σ)	$D_{\mathrm{M}}(0.51)$	2034^{+800}_{-600} (+2.0 σ)
n_{s}	$0.959^{+0.038}_{-0.040}$ (−0.6 σ)	Y_{P}	$0.24531^{+0.00042}_{-0.00043}$ (+0.2 σ)	$H(0.61)$	95^{+20}_{-20} (+0.4 σ)
H_0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00042}_{-0.00043}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2365^{+900}_{-700} (+2.2 σ)
Ω_{Λ}	$0.68^{+0.20}_{-0.36}$ (+0.2 σ)	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18}$ (−0.3 σ)	$H(2.33)$	226^{+22}_{-21} (−8.1 σ)
Ω_{m}	$0.32^{+0.36}_{-0.20}$ (−0.2 σ)	$\mathrm{Age}/\mathrm{Gyr}$	$14.3^{+3.3}_{-2.7}$ (+11.7 σ)	$D_{\mathrm{M}}(2.33)$	5937^{+1000}_{-1000} (+9.8 σ)
$\Omega_{\mathrm{m}}h^2$	$0.129^{+0.020}_{-0.019}$ (−7.5 σ)	z_*	$1088.9^{+2.2}_{-2.0}$ (−3.5 σ)	$f\sigma_8(0.15)$	$0.422^{+0.073}_{-0.075}$ (−3.4 σ)
$\Omega_{\mathrm{m}}h^3$	$0.090^{+0.046}_{-0.043}$ (−12.2 σ)	r_*	$148.5^{+5.5}_{-5.8}$ (+8.5 σ)	$\sigma_8(0.15)$	$0.74^{+0.16}_{-0.18}$ (−1.7 σ)
σ_8	$0.79^{+0.15}_{-0.17}$ (−2.0 σ)	$100\theta_*$	$1.029^{+0.094}_{-0.10}$ (−26.0 σ)	$f\sigma_8(0.38)$	$0.441^{+0.033}_{-0.038}$ (−4.0 σ)
S_8	$0.77^{+0.19}_{-0.16}$ (−2.9 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.5^{+1.9}_{-1.7}$ (+13.9 σ)	$\sigma_8(0.38)$	$0.66^{+0.16}_{-0.19}$ (−0.9 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.422^{+0.10}_{-0.089}$ (−2.9 σ)	z_{drag}	$1058.4^{+2.8}_{-2.8}$ (−2.1 σ)	$f\sigma_8(0.51)$	$0.443^{+0.032}_{-0.040}$ (−4.2 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.574^{+0.032}_{-0.034}$ (−3.1 σ)	r_{drag}	$151.3^{+5.7}_{-5.9}$ (+8.6 σ)	$\sigma_8(0.51)$	$0.62^{+0.16}_{-0.19}$ (−0.4 σ)
$\sigma_8/h^{0.5}$	$0.960^{+0.039}_{-0.045}$ (−2.1 σ)	k_{D}	$0.1364^{+0.0064}_{-0.0059}$ (−8.0 σ)	$f\sigma_8(0.61)$	$0.441^{+0.037}_{-0.057}$ (−4.2 σ)
$r_{\mathrm{drag}}h$	105^{+40}_{-40} (+4.2 σ)	$100\theta_{\mathrm{D}}$	$0.160^{+0.014}_{-0.015}$ (−5.3 σ)	$\sigma_8(0.61)$	$0.59^{+0.16}_{-0.18}$ (+0.0 σ)
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.10}_{-0.10}$ (+1.5 σ)	z_{eq}	3057^{+500}_{-500} (−7.5 σ)	$f\sigma_8(2.33)$	$0.300^{+0.090}_{-0.10}$ (+1.1 σ)
z_{re}	$7.53^{+0.53}_{-0.53}$ (+0.0 σ)	k_{eq}	$0.0093^{+0.0015}_{-0.0014}$ (−7.5 σ)	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11}$ (+2.9 σ)
10^9A_{s}	$2.42^{+0.63}_{-0.55}$ (+9.4 σ)	$100\theta_{\mathrm{eq}}$	$0.873^{+0.090}_{-0.085}$ (+7.0 σ)	$\chi^2_{\mathrm{lensing}}$	11.9 (ν : 2.1)
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.16^{+0.56}_{-0.49}$ (+20.6 σ)	$100\theta_{\mathrm{s,eq}}$	$0.480^{+0.048}_{-0.045}$ (+6.9 σ)	χ^2_{prior}	2.0 (ν : 1.9) (−1.5 σ)
D_{40}	1481^{+400}_{-400} (+16.3 σ)	$H(0.15)$	75^{+30}_{-30} (+2.9 σ)		
D_{220}	7017^{+2000}_{-2000} (+31.1 σ)	$D_{\mathrm{M}}(0.15)$	662^{+400}_{-200} (+1.8 σ)		

$\bar{\chi}^2_{\mathrm{eff}} = 13.92$; $R - 1 = 0.00257$

2.159 base_lensing_lenspriors_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00097}_{-0.00097} \quad (+0.3\sigma)$	D_{810}	$2562^{+800}_{-800} \quad (+1.9\sigma)$	$H(0.38)$	$84^{+30}_{-20} \quad (+2.1\sigma)$
$\Omega_c h^2$	$0.113^{+0.024}_{-0.022} \quad (-3.6\sigma)$	D_{1420}	$796^{+300}_{-300} \quad (-3.5\sigma)$	$D_M(0.38)$	$1586^{+700}_{-500} \quad (+2.8\sigma)$
$100\theta_{MC}$	$1.034^{+0.098}_{-0.099} \quad (-14.3\sigma)$	D_{2000}	$255^{+100}_{-100} \quad (+14.4\sigma)$	$H(0.51)$	$90^{+20}_{-20} \quad (+2.0\sigma)$
$\ln(10^{10} A_s)$	$3.11^{+0.26}_{-0.27} \quad (+4.3\sigma)$	$n_{s,0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.6\sigma)$	$D_M(0.51)$	$2047^{+800}_{-600} \quad (+2.8\sigma)$
n_s	$0.959^{+0.039}_{-0.039} \quad (-0.6\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$H(0.61)$	$96^{+20}_{-20} \quad (+1.8\sigma)$
H_0	—	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$D_M(0.61)$	$2377^{+900}_{-700} \quad (+2.8\sigma)$
Ω_Λ	$0.65^{+0.22}_{-0.37} \quad (-2.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$232^{+24}_{-22} \quad (-3.8\sigma)$
Ω_m	$0.35^{+0.37}_{-0.22} \quad (+2.2\sigma)$	Age/Gyr	$14.1^{+3.2}_{-2.8} \quad (+8.4\sigma)$	$D_M(2.33)$	$5891^{+1000}_{-1000} \quad (+7.0\sigma)$
$\Omega_m h^2$	$0.136^{+0.024}_{-0.022} \quad (-3.7\sigma)$	z_*	$1089.5^{+2.4}_{-2.2} \quad (-1.9\sigma)$	$f\sigma_8(0.15)$	$0.442^{+0.074}_{-0.079} \quad (-1.8\sigma)$
$\Omega_m h^3$	$0.094^{+0.051}_{-0.045} \quad (-3.9\sigma)$	r_*	$146.5^{+6.1}_{-6.4} \quad (+4.2\sigma)$	$\sigma_8(0.15)$	$0.74^{+0.17}_{-0.19} \quad (-1.3\sigma)$
σ_8	$0.80^{+0.16}_{-0.18} \quad (-1.4\sigma)$	$100\theta_*$	$1.034^{+0.098}_{-0.099} \quad (-14.6\sigma)$	$f\sigma_8(0.38)$	$0.455^{+0.037}_{-0.037} \quad (-2.6\sigma)$
S_8	$0.81^{+0.20}_{-0.18} \quad (-1.2\sigma)$	$D_M(z_*)/Gpc$	$14.2^{+1.9}_{-1.8} \quad (+7.7\sigma)$	$\sigma_8(0.38)$	$0.66^{+0.17}_{-0.19} \quad (-0.9\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.11}_{-0.097} \quad (-1.2\sigma)$	z_{drag}	$1059.0^{+2.9}_{-3.0} \quad (-0.9\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.039}_{-0.047} \quad (-2.8\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.591^{+0.038}_{-0.039} \quad (-1.7\sigma)$	r_{drag}	$149.3^{+6.4}_{-6.6} \quad (+4.3\sigma)$	$\sigma_8(0.51)$	$0.62^{+0.17}_{-0.19} \quad (-0.6\sigma)$
$\sigma_8/h^{0.5}$	$0.974^{+0.040}_{-0.044} \quad (-1.2\sigma)$	k_D	$0.1385^{+0.0071}_{-0.0066} \quad (-3.9\sigma)$	$f\sigma_8(0.61)$	$0.450^{+0.046}_{-0.064} \quad (-3.0\sigma)$
$r_{drag} h$	$102^{+40}_{-40} \quad (+2.3\sigma)$	$100\theta_D$	$0.160^{+0.015}_{-0.015} \quad (-3.2\sigma)$	$\sigma_8(0.61)$	$0.59^{+0.17}_{-0.19} \quad (-0.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.49^{+0.11}_{-0.11} \quad (+1.0\sigma)$	z_{eq}	$3236^{+600}_{-500} \quad (-3.7\sigma)$	$f\sigma_8(2.33)$	$0.298^{+0.096}_{-0.10} \quad (+0.3\sigma)$
z_{re}	$7.67^{+0.58}_{-0.56} \quad (+0.2\sigma)$	k_{eq}	$0.0099^{+0.0017}_{-0.0016} \quad (-3.7\sigma)$	$\sigma_8(2.33)$	$0.31^{+0.11}_{-0.11} \quad (+1.7\sigma)$
$10^9 A_s$	$2.26^{+0.60}_{-0.57} \quad (+5.0\sigma)$	$100\theta_{eq}$	$0.841^{+0.097}_{-0.093} \quad (+3.4\sigma)$	$\chi^2_{lensing}$	$8.4 \quad (\nu: 1.9)$
$10^9 A_s e^{-2\tau}$	$2.03^{+0.54}_{-0.51} \quad (+10.5\sigma)$	$100\theta_{s,eq}$	$0.464^{+0.051}_{-0.049} \quad (+3.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 1.9) \quad (-1.5\sigma)$
D_{40}	$1364^{+400}_{-400} \quad (+8.5\sigma)$	$H(0.15)$	$74^{+30}_{-30} \quad (+2.0\sigma)$		
D_{220}	$6361^{+2000}_{-2000} \quad (+15.5\sigma)$	$D_M(0.15)$	$671^{+300}_{-200} \quad (+3.0\sigma)$		

$$\bar{\chi}^2_{eff} = 10.40; R - 1 = 0.00244$$

2.160 base_lensing_lenspriors_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02220	$0.02221^{+0.00098}_{-0.00097}$ (+0.4 σ)	D_{810}	2895	2857^{+800}_{-800} (+23.2 σ)	$H(0.38)$	84.80	$84.6^{+4.3}_{-4.1}$ (+3.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.1100	$0.112^{+0.020}_{-0.018}$ (−4.1 σ)	D_{1420}	921	909^{+200}_{-200} (+18.5 σ)	$D_{\mathrm{M}}(0.38)$	1477	1487^{+120}_{-110} (−3.5 σ)
$100\theta_{\mathrm{MC}}$	1.04090	$1.0409^{+0.0012}_{-0.0012}$ (+0.3 σ)	D_{2000}	258	255^{+70}_{-70} (+14.2 σ)	$H(0.51)$	90.97	$90.9^{+3.2}_{-3.0}$ (+3.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.168	$3.15^{+0.24}_{-0.25}$ (+6.5 σ)	$n_{\mathrm{s},0.002}$	0.9606	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1921	1932^{+140}_{-130} (−3.5 σ)
n_{s}	0.9606	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	Y_{P}	0.245327	$0.24532^{+0.00042}_{-0.00042}$ (+0.3 σ)	$H(0.61)$	96.15	$96.1^{+2.4}_{-2.1}$ (+3.2 σ)
H_0	70.9	$70.3^{+7.2}_{-7.4}$ (+3.8 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246653	$0.24664^{+0.00043}_{-0.00043}$ (+0.3 σ)	$D_{\mathrm{M}}(0.61)$	2242	2253^{+150}_{-140} (−3.5 σ)
Ω_{Λ}	0.736	$0.723^{+0.090}_{-0.10}$ (+3.4 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.618	$2.62^{+0.19}_{-0.18}$ (−0.4 σ)	$H(2.33)$	229.8	231^{+13}_{-12} (−4.4 σ)
Ω_{m}	0.264	$0.277^{+0.10}_{-0.090}$ (−3.4 σ)	Age/Gyr	13.765	$13.77^{+0.14}_{-0.15}$ (−1.7 σ)	$D_{\mathrm{M}}(2.33)$	5742	5742^{+71}_{-77} (−2.2 σ)
$\Omega_{\mathrm{m}}h^2$	0.1329	$0.135^{+0.020}_{-0.019}$ (−4.3 σ)	z_{*}	1089.24	$1089.4^{+2.1}_{-1.9}$ (−2.2 σ)	$f\sigma_8(0.15)$	0.432	$0.435^{+0.057}_{-0.056}$ (−2.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.09420	$0.0945^{+0.0042}_{-0.0040}$ (−3.0 σ)	r_{*}	147.2	$146.8^{+5.1}_{-5.5}$ (+4.8 σ)	$\sigma_8(0.15)$	0.7662	$0.761^{+0.043}_{-0.049}$ (+1.6 σ)
σ_8	0.8237	$0.819^{+0.040}_{-0.043}$ (+0.9 σ)	$100\theta_{*}$	1.04112	$1.0411^{+0.0012}_{-0.0012}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4607	$0.462^{+0.035}_{-0.037}$ (−1.9 σ)
S_8	0.773	$0.78^{+0.12}_{-0.11}$ (−2.4 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	14.14	$14.10^{+0.49}_{-0.53}$ (+5.0 σ)	$\sigma_8(0.38)$	0.685	$0.679^{+0.047}_{-0.054}$ (+2.7 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.423	$0.429^{+0.066}_{-0.060}$ (−2.4 σ)	z_{drag}	1058.83	$1058.9^{+2.8}_{-2.8}$ (−1.0 σ)	$f\sigma_8(0.51)$	0.4652	$0.465^{+0.026}_{-0.028}$ (−1.5 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5906	$0.592^{+0.038}_{-0.040}$ (−1.6 σ)	r_{drag}	150.0	$149.5^{+5.3}_{-5.8}$ (+4.9 σ)	$\sigma_8(0.51)$	0.643	$0.638^{+0.048}_{-0.055}$ (+3.2 σ)
$\sigma_8/h^{0.5}$	0.9783	$0.978^{+0.041}_{-0.043}$ (−0.9 σ)	k_{D}	0.1377	$0.1382^{+0.0063}_{-0.0056}$ (−4.4 σ)	$f\sigma_8(0.61)$	0.4642	$0.463^{+0.021}_{-0.023}$ (−1.2 σ)
$r_{\mathrm{drag}}h$	106.4	105^{+10}_{-10} (+4.3 σ)	$100\theta_{\mathrm{D}}$	0.16133	$0.1613^{+0.0016}_{-0.0016}$ (+0.8 σ)	$\sigma_8(0.61)$	0.614	$0.608^{+0.049}_{-0.055}$ (+3.6 σ)
$\langle d^2 \rangle^{1/2}$	2.506	$2.500^{+0.099}_{-0.10}$ (+1.2 σ)	z_{eq}	3160	3207^{+500}_{-400} (−4.3 σ)	$f\sigma_8(2.33)$	0.3115	$0.308^{+0.029}_{-0.032}$ (+4.5 σ)
z_{re}	7.625	$7.66^{+0.39}_{-0.35}$ (+0.2 σ)	k_{eq}	0.00964	$0.0098^{+0.0015}_{-0.0014}$ (−4.3 σ)	$\sigma_8(2.33)$	0.3237	$0.320^{+0.035}_{-0.038}$ (+5.4 σ)
10^9A_{s}	2.38	$2.35^{+0.58}_{-0.56}$ (+7.4 σ)	$100\theta_{\mathrm{eq}}$	0.859	$0.853^{+0.092}_{-0.091}$ (+4.7 σ)	$\chi^2_{\mathrm{lensing}}$	7.57	9.6 (ν : 2.0)
$10^9A_{\mathrm{s}}e^{-2\tau}$	2.13	$2.10^{+0.52}_{-0.50}$ (+15.9 σ)	$100\theta_{\mathrm{s,eq}}$	0.4734	$0.470^{+0.048}_{-0.047}$ (+4.8 σ)	χ^2_{prior}	0.00	3.0 (ν : 3.2) (−1.2 σ)
D_{40}	1441	1422^{+400}_{-400} (+12.4 σ)	$H(0.15)$	75.6	$75.2^{+6.2}_{-6.1}$ (+3.8 σ)			
D_{220}	6780	6683^{+2000}_{-2000} (+23.1 σ)	$D_{\mathrm{M}}(0.15)$	615	620^{+62}_{-54} (−3.5 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 7.57$; $\bar{\chi}^2_{\mathrm{eff}} = 12.61$; $R - 1 = 0.00164$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.57

2.161 base_lensing_lenspriors_theta_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02221	$0.0222^{+0.0010}_{-0.00096}$ (+0.4 σ)	D_{810}	2676	2678^{+300}_{-300} (+10.3 σ)	$H(0.38)$	83.55	$83.6^{+1.8}_{-1.6}$ (+1.9 σ)
$\Omega_c h^2$	0.1158	$0.1158^{+0.0078}_{-0.0078}$ (−2.3 σ)	D_{1420}	853	854^{+100}_{-100} (+7.7 σ)	$D_M(0.38)$	1512.0	1512^{+46}_{-47} (−1.9 σ)
$100\theta_{MC}$	1.04089	$1.0409^{+0.0012}_{-0.0012}$ (+0.3 σ)	D_{2000}	239.7	240^{+30}_{-30} (+5.8 σ)	$H(0.51)$	90.06	$90.1^{+1.3}_{-1.3}$ (+1.8 σ)
$\ln(10^{10} A_s)$	3.096	$3.10^{+0.11}_{-0.11}$ (+3.3 σ)	$n_{s,0.002}$	0.9562	$0.956^{+0.036}_{-0.037}$ (−1.1 σ)	$D_M(0.51)$	1961	1961^{+53}_{-55} (−1.9 σ)
n_s	0.9562	$0.956^{+0.036}_{-0.037}$ (−1.1 σ)	Y_P	0.245330	$0.24532^{+0.00043}_{-0.00042}$ (+0.3 σ)	$H(0.61)$	95.52	$95.6^{+1.1}_{-0.98}$ (+1.6 σ)
H_0	68.71	$68.7^{+3.0}_{-2.8}$ (+2.0 σ)	Y_P^{BBN}	0.246656	$0.24665^{+0.00043}_{-0.00042}$ (+0.3 σ)	$D_M(0.61)$	2285	2284^{+57}_{-59} (−1.9 σ)
Ω_Λ	0.7063	$0.706^{+0.039}_{-0.042}$ (+2.0 σ)	$10^5 D/H$	2.616	$2.62^{+0.19}_{-0.18}$ (−0.4 σ)	$H(2.33)$	233.6	$233.6^{+5.3}_{-5.4}$ (−2.4 σ)
Ω_m	0.2937	$0.294^{+0.042}_{-0.039}$ (−2.0 σ)	Age/Gyr	13.796	$13.79^{+0.11}_{-0.11}$ (−1.0 σ)	$D_M(2.33)$	5760.3	5759^{+47}_{-47} (−1.1 σ)
$\Omega_m h^2$	0.1387	$0.1387^{+0.0080}_{-0.0080}$ (−2.4 σ)	z_*	1089.75	$1089.8^{+1.4}_{-1.3}$ (−1.3 σ)	$f\sigma_8(0.15)$	0.4481	$0.448^{+0.026}_{-0.027}$ (−1.3 σ)
$\Omega_m h^3$	0.09528	$0.0953^{+0.0026}_{-0.0024}$ (−1.3 σ)	r_*	145.65	$145.7^{+2.3}_{-2.3}$ (+2.5 σ)	$\sigma_8(0.15)$	0.7556	$0.755^{+0.031}_{-0.031}$ (+0.8 σ)
σ_8	0.8157	$0.815^{+0.032}_{-0.031}$ (+0.4 σ)	$100\theta_*$	1.04110	$1.0411^{+0.0012}_{-0.0012}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4705	$0.470^{+0.020}_{-0.021}$ (−1.0 σ)
S_8	0.807	$0.806^{+0.052}_{-0.053}$ (−1.4 σ)	$D_M(z_*)/\text{Gpc}$	13.990	$13.99^{+0.23}_{-0.22}$ (+2.6 σ)	$\sigma_8(0.38)$	0.6718	$0.671^{+0.030}_{-0.030}$ (+1.3 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4420	$0.442^{+0.029}_{-0.029}$ (−1.4 σ)	z_{drag}	1059.25	$1059.3^{+2.4}_{-2.4}$ (−0.3 σ)	$f\sigma_8(0.51)$	0.4713	$0.471^{+0.018}_{-0.019}$ (−0.8 σ)
$\sigma_8 \Omega_m^{0.25}$	0.6005	$0.600^{+0.024}_{-0.025}$ (−0.9 σ)	r_{drag}	148.40	$148.4^{+2.6}_{-2.5}$ (+2.5 σ)	$\sigma_8(0.51)$	0.6295	$0.629^{+0.030}_{-0.029}$ (+1.6 σ)
$\sigma_8/h^{0.5}$	0.9840	$0.983^{+0.036}_{-0.036}$ (−0.6 σ)	k_D	0.13938	$0.1394^{+0.0031}_{-0.0031}$ (−2.2 σ)	$f\sigma_8(0.61)$	0.4677	$0.467^{+0.017}_{-0.017}$ (−0.6 σ)
$r_{\text{drag}} h$	102.0	$102.0^{+5.8}_{-5.5}$ (+2.2 σ)	$100\theta_D$	0.16111	$0.1611^{+0.0014}_{-0.0014}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5995	$0.599^{+0.030}_{-0.028}$ (+1.8 σ)
$\langle d^2 \rangle^{1/2}$	2.487	$2.486^{+0.082}_{-0.081}$ (+0.8 σ)	z_{eq}	3298	3299^{+190}_{-190} (−2.4 σ)	$f\sigma_8(2.33)$	0.3030	$0.303^{+0.016}_{-0.016}$ (+2.3 σ)
z_{re}	7.719	$7.72^{+0.24}_{-0.24}$ (+0.3 σ)	k_{eq}	0.01007	$0.01007^{+0.00058}_{-0.00058}$ (−2.4 σ)	$\sigma_8(2.33)$	0.3132	$0.313^{+0.018}_{-0.017}$ (+2.7 σ)
$10^9 A_s$	2.212	$2.21^{+0.25}_{-0.24}$ (+3.5 σ)	$100\theta_{\text{eq}}$	0.8319	$0.832^{+0.037}_{-0.034}$ (+2.4 σ)	χ^2_{lensing}	7.88	9.2 (ν : 1.2)
$10^9 A_s e^{-2\tau}$	1.981	$1.98^{+0.22}_{-0.21}$ (+7.2 σ)	$100\theta_{s,\text{eq}}$	0.4592	$0.459^{+0.019}_{-0.018}$ (+2.4 σ)	χ^2_{JLA}	1034.79	1035.7 (ν : 0.9)
D_{40}	1333	1335^{+200}_{-200} (+6.7 σ)	$H(0.15)$	73.79	$73.8^{+2.5}_{-2.3}$ (+2.0 σ)	χ^2_{prior}	0.04	2.9 (ν : 3.0) (−1.2 σ)
D_{220}	6178	6189^{+800}_{-800} (+11.3 σ)	$D_M(0.15)$	632.2	632^{+23}_{-24} (−2.0 σ)			

Best-fit $\chi^2_{\text{eff}} = 1042.71$; $\bar{\chi}^2_{\text{eff}} = 1047.77$; $R - 1 = 0.00295$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.88 SN - JLA Pantheon18: 1034.79

2.162 base_lensing_lenspriors_theta_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{810}	$2982^{+700}_{-700} \quad (+32.3\sigma)$	$H(0.38)$	$85.5^{+4.0}_{-3.8} \quad (+5.3\sigma)$
$\Omega_c h^2$	$0.108^{+0.017}_{-0.015} \quad (-6.2\sigma)$	D_{1420}	$945^{+200}_{-200} \quad (+25.5\sigma)$	$D_M(0.38)$	$1462^{+100}_{-93} \quad (-5.1\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$265^{+60}_{-60} \quad (+19.5\sigma)$	$H(0.51)$	$91.5^{+3.0}_{-2.9} \quad (+5.0\sigma)$
$\ln(10^{10} A_s)$	$3.19^{+0.22}_{-0.23} \quad (+8.9\sigma)$	$n_{s,0.002}$	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	$D_M(0.51)$	$1902^{+120}_{-110} \quad (-5.1\sigma)$
n_s	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$H(0.61)$	$96.6^{+2.3}_{-2.1} \quad (+4.6\sigma)$
H_0	$72.0^{+6.2}_{-6.5} \quad (+5.6\sigma)$	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$D_M(0.61)$	$2221^{+130}_{-120} \quad (-5.1\sigma)$
Ω_Λ	$0.745^{+0.072}_{-0.081} \quad (+5.0\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$228^{+11}_{-10} \quad (-6.7\sigma)$
Ω_m	$0.255^{+0.081}_{-0.072} \quad (-5.0\sigma)$	Age/Gyr	$13.74^{+0.14}_{-0.14} \quad (-2.4\sigma)$	$D_M(2.33)$	$5729^{+68}_{-78} \quad (-3.0\sigma)$
$\Omega_m h^2$	$0.131^{+0.017}_{-0.016} \quad (-6.5\sigma)$	z_*	$1089.0^{+1.9}_{-1.7} \quad (-3.1\sigma)$	$f\sigma_8(0.15)$	$0.420^{+0.048}_{-0.046} \quad (-3.6\sigma)$
$\Omega_m h^3$	$0.0937^{+0.0039}_{-0.0036} \quad (-4.8\sigma)$	r_*	$147.9^{+4.5}_{-4.8} \quad (+7.3\sigma)$	$\sigma_8(0.15)$	$0.763^{+0.040}_{-0.044} \quad (+1.8\sigma)$
σ_8	$0.819^{+0.038}_{-0.040} \quad (+0.8\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.451^{+0.030}_{-0.033} \quad (-3.1\sigma)$
S_8	$0.752^{+0.098}_{-0.088} \quad (-3.7\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.21^{+0.43}_{-0.46} \quad (+7.5\sigma)$	$\sigma_8(0.38)$	$0.683^{+0.044}_{-0.048} \quad (+3.4\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.412^{+0.054}_{-0.048} \quad (-3.7\sigma)$	z_{drag}	$1058.6^{+2.7}_{-2.7} \quad (-1.7\sigma)$	$f\sigma_8(0.51)$	$0.456^{+0.023}_{-0.025} \quad (-2.6\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.580^{+0.032}_{-0.033} \quad (-2.6\sigma)$	r_{drag}	$150.7^{+4.7}_{-5.0} \quad (+7.4\sigma)$	$\sigma_8(0.51)$	$0.643^{+0.045}_{-0.050} \quad (+4.1\sigma)$
$\sigma_8/h^{0.5}$	$0.965^{+0.036}_{-0.038} \quad (-1.7\sigma)$	k_D	$0.1370^{+0.0055}_{-0.0050} \quad (-6.8\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.018}_{-0.021} \quad (-2.1\sigma)$
$r_{\text{drag}} h$	$109^{+10}_{-10} \quad (+6.3\sigma)$	$100\theta_D$	$0.1615^{+0.0016}_{-0.0015} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.614^{+0.045}_{-0.050} \quad (+4.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.506^{+0.095}_{-0.098} \quad (+1.4\sigma)$	z_{eq}	$3104^{+400}_{-400} \quad (-6.5\sigma)$	$f\sigma_8(2.33)$	$0.312^{+0.026}_{-0.029} \quad (+6.0\sigma)$
z_{re}	$7.59^{+0.33}_{-0.32} \quad (+0.1\sigma)$	k_{eq}	$0.0095^{+0.0012}_{-0.0011} \quad (-6.5\sigma)$	$\sigma_8(2.33)$	$0.326^{+0.032}_{-0.035} \quad (+7.4\sigma)$
$10^9 A_s$	$2.44^{+0.57}_{-0.51} \quad (+10.1\sigma)$	$100\theta_{\text{eq}}$	$0.873^{+0.081}_{-0.081} \quad (+7.0\sigma)$	χ^2_{lensing}	$11.9 \quad (\nu: 2.0)$
$10^9 A_s e^{-2\tau}$	$2.18^{+0.51}_{-0.46} \quad (+22.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.481^{+0.042}_{-0.042} \quad (+7.1\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1497^{+400}_{-300} \quad (+17.3\sigma)$	$H(0.15)$	$76.6^{+5.4}_{-5.5} \quad (+5.5\sigma)$		
D_{220}	$7076^{+2000}_{-2000} \quad (+32.5\sigma)$	$D_M(0.15)$	$607^{+50}_{-48} \quad (-5.1\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 14.87; R - 1 = 0.00258$$

2.163 base_lensing_lenspriors_theta_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{810}	$2872^{+900}_{-900} \quad (+24.3\sigma)$	$H(0.38)$	$84.7^{+4.9}_{-4.6} \quad (+3.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.112^{+0.022}_{-0.021} \quad (-4.2\sigma)$	D_{1420}	$913^{+300}_{-300} \quad (+19.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1487^{+140}_{-120} \quad (-3.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$256^{+80}_{-70} \quad (+14.8\sigma)$	$H(0.51)$	$90.9^{+3.6}_{-3.3} \quad (+3.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.15^{+0.27}_{-0.29} \quad (+6.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.040} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1931^{+160}_{-150} \quad (-3.5\sigma)$
n_{s}	$0.960^{+0.039}_{-0.040} \quad (-0.5\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$96.2^{+2.7}_{-2.3} \quad (+3.4\sigma)$
H_0	$70^{+8}_{-8} \quad (+3.9\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00042} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2252^{+170}_{-160} \quad (-3.5\sigma)$
Ω_{Λ}	$0.72^{+0.10}_{-0.12} \quad (+3.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$231^{+15}_{-14} \quad (-4.4\sigma)$
Ω_{m}	$0.28^{+0.12}_{-0.10} \quad (-3.3\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.76^{+0.14}_{-0.16} \quad (-1.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5741^{+76}_{-85} \quad (-2.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.135^{+0.023}_{-0.021} \quad (-4.3\sigma)$	z_*	$1089.4^{+2.3}_{-2.1} \quad (-2.2\sigma)$	$f\sigma_8(0.15)$	$0.435^{+0.064}_{-0.061} \quad (-2.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0945^{+0.0046}_{-0.0044} \quad (-3.1\sigma)$	r_*	$146.8^{+5.7}_{-6.3} \quad (+4.9\sigma)$	$\sigma_8(0.15)$	$0.761^{+0.047}_{-0.055} \quad (+1.6\sigma)$
σ_8	$0.819^{+0.043}_{-0.047} \quad (+0.8\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.037}_{-0.041} \quad (-2.0\sigma)$
S_8	$0.78^{+0.13}_{-0.13} \quad (-2.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.10^{+0.55}_{-0.61} \quad (+5.0\sigma)$	$\sigma_8(0.38)$	$0.679^{+0.052}_{-0.062} \quad (+2.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.428^{+0.072}_{-0.069} \quad (-2.4\sigma)$	z_{drag}	$1058.9^{+2.9}_{-2.9} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.027}_{-0.031} \quad (-1.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.592^{+0.041}_{-0.043} \quad (-1.7\sigma)$	r_{drag}	$149.6^{+6.0}_{-6.5} \quad (+5.0\sigma)$	$\sigma_8(0.51)$	$0.638^{+0.053}_{-0.063} \quad (+3.2\sigma)$
$\sigma_8/h^{0.5}$	$0.977^{+0.041}_{-0.045} \quad (-1.0\sigma)$	k_{D}	$0.1382^{+0.0071}_{-0.0063} \quad (-4.5\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.022}_{-0.024} \quad (-1.3\sigma)$
$r_{\mathrm{drag}}h$	$105^{+20}_{-20} \quad (+4.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.1613^{+0.0017}_{-0.0016} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.608^{+0.053}_{-0.064} \quad (+3.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.12}_{-0.12} \quad (+1.3\sigma)$	z_{eq}	$3206^{+500}_{-500} \quad (-4.3\sigma)$	$f\sigma_8(2.33)$	$0.309^{+0.032}_{-0.037} \quad (+4.5\sigma)$
z_{re}	$7.66^{+0.41}_{-0.39} \quad (+0.2\sigma)$	k_{eq}	$0.0098^{+0.0017}_{-0.0015} \quad (-4.3\sigma)$	$\sigma_8(2.33)$	$0.321^{+0.040}_{-0.044} \quad (+5.5\sigma)$
10^9A_{s}	$2.36^{+0.66}_{-0.64} \quad (+7.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.85^{+0.10}_{-0.10} \quad (+4.9\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.5 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.11^{+0.60}_{-0.58} \quad (+16.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.471^{+0.054}_{-0.054} \quad (+4.9\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1432^{+500}_{-400} \quad (+13.0\sigma)$	$H(0.15)$	$75.3^{+7.0}_{-6.9} \quad (+3.9\sigma)$		
D_{220}	$6733^{+2000}_{-2000} \quad (+24.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$620^{+67}_{-64} \quad (-3.5\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 12.57; R - 1 = 0.00195$$

2.164 base_lensing_lenspriors_theta_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{810}	$2814^{+800}_{-700} \quad (+20.1\sigma)$	$H(0.38)$	$84.3^{+4.3}_{-4.1} \quad (+3.2\sigma)$
$\Omega_c h^2$	$0.113^{+0.020}_{-0.019} \quad (-3.5\sigma)$	D_{1420}	$896^{+200}_{-200} \quad (+16.0\sigma)$	$D_M(0.38)$	$1495^{+120}_{-110} \quad (-3.0\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$252^{+70}_{-70} \quad (+12.3\sigma)$	$H(0.51)$	$90.7^{+3.2}_{-2.9} \quad (+3.1\sigma)$
$\ln(10^{10} A_s)$	$3.13^{+0.24}_{-0.25} \quad (+5.7\sigma)$	$n_{s,0.002}$	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	$D_M(0.51)$	$1941^{+140}_{-130} \quad (-3.0\sigma)$
n_s	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$96.0^{+2.3}_{-2.0} \quad (+2.8\sigma)$
H_0	$69.9^{+7.3}_{-7.4} \quad (+3.3\sigma)$	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$D_M(0.61)$	$2262^{+150}_{-140} \quad (-3.0\sigma)$
Ω_Λ	$0.717^{+0.093}_{-0.11} \quad (+2.9\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$232^{+13}_{-13} \quad (-3.8\sigma)$
Ω_m	$0.283^{+0.11}_{-0.093} \quad (-2.9\sigma)$	Age/Gyr	$13.77^{+0.13}_{-0.15} \quad (-1.5\sigma)$	$D_M(2.33)$	$5746^{+69}_{-75} \quad (-1.9\sigma)$
$\Omega_m h^2$	$0.136^{+0.020}_{-0.019} \quad (-3.7\sigma)$	z_*	$1089.5^{+2.1}_{-2.0} \quad (-1.9\sigma)$	$f\sigma_8(0.15)$	$0.439^{+0.057}_{-0.057} \quad (-2.0\sigma)$
$\Omega_m h^3$	$0.0947^{+0.0042}_{-0.0040} \quad (-2.6\sigma)$	r_*	$146.4^{+5.1}_{-5.5} \quad (+4.1\sigma)$	$\sigma_8(0.15)$	$0.760^{+0.044}_{-0.050} \quad (+1.4\sigma)$
σ_8	$0.818^{+0.041}_{-0.043} \quad (+0.7\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.034}_{-0.037} \quad (-1.7\sigma)$
S_8	$0.79^{+0.12}_{-0.11} \quad (-2.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.07^{+0.49}_{-0.53} \quad (+4.3\sigma)$	$\sigma_8(0.38)$	$0.677^{+0.048}_{-0.056} \quad (+2.3\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.433^{+0.067}_{-0.061} \quad (-2.0\sigma)$	z_{drag}	$1059.0^{+2.8}_{-2.8} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.025}_{-0.028} \quad (-1.3\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.595^{+0.038}_{-0.041} \quad (-1.4\sigma)$	r_{drag}	$149.2^{+5.3}_{-5.7} \quad (+4.2\sigma)$	$\sigma_8(0.51)$	$0.635^{+0.049}_{-0.057} \quad (+2.8\sigma)$
$\sigma_8/h^{0.5}$	$0.980^{+0.040}_{-0.043} \quad (-0.8\sigma)$	k_D	$0.1386^{+0.0064}_{-0.0056} \quad (-3.8\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.021}_{-0.022} \quad (-1.0\sigma)$
$r_{\text{drag}} h$	$104^{+10}_{-10} \quad (+3.7\sigma)$	$100\theta_D$	$0.1613^{+0.0016}_{-0.0015} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.606^{+0.050}_{-0.057} \quad (+3.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.10}_{-0.10} \quad (+1.1\sigma)$	z_{eq}	$3236^{+500}_{-500} \quad (-3.7\sigma)$	$f\sigma_8(2.33)$	$0.307^{+0.029}_{-0.033} \quad (+3.9\sigma)$
z_{re}	$7.68^{+0.39}_{-0.35} \quad (+0.2\sigma)$	k_{eq}	$0.0099^{+0.0015}_{-0.0014} \quad (-3.7\sigma)$	$\sigma_8(2.33)$	$0.319^{+0.036}_{-0.039} \quad (+4.7\sigma)$
$10^9 A_s$	$2.31^{+0.58}_{-0.55} \quad (+6.5\sigma)$	$100\theta_{\text{eq}}$	$0.847^{+0.091}_{-0.090} \quad (+4.1\sigma)$	χ^2_{lensing}	$7.5 \quad (\nu: 2.0)$
$10^9 A_s e^{-2\tau}$	$2.07^{+0.52}_{-0.50} \quad (+13.8\sigma)$	$100\theta_{s,\text{eq}}$	$0.467^{+0.047}_{-0.047} \quad (+4.1\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.3) \quad (-1.2\sigma)$
D_{40}	$1400^{+400}_{-400} \quad (+10.9\sigma)$	$H(0.15)$	$74.8^{+6.3}_{-6.1} \quad (+3.3\sigma)$		
D_{220}	$6561^{+2000}_{-2000} \quad (+20.2\sigma)$	$D_M(0.15)$	$624^{+63}_{-55} \quad (-3.0\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 10.53; R - 1 = 0.00161$$

2.165 base_lensing_lenspriors_theta_post_ptt

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.0222^{+0.0010}_{-0.00098} \quad (+0.4\sigma)$	D_{810}	$3350^{+1000}_{-900} \quad (+58.9\sigma)$	$H(0.38)$	$87.2^{+4.7}_{-4.7} \quad (+8.2\sigma)$
$\Omega_c h^2$	$0.102^{+0.019}_{-0.017} \quad (-9.1\sigma)$	D_{1420}	$1056^{+300}_{-300} \quad (+47.2\sigma)$	$D_M(0.38)$	$1423^{+120}_{-110} \quad (-7.6\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0013}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$295^{+90}_{-80} \quad (+36.5\sigma)$	$H(0.51)$	$92.8^{+3.6}_{-3.6} \quad (+7.9\sigma)$
$\ln(10^{10} A_s)$	$3.29^{+0.26}_{-0.27} \quad (+15.5\sigma)$	$n_{s,0.002}$	$0.961^{+0.038}_{-0.038} \quad (-0.4\sigma)$	$D_M(0.51)$	$1857^{+140}_{-130} \quad (-7.6\sigma)$
n_s	$0.961^{+0.038}_{-0.038} \quad (-0.4\sigma)$	Y_P	$0.24531^{+0.00043}_{-0.00044} \quad (+0.3\sigma)$	$H(0.61)$	$97.6^{+2.8}_{-2.7} \quad (+7.4\sigma)$
H_0	$74.6^{+7.4}_{-7.7} \quad (+8.4\sigma)$	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00044} \quad (+0.3\sigma)$	$D_M(0.61)$	$2172^{+150}_{-140} \quad (-7.6\sigma)$
Ω_Λ	$0.772^{+0.074}_{-0.086} \quad (+7.1\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.20} \quad (-0.3\sigma)$	$H(2.33)$	$224^{+12}_{-11} \quad (-9.8\sigma)$
Ω_m	$0.228^{+0.086}_{-0.074} \quad (-7.1\sigma)$	Age/Gyr	$13.70^{+0.16}_{-0.16} \quad (-3.6\sigma)$	$D_M(2.33)$	$5701^{+85}_{-88} \quad (-4.7\sigma)$
$\Omega_m h^2$	$0.125^{+0.019}_{-0.017} \quad (-9.5\sigma)$	z_*	$1088.5^{+2.0}_{-1.9} \quad (-4.5\sigma)$	$f\sigma_8(0.15)$	$0.405^{+0.060}_{-0.055} \quad (-4.8\sigma)$
$\Omega_m h^3$	$0.0925^{+0.0044}_{-0.0046} \quad (-7.5\sigma)$	r_*	$149.7^{+5.2}_{-5.7} \quad (+10.9\sigma)$	$\sigma_8(0.15)$	$0.781^{+0.047}_{-0.047} \quad (+4.2\sigma)$
σ_8	$0.834^{+0.043}_{-0.042} \quad (+2.5\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.442^{+0.042}_{-0.041} \quad (-3.9\sigma)$
S_8	$0.72^{+0.12}_{-0.10} \quad (-4.9\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.38^{+0.16}_{-0.55} \quad (+11.3\sigma)$	$\sigma_8(0.38)$	$0.703^{+0.050}_{-0.052} \quad (+6.7\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.396^{+0.064}_{-0.057} \quad (-4.9\sigma)$	z_{drag}	$1058.1^{+2.8}_{-2.9} \quad (-2.7\sigma)$	$f\sigma_8(0.51)$	$0.452^{+0.033}_{-0.033} \quad (-3.1\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.574^{+0.044}_{-0.042} \quad (-3.1\sigma)$	r_{drag}	$152.5^{+5.6}_{-5.9} \quad (+11.1\sigma)$	$\sigma_8(0.51)$	$0.663^{+0.052}_{-0.053} \quad (+7.9\sigma)$
$\sigma_8/h^{0.5}$	$0.967^{+0.048}_{-0.049} \quad (-1.6\sigma)$	k_D	$0.1352^{+0.0062}_{-0.0059} \quad (-10.2\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.028}_{-0.028} \quad (-2.4\sigma)$
$r_{\text{drag}} h$	$114^{+20}_{-20} \quad (+9.6\sigma)$	$100\theta_D$	$0.1617^{+0.0017}_{-0.0016} \quad (+2.4\sigma)$	$\sigma_8(0.61)$	$0.634^{+0.053}_{-0.054} \quad (+8.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.57^{+0.11}_{-0.12} \quad (+3.1\sigma)$	z_{eq}	$2960^{+400}_{-400} \quad (-9.5\sigma)$	$f\sigma_8(2.33)$	$0.324^{+0.031}_{-0.032} \quad (+10.8\sigma)$
z_{re}	$7.49^{+0.36}_{-0.33} \quad (-0.0\sigma)$	k_{eq}	$0.0090^{+0.0014}_{-0.0013} \quad (-9.5\sigma)$	$\sigma_8(2.33)$	$0.341^{+0.040}_{-0.040} \quad (+13.0\sigma)$
$10^9 A_s$	$2.72^{+0.79}_{-0.66} \quad (+18.3\sigma)$	$100\theta_{\text{eq}}$	$0.906^{+0.096}_{-0.10} \quad (+10.7\sigma)$	χ^2_{lensing}	$10.7 \quad (\nu: 1.7)$
$10^9 A_s e^{-2\tau}$	$2.44^{+0.71}_{-0.59} \quad (+40.6\sigma)$	$100\theta_{s,\text{eq}}$	$0.498^{+0.050}_{-0.053} \quad (+10.8\sigma)$	χ^2_{prior}	$3.1 \quad (\nu: 3.1) \quad (-1.1\sigma)$
D_{40}	$1698^{+400}_{-500} \quad (+30.5\sigma)$	$H(0.15)$	$78.8^{+6.4}_{-6.6} \quad (+8.4\sigma)$		
D_{220}	$8124^{+3000}_{-2000} \quad (+57.4\sigma)$	$D_M(0.15)$	$588^{+57}_{-52} \quad (-7.5\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 13.85; R - 1 = 0.02914$

2.166 base_lensing_lenspriors_theta_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{810}	$2768^{+800}_{-700} \quad (+16.8\sigma)$	$H(0.38)$	$84.3^{+4.5}_{-4.0} \quad (+3.2\sigma)$
$\Omega_c h^2$	$0.113^{+0.020}_{-0.019} \quad (-3.6\sigma)$	D_{1420}	$882^{+200}_{-200} \quad (+13.1\sigma)$	$D_M(0.38)$	$1494^{+120}_{-110} \quad (-3.0\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$247^{+70}_{-60} \quad (+9.9\sigma)$	$H(0.51)$	$90.7^{+3.2}_{-2.9} \quad (+3.1\sigma)$
$\ln(10^{10} A_s)$	$3.12^{+0.24}_{-0.25} \quad (+4.6\sigma)$	$n_{s,0.002}$	$0.960^{+0.039}_{-0.041} \quad (-0.5\sigma)$	$D_M(0.51)$	$1940^{+140}_{-130} \quad (-3.0\sigma)$
n_s	$0.960^{+0.039}_{-0.041} \quad (-0.5\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$96.0^{+2.4}_{-2.0} \quad (+2.9\sigma)$
H_0	$69.9^{+7.4}_{-7.4} \quad (+3.3\sigma)$	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$D_M(0.61)$	$2262^{+150}_{-140} \quad (-3.0\sigma)$
Ω_Λ	$0.717^{+0.094}_{-0.11} \quad (+2.9\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$232^{+13}_{-13} \quad (-3.8\sigma)$
Ω_m	$0.283^{+0.11}_{-0.094} \quad (-2.9\sigma)$	Age/Gyr	$13.77^{+0.13}_{-0.15} \quad (-1.6\sigma)$	$D_M(2.33)$	$5746^{+70}_{-77} \quad (-1.9\sigma)$
$\Omega_m h^2$	$0.136^{+0.020}_{-0.019} \quad (-3.7\sigma)$	z_*	$1089.5^{+2.2}_{-2.0} \quad (-1.9\sigma)$	$f\sigma_8(0.15)$	$0.435^{+0.056}_{-0.058} \quad (-2.3\sigma)$
$\Omega_m h^3$	$0.0947^{+0.0042}_{-0.0041} \quad (-2.6\sigma)$	r_*	$146.5^{+5.1}_{-5.5} \quad (+4.2\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.042}_{-0.049} \quad (+0.5\sigma)$
σ_8	$0.811^{+0.039}_{-0.043} \quad (-0.1\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.035}_{-0.038} \quad (-2.1\sigma)$
S_8	$0.78^{+0.12}_{-0.11} \quad (-2.3\sigma)$	$D_M(z_*)/Gpc$	$14.07^{+0.49}_{-0.53} \quad (+4.3\sigma)$	$\sigma_8(0.38)$	$0.671^{+0.046}_{-0.054} \quad (+1.4\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.429^{+0.066}_{-0.062} \quad (-2.3\sigma)$	z_{drag}	$1059.0^{+2.8}_{-2.8} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.025}_{-0.028} \quad (-1.9\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.589^{+0.038}_{-0.041} \quad (-1.8\sigma)$	r_{drag}	$149.2^{+5.3}_{-5.7} \quad (+4.2\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.048}_{-0.056} \quad (+1.8\sigma)$
$\sigma_8/h^{0.5}$	$0.971^{+0.039}_{-0.043} \quad (-1.4\sigma)$	k_D	$0.1385^{+0.0063}_{-0.0056} \quad (-3.8\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.021}_{-0.022} \quad (-1.6\sigma)$
$r_{drag} h$	$104^{+10}_{-10} \quad (+3.7\sigma)$	$100\theta_D$	$0.1613^{+0.0016}_{-0.0015} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.048}_{-0.056} \quad (+2.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.474^{+0.096}_{-0.094} \quad (+0.5\sigma)$	z_{eq}	$3235^{+500}_{-500} \quad (-3.7\sigma)$	$f\sigma_8(2.33)$	$0.304^{+0.028}_{-0.033} \quad (+2.9\sigma)$
z_{re}	$7.68^{+0.40}_{-0.36} \quad (+0.2\sigma)$	k_{eq}	$0.0099^{+0.0015}_{-0.0014} \quad (-3.7\sigma)$	$\sigma_8(2.33)$	$0.316^{+0.035}_{-0.039} \quad (+3.7\sigma)$
$10^9 A_s$	$2.27^{+0.58}_{-0.52} \quad (+5.3\sigma)$	$100\theta_{eq}$	$0.847^{+0.092}_{-0.090} \quad (+4.1\sigma)$	$\chi^2_{lensing}$	$9.8 \quad (\nu: 2.0)$
$10^9 A_s e^{-2\tau}$	$2.04^{+0.52}_{-0.47} \quad (+11.3\sigma)$	$100\theta_{s,eq}$	$0.467^{+0.048}_{-0.047} \quad (+4.1\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1375^{+400}_{-400} \quad (+9.3\sigma)$	$H(0.15)$	$74.8^{+6.3}_{-6.1} \quad (+3.3\sigma)$		
D_{220}	$6450^{+2000}_{-2000} \quad (+17.6\sigma)$	$D_M(0.15)$	$624^{+60}_{-58} \quad (-3.0\sigma)$		

$$\bar{\chi}^2_{eff} = 12.85; R - 1 = 0.00230$$

2.167 base_lensing_lenspriors_theta_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{810}	$2887^{+700}_{-700} \quad (+25.4\sigma)$	$H(0.38)$	$85.2^{+4.0}_{-3.7} \quad (+4.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.109^{+0.017}_{-0.016} \quad (-5.6\sigma)$	D_{1420}	$916^{+200}_{-200} \quad (+19.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1469^{+100}_{-96} \quad (-4.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$256^{+60}_{-60} \quad (+15.0\sigma)$	$H(0.51)$	$91.3^{+3.0}_{-2.8} \quad (+4.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.16^{+0.22}_{-0.23} \quad (+7.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1911^{+120}_{-110} \quad (-4.6\sigma)$
n_{s}	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	Y_{P}	$0.24531^{+0.00043}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$96.5^{+2.3}_{-2.0} \quad (+4.2\sigma)$
H_0	$71.5^{+6.4}_{-6.5} \quad (+5.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00042} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2230^{+130}_{-120} \quad (-4.6\sigma)$
Ω_{Λ}	$0.739^{+0.075}_{-0.084} \quad (+4.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$229^{+11}_{-11} \quad (-6.1\sigma)$
Ω_{m}	$0.261^{+0.084}_{-0.075} \quad (-4.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.75^{+0.13}_{-0.15} \quad (-2.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5733^{+70}_{-75} \quad (-2.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.132^{+0.017}_{-0.016} \quad (-5.9\sigma)$	z_*	$1089.1^{+1.9}_{-1.8} \quad (-2.8\sigma)$	$f\sigma_8(0.15)$	$0.420^{+0.048}_{-0.048} \quad (-3.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0939^{+0.0039}_{-0.0036} \quad (-4.3\sigma)$	r_*	$147.6^{+4.5}_{-4.8} \quad (+6.6\sigma)$	$\sigma_8(0.15)$	$0.755^{+0.039}_{-0.043} \quad (+0.8\sigma)$
σ_8	$0.811^{+0.037}_{-0.039} \quad (-0.1\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.449^{+0.029}_{-0.034} \quad (-3.2\sigma)$
S_8	$0.753^{+0.099}_{-0.093} \quad (-3.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.18^{+0.43}_{-0.46} \quad (+6.8\sigma)$	$\sigma_8(0.38)$	$0.676^{+0.043}_{-0.048} \quad (+2.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.412^{+0.054}_{-0.051} \quad (-3.6\sigma)$	z_{drag}	$1058.7^{+2.7}_{-2.7} \quad (-1.5\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.023}_{-0.025} \quad (-2.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.578^{+0.032}_{-0.033} \quad (-2.8\sigma)$	r_{drag}	$150.4^{+4.8}_{-5.0} \quad (+6.7\sigma)$	$\sigma_8(0.51)$	$0.635^{+0.043}_{-0.049} \quad (+2.7\sigma)$
$\sigma_8/h^{0.5}$	$0.959^{+0.035}_{-0.037} \quad (-2.1\sigma)$	k_{D}	$0.1373^{+0.0055}_{-0.0051} \quad (-6.2\sigma)$	$f\sigma_8(0.61)$	$0.454^{+0.018}_{-0.020} \quad (-2.5\sigma)$
$r_{\mathrm{drag}}h$	$108^{+10}_{-10} \quad (+5.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1614^{+0.0015}_{-0.0015} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.606^{+0.044}_{-0.049} \quad (+3.2\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.479^{+0.093}_{-0.092} \quad (+0.7\sigma)$	z_{eq}	$3132^{+400}_{-400} \quad (-5.9\sigma)$	$f\sigma_8(2.33)$	$0.308^{+0.026}_{-0.029} \quad (+4.4\sigma)$
z_{re}	$7.61^{+0.34}_{-0.32} \quad (+0.1\sigma)$	k_{eq}	$0.0096^{+0.0012}_{-0.0012} \quad (-5.9\sigma)$	$\sigma_8(2.33)$	$0.321^{+0.032}_{-0.034} \quad (+5.6\sigma)$
10^9A_{s}	$2.36^{+0.53}_{-0.51} \quad (+7.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.867^{+0.083}_{-0.080} \quad (+6.4\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.1 \quad (\nu: 2.0)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.12^{+0.47}_{-0.46} \quad (+17.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.478^{+0.043}_{-0.042} \quad (+6.4\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1445^{+300}_{-300} \quad (+13.9\sigma)$	$H(0.15)$	$76.2^{+5.6}_{-5.5} \quad (+5.0\sigma)$		
D_{220}	$6820^{+2000}_{-2000} \quad (+26.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$611^{+51}_{-49} \quad (-4.6\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 15.12; R - 1 = 0.00542$

2.168 base_lensing_lenspriors_theta_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00096}_{-0.00096} \quad (+0.4\sigma)$	D_{810}	$2761^{+800}_{-700} \quad (+16.2\sigma)$	$H(0.38)$	$83.9^{+4.3}_{-4.1} \quad (+2.4\sigma)$
$\Omega_c h^2$	$0.115^{+0.021}_{-0.020} \quad (-2.5\sigma)$	D_{1420}	$881^{+200}_{-200} \quad (+13.0\sigma)$	$D_M(0.38)$	$1507^{+130}_{-120} \quad (-2.2\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$247^{+70}_{-60} \quad (+9.8\sigma)$	$H(0.51)$	$90.4^{+3.2}_{-2.8} \quad (+2.4\sigma)$
$\ln(10^{10} A_s)$	$3.12^{+0.25}_{-0.25} \quad (+4.6\sigma)$	$n_{s,0.002}$	$0.960^{+0.039}_{-0.040} \quad (-0.5\sigma)$	$D_M(0.51)$	$1955^{+140}_{-140} \quad (-2.2\sigma)$
n_s	$0.960^{+0.039}_{-0.040} \quad (-0.5\sigma)$	Y_P	$0.24532^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$95.8^{+2.3}_{-1.9} \quad (+2.3\sigma)$
H_0	$69.1^{+7.6}_{-7.6} \quad (+2.4\sigma)$	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$D_M(0.61)$	$2277^{+150}_{-150} \quad (-2.2\sigma)$
Ω_Λ	$0.71^{+0.10}_{-0.11} \quad (+2.0\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.4\sigma)$	$H(2.33)$	$233^{+14}_{-13} \quad (-2.7\sigma)$
Ω_m	$0.29^{+0.11}_{-0.10} \quad (-2.0\sigma)$	Age/Gyr	$13.78^{+0.13}_{-0.15} \quad (-1.3\sigma)$	$D_M(2.33)$	$5752^{+67}_{-74} \quad (-1.6\sigma)$
$\Omega_m h^2$	$0.138^{+0.021}_{-0.020} \quad (-2.6\sigma)$	z_*	$1089.7^{+2.1}_{-2.0} \quad (-1.4\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.059}_{-0.061} \quad (-1.4\sigma)$
$\Omega_m h^3$	$0.0951^{+0.0042}_{-0.0042} \quad (-1.7\sigma)$	r_*	$145.9^{+5.4}_{-5.7} \quad (+2.9\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.044}_{-0.050} \quad (+1.3\sigma)$
σ_8	$0.819^{+0.041}_{-0.044} \quad (+0.8\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.035}_{-0.039} \quad (-1.1\sigma)$
S_8	$0.81^{+0.13}_{-0.12} \quad (-1.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.01^{+0.52}_{-0.54} \quad (+3.0\sigma)$	$\sigma_8(0.38)$	$0.675^{+0.049}_{-0.057} \quad (+2.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.442^{+0.070}_{-0.066} \quad (-1.4\sigma)$	z_{drag}	$1059.2^{+2.8}_{-2.9} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.026}_{-0.029} \quad (-0.8\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.601^{+0.039}_{-0.043} \quad (-0.9\sigma)$	r_{drag}	$148.6^{+5.6}_{-5.8} \quad (+3.0\sigma)$	$\sigma_8(0.51)$	$0.633^{+0.050}_{-0.058} \quad (+2.4\sigma)$
$\sigma_8/h^{0.5}$	$0.986^{+0.042}_{-0.044} \quad (-0.4\sigma)$	k_D	$0.1392^{+0.0064}_{-0.0060} \quad (-2.6\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.020}_{-0.024} \quad (-0.6\sigma)$
$r_{\text{drag}} h$	$103^{+20}_{-10} \quad (+2.7\sigma)$	$100\theta_D$	$0.1612^{+0.0016}_{-0.0015} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.603^{+0.051}_{-0.058} \quad (+2.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.492^{+0.099}_{-0.10} \quad (+1.0\sigma)$	z_{eq}	$3287^{+500}_{-500} \quad (-2.6\sigma)$	$f\sigma_8(2.33)$	$0.305^{+0.030}_{-0.034} \quad (+3.2\sigma)$
z_{re}	$7.71^{+0.38}_{-0.37} \quad (+0.3\sigma)$	k_{eq}	$0.0100^{+0.0015}_{-0.0015} \quad (-2.6\sigma)$	$\sigma_8(2.33)$	$0.316^{+0.037}_{-0.039} \quad (+3.9\sigma)$
$10^9 A_s$	$2.27^{+0.58}_{-0.54} \quad (+5.3\sigma)$	$100\theta_{\text{eq}}$	$0.837^{+0.096}_{-0.092} \quad (+3.0\sigma)$	χ^2_{lensing}	$10.1 \quad (\nu: 1.9)$
$10^9 A_s e^{-2\tau}$	$2.04^{+0.52}_{-0.49} \quad (+11.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.462^{+0.050}_{-0.048} \quad (+3.0\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1367^{+400}_{-400} \quad (+8.7\sigma)$	$H(0.15)$	$74.2^{+6.5}_{-6.2} \quad (+2.5\sigma)$		
D_{220}	$6389^{+2000}_{-2000} \quad (+16.1\sigma)$	$D_M(0.15)$	$630^{+66}_{-58} \quad (-2.2\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 13.09; R - 1 = 0.00194$$

2.169 base_lensing_lenspriors_theta_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{810}	$2862^{+800}_{-700} \quad (+23.6\sigma)$	$H(0.38)$	$84.6^{+4.3}_{-4.1} \quad (+3.7\sigma)$
$\Omega_c h^2$	$0.112^{+0.020}_{-0.018} \quad (-4.2\sigma)$	D_{1420}	$910^{+200}_{-200} \quad (+18.7\sigma)$	$D_M(0.38)$	$1486^{+120}_{-110} \quad (-3.5\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$256^{+70}_{-70} \quad (+14.5\sigma)$	$H(0.51)$	$90.9^{+3.2}_{-3.0} \quad (+3.6\sigma)$
$\ln(10^{10} A_s)$	$3.15^{+0.24}_{-0.25} \quad (+6.6\sigma)$	$n_{s,0.002}$	$0.960^{+0.039}_{-0.041} \quad (-0.5\sigma)$	$D_M(0.51)$	$1931^{+140}_{-130} \quad (-3.5\sigma)$
n_s	$0.960^{+0.039}_{-0.041} \quad (-0.5\sigma)$	Y_P	$0.24532^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$96.2^{+2.4}_{-2.1} \quad (+3.3\sigma)$
H_0	$70.4^{+7.2}_{-7.4} \quad (+3.9\sigma)$	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$D_M(0.61)$	$2252^{+150}_{-140} \quad (-3.5\sigma)$
Ω_Λ	$0.724^{+0.090}_{-0.10} \quad (+3.4\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$231^{+13}_{-12} \quad (-4.5\sigma)$
Ω_m	$0.276^{+0.10}_{-0.090} \quad (-3.4\sigma)$	Age/Gyr	$13.77^{+0.14}_{-0.15} \quad (-1.8\sigma)$	$D_M(2.33)$	$5742^{+71}_{-77} \quad (-2.2\sigma)$
$\Omega_m h^2$	$0.135^{+0.020}_{-0.019} \quad (-4.4\sigma)$	z_*	$1089.4^{+2.1}_{-1.9} \quad (-2.2\sigma)$	$f\sigma_8(0.15)$	$0.435^{+0.057}_{-0.056} \quad (-2.4\sigma)$
$\Omega_m h^3$	$0.0945^{+0.0042}_{-0.0040} \quad (-3.1\sigma)$	r_*	$146.8^{+5.0}_{-5.6} \quad (+4.9\sigma)$	$\sigma_8(0.15)$	$0.761^{+0.043}_{-0.049} \quad (+1.6\sigma)$
σ_8	$0.819^{+0.040}_{-0.043} \quad (+0.8\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.035}_{-0.037} \quad (-2.0\sigma)$
S_8	$0.78^{+0.12}_{-0.11} \quad (-2.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.10^{+0.48}_{-0.53} \quad (+5.1\sigma)$	$\sigma_8(0.38)$	$0.679^{+0.047}_{-0.054} \quad (+2.7\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.428^{+0.066}_{-0.060} \quad (-2.4\sigma)$	z_{drag}	$1058.9^{+2.8}_{-2.8} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.026}_{-0.028} \quad (-1.6\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.039}_{-0.040} \quad (-1.6\sigma)$	r_{drag}	$149.6^{+5.2}_{-5.8} \quad (+5.0\sigma)$	$\sigma_8(0.51)$	$0.638^{+0.048}_{-0.055} \quad (+3.2\sigma)$
$\sigma_8/h^{0.5}$	$0.977^{+0.040}_{-0.043} \quad (-1.0\sigma)$	k_D	$0.1382^{+0.0063}_{-0.0055} \quad (-4.5\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.021}_{-0.022} \quad (-1.2\sigma)$
$r_{\text{drag}} h$	$105^{+10}_{-10} \quad (+4.3\sigma)$	$100\theta_D$	$0.1613^{+0.0016}_{-0.0016} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.608^{+0.049}_{-0.056} \quad (+3.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.501^{+0.098}_{-0.10} \quad (+1.2\sigma)$	z_{eq}	$3203^{+500}_{-400} \quad (-4.4\sigma)$	$f\sigma_8(2.33)$	$0.309^{+0.028}_{-0.032} \quad (+4.6\sigma)$
z_{re}	$7.66^{+0.39}_{-0.35} \quad (+0.2\sigma)$	k_{eq}	$0.0098^{+0.0014}_{-0.0014} \quad (-4.4\sigma)$	$\sigma_8(2.33)$	$0.321^{+0.035}_{-0.038} \quad (+5.5\sigma)$
$10^9 A_s$	$2.35^{+0.58}_{-0.56} \quad (+7.5\sigma)$	$100\theta_{\text{eq}}$	$0.854^{+0.091}_{-0.090} \quad (+4.8\sigma)$	χ^2_{lensing}	$9.6 \quad (\nu: 2.0)$
$10^9 A_s e^{-2\tau}$	$2.10^{+0.52}_{-0.50} \quad (+16.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.470^{+0.047}_{-0.047} \quad (+4.8\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.3) \quad (-1.2\sigma)$
D_{40}	$1425^{+400}_{-400} \quad (+12.5\sigma)$	$H(0.15)$	$75.3^{+6.2}_{-6.1} \quad (+3.8\sigma)$		
D_{220}	$6697^{+2000}_{-2000} \quad (+23.4\sigma)$	$D_M(0.15)$	$620^{+59}_{-56} \quad (-3.5\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 12.59; R - 1 = 0.00106$$

2.170 base_lensing_lenspriors_theta_post_agr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{810}	$2998^{+700}_{-700} \quad (+33.4\sigma)$	$H(0.38)$	$85.6^{+4.0}_{-3.7} \quad (+5.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.107^{+0.016}_{-0.015} \quad (-6.4\sigma)$	D_{1420}	$950^{+200}_{-200} \quad (+26.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1459^{+100}_{-94} \quad (-5.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$266^{+60}_{-60} \quad (+20.2\sigma)$	$H(0.51)$	$91.6^{+3.0}_{-2.9} \quad (+5.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.19^{+0.22}_{-0.23} \quad (+9.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.038}_{-0.040} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1899^{+120}_{-110} \quad (-5.3\sigma)$
n_{s}	$0.959^{+0.038}_{-0.040} \quad (-0.7\sigma)$	Y_{P}	$0.24531^{+0.00043}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$96.7^{+2.3}_{-2.1} \quad (+4.8\sigma)$
H_0	$72.2^{+6.3}_{-6.5} \quad (+5.8\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2218^{+130}_{-120} \quad (-5.3\sigma)$
Ω_{Λ}	$0.747^{+0.071}_{-0.080} \quad (+5.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$228^{+12}_{-9.8} \quad (-6.9\sigma)$
Ω_{m}	$0.253^{+0.080}_{-0.071} \quad (-5.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.74^{+0.14}_{-0.14} \quad (-2.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5727^{+69}_{-79} \quad (-3.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.130^{+0.017}_{-0.015} \quad (-6.7\sigma)$	z_{*}	$1089.0^{+1.9}_{-1.7} \quad (-3.2\sigma)$	$f\sigma_8(0.15)$	$0.418^{+0.047}_{-0.046} \quad (-3.8\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0936^{+0.0038}_{-0.0035} \quad (-5.0\sigma)$	r_{*}	$148.1^{+4.4}_{-4.8} \quad (+7.5\sigma)$	$\sigma_8(0.15)$	$0.763^{+0.040}_{-0.044} \quad (+1.8\sigma)$
σ_8	$0.819^{+0.038}_{-0.040} \quad (+0.8\sigma)$	$100\theta_{*}$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.449^{+0.030}_{-0.033} \quad (-3.2\sigma)$
S_8	$0.748^{+0.098}_{-0.089} \quad (-3.8\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$14.22^{+0.42}_{-0.46} \quad (+7.8\sigma)$	$\sigma_8(0.38)$	$0.684^{+0.044}_{-0.048} \quad (+3.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.410^{+0.053}_{-0.049} \quad (-3.8\sigma)$	z_{drag}	$1058.6^{+2.7}_{-2.6} \quad (-1.8\sigma)$	$f\sigma_8(0.51)$	$0.455^{+0.022}_{-0.025} \quad (-2.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.579^{+0.032}_{-0.033} \quad (-2.8\sigma)$	r_{drag}	$150.9^{+4.7}_{-5.0} \quad (+7.6\sigma)$	$\sigma_8(0.51)$	$0.643^{+0.045}_{-0.050} \quad (+4.2\sigma)$
$\sigma_8/h^{0.5}$	$0.964^{+0.036}_{-0.037} \quad (-1.8\sigma)$	k_{D}	$0.1369^{+0.0054}_{-0.0049} \quad (-7.1\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.018}_{-0.020} \quad (-2.2\sigma)$
$r_{\mathrm{drag}}h$	$109^{+10}_{-10} \quad (+6.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1615^{+0.0016}_{-0.0015} \quad (+1.5\sigma)$	$\sigma_8(0.61)$	$0.614^{+0.045}_{-0.050} \quad (+4.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.508^{+0.094}_{-0.098} \quad (+1.4\sigma)$	z_{eq}	$3093^{+400}_{-400} \quad (-6.7\sigma)$	$f\sigma_8(2.33)$	$0.313^{+0.026}_{-0.029} \quad (+6.1\sigma)$
z_{re}	$7.58^{+0.34}_{-0.30} \quad (+0.1\sigma)$	k_{eq}	$0.0094^{+0.0013}_{-0.0011} \quad (-6.7\sigma)$	$\sigma_8(2.33)$	$0.326^{+0.032}_{-0.034} \quad (+7.6\sigma)$
$10^9 A_{\mathrm{s}}$	$2.45^{+0.57}_{-0.52} \quad (+10.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.875^{+0.081}_{-0.081} \quad (+7.3\sigma)$	$\chi^2_{\mathrm{lensing}}$	$11.9 \quad (\nu: 2.0)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$2.19^{+0.51}_{-0.46} \quad (+22.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.482^{+0.042}_{-0.042} \quad (+7.3\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.3) \quad (-1.2\sigma)$
D_{40}	$1506^{+400}_{-300} \quad (+17.9\sigma)$	$H(0.15)$	$76.7^{+5.5}_{-5.5} \quad (+5.7\sigma)$		
D_{220}	$7122^{+2000}_{-2000} \quad (+33.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$606^{+52}_{-46} \quad (-5.3\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 14.92; R - 1 = 0.00317$$

2.171 base_lensing_lenspriors_theta_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{810}	$2878^{+800}_{-800} \quad (+24.8\sigma)$	$H(0.38)$	$84.8^{+4.5}_{-4.1} \quad (+4.0\sigma)$
$\Omega_c h^2$	$0.111^{+0.020}_{-0.018} \quad (-4.5\sigma)$	D_{1420}	$915^{+200}_{-200} \quad (+19.7\sigma)$	$D_M(0.38)$	$1483^{+120}_{-110} \quad (-3.8\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$257^{+70}_{-70} \quad (+15.1\sigma)$	$H(0.51)$	$91.0^{+3.3}_{-3.0} \quad (+3.8\sigma)$
$\ln(10^{10} A_s)$	$3.15^{+0.24}_{-0.25} \quad (+6.9\sigma)$	$n_{s,0.002}$	$0.960^{+0.039}_{-0.040} \quad (-0.5\sigma)$	$D_M(0.51)$	$1927^{+140}_{-130} \quad (-3.8\sigma)$
n_s	$0.960^{+0.039}_{-0.040} \quad (-0.5\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$96.2^{+2.4}_{-2.1} \quad (+3.5\sigma)$
H_0	$70.7^{+7.3}_{-7.5} \quad (+4.1\sigma)$	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$D_M(0.61)$	$2247^{+150}_{-140} \quad (-3.8\sigma)$
Ω_Λ	$0.727^{+0.089}_{-0.10} \quad (+3.7\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$231^{+13}_{-12} \quad (-4.8\sigma)$
Ω_m	$0.273^{+0.10}_{-0.089} \quad (-3.7\sigma)$	Age/Gyr	$13.76^{+0.14}_{-0.15} \quad (-1.9\sigma)$	$D_M(2.33)$	$5740^{+72}_{-78} \quad (-2.3\sigma)$
$\Omega_m h^2$	$0.134^{+0.020}_{-0.019} \quad (-4.7\sigma)$	z_*	$1089.3^{+2.1}_{-1.9} \quad (-2.3\sigma)$	$f\sigma_8(0.15)$	$0.432^{+0.058}_{-0.057} \quad (-2.6\sigma)$
$\Omega_m h^3$	$0.0943^{+0.0042}_{-0.0040} \quad (-3.4\sigma)$	r_*	$147.0^{+5.1}_{-5.6} \quad (+5.3\sigma)$	$\sigma_8(0.15)$	$0.761^{+0.043}_{-0.048} \quad (+1.6\sigma)$
σ_8	$0.819^{+0.040}_{-0.042} \quad (+0.8\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.459^{+0.036}_{-0.041} \quad (-2.1\sigma)$
S_8	$0.78^{+0.12}_{-0.11} \quad (-2.6\sigma)$	$D_M(z_*)/Gpc$	$14.12^{+0.49}_{-0.53} \quad (+5.4\sigma)$	$\sigma_8(0.38)$	$0.680^{+0.047}_{-0.053} \quad (+2.8\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.426^{+0.068}_{-0.061} \quad (-2.6\sigma)$	z_{drag}	$1058.9^{+2.8}_{-2.8} \quad (-1.1\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.027}_{-0.030} \quad (-1.8\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.590^{+0.040}_{-0.042} \quad (-1.8\sigma)$	r_{drag}	$149.8^{+5.3}_{-5.8} \quad (+5.3\sigma)$	$\sigma_8(0.51)$	$0.638^{+0.048}_{-0.055} \quad (+3.3\sigma)$
$\sigma_8/h^{0.5}$	$0.975^{+0.043}_{-0.046} \quad (-1.1\sigma)$	k_D	$0.1380^{+0.0063}_{-0.0057} \quad (-4.9\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.022}_{-0.024} \quad (-1.4\sigma)$
$r_{drag} h$	$106^{+10}_{-10} \quad (+4.6\sigma)$	$100\theta_D$	$0.1613^{+0.0016}_{-0.0016} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.609^{+0.048}_{-0.055} \quad (+3.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.501^{+0.098}_{-0.10} \quad (+1.2\sigma)$	z_{eq}	$3188^{+500}_{-400} \quad (-4.7\sigma)$	$f\sigma_8(2.33)$	$0.309^{+0.028}_{-0.032} \quad (+4.7\sigma)$
z_{re}	$7.65^{+0.39}_{-0.35} \quad (+0.2\sigma)$	k_{eq}	$0.0097^{+0.0015}_{-0.0014} \quad (-4.7\sigma)$	$\sigma_8(2.33)$	$0.321^{+0.035}_{-0.038} \quad (+5.8\sigma)$
$10^9 A_s$	$2.36^{+0.58}_{-0.56} \quad (+7.8\sigma)$	$100\theta_{eq}$	$0.857^{+0.092}_{-0.091} \quad (+5.2\sigma)$	$\chi^2_{lensing}$	$9.5 \quad (\nu: 2.0)$
$10^9 A_s e^{-2\tau}$	$2.12^{+0.52}_{-0.50} \quad (+17.0\sigma)$	$100\theta_{s,eq}$	$0.472^{+0.048}_{-0.048} \quad (+5.2\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1436^{+400}_{-400} \quad (+13.2\sigma)$	$H(0.15)$	$75.5^{+6.3}_{-6.2} \quad (+4.1\sigma)$		
D_{220}	$6754^{+2000}_{-2000} \quad (+24.8\sigma)$	$D_M(0.15)$	$618^{+59}_{-56} \quad (-3.8\sigma)$		

$$\bar{\chi}^2_{eff} = 12.55; R - 1 = 0.00157$$

2.172 base_lensing_lenspriors_theta_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{810}	$3015^{+700}_{-700} \quad (+34.7\sigma)$	$H(0.38)$	$85.8^{+4.0}_{-3.8} \quad (+5.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.107^{+0.017}_{-0.015} \quad (-6.7\sigma)$	D_{1420}	$955^{+200}_{-200} \quad (+27.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1455^{+100}_{-92} \quad (-5.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$267^{+60}_{-60} \quad (+20.9\sigma)$	$H(0.51)$	$91.8^{+3.1}_{-2.8} \quad (+5.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.20^{+0.21}_{-0.23} \quad (+9.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1894^{+120}_{-110} \quad (-5.5\sigma)$
n_{s}	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	Y_{P}	$0.24531^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$H(0.61)$	$96.8^{+2.3}_{-2.2} \quad (+5.0\sigma)$
H_0	$72.4^{+6.2}_{-6.6} \quad (+6.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2212^{+130}_{-120} \quad (-5.5\sigma)$
Ω_{Λ}	$0.750^{+0.070}_{-0.080} \quad (+5.5\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$228^{+12}_{-9.9} \quad (-7.3\sigma)$
Ω_{m}	$0.250^{+0.080}_{-0.070} \quad (-5.5\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.74^{+0.14}_{-0.14} \quad (-2.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5724^{+69}_{-79} \quad (-3.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.129^{+0.017}_{-0.015} \quad (-7.0\sigma)$	z_{*}	$1088.9^{+1.8}_{-1.7} \quad (-3.4\sigma)$	$f\sigma_8(0.15)$	$0.415^{+0.048}_{-0.047} \quad (-4.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0935^{+0.0038}_{-0.0036} \quad (-5.3\sigma)$	r_{*}	$148.2^{+4.4}_{-4.8} \quad (+7.9\sigma)$	$\sigma_8(0.15)$	$0.763^{+0.040}_{-0.043} \quad (+1.8\sigma)$
σ_8	$0.818^{+0.037}_{-0.039} \quad (+0.7\sigma)$	$100\theta_{*}$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.447^{+0.031}_{-0.035} \quad (-3.4\sigma)$
S_8	$0.743^{+0.099}_{-0.090} \quad (-4.0\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$14.24^{+0.43}_{-0.46} \quad (+8.2\sigma)$	$\sigma_8(0.38)$	$0.684^{+0.043}_{-0.047} \quad (+3.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.407^{+0.054}_{-0.049} \quad (-4.0\sigma)$	z_{drag}	$1058.5^{+2.7}_{-2.7} \quad (-1.9\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.024}_{-0.026} \quad (-2.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.576^{+0.033}_{-0.034} \quad (-3.0\sigma)$	r_{drag}	$151.1^{+4.7}_{-5.0} \quad (+8.1\sigma)$	$\sigma_8(0.51)$	$0.644^{+0.044}_{-0.048} \quad (+4.3\sigma)$
$\sigma_8/h^{0.5}$	$0.961^{+0.037}_{-0.040} \quad (-2.0\sigma)$	k_{D}	$0.1367^{+0.0055}_{-0.0050} \quad (-7.4\sigma)$	$f\sigma_8(0.61)$	$0.454^{+0.019}_{-0.022} \quad (-2.4\sigma)$
$r_{\mathrm{drag}}h$	$110^{+10}_{-10} \quad (+6.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1615^{+0.0016}_{-0.0015} \quad (+1.6\sigma)$	$\sigma_8(0.61)$	$0.615^{+0.044}_{-0.049} \quad (+4.8\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.508^{+0.095}_{-0.098} \quad (+1.4\sigma)$	z_{eq}	$3077^{+400}_{-400} \quad (-7.0\sigma)$	$f\sigma_8(2.33)$	$0.313^{+0.026}_{-0.028} \quad (+6.3\sigma)$
z_{re}	$7.57^{+0.33}_{-0.31} \quad (+0.1\sigma)$	k_{eq}	$0.0094^{+0.0013}_{-0.0011} \quad (-7.0\sigma)$	$\sigma_8(2.33)$	$0.327^{+0.032}_{-0.034} \quad (+7.8\sigma)$
10^9A_{s}	$2.46^{+0.54}_{-0.54} \quad (+10.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.879^{+0.083}_{-0.081} \quad (+7.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$11.9 \quad (\nu: 2.0)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.21^{+0.49}_{-0.48} \quad (+23.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.484^{+0.043}_{-0.042} \quad (+7.7\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1517^{+400}_{-300} \quad (+18.6\sigma)$	$H(0.15)$	$77.0^{+5.4}_{-5.5} \quad (+6.0\sigma)$		
D_{220}	$7184^{+2000}_{-2000} \quad (+35.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$604^{+50}_{-47} \quad (-5.5\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 14.89; R - 1 = 0.00293$

2.173 base_lensing_lenspriors_theta_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{810}	$2779^{+800}_{-700} \quad (+17.6\sigma)$	$H(0.38)$	$84.2^{+4.3}_{-4.0} \quad (+3.0\sigma)$
$\Omega_c h^2$	$0.114^{+0.020}_{-0.019} \quad (-3.2\sigma)$	D_{1420}	$886^{+200}_{-200} \quad (+13.9\sigma)$	$D_M(0.38)$	$1498^{+120}_{-110} \quad (-2.8\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	D_{2000}	$249^{+70}_{-60} \quad (+10.6\sigma)$	$H(0.51)$	$90.6^{+3.1}_{-2.8} \quad (+2.8\sigma)$
$\ln(10^{10} A_s)$	$3.12^{+0.24}_{-0.25} \quad (+4.9\sigma)$	$n_{s,0.002}$	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	$D_M(0.51)$	$1945^{+140}_{-130} \quad (-2.8\sigma)$
n_s	$0.959^{+0.039}_{-0.040} \quad (-0.6\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(0.61)$	$95.9^{+2.3}_{-1.9} \quad (+2.6\sigma)$
H_0	$69.6^{+7.3}_{-7.3} \quad (+3.0\sigma)$	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$D_M(0.61)$	$2267^{+150}_{-140} \quad (-2.8\sigma)$
Ω_Λ	$0.713^{+0.095}_{-0.11} \quad (+2.6\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$H(2.33)$	$232^{+13}_{-13} \quad (-3.5\sigma)$
Ω_m	$0.287^{+0.11}_{-0.095} \quad (-2.6\sigma)$	Age/Gyr	$13.78^{+0.13}_{-0.15} \quad (-1.5\sigma)$	$D_M(2.33)$	$5748^{+68}_{-75} \quad (-1.8\sigma)$
$\Omega_m h^2$	$0.137^{+0.020}_{-0.019} \quad (-3.4\sigma)$	z_*	$1089.6^{+2.1}_{-2.0} \quad (-1.8\sigma)$	$f\sigma_8(0.15)$	$0.440^{+0.057}_{-0.057} \quad (-1.9\sigma)$
$\Omega_m h^3$	$0.0948^{+0.0042}_{-0.0040} \quad (-2.3\sigma)$	r_*	$146.3^{+5.1}_{-5.6} \quad (+3.8\sigma)$	$\sigma_8(0.15)$	$0.757^{+0.044}_{-0.050} \quad (+1.0\sigma)$
σ_8	$0.816^{+0.040}_{-0.043} \quad (+0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.034}_{-0.037} \quad (-1.6\sigma)$
S_8	$0.79^{+0.12}_{-0.11} \quad (-1.9\sigma)$	$D_M(z_*)/Gpc$	$14.05^{+0.49}_{-0.53} \quad (+3.9\sigma)$	$\sigma_8(0.38)$	$0.675^{+0.050}_{-0.053} \quad (+1.9\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.434^{+0.067}_{-0.062} \quad (-1.9\sigma)$	z_{drag}	$1059.1^{+2.8}_{-2.8} \quad (-0.7\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.025}_{-0.028} \quad (-1.4\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.595^{+0.038}_{-0.041} \quad (-1.4\sigma)$	r_{drag}	$149.0^{+5.4}_{-5.8} \quad (+3.8\sigma)$	$\sigma_8(0.51)$	$0.633^{+0.051}_{-0.054} \quad (+2.3\sigma)$
$\sigma_8/h^{0.5}$	$0.979^{+0.040}_{-0.042} \quad (-0.9\sigma)$	k_D	$0.1388^{+0.0064}_{-0.0057} \quad (-3.4\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.021}_{-0.022} \quad (-1.1\sigma)$
$r_{drag} h$	$104^{+10}_{-10} \quad (+3.4\sigma)$	$100\theta_D$	$0.1612^{+0.0016}_{-0.0015} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.603^{+0.049}_{-0.057} \quad (+2.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.488^{+0.098}_{-0.099} \quad (+0.9\sigma)$	z_{eq}	$3252^{+500}_{-500} \quad (-3.4\sigma)$	$f\sigma_8(2.33)$	$0.305^{+0.029}_{-0.033} \quad (+3.3\sigma)$
z_{re}	$7.69^{+0.39}_{-0.35} \quad (+0.2\sigma)$	k_{eq}	$0.0099^{+0.0015}_{-0.0014} \quad (-3.4\sigma)$	$\sigma_8(2.33)$	$0.317^{+0.036}_{-0.039} \quad (+4.1\sigma)$
$10^9 A_s$	$2.29^{+0.57}_{-0.54} \quad (+5.7\sigma)$	$100\theta_{eq}$	$0.844^{+0.092}_{-0.090} \quad (+3.7\sigma)$	$\chi^2_{lensing}$	$8.4 \quad (\nu: 2.0)$
$10^9 A_s e^{-2\tau}$	$2.05^{+0.51}_{-0.49} \quad (+12.0\sigma)$	$100\theta_{s,eq}$	$0.465^{+0.048}_{-0.047} \quad (+3.8\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 3.2) \quad (-1.2\sigma)$
D_{40}	$1380^{+400}_{-400} \quad (+9.6\sigma)$	$H(0.15)$	$74.6^{+6.3}_{-6.0} \quad (+3.0\sigma)$		
D_{220}	$6464^{+2000}_{-2000} \quad (+17.9\sigma)$	$D_M(0.15)$	$626^{+60}_{-58} \quad (-2.7\sigma)$		

$\bar{\chi}^2_{eff} = 11.47; R - 1 = 0.00170$

2.174 base_lensing_lenspriors_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02218	$0.02219^{+0.00098}_{-0.00099}$ (+0.3 σ)	D_{1420}	847	835^{+200}_{-200} (+3.9 σ)	$H(0.51)$	89.30	$89.6^{+4.7}_{-4.6}$ (+0.7 σ)
$\Omega_c h^2$	0.1156	$0.117^{+0.022}_{-0.022}$ (-1.6 σ)	D_{2000}	238	237^{+60}_{-50} (+4.3 σ)	$D_M(0.51)$	1984	1978^{+84}_{-86} (-1.0 σ)
$100\theta_{MC}$	1.0379	$1.040^{+0.030}_{-0.029}$ (-2.6 σ)	$n_{s,0.002}$	0.9554	$0.956^{+0.039}_{-0.039}$ (-1.2 σ)	$H(0.61)$	94.8	$95.2^{+5.2}_{-5.1}$ (+0.5 σ)
$\ln(10^{10} A_s)$	3.090	$3.08^{+0.20}_{-0.20}$ (+2.5 σ)	Y_P	0.245319	$0.24531^{+0.00042}_{-0.00043}$ (+0.2 σ)	$D_M(0.61)$	2310	2303^{+100}_{-100} (-1.0 σ)
n_s	0.9554	$0.956^{+0.039}_{-0.039}$ (-1.2 σ)	Y_P^{BBN}	0.246645	$0.24663^{+0.00043}_{-0.00043}$ (+0.2 σ)	$H(2.33)$	233.2	234^{+18}_{-17} (-1.9 σ)
H_0	67.75	$67.9^{+2.6}_{-2.4}$ (+1.2 σ)	$10^5 D/H$	2.621	$2.62^{+0.20}_{-0.18}$ (-0.3 σ)	$D_M(2.33)$	5800	5781^{+320}_{-330} (+0.2 σ)
Ω_Λ	0.6983	$0.697^{+0.033}_{-0.034}$ (+1.4 σ)	Age/Gyr	13.89	$13.84^{+0.78}_{-0.81}$ (+0.4 σ)	$f\sigma_8(0.15)$	0.4501	$0.452^{+0.037}_{-0.035}$ (-1.0 σ)
Ω_m	0.3017	$0.303^{+0.034}_{-0.033}$ (-1.4 σ)	z_*	1089.77	$1089.9^{+2.4}_{-2.1}$ (-1.0 σ)	$\sigma_8(0.15)$	0.7493	$0.750^{+0.033}_{-0.033}$ (+0.1 σ)
$\Omega_m h^2$	0.1385	$0.140^{+0.023}_{-0.022}$ (-1.6 σ)	r_*	145.7	$145.4^{+5.7}_{-6.1}$ (+1.9 σ)	$f\sigma_8(0.38)$	0.4707	$0.472^{+0.031}_{-0.031}$ (-0.8 σ)
$\Omega_m h^3$	0.0938	$0.095^{+0.018}_{-0.017}$ (-1.3 σ)	$100\theta_*$	1.0381	$1.040^{+0.030}_{-0.029}$ (-2.7 σ)	$\sigma_8(0.38)$	0.6653	$0.666^{+0.028}_{-0.028}$ (+0.5 σ)
σ_8	0.8098	$0.811^{+0.037}_{-0.037}$ (-0.1 σ)	$D_M(z_*)/\text{Gpc}$	14.04	$13.99^{+0.95}_{-0.96}$ (+2.5 σ)	$f\sigma_8(0.51)$	0.4704	$0.471^{+0.027}_{-0.028}$ (-0.7 σ)
S_8	0.812	$0.815^{+0.071}_{-0.068}$ (-1.0 σ)	z_{drag}	1059.17	$1059.3^{+2.9}_{-2.9}$ (-0.2 σ)	$\sigma_8(0.51)$	0.6230	$0.624^{+0.026}_{-0.026}$ (+0.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4448	$0.447^{+0.039}_{-0.037}$ (-1.0 σ)	r_{drag}	148.5	$148.1^{+6.0}_{-6.3}$ (+1.9 σ)	$f\sigma_8(0.61)$	0.4663	$0.467^{+0.025}_{-0.026}$ (-0.6 σ)
$\sigma_8 \Omega_m^{0.25}$	0.6001	$0.602^{+0.038}_{-0.037}$ (-0.8 σ)	k_D	0.1393	$0.1397^{+0.0070}_{-0.0063}$ (-1.7 σ)	$\sigma_8(0.61)$	0.5931	$0.594^{+0.025}_{-0.024}$ (+0.7 σ)
$\sigma_8/h^{0.5}$	0.9838	$0.984^{+0.038}_{-0.038}$ (-0.5 σ)	$100\theta_D$	0.16069	$0.1609^{+0.0041}_{-0.0039}$ (-0.6 σ)	$f\sigma_8(2.33)$	0.2995	$0.300^{+0.012}_{-0.012}$ (+1.0 σ)
$r_{\text{drag}} h$	100.59	$100.6^{+2.4}_{-2.5}$ (+1.3 σ)	z_{eq}	3293	3333^{+500}_{-500} (-1.6 σ)	$\sigma_8(2.33)$	0.3092	$0.309^{+0.013}_{-0.013}$ (+1.3 σ)
$\langle d^2 \rangle^{1/2}$	2.487	$2.48^{+0.10}_{-0.10}$ (+0.8 σ)	k_{eq}	0.01005	$0.0102^{+0.0016}_{-0.0016}$ (-1.6 σ)	χ^2_{lensing}	7.88	9.9 (ν : 2.6)
z_{re}	7.716	$7.74^{+0.48}_{-0.44}$ (+0.3 σ)	$100\theta_{\text{eq}}$	0.830	$0.827^{+0.076}_{-0.074}$ (+1.9 σ)	$\chi^2_{6\text{DF}}$	0.000	0.062 (ν : 0.0)
$10^9 A_s$	2.198	$2.19^{+0.47}_{-0.41}$ (+2.8 σ)	$100\theta_{s,\text{eq}}$	0.4583	$0.457^{+0.038}_{-0.038}$ (+1.8 σ)	χ^2_{MGS}	1.75	1.85 (ν : 0.3)
$10^9 A_s e^{-2\tau}$	1.969	$1.96^{+0.42}_{-0.37}$ (+5.6 σ)	$H(0.15)$	72.88	$73.1^{+3.1}_{-2.8}$ (+1.1 σ)	χ^2_{DR12BAO}	3.62	4.5 (ν : 1.3)
D_{40}	1325	1317^{+300}_{-300} (+5.5 σ)	$D_M(0.15)$	640.6	639^{+24}_{-25} (-1.1 σ)	χ^2_{prior}	0.05	2.0 (ν : 2.1) (-1.4 σ)
D_{220}	6146	6116^{+2000}_{-2000} (+9.6 σ)	$H(0.38)$	82.74	$83.0^{+4.2}_{-3.7}$ (+0.9 σ)	χ^2_{BAO}	5.37	6.4 (ν : 1.5)
D_{810}	2656	2630^{+600}_{-600} (+6.8 σ)	$D_M(0.38)$	1530	1526^{+62}_{-64} (-1.0 σ)			

Best-fit $\chi^2_{\text{eff}} = 13.31$; $\bar{\chi}^2_{\text{eff}} = 18.39$; $R - 1 = 0.00184$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.62 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.88

2.175 base_lensing_lenspriors_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02218	$0.02219^{+0.00098}_{-0.00098}$ (+0.3 σ)	D_{1420}	859	844^{+100}_{-200} (+5.8 σ)	$H(0.51)$	89.05	$89.4^{+4.1}_{-3.9}$ (+0.2 σ)
$\Omega_c h^2$	0.1143	$0.116^{+0.018}_{-0.018}$ (−2.2 σ)	D_{2000}	241.3	239^{+50}_{-50} (+5.4 σ)	$D_M(0.51)$	1988	1981^{+78}_{-77} (−0.8 σ)
$100\theta_{MC}$	1.0362	$1.038^{+0.025}_{-0.025}$ (−5.4 σ)	$n_{s,0.002}$	0.9567	$0.956^{+0.039}_{-0.038}$ (−1.1 σ)	$H(0.61)$	94.51	$94.9^{+4.6}_{-4.3}$ (−0.2 σ)
$\ln(10^{10} A_s)$	3.104	$3.09^{+0.17}_{-0.17}$ (+3.0 σ)	Y_P	0.245317	$0.24531^{+0.00042}_{-0.00043}$ (+0.2 σ)	$D_M(0.61)$	2315	2307^{+93}_{-92} (−0.8 σ)
n_s	0.9567	$0.956^{+0.039}_{-0.038}$ (−1.1 σ)	Y_P^{BBN}	0.246643	$0.24663^{+0.00042}_{-0.00043}$ (+0.2 σ)	$H(2.33)$	232.1	233^{+15}_{-14} (−2.6 σ)
H_0	67.67	$67.9^{+2.4}_{-2.3}$ (+1.1 σ)	$10^5 D/H$	2.622	$2.62^{+0.19}_{-0.18}$ (−0.3 σ)	$D_M(2.33)$	5819	5796^{+280}_{-280} (+1.1 σ)
Ω_Λ	0.7006	$0.699^{+0.025}_{-0.027}$ (+1.5 σ)	Age/Gyr	13.93	$13.88^{+0.68}_{-0.67}$ (+1.3 σ)	$f\sigma_8(0.15)$	0.4485	$0.450^{+0.031}_{-0.030}$ (−1.1 σ)
Ω_m	0.2994	$0.301^{+0.027}_{-0.025}$ (−1.5 σ)	z_*	1089.65	$1089.8^{+2.0}_{-1.8}$ (−1.2 σ)	$\sigma_8(0.15)$	0.7492	$0.750^{+0.032}_{-0.032}$ (+0.1 σ)
$\Omega_m h^2$	0.1371	$0.139^{+0.018}_{-0.018}$ (−2.3 σ)	r_*	146.08	$145.7^{+4.8}_{-4.9}$ (+2.5 σ)	$f\sigma_8(0.38)$	0.4695	$0.471^{+0.027}_{-0.027}$ (−1.0 σ)
$\Omega_m h^3$	0.0928	$0.094^{+0.015}_{-0.015}$ (−3.4 σ)	$100\theta_*$	1.0364	$1.038^{+0.025}_{-0.025}$ (−5.5 σ)	$\sigma_8(0.38)$	0.6655	$0.666^{+0.028}_{-0.028}$ (+0.5 σ)
σ_8	0.8095	$0.810^{+0.036}_{-0.036}$ (−0.2 σ)	$D_M(z_*)/\text{Gpc}$	14.10	$14.03^{+0.81}_{-0.79}$ (+3.5 σ)	$f\sigma_8(0.51)$	0.4695	$0.471^{+0.025}_{-0.025}$ (−0.8 σ)
S_8	0.809	$0.812^{+0.059}_{-0.058}$ (−1.1 σ)	z_{drag}	1059.06	$1059.2^{+2.7}_{-2.8}$ (−0.4 σ)	$\sigma_8(0.51)$	0.6233	$0.624^{+0.026}_{-0.026}$ (+0.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4429	$0.445^{+0.032}_{-0.032}$ (−1.1 σ)	r_{drag}	148.9	$148.4^{+5.0}_{-5.1}$ (+2.5 σ)	$f\sigma_8(0.61)$	0.4656	$0.466^{+0.023}_{-0.023}$ (−0.7 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5988	$0.600^{+0.033}_{-0.034}$ (−0.9 σ)	k_D	0.1389	$0.1394^{+0.0058}_{-0.0054}$ (−2.3 σ)	$\sigma_8(0.61)$	0.5935	$0.594^{+0.025}_{-0.024}$ (+0.7 σ)
$\sigma_8/h^{0.5}$	0.9840	$0.984^{+0.038}_{-0.037}$ (−0.6 σ)	$100\theta_D$	0.16048	$0.1608^{+0.0035}_{-0.0034}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.2997	$0.300^{+0.012}_{-0.012}$ (+1.1 σ)
$r_{\text{drag}} h$	100.73	$100.7^{+2.1}_{-2.1}$ (+1.4 σ)	z_{eq}	3261	3304^{+400}_{-400} (−2.3 σ)	$\sigma_8(2.33)$	0.3096	$0.310^{+0.013}_{-0.013}$ (+1.4 σ)
$\langle d^2 \rangle^{1/2}$	2.493	$2.486^{+0.096}_{-0.095}$ (+0.8 σ)	k_{eq}	0.00995	$0.0101^{+0.0013}_{-0.0013}$ (−2.3 σ)	χ^2_{lensing}	7.78	9.6 (ν : 1.8)
z_{re}	7.692	$7.72^{+0.40}_{-0.38}$ (+0.3 σ)	$100\theta_{\text{eq}}$	0.835	$0.831^{+0.062}_{-0.060}$ (+2.2 σ)	χ^2_{JLA}	1034.73	1035.12 (ν : 0.1)
$10^9 A_s$	2.228	$2.21^{+0.40}_{-0.34}$ (+3.3 σ)	$100\theta_{s,\text{eq}}$	0.4608	$0.459^{+0.032}_{-0.031}$ (+2.2 σ)	$\chi^2_{6\text{DF}}$	0.002	0.050 (ν : 0.0)
$10^9 A_s e^{-2\tau}$	1.996	$1.98^{+0.36}_{-0.31}$ (+6.8 σ)	$H(0.15)$	72.76	$73.0^{+2.8}_{-2.7}$ (+1.0 σ)	χ^2_{MGS}	1.82	1.90 (ν : 0.2)
D_{40}	1343	1328^{+200}_{-200} (+6.2 σ)	$D_M(0.15)$	641.5	640^{+23}_{-23} (−1.0 σ)	χ^2_{DR12BAO}	3.68	4.5 (ν : 1.2)
D_{220}	6262	6181^{+2000}_{-1000} (+11.1 σ)	$H(0.38)$	82.54	$82.9^{+3.6}_{-3.4}$ (+0.6 σ)	χ^2_{prior}	0.03	2.0 (ν : 1.9) (−1.5 σ)
D_{810}	2696	2656^{+500}_{-500} (+8.7 σ)	$D_M(0.38)$	1533	1528^{+58}_{-57} (−0.9 σ)	χ^2_{BAO}	5.50	6.4 (ν : 1.3)

Best-fit $\chi^2_{\text{eff}} = 1048.05$; $\bar{\chi}^2_{\text{eff}} = 1053.10$; $R - 1 = 0.00233$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.68 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.78 SN - JLA Pantheon18: 1034.73

2.176 base_lensing_lenspriors_BAO_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00096}_{-0.00098} \quad (+0.3\sigma)$	D_{1420}	$863^{+200}_{-200} \quad (+9.5\sigma)$	$H(0.51)$	$88.5^{+4.1}_{-3.8} \quad (-2.0\sigma)$
$\Omega_c h^2$	$0.111^{+0.019}_{-0.018} \quad (-4.5\sigma)$	D_{2000}	$246^{+60}_{-50} \quad (+9.1\sigma)$	$D_M(0.51)$	$1998^{+76}_{-76} \quad (+0.1\sigma)$
$100\theta_{MC}$	$1.032^{+0.026}_{-0.025} \quad (-19.5\sigma)$	$n_{s,0.002}$	$0.954^{+0.039}_{-0.039} \quad (-1.5\sigma)$	$H(0.61)$	$93.8^{+4.6}_{-4.2} \quad (-3.3\sigma)$
$\ln(10^{10} A_s)$	$3.12^{+0.18}_{-0.19} \quad (+4.7\sigma)$	Y_P	$0.24531^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$D_M(0.61)$	$2328^{+91}_{-91} \quad (+0.3\sigma)$
n_s	$0.954^{+0.039}_{-0.039} \quad (-1.5\sigma)$	Y_P^{BBN}	$0.24663^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$H(2.33)$	$230^{+15}_{-14} \quad (-5.6\sigma)$
H_0	$67.4^{+2.3}_{-2.2} \quad (+0.6\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$D_M(2.33)$	$5868^{+280}_{-290} \quad (+5.5\sigma)$
Ω_Λ	$0.705^{+0.027}_{-0.030} \quad (+2.0\sigma)$	Age/Gyr	$14.05^{+0.69}_{-0.70} \quad (+6.1\sigma)$	$f\sigma_8(0.15)$	$0.439^{+0.029}_{-0.028} \quad (-2.1\sigma)$
Ω_m	$0.295^{+0.030}_{-0.027} \quad (-2.0\sigma)$	z_*	$1089.4^{+2.1}_{-1.9} \quad (-2.3\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.028}_{-0.028} \quad (-1.4\sigma)$
$\Omega_m h^2$	$0.134^{+0.019}_{-0.018} \quad (-4.7\sigma)$	r_*	$147.0^{+5.0}_{-5.2} \quad (+5.2\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.024}_{-0.024} \quad (-2.1\sigma)$
$\Omega_m h^3$	$0.091^{+0.015}_{-0.014} \quad (-11.7\sigma)$	$100\theta_*$	$1.032^{+0.026}_{-0.025} \quad (-19.9\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.024}_{-0.024} \quad (-1.1\sigma)$
σ_8	$0.797^{+0.031}_{-0.031} \quad (-1.6\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.25^{+0.84}_{-0.84} \quad (+8.4\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.022}_{-0.022} \quad (-2.0\sigma)$
S_8	$0.790^{+0.057}_{-0.054} \quad (-2.1\sigma)$	z_{drag}	$1058.9^{+2.7}_{-2.8} \quad (-1.2\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.023}_{-0.023} \quad (-0.9\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.433^{+0.031}_{-0.030} \quad (-2.1\sigma)$	r_{drag}	$149.7^{+5.2}_{-5.4} \quad (+5.3\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.020}_{-0.021} \quad (-2.0\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.587^{+0.030}_{-0.030} \quad (-2.0\sigma)$	k_D	$0.1380^{+0.0059}_{-0.0054} \quad (-4.9\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.022}_{-0.022} \quad (-0.8\sigma)$
$\sigma_8/h^{0.5}$	$0.971^{+0.033}_{-0.033} \quad (-1.4\sigma)$	$100\theta_D$	$0.1599^{+0.0036}_{-0.0035} \quad (-4.4\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$r_{\text{drag}} h$	$101.0^{+2.3}_{-2.3} \quad (+1.6\sigma)$	z_{eq}	$3190^{+400}_{-400} \quad (-4.7\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.492^{+0.099}_{-0.099} \quad (+1.0\sigma)$	k_{eq}	$0.0097^{+0.0014}_{-0.0013} \quad (-4.7\sigma)$	χ^2_{lensing}	$12.1 \quad (\nu: 2.5)$
z_{re}	$7.63^{+0.42}_{-0.38} \quad (+0.2\sigma)$	$100\theta_{\text{eq}}$	$0.848^{+0.067}_{-0.066} \quad (+4.1\sigma)$	$\chi^2_{6\text{DF}}$	$0.063 \quad (\nu: 0.0)$
$10^9 A_s$	$2.27^{+0.43}_{-0.41} \quad (+5.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.467^{+0.034}_{-0.034} \quad (+4.1\sigma)$	χ^2_{MGS}	$2.02 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$2.03^{+0.38}_{-0.37} \quad (+10.8\sigma)$	$H(0.15)$	$72.4^{+2.7}_{-2.6} \quad (+0.2\sigma)$	χ^2_{DR12BAO}	$4.9 \quad (\nu: 1.3)$
D_{40}	$1382^{+300}_{-200} \quad (+9.7\sigma)$	$D_M(0.15)$	$644^{+22}_{-22} \quad (-0.4\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.2) \quad (-1.4\sigma)$
D_{220}	$6502^{+2000}_{-2000} \quad (+18.8\sigma)$	$H(0.38)$	$82.1^{+3.5}_{-3.3} \quad (-0.8\sigma)$	χ^2_{BAO}	$6.9 \quad (\nu: 1.4)$
D_{810}	$2733^{+500}_{-500} \quad (+14.2\sigma)$	$D_M(0.38)$	$1541^{+57}_{-56} \quad (-0.1\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 21.15; R - 1 = 0.00403$$

2.177 base_lensing_lenspriors_BAO_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00098}_{-0.00099}$ (+0.3 σ)	D_{1420}	819^{+200}_{-200} (+0.9 σ)	$H(0.51)$	$90.0^{+5.5}_{-5.3}$ (+1.6 σ)
$\Omega_c h^2$	$0.119^{+0.027}_{-0.025}$ (−0.6 σ)	D_{2000}	233^{+70}_{-60} (+2.1 σ)	$D_M(0.51)$	1972^{+93}_{-100} (−1.4 σ)
$100\theta_{MC}$	$1.042^{+0.037}_{-0.033}$ (+2.7 σ)	$n_{s,0.002}$	$0.956^{+0.040}_{-0.039}$ (−1.2 σ)	$H(0.61)$	$95.6^{+6.2}_{-6.0}$ (+1.8 σ)
$\ln(10^{10} A_s)$	$3.06^{+0.23}_{-0.25}$ (+1.4 σ)	Y_P	$0.24531^{+0.00042}_{-0.00043}$ (+0.2 σ)	$D_M(0.61)$	2295^{+110}_{-120} (−1.4 σ)
n_s	$0.956^{+0.040}_{-0.039}$ (−1.2 σ)	Y_P^{BBN}	$0.24663^{+0.00043}_{-0.00043}$ (+0.2 σ)	$H(2.33)$	236^{+21}_{-20} (−0.6 σ)
H_0	$68.1^{+2.9}_{-2.6}$ (+1.3 σ)	$10^5 D/H$	$2.62^{+0.20}_{-0.18}$ (−0.3 σ)	$D_M(2.33)$	5754^{+370}_{-400} (−1.5 σ)
Ω_Λ	$0.694^{+0.038}_{-0.039}$ (+1.1 σ)	Age/Gyr	$13.78^{+0.90}_{-0.97}$ (−1.4 σ)	$f\sigma_8(0.15)$	$0.454^{+0.041}_{-0.039}$ (−0.8 σ)
Ω_m	$0.306^{+0.039}_{-0.038}$ (−1.1 σ)	z_*	$1090.1^{+2.6}_{-2.5}$ (−0.5 σ)	$\sigma_8(0.15)$	$0.751^{+0.034}_{-0.034}$ (+0.3 σ)
$\Omega_m h^2$	$0.142^{+0.027}_{-0.026}$ (−0.6 σ)	r_*	$144.9^{+6.8}_{-6.9}$ (+0.9 σ)	$f\sigma_8(0.38)$	$0.474^{+0.034}_{-0.034}$ (−0.6 σ)
$\Omega_m h^3$	$0.097^{+0.022}_{-0.021}$ (+2.5 σ)	$100\theta_*$	$1.042^{+0.037}_{-0.033}$ (+2.7 σ)	$\sigma_8(0.38)$	$0.667^{+0.029}_{-0.028}$ (+0.6 σ)
σ_8	$0.813^{+0.039}_{-0.038}$ (+0.1 σ)	$D_M(z_*)/\text{Gpc}$	$13.9^{+1.1}_{-1.2}$ (+0.7 σ)	$f\sigma_8(0.51)$	$0.473^{+0.030}_{-0.030}$ (−0.5 σ)
S_8	$0.821^{+0.081}_{-0.076}$ (−0.8 σ)	z_{drag}	$1059.4^{+3.1}_{-3.1}$ (+0.1 σ)	$\sigma_8(0.51)$	$0.624^{+0.026}_{-0.026}$ (+0.7 σ)
$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.044}_{-0.041}$ (−0.8 σ)	r_{drag}	$147.6^{+7.1}_{-7.2}$ (+0.8 σ)	$f\sigma_8(0.61)$	$0.469^{+0.028}_{-0.028}$ (−0.4 σ)
$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.042}_{-0.041}$ (−0.6 σ)	k_D	$0.1402^{+0.0078}_{-0.0076}$ (−0.6 σ)	$\sigma_8(0.61)$	$0.594^{+0.025}_{-0.025}$ (+0.8 σ)
$\sigma_8/h^{0.5}$	$0.985^{+0.038}_{-0.038}$ (−0.5 σ)	$100\theta_D$	$0.1613^{+0.0047}_{-0.0046}$ (+0.7 σ)	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012}$ (+1.1 σ)
$r_{\text{drag}} h$	$100.5^{+2.4}_{-2.5}$ (+1.3 σ)	z_{eq}	3383^{+600}_{-600} (−0.6 σ)	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.013}$ (+1.3 σ)
$\langle d^2 \rangle^{1/2}$	$2.47^{+0.12}_{-0.12}$ (+0.5 σ)	k_{eq}	$0.0103^{+0.0020}_{-0.0019}$ (−0.6 σ)	χ^2_{lensing}	10.1 (ν : 2.9)
z_{re}	$7.78^{+0.53}_{-0.52}$ (+0.3 σ)	$100\theta_{\text{eq}}$	$0.821^{+0.086}_{-0.089}$ (+1.2 σ)	$\chi^2_{6\text{DF}}$	0.064 (ν : 0.0)
$10^9 A_s$	$2.16^{+0.53}_{-0.49}$ (+1.9 σ)	$100\theta_{s,\text{eq}}$	$0.454^{+0.044}_{-0.046}$ (+1.2 σ)	χ^2_{MGS}	1.81 (ν : 0.3)
$10^9 A_s e^{-2\tau}$	$1.93^{+0.48}_{-0.44}$ (+3.4 σ)	$H(0.15)$	$73.3^{+3.4}_{-3.3}$ (+1.4 σ)	χ^2_{DR12BAO}	4.4 (ν : 1.3)
D_{40}	1294^{+400}_{-300} (+3.9 σ)	$D_M(0.15)$	637^{+27}_{-28} (−1.3 σ)	χ^2_{prior}	2.0 (ν : 2.1) (−1.4 σ)
D_{220}	5984^{+2000}_{-2000} (+6.5 σ)	$H(0.38)$	$83.4^{+4.7}_{-4.5}$ (+1.5 σ)	χ^2_{BAO}	6.2 (ν : 1.6)
D_{810}	2581^{+700}_{-700} (+3.3 σ)	$D_M(0.38)$	1521^{+69}_{-74} (−1.3 σ)		

$$\bar{\chi}^2_{\text{eff}} = 18.35; R - 1 = 0.00540$$

2.178 base_lensing_lenspriors_BAO_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00098}_{-0.00098} (+0.3\sigma)$	D_{1420}	$825^{+200}_{-200} (+2.1\sigma)$	$H(0.51)$	$89.9^{+4.7}_{-4.7} (+1.4\sigma)$
$\Omega_c h^2$	$0.119^{+0.023}_{-0.022} (-0.9\sigma)$	D_{2000}	$234^{+60}_{-50} (+2.7\sigma)$	$D_M(0.51)$	$1973^{+85}_{-88} (-1.3\sigma)$
$100\theta_{MC}$	$1.041^{+0.030}_{-0.029} (+1.4\sigma)$	$n_{s,0.002}$	$0.955^{+0.040}_{-0.039} (-1.3\sigma)$	$H(0.61)$	$95.5^{+5.3}_{-5.2} (+1.4\sigma)$
$\ln(10^{10} A_s)$	$3.07^{+0.20}_{-0.21} (+1.8\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} (+0.2\sigma)$	$D_M(0.61)$	$2297^{+100}_{-110} (-1.3\sigma)$
n_s	$0.955^{+0.040}_{-0.039} (-1.3\sigma)$	Y_P^{BBN}	$0.24663^{+0.00043}_{-0.00043} (+0.2\sigma)$	$H(2.33)$	$235^{+18}_{-18} (-1.0\sigma)$
H_0	$68.1^{+2.6}_{-2.4} (+1.3\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} (-0.3\sigma)$	$D_M(2.33)$	$5761^{+330}_{-340} (-1.0\sigma)$
Ω_Λ	$0.695^{+0.033}_{-0.035} (+1.2\sigma)$	Age/Gyr	$13.79^{+0.79}_{-0.81} (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.037}_{-0.035} (-0.8\sigma)$
Ω_m	$0.305^{+0.035}_{-0.033} (-1.2\sigma)$	z_*	$1090.0^{+2.4}_{-2.1} (-0.7\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.033}_{-0.032} (+0.4\sigma)$
$\Omega_m h^2$	$0.142^{+0.023}_{-0.022} (-0.9\sigma)$	r_*	$145.0^{+5.8}_{-6.2} (+1.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.031}_{-0.031} (-0.6\sigma)$
$\Omega_m h^3$	$0.096^{+0.019}_{-0.018} (+1.2\sigma)$	$100\theta_*$	$1.042^{+0.030}_{-0.029} (+1.4\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.028}_{-0.028} (+0.7\sigma)$
σ_8	$0.813^{+0.037}_{-0.037} (+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.93^{+0.95}_{-0.97} (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.028}_{-0.028} (-0.5\sigma)$
S_8	$0.820^{+0.073}_{-0.068} (-0.8\sigma)$	z_{drag}	$1059.4^{+2.9}_{-2.9} (-0.0\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.026}_{-0.026} (+0.8\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.040}_{-0.037} (-0.8\sigma)$	r_{drag}	$147.8^{+6.0}_{-6.4} (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.026}_{-0.026} (-0.4\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.038}_{-0.038} (-0.6\sigma)$	k_D	$0.1401^{+0.0068}_{-0.0067} (-0.9\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.025}_{-0.024} (+0.9\sigma)$
$\sigma_8/h^{0.5}$	$0.986^{+0.038}_{-0.038} (-0.4\sigma)$	$100\theta_D$	$0.1612^{+0.0042}_{-0.0039} (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012} (+1.2\sigma)$
$r_{\text{drag}} h$	$100.5^{+2.4}_{-2.4} (+1.3\sigma)$	z_{eq}	$3367^{+500}_{-500} (-0.9\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.013}_{-0.013} (+1.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.48^{+0.10}_{-0.10} (+0.6\sigma)$	k_{eq}	$0.0103^{+0.0017}_{-0.0016} (-0.9\sigma)$	χ^2_{lensing}	$7.8 (\nu: 2.6)$
z_{re}	$7.77^{+0.48}_{-0.44} (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.075}_{-0.075} (+1.3\sigma)$	$\chi^2_{6\text{DF}}$	$0.061 (\nu: 0.0)$
$10^9 A_s$	$2.17^{+0.47}_{-0.41} (+2.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.454^{+0.038}_{-0.039} (+1.3\sigma)$	χ^2_{MGS}	$1.82 (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.94^{+0.42}_{-0.37} (+4.1\sigma)$	$H(0.15)$	$73.3^{+3.1}_{-2.9} (+1.3\sigma)$	χ^2_{DR12BAO}	$4.4 (\nu: 1.3)$
D_{40}	$1301^{+300}_{-300} (+4.4\sigma)$	$D_M(0.15)$	$638^{+24}_{-25} (-1.3\sigma)$	χ^2_{prior}	$2.0 (\nu: 2.1) (-1.4\sigma)$
D_{220}	$6015^{+2000}_{-2000} (+7.2\sigma)$	$H(0.38)$	$83.3^{+4.0}_{-4.0} (+1.3\sigma)$	χ^2_{BAO}	$6.3 (\nu: 1.5)$
D_{810}	$2598^{+600}_{-600} (+4.5\sigma)$	$D_M(0.38)$	$1523^{+63}_{-65} (-1.3\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 16.15; R - 1 = 0.00217$

2.179 base_lensing_lenspriors_BAO_post_ptt

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00099}_{-0.0010} (+0.4\sigma)$	D_{1420}	$918^{+200}_{-200} (+20.2\sigma)$	$H(0.51)$	$87.6^{+4.6}_{-4.3} (-4.0\sigma)$
$\Omega_c h^2$	$0.107^{+0.022}_{-0.020} (-6.5\sigma)$	D_{2000}	$266^{+80}_{-70} (+20.4\sigma)$	$D_M(0.51)$	$2015^{+80}_{-90} (+1.0\sigma)$
$100\theta_{MC}$	$1.025^{+0.031}_{-0.030} (-33.2\sigma)$	$n_{s,0.002}$	$0.955^{+0.040}_{-0.039} (-1.3\sigma)$	$H(0.61)$	$92.8^{+5.2}_{-4.8} (-6.2\sigma)$
$\ln(10^{10} A_s)$	$3.19^{+0.20}_{-0.22} (+8.9\sigma)$	Y_P	$0.24531^{+0.00043}_{-0.00044} (+0.3\sigma)$	$D_M(0.61)$	$2348^{+97}_{-110} (+1.3\sigma)$
n_s	$0.955^{+0.040}_{-0.039} (-1.3\sigma)$	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00044} (+0.3\sigma)$	$H(2.33)$	$226^{+18}_{-16} (-8.4\sigma)$
H_0	$67.0^{+2.4}_{-2.3} (+0.2\sigma)$	$10^5 D/H$	$2.62^{+0.20}_{-0.18} (-0.3\sigma)$	$D_M(2.33)$	$5937^{+330}_{-340} (+9.8\sigma)$
Ω_Λ	$0.712^{+0.030}_{-0.035} (+2.5\sigma)$	Age/Gyr	$14.22^{+0.80}_{-0.83} (+10.8\sigma)$	$f\sigma_8(0.15)$	$0.437^{+0.038}_{-0.037} (-2.2\sigma)$
Ω_m	$0.288^{+0.035}_{-0.030} (-2.5\sigma)$	z_*	$1089.0^{+2.3}_{-2.1} (-3.3\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.035}_{-0.037} (-0.7\sigma)$
$\Omega_m h^2$	$0.130^{+0.022}_{-0.020} (-6.8\sigma)$	r_*	$148.2^{+5.6}_{-6.3} (+7.8\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.032}_{-0.030} (-2.0\sigma)$
$\Omega_m h^3$	$0.087^{+0.017}_{-0.016} (-19.1\sigma)$	$100\theta_*$	$1.025^{+0.031}_{-0.030} (-33.8\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.030}_{-0.032} (-0.2\sigma)$
σ_8	$0.803^{+0.038}_{-0.040} (-1.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.46^{+0.98}_{-1.0} (+13.1\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.029}_{-0.028} (-1.9\sigma)$
S_8	$0.787^{+0.073}_{-0.071} (-2.2\sigma)$	z_{drag}	$1058.5^{+2.9}_{-2.9} (-1.8\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.028}_{-0.030} (+0.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.431^{+0.040}_{-0.039} (-2.2\sigma)$	r_{drag}	$151.0^{+5.8}_{-6.5} (+7.9\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.027}_{-0.027} (-1.8\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.588^{+0.040}_{-0.037} (-2.0\sigma)$	k_D	$0.1368^{+0.0070}_{-0.0063} (-7.2\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.026}_{-0.028} (+0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.980^{+0.042}_{-0.045} (-0.8\sigma)$	$100\theta_D$	$0.1591^{+0.0043}_{-0.0043} (-7.5\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.013}_{-0.014} (+0.8\sigma)$
$r_{\text{drag}} h$	$101.2^{+2.2}_{-2.4} (+1.7\sigma)$	z_{eq}	$3088^{+500}_{-500} (-6.8\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.013}_{-0.014} (+1.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.55^{+0.12}_{-0.12} (+2.4\sigma)$	k_{eq}	$0.0094^{+0.0016}_{-0.0014} (-6.8\sigma)$	χ^2_{lensing}	$11.5 (\nu: 2.8)$
z_{re}	$7.54^{+0.48}_{-0.43} (+0.0\sigma)$	$100\theta_{\text{eq}}$	$0.864^{+0.074}_{-0.081} (+6.0\sigma)$	$\chi^2_{6\text{DF}}$	$0.071 (\nu: 0.0)$
$10^9 A_s$	$2.43^{+0.53}_{-0.50} (+9.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.476^{+0.040}_{-0.040} (+6.0\sigma)$	χ^2_{MGS}	$2.12 (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$2.18^{+0.48}_{-0.45} (+21.7\sigma)$	$H(0.15)$	$71.9^{+2.9}_{-2.8} (-0.4\sigma)$	χ^2_{DR12BAO}	$5.2 (\nu: 1.5)$
D_{40}	$1493^{+300}_{-300} (+17.0\sigma)$	$D_M(0.15)$	$648^{+24}_{-25} (+0.1\sigma)$	χ^2_{prior}	$2.1 (\nu: 2.3) (-1.4\sigma)$
D_{220}	$7122^{+2000}_{-2000} (+33.6\sigma)$	$H(0.38)$	$81.3^{+4.0}_{-3.7} (-2.2\sigma)$	χ^2_{BAO}	$7.4 (\nu: 1.6)$
D_{810}	$2923^{+600}_{-600} (+28.0\sigma)$	$D_M(0.38)$	$1552^{+59}_{-66} (+0.6\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 21.02; R - 1 = 0.01428$$

2.180 base_lensing_lenspriors_BAO_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00097}_{-0.00098} \quad (+0.3\sigma)$	D_{1420}	$812^{+200}_{-200} \quad (-0.4\sigma)$	$H(0.51)$	$89.9^{+4.8}_{-4.7} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.119^{+0.023}_{-0.022} \quad (-1.0\sigma)$	D_{2000}	$231^{+60}_{-50} \quad (+0.6\sigma)$	$D_M(0.51)$	$1974^{+84}_{-88} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.041^{+0.030}_{-0.029} \quad (+0.9\sigma)$	$n_{s,0.002}$	$0.956^{+0.040}_{-0.039} \quad (-1.3\sigma)$	$H(0.61)$	$95.5^{+5.3}_{-5.2} \quad (+1.3\sigma)$
$\ln(10^{10} A_s)$	$3.05^{+0.20}_{-0.20} \quad (+0.8\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$D_M(0.61)$	$2298^{+100}_{-110} \quad (-1.2\sigma)$
n_s	$0.956^{+0.040}_{-0.039} \quad (-1.3\sigma)$	Y_P^{BBN}	$0.24663^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$H(2.33)$	$235^{+18}_{-18} \quad (-1.1\sigma)$
H_0	$68.0^{+2.6}_{-2.4} \quad (+1.3\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$D_M(2.33)$	$5763^{+330}_{-340} \quad (-0.9\sigma)$
Ω_Λ	$0.695^{+0.033}_{-0.034} \quad (+1.2\sigma)$	Age/Gyr	$13.80^{+0.79}_{-0.82} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.036}_{-0.036} \quad (-1.1\sigma)$
Ω_m	$0.305^{+0.034}_{-0.033} \quad (-1.2\sigma)$	z_*	$1090.0^{+2.4}_{-2.2} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.033}_{-0.032} \quad (-0.5\sigma)$
$\Omega_m h^2$	$0.141^{+0.023}_{-0.022} \quad (-1.0\sigma)$	r_*	$145.1^{+5.7}_{-6.1} \quad (+1.2\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.031}_{-0.031} \quad (-1.1\sigma)$
$\Omega_m h^3$	$0.096^{+0.019}_{-0.018} \quad (+1.0\sigma)$	$100\theta_*$	$1.041^{+0.030}_{-0.029} \quad (+0.9\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.028}_{-0.028} \quad (-0.3\sigma)$
σ_8	$0.806^{+0.037}_{-0.036} \quad (-0.7\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.95}_{-0.97} \quad (+1.3\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.028}_{-0.028} \quad (-1.0\sigma)$
S_8	$0.812^{+0.071}_{-0.069} \quad (-1.1\sigma)$	z_{drag}	$1059.4^{+2.9}_{-2.9} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.026}_{-0.026} \quad (-0.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.039}_{-0.038} \quad (-1.1\sigma)$	r_{drag}	$147.8^{+5.9}_{-6.4} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.025}_{-0.026} \quad (-1.0\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.599^{+0.038}_{-0.038} \quad (-1.0\sigma)$	k_D	$0.1400^{+0.0068}_{-0.0066} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.024}_{-0.024} \quad (-0.1\sigma)$
$\sigma_8/h^{0.5}$	$0.977^{+0.037}_{-0.038} \quad (-1.0\sigma)$	$100\theta_D$	$0.1611^{+0.0042}_{-0.0040} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.298^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$r_{\text{drag}} h$	$100.5^{+2.4}_{-2.4} \quad (+1.3\sigma)$	z_{eq}	$3363^{+600}_{-500} \quad (-1.0\sigma)$	$\sigma_8(2.33)$	$0.307^{+0.012}_{-0.012} \quad (+0.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.457^{+0.097}_{-0.098} \quad (+0.1\sigma)$	k_{eq}	$0.0103^{+0.0017}_{-0.0016} \quad (-1.0\sigma)$	χ^2_{lensing}	$10.1 \quad (\nu: 2.6)$
z_{re}	$7.77^{+0.48}_{-0.44} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.075}_{-0.074} \quad (+1.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.060 \quad (\nu: 0.0)$
$10^9 A_s$	$2.13^{+0.45}_{-0.40} \quad (+1.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.455^{+0.038}_{-0.039} \quad (+1.4\sigma)$	χ^2_{MGS}	$1.83 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.91^{+0.41}_{-0.36} \quad (+1.8\sigma)$	$H(0.15)$	$73.3^{+3.2}_{-2.8} \quad (+1.3\sigma)$	χ^2_{DR12BAO}	$4.4 \quad (\nu: 1.3)$
D_{40}	$1280^{+300}_{-300} \quad (+3.0\sigma)$	$D_M(0.15)$	$638^{+24}_{-25} \quad (-1.2\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.1) \quad (-1.4\sigma)$
D_{220}	$5922^{+2000}_{-2000} \quad (+5.0\sigma)$	$H(0.38)$	$83.3^{+4.1}_{-4.0} \quad (+1.3\sigma)$	χ^2_{BAO}	$6.3 \quad (\nu: 1.5)$
D_{810}	$2558^{+600}_{-600} \quad (+1.5\sigma)$	$D_M(0.38)$	$1523^{+63}_{-65} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.42; R - 1 = 0.00341$

2.181 base_lensing_lenspriors_BAO_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00095}_{-0.00097} (+0.3\sigma)$	D_{1420}	$842^{+200}_{-200} (+5.4\sigma)$	$H(0.51)$	$88.7^{+4.1}_{-3.9} (-1.4\sigma)$
$\Omega_c h^2$	$0.113^{+0.019}_{-0.018} (-3.9\sigma)$	D_{2000}	$239^{+60}_{-50} (+5.4\sigma)$	$D_M(0.51)$	$1994^{+78}_{-76} (-0.1\sigma)$
$100\theta_{MC}$	$1.033^{+0.026}_{-0.026} (-16.0\sigma)$	$n_{s,0.002}$	$0.954^{+0.040}_{-0.040} (-1.4\sigma)$	$H(0.61)$	$94.1^{+4.6}_{-4.3} (-2.6\sigma)$
$\ln(10^{10} A_s)$	$3.09^{+0.18}_{-0.18} (+3.1\sigma)$	Y_P	$0.24531^{+0.00041}_{-0.00042} (+0.3\sigma)$	$D_M(0.61)$	$2322^{+93}_{-91} (+0.0\sigma)$
n_s	$0.954^{+0.040}_{-0.040} (-1.4\sigma)$	Y_P^{BBN}	$0.24664^{+0.00041}_{-0.00043} (+0.3\sigma)$	$H(2.33)$	$231^{+16}_{-14} (-4.8\sigma)$
H_0	$67.6^{+2.3}_{-2.3} (+0.7\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.17} (-0.3\sigma)$	$D_M(2.33)$	$5849^{+290}_{-290} (+4.4\sigma)$
Ω_Λ	$0.704^{+0.028}_{-0.031} (+1.9\sigma)$	Age/Gyr	$14.01^{+0.70}_{-0.70} (+4.9\sigma)$	$f\sigma_8(0.15)$	$0.437^{+0.029}_{-0.028} (-2.2\sigma)$
Ω_m	$0.296^{+0.031}_{-0.028} (-1.9\sigma)$	z_*	$1089.5^{+2.1}_{-1.9} (-2.0\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.027}_{-0.029} (-2.0\sigma)$
$\Omega_m h^2$	$0.135^{+0.019}_{-0.018} (-4.1\sigma)$	r_*	$146.6^{+5.0}_{-5.2} (+4.5\sigma)$	$f\sigma_8(0.38)$	$0.458^{+0.025}_{-0.025} (-2.3\sigma)$
$\Omega_m h^3$	$0.092^{+0.015}_{-0.015} (-9.6\sigma)$	$100\theta_*$	$1.033^{+0.026}_{-0.026} (-16.3\sigma)$	$\sigma_8(0.38)$	$0.652^{+0.024}_{-0.026} (-1.8\sigma)$
σ_8	$0.793^{+0.030}_{-0.032} (-2.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.19^{+0.85}_{-0.83} (+7.2\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.022}_{-0.023} (-2.3\sigma)$
S_8	$0.788^{+0.058}_{-0.054} (-2.2\sigma)$	z_{drag}	$1059.0^{+2.7}_{-2.7} (-1.0\sigma)$	$\sigma_8(0.51)$	$0.611^{+0.023}_{-0.024} (-1.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.431^{+0.031}_{-0.030} (-2.2\sigma)$	r_{drag}	$149.4^{+5.2}_{-5.5} (+4.6\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.020}_{-0.021} (-2.3\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.585^{+0.030}_{-0.031} (-2.2\sigma)$	k_D	$0.1383^{+0.0061}_{-0.0055} (-4.2\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.021}_{-0.023} (-1.5\sigma)$
$\sigma_8/h^{0.5}$	$0.964^{+0.033}_{-0.034} (-1.8\sigma)$	$100\theta_D$	$0.1601^{+0.0036}_{-0.0036} (-3.6\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.011}_{-0.011} (-1.2\sigma)$
$r_{\text{drag}} h$	$100.9^{+2.3}_{-2.3} (+1.5\sigma)$	z_{eq}	$3219^{+500}_{-400} (-4.1\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.012}_{-0.012} (-0.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.466^{+0.092}_{-0.091} (+0.3\sigma)$	k_{eq}	$0.0098^{+0.0014}_{-0.0013} (-4.1\sigma)$	χ^2_{lensing}	$12.3 (\nu: 2.4)$
z_{re}	$7.65^{+0.42}_{-0.39} (+0.2\sigma)$	$100\theta_{\text{eq}}$	$0.843^{+0.067}_{-0.066} (+3.7\sigma)$	$\chi^2_{6\text{DF}}$	$0.062 (\nu: 0.0)$
$10^9 A_s$	$2.21^{+0.43}_{-0.38} (+3.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.465^{+0.034}_{-0.034} (+3.6\sigma)$	χ^2_{MGS}	$1.99 (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.98^{+0.39}_{-0.34} (+6.9\sigma)$	$H(0.15)$	$72.6^{+2.7}_{-2.6} (+0.4\sigma)$	χ^2_{DR12BAO}	$4.8 (\nu: 1.3)$
D_{40}	$1342^{+300}_{-200} (+7.1\sigma)$	$D_M(0.15)$	$643^{+23}_{-22} (-0.6\sigma)$	χ^2_{prior}	$2.1 (\nu: 2.2) (-1.4\sigma)$
D_{220}	$6298^{+2000}_{-1000} (+13.9\sigma)$	$H(0.38)$	$82.3^{+3.5}_{-3.3} (-0.5\sigma)$	χ^2_{BAO}	$6.8 (\nu: 1.4)$
D_{810}	$2662^{+500}_{-500} (+9.1\sigma)$	$D_M(0.38)$	$1537^{+59}_{-56} (-0.3\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 21.20; R - 1 = 0.00647$

2.182 base_lensing_lenspriors_BAO_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00099}_{-0.00099} (+0.3\sigma)$	D_{1420}	$812^{+200}_{-200} (-0.4\sigma)$	$H(0.51)$	$90.5^{+5.0}_{-5.0} (+2.7\sigma)$
$\Omega_c h^2$	$0.122^{+0.025}_{-0.024} (+0.5\sigma)$	D_{2000}	$230^{+60}_{-60} (+0.5\sigma)$	$D_M(0.51)$	$1964^{+87}_{-94} (-1.8\sigma)$
$100\theta_{MC}$	$1.045^{+0.033}_{-0.030} (+9.2\sigma)$	$n_{s,0.002}$	$0.956^{+0.041}_{-0.039} (-1.2\sigma)$	$H(0.61)$	$96.1^{+5.7}_{-5.6} (+3.2\sigma)$
$\ln(10^{10} A_s)$	$3.06^{+0.20}_{-0.21} (+0.9\sigma)$	Y_P	$0.24531^{+0.00043}_{-0.00043} (+0.2\sigma)$	$D_M(0.61)$	$2286^{+100}_{-110} (-1.8\sigma)$
n_s	$0.956^{+0.041}_{-0.039} (-1.2\sigma)$	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00043} (+0.2\sigma)$	$H(2.33)$	$238^{+19}_{-19} (+0.8\sigma)$
H_0	$68.3^{+2.7}_{-2.5} (+1.5\sigma)$	$10^5 D/H$	$2.62^{+0.20}_{-0.18} (-0.3\sigma)$	$D_M(2.33)$	$5720^{+340}_{-360} (-3.5\sigma)$
Ω_Λ	$0.691^{+0.033}_{-0.038} (+0.9\sigma)$	Age/Gyr	$13.70^{+0.82}_{-0.88} (-3.7\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.040}_{-0.038} (-0.2\sigma)$
Ω_m	$0.309^{+0.038}_{-0.033} (-0.9\sigma)$	z_*	$1090.3^{+2.4}_{-2.3} (-0.1\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.034}_{-0.034} (+1.2\sigma)$
$\Omega_m h^2$	$0.144^{+0.025}_{-0.024} (+0.5\sigma)$	r_*	$144.3^{+6.0}_{-6.6} (-0.4\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.034}_{-0.032} (+0.0\sigma)$
$\Omega_m h^3$	$0.099^{+0.020}_{-0.019} (+6.4\sigma)$	$100\theta_*$	$1.045^{+0.033}_{-0.030} (+9.4\sigma)$	$\sigma_8(0.38)$	$0.672^{+0.029}_{-0.029} (+1.5\sigma)$
σ_8	$0.820^{+0.040}_{-0.038} (+0.9\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.8^{+1.0}_{-1.0} (-1.5\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.030}_{-0.029} (+0.2\sigma)$
S_8	$0.833^{+0.078}_{-0.073} (-0.3\sigma)$	z_{drag}	$1059.6^{+3.0}_{-3.0} (+0.5\sigma)$	$\sigma_8(0.51)$	$0.629^{+0.027}_{-0.026} (+1.7\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.456^{+0.043}_{-0.040} (-0.3\sigma)$	r_{drag}	$147.0^{+6.5}_{-6.6} (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.027}_{-0.027} (+0.3\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.612^{+0.042}_{-0.040} (+0.1\sigma)$	k_D	$0.1409^{+0.0072}_{-0.0071} (+0.7\sigma)$	$\sigma_8(0.61)$	$0.599^{+0.025}_{-0.025} (+1.8\sigma)$
$\sigma_8/h^{0.5}$	$0.993^{+0.039}_{-0.039} (-0.0\sigma)$	$100\theta_D$	$0.1616^{+0.0044}_{-0.0041} (+2.2\sigma)$	$f\sigma_8(2.33)$	$0.302^{+0.013}_{-0.012} (+2.0\sigma)$
$r_{\text{drag}} h$	$100.3^{+2.4}_{-2.5} (+1.2\sigma)$	z_{eq}	$3437^{+600}_{-600} (+0.5\sigma)$	$\sigma_8(2.33)$	$0.312^{+0.013}_{-0.013} (+2.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.47^{+0.10}_{-0.10} (+0.5\sigma)$	k_{eq}	$0.0105^{+0.0018}_{-0.0017} (+0.5\sigma)$	χ^2_{lensing}	$10.4 (\nu: 2.7)$
z_{re}	$7.82^{+0.49}_{-0.48} (+0.4\sigma)$	$100\theta_{\text{eq}}$	$0.813^{+0.078}_{-0.079} (+0.3\sigma)$	$\chi^2_{6\text{DF}}$	$0.063 (\nu: 0.0)$
$10^9 A_s$	$2.13^{+0.47}_{-0.42} (+1.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.450^{+0.040}_{-0.041} (+0.3\sigma)$	χ^2_{MGS}	$1.74 (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.91^{+0.42}_{-0.38} (+2.0\sigma)$	$H(0.15)$	$73.6^{+3.2}_{-3.1} (+1.7\sigma)$	χ^2_{DR12BAO}	$4.2 (\nu: 1.3)$
D_{40}	$1274^{+300}_{-300} (+2.7\sigma)$	$D_M(0.15)$	$635^{+25}_{-26} (-1.6\sigma)$	χ^2_{prior}	$2.1 (\nu: 2.0) (-1.4\sigma)$
D_{220}	$5855^{+2000}_{-2000} (+3.4\sigma)$	$H(0.38)$	$83.8^{+4.3}_{-4.2} (+2.2\sigma)$	χ^2_{BAO}	$6.0 (\nu: 1.5)$
D_{810}	$2554^{+600}_{-600} (+1.3\sigma)$	$D_M(0.38)$	$1516^{+64}_{-69} (-1.7\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.54; R - 1 = 0.00374$

2.183 base_lensing_lenspriors_BAO_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00098}_{-0.00098} (+0.3\sigma)$	D_{1420}	$835^{+200}_{-200} (+4.1\sigma)$	$H(0.51)$	$89.6^{+4.8}_{-4.4} (+0.7\sigma)$
$\Omega_c h^2$	$0.117^{+0.022}_{-0.021} (-1.7\sigma)$	D_{2000}	$238^{+60}_{-50} (+4.5\sigma)$	$D_M(0.51)$	$1979^{+84}_{-86} (-1.0\sigma)$
$100\theta_{MC}$	$1.039^{+0.030}_{-0.029} (-3.1\sigma)$	$n_{s,0.002}$	$0.956^{+0.040}_{-0.039} (-1.2\sigma)$	$H(0.61)$	$95.1^{+5.2}_{-5.1} (+0.4\sigma)$
$\ln(10^{10} A_s)$	$3.08^{+0.20}_{-0.20} (+2.5\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} (+0.2\sigma)$	$D_M(0.61)$	$2304^{+100}_{-100} (-0.9\sigma)$
n_s	$0.956^{+0.040}_{-0.039} (-1.2\sigma)$	Y_P^{BBN}	$0.24663^{+0.00043}_{-0.00043} (+0.2\sigma)$	$H(2.33)$	$234^{+18}_{-17} (-2.0\sigma)$
H_0	$67.9^{+2.5}_{-2.4} (+1.1\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} (-0.3\sigma)$	$D_M(2.33)$	$5784^{+320}_{-330} (+0.4\sigma)$
Ω_Λ	$0.697^{+0.033}_{-0.034} (+1.4\sigma)$	Age/Gyr	$13.85^{+0.78}_{-0.79} (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.036}_{-0.036} (-1.0\sigma)$
Ω_m	$0.303^{+0.034}_{-0.033} (-1.4\sigma)$	z_*	$1089.9^{+2.3}_{-2.1} (-1.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.033}_{-0.033} (+0.1\sigma)$
$\Omega_m h^2$	$0.140^{+0.022}_{-0.022} (-1.7\sigma)$	r_*	$145.4^{+5.7}_{-6.1} (+2.0\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.031}_{-0.031} (-0.9\sigma)$
$\Omega_m h^3$	$0.095^{+0.018}_{-0.017} (-1.6\sigma)$	$100\theta_*$	$1.040^{+0.030}_{-0.029} (-3.1\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.028}_{-0.028} (+0.4\sigma)$
σ_8	$0.811^{+0.037}_{-0.037} (-0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.00^{+0.95}_{-0.96} (+2.7\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.028}_{-0.028} (-0.8\sigma)$
S_8	$0.814^{+0.071}_{-0.068} (-1.0\sigma)$	z_{drag}	$1059.3^{+2.9}_{-2.9} (-0.2\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.026}_{-0.026} (+0.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.446^{+0.039}_{-0.037} (-1.0\sigma)$	r_{drag}	$148.2^{+5.9}_{-6.3} (+2.0\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.025}_{-0.026} (-0.7\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.601^{+0.038}_{-0.038} (-0.8\sigma)$	k_D	$0.1396^{+0.0070}_{-0.0063} (-1.7\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.025}_{-0.024} (+0.7\sigma)$
$\sigma_8/h^{0.5}$	$0.984^{+0.038}_{-0.038} (-0.6\sigma)$	$100\theta_D$	$0.1609^{+0.0041}_{-0.0039} (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012} (+1.0\sigma)$
$r_{\text{drag}} h$	$100.6^{+2.4}_{-2.4} (+1.3\sigma)$	z_{eq}	$3329^{+500}_{-500} (-1.7\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.013} (+1.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.48^{+0.10}_{-0.10} (+0.8\sigma)$	k_{eq}	$0.0102^{+0.0016}_{-0.0016} (-1.7\sigma)$	χ^2_{lensing}	$9.9 (\nu: 2.6)$
z_{re}	$7.74^{+0.48}_{-0.44} (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.828^{+0.075}_{-0.075} (+1.9\sigma)$	$\chi^2_{6\text{DF}}$	$0.061 (\nu: 0.0)$
$10^9 A_s$	$2.19^{+0.47}_{-0.41} (+2.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.457^{+0.038}_{-0.038} (+1.9\sigma)$	χ^2_{MGS}	$1.86 (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.96^{+0.42}_{-0.37} (+5.7\sigma)$	$H(0.15)$	$73.1^{+3.0}_{-2.8} (+1.1\sigma)$	χ^2_{DR12BAO}	$4.5 (\nu: 1.3)$
D_{40}	$1319^{+300}_{-300} (+5.6\sigma)$	$D_M(0.15)$	$639^{+24}_{-24} (-1.1\sigma)$	χ^2_{prior}	$2.0 (\nu: 2.1) (-1.4\sigma)$
D_{220}	$6124^{+2000}_{-2000} (+9.8\sigma)$	$H(0.38)$	$83.0^{+4.1}_{-3.7} (+0.9\sigma)$	χ^2_{BAO}	$6.4 (\nu: 1.5)$
D_{810}	$2633^{+600}_{-600} (+7.0\sigma)$	$D_M(0.38)$	$1526^{+62}_{-63} (-1.0\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.36; R - 1 = 0.00214$

2.184 base_lensing_lenspriors_BAO_post_agr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00096}_{-0.00098} \quad (+0.3\sigma)$	D_{1420}	$866^{+200}_{-200} \quad (+10.1\sigma)$	$H(0.51)$	$88.4^{+4.1}_{-3.7} \quad (-2.2\sigma)$
$\Omega_c h^2$	$0.111^{+0.019}_{-0.017} \quad (-4.7\sigma)$	D_{2000}	$247^{+60}_{-50} \quad (+9.8\sigma)$	$D_M(0.51)$	$2000^{+76}_{-75} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.031^{+0.026}_{-0.025} \quad (-21.1\sigma)$	$n_{s,0.002}$	$0.954^{+0.039}_{-0.039} \quad (-1.5\sigma)$	$H(0.61)$	$93.7^{+4.6}_{-4.2} \quad (-3.7\sigma)$
$\ln(10^{10} A_s)$	$3.12^{+0.18}_{-0.18} \quad (+4.9\sigma)$	Y_P	$0.24531^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$D_M(0.61)$	$2330^{+91}_{-90} \quad (+0.4\sigma)$
n_s	$0.954^{+0.039}_{-0.039} \quad (-1.5\sigma)$	Y_P^{BBN}	$0.24663^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$H(2.33)$	$229^{+16}_{-14} \quad (-5.9\sigma)$
H_0	$67.4^{+2.2}_{-2.2} \quad (+0.6\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$D_M(2.33)$	$5876^{+280}_{-290} \quad (+6.0\sigma)$
Ω_Λ	$0.706^{+0.027}_{-0.030} \quad (+2.1\sigma)$	Age/Gyr	$14.07^{+0.68}_{-0.70} \quad (+6.6\sigma)$	$f\sigma_8(0.15)$	$0.437^{+0.029}_{-0.028} \quad (-2.2\sigma)$
Ω_m	$0.294^{+0.030}_{-0.027} \quad (-2.1\sigma)$	z_*	$1089.3^{+2.0}_{-1.8} \quad (-2.4\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.028}_{-0.028} \quad (-1.6\sigma)$
$\Omega_m h^2$	$0.134^{+0.019}_{-0.018} \quad (-4.9\sigma)$	r_*	$147.1^{+4.9}_{-5.2} \quad (+5.5\sigma)$	$f\sigma_8(0.38)$	$0.459^{+0.024}_{-0.024} \quad (-2.2\sigma)$
$\Omega_m h^3$	$0.090^{+0.015}_{-0.014} \quad (-12.6\sigma)$	$100\theta_*$	$1.031^{+0.026}_{-0.025} \quad (-21.5\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.024}_{-0.025} \quad (-1.2\sigma)$
σ_8	$0.796^{+0.030}_{-0.031} \quad (-1.7\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.27^{+0.83}_{-0.84} \quad (+8.9\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.022}_{-0.022} \quad (-2.1\sigma)$
S_8	$0.788^{+0.056}_{-0.053} \quad (-2.2\sigma)$	z_{drag}	$1058.8^{+2.7}_{-2.8} \quad (-1.3\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.023}_{-0.023} \quad (-1.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.432^{+0.031}_{-0.029} \quad (-2.2\sigma)$	r_{drag}	$149.9^{+5.1}_{-5.4} \quad (+5.6\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.020}_{-0.021} \quad (-2.1\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.586^{+0.030}_{-0.030} \quad (-2.1\sigma)$	k_D	$0.1379^{+0.0059}_{-0.0054} \quad (-5.2\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.022}_{-0.022} \quad (-0.9\sigma)$
$\sigma_8/h^{0.5}$	$0.970^{+0.033}_{-0.034} \quad (-1.4\sigma)$	$100\theta_D$	$0.1598^{+0.0036}_{-0.0035} \quad (-4.8\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.011}_{-0.011} \quad (-0.5\sigma)$
$r_{\text{drag}} h$	$101.0^{+2.3}_{-2.3} \quad (+1.6\sigma)$	z_{eq}	$3178^{+400}_{-400} \quad (-4.9\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.012}_{-0.012} \quad (-0.0\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.493^{+0.099}_{-0.099} \quad (+1.0\sigma)$	k_{eq}	$0.0097^{+0.0014}_{-0.0013} \quad (-4.9\sigma)$	χ^2_{lensing}	$12.2 \quad (\nu: 2.5)$
z_{re}	$7.62^{+0.42}_{-0.38} \quad (+0.1\sigma)$	$100\theta_{\text{eq}}$	$0.850^{+0.067}_{-0.066} \quad (+4.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.064 \quad (\nu: 0.0)$
$10^9 A_s$	$2.28^{+0.43}_{-0.41} \quad (+5.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.468^{+0.034}_{-0.034} \quad (+4.3\sigma)$	χ^2_{MGS}	$2.03 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$2.04^{+0.38}_{-0.37} \quad (+11.4\sigma)$	$H(0.15)$	$72.4^{+2.7}_{-2.5} \quad (+0.2\sigma)$	χ^2_{DR12BAO}	$4.9 \quad (\nu: 1.3)$
D_{40}	$1388^{+300}_{-200} \quad (+10.1\sigma)$	$D_M(0.15)$	$645^{+22}_{-22} \quad (-0.4\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.2) \quad (-1.4\sigma)$
D_{220}	$6540^{+2000}_{-1000} \quad (+19.7\sigma)$	$H(0.38)$	$82.0^{+3.5}_{-3.3} \quad (-1.0\sigma)$	χ^2_{BAO}	$7.0 \quad (\nu: 1.5)$
D_{810}	$2744^{+500}_{-500} \quad (+15.0\sigma)$	$D_M(0.38)$	$1542^{+56}_{-56} \quad (-0.0\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 21.26; R - 1 = 0.00444$$

2.185 base_lensing_lenspriors_BAO_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00098}_{-0.00098} (+0.3\sigma)$	D_{1420}	$838^{+200}_{-200} (+4.6\sigma)$	$H(0.51)$	$89.5^{+4.8}_{-4.4} (+0.4\sigma)$
$\Omega_c h^2$	$0.117^{+0.022}_{-0.021} (-2.0\sigma)$	D_{2000}	$238^{+60}_{-50} (+4.9\sigma)$	$D_M(0.51)$	$1981^{+84}_{-86} (-0.9\sigma)$
$100\theta_{MC}$	$1.039^{+0.030}_{-0.029} (-4.7\sigma)$	$n_{s,0.002}$	$0.956^{+0.040}_{-0.039} (-1.2\sigma)$	$H(0.61)$	$95.0^{+5.4}_{-4.9} (+0.0\sigma)$
$\ln(10^{10} A_s)$	$3.09^{+0.20}_{-0.20} (+2.7\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} (+0.2\sigma)$	$D_M(0.61)$	$2306^{+100}_{-100} (-0.8\sigma)$
n_s	$0.956^{+0.040}_{-0.039} (-1.2\sigma)$	Y_P^{BBN}	$0.24663^{+0.00042}_{-0.00043} (+0.2\sigma)$	$H(2.33)$	$234^{+18}_{-17} (-2.3\sigma)$
H_0	$67.9^{+2.5}_{-2.4} (+1.1\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} (-0.3\sigma)$	$D_M(2.33)$	$5792^{+330}_{-330} (+0.9\sigma)$
Ω_Λ	$0.698^{+0.033}_{-0.034} (+1.4\sigma)$	Age/Gyr	$13.87^{+0.79}_{-0.80} (+1.1\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.037}_{-0.036} (-1.1\sigma)$
Ω_m	$0.302^{+0.034}_{-0.033} (-1.4\sigma)$	z_*	$1089.8^{+2.3}_{-2.1} (-1.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.034}_{-0.034} (-0.0\sigma)$
$\Omega_m h^2$	$0.139^{+0.022}_{-0.022} (-2.0\sigma)$	r_*	$145.6^{+5.7}_{-6.1} (+2.3\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.032}_{-0.032} (-1.0\sigma)$
$\Omega_m h^3$	$0.095^{+0.018}_{-0.017} (-2.5\sigma)$	$100\theta_*$	$1.039^{+0.030}_{-0.029} (-4.8\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.029}_{-0.029} (+0.3\sigma)$
σ_8	$0.809^{+0.038}_{-0.038} (-0.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.02^{+0.95}_{-0.97} (+3.3\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.029}_{-0.029} (-0.9\sigma)$
S_8	$0.812^{+0.073}_{-0.069} (-1.1\sigma)$	z_{drag}	$1059.2^{+2.9}_{-2.9} (-0.3\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.027}_{-0.027} (+0.5\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.040}_{-0.038} (-1.1\sigma)$	r_{drag}	$148.3^{+5.9}_{-6.4} (+2.3\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.026}_{-0.026} (-0.8\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.600^{+0.039}_{-0.039} (-0.9\sigma)$	k_D	$0.1395^{+0.0070}_{-0.0063} (-2.0\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.026}_{-0.025} (+0.6\sigma)$
$\sigma_8/h^{0.5}$	$0.982^{+0.040}_{-0.039} (-0.6\sigma)$	$100\theta_D$	$0.1608^{+0.0041}_{-0.0039} (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.013}_{-0.013} (+0.9\sigma)$
$r_{\text{drag}} h$	$100.6^{+2.4}_{-2.4} (+1.4\sigma)$	z_{eq}	$3316^{+500}_{-500} (-2.0\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.013} (+1.2\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.48^{+0.10}_{-0.10} (+0.8\sigma)$	k_{eq}	$0.0101^{+0.0016}_{-0.0016} (-2.0\sigma)$	χ^2_{lensing}	$9.9 (\nu: 2.7)$
z_{re}	$7.73^{+0.48}_{-0.43} (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.830^{+0.076}_{-0.075} (+2.1\sigma)$	$\chi^2_{6\text{DF}}$	$0.061 (\nu: 0.0)$
$10^9 A_s$	$2.20^{+0.47}_{-0.41} (+3.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.458^{+0.039}_{-0.039} (+2.1\sigma)$	χ^2_{MGS}	$1.87 (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.97^{+0.42}_{-0.37} (+6.2\sigma)$	$H(0.15)$	$73.0^{+3.1}_{-2.8} (+1.0\sigma)$	χ^2_{DR12BAO}	$4.5 (\nu: 1.3)$
D_{40}	$1324^{+300}_{-300} (+5.9\sigma)$	$D_M(0.15)$	$640^{+24}_{-25} (-1.0\sigma)$	χ^2_{prior}	$2.0 (\nu: 2.1) (-1.4\sigma)$
D_{220}	$6160^{+2000}_{-2000} (+10.7\sigma)$	$H(0.38)$	$82.9^{+4.0}_{-3.9} (+0.7\sigma)$	χ^2_{BAO}	$6.5 (\nu: 1.5)$
D_{810}	$2642^{+600}_{-600} (+7.6\sigma)$	$D_M(0.38)$	$1528^{+62}_{-63} (-0.9\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.40; R - 1 = 0.00240$

2.186 base_lensing_lenspriors_BAO_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00096}_{-0.00098} \quad (+0.3\sigma)$	D_{1420}	$868^{+200}_{-200} \quad (+10.5\sigma)$	$H(0.51)$	$88.2^{+4.1}_{-3.7} \quad (-2.5\sigma)$
$\Omega_c h^2$	$0.110^{+0.019}_{-0.017} \quad (-5.0\sigma)$	D_{2000}	$248^{+60}_{-50} \quad (+10.3\sigma)$	$D_M(0.51)$	$2003^{+75}_{-75} \quad (+0.3\sigma)$
$100\theta_{MC}$	$1.030^{+0.026}_{-0.025} \quad (-23.0\sigma)$	$n_{s,0.002}$	$0.955^{+0.039}_{-0.040} \quad (-1.4\sigma)$	$H(0.61)$	$93.6^{+4.6}_{-4.1} \quad (-4.1\sigma)$
$\ln(10^{10} A_s)$	$3.12^{+0.18}_{-0.18} \quad (+5.1\sigma)$	Y_P	$0.24531^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$D_M(0.61)$	$2333^{+90}_{-90} \quad (+0.5\sigma)$
n_s	$0.955^{+0.039}_{-0.040} \quad (-1.4\sigma)$	Y_P^{BBN}	$0.24664^{+0.00041}_{-0.00043} \quad (+0.2\sigma)$	$H(2.33)$	$229^{+15}_{-14} \quad (-6.3\sigma)$
H_0	$67.3^{+2.3}_{-2.2} \quad (+0.5\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$D_M(2.33)$	$5885^{+280}_{-290} \quad (+6.6\sigma)$
Ω_Λ	$0.707^{+0.027}_{-0.030} \quad (+2.1\sigma)$	Age/Gyr	$14.10^{+0.68}_{-0.70} \quad (+7.3\sigma)$	$f\sigma_8(0.15)$	$0.436^{+0.030}_{-0.029} \quad (-2.3\sigma)$
Ω_m	$0.293^{+0.030}_{-0.027} \quad (-2.1\sigma)$	z_*	$1089.3^{+2.0}_{-1.9} \quad (-2.5\sigma)$	$\sigma_8(0.15)$	$0.736^{+0.029}_{-0.030} \quad (-1.8\sigma)$
$\Omega_m h^2$	$0.133^{+0.019}_{-0.017} \quad (-5.2\sigma)$	r_*	$147.3^{+4.8}_{-5.2} \quad (+5.9\sigma)$	$f\sigma_8(0.38)$	$0.458^{+0.025}_{-0.025} \quad (-2.3\sigma)$
$\Omega_m h^3$	$0.090^{+0.015}_{-0.014} \quad (-13.7\sigma)$	$100\theta_*$	$1.030^{+0.026}_{-0.025} \quad (-23.4\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.025}_{-0.026} \quad (-1.4\sigma)$
σ_8	$0.795^{+0.032}_{-0.033} \quad (-1.9\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.30^{+0.83}_{-0.84} \quad (+9.6\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.023}_{-0.023} \quad (-2.3\sigma)$
S_8	$0.785^{+0.058}_{-0.054} \quad (-2.3\sigma)$	z_{drag}	$1058.8^{+2.7}_{-2.8} \quad (-1.3\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.024}_{-0.024} \quad (-1.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.430^{+0.032}_{-0.030} \quad (-2.3\sigma)$	r_{drag}	$150.1^{+5.1}_{-5.4} \quad (+6.0\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.021}_{-0.021} \quad (-2.3\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.584^{+0.031}_{-0.031} \quad (-2.3\sigma)$	k_D	$0.1377^{+0.0059}_{-0.0053} \quad (-5.5\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.023}_{-0.023} \quad (-1.1\sigma)$
$\sigma_8/h^{0.5}$	$0.968^{+0.035}_{-0.036} \quad (-1.5\sigma)$	$100\theta_D$	$0.1597^{+0.0036}_{-0.0035} \quad (-5.2\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.012}_{-0.012} \quad (-0.7\sigma)$
$r_{\text{drag}} h$	$101.0^{+2.3}_{-2.3} \quad (+1.6\sigma)$	z_{eq}	$3162^{+400}_{-400} \quad (-5.2\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.012}_{-0.012} \quad (-0.2\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.493^{+0.099}_{-0.099} \quad (+1.0\sigma)$	k_{eq}	$0.0097^{+0.0014}_{-0.0013} \quad (-5.2\sigma)$	χ^2_{lensing}	$12.2 \quad (\nu: 2.5)$
z_{re}	$7.61^{+0.42}_{-0.38} \quad (+0.1\sigma)$	$100\theta_{\text{eq}}$	$0.852^{+0.066}_{-0.066} \quad (+4.6\sigma)$	$\chi^2_{6\text{DF}}$	$0.065 \quad (\nu: 0.0)$
$10^9 A_s$	$2.28^{+0.43}_{-0.41} \quad (+5.6\sigma)$	$100\theta_{s,\text{eq}}$	$0.469^{+0.033}_{-0.034} \quad (+4.6\sigma)$	χ^2_{MGS}	$2.05 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$2.05^{+0.38}_{-0.37} \quad (+11.9\sigma)$	$H(0.15)$	$72.3^{+2.6}_{-2.5} \quad (+0.1\sigma)$	χ^2_{DR12BAO}	$5.0 \quad (\nu: 1.4)$
D_{40}	$1394^{+300}_{-200} \quad (+10.5\sigma)$	$D_M(0.15)$	$645^{+22}_{-22} \quad (-0.3\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.2) \quad (-1.4\sigma)$
D_{220}	$6581^{+2000}_{-2000} \quad (+20.7\sigma)$	$H(0.38)$	$81.9^{+3.5}_{-3.3} \quad (-1.2\sigma)$	χ^2_{BAO}	$7.1 \quad (\nu: 1.5)$
D_{810}	$2752^{+500}_{-500} \quad (+15.6\sigma)$	$D_M(0.38)$	$1544^{+57}_{-56} \quad (+0.1\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 21.32; R - 1 = 0.00478$$

2.187 base_lensing_lenspriors_BAO_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00098}_{-0.00098} \quad (+0.3\sigma)$	D_{1420}	$817^{+200}_{-200} \quad (+0.6\sigma)$	$H(0.51)$	$90.1^{+4.8}_{-4.7} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.119^{+0.023}_{-0.022} \quad (-0.6\sigma)$	D_{2000}	$232^{+60}_{-50} \quad (+1.4\sigma)$	$D_M(0.51)$	$1971^{+84}_{-88} \quad (-1.4\sigma)$
$100\theta_{MC}$	$1.042^{+0.030}_{-0.029} \quad (+3.2\sigma)$	$n_{s,0.002}$	$0.956^{+0.040}_{-0.039} \quad (-1.3\sigma)$	$H(0.61)$	$95.6^{+5.3}_{-5.3} \quad (+1.8\sigma)$
$\ln(10^{10} A_s)$	$3.06^{+0.20}_{-0.20} \quad (+1.2\sigma)$	Y_P	$0.24531^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$D_M(0.61)$	$2294^{+100}_{-110} \quad (-1.4\sigma)$
n_s	$0.956^{+0.040}_{-0.039} \quad (-1.3\sigma)$	Y_P^{BBN}	$0.24663^{+0.00042}_{-0.00043} \quad (+0.2\sigma)$	$H(2.33)$	$236^{+18}_{-18} \quad (-0.6\sigma)$
H_0	$68.1^{+2.6}_{-2.4} \quad (+1.3\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$D_M(2.33)$	$5751^{+330}_{-340} \quad (-1.6\sigma)$
Ω_Λ	$0.694^{+0.034}_{-0.035} \quad (+1.1\sigma)$	Age/Gyr	$13.77^{+0.79}_{-0.81} \quad (-1.6\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.038}_{-0.036} \quad (-0.8\sigma)$
Ω_m	$0.306^{+0.035}_{-0.034} \quad (-1.1\sigma)$	z_*	$1090.1^{+2.4}_{-2.1} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.033}_{-0.033} \quad (+0.3\sigma)$
$\Omega_m h^2$	$0.142^{+0.023}_{-0.022} \quad (-0.6\sigma)$	r_*	$144.8^{+5.8}_{-6.2} \quad (+0.8\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.031}_{-0.031} \quad (-0.6\sigma)$
$\Omega_m h^3$	$0.097^{+0.019}_{-0.018} \quad (+2.4\sigma)$	$100\theta_*$	$1.042^{+0.030}_{-0.029} \quad (+3.2\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.028}_{-0.028} \quad (+0.6\sigma)$
σ_8	$0.812^{+0.037}_{-0.037} \quad (+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.90^{+0.95}_{-0.97} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.028}_{-0.028} \quad (-0.5\sigma)$
S_8	$0.820^{+0.073}_{-0.069} \quad (-0.8\sigma)$	z_{drag}	$1059.4^{+2.9}_{-2.9} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.026}_{-0.026} \quad (+0.7\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.040}_{-0.038} \quad (-0.8\sigma)$	r_{drag}	$147.6^{+6.0}_{-6.4} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.026}_{-0.026} \quad (-0.4\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.038}_{-0.038} \quad (-0.6\sigma)$	k_D	$0.1403^{+0.0068}_{-0.0067} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.025}_{-0.024} \quad (+0.8\sigma)$
$\sigma_8/h^{0.5}$	$0.984^{+0.038}_{-0.038} \quad (-0.5\sigma)$	$100\theta_D$	$0.1613^{+0.0042}_{-0.0040} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012} \quad (+1.0\sigma)$
$r_{\text{drag}} h$	$100.5^{+2.4}_{-2.4} \quad (+1.3\sigma)$	z_{eq}	$3383^{+600}_{-500} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.013} \quad (+1.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.47^{+0.10}_{-0.10} \quad (+0.4\sigma)$	k_{eq}	$0.0103^{+0.0017}_{-0.0016} \quad (-0.6\sigma)$	χ^2_{lensing}	$8.8 \quad (\nu: 2.7)$
z_{re}	$7.78^{+0.49}_{-0.44} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.820^{+0.075}_{-0.074} \quad (+1.1\sigma)$	$\chi^2_{6\text{DF}}$	$0.060 \quad (\nu: 0.0)$
$10^9 A_s$	$2.15^{+0.46}_{-0.41} \quad (+1.6\sigma)$	$100\theta_{s,\text{eq}}$	$0.453^{+0.038}_{-0.038} \quad (+1.1\sigma)$	χ^2_{MGS}	$1.80 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.92^{+0.41}_{-0.36} \quad (+2.8\sigma)$	$H(0.15)$	$73.3^{+3.2}_{-2.8} \quad (+1.4\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 1.3)$
D_{40}	$1287^{+300}_{-300} \quad (+3.5\sigma)$	$D_M(0.15)$	$637^{+24}_{-25} \quad (-1.3\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.1) \quad (-1.4\sigma)$
D_{220}	$5941^{+2000}_{-2000} \quad (+5.4\sigma)$	$H(0.38)$	$83.4^{+4.1}_{-4.0} \quad (+1.5\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.5)$
D_{810}	$2573^{+600}_{-600} \quad (+2.6\sigma)$	$D_M(0.38)$	$1521^{+62}_{-65} \quad (-1.4\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 17.02; R - 1 = 0.00221$

2.188 base_lensing_lenspriors_BAO_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_b h^2$	0.02221	$0.02221^{+0.00097}_{-0.00097}$	$(+0.4\sigma)$	D_{1420}	831	831^{+72}_{-68}	$(+3.3\sigma)$	$H(0.51)$	89.79	$89.80^{+0.81}_{-0.81}$	$(+1.1\sigma)$
$\Omega_c h^2$	0.11776	$0.1178^{+0.0033}_{-0.0033}$	(-1.4σ)	D_{2000}	233.6	234^{+23}_{-22}	$(+2.3\sigma)$	$D_M(0.51)$	1974.6	1974^{+27}_{-26}	(-1.2σ)
$100\theta_{\text{MC}}$	1.04090	$1.0409^{+0.0011}_{-0.0012}$	$(+0.3\sigma)$	$n_{\text{s},0.002}$	0.9545	$0.955^{+0.036}_{-0.036}$	(-1.4σ)	$H(0.61)$	95.34	$95.35^{+0.77}_{-0.77}$	$(+1.0\sigma)$
$\ln(10^{10} A_{\text{s}})$	3.072	$3.071^{+0.067}_{-0.069}$	$(+1.9\sigma)$	Y_{P}	0.245329	$0.24532^{+0.00042}_{-0.00043}$	$(+0.3\sigma)$	$D_M(0.61)$	2298.7	2299^{+30}_{-29}	(-1.2σ)
n_{s}	0.9545	$0.955^{+0.036}_{-0.036}$	(-1.4σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246655	$0.24665^{+0.00042}_{-0.00043}$	$(+0.3\sigma)$	$H(2.33)$	234.92	$234.9^{+2.6}_{-2.5}$	(-1.4σ)
H_0	68.01	$68.0^{+1.3}_{-1.3}$	$(+1.2\sigma)$	$10^5 \text{D}/\text{H}$	2.616	$2.62^{+0.19}_{-0.18}$	(-0.4σ)	$D_M(2.33)$	5765.5	5765^{+43}_{-43}	(-0.8σ)
Ω_{Λ}	0.6960	$0.696^{+0.017}_{-0.018}$	$(+1.3\sigma)$	Age/Gyr	13.805	$13.80^{+0.10}_{-0.10}$	(-0.7σ)	$f\sigma_8(0.15)$	0.4531	$0.453^{+0.019}_{-0.019}$	(-0.9σ)
Ω_{m}	0.3040	$0.304^{+0.018}_{-0.017}$	(-1.3σ)	z_*	1089.93	$1089.9^{+1.3}_{-1.2}$	(-0.9σ)	$\sigma_8(0.15)$	0.7514	$0.751^{+0.028}_{-0.028}$	$(+0.3\sigma)$
$\Omega_{\text{m}} h^2$	0.14061	$0.1406^{+0.0036}_{-0.0035}$	(-1.4σ)	r_*	145.14	$145.1^{+1.2}_{-1.2}$	$(+1.4\sigma)$	$f\sigma_8(0.38)$	0.4732	$0.473^{+0.018}_{-0.018}$	(-0.7σ)
$\Omega_{\text{m}} h^3$	0.09563	$0.0956^{+0.0021}_{-0.0021}$	(-0.5σ)	$100\theta_*$	1.04110	$1.0411^{+0.0012}_{-0.0012}$	$(+0.3\sigma)$	$\sigma_8(0.38)$	0.6669	$0.667^{+0.026}_{-0.025}$	$(+0.6\sigma)$
σ_8	0.8124	$0.812^{+0.030}_{-0.030}$	$(+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.941	$13.94^{+0.12}_{-0.12}$	$(+1.4\sigma)$	$f\sigma_8(0.51)$	0.4727	$0.473^{+0.017}_{-0.017}$	(-0.6σ)
S_8	0.8178	$0.818^{+0.035}_{-0.035}$	(-0.9σ)	z_{drag}	1059.40	$1059.4^{+2.3}_{-2.3}$	$(+0.0\sigma)$	$\sigma_8(0.51)$	0.6245	$0.624^{+0.024}_{-0.024}$	$(+0.8\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4479	$0.448^{+0.019}_{-0.019}$	(-0.9σ)	r_{drag}	147.87	$147.9^{+1.5}_{-1.5}$	$(+1.4\sigma)$	$f\sigma_8(0.61)$	0.4683	$0.468^{+0.017}_{-0.017}$	(-0.5σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6032	$0.603^{+0.023}_{-0.023}$	(-0.7σ)	k_{D}	0.13993	$0.1399^{+0.0022}_{-0.0022}$	(-1.2σ)	$\sigma_8(0.61)$	0.5944	$0.594^{+0.023}_{-0.023}$	$(+0.9\sigma)$
$\sigma_8/h^{0.5}$	0.9851	$0.985^{+0.036}_{-0.036}$	(-0.5σ)	$100\theta_{\text{D}}$	0.16105	$0.1611^{+0.0014}_{-0.0013}$	(-0.0σ)	$f\sigma_8(2.33)$	0.3000	$0.300^{+0.012}_{-0.012}$	$(+1.1\sigma)$
$r_{\text{drag}} h$	100.56	$100.6^{+2.3}_{-2.2}$	$(+1.3\sigma)$	z_{eq}	3345	3345^{+86}_{-85}	(-1.4σ)	$\sigma_8(2.33)$	0.3096	$0.310^{+0.013}_{-0.012}$	$(+1.4\sigma)$
$\langle d^2 \rangle^{1/2}$	2.480	$2.479^{+0.079}_{-0.077}$	$(+0.7\sigma)$	k_{eq}	0.010209	$0.01021^{+0.00026}_{-0.00026}$	(-1.4σ)	χ^2_{lensing}	8.10	9.3 (ν : 1.2)	
z_{re}	7.753	$7.75^{+0.22}_{-0.21}$	$(+0.3\sigma)$	$100\theta_{\text{eq}}$	0.8232	$0.823^{+0.015}_{-0.014}$	$(+1.4\sigma)$	$\chi^2_{6\text{DF}}$	0.000	0.055 (ν : 0.0)	
$10^9 A_{\text{s}}$	2.159	$2.16^{+0.15}_{-0.14}$	$(+1.9\sigma)$	$100\theta_{\text{s,eq}}$	0.4547	$0.4547^{+0.0079}_{-0.0078}$	$(+1.4\sigma)$	χ^2_{MGS}	1.75	1.84 (ν : 0.2)	
$10^9 A_{\text{s}} e^{-2\tau}$	1.934	$1.93^{+0.13}_{-0.13}$	$(+3.6\sigma)$	$H(0.15)$	73.20	$73.2^{+1.1}_{-1.1}$	$(+1.2\sigma)$	χ^2_{DR12BAO}	3.43	4.3 (ν : 0.9)	
D_{40}	1300	1299^{+110}_{-110}	$(+4.3\sigma)$	$D_M(0.15)$	638.0	638^{+11}_{-11}	(-1.2σ)	χ^2_{prior}	0.08	2.9 (ν : 2.7) (-1.2σ)	
D_{220}	5991	5987^{+450}_{-430}	$(+6.5\sigma)$	$H(0.38)$	83.16	$83.17^{+0.90}_{-0.90}$	$(+1.2\sigma)$	χ^2_{BAO}	5.17	6.2 (ν : 1.0)	
D_{810}	2605	2605^{+200}_{-190}	$(+4.9\sigma)$	$D_M(0.38)$	1523.4	1523^{+23}_{-22}	(-1.2σ)				

Best-fit $\chi^2_{\text{eff}} = 13.35$; $\bar{\chi}^2_{\text{eff}} = 18.35$; $R - 1 = 0.00243$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.43 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 8.10

2.189 base_lensing_lenspriors_BAO_theta_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02222	$0.02222^{+0.00098}_{-0.00097}$ (+0.5 σ)	D_{1420}	834	833^{+72}_{-67} (+3.7 σ)	$H(0.51)$	89.82	$89.82^{+0.79}_{-0.77}$ (+1.1 σ)
$\Omega_c h^2$	0.11761	$0.1176^{+0.0031}_{-0.0031}$ (−1.4 σ)	D_{2000}	234.4	234^{+23}_{-21} (+2.6 σ)	$D_M(0.51)$	1973.4	1974^{+25}_{-25} (−1.2 σ)
$100\theta_{MC}$	1.04090	$1.0409^{+0.0011}_{-0.0012}$ (+0.3 σ)	$n_{s,0.002}$	0.9547	$0.955^{+0.037}_{-0.036}$ (−1.3 σ)	$H(0.61)$	95.36	$95.36^{+0.75}_{-0.75}$ (+1.0 σ)
$\ln(10^{10} A_s)$	3.075	$3.073^{+0.066}_{-0.068}$ (+2.0 σ)	Y_P	0.245332	$0.24532^{+0.00042}_{-0.00043}$ (+0.4 σ)	$D_M(0.61)$	2297.4	2298^{+28}_{-27} (−1.2 σ)
n_s	0.9547	$0.955^{+0.037}_{-0.036}$ (−1.3 σ)	Y_P^{BBN}	0.246659	$0.24665^{+0.00042}_{-0.00043}$ (+0.4 σ)	$H(2.33)$	234.82	$234.8^{+2.5}_{-2.4}$ (−1.5 σ)
H_0	68.07	$68.1^{+1.2}_{-1.2}$ (+1.3 σ)	$10^5 D/H$	2.615	$2.62^{+0.19}_{-0.18}$ (−0.4 σ)	$D_M(2.33)$	5764.7	5765^{+42}_{-42} (−0.8 σ)
Ω_Λ	0.6968	$0.697^{+0.016}_{-0.016}$ (+1.3 σ)	Age/Gyr	13.803	$13.80^{+0.10}_{-0.10}$ (−0.7 σ)	$f\sigma_8(0.15)$	0.4530	$0.453^{+0.018}_{-0.019}$ (−0.9 σ)
Ω_m	0.3032	$0.303^{+0.016}_{-0.016}$ (−1.3 σ)	z_*	1089.90	$1089.9^{+1.2}_{-1.2}$ (−0.9 σ)	$\sigma_8(0.15)$	0.7522	$0.752^{+0.028}_{-0.028}$ (+0.3 σ)
$\Omega_m h^2$	0.14047	$0.1405^{+0.0034}_{-0.0034}$ (−1.5 σ)	r_*	145.17	$145.2^{+1.2}_{-1.2}$ (+1.5 σ)	$f\sigma_8(0.38)$	0.4733	$0.473^{+0.018}_{-0.018}$ (−0.7 σ)
$\Omega_m h^3$	0.09561	$0.0956^{+0.0021}_{-0.0020}$ (−0.6 σ)	$100\theta_*$	1.04111	$1.0411^{+0.0011}_{-0.0012}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6677	$0.667^{+0.026}_{-0.025}$ (+0.7 σ)
σ_8	0.8131	$0.812^{+0.030}_{-0.030}$ (+0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.944	$13.94^{+0.12}_{-0.12}$ (+1.5 σ)	$f\sigma_8(0.51)$	0.4728	$0.472^{+0.017}_{-0.018}$ (−0.6 σ)
S_8	0.8174	$0.817^{+0.035}_{-0.035}$ (−0.9 σ)	z_{drag}	1059.40	$1059.4^{+2.3}_{-2.3}$ (+0.0 σ)	$\sigma_8(0.51)$	0.6252	$0.625^{+0.024}_{-0.024}$ (+0.8 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4477	$0.447^{+0.019}_{-0.019}$ (−0.9 σ)	r_{drag}	147.90	$147.9^{+1.5}_{-1.5}$ (+1.4 σ)	$f\sigma_8(0.61)$	0.4685	$0.468^{+0.017}_{-0.017}$ (−0.5 σ)
$\sigma_8 \Omega_m^{0.25}$	0.6034	$0.603^{+0.023}_{-0.023}$ (−0.7 σ)	k_D	0.13990	$0.1399^{+0.0022}_{-0.0022}$ (−1.2 σ)	$\sigma_8(0.61)$	0.5952	$0.595^{+0.023}_{-0.023}$ (+0.9 σ)
$\sigma_8/h^{0.5}$	0.9856	$0.985^{+0.036}_{-0.036}$ (−0.5 σ)	$100\theta_D$	0.16105	$0.1611^{+0.0014}_{-0.0013}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.3004	$0.300^{+0.012}_{-0.012}$ (+1.2 σ)
$r_{\text{drag}} h$	100.67	$100.7^{+2.1}_{-2.1}$ (+1.4 σ)	z_{eq}	3341	3342^{+82}_{-80} (−1.5 σ)	$\sigma_8(2.33)$	0.3101	$0.310^{+0.013}_{-0.012}$ (+1.5 σ)
$\langle d^2 \rangle^{1/2}$	2.482	$2.479^{+0.079}_{-0.077}$ (+0.7 σ)	k_{eq}	0.010198	$0.01020^{+0.00025}_{-0.00025}$ (−1.5 σ)	χ^2_{lensing}	8.08	9.3 (ν : 1.2)
z_{re}	7.747	$7.75^{+0.22}_{-0.21}$ (+0.3 σ)	$100\theta_{\text{eq}}$	0.8239	$0.824^{+0.014}_{-0.013}$ (+1.5 σ)	χ^2_{JLA}	1034.771	1034.91 (ν : 0.0)
$10^9 A_s$	2.166	$2.16^{+0.15}_{-0.14}$ (+2.0 σ)	$100\theta_{s,\text{eq}}$	0.4550	$0.4550^{+0.0075}_{-0.0073}$ (+1.5 σ)	$\chi^2_{6\text{DF}}$	0.002	0.049 (ν : 0.0)
$10^9 A_s e^{-2\tau}$	1.940	$1.94^{+0.13}_{-0.13}$ (+3.8 σ)	$H(0.15)$	73.25	$73.2^{+1.1}_{-1.1}$ (+1.3 σ)	χ^2_{MGS}	1.82	1.89 (ν : 0.2)
D_{40}	1304	1301^{+110}_{-100} (+4.4 σ)	$D_M(0.15)$	637.5	638^{+10}_{-10} (−1.3 σ)	χ^2_{DR12BAO}	3.39	4.1 (ν : 0.6)
D_{220}	6012	5999^{+430}_{-410} (+6.8 σ)	$H(0.38)$	83.20	$83.20^{+0.86}_{-0.85}$ (+1.2 σ)	χ^2_{prior}	0.07	2.9 (ν : 2.7) (−1.2 σ)
D_{810}	2614	2610^{+190}_{-190} (+5.3 σ)	$D_M(0.38)$	1522.4	1522^{+21}_{-21} (−1.3 σ)	χ^2_{BAO}	5.21	6.1 (ν : 0.8)

Best-fit $\chi^2_{\text{eff}} = 1048.13$; $\bar{\chi}^2_{\text{eff}} = 1053.13$; $R - 1 = 0.00215$

χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.39 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 8.08 SN - JLA Pantheon18: 1034.77

2.190 base_lensing_lenspriors_BAO_theta_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00097}_{-0.00096}$ (+0.5 σ)	D_{1420}	814^{+67}_{-64} (−0.1 σ)	$H(0.51)$	$89.83^{+0.81}_{-0.78}$ (+1.2 σ)
$\Omega_c h^2$	$0.1176^{+0.0033}_{-0.0032}$ (−1.5 σ)	D_{2000}	228^{+21}_{-20} (−0.8 σ)	$D_M(0.51)$	1973^{+26}_{-26} (−1.3 σ)
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012}$ (+0.3 σ)	$n_{s,0.002}$	$0.949^{+0.035}_{-0.034}$ (−2.5 σ)	$H(0.61)$	$95.37^{+0.77}_{-0.74}$ (+1.0 σ)
$\ln(10^{10} A_s)$	$3.054^{+0.065}_{-0.064}$ (+0.8 σ)	Y_P	$0.24533^{+0.00042}_{-0.00042}$ (+0.4 σ)	$D_M(0.61)$	2297^{+29}_{-29} (−1.3 σ)
n_s	$0.949^{+0.035}_{-0.034}$ (−2.5 σ)	Y_P^{BBN}	$0.24665^{+0.00042}_{-0.00042}$ (+0.4 σ)	$H(2.33)$	$234.8^{+2.6}_{-2.5}$ (−1.5 σ)
H_0	$68.1^{+1.3}_{-1.3}$ (+1.3 σ)	$10^5 D/H$	$2.62^{+0.19}_{-0.18}$ (−0.5 σ)	$D_M(2.33)$	5764^{+43}_{-42} (−0.8 σ)
Ω_Λ	$0.697^{+0.016}_{-0.018}$ (+1.4 σ)	Age/Gyr	$13.80^{+0.10}_{-0.10}$ (−0.8 σ)	$f\sigma_8(0.15)$	$0.447^{+0.017}_{-0.017}$ (−1.4 σ)
Ω_m	$0.303^{+0.018}_{-0.016}$ (−1.4 σ)	z_*	$1089.9^{+1.2}_{-1.2}$ (−1.0 σ)	$\sigma_8(0.15)$	$0.743^{+0.026}_{-0.025}$ (−0.9 σ)
$\Omega_m h^2$	$0.1404^{+0.0036}_{-0.0035}$ (−1.5 σ)	r_*	$145.2^{+1.2}_{-1.2}$ (+1.5 σ)	$f\sigma_8(0.38)$	$0.467^{+0.016}_{-0.016}$ (−1.3 σ)
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020}$ (−0.6 σ)	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012}$ (+0.3 σ)	$\sigma_8(0.38)$	$0.659^{+0.023}_{-0.022}$ (−0.7 σ)
σ_8	$0.803^{+0.027}_{-0.027}$ (−1.0 σ)	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12}$ (+1.5 σ)	$f\sigma_8(0.51)$	$0.467^{+0.016}_{-0.015}$ (−1.3 σ)
S_8	$0.807^{+0.032}_{-0.032}$ (−1.4 σ)	z_{drag}	$1059.4^{+2.3}_{-2.3}$ (+0.1 σ)	$\sigma_8(0.51)$	$0.617^{+0.022}_{-0.021}$ (−0.5 σ)
$\sigma_8 \Omega_m^{0.5}$	$0.442^{+0.017}_{-0.017}$ (−1.4 σ)	r_{drag}	$147.9^{+1.5}_{-1.5}$ (+1.5 σ)	$f\sigma_8(0.61)$	$0.462^{+0.015}_{-0.015}$ (−1.3 σ)
$\sigma_8 \Omega_m^{0.25}$	$0.595^{+0.020}_{-0.020}$ (−1.3 σ)	k_D	$0.1399^{+0.0022}_{-0.0022}$ (−1.2 σ)	$\sigma_8(0.61)$	$0.588^{+0.021}_{-0.021}$ (−0.4 σ)
$\sigma_8/h^{0.5}$	$0.973^{+0.033}_{-0.032}$ (−1.3 σ)	$100\theta_D$	$0.1610^{+0.0014}_{-0.0013}$ (−0.1 σ)	$f\sigma_8(2.33)$	$0.297^{+0.011}_{-0.011}$ (−0.2 σ)
$r_{\text{drag}} h$	$100.7^{+2.2}_{-2.3}$ (+1.4 σ)	z_{eq}	3341^{+86}_{-84} (−1.5 σ)	$\sigma_8(2.33)$	$0.306^{+0.012}_{-0.011}$ (+0.1 σ)
$\langle d^2 \rangle^{1/2}$	$2.468^{+0.077}_{-0.074}$ (+0.4 σ)	k_{eq}	$0.01020^{+0.00026}_{-0.00026}$ (−1.5 σ)	χ^2_{lensing}	12.5 (ν : 1.6)
z_{re}	$7.75^{+0.22}_{-0.21}$ (+0.3 σ)	$100\theta_{\text{eq}}$	$0.824^{+0.015}_{-0.014}$ (+1.5 σ)	$\chi^2_{6\text{DF}}$	0.057 (ν : 0.0)
$10^9 A_s$	$2.12^{+0.14}_{-0.13}$ (+0.9 σ)	$100\theta_{s,\text{eq}}$	$0.4552^{+0.0078}_{-0.0077}$ (+1.5 σ)	χ^2_{MGS}	1.93 (ν : 0.3)
$10^9 A_s e^{-2\tau}$	$1.90^{+0.13}_{-0.12}$ (+1.2 σ)	$H(0.15)$	$73.3^{+1.1}_{-1.1}$ (+1.3 σ)	χ^2_{DR12BAO}	4.2 (ν : 0.8)
D_{40}	1294^{+110}_{-100} (+4.0 σ)	$D_M(0.15)$	637^{+11}_{-11} (−1.3 σ)	χ^2_{prior}	3.1 (ν : 3.0) (−1.2 σ)
D_{220}	5927^{+440}_{-410} (+5.1 σ)	$H(0.38)$	$83.22^{+0.89}_{-0.88}$ (+1.2 σ)	χ^2_{BAO}	6.2 (ν : 1.0)
D_{810}	2557^{+190}_{-180} (+1.5 σ)	$D_M(0.38)$	1522^{+22}_{-22} (−1.3 σ)		

$$\bar{\chi}^2_{\text{eff}} = 21.73; R - 1 = 0.00232$$

2.191 base_lensing_lenspriors_BAO_theta_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{1420}	$831^{+73}_{-69} \quad (+3.3\sigma)$	$H(0.51)$	$89.79^{+0.81}_{-0.79} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0033}_{-0.0033} \quad (-1.4\sigma)$	D_{2000}	$234^{+23}_{-22} \quad (+2.3\sigma)$	$D_M(0.51)$	$1975^{+27}_{-26} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.956^{+0.037}_{-0.037} \quad (-1.1\sigma)$	$H(0.61)$	$95.34^{+0.76}_{-0.75} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.070^{+0.068}_{-0.070} \quad (+1.8\sigma)$	Y_P	$0.24532^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$D_M(0.61)$	$2299^{+30}_{-29} \quad (-1.2\sigma)$
n_s	$0.956^{+0.037}_{-0.037} \quad (-1.1\sigma)$	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$H(2.33)$	$234.9^{+2.6}_{-2.5} \quad (-1.4\sigma)$
H_0	$68.0^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.4\sigma)$	$D_M(2.33)$	$5765^{+43}_{-43} \quad (-0.8\sigma)$
Ω_Λ	$0.696^{+0.017}_{-0.018} \quad (+1.3\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.019}_{-0.019} \quad (-0.9\sigma)$
Ω_m	$0.304^{+0.018}_{-0.017} \quad (-1.3\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-0.9\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.028}_{-0.028} \quad (+0.3\sigma)$
$\Omega_m h^2$	$0.1407^{+0.0036}_{-0.0035} \quad (-1.4\sigma)$	r_*	$145.1^{+1.2}_{-1.2} \quad (+1.4\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.018}_{-0.018} \quad (-0.7\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.026}_{-0.025} \quad (+0.6\sigma)$
σ_8	$0.812^{+0.030}_{-0.030} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.018}_{-0.018} \quad (-0.6\sigma)$
S_8	$0.818^{+0.035}_{-0.035} \quad (-0.9\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.024}_{-0.024} \quad (+0.7\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.019}_{-0.019} \quad (-0.9\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.017}_{-0.017} \quad (-0.5\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.023}_{-0.023} \quad (-0.7\sigma)$	k_D	$0.1399^{+0.0023}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.023}_{-0.023} \quad (+0.8\sigma)$
$\sigma_8/h^{0.5}$	$0.985^{+0.036}_{-0.036} \quad (-0.5\sigma)$	$100\theta_D$	$0.1611^{+0.0014}_{-0.0014} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012} \quad (+1.1\sigma)$
$r_{\text{drag}} h$	$100.6^{+2.2}_{-2.2} \quad (+1.3\sigma)$	z_{eq}	$3346^{+87}_{-85} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.013}_{-0.013} \quad (+1.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.474^{+0.084}_{-0.081} \quad (+0.5\sigma)$	k_{eq}	$0.01021^{+0.00026}_{-0.00026} \quad (-1.4\sigma)$	χ^2_{lensing}	$9.2 \quad (\nu: 1.1)$
z_{re}	$7.75^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.015}_{-0.014} \quad (+1.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.055 \quad (\nu: 0.0)$
$10^9 A_s$	$2.16^{+0.15}_{-0.15} \quad (+1.8\sigma)$	$100\theta_{s,\text{eq}}$	$0.4546^{+0.0079}_{-0.0078} \quad (+1.4\sigma)$	χ^2_{MGS}	$1.83 \quad (\nu: 0.2)$
$10^9 A_s e^{-2\tau}$	$1.93^{+0.14}_{-0.13} \quad (+3.4\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.1} \quad (+1.2\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.9)$
D_{40}	$1293^{+120}_{-110} \quad (+3.9\sigma)$	$D_M(0.15)$	$638^{+11}_{-11} \quad (-1.2\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.7) \quad (-1.2\sigma)$
D_{220}	$5970^{+460}_{-440} \quad (+6.1\sigma)$	$H(0.38)$	$83.16^{+0.90}_{-0.90} \quad (+1.1\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2602^{+200}_{-190} \quad (+4.8\sigma)$	$D_M(0.38)$	$1524^{+23}_{-22} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.27; R - 1 = 0.00270$

2.192 base_lensing_lenspriors_BAO_theta_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	D_{1420}	$833^{+73}_{-69} \quad (+3.6\sigma)$	$H(0.51)$	$89.79^{+0.81}_{-0.79} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0033}_{-0.0033} \quad (-1.4\sigma)$	D_{2000}	$234^{+23}_{-22} \quad (+2.5\sigma)$	$D_M(0.51)$	$1975^{+27}_{-26} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.956^{+0.037}_{-0.036} \quad (-1.2\sigma)$	$H(0.61)$	$95.34^{+0.76}_{-0.75} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.072^{+0.067}_{-0.070} \quad (+1.9\sigma)$	Y_P	$0.24532^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$D_M(0.61)$	$2299^{+30}_{-29} \quad (-1.2\sigma)$
n_s	$0.956^{+0.037}_{-0.036} \quad (-1.2\sigma)$	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$H(2.33)$	$234.9^{+2.6}_{-2.5} \quad (-1.4\sigma)$
H_0	$68.0^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.4\sigma)$	$D_M(2.33)$	$5765^{+43}_{-43} \quad (-0.8\sigma)$
Ω_Λ	$0.696^{+0.017}_{-0.018} \quad (+1.3\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.019}_{-0.019} \quad (-0.8\sigma)$
Ω_m	$0.304^{+0.018}_{-0.017} \quad (-1.3\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-0.9\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.028}_{-0.028} \quad (+0.4\sigma)$
$\Omega_m h^2$	$0.1407^{+0.0036}_{-0.0035} \quad (-1.4\sigma)$	r_*	$145.1^{+1.2}_{-1.2} \quad (+1.4\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.018}_{-0.018} \quad (-0.7\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.026}_{-0.025} \quad (+0.7\sigma)$
σ_8	$0.813^{+0.030}_{-0.030} \quad (+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.017}_{-0.017} \quad (-0.5\sigma)$
S_8	$0.819^{+0.035}_{-0.035} \quad (-0.9\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.025}_{-0.024} \quad (+0.9\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.019}_{-0.019} \quad (-0.9\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.017}_{-0.017} \quad (-0.4\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.023}_{-0.023} \quad (-0.6\sigma)$	k_D	$0.1399^{+0.0022}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.023}_{-0.023} \quad (+1.0\sigma)$
$\sigma_8/h^{0.5}$	$0.986^{+0.036}_{-0.036} \quad (-0.4\sigma)$	$100\theta_D$	$0.1611^{+0.0014}_{-0.0014} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012} \quad (+1.2\sigma)$
$r_{\text{drag}} h$	$100.6^{+2.2}_{-2.2} \quad (+1.3\sigma)$	z_{eq}	$3346^{+86}_{-84} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.013}_{-0.012} \quad (+1.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.479^{+0.079}_{-0.078} \quad (+0.7\sigma)$	k_{eq}	$0.01021^{+0.00026}_{-0.00026} \quad (-1.4\sigma)$	χ^2_{lensing}	$7.0 \quad (\nu: 1.1)$
z_{re}	$7.75^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.015}_{-0.014} \quad (+1.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.055 \quad (\nu: 0.0)$
$10^9 A_s$	$2.16^{+0.15}_{-0.15} \quad (+2.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.4546^{+0.0079}_{-0.0078} \quad (+1.4\sigma)$	χ^2_{MGS}	$1.82 \quad (\nu: 0.2)$
$10^9 A_s e^{-2\tau}$	$1.94^{+0.13}_{-0.13} \quad (+3.8\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.1} \quad (+1.2\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.9)$
D_{40}	$1298^{+110}_{-110} \quad (+4.2\sigma)$	$D_M(0.15)$	$638^{+11}_{-11} \quad (-1.2\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.7) \quad (-1.2\sigma)$
D_{220}	$5988^{+440}_{-430} \quad (+6.6\sigma)$	$H(0.38)$	$83.16^{+0.90}_{-0.89} \quad (+1.1\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2608^{+200}_{-190} \quad (+5.2\sigma)$	$D_M(0.38)$	$1524^{+23}_{-22} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 16.09; R - 1 = 0.00233$

2.193 base_lensing_lenspriors_BAO_theta_post_ptt

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00097}_{-0.00097} \quad (+0.5\sigma)$	D_{1420}	$837^{+79}_{-74} \quad (+4.3\sigma)$	$H(0.51)$	$89.84^{+0.80}_{-0.80} \quad (+1.2\sigma)$
$\Omega_c h^2$	$0.1176^{+0.0033}_{-0.0033} \quad (-1.5\sigma)$	D_{2000}	$235^{+25}_{-23} \quad (+2.9\sigma)$	$D_M(0.51)$	$1973^{+27}_{-26} \quad (-1.3\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.2\sigma)$	$n_{s,0.002}$	$0.948^{+0.037}_{-0.035} \quad (-2.5\sigma)$	$H(0.61)$	$95.38^{+0.76}_{-0.76} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.083^{+0.082}_{-0.079} \quad (+2.6\sigma)$	Y_P	$0.24533^{+0.00042}_{-0.00043} \quad (+0.4\sigma)$	$D_M(0.61)$	$2297^{+29}_{-29} \quad (-1.3\sigma)$
n_s	$0.948^{+0.037}_{-0.035} \quad (-2.5\sigma)$	Y_P^{BBN}	$0.24665^{+0.00042}_{-0.00043} \quad (+0.4\sigma)$	$H(2.33)$	$234.8^{+2.6}_{-2.5} \quad (-1.5\sigma)$
H_0	$68.1^{+1.3}_{-1.3} \quad (+1.3\sigma)$	$10^5 D/H$	$2.61^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$D_M(2.33)$	$5764^{+43}_{-42} \quad (-0.8\sigma)$
Ω_Λ	$0.697^{+0.017}_{-0.017} \quad (+1.4\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.099} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.020}_{-0.020} \quad (-0.9\sigma)$
Ω_m	$0.303^{+0.017}_{-0.017} \quad (-1.4\sigma)$	z_*	$1089.9^{+1.3}_{-1.2} \quad (-1.0\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.032}_{-0.031} \quad (+0.5\sigma)$
$\Omega_m h^2$	$0.1404^{+0.0036}_{-0.0036} \quad (-1.5\sigma)$	r_*	$145.2^{+1.2}_{-1.2} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.019}_{-0.020} \quad (-0.6\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.6\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.669^{+0.029}_{-0.027} \quad (+0.9\sigma)$
σ_8	$0.814^{+0.034}_{-0.033} \quad (+0.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.5\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.019}_{-0.019} \quad (-0.5\sigma)$
S_8	$0.818^{+0.038}_{-0.038} \quad (-0.9\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.4} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.626^{+0.027}_{-0.026} \quad (+1.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.021}_{-0.021} \quad (-0.9\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.019}_{-0.019} \quad (-0.4\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.025}_{-0.025} \quad (-0.6\sigma)$	k_D	$0.1399^{+0.0022}_{-0.0023} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.596^{+0.026}_{-0.025} \quad (+1.2\sigma)$
$\sigma_8/h^{0.5}$	$0.987^{+0.040}_{-0.040} \quad (-0.4\sigma)$	$100\theta_D$	$0.1610^{+0.0014}_{-0.0013} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.301^{+0.013}_{-0.013} \quad (+1.5\sigma)$
$r_{\text{drag}} h$	$100.7^{+2.3}_{-2.2} \quad (+1.4\sigma)$	z_{eq}	$3341^{+86}_{-85} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.311^{+0.014}_{-0.014} \quad (+1.8\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.505^{+0.096}_{-0.094} \quad (+1.3\sigma)$	k_{eq}	$0.01020^{+0.00026}_{-0.00026} \quad (-1.5\sigma)$	χ^2_{lensing}	$12.9 \quad (\nu: 1.8)$
z_{re}	$7.74^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.015}_{-0.014} \quad (+1.5\sigma)$	$\chi^2_{6\text{DF}}$	$0.057 \quad (\nu: 0.0)$
$10^9 A_s$	$2.18^{+0.18}_{-0.17} \quad (+2.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4551^{+0.0080}_{-0.0077} \quad (+1.5\sigma)$	χ^2_{MGS}	$1.93 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.96^{+0.17}_{-0.15} \quad (+5.3\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.1} \quad (+1.3\sigma)$	χ^2_{DR12BAO}	$4.2 \quad (\nu: 0.8)$
D_{40}	$1334^{+130}_{-120} \quad (+6.6\sigma)$	$D_M(0.15)$	$637^{+11}_{-11} \quad (-1.3\sigma)$	χ^2_{prior}	$3.2 \quad (\nu: 3.1) \quad (-1.1\sigma)$
D_{220}	$6104^{+510}_{-490} \quad (+9.3\sigma)$	$H(0.38)$	$83.22^{+0.89}_{-0.90} \quad (+1.2\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.1)$
D_{810}	$2631^{+230}_{-210} \quad (+6.8\sigma)$	$D_M(0.38)$	$1522^{+23}_{-22} \quad (-1.3\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 22.40; R - 1 = 0.00650$

2.194 base_lensing_lenspriors_BAO_theta_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{1420}	$819^{+70}_{-66} \quad (+0.9\sigma)$	$H(0.51)$	$89.80^{+0.80}_{-0.79} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0033}_{-0.0032} \quad (-1.4\sigma)$	D_{2000}	$230^{+22}_{-21} \quad (+0.3\sigma)$	$D_M(0.51)$	$1975^{+27}_{-26} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.956^{+0.037}_{-0.036} \quad (-1.2\sigma)$	$H(0.61)$	$95.35^{+0.76}_{-0.75} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.055^{+0.065}_{-0.065} \quad (+0.9\sigma)$	Y_P	$0.24532^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$D_M(0.61)$	$2299^{+29}_{-28} \quad (-1.2\sigma)$
n_s	$0.956^{+0.037}_{-0.036} \quad (-1.2\sigma)$	Y_P^{BBN}	$0.24664^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	$H(2.33)$	$234.9^{+2.6}_{-2.5} \quad (-1.4\sigma)$
H_0	$68.0^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.4\sigma)$	$D_M(2.33)$	$5765^{+42}_{-43} \quad (-0.8\sigma)$
Ω_Λ	$0.696^{+0.017}_{-0.018} \quad (+1.3\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.018}_{-0.018} \quad (-1.2\sigma)$
Ω_m	$0.304^{+0.018}_{-0.017} \quad (-1.3\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-0.9\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.027}_{-0.027} \quad (-0.5\sigma)$
$\Omega_m h^2$	$0.1406^{+0.0036}_{-0.0035} \quad (-1.4\sigma)$	r_*	$145.1^{+1.2}_{-1.3} \quad (+1.4\sigma)$	$f\sigma_8(0.38)$	$0.469^{+0.017}_{-0.017} \quad (-1.1\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.025}_{-0.024} \quad (-0.2\sigma)$
σ_8	$0.806^{+0.029}_{-0.028} \quad (-0.6\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.017}_{-0.017} \quad (-1.0\sigma)$
S_8	$0.811^{+0.034}_{-0.034} \quad (-1.2\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.023}_{-0.023} \quad (-0.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.019}_{-0.019} \quad (-1.2\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.017}_{-0.016} \quad (-1.0\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.599^{+0.022}_{-0.021} \quad (-1.1\sigma)$	k_D	$0.1399^{+0.0022}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.022}_{-0.022} \quad (-0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.977^{+0.035}_{-0.034} \quad (-1.0\sigma)$	$100\theta_D$	$0.1611^{+0.0014}_{-0.0013} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.298^{+0.012}_{-0.011} \quad (+0.2\sigma)$
$r_{\text{drag}} h$	$100.6^{+2.2}_{-2.2} \quad (+1.3\sigma)$	z_{eq}	$3345^{+87}_{-84} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.307^{+0.012}_{-0.012} \quad (+0.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.457^{+0.072}_{-0.070} \quad (+0.1\sigma)$	k_{eq}	$0.01021^{+0.00026}_{-0.00026} \quad (-1.4\sigma)$	χ^2_{lensing}	$9.3 \quad (\nu: 1.1)$
z_{re}	$7.75^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.015}_{-0.015} \quad (+1.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.055 \quad (\nu: 0.0)$
$10^9 A_s$	$2.12^{+0.14}_{-0.13} \quad (+0.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.4547^{+0.0079}_{-0.0078} \quad (+1.4\sigma)$	χ^2_{MGS}	$1.84 \quad (\nu: 0.2)$
$10^9 A_s e^{-2\tau}$	$1.90^{+0.13}_{-0.12} \quad (+1.3\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.1} \quad (+1.2\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.9)$
D_{40}	$1275^{+110}_{-99} \quad (+2.7\sigma)$	$D_M(0.15)$	$638^{+11}_{-11} \quad (-1.2\sigma)$	χ^2_{prior}	$2.8 \quad (\nu: 2.6) \quad (-1.2\sigma)$
D_{220}	$5886^{+420}_{-400} \quad (+4.1\sigma)$	$H(0.38)$	$83.17^{+0.88}_{-0.89} \quad (+1.2\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2565^{+190}_{-180} \quad (+2.0\sigma)$	$D_M(0.38)$	$1523^{+23}_{-22} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.37; R - 1 = 0.00253$

2.195 base_lensing_lenspriors_BAO_theta_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02222^{+0.00096}_{-0.00096} \quad (+0.5\sigma)$	D_{1420}	$803^{+65}_{-61} \quad (-2.2\sigma)$	$H(0.51)$	$89.83^{+0.80}_{-0.78} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1176^{+0.0033}_{-0.0032} \quad (-1.5\sigma)$	D_{2000}	$225^{+21}_{-20} \quad (-2.5\sigma)$	$D_M(0.51)$	$1973^{+26}_{-26} \quad (-1.3\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.950^{+0.035}_{-0.035} \quad (-2.3\sigma)$	$H(0.61)$	$95.37^{+0.74}_{-0.73} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.063}_{-0.060} \quad (-0.0\sigma)$	Y_P	$0.24532^{+0.00041}_{-0.00042} \quad (+0.4\sigma)$	$D_M(0.61)$	$2297^{+29}_{-28} \quad (-1.3\sigma)$
n_s	$0.950^{+0.035}_{-0.035} \quad (-2.3\sigma)$	Y_P^{BBN}	$0.24665^{+0.00041}_{-0.00042} \quad (+0.4\sigma)$	$H(2.33)$	$234.8^{+2.5}_{-2.5} \quad (-1.5\sigma)$
H_0	$68.1^{+1.2}_{-1.3} \quad (+1.3\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.17} \quad (-0.4\sigma)$	$D_M(2.33)$	$5764^{+42}_{-42} \quad (-0.8\sigma)$
Ω_Λ	$0.697^{+0.016}_{-0.017} \quad (+1.4\sigma)$	Age/Gyr	$13.803^{+0.099}_{-0.099} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.017}_{-0.016} \quad (-1.6\sigma)$
Ω_m	$0.303^{+0.017}_{-0.016} \quad (-1.4\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-1.0\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.025}_{-0.023} \quad (-1.6\sigma)$
$\Omega_m h^2$	$0.1404^{+0.0036}_{-0.0035} \quad (-1.5\sigma)$	r_*	$145.2^{+1.2}_{-1.2} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.016}_{-0.015} \quad (-1.7\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.6\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.023}_{-0.021} \quad (-1.4\sigma)$
σ_8	$0.797^{+0.027}_{-0.025} \quad (-1.6\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.5\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.016}_{-0.015} \quad (-1.7\sigma)$
S_8	$0.801^{+0.032}_{-0.031} \quad (-1.6\sigma)$	z_{drag}	$1059.4^{+2.2}_{-2.3} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.022}_{-0.020} \quad (-1.3\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.017}_{-0.017} \quad (-1.6\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.5\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.015}_{-0.015} \quad (-1.7\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.020}_{-0.019} \quad (-1.7\sigma)$	k_D	$0.1399^{+0.0022}_{-0.0022} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.021}_{-0.020} \quad (-1.2\sigma)$
$\sigma_8/h^{0.5}$	$0.966^{+0.032}_{-0.030} \quad (-1.7\sigma)$	$100\theta_D$	$0.1611^{+0.0014}_{-0.0013} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.011}_{-0.010} \quad (-1.0\sigma)$
$r_{\text{drag}} h$	$100.7^{+2.2}_{-2.3} \quad (+1.4\sigma)$	z_{eq}	$3341^{+86}_{-83} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.012}_{-0.011} \quad (-0.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.448^{+0.070}_{-0.069} \quad (-0.2\sigma)$	k_{eq}	$0.01020^{+0.00026}_{-0.00025} \quad (-1.5\sigma)$	χ^2_{lensing}	$12.3 \quad (\nu: 1.5)$
z_{re}	$7.75^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.014}_{-0.014} \quad (+1.5\sigma)$	$\chi^2_{6\text{DF}}$	$0.056 \quad (\nu: 0.0)$
$10^9 A_s$	$2.09^{+0.13}_{-0.12} \quad (-0.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.4551^{+0.0078}_{-0.0078} \quad (+1.5\sigma)$	χ^2_{MGS}	$1.92 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.87^{+0.12}_{-0.11} \quad (-0.8\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.1} \quad (+1.3\sigma)$	χ^2_{DR12BAO}	$4.2 \quad (\nu: 0.8)$
D_{40}	$1273^{+100}_{-97} \quad (+2.5\sigma)$	$D_M(0.15)$	$637^{+11}_{-10} \quad (-1.3\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$
D_{220}	$5834^{+410}_{-390} \quad (+2.9\sigma)$	$H(0.38)$	$83.21^{+0.88}_{-0.87} \quad (+1.2\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2522^{+180}_{-170} \quad (-1.1\sigma)$	$D_M(0.38)$	$1522^{+22}_{-22} \quad (-1.3\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 21.52; R - 1 = 0.00519$

2.196 base_lensing_lenspriors_BAO_theta_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00099}_{-0.00097} \quad (+0.4\sigma)$	D_{1420}	$841^{+74}_{-69} \quad (+5.2\sigma)$	$H(0.51)$	$89.78^{+0.80}_{-0.80} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0033}_{-0.0033} \quad (-1.3\sigma)$	D_{2000}	$236^{+23}_{-22} \quad (+3.7\sigma)$	$D_M(0.51)$	$1975^{+27}_{-26} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.958^{+0.037}_{-0.036} \quad (-0.9\sigma)$	$H(0.61)$	$95.33^{+0.76}_{-0.76} \quad (+0.9\sigma)$
$\ln(10^{10} A_s)$	$3.080^{+0.069}_{-0.069} \quad (+2.4\sigma)$	Y_P	$0.24531^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$D_M(0.61)$	$2299^{+30}_{-29} \quad (-1.1\sigma)$
n_s	$0.958^{+0.037}_{-0.036} \quad (-0.9\sigma)$	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$H(2.33)$	$235.0^{+2.6}_{-2.5} \quad (-1.4\sigma)$
H_0	$68.0^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.3\sigma)$	$D_M(2.33)$	$5766^{+43}_{-43} \quad (-0.7\sigma)$
Ω_Λ	$0.695^{+0.017}_{-0.018} \quad (+1.2\sigma)$	Age/Gyr	$13.81^{+0.10}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.019}_{-0.019} \quad (-0.6\sigma)$
Ω_m	$0.305^{+0.018}_{-0.017} \quad (-1.2\sigma)$	z_*	$1090.0^{+1.2}_{-1.2} \quad (-0.9\sigma)$	$\sigma_8(0.15)$	$0.756^{+0.029}_{-0.028} \quad (+0.9\sigma)$
$\Omega_m h^2$	$0.1407^{+0.0036}_{-0.0035} \quad (-1.4\sigma)$	r_*	$145.1^{+1.2}_{-1.2} \quad (+1.4\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.018}_{-0.018} \quad (-0.4\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.671^{+0.026}_{-0.026} \quad (+1.3\sigma)$
σ_8	$0.817^{+0.031}_{-0.030} \quad (+0.6\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.018}_{-0.018} \quad (-0.2\sigma)$
S_8	$0.823^{+0.036}_{-0.036} \quad (-0.7\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.4} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.628^{+0.025}_{-0.024} \quad (+1.4\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.020}_{-0.020} \quad (-0.7\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.017}_{-0.017} \quad (-0.1\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.023}_{-0.023} \quad (-0.3\sigma)$	k_D	$0.1399^{+0.0023}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.598^{+0.024}_{-0.023} \quad (+1.5\sigma)$
$\sigma_8/h^{0.5}$	$0.991^{+0.038}_{-0.037} \quad (-0.1\sigma)$	$100\theta_D$	$0.1611^{+0.0014}_{-0.0014} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.302^{+0.012}_{-0.012} \quad (+1.8\sigma)$
$r_{\text{drag}} h$	$100.5^{+2.3}_{-2.2} \quad (+1.3\sigma)$	z_{eq}	$3347^{+87}_{-84} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.311^{+0.013}_{-0.012} \quad (+2.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.482^{+0.078}_{-0.077} \quad (+0.7\sigma)$	k_{eq}	$0.01022^{+0.00026}_{-0.00026} \quad (-1.4\sigma)$	χ^2_{lensing}	$9.4 \quad (\nu: 1.1)$
z_{re}	$7.76^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.015}_{-0.014} \quad (+1.3\sigma)$	$\chi^2_{6\text{DF}}$	$0.055 \quad (\nu: 0.0)$
$10^9 A_s$	$2.18^{+0.15}_{-0.15} \quad (+2.5\sigma)$	$100\theta_{s,\text{eq}}$	$0.4545^{+0.0079}_{-0.0078} \quad (+1.4\sigma)$	χ^2_{MGS}	$1.80 \quad (\nu: 0.2)$
$10^9 A_s e^{-2\tau}$	$1.95^{+0.14}_{-0.13} \quad (+4.9\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.1} \quad (+1.2\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.9)$
D_{40}	$1303^{+110}_{-110} \quad (+4.5\sigma)$	$D_M(0.15)$	$638^{+11}_{-11} \quad (-1.2\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.7) \quad (-1.2\sigma)$
D_{220}	$6024^{+440}_{-430} \quad (+7.4\sigma)$	$H(0.38)$	$83.15^{+0.90}_{-0.90} \quad (+1.1\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2631^{+200}_{-190} \quad (+6.9\sigma)$	$D_M(0.38)$	$1524^{+23}_{-22} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.45; R - 1 = 0.00265$

2.197 base_lensing_lenspriors_BAO_theta_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02222^{+0.00099}_{-0.00097} \quad (+0.5\sigma)$	D_{1420}	$831^{+72}_{-68} \quad (+3.3\sigma)$	$H(0.51)$	$89.80^{+0.80}_{-0.80} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0033}_{-0.0033} \quad (-1.4\sigma)$	D_{2000}	$234^{+23}_{-22} \quad (+2.3\sigma)$	$D_M(0.51)$	$1974^{+27}_{-26} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.955^{+0.037}_{-0.036} \quad (-1.4\sigma)$	$H(0.61)$	$95.35^{+0.76}_{-0.75} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.071^{+0.067}_{-0.069} \quad (+1.8\sigma)$	Y_P	$0.24532^{+0.00043}_{-0.00043} \quad (+0.4\sigma)$	$D_M(0.61)$	$2298^{+30}_{-28} \quad (-1.2\sigma)$
n_s	$0.955^{+0.037}_{-0.036} \quad (-1.4\sigma)$	Y_P^{BBN}	$0.24665^{+0.00043}_{-0.00043} \quad (+0.4\sigma)$	$H(2.33)$	$234.9^{+2.6}_{-2.5} \quad (-1.4\sigma)$
H_0	$68.0^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.4\sigma)$	$D_M(2.33)$	$5765^{+43}_{-43} \quad (-0.8\sigma)$
Ω_Λ	$0.696^{+0.016}_{-0.018} \quad (+1.3\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.019}_{-0.019} \quad (-0.9\sigma)$
Ω_m	$0.304^{+0.018}_{-0.016} \quad (-1.3\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-0.9\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.028}_{-0.028} \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1406^{+0.0036}_{-0.0035} \quad (-1.4\sigma)$	r_*	$145.1^{+1.2}_{-1.3} \quad (+1.4\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.018}_{-0.018} \quad (-0.7\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.026}_{-0.025} \quad (+0.6\sigma)$
σ_8	$0.812^{+0.030}_{-0.029} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.017}_{-0.017} \quad (-0.6\sigma)$
S_8	$0.817^{+0.035}_{-0.035} \quad (-0.9\sigma)$	z_{drag}	$1059.4^{+2.4}_{-2.3} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.024}_{-0.024} \quad (+0.7\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.019}_{-0.019} \quad (-0.9\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.017}_{-0.017} \quad (-0.5\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.023}_{-0.022} \quad (-0.7\sigma)$	k_D	$0.1399^{+0.0023}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.023}_{-0.023} \quad (+0.8\sigma)$
$\sigma_8/h^{0.5}$	$0.984^{+0.036}_{-0.036} \quad (-0.5\sigma)$	$100\theta_D$	$0.1611^{+0.0014}_{-0.0014} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012} \quad (+1.1\sigma)$
$r_{\text{drag}} h$	$100.6^{+2.2}_{-2.3} \quad (+1.3\sigma)$	z_{eq}	$3345^{+87}_{-85} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.012} \quad (+1.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.479^{+0.079}_{-0.078} \quad (+0.7\sigma)$	k_{eq}	$0.01021^{+0.00026}_{-0.00026} \quad (-1.4\sigma)$	χ^2_{lensing}	$9.3 \quad (\nu: 1.2)$
z_{re}	$7.75^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.015}_{-0.015} \quad (+1.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.055 \quad (\nu: 0.0)$
$10^9 A_s$	$2.16^{+0.15}_{-0.15} \quad (+1.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.4547^{+0.0079}_{-0.0078} \quad (+1.4\sigma)$	χ^2_{MGS}	$1.84 \quad (\nu: 0.2)$
$10^9 A_s e^{-2\tau}$	$1.93^{+0.13}_{-0.13} \quad (+3.5\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.1} \quad (+1.2\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.9)$
D_{40}	$1298^{+110}_{-110} \quad (+4.2\sigma)$	$D_M(0.15)$	$638^{+11}_{-11} \quad (-1.2\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.7) \quad (-1.2\sigma)$
D_{220}	$5984^{+440}_{-430} \quad (+6.5\sigma)$	$H(0.38)$	$83.17^{+0.89}_{-0.89} \quad (+1.2\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2604^{+200}_{-190} \quad (+4.9\sigma)$	$D_M(0.38)$	$1523^{+23}_{-22} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.35; R - 1 = 0.00361$

2.198 base_lensing_lenspriors_BAO_theta_post_agr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00098}_{-0.00094} \quad (+0.5\sigma)$	D_{1420}	$813^{+67}_{-64} \quad (-0.4\sigma)$	$H(0.51)$	$89.84^{+0.80}_{-0.79} \quad (+1.2\sigma)$
$\Omega_c h^2$	$0.1175^{+0.0033}_{-0.0032} \quad (-1.5\sigma)$	D_{2000}	$228^{+21}_{-20} \quad (-1.0\sigma)$	$D_M(0.51)$	$1973^{+26}_{-26} \quad (-1.3\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.2\sigma)$	$n_{s,0.002}$	$0.948^{+0.035}_{-0.034} \quad (-2.6\sigma)$	$H(0.61)$	$95.38^{+0.77}_{-0.75} \quad (+1.1\sigma)$
$\ln(10^{10} A_s)$	$3.053^{+0.064}_{-0.064} \quad (+0.8\sigma)$	Y_P	$0.24533^{+0.00042}_{-0.00042} \quad (+0.4\sigma)$	$D_M(0.61)$	$2297^{+29}_{-28} \quad (-1.3\sigma)$
n_s	$0.948^{+0.035}_{-0.034} \quad (-2.6\sigma)$	Y_P^{BBN}	$0.24665^{+0.00042}_{-0.00042} \quad (+0.4\sigma)$	$H(2.33)$	$234.8^{+2.6}_{-2.5} \quad (-1.5\sigma)$
H_0	$68.1^{+1.3}_{-1.3} \quad (+1.3\sigma)$	$10^5 D/H$	$2.61^{+0.18}_{-0.18} \quad (-0.5\sigma)$	$D_M(2.33)$	$5764^{+43}_{-43} \quad (-0.8\sigma)$
Ω_Λ	$0.697^{+0.016}_{-0.018} \quad (+1.4\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.10} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.017}_{-0.017} \quad (-1.4\sigma)$
Ω_m	$0.303^{+0.018}_{-0.016} \quad (-1.4\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-1.0\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.025}_{-0.025} \quad (-1.0\sigma)$
$\Omega_m h^2$	$0.1404^{+0.0036}_{-0.0035} \quad (-1.5\sigma)$	r_*	$145.2^{+1.2}_{-1.2} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.016}_{-0.016} \quad (-1.4\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.6\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.023}_{-0.022} \quad (-0.8\sigma)$
σ_8	$0.802^{+0.027}_{-0.027} \quad (-1.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.5\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.016}_{-0.015} \quad (-1.4\sigma)$
S_8	$0.806^{+0.032}_{-0.032} \quad (-1.4\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.022}_{-0.021} \quad (-0.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.441^{+0.017}_{-0.018} \quad (-1.4\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.015}_{-0.015} \quad (-1.3\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.595^{+0.020}_{-0.020} \quad (-1.4\sigma)$	k_D	$0.1399^{+0.0022}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.021}_{-0.021} \quad (-0.5\sigma)$
$\sigma_8/h^{0.5}$	$0.972^{+0.032}_{-0.032} \quad (-1.3\sigma)$	$100\theta_D$	$0.1610^{+0.0014}_{-0.0013} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$r_{\text{drag}} h$	$100.7^{+2.2}_{-2.3} \quad (+1.4\sigma)$	z_{eq}	$3340^{+86}_{-84} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.012}_{-0.011} \quad (+0.0\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.468^{+0.076}_{-0.074} \quad (+0.4\sigma)$	k_{eq}	$0.01020^{+0.00026}_{-0.00026} \quad (-1.5\sigma)$	χ^2_{lensing}	$12.6 \quad (\nu: 1.7)$
z_{re}	$7.74^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.015}_{-0.014} \quad (+1.5\sigma)$	$\chi^2_{6\text{DF}}$	$0.057 \quad (\nu: 0.0)$
$10^9 A_s$	$2.12^{+0.14}_{-0.13} \quad (+0.8\sigma)$	$100\theta_{s,\text{eq}}$	$0.4552^{+0.0078}_{-0.0078} \quad (+1.5\sigma)$	χ^2_{MGS}	$1.93 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.90^{+0.12}_{-0.12} \quad (+1.0\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.1} \quad (+1.3\sigma)$	χ^2_{DR12BAO}	$4.2 \quad (\nu: 0.8)$
D_{40}	$1295^{+110}_{-100} \quad (+4.0\sigma)$	$D_M(0.15)$	$637^{+11}_{-11} \quad (-1.3\sigma)$	χ^2_{prior}	$3.1 \quad (\nu: 3.0) \quad (-1.1\sigma)$
D_{220}	$5923^{+430}_{-420} \quad (+5.0\sigma)$	$H(0.38)$	$83.22^{+0.88}_{-0.89} \quad (+1.3\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2555^{+180}_{-180} \quad (+1.3\sigma)$	$D_M(0.38)$	$1522^{+22}_{-22} \quad (-1.3\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 21.94; R - 1 = 0.00291$

2.199 base_lensing_lenspriors_BAO_theta_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00098}_{-0.00096} \quad (+0.4\sigma)$	D_{1420}	$830^{+74}_{-71} \quad (+3.0\sigma)$	$H(0.51)$	$89.80^{+0.81}_{-0.79} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1177^{+0.0033}_{-0.0033} \quad (-1.4\sigma)$	D_{2000}	$233^{+24}_{-22} \quad (+2.1\sigma)$	$D_M(0.51)$	$1974^{+27}_{-26} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.955^{+0.037}_{-0.036} \quad (-1.4\sigma)$	$H(0.61)$	$95.35^{+0.77}_{-0.75} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.070^{+0.069}_{-0.070} \quad (+1.8\sigma)$	Y_P	$0.24532^{+0.00042}_{-0.00042} \quad (+0.4\sigma)$	$D_M(0.61)$	$2298^{+29}_{-29} \quad (-1.2\sigma)$
n_s	$0.955^{+0.037}_{-0.036} \quad (-1.4\sigma)$	Y_P^{BBN}	$0.24665^{+0.00043}_{-0.00043} \quad (+0.4\sigma)$	$H(2.33)$	$234.9^{+2.6}_{-2.5} \quad (-1.4\sigma)$
H_0	$68.0^{+1.3}_{-1.3} \quad (+1.2\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} \quad (-0.4\sigma)$	$D_M(2.33)$	$5765^{+43}_{-43} \quad (-0.8\sigma)$
Ω_Λ	$0.696^{+0.017}_{-0.018} \quad (+1.3\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.019}_{-0.019} \quad (-0.9\sigma)$
Ω_m	$0.304^{+0.018}_{-0.017} \quad (-1.3\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-0.9\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.029}_{-0.029} \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1406^{+0.0036}_{-0.0035} \quad (-1.4\sigma)$	r_*	$145.1^{+1.2}_{-1.2} \quad (+1.4\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.018}_{-0.019} \quad (-0.8\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.027}_{-0.026} \quad (+0.5\sigma)$
σ_8	$0.811^{+0.031}_{-0.031} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.018}_{-0.018} \quad (-0.6\sigma)$
S_8	$0.817^{+0.036}_{-0.036} \quad (-1.0\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.025}_{-0.024} \quad (+0.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.447^{+0.020}_{-0.020} \quad (-1.0\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.018}_{-0.018} \quad (-0.5\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.602^{+0.023}_{-0.023} \quad (-0.7\sigma)$	k_D	$0.1399^{+0.0022}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.024}_{-0.023} \quad (+0.8\sigma)$
$\sigma_8/h^{0.5}$	$0.984^{+0.037}_{-0.037} \quad (-0.6\sigma)$	$100\theta_D$	$0.1611^{+0.0014}_{-0.0013} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012} \quad (+1.0\sigma)$
$r_{\text{drag}} h$	$100.6^{+2.2}_{-2.2} \quad (+1.3\sigma)$	z_{eq}	$3345^{+86}_{-84} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.013} \quad (+1.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.477^{+0.078}_{-0.076} \quad (+0.6\sigma)$	k_{eq}	$0.01021^{+0.00026}_{-0.00026} \quad (-1.4\sigma)$	χ^2_{lensing}	$9.3 \quad (\nu: 1.2)$
z_{re}	$7.75^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.015}_{-0.014} \quad (+1.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.055 \quad (\nu: 0.0)$
$10^9 A_s$	$2.15^{+0.15}_{-0.15} \quad (+1.8\sigma)$	$100\theta_{s,\text{eq}}$	$0.4548^{+0.0079}_{-0.0077} \quad (+1.4\sigma)$	χ^2_{MGS}	$1.85 \quad (\nu: 0.2)$
$10^9 A_s e^{-2\tau}$	$1.93^{+0.14}_{-0.13} \quad (+3.4\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.1} \quad (+1.2\sigma)$	χ^2_{DR12BAO}	$4.3 \quad (\nu: 0.9)$
D_{40}	$1297^{+110}_{-100} \quad (+4.1\sigma)$	$D_M(0.15)$	$638^{+11}_{-11} \quad (-1.2\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.7) \quad (-1.2\sigma)$
D_{220}	$5978^{+440}_{-420} \quad (+6.3\sigma)$	$H(0.38)$	$83.17^{+0.89}_{-0.90} \quad (+1.2\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.0)$
D_{810}	$2600^{+200}_{-190} \quad (+4.6\sigma)$	$D_M(0.38)$	$1523^{+23}_{-22} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 18.40; R - 1 = 0.00218$

2.200 base_lensing_lenspriors_BAO_theta_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00097}_{-0.00095} \quad (+0.5\sigma)$	D_{1420}	$811^{+69}_{-64} \quad (-0.7\sigma)$	$H(0.51)$	$89.84^{+0.80}_{-0.78} \quad (+1.2\sigma)$
$\Omega_c h^2$	$0.1175^{+0.0033}_{-0.0032} \quad (-1.5\sigma)$	D_{2000}	$227^{+22}_{-21} \quad (-1.3\sigma)$	$D_M(0.51)$	$1973^{+26}_{-26} \quad (-1.3\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.948^{+0.036}_{-0.035} \quad (-2.5\sigma)$	$H(0.61)$	$95.38^{+0.76}_{-0.74} \quad (+1.1\sigma)$
$\ln(10^{10} A_s)$	$3.051^{+0.066}_{-0.065} \quad (+0.6\sigma)$	Y_P	$0.24533^{+0.00042}_{-0.00042} \quad (+0.4\sigma)$	$D_M(0.61)$	$2297^{+29}_{-29} \quad (-1.3\sigma)$
n_s	$0.948^{+0.036}_{-0.035} \quad (-2.5\sigma)$	Y_P^{BBN}	$0.24665^{+0.00042}_{-0.00042} \quad (+0.4\sigma)$	$H(2.33)$	$234.8^{+2.5}_{-2.5} \quad (-1.5\sigma)$
H_0	$68.1^{+1.3}_{-1.3} \quad (+1.3\sigma)$	$10^5 D/H$	$2.61^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$D_M(2.33)$	$5764^{+43}_{-42} \quad (-0.8\sigma)$
Ω_Λ	$0.697^{+0.016}_{-0.018} \quad (+1.4\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.099} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.018}_{-0.018} \quad (-1.5\sigma)$
Ω_m	$0.303^{+0.018}_{-0.016} \quad (-1.4\sigma)$	z_*	$1089.9^{+1.2}_{-1.2} \quad (-1.0\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.027}_{-0.025} \quad (-1.1\sigma)$
$\Omega_m h^2$	$0.1404^{+0.0036}_{-0.0035} \quad (-1.5\sigma)$	r_*	$145.2^{+1.2}_{-1.2} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.017}_{-0.016} \quad (-1.5\sigma)$
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020} \quad (-0.6\sigma)$	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.024}_{-0.023} \quad (-0.9\sigma)$
σ_8	$0.801^{+0.029}_{-0.027} \quad (-1.2\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.95^{+0.12}_{-0.12} \quad (+1.5\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.016}_{-0.016} \quad (-1.4\sigma)$
S_8	$0.805^{+0.033}_{-0.033} \quad (-1.5\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.023}_{-0.022} \quad (-0.8\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.441^{+0.018}_{-0.018} \quad (-1.5\sigma)$	r_{drag}	$147.9^{+1.5}_{-1.5} \quad (+1.5\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.016}_{-0.016} \quad (-1.4\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.021}_{-0.021} \quad (-1.4\sigma)$	k_D	$0.1399^{+0.0022}_{-0.0022} \quad (-1.2\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.022}_{-0.021} \quad (-0.7\sigma)$
$\sigma_8/h^{0.5}$	$0.971^{+0.034}_{-0.033} \quad (-1.4\sigma)$	$100\theta_D$	$0.1610^{+0.0014}_{-0.0013} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$r_{\text{drag}} h$	$100.7^{+2.2}_{-2.3} \quad (+1.4\sigma)$	z_{eq}	$3340^{+85}_{-83} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.012}_{-0.012} \quad (-0.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.465^{+0.074}_{-0.073} \quad (+0.3\sigma)$	k_{eq}	$0.01019^{+0.00026}_{-0.00025} \quad (-1.5\sigma)$	χ^2_{lensing}	$12.8 \quad (\nu: 1.7)$
z_{re}	$7.74^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.015}_{-0.014} \quad (+1.5\sigma)$	$\chi^2_{6\text{DF}}$	$0.057 \quad (\nu: 0.0)$
$10^9 A_s$	$2.11^{+0.14}_{-0.13} \quad (+0.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4552^{+0.0078}_{-0.0077} \quad (+1.5\sigma)$	χ^2_{MGS}	$1.95 \quad (\nu: 0.3)$
$10^9 A_s e^{-2\tau}$	$1.89^{+0.13}_{-0.12} \quad (+0.7\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.1} \quad (+1.3\sigma)$	χ^2_{DR12BAO}	$4.2 \quad (\nu: 0.8)$
D_{40}	$1291^{+110}_{-100} \quad (+3.8\sigma)$	$D_M(0.15)$	$637^{+11}_{-11} \quad (-1.3\sigma)$	χ^2_{prior}	$3.1 \quad (\nu: 3.0) \quad (-1.1\sigma)$
D_{220}	$5911^{+440}_{-410} \quad (+4.7\sigma)$	$H(0.38)$	$83.23^{+0.89}_{-0.87} \quad (+1.3\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 1.1)$
D_{810}	$2548^{+190}_{-180} \quad (+0.9\sigma)$	$D_M(0.38)$	$1522^{+22}_{-22} \quad (-1.3\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 22.09; R - 1 = 0.00237$

2.201 base_lensing_lenspriors_BAO_theta_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00098}_{-0.00096}$ (+0.4 σ)	D_{1420}	830^{+72}_{-69} (+3.1 σ)	$H(0.51)$	$89.79^{+0.80}_{-0.79}$ (+1.1 σ)
$\Omega_c h^2$	$0.1178^{+0.0033}_{-0.0033}$ (−1.4 σ)	D_{2000}	233^{+23}_{-22} (+2.1 σ)	$D_M(0.51)$	1975^{+27}_{-26} (−1.2 σ)
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0012}$ (+0.3 σ)	$n_{s,0.002}$	$0.956^{+0.036}_{-0.036}$ (−1.1 σ)	$H(0.61)$	$95.34^{+0.76}_{-0.75}$ (+0.9 σ)
$\ln(10^{10} A_s)$	$3.068^{+0.067}_{-0.068}$ (+1.7 σ)	Y_P	$0.24532^{+0.00042}_{-0.00042}$ (+0.3 σ)	$D_M(0.61)$	2299^{+30}_{-29} (−1.2 σ)
n_s	$0.956^{+0.036}_{-0.036}$ (−1.1 σ)	Y_P^{BBN}	$0.24664^{+0.00043}_{-0.00043}$ (+0.3 σ)	$H(2.33)$	$234.9^{+2.6}_{-2.5}$ (−1.4 σ)
H_0	$68.0^{+1.3}_{-1.3}$ (+1.2 σ)	$10^5 D/H$	$2.62^{+0.19}_{-0.18}$ (−0.4 σ)	$D_M(2.33)$	5765^{+42}_{-43} (−0.8 σ)
Ω_Λ	$0.696^{+0.017}_{-0.018}$ (+1.3 σ)	Age/Gyr	$13.80^{+0.10}_{-0.10}$ (−0.7 σ)	$f\sigma_8(0.15)$	$0.453^{+0.019}_{-0.019}$ (−0.9 σ)
Ω_m	$0.304^{+0.018}_{-0.017}$ (−1.3 σ)	z_*	$1089.9^{+1.2}_{-1.2}$ (−0.9 σ)	$\sigma_8(0.15)$	$0.751^{+0.028}_{-0.028}$ (+0.2 σ)
$\Omega_m h^2$	$0.1407^{+0.0036}_{-0.0035}$ (−1.4 σ)	r_*	$145.1^{+1.2}_{-1.2}$ (+1.4 σ)	$f\sigma_8(0.38)$	$0.473^{+0.018}_{-0.018}$ (−0.7 σ)
$\Omega_m h^3$	$0.0956^{+0.0021}_{-0.0020}$ (−0.5 σ)	$100\theta_*$	$1.0411^{+0.0011}_{-0.0012}$ (+0.3 σ)	$\sigma_8(0.38)$	$0.666^{+0.026}_{-0.025}$ (+0.5 σ)
σ_8	$0.812^{+0.030}_{-0.030}$ (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.12}_{-0.12}$ (+1.4 σ)	$f\sigma_8(0.51)$	$0.472^{+0.018}_{-0.018}$ (−0.6 σ)
S_8	$0.817^{+0.035}_{-0.035}$ (−0.9 σ)	z_{drag}	$1059.4^{+2.3}_{-2.3}$ (−0.0 σ)	$\sigma_8(0.51)$	$0.624^{+0.024}_{-0.024}$ (+0.7 σ)
$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.019}_{-0.019}$ (−0.9 σ)	r_{drag}	$147.9^{+1.5}_{-1.5}$ (+1.4 σ)	$f\sigma_8(0.61)$	$0.468^{+0.017}_{-0.017}$ (−0.5 σ)
$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.023}_{-0.023}$ (−0.7 σ)	k_D	$0.1399^{+0.0022}_{-0.0022}$ (−1.2 σ)	$\sigma_8(0.61)$	$0.594^{+0.023}_{-0.023}$ (+0.8 σ)
$\sigma_8/h^{0.5}$	$0.984^{+0.036}_{-0.036}$ (−0.5 σ)	$100\theta_D$	$0.1611^{+0.0014}_{-0.0014}$ (−0.0 σ)	$f\sigma_8(2.33)$	$0.300^{+0.012}_{-0.012}$ (+1.0 σ)
$r_{\text{drag}} h$	$100.5^{+2.2}_{-2.2}$ (+1.3 σ)	z_{eq}	3346^{+86}_{-84} (−1.4 σ)	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.012}$ (+1.3 σ)
$\langle d^2 \rangle^{1/2}$	$2.473^{+0.078}_{-0.075}$ (+0.5 σ)	k_{eq}	$0.01021^{+0.00026}_{-0.00026}$ (−1.4 σ)	χ^2_{lensing}	7.9 (ν : 1.1)
z_{re}	$7.75^{+0.22}_{-0.21}$ (+0.3 σ)	$100\theta_{\text{eq}}$	$0.823^{+0.015}_{-0.014}$ (+1.4 σ)	$\chi^2_{6\text{DF}}$	0.055 (ν : 0.0)
$10^9 A_s$	$2.15^{+0.15}_{-0.14}$ (+1.8 σ)	$100\theta_{s,\text{eq}}$	$0.4546^{+0.0079}_{-0.0078}$ (+1.4 σ)	χ^2_{MGS}	1.82 (ν : 0.2)
$10^9 A_s e^{-2\tau}$	$1.93^{+0.13}_{-0.13}$ (+3.2 σ)	$H(0.15)$	$73.2^{+1.1}_{-1.1}$ (+1.2 σ)	χ^2_{DR12BAO}	4.3 (ν : 0.9)
D_{40}	1291^{+110}_{-100} (+3.8 σ)	$D_M(0.15)$	638^{+11}_{-11} (−1.2 σ)	χ^2_{prior}	2.9 (ν : 2.7) (−1.2 σ)
D_{220}	5961^{+440}_{-420} (+5.9 σ)	$H(0.38)$	$83.16^{+0.89}_{-0.89}$ (+1.1 σ)	χ^2_{BAO}	6.2 (ν : 1.0)
D_{810}	2598^{+190}_{-190} (+4.5 σ)	$D_M(0.38)$	1524^{+23}_{-22} (−1.2 σ)		

$\bar{\chi}^2_{\text{eff}} = 16.94$; $R - 1 = 0.00237$

2.202 base_lensing_lenspriors_pttagr2

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02218	$0.02220^{+0.00098}_{-0.0010}$ (+0.4 σ)	D_{810}	3632	3282^{+1000}_{-1000} (+54.0 σ)	$H(0.38)$	109.4	84^{+20}_{-20} (+2.3 σ)
$\Omega_{\mathrm{c}}h^2$	0.0991	$0.094^{+0.019}_{-0.017}$ (−12.7 σ)	D_{1420}	1013	1046^{+300}_{-300} (+45.1 σ)	$D_{\mathrm{M}}(0.38)$	1094	1556^{+700}_{-500} (+0.8 σ)
$100\theta_{\mathrm{MC}}$	1.107	$1.018^{+0.092}_{-0.10}$ (−48.6 σ)	D_{2000}	287	344^{+200}_{-100} (+63.6 σ)	$H(0.51)$	113.8	89^{+20}_{-20} (+0.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.465	$3.34^{+0.26}_{-0.27}$ (+18.1 σ)	$n_{\mathrm{s},0.002}$	0.9594	$0.959^{+0.039}_{-0.040}$ (−0.6 σ)	$D_{\mathrm{M}}(0.51)$	1444	2019^{+800}_{-600} (+1.2 σ)
n_{s}	0.9594	$0.959^{+0.039}_{-0.040}$ (−0.6 σ)	Y_{P}	0.245319	$0.24531^{+0.00042}_{-0.00044}$ (+0.3 σ)	$H(0.61)$	117.7	94^{+20}_{-20} (−2.3 σ)
H_0	99.9	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246645	$0.24664^{+0.00043}_{-0.00044}$ (+0.3 σ)	$D_{\mathrm{M}}(0.61)$	1703	2353^{+900}_{-700} (+1.6 σ)
Ω_{Λ}	0.878	$0.72^{+0.17}_{-0.31}$ (+3.3 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.621	$2.62^{+0.20}_{-0.18}$ (−0.3 σ)	$H(2.33)$	232.0	217^{+21}_{-21} (−15.2 σ)
Ω_{m}	0.122	$0.28^{+0.31}_{-0.17}$ (−3.3 σ)	Age/Gyr	11.92	$14.5^{+3.5}_{-2.7}$ (+18.2 σ)	$D_{\mathrm{M}}(2.33)$	4894	6028^{+1000}_{-1000} (+15.4 σ)
$\Omega_{\mathrm{m}}h^2$	0.1219	$0.117^{+0.019}_{-0.017}$ (−13.3 σ)	z_{*}	1088.25	$1087.7^{+2.1}_{-1.9}$ (−6.3 σ)	$f\sigma_{\mathrm{s}}(0.15)$	0.333	$0.399^{+0.081}_{-0.076}$ (−5.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.1218	$0.084^{+0.041}_{-0.040}$ (−26.7 σ)	r_{*}	150.4	$151.9^{+5.6}_{-5.6}$ (+15.7 σ)	$\sigma_{\mathrm{s}}(0.15)$	0.881	$0.74^{+0.15}_{-0.18}$ (−0.9 σ)
σ_{s}	0.924	$0.80^{+0.14}_{-0.17}$ (−1.7 σ)	$100\theta_{*}$	1.107	$1.018^{+0.092}_{-0.10}$ (−49.4 σ)	$f\sigma_{\mathrm{s}}(0.38)$	0.3926	$0.426^{+0.037}_{-0.043}$ (−5.7 σ)
S_{s}	0.589	$0.72^{+0.19}_{-0.16}$ (−4.9 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.58	$15.0^{+2.0}_{-1.7}$ (+25.0 σ)	$\sigma_{\mathrm{s}}(0.38)$	0.815	$0.67^{+0.15}_{-0.18}$ (+0.8 σ)
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	0.323	$0.396^{+0.11}_{-0.087}$ (−4.9 σ)	z_{drag}	1057.95	$1057.6^{+2.8}_{-2.8}$ (−4.0 σ)	$f\sigma_{\mathrm{s}}(0.51)$	0.4177	$0.431^{+0.030}_{-0.034}$ (−5.6 σ)
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	0.5460	$0.557^{+0.034}_{-0.037}$ (−4.6 σ)	r_{drag}	153.2	$154.9^{+5.8}_{-5.9}$ (+16.0 σ)	$\sigma_{\mathrm{s}}(0.51)$	0.778	$0.63^{+0.15}_{-0.18}$ (+1.7 σ)
$\sigma_{\mathrm{s}}/h^{0.5}$	0.9241	$0.954^{+0.047}_{-0.050}$ (−2.5 σ)	k_{D}	0.1345	$0.1329^{+0.0061}_{-0.0057}$ (−14.6 σ)	$f\sigma_{\mathrm{s}}(0.61)$	0.4326	$0.432^{+0.034}_{-0.046}$ (−5.4 σ)
$r_{\mathrm{drag}}h$	153.0	110^{+40}_{-40} (+7.1 σ)	$100\theta_{\mathrm{D}}$	0.1720	$0.158^{+0.014}_{-0.016}$ (−9.7 σ)	$\sigma_{\mathrm{s}}(0.61)$	0.751	$0.60^{+0.15}_{-0.18}$ (+2.3 σ)
$\langle d^2 \rangle^{1/2}$	2.597	$2.61^{+0.13}_{-0.12}$ (+4.0 σ)	z_{eq}	2898	2778^{+500}_{-400} (−13.3 σ)	$f\sigma_{\mathrm{s}}(2.33)$	0.392	$0.307^{+0.086}_{-0.10}$ (+4.1 σ)
z_{re}	7.60	$7.31^{+0.52}_{-0.53}$ (−0.2 σ)	k_{eq}	0.00884	$0.0085^{+0.0014}_{-0.0012}$ (−13.3 σ)	$\sigma_{\mathrm{s}}(2.33)$	0.432	$0.32^{+0.11}_{-0.12}$ (+6.8 σ)
10^9A_{s}	3.20	$2.84^{+0.77}_{-0.73}$ (+21.8 σ)	$100\theta_{\mathrm{eq}}$	0.975	$0.929^{+0.099}_{-0.097}$ (+13.3 σ)	$\chi^2_{\mathrm{lensing}}$	15.57	18.0 (ν : 2.0)
$10^9A_{\mathrm{s}}e^{-2\tau}$	2.87	$2.55^{+0.69}_{-0.65}$ (+48.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.535	$0.509^{+0.052}_{-0.051}$ (+13.2 σ)	χ^2_{prior}	0.00	2.0 (ν : 2.0) (−1.4 σ)
D_{40}	2108	1794^{+600}_{-500} (+36.8 σ)	$H(0.15)$	103.0	75^{+30}_{-30} (+4.0 σ)			
D_{220}	9493	8741^{+3000}_{-3000} (+72.1 σ)	$D_{\mathrm{M}}(0.15)$	444	651^{+400}_{-200} (+0.4 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 15.57$; $\bar{\chi}^2_{\mathrm{eff}} = 20.05$; $R - 1 = 0.00735$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmargd: 15.57

2.203 base_lensing_lenspriors_pttagr2_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02220	$0.02222^{+0.00096}_{-0.0010}$ (+0.5 σ)	D_{810}	3672	3627^{+1000}_{-900} (+79.0 σ)	$H(0.38)$	89.11	$88.9^{+5.0}_{-4.6}$ (+11.3 σ)
$\Omega_c h^2$	0.0943	$0.096^{+0.016}_{-0.015}$ (-11.9 σ)	D_{1420}	1150	1137^{+300}_{-300} (+62.9 σ)	$D_M(0.38)$	1376	1384^{+110}_{-98} (-10.0 σ)
$100\theta_{MC}$	1.04090	$1.0409^{+0.0012}_{-0.0012}$ (+0.3 σ)	D_{2000}	320	317^{+90}_{-80} (+48.4 σ)	$H(0.51)$	94.32	$94.2^{+4.1}_{-3.7}$ (+11.0 σ)
$\ln(10^{10} A_s)$	3.389	$3.37^{+0.24}_{-0.25}$ (+20.0 σ)	$n_{s,0.002}$	0.9600	$0.959^{+0.040}_{-0.037}$ (-0.6 σ)	$D_M(0.51)$	1801	1811^{+130}_{-120} (-10.1 σ)
n_s	0.9600	$0.959^{+0.040}_{-0.037}$ (-0.6 σ)	Y_P	0.245325	$0.24532^{+0.00042}_{-0.00044}$ (+0.4 σ)	$H(0.61)$	98.76	$98.7^{+3.2}_{-3.0}$ (+10.4 σ)
H_0	77.7	$77.2^{+7.1}_{-7.2}$ (+11.3 σ)	Y_P^{BBN}	0.246651	$0.24665^{+0.00042}_{-0.00044}$ (+0.4 σ)	$D_M(0.61)$	2112	2122^{+140}_{-130} (-10.1 σ)
Ω_Λ	0.806	$0.798^{+0.059}_{-0.066}$ (+9.1 σ)	$10^5 D/H$	2.618	$2.62^{+0.19}_{-0.18}$ (-0.4 σ)	$H(2.33)$	219.5	$220^{+10}_{-9.7}$ (-12.8 σ)
Ω_m	0.194	$0.202^{+0.066}_{-0.059}$ (-9.1 σ)	Age/Gyr	13.645	$13.65^{+0.16}_{-0.17}$ (-5.0 σ)	$D_M(2.33)$	5668	5670^{+91}_{-100} (-6.6 σ)
$\Omega_m h^2$	0.1171	$0.119^{+0.016}_{-0.015}$ (-12.5 σ)	z_*	1087.78	$1087.9^{+1.9}_{-1.7}$ (-5.9 σ)	$f\sigma_8(0.15)$	0.380	$0.383^{+0.052}_{-0.050}$ (-6.6 σ)
$\Omega_m h^3$	0.09099	$0.0913^{+0.0038}_{-0.0037}$ (-10.1 σ)	r_*	151.79	$151.4^{+4.5}_{-4.9}$ (+14.5 σ)	$\sigma_8(0.15)$	0.7876	$0.784^{+0.040}_{-0.043}$ (+4.6 σ)
σ_8	0.8374	$0.834^{+0.038}_{-0.039}$ (+2.5 σ)	$100\theta_*$	1.04114	$1.0411^{+0.0012}_{-0.0012}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.4240	$0.425^{+0.038}_{-0.041}$ (-5.7 σ)
S_8	0.674	$0.681^{+0.10}_{-0.091}$ (-6.6 σ)	$D_M(z_*)/\text{Gpc}$	14.579	$14.54^{+0.43}_{-0.47}$ (+15.0 σ)	$\sigma_8(0.38)$	0.7144	$0.710^{+0.043}_{-0.047}$ (+7.8 σ)
$\sigma_8 \Omega_m^{0.5}$	0.369	$0.373^{+0.055}_{-0.050}$ (-6.6 σ)	z_{drag}	1057.61	$1057.7^{+2.6}_{-2.7}$ (-3.6 σ)	$f\sigma_8(0.51)$	0.4377	$0.438^{+0.031}_{-0.033}$ (-4.8 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5559	$0.557^{+0.037}_{-0.039}$ (-4.6 σ)	r_{drag}	154.68	$154.3^{+4.7}_{-5.1}$ (+14.8 σ)	$\sigma_8(0.51)$	0.6757	$0.671^{+0.044}_{-0.048}$ (+9.3 σ)
$\sigma_8/h^{0.5}$	0.9502	$0.950^{+0.042}_{-0.046}$ (-2.7 σ)	k_D	0.1330	$0.1335^{+0.0053}_{-0.0049}$ (-13.5 σ)	$f\sigma_8(0.61)$	0.4436	$0.443^{+0.026}_{-0.028}$ (-3.9 σ)
$r_{\text{drag}} h$	120.1	119^{+10}_{-10} (+12.9 σ)	$100\theta_D$	0.16199	$0.1619^{+0.0016}_{-0.0015}$ (+3.2 σ)	$\sigma_8(0.61)$	0.6476	$0.643^{+0.044}_{-0.049}$ (+10.4 σ)
$\langle d^2 \rangle^{1/2}$	2.607	$2.60^{+0.12}_{-0.12}$ (+3.8 σ)	z_{eq}	2784	2819^{+400}_{-400} (-12.5 σ)	$f\sigma_8(2.33)$	0.3330	$0.330^{+0.026}_{-0.029}$ (+13.2 σ)
z_{re}	7.362	$7.38^{+0.34}_{-0.31}$ (-0.1 σ)	k_{eq}	0.00850	$0.0086^{+0.0011}_{-0.0011}$ (-12.5 σ)	$\sigma_8(2.33)$	0.3524	$0.350^{+0.034}_{-0.037}$ (+16.3 σ)
$10^9 A_s$	2.96	$2.93^{+0.73}_{-0.70}$ (+24.4 σ)	$100\theta_{\text{eq}}$	0.946	$0.940^{+0.093}_{-0.092}$ (+14.5 σ)	χ^2_{lensing}	15.83	17.9 (ν : 2.1)
$10^9 A_s e^{-2\tau}$	2.65	$2.62^{+0.65}_{-0.63}$ (+54.2 σ)	$100\theta_{s,\text{eq}}$	0.5181	$0.515^{+0.048}_{-0.048}$ (+14.6 σ)	χ^2_{prior}	0.00	3.0 (ν : 3.0) (-1.2 σ)
D_{40}	1891	1868^{+500}_{-500} (+41.6 σ)	$H(0.15)$	81.5	$81.1^{+6.3}_{-6.2}$ (+11.3 σ)			
D_{220}	9125	9009^{+3000}_{-3000} (+78.5 σ)	$D_M(0.15)$	565.6	570^{+52}_{-46} (-9.8 σ)			

Best-fit $\chi^2_{\text{eff}} = 15.83$; $\bar{\chi}^2_{\text{eff}} = 20.91$; $R - 1 = 0.00715$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmargd: 15.83

2.204 base_lensing_lenspriors_pttagr2_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02219	$0.02221^{+0.00099}_{-0.00098}$ (+0.4 σ)	D_{1420}	973	967^{+200}_{-200} (+29.7 σ)	$H(0.51)$	85.63	$85.9^{+3.9}_{-3.7}$ (-7.8 σ)
$\Omega_c h^2$	0.0976	$0.099^{+0.018}_{-0.016}$ (-10.5 σ)	D_{2000}	287	290^{+90}_{-70} (+33.8 σ)	$D_M(0.51)$	2048	2044^{+75}_{-76} (+2.6 σ)
$100\theta_{MC}$	1.0117	$1.013^{+0.027}_{-0.027}$ (-59.2 σ)	$n_{s,0.002}$	0.9542	$0.954^{+0.039}_{-0.039}$ (-1.6 σ)	$H(0.61)$	90.62	$90.9^{+4.4}_{-4.1}$ (-11.6 σ)
$\ln(10^{10} A_s)$	3.266	$3.26^{+0.20}_{-0.20}$ (+13.1 σ)	Y_P	0.245322	$0.24532^{+0.00043}_{-0.00043}$ (+0.3 σ)	$D_M(0.61)$	2389	2383^{+90}_{-91} (+3.1 σ)
n_s	0.9542	$0.954^{+0.039}_{-0.039}$ (-1.6 σ)	Y_P^{BBN}	0.246648	$0.24664^{+0.00043}_{-0.00043}$ (+0.3 σ)	$H(2.33)$	218.4	219^{+15}_{-14} (-13.8 σ)
H_0	66.26	$66.4^{+2.2}_{-2.1}$ (-0.5 σ)	$10^5 D/H$	2.620	$2.62^{+0.19}_{-0.18}$ (-0.4 σ)	$D_M(2.33)$	6085	6069^{+300}_{-300} (+17.9 σ)
Ω_Λ	0.7257	$0.725^{+0.027}_{-0.029}$ (+3.5 σ)	Age/Gyr	14.58	$14.54^{+0.73}_{-0.72}$ (+19.5 σ)	$f\sigma_8(0.15)$	0.4189	$0.419^{+0.030}_{-0.030}$ (-3.6 σ)
Ω_m	0.2743	$0.275^{+0.029}_{-0.027}$ (-3.5 σ)	z_*	1088.10	$1088.2^{+1.9}_{-1.8}$ (-5.2 σ)	$\sigma_8(0.15)$	0.7302	$0.730^{+0.031}_{-0.032}$ (-2.6 σ)
$\Omega_m h^2$	0.1204	$0.122^{+0.018}_{-0.016}$ (-11.0 σ)	r_*	150.8	$150.5^{+5.1}_{-5.2}$ (+12.7 σ)	$f\sigma_8(0.38)$	0.4447	$0.445^{+0.026}_{-0.027}$ (-3.7 σ)
$\Omega_m h^3$	0.0798	$0.081^{+0.014}_{-0.013}$ (-33.1 σ)	$100\theta_*$	1.0120	$1.013^{+0.027}_{-0.027}$ (-60.3 σ)	$\sigma_8(0.38)$	0.6514	$0.651^{+0.027}_{-0.027}$ (-2.0 σ)
σ_8	0.7861	$0.786^{+0.034}_{-0.035}$ (-2.9 σ)	$D_M(z_*)/\text{Gpc}$	14.90	$14.86^{+0.91}_{-0.88}$ (+22.3 σ)	$f\sigma_8(0.51)$	0.4477	$0.448^{+0.024}_{-0.025}$ (-3.6 σ)
S_8	0.752	$0.753^{+0.057}_{-0.057}$ (-3.6 σ)	z_{drag}	1057.84	$1057.9^{+2.7}_{-2.8}$ (-3.1 σ)	$\sigma_8(0.51)$	0.6114	$0.611^{+0.025}_{-0.025}$ (-1.7 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4117	$0.412^{+0.031}_{-0.031}$ (-3.6 σ)	r_{drag}	153.7	$153.4^{+5.3}_{-5.4}$ (+12.9 σ)	$f\sigma_8(0.61)$	0.4459	$0.446^{+0.023}_{-0.023}$ (-3.5 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5689	$0.569^{+0.032}_{-0.033}$ (-3.6 σ)	k_D	0.1340	$0.1343^{+0.0057}_{-0.0054}$ (-11.9 σ)	$\sigma_8(0.61)$	0.5829	$0.583^{+0.024}_{-0.024}$ (-1.4 σ)
$\sigma_8/h^{0.5}$	0.9658	$0.965^{+0.037}_{-0.038}$ (-1.8 σ)	$100\theta_D$	0.15731	$0.1575^{+0.0037}_{-0.0036}$ (-13.5 σ)	$f\sigma_8(2.33)$	0.2956	$0.295^{+0.012}_{-0.012}$ (-0.7 σ)
$r_{\text{drag}} h$	101.82	$101.8^{+2.3}_{-2.3}$ (+2.1 σ)	z_{eq}	2862	2889^{+400}_{-400} (-11.0 σ)	$\sigma_8(2.33)$	0.3065	$0.306^{+0.012}_{-0.013}$ (+0.1 σ)
$\langle d^2 \rangle^{1/2}$	2.585	$2.58^{+0.12}_{-0.12}$ (+3.3 σ)	k_{eq}	0.00873	$0.0088^{+0.0013}_{-0.0012}$ (-11.0 σ)	χ^2_{lensing}	16.40	18.4 (ν : 2.6)
z_{re}	7.356	$7.37^{+0.40}_{-0.37}$ (-0.2 σ)	$100\theta_{\text{eq}}$	0.900	$0.897^{+0.074}_{-0.070}$ (+9.8 σ)	$\chi^2_{6\text{DF}}$	0.051	0.11 (ν : 0.0)
$10^9 A_s$	2.62	$2.61^{+0.54}_{-0.50}$ (+15.0 σ)	$100\theta_{s,\text{eq}}$	0.4937	$0.492^{+0.037}_{-0.035}$ (+9.6 σ)	χ^2_{MGS}	2.35	2.43 (ν : 0.3)
$10^9 A_s e^{-2\tau}$	2.348	$2.34^{+0.48}_{-0.45}$ (+33.2 σ)	$H(0.15)$	70.83	$71.0^{+2.6}_{-2.4}$ (-1.6 σ)	χ^2_{DR12BAO}	5.16	6.0 (ν : 1.5)
D_{40}	1640	1633^{+400}_{-300} (+26.2 σ)	$D_M(0.15)$	657.1	656^{+22}_{-22} (+1.0 σ)	χ^2_{prior}	0.09	2.1 (ν : 2.2) (-1.4 σ)
D_{220}	7982	7943^{+2000}_{-2000} (+53.1 σ)	$H(0.38)$	79.69	$79.9^{+3.3}_{-3.1}$ (-4.6 σ)	χ^2_{BAO}	7.56	8.6 (ν : 1.7)
D_{810}	3143	3114^{+600}_{-600} (+41.8 σ)	$D_M(0.38)$	1576	1573^{+56}_{-57} (+1.9 σ)			

Best-fit $\chi^2_{\text{eff}} = 24.05$; $\bar{\chi}^2_{\text{eff}} = 29.10$; $R - 1 = 0.00706$

χ^2_{eff} : BAO - 6DF: 0.05 MGS: 2.35 DR12BAO: 5.16 CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmarged: 16.40

2.205 base_lensing_lenspriors_pttagr2_BAO_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_b h^2$	0.02225	$0.0223^{+0.0010}_{-0.0010}$	$(+0.7\sigma)$	D_{1420}	812	812^{+75}_{-68}	(-0.4σ)	$H(0.51)$	89.87	$89.91^{+0.84}_{-0.82}$	$(+1.3\sigma)$
$\Omega_c h^2$	0.11724	$0.1173^{+0.0033}_{-0.0034}$	(-1.6σ)	D_{2000}	226.8	227^{+23}_{-22}	(-1.4σ)	$D_M(0.51)$	1970.9	1970^{+27}_{-28}	(-1.4σ)
$100\theta_{\text{MC}}$	1.04081	$1.0409^{+0.0011}_{-0.0012}$	$(+0.2\sigma)$	$n_{\text{s},0.002}$	0.9377	$0.938^{+0.036}_{-0.036}$	(-4.3σ)	$H(0.61)$	95.40	$95.43^{+0.79}_{-0.78}$	$(+1.2\sigma)$
$\ln(10^{10} A_{\text{s}})$	3.062	$3.061^{+0.075}_{-0.074}$	$(+1.2\sigma)$	Y_{P}	0.245348	$0.24535^{+0.00044}_{-0.00045}$	$(+0.6\sigma)$	$D_M(0.61)$	2294.8	2294^{+30}_{-30}	(-1.4σ)
n_{s}	0.9377	$0.938^{+0.036}_{-0.036}$	(-4.3σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246674	$0.24667^{+0.00044}_{-0.00045}$	$(+0.6\sigma)$	$H(2.33)$	234.61	$234.6^{+2.6}_{-2.6}$	(-1.6σ)
H_0	68.20	$68.2^{+1.4}_{-1.3}$	$(+1.5\sigma)$	$10^5 \text{D}/\text{H}$	2.608	$2.61^{+0.20}_{-0.18}$	(-0.7σ)	$D_M(2.33)$	5763.3	5761^{+44}_{-44}	(-1.0σ)
Ω_{Λ}	0.6987	$0.699^{+0.017}_{-0.017}$	$(+1.5\sigma)$	Age/Gyr	13.801	$13.80^{+0.10}_{-0.10}$	(-0.9σ)	$f\sigma_8(0.15)$	0.4450	$0.445^{+0.018}_{-0.018}$	(-1.6σ)
Ω_{m}	0.3013	$0.301^{+0.017}_{-0.017}$	(-1.5σ)	z_*	1089.83	$1089.8^{+1.3}_{-1.2}$	(-1.2σ)	$\sigma_8(0.15)$	0.7411	$0.741^{+0.029}_{-0.028}$	(-1.1σ)
$\Omega_{\text{m}} h^2$	0.14014	$0.1402^{+0.0036}_{-0.0036}$	(-1.6σ)	r_*	145.24	$145.2^{+1.2}_{-1.3}$	$(+1.6\sigma)$	$f\sigma_8(0.38)$	0.4654	$0.465^{+0.018}_{-0.018}$	(-1.5σ)
$\Omega_{\text{m}} h^3$	0.09557	$0.0957^{+0.0021}_{-0.0021}$	(-0.5σ)	$100\theta_*$	1.04101	$1.0411^{+0.0011}_{-0.0012}$	$(+0.2\sigma)$	$\sigma_8(0.38)$	0.6581	$0.658^{+0.026}_{-0.025}$	(-0.8σ)
σ_8	0.8010	$0.801^{+0.030}_{-0.030}$	(-1.2σ)	$D_M(z_*)/\text{Gpc}$	13.952	$13.95^{+0.12}_{-0.12}$	$(+1.6\sigma)$	$f\sigma_8(0.51)$	0.4652	$0.465^{+0.017}_{-0.018}$	(-1.5σ)
S_8	0.8027	$0.802^{+0.034}_{-0.034}$	(-1.6σ)	z_{drag}	1059.47	$1059.5^{+2.4}_{-2.4}$	$(+0.3\sigma)$	$\sigma_8(0.51)$	0.6163	$0.616^{+0.024}_{-0.024}$	(-0.7σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4396	$0.439^{+0.019}_{-0.019}$	(-1.6σ)	r_{drag}	147.96	$147.9^{+1.5}_{-1.6}$	$(+1.5\sigma)$	$f\sigma_8(0.61)$	0.4611	$0.461^{+0.017}_{-0.017}$	(-1.5σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5934	$0.593^{+0.023}_{-0.023}$	(-1.5σ)	k_{D}	0.13987	$0.1399^{+0.0023}_{-0.0023}$	(-1.2σ)	$\sigma_8(0.61)$	0.5867	$0.587^{+0.023}_{-0.023}$	(-0.6σ)
$\sigma_8/h^{0.5}$	0.9699	$0.969^{+0.036}_{-0.037}$	(-1.5σ)	$100\theta_{\text{D}}$	0.16099	$0.1610^{+0.0015}_{-0.0014}$	(-0.3σ)	$f\sigma_8(2.33)$	0.2962	$0.296^{+0.012}_{-0.012}$	(-0.3σ)
$r_{\text{drag}} h$	100.91	$101.0^{+2.3}_{-2.2}$	$(+1.6\sigma)$	z_{eq}	3333	3334^{+87}_{-86}	(-1.6σ)	$\sigma_8(2.33)$	0.3059	$0.306^{+0.013}_{-0.013}$	$(+0.0\sigma)$
$\langle d^2 \rangle^{1/2}$	2.496	$2.495^{+0.092}_{-0.090}$	$(+1.1\sigma)$	k_{eq}	0.010174	$0.01018^{+0.00027}_{-0.00026}$	(-1.6σ)	χ^2_{lensing}	21.72	23 (ν : 3.4)	
z_{re}	7.732	$7.73^{+0.23}_{-0.21}$	$(+0.3\sigma)$	$100\theta_{\text{eq}}$	0.8254	$0.825^{+0.015}_{-0.015}$	$(+1.6\sigma)$	$\chi^2_{6\text{DF}}$	0.008	0.066 (ν : 0.0)	
$10^9 A_{\text{s}}$	2.136	$2.14^{+0.16}_{-0.15}$	$(+1.3\sigma)$	$100\theta_{\text{s,eq}}$	0.4558	$0.4558^{+0.0081}_{-0.0079}$	$(+1.6\sigma)$	χ^2_{MGS}	1.97	2.07 (ν : 0.3)	
$10^9 A_{\text{s}} e^{-2\tau}$	1.914	$1.91^{+0.15}_{-0.14}$	$(+2.2\sigma)$	$H(0.15)$	73.36	$73.4^{+1.2}_{-1.1}$	$(+1.5\sigma)$	χ^2_{DR12BAO}	3.37	4.3 (ν : 0.8)	
D_{40}	1335	1335^{+130}_{-120}	$(+6.6\sigma)$	$D_M(0.15)$	636.4	636^{+11}_{-11}	(-1.5σ)	χ^2_{prior}	1.3	4.1 (ν : 4.9) (-0.9σ)	
D_{220}	6040	6041^{+530}_{-480}	$(+7.8\sigma)$	$H(0.38)$	83.27	$83.31^{+0.95}_{-0.91}$	$(+1.4\sigma)$	χ^2_{BAO}	5.34	6.4 (ν : 1.4)	
D_{810}	2567	2567^{+210}_{-200}	$(+2.2\sigma)$	$D_M(0.38)$	1520.2	1519^{+22}_{-23}	(-1.4σ)				

Best-fit $\chi^2_{\text{eff}} = 28.33$; $\bar{\chi}^2_{\text{eff}} = 33.48$; $R - 1 = 0.01261$

χ^2_{eff} : BAO - 6DF: 0.01 MGS: 1.97 DR12BAO: 3.37 CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmarged: 21.72

2.206 base_lensing_DESpriors

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
Ω_{m}	0.259	$0.28^{+0.11}_{-0.10}$	(-3.4σ)	$\Omega_{\text{b}}h^2$	0.0276	$0.026^{+0.019}_{-0.015}$	$(+16.2\sigma)$	S_8	0.779	$0.780^{+0.097}_{-0.10}$	(-2.5σ)
Ω_b	0.0541	—		$\Omega_{\text{c}}h^2$	0.1041	$0.112^{+0.044}_{-0.038}$	(-4.0σ)	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.427	$0.427^{+0.053}_{-0.056}$	(-2.5σ)
H_0	71.5	—		Ω_{Λ}	0.741	$0.72^{+0.10}_{-0.11}$	$(+3.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5983	$0.591^{+0.039}_{-0.040}$	(-1.7σ)
$10^9 A_{\text{s}}$	2.73	$2.47^{+0.92}_{-0.81}$	$(+11.1\sigma)$	$\ln(10^{10} A_{\text{s}})$	3.308	$3.19^{+0.35}_{-0.35}$	$(+9.2\sigma)$	χ^2_{lensing}	7.38	$9.6\,(\nu: 2.1)$	
n_{s}	1.037	—		σ_8	0.839	$0.820^{+0.088}_{-0.084}$	$(+0.9\sigma)$				

Best-fit $\chi^2_{\text{eff}} = 7.38$; $\bar{\chi}^2_{\text{eff}} = 9.64$; $R - 1 = 0.01504$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.38

2.207 base_lensing_DESpriors_BAO

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
Ω_m	0.3365	$0.302^{+0.047}_{-0.044}$	(-1.4σ)	$\Omega_c h^2$	0.1204	$0.122^{+0.050}_{-0.043}$	$(+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.5911	$0.598^{+0.039}_{-0.038}$	(-1.1σ)
Ω_b	0.0373	—		Ω_Λ	0.6635	$0.698^{+0.044}_{-0.047}$	$(+1.4\sigma)$	χ^2_{lensing}	8.16	9.9 ($\nu: 2.3$)	
H_0	63.6	70^{+20}_{-10}	$(+2.9\sigma)$	$\ln(10^{10} A_s)$	2.925	$3.07^{+0.33}_{-0.30}$	$(+1.6\sigma)$	$\chi^2_{6\text{DF}}$	0.047	0.08 ($\nu: 0.0$)	
$10^9 A_s$	1.86	$2.18^{+0.77}_{-0.62}$	$(+2.5\sigma)$	σ_8	0.776	$0.808^{+0.053}_{-0.048}$	(-0.5σ)	χ^2_{MGS}	1.16	1.87 ($\nu: 0.3$)	
n_s	0.870	—		S_8	0.822	$0.810^{+0.072}_{-0.067}$	(-1.3σ)	χ^2_{DR12BAO}	2.43	4.7 ($\nu: 1.5$)	
$\Omega_b h^2$	0.0151	$0.025^{+0.022}_{-0.015}$	$(+11.9\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4502	$0.443^{+0.040}_{-0.037}$	(-1.3σ)	χ^2_{BAO}	3.64	6.6 ($\nu: 2.0$)	

Best-fit $\chi^2_{\text{eff}} = 11.80$; $\bar{\chi}^2_{\text{eff}} = 16.52$; $R - 1 = 0.00617$

χ^2_{eff} : BAO - 6DF: 0.05 MGS: 1.16 DR12BAO: 2.43 CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb_consext8_CMBmarged: 8.16

2.208 base_lensing_DESpriors_CookeDH

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
Ω_{m}	0.239	$0.30^{+0.14}_{-0.13}$	(-1.6σ)	$\Omega_{\text{b}}h^2$	0.02224	$0.02218^{+0.00099}_{-0.0010}$	$(+0.3\sigma)$	S_8	0.762	$0.80^{+0.12}_{-0.11}$	(-1.8σ)
Ω_{b}	0.0445	—		$\Omega_{\text{c}}h^2$	0.0966	$0.108^{+0.029}_{-0.026}$	(-6.1σ)	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.417	$0.437^{+0.063}_{-0.062}$	(-1.8σ)
H_0	70.7	67^{+20}_{-10}	$(+0.3\sigma)$	Ω_{Λ}	0.761	$0.70^{+0.13}_{-0.14}$	$(+1.6\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5972	$0.593^{+0.040}_{-0.039}$	(-1.6σ)
$10^9 A_{\text{s}}$	2.89	$2.46^{+0.85}_{-0.79}$	$(+10.6\sigma)$	$\ln(10^{10} A_{\text{s}})$	3.364	$3.18^{+0.33}_{-0.35}$	$(+8.8\sigma)$	χ^2_{lensing}	7.36	$9.6 (\nu: 2.1)$	
n_{s}	1.036	—		σ_8	0.854	$0.808^{+0.11}_{-0.093}$	(-0.4σ)	χ^2_{prior}	0.01	$1.0 (\nu: 1.1)$	(-1.7σ)

Best-fit $\chi^2_{\text{eff}} = 7.37$; $\bar{\chi}^2_{\text{eff}} = 10.57$; $R - 1 = 0.00800$

χ^2_{eff} : CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb_consext8_CMBmarged: 7.36

2.209 base_lensing_DESpriors_CookeDH_BAO

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
Ω_{m}	0.3280	$0.306^{+0.043}_{-0.042}$	(-1.2σ)	Ω_{Λ}	0.6720	$0.694^{+0.042}_{-0.043}$	$(+1.2\sigma)$	$\chi^2_{6\text{DF}}$	0.028	$0.070 (\nu: 0.0)$	
Ω_{b}	0.04619	$0.0480^{+0.0043}_{-0.0039}$		$\ln(10^{10} A_{\text{s}})$	2.890	$3.06^{+0.32}_{-0.26}$	$(+1.5\sigma)$	χ^2_{MGS}	1.28	$1.79 (\nu: 0.3)$	
H_0	69.24	$68.0^{+2.9}_{-2.8}$	$(+1.3\sigma)$	σ_8	0.7835	$0.807^{+0.050}_{-0.045}$	(-0.6σ)	χ^2_{DR12BAO}	2.67	$4.5 (\nu: 1.6)$	
$10^9 A_{\text{s}}$	1.80	$2.17^{+0.71}_{-0.57}$	$(+2.2\sigma)$	S_8	0.819	$0.813^{+0.068}_{-0.068}$	(-1.1σ)	χ^2_{prior}	0.01	$0.99 (\nu: 1.0)$	(-1.7σ)
n_{s}	0.870	—		$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4487	$0.446^{+0.038}_{-0.037}$	(-1.1σ)	χ^2_{BAO}	3.98	$6.4 (\nu: 1.9)$	
$\Omega_{\text{b}}h^2$	0.02215	$0.02219^{+0.00099}_{-0.00097}$	$(+0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5929	$0.599^{+0.038}_{-0.039}$	(-1.0σ)				
$\Omega_{\text{c}}h^2$	0.1345	$0.119^{+0.029}_{-0.028}$	(-0.8σ)	χ^2_{lensing}	8.00	$9.8 (\nu: 2.3)$					

Best-fit $\chi^2_{\text{eff}} = 11.99$; $\bar{\chi}^2_{\text{eff}} = 17.15$; $R - 1 = 0.00446$

χ^2_{eff} : BAO - 6DF: 0.03 MGS: 1.28 DR12BAO: 2.67 CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb_consext8_CMBmarged: 8.00

2.210 base_plikHM_TT

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02256	$0.02242^{+0.00055}_{-0.00055}$ (+1.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4799	$0.478^{+0.028}_{-0.028}$ (+1.4 σ)	$100\theta_{\text{eq}}$	0.8255	$0.821^{+0.023}_{-0.023}$ (+1.2 σ)
$\Omega_c h^2$	0.1172	$0.1182^{+0.0054}_{-0.0052}$ (−1.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6495	$0.643^{+0.033}_{-0.034}$ (+2.7 σ)	$100\theta_{\text{s,eq}}$	0.4556	$0.454^{+0.012}_{-0.012}$ (+1.2 σ)
$100\theta_{\text{MC}}$	1.04130	$1.0411^{+0.0011}_{-0.0011}$ (+0.8 σ)	$\sigma_8/h^{0.5}$	1.061	$1.049^{+0.053}_{-0.057}$ (+3.5 σ)	$H(0.15)$	73.77	$73.3^{+2.1}_{-2.1}$ (+1.4 σ)
τ	0.147	$0.127^{+0.067}_{-0.076}$ (+9.4 σ)	$r_{\text{drag}} h$	101.33	$100.5^{+4.3}_{-4.3}$ (+1.3 σ)	$D_{\text{M}}(0.15)$	632.6	637^{+21}_{-20} (−1.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.222	$3.18^{+0.13}_{-0.14}$ (+8.8 σ)	$\langle d^2 \rangle^{1/2}$	2.618	$2.59^{+0.13}_{-0.14}$ (+3.6 σ)	$H(0.38)$	83.65	$83.3^{+1.6}_{-1.5}$ (+1.4 σ)
n_{s}	0.9756	$0.971^{+0.017}_{-0.017}$ (+1.4 σ)	z_{re}	15.4	$13.8^{+5.1}_{-5.7}$ (+7.7 σ)	$D_{\text{M}}(0.38)$	1511.9	1521^{+42}_{-41} (−1.4 σ)
A_{217}^{CIB}	42.9	46^{+10}_{-10} (−0.3 σ)	$10^9 A_{\text{s}}$	2.508	$2.42^{+0.32}_{-0.33}$ (+9.6 σ)	$H(0.51)$	90.23	$90.0^{+1.3}_{-1.2}$ (+1.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.999	—	$10^9 A_{\text{s}} e^{-2\tau}$	1.8692	$1.873^{+0.032}_{-0.031}$ (−0.8 σ)	$D_{\text{M}}(0.51)$	1960.7	1971^{+50}_{-48} (−1.4 σ)
A_{143}^{tSZ}	6.81	$5.5^{+3.6}_{-3.9}$ (+0.2 σ)	D_{40}	1254.8	1255^{+38}_{-35} (+1.4 σ)	$H(0.61)$	95.75	$95.5^{+1.0}_{-0.96}$ (+1.5 σ)
A_{100}^{PS}	240	254^{+60}_{-60} (−0.3 σ)	D_{220}	5725	5725^{+82}_{-80} (+0.3 σ)	$D_{\text{M}}(0.61)$	2283	2295^{+53}_{-52} (−1.4 σ)
A_{143}^{PS}	49.8	44^{+20}_{-20} (−0.6 σ)	D_{810}	2530.1	2529^{+28}_{-27} (−0.5 σ)	$H(2.33)$	234.93	$235.4^{+3.2}_{-3.0}$ (−1.0 σ)
$A_{143 \times 217}^{\text{PS}}$	57.4	42^{+20}_{-20} (−0.2 σ)	D_{1420}	816.4	814^{+10}_{-10} (−0.0 σ)	$D_{\text{M}}(2.33)$	5743.9	5754^{+43}_{-45} (−1.4 σ)
A_{217}^{PS}	123.1	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.90	$231.5^{+4.2}_{-4.3}$ (+1.1 σ)	$f\sigma_8(0.15)$	0.4860	$0.483^{+0.027}_{-0.027}$ (+1.6 σ)
A^{kSZ}	0.01	< 7.58 (−0.3 σ)	$n_{\text{s},0.002}$	0.9756	$0.971^{+0.017}_{-0.017}$ (+1.4 σ)	$\sigma_8(0.15)$	0.8138	$0.801^{+0.046}_{-0.050}$ (+6.8 σ)
A_{100}^{dustTT}	8.63	$8.7^{+3.6}_{-3.6}$ (−0.1 σ)	Y_{P}	0.245465	$0.24541^{+0.00023}_{-0.00024}$ (+1.3 σ)	$f\sigma_8(0.38)$	0.5092	$0.504^{+0.026}_{-0.027}$ (+2.6 σ)
A_{143}^{dustTT}	10.54	$10.5^{+3.5}_{-3.5}$ (−0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246791	$0.24674^{+0.00023}_{-0.00024}$ (+1.3 σ)	$\sigma_8(0.38)$	0.7230	$0.711^{+0.043}_{-0.046}$ (+7.9 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.0^{+6.4}_{-6.4}$ (−0.1 σ)	10^5D/H	2.552	$2.58^{+0.10}_{-0.10}$ (−1.3 σ)	$f\sigma_8(0.51)$	0.5094	$0.504^{+0.026}_{-0.027}$ (+3.2 σ)
A_{217}^{dustTT}	95.9	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.755	$13.778^{+0.096}_{-0.096}$ (−1.4 σ)	$\sigma_8(0.51)$	0.6773	$0.665^{+0.041}_{-0.044}$ (+8.2 σ)
c_{100}	0.99971	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_*	1089.44	$1089.7^{+1.1}_{-1.0}$ (−1.5 σ)	$f\sigma_8(0.61)$	0.5052	$0.499^{+0.026}_{-0.028}$ (+3.8 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_*	145.02	$144.9^{+1.1}_{-1.1}$ (+0.9 σ)	$\sigma_8(0.61)$	0.6449	$0.633^{+0.039}_{-0.043}$ (+8.5 σ)
y_{cal}	1.00006	$1.0002^{+0.0049}_{-0.0048}$ (−0.1 σ)	$100\theta_*$	1.04147	$1.0413^{+0.0010}_{-0.0010}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.3258	$0.320^{+0.021}_{-0.023}$ (+8.9 σ)
H_0	68.64	$68.1^{+2.4}_{-2.5}$ (+1.4 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.925	$13.91^{+0.10}_{-0.10}$ (+0.8 σ)	$\sigma_8(2.33)$	0.3365	$0.330^{+0.023}_{-0.024}$ (+9.0 σ)
Ω_{Λ}	0.7020	$0.695^{+0.031}_{-0.034}$ (+1.2 σ)	z_{drag}	1060.16	$1059.9^{+1.1}_{-1.0}$ (+1.1 σ)	f_{2000}^{143}	25.7	28^{+7}_{-7} (−1.1 σ)
Ω_{m}	0.2980	$0.305^{+0.034}_{-0.031}$ (−1.2 σ)	r_{drag}	147.63	$147.5^{+1.1}_{-1.1}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	29.7	31^{+5}_{-5} (−1.3 σ)
$\Omega_{\text{m}} h^2$	0.14039	$0.1412^{+0.0051}_{-0.0048}$ (−1.1 σ)	k_{D}	0.14044	$0.1404^{+0.0011}_{-0.0011}$ (−0.2 σ)	f_{2000}^{217}	104.31	$105.8^{+4.6}_{-4.5}$ (−1.2 σ)
$\Omega_{\text{m}} h^3$	0.09635	$0.09619^{+0.00095}_{-0.00095}$ (+0.7 σ)	$100\theta_{\text{D}}$	0.16065	$0.16080^{+0.00059}_{-0.00058}$ (−1.0 σ)	χ_{plik}^2	752.7	767.4 (ν : 15.2) (−0.7 σ)
σ_8	0.879	$0.866^{+0.048}_{-0.052}$ (+6.0 σ)	z_{eq}	3339	3360^{+120}_{-110} (−1.1 σ)	χ_{prior}^2	0.98	7.1 (ν : 6.4) (−0.1 σ)
S_8	0.876	$0.872^{+0.052}_{-0.051}$ (+1.4 σ)	k_{eq}	0.010192	$0.01025^{+0.00037}_{-0.00035}$ (−1.1 σ)			

Best-fit $\chi_{\text{eff}}^2 = 753.73$; $\bar{\chi}_{\text{eff}}^2 = 774.46$; $R - 1 = 0.00674$
 χ_{eff}^2 : CMB - plik_rd12_HM_v22_TT: 752.75

2.211 base_plikHM_TT_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02250	$0.02238^{+0.00054}_{-0.00052}$ (+1.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6370	$0.630^{+0.031}_{-0.032}$ (+1.6 σ)	$H(0.15)$	73.68	$73.3^{+2.0}_{-1.9}$ (+1.4 σ)
$\Omega_c h^2$	0.11728	$0.1181^{+0.0050}_{-0.0049}$ (−1.2 σ)	$\sigma_8/h^{0.5}$	1.041	$1.028^{+0.049}_{-0.052}$ (+2.2 σ)	$D_M(0.15)$	633.5	637^{+19}_{-19} (−1.3 σ)
$100\theta_{MC}$	1.04124	$1.0411^{+0.0010}_{-0.0010}$ (+0.8 σ)	$r_{drag}h$	101.20	$100.6^{+4.0}_{-3.9}$ (+1.3 σ)	$H(0.38)$	83.57	$83.3^{+1.5}_{-1.4}$ (+1.4 σ)
τ	0.126	$0.108^{+0.062}_{-0.065}$ (+6.9 σ)	$\langle d^2 \rangle^{1/2}$	2.564	$2.54^{+0.11}_{-0.12}$ (+2.3 σ)	$D_M(0.38)$	1513.9	1521^{+38}_{-38} (−1.4 σ)
$\ln(10^{10} A_s)$	3.180	$3.15^{+0.12}_{-0.12}$ (+6.4 σ)	z_{re}	13.8	$12.3^{+4.9}_{-5.4}$ (+5.8 σ)	$H(0.51)$	90.16	$90.0^{+1.2}_{-1.1}$ (+1.4 σ)
n_s	0.9756	$0.971^{+0.015}_{-0.015}$ (+1.5 σ)	$10^9 A_s$	2.405	$2.33^{+0.28}_{-0.28}$ (+6.9 σ)	$D_M(0.51)$	1963.1	1971^{+45}_{-45} (−1.4 σ)
y_{cal}	1.00013	$1.0003^{+0.0050}_{-0.0049}$ (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8693	$1.872^{+0.029}_{-0.029}$ (−0.9 σ)	$H(0.61)$	95.68	$95.51^{+0.96}_{-0.88}$ (+1.4 σ)
A_{217}^{CIB}	42.8	46^{+10}_{-10} (−0.3 σ)	D_{40}	1238.9	1240^{+32}_{-31} (+0.4 σ)	$D_M(0.61)$	2285.9	2295^{+48}_{-49} (−1.4 σ)
$\xi^{tSZ \times CIB}$	0.99	—	D_{220}	5715	5718^{+83}_{-81} (+0.1 σ)	$H(2.33)$	234.92	$235.3^{+2.9}_{-2.9}$ (−1.1 σ)
A_{143}^{tSZ}	6.86	$5.5^{+3.7}_{-3.8}$ (+0.2 σ)	D_{810}	2531.7	2531^{+28}_{-27} (−0.4 σ)	$D_M(2.33)$	5747.6	5755^{+40}_{-42} (−1.4 σ)
A_{100}^{PS}	240	254^{+60}_{-60} (−0.3 σ)	D_{1420}	817.1	815^{+10}_{-10} (+0.2 σ)	$f\sigma_8(0.15)$	0.4770	$0.473^{+0.026}_{-0.026}$ (+0.8 σ)
A_{143}^{PS}	50.5	44^{+20}_{-20} (−0.6 σ)	D_{2000}	232.59	$231.4^{+4.1}_{-4.1}$ (+1.0 σ)	$\sigma_8(0.15)$	0.7973	$0.785^{+0.042}_{-0.044}$ (+4.8 σ)
$A_{143 \times 217}^{PS}$	58.0	42^{+20}_{-20} (−0.2 σ)	$n_{s,0.002}$	0.9756	$0.971^{+0.015}_{-0.015}$ (+1.5 σ)	$f\sigma_8(0.38)$	0.4994	$0.494^{+0.024}_{-0.025}$ (+1.5 σ)
A_{217}^{PS}	123.8	115^{+20}_{-20} (+0.0 σ)	Y_P	0.245443	$0.24540^{+0.00022}_{-0.00023}$ (+1.1 σ)	$\sigma_8(0.38)$	0.7082	$0.697^{+0.039}_{-0.040}$ (+5.6 σ)
A^{kSZ}	0.00	< 7.59 (−0.3 σ)	Y_P^{BBN}	0.246770	$0.24672^{+0.00022}_{-0.00023}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4995	$0.494^{+0.024}_{-0.025}$ (+2.0 σ)
A_{100}^{dustTT}	8.74	$8.8^{+3.6}_{-3.6}$ (−0.1 σ)	$10^5 D/H$	2.563	$2.584^{+0.099}_{-0.099}$ (−1.2 σ)	$\sigma_8(0.51)$	0.6634	$0.652^{+0.037}_{-0.038}$ (+5.9 σ)
A_{143}^{dustTT}	10.66	$10.5^{+3.5}_{-3.5}$ (−0.1 σ)	Age/Gyr	13.764	$13.781^{+0.089}_{-0.091}$ (−1.3 σ)	$f\sigma_8(0.61)$	0.4953	$0.489^{+0.024}_{-0.025}$ (+2.4 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.1^{+6.4}_{-6.5}$ (−0.1 σ)	z_*	1089.53	$1089.7^{+1.0}_{-0.99}$ (−1.4 σ)	$\sigma_8(0.61)$	0.6316	$0.621^{+0.036}_{-0.037}$ (+6.1 σ)
A_{217}^{dustTT}	96.2	94^{+10}_{-10} (+0.1 σ)	r_*	145.04	$144.9^{+1.1}_{-1.1}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3190	$0.313^{+0.019}_{-0.019}$ (+6.4 σ)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_*$	1.04141	$1.04131^{+0.00099}_{-0.00099}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3295	$0.323^{+0.020}_{-0.021}$ (+6.6 σ)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.927	$13.918^{+0.097}_{-0.098}$ (+0.9 σ)	f_{2000}^{143}	26.1	28^{+7}_{-7} (−1.0 σ)
H_0	68.53	$68.1^{+2.3}_{-2.2}$ (+1.4 σ)	z_{drag}	1060.05	$1059.8^{+1.1}_{-1.0}$ (+1.0 σ)	$f_{2000}^{143 \times 217}$	30.11	31^{+5}_{-5} (−1.2 σ)
Ω_Λ	0.7010	$0.696^{+0.029}_{-0.031}$ (+1.3 σ)	r_{drag}	147.67	$147.6^{+1.0}_{-1.0}$ (+0.8 σ)	f_{2000}^{217}	104.67	$106.1^{+4.4}_{-4.4}$ (−1.1 σ)
Ω_m	0.2990	$0.304^{+0.031}_{-0.029}$ (−1.3 σ)	k_D	0.14035	$0.1403^{+0.0010}_{-0.0010}$ (−0.4 σ)	χ_{lowl}^2	24.89	25.0 (ν : 1.5) (+0.9 σ)
$\Omega_m h^2$	0.14042	$0.1411^{+0.0047}_{-0.0046}$ (−1.2 σ)	$100\theta_D$	0.16072	$0.16084^{+0.00057}_{-0.00057}$ (−0.9 σ)	χ_{plik}^2	753.5	768.0 (ν : 16.1) (−0.6 σ)
$\Omega_m h^3$	0.09623	$0.09610^{+0.00094}_{-0.00093}$ (+0.5 σ)	z_{eq}	3340	3356^{+110}_{-110} (−1.2 σ)	χ_{prior}^2	1.1	7.2 (ν : 6.5) (−0.0 σ)
σ_8	0.8614	$0.849^{+0.044}_{-0.046}$ (+4.1 σ)	k_{eq}	0.010195	$0.01024^{+0.00034}_{-0.00033}$ (−1.2 σ)	χ_{CMB}^2	778.4	793.0 (ν : 15.1) (−72.7 σ)
S_8	0.860	$0.854^{+0.050}_{-0.050}$ (+0.6 σ)	$100\theta_{eq}$	0.8251	$0.822^{+0.022}_{-0.021}$ (+1.2 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4710	$0.468^{+0.027}_{-0.027}$ (+0.6 σ)	$100\theta_{s,eq}$	0.4555	$0.454^{+0.011}_{-0.011}$ (+1.2 σ)			

Best-fit $\chi_{eff}^2 = 779.48$; $\bar{\chi}_{eff}^2 = 800.20$; $R - 1 = 0.00744$

χ_{eff}^2 : CMB - commander_dx12_v3_2_29: 24.89 plik_rd12_HM_v22_TT: 753.54

2.212 base_plikHM_TT_lowl_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022429	$0.02237^{+0.00042}_{-0.00041}$ (+1.2 σ)	$\sigma_8/h^{0.5}$	1.036	$1.028^{+0.049}_{-0.053}$ (+2.2 σ)	$H(0.38)$	83.37	$83.27^{+0.79}_{-0.75}$ (+1.3 σ)
$\Omega_c h^2$	0.11792	$0.1182^{+0.0025}_{-0.0025}$ (-1.2 σ)	$r_{\text{drag}} h$	100.68	$100.5^{+2.0}_{-2.0}$ (+1.2 σ)	$D_M(0.38)$	1519.1	1522^{+20}_{-20} (-1.3 σ)
$100\theta_{\text{MC}}$	1.04117	$1.04111^{+0.00083}_{-0.00086}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.554	$2.54^{+0.11}_{-0.13}$ (+2.2 σ)	$H(0.51)$	90.00	$89.91^{+0.65}_{-0.62}$ (+1.3 σ)
τ	0.116	$0.107^{+0.051}_{-0.057}$ (+6.8 σ)	z_{re}	13.12	$12.3^{+4.2}_{-4.5}$ (+5.8 σ)	$D_M(0.51)$	1969.2	1972^{+24}_{-24} (-1.3 σ)
$\ln(10^{10} A_s)$	3.163	$3.143^{+0.099}_{-0.11}$ (+6.3 σ)	$10^9 A_s$	2.363	$2.32^{+0.24}_{-0.25}$ (+6.7 σ)	$H(0.61)$	95.55	$95.48^{+0.55}_{-0.53}$ (+1.3 σ)
n_s	0.9735	$0.9709^{+0.0098}_{-0.0094}$ (+1.5 σ)	$10^9 A_s e^{-2\tau}$	1.8728	$1.873^{+0.023}_{-0.023}$ (-0.9 σ)	$D_M(0.61)$	2292.5	2296^{+26}_{-26} (-1.3 σ)
y_{cal}	1.00027	$1.0003^{+0.0049}_{-0.0049}$ (-0.1 σ)	D_{40}	1238.1	1240^{+32}_{-30} (+0.4 σ)	$H(2.33)$	235.27	$235.4^{+1.5}_{-1.6}$ (-1.1 σ)
A_{217}^{CIB}	43.1	46^{+10}_{-10} (-0.3 σ)	D_{220}	5715	5718^{+79}_{-78} (+0.1 σ)	$D_M(2.33)$	5752.9	5757^{+27}_{-26} (-1.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.999	—	D_{810}	2533.5	2531^{+27}_{-26} (-0.4 σ)	$f\sigma_8(0.15)$	0.4767	$0.474^{+0.024}_{-0.025}$ (+0.8 σ)
A_{143}^{tSZ}	6.73	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	D_{1420}	817.0	$815.1^{+9.5}_{-10}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7918	$0.784^{+0.039}_{-0.042}$ (+4.7 σ)
A_{100}^{PS}	242	254^{+50}_{-60} (-0.3 σ)	D_{2000}	232.25	$231.3^{+3.6}_{-3.8}$ (+1.0 σ)	$f\sigma_8(0.38)$	0.4981	$0.494^{+0.024}_{-0.026}$ (+1.5 σ)
A_{143}^{PS}	52.4	45^{+20}_{-20} (-0.6 σ)	$n_{s,0.002}$	0.9735	$0.9709^{+0.0098}_{-0.0094}$ (+1.5 σ)	$\sigma_8(0.38)$	0.7029	$0.696^{+0.035}_{-0.038}$ (+5.5 σ)
$A_{143 \times 217}^{\text{PS}}$	59.3	42^{+20}_{-20} (-0.1 σ)	Y_{P}	0.245419	$0.24539^{+0.00016}_{-0.00017}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4977	$0.494^{+0.024}_{-0.026}$ (+2.0 σ)
A_{217}^{PS}	124.6	115^{+20}_{-20} (+0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246745	$0.24672^{+0.00016}_{-0.00017}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6582	$0.652^{+0.033}_{-0.036}$ (+5.8 σ)
A^{kSZ}	0.00	< 7.60 (-0.3 σ)	$10^5 \text{D}/\text{H}$	2.575	$2.586^{+0.078}_{-0.075}$ (-1.1 σ)	$f\sigma_8(0.61)$	0.4931	$0.489^{+0.024}_{-0.025}$ (+2.4 σ)
A_{100}^{dustTT}	8.74	$8.8^{+3.5}_{-3.5}$ (-0.1 σ)	Age/Gyr	13.775	$13.784^{+0.061}_{-0.060}$ (-1.3 σ)	$\sigma_8(0.61)$	0.6265	$0.620^{+0.032}_{-0.034}$ (+6.0 σ)
A_{143}^{dustTT}	10.65	$10.5^{+3.5}_{-3.5}$ (-0.1 σ)	z_*	1089.66	$1089.76^{+0.63}_{-0.63}$ (-1.3 σ)	$f\sigma_8(2.33)$	0.3163	$0.313^{+0.016}_{-0.017}$ (+6.3 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.1^{+6.4}_{-6.5}$ (-0.0 σ)	r_*	144.92	$144.91^{+0.63}_{-0.62}$ (+0.9 σ)	$\sigma_8(2.33)$	0.3265	$0.323^{+0.017}_{-0.018}$ (+6.5 σ)
A_{217}^{dustTT}	95.8	94^{+10}_{-10} (+0.1 σ)	$100\theta_*$	1.04135	$1.04130^{+0.00082}_{-0.00084}$ (+0.7 σ)	f_{2000}^{143}	26.8	28^{+6}_{-6} (-1.0 σ)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ (-0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.917	$13.916^{+0.061}_{-0.060}$ (+0.9 σ)	$f_{2000}^{143 \times 217}$	30.66	31^{+4}_{-4} (-1.1 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	z_{drag}	1059.93	$1059.81^{+0.93}_{-0.90}$ (+0.9 σ)	f_{2000}^{217}	105.17	$106.2^{+4.1}_{-4.1}$ (-1.0 σ)
H_0	68.22	$68.1^{+1.2}_{-1.2}$ (+1.3 σ)	r_{drag}	147.58	$147.58^{+0.68}_{-0.66}$ (+0.8 σ)	χ_{lowl}^2	24.68	24.9 (ν : 1.4) (+0.8 σ)
Ω_Λ	0.6970	$0.695^{+0.015}_{-0.015}$ (+1.2 σ)	k_{D}	0.14040	$0.14036^{+0.00086}_{-0.00084}$ (-0.4 σ)	χ_{plik}^2	753.8	767.3 (ν : 15.1) (-0.7 σ)
Ω_{m}	0.3030	$0.305^{+0.015}_{-0.015}$ (-1.2 σ)	$100\theta_{\text{D}}$	0.16078	$0.16085^{+0.00053}_{-0.00052}$ (-0.8 σ)	$\chi_{6\text{DF}}^2$	0.002	0.043 (ν : 0.0)
$\Omega_{\text{m}} h^2$	0.14100	$0.1412^{+0.0024}_{-0.0024}$ (-1.1 σ)	z_{eq}	3354	3359^{+57}_{-57} (-1.1 σ)	χ_{MGS}^2	1.82	1.75 (ν : 0.2)
$\Omega_{\text{m}} h^3$	0.09619	$0.09610^{+0.00091}_{-0.00093}$ (+0.5 σ)	k_{eq}	0.010237	$0.01025^{+0.00017}_{-0.00018}$ (-1.1 σ)	χ_{DR12BAO}^2	3.40	4.2 (ν : 0.6)
σ_8	0.8559	$0.848^{+0.042}_{-0.045}$ (+4.1 σ)	$100\theta_{\text{eq}}$	0.8224	$0.821^{+0.011}_{-0.011}$ (+1.2 σ)	χ_{prior}^2	1.0	7.2 (ν : 6.5) (-0.0 σ)
S_8	0.8601	$0.855^{+0.043}_{-0.045}$ (+0.6 σ)	$100\theta_{\text{s,eq}}$	0.4541	$0.4536^{+0.0057}_{-0.0055}$ (+1.2 σ)	χ_{BAO}^2	5.22	6.0 (ν : 0.6)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4711	$0.468^{+0.024}_{-0.025}$ (+0.6 σ)	$H(0.15)$	73.41	$73.3^{+1.0}_{-1.0}$ (+1.3 σ)	χ_{CMB}^2	778.5	792.3 (ν : 13.8) (-72.8 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6350	$0.630^{+0.030}_{-0.033}$ (+1.6 σ)	$D_M(0.15)$	636.1	$637.4^{+9.9}_{-10}$ (-1.3 σ)			

Best-fit $\chi_{\text{eff}}^2 = 784.78$; $\bar{\chi}_{\text{eff}}^2 = 805.42$; $R - 1 = 0.01210$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.40 CMB - commander_dx12_v3.2.29: 24.68 plik_rd12_HM_v22_TT: 753.84

2.213 base_plikHM_TT_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00054}_{-0.00051} (+1.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.631^{+0.030}_{-0.030} (+1.7\sigma)$	$H(0.15)$	$73.4^{+2.0}_{-1.9} (+1.4\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0049}_{-0.0048} (-1.3\sigma)$	$\sigma_8/h^{0.5}$	$1.029^{+0.048}_{-0.047} (+2.3\sigma)$	$D_M(0.15)$	$637^{+19}_{-19} (-1.4\sigma)$
$100\theta_{MC}$	$1.0411^{+0.0010}_{-0.0010} (+0.8\sigma)$	$r_{drag} h$	$100.6^{+4.0}_{-3.8} (+1.3\sigma)$	$H(0.38)$	$83.3^{+1.5}_{-1.4} (+1.5\sigma)$
τ	$0.110^{+0.060}_{-0.058} (+7.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.54^{+0.11}_{-0.11} (+2.3\sigma)$	$D_M(0.38)$	$1520^{+37}_{-38} (-1.4\sigma)$
$\ln(10^{10} A_s)$	$3.15^{+0.11}_{-0.11} (+6.6\sigma)$	z_{re}	$12.5^{+4.4}_{-5.0} (+6.0\sigma)$	$H(0.51)$	$90.0^{+1.2}_{-1.1} (+1.5\sigma)$
n_s	$0.972^{+0.015}_{-0.014} (+1.6\sigma)$	$10^9 A_s$	$2.34^{+0.26}_{-0.25} (+7.1\sigma)$	$D_M(0.51)$	$1971^{+44}_{-45} (-1.4\sigma)$
y_{cal}	$1.0003^{+0.0049}_{-0.0050} (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.872^{+0.029}_{-0.029} (-0.9\sigma)$	$H(0.61)$	$95.53^{+0.95}_{-0.86} (+1.5\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} (-0.3\sigma)$	D_{40}	$1240^{+32}_{-31} (+0.4\sigma)$	$D_M(0.61)$	$2294^{+47}_{-48} (-1.4\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5718^{+83}_{-81} (+0.1\sigma)$	$H(2.33)$	$235.3^{+2.9}_{-2.8} (-1.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.7} (+0.2\sigma)$	D_{810}	$2531^{+28}_{-27} (-0.4\sigma)$	$D_M(2.33)$	$5755^{+39}_{-41} (-1.4\sigma)$
A_{100}^{PS}	$254^{+60}_{-60} (-0.3\sigma)$	D_{1420}	$815^{+10}_{-10} (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.026}_{-0.026} (+0.8\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} (-0.6\sigma)$	D_{2000}	$231.4^{+4.1}_{-4.1} (+1.0\sigma)$	$\sigma_8(0.15)$	$0.786^{+0.041}_{-0.038} (+4.9\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} (-0.2\sigma)$	$n_{s,0.002}$	$0.972^{+0.015}_{-0.014} (+1.6\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.024}_{-0.024} (+1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} (+0.0\sigma)$	Y_P	$0.24540^{+0.00022}_{-0.00022} (+1.2\sigma)$	$\sigma_8(0.38)$	$0.698^{+0.036}_{-0.036} (+5.8\sigma)$
A^{kSZ}	$< 7.53 (-0.3\sigma)$	Y_P^{BBN}	$0.24673^{+0.00022}_{-0.00022} (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.494^{+0.023}_{-0.023} (+2.1\sigma)$
A_{100}^{dustTT}	$8.8^{+3.6}_{-3.6} (-0.1\sigma)$	$10^5 D/H$	$2.582^{+0.096}_{-0.097} (-1.2\sigma)$	$\sigma_8(0.51)$	$0.653^{+0.034}_{-0.035} (+6.1\sigma)$
A_{143}^{dustTT}	$10.5^{+3.5}_{-3.5} (-0.1\sigma)$	Age/Gyr	$13.780^{+0.087}_{-0.090} (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.490^{+0.023}_{-0.023} (+2.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.0^{+6.4}_{-6.5} (-0.1\sigma)$	z_*	$1089.72^{+0.98}_{-0.98} (-1.4\sigma)$	$\sigma_8(0.61)$	$0.622^{+0.033}_{-0.033} (+6.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} (+0.1\sigma)$	r_*	$144.9^{+1.1}_{-1.1} (+1.0\sigma)$	$f\sigma_8(2.33)$	$0.314^{+0.017}_{-0.017} (+6.7\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} (-0.0\sigma)$	$100\theta_*$	$1.04132^{+0.00098}_{-0.00098} (+0.7\sigma)$	$\sigma_8(2.33)$	$0.324^{+0.019}_{-0.019} (+6.8\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} (-0.1\sigma)$	$D_M(z_*)/Gpc$	$13.919^{+0.096}_{-0.096} (+0.9\sigma)$	f_{2000}^{143}	$28^{+6}_{-7} (-1.0\sigma)$
H_0	$68.2^{+2.3}_{-2.2} (+1.4\sigma)$	z_{drag}	$1059.8^{+1.0}_{-0.98} (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} (-1.2\sigma)$
Ω_Λ	$0.696^{+0.029}_{-0.030} (+1.3\sigma)$	r_{drag}	$147.6^{+1.0}_{-1.0} (+0.8\sigma)$	f_{2000}^{217}	$106.0^{+4.3}_{-4.4} (-1.1\sigma)$
Ω_m	$0.304^{+0.030}_{-0.029} (-1.3\sigma)$	k_D	$0.1403^{+0.0010}_{-0.0010} (-0.4\sigma)$	χ_{lowl}^2	$25.0 (\nu: 1.5) (+0.9\sigma)$
$\Omega_m h^2$	$0.1410^{+0.0046}_{-0.0045} (-1.2\sigma)$	$100\theta_D$	$0.16083^{+0.00056}_{-0.00057} (-0.9\sigma)$	χ_{plik}^2	$767.9 (\nu: 15.7) (-0.6\sigma)$
$\Omega_m h^3$	$0.09611^{+0.00094}_{-0.00093} (+0.5\sigma)$	z_{eq}	$3355^{+110}_{-110} (-1.2\sigma)$	χ_{prior}^2	$7.2 (\nu: 6.5) (-0.0\sigma)$
σ_8	$0.850^{+0.043}_{-0.040} (+4.3\sigma)$	k_{eq}	$0.01024^{+0.00033}_{-0.00033} (-1.2\sigma)$	χ_{CMB}^2	$792.9 (\nu: 14.8) (-72.7\sigma)$
S_8	$0.855^{+0.050}_{-0.049} (+0.6\sigma)$	$100\theta_{eq}$	$0.822^{+0.022}_{-0.021} (+1.3\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.468^{+0.027}_{-0.027} (+0.6\sigma)$	$100\theta_{s,eq}$	$0.454^{+0.011}_{-0.011} (+1.3\sigma)$		

$\bar{\chi}_{eff}^2 = 800.08; R - 1 = 0.00767$

2.214 base_plikHM_TT_lowl_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00042}_{-0.00041} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$1.029^{+0.048}_{-0.048} \quad (+2.3\sigma)$	$H(0.38)$	$83.27^{+0.79}_{-0.75} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0025}_{-0.0025} \quad (-1.2\sigma)$	$r_{\text{drag}} h$	$100.5^{+2.0}_{-2.0} \quad (+1.3\sigma)$	$D_M(0.38)$	$1522^{+20}_{-20} \quad (-1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04112^{+0.00083}_{-0.00086} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.54^{+0.11}_{-0.11} \quad (+2.3\sigma)$	$H(0.51)$	$89.92^{+0.65}_{-0.62} \quad (+1.4\sigma)$
τ	$0.108^{+0.050}_{-0.052} \quad (+6.9\sigma)$	z_{re}	$12.4^{+3.8}_{-4.4} \quad (+5.9\sigma)$	$D_M(0.51)$	$1972^{+23}_{-24} \quad (-1.3\sigma)$
$\ln(10^{10} A_s)$	$3.146^{+0.098}_{-0.10} \quad (+6.4\sigma)$	$10^9 A_s$	$2.33^{+0.24}_{-0.23} \quad (+6.8\sigma)$	$H(0.61)$	$95.48^{+0.55}_{-0.53} \quad (+1.4\sigma)$
n_s	$0.9710^{+0.0097}_{-0.0094} \quad (+1.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.873^{+0.023}_{-0.023} \quad (-0.9\sigma)$	$D_M(0.61)$	$2296^{+25}_{-26} \quad (-1.3\sigma)$
y_{cal}	$1.0003^{+0.0048}_{-0.0049} \quad (-0.1\sigma)$	D_{40}	$1240^{+32}_{-30} \quad (+0.4\sigma)$	$H(2.33)$	$235.4^{+1.5}_{-1.6} \quad (-1.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	D_{220}	$5718^{+79}_{-78} \quad (+0.1\sigma)$	$D_M(2.33)$	$5756^{+27}_{-26} \quad (-1.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	$2531^{+27}_{-26} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.023}_{-0.023} \quad (+0.9\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.8} \quad (+0.2\sigma)$	D_{1420}	$815.1^{+9.5}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.785^{+0.039}_{-0.038} \quad (+4.8\sigma)$
A_{100}^{PS}	$254^{+50}_{-60} \quad (-0.3\sigma)$	D_{2000}	$231.3^{+3.6}_{-3.7} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.023}_{-0.023} \quad (+1.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.6\sigma)$	$n_{s,0.002}$	$0.9710^{+0.0097}_{-0.0094} \quad (+1.5\sigma)$	$\sigma_8(0.38)$	$0.697^{+0.035}_{-0.034} \quad (+5.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24539^{+0.00016}_{-0.00017} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.494^{+0.023}_{-0.023} \quad (+2.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24672^{+0.00016}_{-0.00017} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.652^{+0.033}_{-0.032} \quad (+5.9\sigma)$
A^{kSZ}	$< 7.59 \quad (-0.3\sigma)$	$10^5 \text{D}/\text{H}$	$2.586^{+0.077}_{-0.075} \quad (-1.2\sigma)$	$f\sigma_8(0.61)$	$0.490^{+0.023}_{-0.023} \quad (+2.5\sigma)$
A_{100}^{dustTT}	$8.8^{+3.5}_{-3.5} \quad (-0.1\sigma)$	Age/Gyr	$13.783^{+0.060}_{-0.060} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.621^{+0.031}_{-0.031} \quad (+6.1\sigma)$
A_{143}^{dustTT}	$10.5^{+3.5}_{-3.5} \quad (-0.1\sigma)$	z_*	$1089.76^{+0.63}_{-0.63} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.313^{+0.016}_{-0.016} \quad (+6.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.1^{+6.4}_{-6.4} \quad (-0.1\sigma)$	r_*	$144.91^{+0.63}_{-0.62} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.323^{+0.017}_{-0.017} \quad (+6.6\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$100\theta_*$	$1.04130^{+0.00082}_{-0.00084} \quad (+0.7\sigma)$	f_{2000}^{143}	$28^{+6}_{-6} \quad (-1.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.916^{+0.061}_{-0.060} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-1.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{drag}	$1059.81^{+0.92}_{-0.87} \quad (+0.9\sigma)$	f_{2000}^{217}	$106.2^{+4.1}_{-4.0} \quad (-1.0\sigma)$
H_0	$68.1^{+1.2}_{-1.2} \quad (+1.3\sigma)$	r_{drag}	$147.58^{+0.68}_{-0.66} \quad (+0.8\sigma)$	χ_{lowl}^2	$25.0 \quad (\nu: 1.4) \quad (+0.8\sigma)$
Ω_Λ	$0.695^{+0.015}_{-0.015} \quad (+1.2\sigma)$	k_{D}	$0.14036^{+0.00086}_{-0.00084} \quad (-0.4\sigma)$	χ_{plik}^2	$767.2 \quad (\nu: 14.7) \quad (-0.8\sigma)$
Ω_{m}	$0.305^{+0.015}_{-0.015} \quad (-1.2\sigma)$	$100\theta_{\text{D}}$	$0.16084^{+0.00052}_{-0.00052} \quad (-0.9\sigma)$	$\chi_{6\text{DF}}^2$	$0.043 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1412^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	z_{eq}	$3358^{+57}_{-57} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.76 \quad (\nu: 0.2)$
$\Omega_{\text{m}} h^3$	$0.09610^{+0.00091}_{-0.00092} \quad (+0.5\sigma)$	k_{eq}	$0.01025^{+0.00017}_{-0.00018} \quad (-1.1\sigma)$	χ_{DR12BAO}^2	$4.2 \quad (\nu: 0.6)$
σ_8	$0.849^{+0.041}_{-0.041} \quad (+4.2\sigma)$	$100\theta_{\text{eq}}$	$0.821^{+0.011}_{-0.011} \quad (+1.2\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.5) \quad (-0.0\sigma)$
S_8	$0.856^{+0.043}_{-0.042} \quad (+0.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4536^{+0.0057}_{-0.0054} \quad (+1.2\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.469^{+0.023}_{-0.023} \quad (+0.7\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (+1.3\sigma)$	χ_{CMB}^2	$792.2 \quad (\nu: 13.6) \quad (-72.9\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.631^{+0.030}_{-0.030} \quad (+1.7\sigma)$	$D_M(0.15)$	$637.3^{+9.9}_{-9.9} \quad (-1.3\sigma)$		
$\bar{\chi}_{\text{eff}}^2 = 805.33; R - 1 = 0.01264$					

2.215 base_plikHM_TT_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022073	$0.02205^{+0.00043}_{-0.00042}$ (-0.3σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6170	$0.617^{+0.024}_{-0.023}$ $(+0.5\sigma)$	$H(0.15)$	71.88	$71.8^{+1.6}_{-1.5}$ (-0.5σ)
$\Omega_{\mathrm{c}}h^2$	0.12172	$0.1218^{+0.0042}_{-0.0042}$ $(+0.6\sigma)$	$\sigma_8/h^{0.5}$	1.0009	$1.001^{+0.032}_{-0.032}$ $(+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	651.4	652^{+16}_{-16} $(+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	1.04068	$1.04065^{+0.00093}_{-0.00095}$ (-0.3σ)	$r_{\mathrm{drag}}h$	97.64	$97.6^{+3.3}_{-3.2}$ (-0.6σ)	$H(0.38)$	82.26	$82.2^{+1.1}_{-1.1}$ (-0.5σ)
τ	0.0520	$0.051^{+0.016}_{-0.016}$ (-0.1σ)	$\langle d^2 \rangle^{1/2}$	2.474	$2.477^{+0.078}_{-0.076}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	1549.8	1551^{+32}_{-32} $(+0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0431	$3.042^{+0.033}_{-0.032}$ $(+0.1\sigma)$	z_{re}	7.54	$7.5^{+1.6}_{-1.7}$ (-0.0σ)	$H(0.51)$	89.13	$89.10^{+0.88}_{-0.83}$ (-0.5σ)
n_{s}	0.9600	$0.959^{+0.012}_{-0.012}$ (-0.7σ)	$10^9 A_{\mathrm{s}}$	2.097	$2.096^{+0.069}_{-0.066}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	2005.2	2007^{+37}_{-37} $(+0.5\sigma)$
y_{cal}	1.0002	$1.0004^{+0.0050}_{-0.0050}$ $(+0.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8898	$1.891^{+0.028}_{-0.027}$ $(+0.5\sigma)$	$H(0.61)$	94.86	$94.84^{+0.70}_{-0.66}$ (-0.5σ)
A_{217}^{CIB}	49.7	48^{+10}_{-10} $(+0.1\sigma)$	D_{40}	1239.9	1243^{+31}_{-31} $(+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	2331.3	2333^{+39}_{-39} $(+0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.22	—	D_{220}	5713	5718^{+81}_{-84} $(+0.1\sigma)$	$H(2.33)$	237.38	$237.4^{+2.6}_{-2.5}$ $(+0.6\sigma)$
A_{143}^{tSZ}	7.03	$4.9^{+3.9}_{-3.9}$ (-0.1σ)	D_{810}	2538.0	2537^{+27}_{-27} $(+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5783.3	5785^{+31}_{-32} $(+0.4\sigma)$
A_{100}^{PS}	257	266^{+60}_{-60} $(+0.1\sigma)$	D_{1420}	814.2	813^{+10}_{-10} (-0.2σ)	$f\sigma_8(0.15)$	0.4700	$0.470^{+0.025}_{-0.024}$ $(+0.6\sigma)$
A_{143}^{PS}	49.6	50^{+20}_{-20} $(+0.2\sigma)$	D_{2000}	229.46	$229.1^{+3.6}_{-3.7}$ (-0.2σ)	$\sigma_8(0.15)$	0.7523	$0.752^{+0.015}_{-0.014}$ $(+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	45.1	44^{+20}_{-20} $(+0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9600	$0.959^{+0.012}_{-0.012}$ (-0.7σ)	$f\sigma_8(0.38)$	0.4848	$0.485^{+0.019}_{-0.019}$ $(+0.5\sigma)$
A_{217}^{PS}	118.5	115^{+20}_{-20} (-0.0σ)	Y_{P}	0.245272	$0.24525^{+0.00018}_{-0.00020}$ (-0.3σ)	$\sigma_8(0.38)$	0.6651	$0.665^{+0.012}_{-0.012}$ $(+0.2\sigma)$
A^{kSZ}	0.0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246598	$0.24658^{+0.00018}_{-0.00020}$ (-0.3σ)	$f\sigma_8(0.51)$	0.4816	$0.482^{+0.016}_{-0.016}$ $(+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.79	$8.8^{+3.5}_{-3.6}$ (-0.1σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.642	$2.647^{+0.082}_{-0.081}$ $(+0.3\sigma)$	$\sigma_8(0.51)$	0.6218	$0.621^{+0.011}_{-0.011}$ $(+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.79	$10.7^{+3.5}_{-3.5}$ (-0.0σ)	Age/Gyr	13.842	$13.845^{+0.071}_{-0.071}$ $(+0.4\sigma)$	$f\sigma_8(0.61)$	0.4753	$0.475^{+0.014}_{-0.014}$ $(+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.4	$18.3^{+6.5}_{-6.5}$ $(+0.0\sigma)$	z_*	1090.45	$1090.49^{+0.81}_{-0.79}$ $(+0.5\sigma)$	$\sigma_8(0.61)$	0.5912	$0.591^{+0.010}_{-0.0099}$ $(+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.5	93^{+10}_{-10} (-0.0σ)	r_*	144.22	$144.21^{+0.96}_{-0.96}$ (-0.5σ)	$f\sigma_8(2.33)$	0.2975	$0.2972^{+0.0051}_{-0.0049}$ $(+0.1\sigma)$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$100\theta_*$	1.04089	$1.04086^{+0.00092}_{-0.00093}$ (-0.2σ)	$\sigma_8(2.33)$	0.3060	$0.3057^{+0.0054}_{-0.0052}$ (-0.1σ)
c_{217}	0.99828	$0.9983^{+0.0012}_{-0.0013}$ $(+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.855	$13.855^{+0.089}_{-0.089}$ (-0.5σ)	f_{2000}^{143}	31.2	32^{+6}_{-6} $(+0.3\sigma)$
H_0	66.43	$66.4^{+1.8}_{-1.8}$ (-0.5σ)	z_{drag}	1059.36	$1059.32^{+0.88}_{-0.87}$ (-0.2σ)	$f_{2000}^{143 \times 217}$	33.79	34^{+4}_{-4} $(+0.3\sigma)$
Ω_{Λ}	0.6727	$0.672^{+0.026}_{-0.028}$ (-0.6σ)	r_{drag}	146.97	$146.97^{+0.97}_{-0.97}$ (-0.5σ)	f_{2000}^{217}	108.16	$108.6^{+3.7}_{-3.7}$ $(+0.2\sigma)$
Ω_{m}	0.3273	$0.328^{+0.028}_{-0.026}$ $(+0.6\sigma)$	k_{D}	0.14076	$0.1407^{+0.0010}_{-0.0011}$ $(+0.4\sigma)$	χ_{simall}^2	395.90	$397.0 (\nu: 1.5)$ $(+0.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14443	$0.1445^{+0.0040}_{-0.0040}$ $(+0.6\sigma)$	$100\theta_{\mathrm{D}}$	0.16109	$0.16112^{+0.00052}_{-0.00052}$ $(+0.2\sigma)$	χ_{plik}^2	758.3	$771.1 (\nu: 14.3)$ (-0.1σ)
$\Omega_{\mathrm{m}}h^3$	0.09595	$0.09590^{+0.00090}_{-0.00088}$ $(+0.0\sigma)$	z_{eq}	3436	3438^{+97}_{-95} $(+0.6\sigma)$	χ_{prior}^2	1.4	$7.3 (\nu: 6.9)$ $(+0.0\sigma)$
σ_8	0.8158	$0.815^{+0.018}_{-0.017}$ $(+0.4\sigma)$	k_{eq}	0.010487	$0.01049^{+0.00030}_{-0.00029}$ $(+0.6\sigma)$	χ_{CMB}^2	1154.2	$1168.0 (\nu: 15.2)$ (-4.4σ)
S_8	0.8520	$0.853^{+0.050}_{-0.048}$ $(+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	0.8063	$0.806^{+0.018}_{-0.017}$ (-0.6σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4667	$0.467^{+0.027}_{-0.026}$ $(+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4459	$0.4458^{+0.0092}_{-0.0090}$ (-0.6σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1155.55$; $\bar{\chi}_{\mathrm{eff}}^2 = 1175.37$; $R - 1 = 0.00555$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.90 plik_rd12_HM_v22_TT: 758.28

2.216 base_plikHM_TTTEEE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022555	$0.02253^{+0.00033}_{-0.00033}$ (+1.9 σ)	$\Omega_{\mathrm{m}}h^2$	0.14173	$0.1418^{+0.0030}_{-0.0029}$ (−0.8 σ)	z_{eq}	3372	3373^{+71}_{-69} (−0.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.11853	$0.1186^{+0.0032}_{-0.0031}$ (−1.0 σ)	$\Omega_{\mathrm{m}}h^3$	0.09649	$0.09646^{+0.00058}_{-0.00057}$ (+1.2 σ)	k_{eq}	0.010290	$0.01030^{+0.00022}_{-0.00021}$ (−0.8 σ)
$100\theta_{\mathrm{MC}}$	1.04109	$1.04108^{+0.00064}_{-0.00064}$ (+0.7 σ)	σ_8	0.8637	$0.860^{+0.037}_{-0.038}$ (+5.4 σ)	$100\theta_{\mathrm{eq}}$	0.8195	$0.819^{+0.014}_{-0.013}$ (+0.9 σ)
τ	0.123	$0.120^{+0.050}_{-0.052}$ (+8.4 σ)	S_8	0.8720	$0.870^{+0.038}_{-0.038}$ (+1.3 σ)	$100\theta_{\mathrm{s,eq}}$	0.4525	$0.4523^{+0.0069}_{-0.0069}$ (+0.9 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.179	$3.171^{+0.094}_{-0.099}$ (+8.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4776	$0.476^{+0.021}_{-0.021}$ (+1.3 σ)	$H(0.15)$	73.30	$73.3^{+1.2}_{-1.2}$ (+1.3 σ)
n_{s}	0.9715	$0.970^{+0.011}_{-0.011}$ (+1.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6423	$0.640^{+0.026}_{-0.027}$ (+2.5 σ)	$D_{\mathrm{M}}(0.15)$	637.2	638^{+12}_{-12} (−1.3 σ)
A_{217}^{CIB}	42.8	45^{+10}_{-10} (−0.4 σ)	$\sigma_8/h^{0.5}$	1.0468	$1.043^{+0.043}_{-0.044}$ (+3.2 σ)	$H(0.38)$	83.33	$83.30^{+0.91}_{-0.87}$ (+1.4 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	1.00	—	$r_{\mathrm{drag}}h$	100.26	$100.2^{+2.5}_{-2.4}$ (+1.1 σ)	$D_{\mathrm{M}}(0.38)$	1521.1	1522^{+24}_{-24} (−1.3 σ)
A_{143}^{tSZ}	6.83	$5.7^{+3.7}_{-3.6}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.585	$2.58^{+0.10}_{-0.10}$ (+3.3 σ)	$H(0.51)$	89.99	$89.97^{+0.72}_{-0.69}$ (+1.5 σ)
A_{100}^{PS}	241	251^{+50}_{-50} (−0.4 σ)	z_{re}	13.65	$13.3^{+3.8}_{-4.0}$ (+7.0 σ)	$D_{\mathrm{M}}(0.51)$	1971.3	1972^{+28}_{-28} (−1.3 σ)
A_{143}^{PS}	50.2	43^{+20}_{-20} (−0.8 σ)	$10^9 A_{\mathrm{s}}$	2.402	$2.39^{+0.23}_{-0.23}$ (+8.6 σ)	$H(0.61)$	95.58	$95.55^{+0.58}_{-0.55}$ (+1.6 σ)
$A_{143\times 217}^{\mathrm{PS}}$	57.9	42^{+20}_{-20} (−0.2 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8762	$1.876^{+0.025}_{-0.024}$ (−0.6 σ)	$D_{\mathrm{M}}(0.61)$	2294.6	2296^{+30}_{-30} (−1.3 σ)
A_{217}^{PS}	124.0	116^{+20}_{-20} (+0.1 σ)	D_{40}	1249.1	1252^{+30}_{-29} (+1.2 σ)	$H(2.33)$	235.79	$235.8^{+1.9}_{-1.8}$ (−0.7 σ)
A^{kSZ}	0.00	< 6.92 (−0.4 σ)	D_{220}	5733	5737^{+76}_{-75} (+0.6 σ)	$D_{\mathrm{M}}(2.33)$	5750.2	5751^{+25}_{-25} (−1.6 σ)
$A_{100}^{\mathrm{dustTT}}$	8.56	$8.7^{+3.6}_{-3.6}$ (−0.1 σ)	D_{810}	2533.8	2532^{+27}_{-27} (−0.3 σ)	$f\sigma_8(0.15)$	0.4830	$0.482^{+0.020}_{-0.021}$ (+1.5 σ)
$A_{143}^{\mathrm{dustTT}}$	10.70	$10.5^{+3.5}_{-3.5}$ (−0.1 σ)	D_{1420}	817.0	$815.7^{+9.3}_{-9.5}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7987	$0.796^{+0.035}_{-0.036}$ (+6.2 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.8	$18.1^{+6.4}_{-6.4}$ (−0.1 σ)	D_{2000}	232.62	$232.0^{+3.2}_{-3.3}$ (+1.4 σ)	$f\sigma_8(0.38)$	0.5039	$0.502^{+0.020}_{-0.021}$ (+2.4 σ)
$A_{217}^{\mathrm{dustTT}}$	95.3	93^{+10}_{-10} (+0.0 σ)	$n_{\mathrm{s},0.002}$	0.9715	$0.970^{+0.011}_{-0.011}$ (+1.3 σ)	$\sigma_8(0.38)$	0.7087	$0.706^{+0.032}_{-0.033}$ (+7.1 σ)
$A_{100}^{\mathrm{dustTE}}$	0.112	$0.113^{+0.074}_{-0.074}$	Y_{P}	0.245464	$0.24546^{+0.00013}_{-0.00013}$ (+1.7 σ)	$f\sigma_8(0.51)$	0.5031	$0.501^{+0.020}_{-0.021}$ (+3.0 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.058}_{-0.057}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246791	$0.24678^{+0.00013}_{-0.00013}$ (+1.7 σ)	$\sigma_8(0.51)$	0.6635	$0.661^{+0.031}_{-0.031}$ (+7.4 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	$10^5\mathrm{D}/\mathrm{H}$	2.552	$2.557^{+0.061}_{-0.059}$ (−1.8 σ)	$f\sigma_8(0.61)$	0.4983	$0.497^{+0.020}_{-0.021}$ (+3.5 σ)
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.22^{+0.11}_{-0.10}$	Age/Gyr	13.768	$13.771^{+0.055}_{-0.056}$ (−1.6 σ)	$\sigma_8(0.61)$	0.6315	$0.629^{+0.030}_{-0.030}$ (+7.6 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	z_*	1089.56	$1089.60^{+0.63}_{-0.62}$ (−1.7 σ)	$f\sigma_8(2.33)$	0.3187	$0.317^{+0.015}_{-0.016}$ (+8.0 σ)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.06^{+0.52}_{-0.52}$	r_*	144.67	$144.66^{+0.68}_{-0.67}$ (+0.4 σ)	$\sigma_8(2.33)$	0.3288	$0.327^{+0.016}_{-0.017}$ (+8.1 σ)
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_*$	1.04125	$1.04124^{+0.00062}_{-0.00063}$ (+0.6 σ)	f_{2000}^{143}	25.9	27^{+6}_{-6} (−1.4 σ)
c_{217}	0.99812	$0.9981^{+0.0012}_{-0.0012}$ (−0.2 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.894	$13.893^{+0.062}_{-0.062}$ (+0.4 σ)	$f_{2000}^{143\times 217}$	29.92	30^{+4}_{-4} (−1.6 σ)
y_{cal}	0.99995	$1.0001^{+0.0049}_{-0.0050}$ (−0.1 σ)	z_{drag}	1060.28	$1060.21^{+0.64}_{-0.62}$ (+1.8 σ)	f_{2000}^{217}	104.56	$105.3^{+3.8}_{-3.8}$ (−1.5 σ)
H_0	68.08	$68.0^{+1.4}_{-1.4}$ (+1.3 σ)	r_{drag}	147.27	$147.28^{+0.64}_{-0.64}$ (+0.1 σ)	χ_{plik}^2	2337.1	2353.9 (ν : 16.5) (+290.3 σ)
Ω_{Λ}	0.6942	$0.693^{+0.019}_{-0.019}$ (+1.1 σ)	k_{D}	0.14081	$0.14079^{+0.00065}_{-0.00064}$ (+0.5 σ)	χ_{prior}^2	1.3	11.2 (ν : 9.5) (+1.1 σ)
Ω_{m}	0.3058	$0.307^{+0.019}_{-0.019}$ (−1.1 σ)	$100\theta_{\mathrm{D}}$	0.160577	$0.16061^{+0.00037}_{-0.00035}$ (−1.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2338.36$; $\bar{\chi}_{\mathrm{eff}}^2 = 2365.14$; $R - 1 = 0.00675$

χ_{eff}^2 : CMB - plik_rd12_HM_v22b_TTTEEE: 2337.05

2.217 base_plikHM_TTTEEE_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022555	$0.02251^{+0.00032}_{-0.00032}$ (+1.8 σ)	$\Omega_{\mathrm{m}}h^3$	0.09646	$0.09641^{+0.00057}_{-0.00059}$ (+1.1 σ)	$100\theta_{\mathrm{eq}}$	0.8205	$0.820^{+0.013}_{-0.013}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.11829	$0.1185^{+0.0030}_{-0.0030}$ (−1.0 σ)	σ_8	0.8551	$0.848^{+0.035}_{-0.037}$ (+4.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.4530	$0.4526^{+0.0067}_{-0.0065}$ (+0.9 σ)
$100\theta_{\mathrm{MC}}$	1.04110	$1.04108^{+0.00063}_{-0.00064}$ (+0.7 σ)	S_8	0.8614	$0.857^{+0.036}_{-0.037}$ (+0.7 σ)	$H(0.15)$	73.38	$73.3^{+1.2}_{-1.2}$ (+1.3 σ)
τ	0.1141	$0.106^{+0.046}_{-0.049}$ (+6.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4718	$0.469^{+0.020}_{-0.020}$ (+0.7 σ)	$D_{\mathrm{M}}(0.15)$	636.4	637^{+12}_{-12} (−1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.160	$3.143^{+0.089}_{-0.095}$ (+6.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6352	$0.631^{+0.024}_{-0.026}$ (+1.7 σ)	$H(0.38)$	83.38	$83.31^{+0.88}_{-0.85}$ (+1.4 σ)
n_{s}	0.9730	$0.971^{+0.010}_{-0.010}$ (+1.4 σ)	$\sigma_8/h^{0.5}$	1.0356	$1.028^{+0.040}_{-0.042}$ (+2.2 σ)	$D_{\mathrm{M}}(0.38)$	1519.6	1522^{+23}_{-23} (−1.3 σ)
y_{cal}	1.00020	$1.0003^{+0.0048}_{-0.0048}$ (−0.1 σ)	$r_{\mathrm{drag}}h$	100.44	$100.3^{+2.4}_{-2.3}$ (+1.1 σ)	$H(0.51)$	90.03	$89.97^{+0.70}_{-0.67}$ (+1.5 σ)
A_{217}^{CIB}	42.5	45^{+10}_{-10} (−0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.554	$2.541^{+0.094}_{-0.10}$ (+2.3 σ)	$D_{\mathrm{M}}(0.51)$	1969.6	1972^{+27}_{-27} (−1.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	1.00	—	z_{re}	12.90	$12.2^{+3.8}_{-4.0}$ (+5.7 σ)	$H(0.61)$	95.60	$95.55^{+0.56}_{-0.54}$ (+1.5 σ)
A_{143}^{tSZ}	6.85	$5.7^{+3.6}_{-3.6}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}$	2.356	$2.32^{+0.21}_{-0.21}$ (+6.6 σ)	$D_{\mathrm{M}}(0.61)$	2292.8	2295^{+29}_{-30} (−1.3 σ)
A_{100}^{PS}	239	251^{+50}_{-50} (−0.4 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8754	$1.875^{+0.024}_{-0.024}$ (−0.7 σ)	$H(2.33)$	235.64	$235.7^{+1.8}_{-1.8}$ (−0.8 σ)
A_{143}^{PS}	49.7	43^{+20}_{-20} (−0.8 σ)	D_{40}	1239.7	1241^{+27}_{-27} (+0.5 σ)	$D_{\mathrm{M}}(2.33)$	5749.3	5752^{+24}_{-24} (−1.6 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	57.7	42^{+20}_{-20} (−0.2 σ)	D_{220}	5728	5731^{+75}_{-75} (+0.4 σ)	$f\sigma_8(0.15)$	0.4773	$0.474^{+0.019}_{-0.020}$ (+0.9 σ)
A_{217}^{PS}	124.3	116^{+20}_{-20} (+0.1 σ)	D_{810}	2535.6	2534^{+27}_{-26} (−0.2 σ)	$\sigma_8(0.15)$	0.7909	$0.785^{+0.033}_{-0.035}$ (+4.7 σ)
A^{kSZ}	0.00	< 7.01 (−0.4 σ)	D_{1420}	818.3	$816.7^{+9.1}_{-9.1}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4983	$0.495^{+0.019}_{-0.020}$ (+1.6 σ)
$A_{100}^{\mathrm{dustTT}}$	8.68	$8.8^{+3.7}_{-3.6}$ (−0.1 σ)	D_{2000}	232.84	$232.0^{+3.2}_{-3.3}$ (+1.4 σ)	$\sigma_8(0.38)$	0.7019	$0.696^{+0.030}_{-0.031}$ (+5.5 σ)
$A_{143}^{\mathrm{dustTT}}$	10.72	$10.6^{+3.5}_{-3.5}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9730	$0.971^{+0.010}_{-0.010}$ (+1.4 σ)	$f\sigma_8(0.51)$	0.4977	$0.494^{+0.019}_{-0.020}$ (+2.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.8	$18.2^{+6.4}_{-6.4}$ (−0.0 σ)	Y_{P}	0.245464	$0.24545^{+0.00012}_{-0.00012}$ (+1.7 σ)	$\sigma_8(0.51)$	0.6572	$0.652^{+0.029}_{-0.030}$ (+5.8 σ)
$A_{217}^{\mathrm{dustTT}}$	95.5	94^{+10}_{-10} (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246791	$0.24678^{+0.00012}_{-0.00012}$ (+1.7 σ)	$f\sigma_8(0.61)$	0.4930	$0.489^{+0.019}_{-0.020}$ (+2.5 σ)
$A_{100}^{\mathrm{dustTE}}$	0.113	$0.113^{+0.075}_{-0.075}$	$10^5 \mathrm{D}/\mathrm{H}$	2.552	$2.560^{+0.059}_{-0.057}$ (−1.8 σ)	$\sigma_8(0.61)$	0.6255	$0.620^{+0.028}_{-0.029}$ (+5.9 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.134^{+0.058}_{-0.057}$	Age/Gyr	13.766	$13.772^{+0.054}_{-0.054}$ (−1.6 σ)	$f\sigma_8(2.33)$	0.3157	$0.313^{+0.014}_{-0.015}$ (+6.3 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.477	$0.48^{+0.17}_{-0.16}$	z_*	1089.54	$1089.61^{+0.61}_{-0.59}$ (−1.7 σ)	$\sigma_8(2.33)$	0.3258	$0.323^{+0.015}_{-0.016}$ (+6.4 σ)
$A_{143}^{\mathrm{dustTE}}$	0.221	$0.22^{+0.10}_{-0.10}$	r_*	144.73	$144.71^{+0.65}_{-0.65}$ (+0.5 σ)	f_{2000}^{143}	25.7	27^{+6}_{-6} (−1.4 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	1.04127	$1.04125^{+0.00063}_{-0.00063}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	29.78	30^{+4}_{-4} (−1.6 σ)
$A_{217}^{\mathrm{dustTE}}$	2.06	$2.07^{+0.52}_{-0.53}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.900	$13.897^{+0.060}_{-0.060}$ (+0.5 σ)	f_{2000}^{217}	104.53	$105.4^{+3.8}_{-3.7}$ (−1.4 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.24	$1060.16^{+0.61}_{-0.61}$ (+1.7 σ)	χ_{lowl}^2	24.77	25.0 (ν : 1.0) (+0.8 σ)
c_{217}	0.99812	$0.9981^{+0.0012}_{-0.0012}$ (−0.2 σ)	r_{drag}	147.34	$147.33^{+0.63}_{-0.63}$ (+0.2 σ)	χ_{plik}^2	2337.6	2354.2 (ν : 17.3) (+290.4 σ)
H_0	68.17	$68.1^{+1.4}_{-1.4}$ (+1.3 σ)	k_{D}	0.14075	$0.14073^{+0.00065}_{-0.00064}$ (+0.3 σ)	χ_{prior}^2	1.3	11.3 (ν : 10.0) (+1.1 σ)
Ω_{Λ}	0.6955	$0.694^{+0.018}_{-0.018}$ (+1.1 σ)	$100\theta_{\mathrm{D}}$	0.160589	$0.16064^{+0.00036}_{-0.00035}$ (−1.6 σ)	χ_{CMB}^2	2362.3	2379.2 (ν : 16.7) (+216.1 σ)
Ω_{m}	0.3045	$0.306^{+0.018}_{-0.018}$ (−1.1 σ)	z_{eq}	3366	3370^{+67}_{-67} (−0.9 σ)			
$\Omega_{\mathrm{m}}h^2$	0.14149	$0.1417^{+0.0028}_{-0.0028}$ (−0.9 σ)	k_{eq}	0.010273	$0.01029^{+0.00020}_{-0.00021}$ (−0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2363.64$; $\bar{\chi}_{\mathrm{eff}}^2 = 2390.54$; $R - 1 = 0.00817$

χ_{eff}^2 : CMB - commander_dx12.v3.2.29: 24.77 plik_rd12_HM.v22b_TTTEEE: 2337.58

2.218 base_plikHM_TTTEEE_lowl_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022555	$0.02252^{+0.00028}_{-0.00028}$ (+1.8 σ)	σ_8	0.8549	$0.849^{+0.033}_{-0.036}$ (+4.2 σ)	$H(0.15)$	73.39	$73.33^{+0.83}_{-0.81}$ (+1.4 σ)
$\Omega_c h^2$	0.11828	$0.1184^{+0.0021}_{-0.0021}$ (−1.1 σ)	S_8	0.8611	$0.856^{+0.034}_{-0.035}$ (+0.7 σ)	$D_M(0.15)$	636.4	$637.0^{+8.0}_{-8.0}$ (−1.3 σ)
$100\theta_{MC}$	1.04110	$1.04110^{+0.00058}_{-0.00058}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4716	$0.469^{+0.019}_{-0.019}$ (+0.7 σ)	$H(0.38)$	83.38	$83.34^{+0.62}_{-0.60}$ (+1.5 σ)
τ	0.1142	$0.107^{+0.042}_{-0.045}$ (+6.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6350	$0.631^{+0.024}_{-0.026}$ (+1.7 σ)	$D_M(0.38)$	1519.5	1521^{+16}_{-16} (−1.4 σ)
$\ln(10^{10} A_s)$	3.159	$3.145^{+0.081}_{-0.088}$ (+6.4 σ)	$\sigma_8/h^{0.5}$	1.0353	$1.029^{+0.039}_{-0.042}$ (+2.2 σ)	$H(0.51)$	90.034	$89.99^{+0.50}_{-0.49}$ (+1.5 σ)
n_s	0.9728	$0.9710^{+0.0083}_{-0.0081}$ (+1.5 σ)	$r_{drag} h$	100.45	$100.4^{+1.6}_{-1.6}$ (+1.2 σ)	$D_M(0.51)$	1969.5	1971^{+19}_{-19} (−1.4 σ)
y_{cal}	0.99998	$1.0003^{+0.0049}_{-0.0048}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.554	$2.542^{+0.091}_{-0.10}$ (+2.3 σ)	$H(0.61)$	95.603	$95.57^{+0.41}_{-0.40}$ (+1.6 σ)
A_{217}^{CIB}	42.4	45^{+10}_{-10} (−0.4 σ)	z_{re}	12.91	$12.3^{+3.4}_{-3.6}$ (+5.8 σ)	$D_M(0.61)$	2292.7	2294^{+21}_{-21} (−1.4 σ)
$\xi^{tSZ \times CIB}$	1.00	—	$10^9 A_s$	2.355	$2.32^{+0.19}_{-0.20}$ (+6.8 σ)	$H(2.33)$	235.63	$235.7^{+1.3}_{-1.3}$ (−0.8 σ)
A_{143}^{tSZ}	6.90	$5.7^{+3.7}_{-3.6}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8744	$1.875^{+0.021}_{-0.022}$ (−0.7 σ)	$D_M(2.33)$	5749.3	5751^{+19}_{-19} (−1.6 σ)
A_{100}^{PS}	238	251^{+50}_{-60} (−0.4 σ)	D_{40}	1239.8	1241^{+27}_{-26} (+0.5 σ)	$f\sigma_8(0.15)$	0.4771	$0.474^{+0.019}_{-0.020}$ (+0.9 σ)
A_{143}^{PS}	50.0	43^{+10}_{-20} (−0.8 σ)	D_{220}	5726	5731^{+75}_{-74} (+0.4 σ)	$\sigma_8(0.15)$	0.7907	$0.785^{+0.031}_{-0.033}$ (+4.8 σ)
$A_{143 \times 217}^{PS}$	57.8	42^{+20}_{-20} (−0.2 σ)	D_{810}	2534.3	2534^{+26}_{-26} (−0.2 σ)	$f\sigma_8(0.38)$	0.4981	$0.495^{+0.019}_{-0.020}$ (+1.6 σ)
A_{217}^{PS}	124.3	116^{+20}_{-20} (+0.1 σ)	D_{1420}	817.7	$816.8^{+9.0}_{-9.1}$ (+0.5 σ)	$\sigma_8(0.38)$	0.7017	$0.697^{+0.028}_{-0.030}$ (+5.6 σ)
A^{kSZ}	0.00	< 6.95 (−0.4 σ)	D_{2000}	232.67	$232.1^{+3.1}_{-3.1}$ (+1.4 σ)	$f\sigma_8(0.51)$	0.4975	$0.494^{+0.019}_{-0.020}$ (+2.1 σ)
A_{100}^{dustTT}	8.67	$8.8^{+3.6}_{-3.7}$ (−0.1 σ)	$n_{s,0.002}$	0.9728	$0.9710^{+0.0083}_{-0.0081}$ (+1.5 σ)	$\sigma_8(0.51)$	0.6570	$0.652^{+0.027}_{-0.028}$ (+5.9 σ)
A_{143}^{dustTT}	10.75	$10.6^{+3.5}_{-3.5}$ (−0.1 σ)	Y_P	0.245464	$0.24545^{+0.00011}_{-0.00011}$ (+1.7 σ)	$f\sigma_8(0.61)$	0.4929	$0.490^{+0.018}_{-0.020}$ (+2.5 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.2^{+6.5}_{-6.5}$ (−0.0 σ)	Y_P^{BBN}	0.246791	$0.24678^{+0.00011}_{-0.00011}$ (+1.7 σ)	$\sigma_8(0.61)$	0.6254	$0.621^{+0.025}_{-0.027}$ (+6.0 σ)
A_{217}^{dustTT}	95.9	94^{+10}_{-10} (+0.0 σ)	$10^5 D/H$	2.552	$2.559^{+0.051}_{-0.050}$ (−1.8 σ)	$f\sigma_8(2.33)$	0.3156	$0.313^{+0.013}_{-0.014}$ (+6.4 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.075}_{-0.075}$	Age/Gyr	13.7660	$13.770^{+0.042}_{-0.043}$ (−1.6 σ)	$\sigma_8(2.33)$	0.3257	$0.323^{+0.014}_{-0.014}$ (+6.5 σ)
$A_{100 \times 143}^{dustTE}$	0.133	$0.135^{+0.059}_{-0.057}$	z_*	1089.537	$1089.59^{+0.46}_{-0.46}$ (−1.7 σ)	f_{2000}^{143}	25.8	27^{+6}_{-5} (−1.4 σ)
$A_{100 \times 217}^{dustTE}$	0.487	$0.48^{+0.17}_{-0.16}$	r_*	144.736	$144.73^{+0.49}_{-0.48}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	29.84	30^{+4}_{-4} (−1.6 σ)
A_{143}^{dustTE}	0.220	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	1.04127	$1.04127^{+0.00057}_{-0.00057}$ (+0.6 σ)	f_{2000}^{217}	104.50	$105.4^{+3.7}_{-3.6}$ (−1.4 σ)
$A_{143 \times 217}^{dustTE}$	0.661	$0.66^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	13.8999	$13.900^{+0.047}_{-0.046}$ (+0.5 σ)	χ_{lowl}^2	24.83	$24.9 (\nu: 1.0)$ (+0.8 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.52}_{-0.52}$	z_{drag}	1060.24	$1060.17^{+0.60}_{-0.58}$ (+1.7 σ)	χ_{plik}^2	2337.4	$2353.9 (\nu: 16.5)$ (+290.3 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.342	$147.35^{+0.50}_{-0.49}$ (+0.3 σ)	χ_{6DF}^2	0.000	$0.030 (\nu: 0.0)$
c_{217}	0.99813	$0.9981^{+0.0012}_{-0.0012}$ (−0.2 σ)	k_D	0.14074	$0.14071^{+0.00057}_{-0.00059}$ (+0.3 σ)	χ_{MGS}^2	1.68	$1.68 (\nu: 0.1)$
H_0	68.18	$68.11^{+0.96}_{-0.95}$ (+1.3 σ)	$100\theta_D$	0.160588	$0.16063^{+0.00034}_{-0.00034}$ (−1.7 σ)	$\chi_{DR12BAO}^2$	3.53	$4.05 (\nu: 0.4)$
Ω_Λ	0.6956	$0.695^{+0.012}_{-0.013}$ (+1.2 σ)	z_{eq}	3365.5	3367^{+48}_{-48} (−0.9 σ)	χ_{prior}^2	1.4	$11.3 (\nu: 9.6)$ (+1.1 σ)
Ω_m	0.3044	$0.305^{+0.013}_{-0.012}$ (−1.2 σ)	k_{eq}	0.010272	$0.01028^{+0.00015}_{-0.00015}$ (−0.9 σ)	χ_{BAO}^2	5.21	$5.77 (\nu: 0.3)$
$\Omega_m h^2$	0.14148	$0.1416^{+0.0020}_{-0.0020}$ (−0.9 σ)	$100\theta_{eq}$	0.8206	$0.8202^{+0.0092}_{-0.0090}$ (+1.0 σ)	χ_{CMB}^2	2362.3	$2378.8 (\nu: 15.8)$ (+216.1 σ)
$\Omega_m h^3$	0.09645	$0.09641^{+0.00059}_{-0.00059}$ (+1.1 σ)	$100\theta_{s,eq}$	0.45305	$0.4529^{+0.0047}_{-0.0046}$ (+1.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2368.86$; $\bar{\chi}_{\text{eff}}^2 = 2395.83$; $R - 1 = 0.01077$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.53 CMB - commander_dx12_v3.2.29: 24.83 plik_rd12_HM_v22b_TTTEEE: 2337.43

2.219 base_plikHM_TTTEEE_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02252^{+0.00032}_{-0.00032}$ (+1.8 σ)	$\Omega_{\mathrm{m}}h^3$	$0.09641^{+0.00057}_{-0.00059}$ (+1.1 σ)	$100\theta_{\mathrm{eq}}$	$0.820^{+0.013}_{-0.013}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1185^{+0.0029}_{-0.0030}$ (−1.0 σ)	σ_8	$0.849^{+0.035}_{-0.035}$ (+4.1 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4526^{+0.0067}_{-0.0064}$ (+0.9 σ)
$100\theta_{\mathrm{MC}}$	$1.04109^{+0.00063}_{-0.00064}$ (+0.7 σ)	S_8	$0.857^{+0.036}_{-0.036}$ (+0.7 σ)	$H(0.15)$	$73.3^{+1.2}_{-1.2}$ (+1.3 σ)
τ	$0.106^{+0.046}_{-0.047}$ (+6.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.469^{+0.020}_{-0.020}$ (+0.7 σ)	$D_{\mathrm{M}}(0.15)$	637^{+11}_{-12} (−1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.144^{+0.088}_{-0.091}$ (+6.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.631^{+0.024}_{-0.025}$ (+1.7 σ)	$H(0.38)$	$83.31^{+0.88}_{-0.84}$ (+1.4 σ)
n_{s}	$0.971^{+0.010}_{-0.0099}$ (+1.4 σ)	$\sigma_8/h^{0.5}$	$1.029^{+0.040}_{-0.040}$ (+2.3 σ)	$D_{\mathrm{M}}(0.38)$	1521^{+23}_{-23} (−1.3 σ)
y_{cal}	$1.0003^{+0.0048}_{-0.0048}$ (−0.1 σ)	$r_{\mathrm{drag}}h$	$100.3^{+2.4}_{-2.3}$ (+1.1 σ)	$H(0.51)$	$89.98^{+0.70}_{-0.66}$ (+1.5 σ)
A_{217}^{CIB}	45^{+10}_{-10} (−0.4 σ)	$\langle d^2 \rangle^{1/2}$	$2.542^{+0.094}_{-0.096}$ (+2.3 σ)	$D_{\mathrm{M}}(0.51)$	1972^{+27}_{-27} (−1.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$12.2^{+3.5}_{-4.0}$ (+5.7 σ)	$H(0.61)$	$95.56^{+0.56}_{-0.53}$ (+1.6 σ)
A_{143}^{tSZ}	$5.7^{+3.6}_{-3.6}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}$	$2.32^{+0.21}_{-0.20}$ (+6.7 σ)	$D_{\mathrm{M}}(0.61)$	2295^{+29}_{-30} (−1.4 σ)
A_{100}^{PS}	251^{+50}_{-50} (−0.4 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.875^{+0.024}_{-0.024}$ (−0.7 σ)	$H(2.33)$	$235.7^{+1.7}_{-1.8}$ (−0.8 σ)
A_{143}^{PS}	43^{+20}_{-20} (−0.8 σ)	D_{40}	1241^{+27}_{-27} (+0.5 σ)	$D_{\mathrm{M}}(2.33)$	5752^{+24}_{-24} (−1.6 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.2 σ)	D_{220}	5731^{+75}_{-75} (+0.4 σ)	$f\sigma_8(0.15)$	$0.475^{+0.019}_{-0.020}$ (+0.9 σ)
A_{217}^{PS}	116^{+20}_{-20} (+0.1 σ)	D_{810}	2534^{+27}_{-26} (−0.2 σ)	$\sigma_8(0.15)$	$0.785^{+0.033}_{-0.033}$ (+4.8 σ)
A^{kSZ}	< 7.00 (−0.4 σ)	D_{1420}	$816.7^{+9.1}_{-9.1}$ (+0.4 σ)	$f\sigma_8(0.38)$	$0.495^{+0.019}_{-0.020}$ (+1.6 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.8^{+3.7}_{-3.6}$ (−0.1 σ)	D_{2000}	$232.1^{+3.2}_{-3.2}$ (+1.4 σ)	$\sigma_8(0.38)$	$0.696^{+0.030}_{-0.030}$ (+5.5 σ)
$A_{143}^{\mathrm{dustTT}}$	$10.6^{+3.5}_{-3.5}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	$0.971^{+0.010}_{-0.0099}$ (+1.4 σ)	$f\sigma_8(0.51)$	$0.494^{+0.019}_{-0.019}$ (+2.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.4}_{-6.4}$ (−0.0 σ)	Y_{P}	$0.24545^{+0.00012}_{-0.00012}$ (+1.7 σ)	$\sigma_8(0.51)$	$0.652^{+0.029}_{-0.028}$ (+5.8 σ)
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10} (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00012}_{-0.00012}$ (+1.7 σ)	$f\sigma_8(0.61)$	$0.490^{+0.019}_{-0.019}$ (+2.5 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.075}_{-0.075}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.560^{+0.058}_{-0.057}$ (−1.8 σ)	$\sigma_8(0.61)$	$0.621^{+0.027}_{-0.027}$ (+6.0 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.057}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.771^{+0.053}_{-0.053}$ (−1.6 σ)	$f\sigma_8(2.33)$	$0.313^{+0.014}_{-0.014}$ (+6.4 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	z_*	$1089.61^{+0.60}_{-0.59}$ (−1.7 σ)	$\sigma_8(2.33)$	$0.323^{+0.015}_{-0.015}$ (+6.5 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.10}$	r_*	$144.71^{+0.65}_{-0.65}$ (+0.5 σ)	f_{2000}^{143}	27^{+6}_{-6} (−1.4 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	$1.04126^{+0.00062}_{-0.00063}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	30^{+4}_{-4} (−1.6 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.52}_{-0.53}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.060}_{-0.059}$ (+0.5 σ)	f_{2000}^{217}	$105.4^{+3.8}_{-3.7}$ (−1.4 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	$1060.16^{+0.61}_{-0.61}$ (+1.7 σ)	χ_{lowl}^2	25.0 (ν : 1.0) (+0.8 σ)
c_{217}	$0.9981^{+0.0012}_{-0.0012}$ (−0.2 σ)	r_{drag}	$147.33^{+0.63}_{-0.63}$ (+0.3 σ)	χ_{plik}^2	2354.2 (ν : 17.0) (+290.4 σ)
H_0	$68.1^{+1.4}_{-1.3}$ (+1.3 σ)	k_{D}	$0.14072^{+0.00065}_{-0.00064}$ (+0.3 σ)	χ_{prior}^2	11.3 (ν : 10.0) (+1.1 σ)
Ω_{Λ}	$0.694^{+0.018}_{-0.018}$ (+1.1 σ)	$100\theta_{\mathrm{D}}$	$0.16063^{+0.00036}_{-0.00035}$ (−1.6 σ)	χ_{CMB}^2	2379.2 (ν : 16.5) (+216.1 σ)
Ω_{m}	$0.306^{+0.018}_{-0.018}$ (−1.1 σ)	z_{eq}	3370^{+66}_{-67} (−0.9 σ)		
$\Omega_{\mathrm{m}}h^2$	$0.1417^{+0.0028}_{-0.0028}$ (−0.9 σ)	k_{eq}	$0.01028^{+0.00020}_{-0.00021}$ (−0.9 σ)		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2390.49; R - 1 = 0.00813$$

2.220 base_plikHM_TTTEEE_lowl_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02252^{+0.00028}_{-0.00028} \quad (+1.8\sigma)$	σ_8	$0.849^{+0.033}_{-0.034} \quad (+4.2\sigma)$	$H(0.15)$	$73.33^{+0.82}_{-0.81} \quad (+1.4\sigma)$
$\Omega_c h^2$	$0.1184^{+0.0021}_{-0.0021} \quad (-1.1\sigma)$	S_8	$0.856^{+0.034}_{-0.035} \quad (+0.7\sigma)$	$D_M(0.15)$	$637.0^{+8.0}_{-8.0} \quad (-1.3\sigma)$
$100\theta_{MC}$	$1.04110^{+0.00057}_{-0.00058} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.469^{+0.019}_{-0.019} \quad (+0.7\sigma)$	$H(0.38)$	$83.34^{+0.62}_{-0.60} \quad (+1.5\sigma)$
τ	$0.107^{+0.042}_{-0.044} \quad (+6.9\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.631^{+0.024}_{-0.025} \quad (+1.7\sigma)$	$D_M(0.38)$	$1521^{+16}_{-16} \quad (-1.4\sigma)$
$\ln(10^{10} A_s)$	$3.146^{+0.081}_{-0.086} \quad (+6.4\sigma)$	$\sigma_8/h^{0.5}$	$1.029^{+0.038}_{-0.040} \quad (+2.3\sigma)$	$H(0.51)$	$90.00^{+0.50}_{-0.49} \quad (+1.5\sigma)$
n_s	$0.9711^{+0.0082}_{-0.0081} \quad (+1.5\sigma)$	$r_{drag} h$	$100.4^{+1.6}_{-1.6} \quad (+1.2\sigma)$	$D_M(0.51)$	$1971^{+19}_{-19} \quad (-1.4\sigma)$
y_{cal}	$1.0003^{+0.0049}_{-0.0048} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.542^{+0.091}_{-0.098} \quad (+2.3\sigma)$	$H(0.61)$	$95.57^{+0.41}_{-0.40} \quad (+1.6\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (-0.4\sigma)$	z_{re}	$12.3^{+3.3}_{-3.6} \quad (+5.8\sigma)$	$D_M(0.61)$	$2294^{+20}_{-21} \quad (-1.4\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.33^{+0.19}_{-0.19} \quad (+6.8\sigma)$	$H(2.33)$	$235.7^{+1.3}_{-1.3} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$5.7^{+3.7}_{-3.6} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.875^{+0.021}_{-0.022} \quad (-0.7\sigma)$	$D_M(2.33)$	$5751^{+19}_{-19} \quad (-1.6\sigma)$
A_{100}^{PS}	$251^{+50}_{-60} \quad (-0.4\sigma)$	D_{40}	$1241^{+26}_{-26} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.018}_{-0.019} \quad (+0.9\sigma)$
A_{143}^{PS}	$43^{+10}_{-20} \quad (-0.8\sigma)$	D_{220}	$5731^{+75}_{-74} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.785^{+0.031}_{-0.032} \quad (+4.8\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2533^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.019}_{-0.020} \quad (+1.6\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{1420}	$816.8^{+9.0}_{-9.1} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.697^{+0.028}_{-0.029} \quad (+5.6\sigma)$
A^{kSZ}	$< 6.95 \quad (-0.4\sigma)$	D_{2000}	$232.1^{+3.1}_{-3.1} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.494^{+0.018}_{-0.019} \quad (+2.1\sigma)$
A_{100}^{dustTT}	$8.8^{+3.6}_{-3.7} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9711^{+0.0082}_{-0.0081} \quad (+1.5\sigma)$	$\sigma_8(0.51)$	$0.652^{+0.027}_{-0.027} \quad (+5.9\sigma)$
A_{143}^{dustTT}	$10.6^{+3.5}_{-3.5} \quad (-0.1\sigma)$	Y_P	$0.24545^{+0.00011}_{-0.00011} \quad (+1.7\sigma)$	$f\sigma_8(0.61)$	$0.490^{+0.018}_{-0.019} \quad (+2.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.2^{+6.5}_{-6.5} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24678^{+0.00011}_{-0.00011} \quad (+1.7\sigma)$	$\sigma_8(0.61)$	$0.621^{+0.025}_{-0.026} \quad (+6.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 D/H$	$2.558^{+0.051}_{-0.050} \quad (-1.8\sigma)$	$f\sigma_8(2.33)$	$0.313^{+0.013}_{-0.013} \quad (+6.4\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.075}$	Age/Gyr	$13.770^{+0.042}_{-0.043} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.323^{+0.014}_{-0.014} \quad (+6.6\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.059}_{-0.057}$	z_*	$1089.59^{+0.46}_{-0.46} \quad (-1.7\sigma)$	f_{2000}^{143}	$27^{+6}_{-5} \quad (-1.4\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.16}$	r_*	$144.73^{+0.49}_{-0.48} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-1.6\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	$1.04127^{+0.00057}_{-0.00057} \quad (+0.6\sigma)$	f_{2000}^{217}	$105.4^{+3.7}_{-3.6} \quad (-1.4\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$13.900^{+0.047}_{-0.046} \quad (+0.5\sigma)$	χ_{lowl}^2	$24.9 \quad (\nu: 1.0) \quad (+0.8\sigma)$
A_{217}^{dustTE}	$2.07^{+0.52}_{-0.52}$	z_{drag}	$1060.17^{+0.60}_{-0.58} \quad (+1.7\sigma)$	χ_{plik}^2	$2353.8 \quad (\nu: 16.3) \quad (+290.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.35^{+0.50}_{-0.49} \quad (+0.3\sigma)$	χ_{6DF}^2	$0.030 \quad (\nu: 0.0)$
c_{217}	$0.9981^{+0.0012}_{-0.0012} \quad (-0.2\sigma)$	k_D	$0.14071^{+0.00057}_{-0.00059} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.69 \quad (\nu: 0.1)$
H_0	$68.11^{+0.96}_{-0.95} \quad (+1.3\sigma)$	$100\theta_D$	$0.16063^{+0.00034}_{-0.00034} \quad (-1.7\sigma)$	$\chi_{DR12BAO}^2$	$4.05 \quad (\nu: 0.4)$
Ω_Λ	$0.695^{+0.012}_{-0.013} \quad (+1.2\sigma)$	z_{eq}	$3367^{+48}_{-48} \quad (-0.9\sigma)$	χ_{prior}^2	$11.3 \quad (\nu: 9.6) \quad (+1.1\sigma)$
Ω_m	$0.305^{+0.013}_{-0.012} \quad (-1.2\sigma)$	k_{eq}	$0.01028^{+0.00015}_{-0.00015} \quad (-0.9\sigma)$	χ_{BAO}^2	$5.77 \quad (\nu: 0.3)$
$\Omega_m h^2$	$0.1416^{+0.0020}_{-0.0020} \quad (-0.9\sigma)$	$100\theta_{eq}$	$0.8202^{+0.0092}_{-0.0090} \quad (+1.0\sigma)$	χ_{CMB}^2	$2378.8 \quad (\nu: 15.6) \quad (+216.1\sigma)$
$\Omega_m h^3$	$0.09641^{+0.00058}_{-0.00059} \quad (+1.1\sigma)$	$100\theta_{s,eq}$	$0.4529^{+0.0047}_{-0.0046} \quad (+1.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2395.80; R - 1 = 0.01085$$

2.221 base_plikHM_TTTEEE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022348	$0.02233^{+0.00030}_{-0.00029}$ (+1.0 σ)	$\Omega_{\text{m}}h^3$	0.09636	$0.09634^{+0.00057}_{-0.00057}$ (+1.0 σ)	$100\theta_{\text{eq}}$	0.8107	$0.811^{+0.011}_{-0.011}$ (−0.0 σ)
$\Omega_{\text{c}}h^2$	0.12060	$0.1207^{+0.0027}_{-0.0027}$ (+0.0 σ)	σ_8	0.8136	$0.814^{+0.015}_{-0.015}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.4481	$0.4480^{+0.0059}_{-0.0058}$ (−0.1 σ)
$100\theta_{\text{MC}}$	1.04086	$1.04086^{+0.00061}_{-0.00060}$ (+0.2 σ)	S_8	0.8387	$0.840^{+0.032}_{-0.032}$ (−0.0 σ)	$H(0.15)$	72.47	$72.4^{+1.0}_{-1.0}$ (+0.2 σ)
τ	0.0540	$0.055^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4594	$0.460^{+0.018}_{-0.017}$ (−0.0 σ)	$D_{\text{M}}(0.15)$	645.5	646^{+10}_{-10} (−0.2 σ)
$\ln(10^{10}A_{\text{s}})$	3.0460	$3.047^{+0.033}_{-0.031}$ (+0.4 σ)	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6113	$0.612^{+0.016}_{-0.016}$ (+0.1 σ)	$H(0.38)$	82.72	$82.70^{+0.74}_{-0.73}$ (+0.3 σ)
n_{s}	0.9638	$0.9625^{+0.0088}_{-0.0089}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9931	$0.994^{+0.023}_{-0.023}$ (+0.0 σ)	$D_{\text{M}}(0.38)$	1537.7	1538^{+21}_{-20} (−0.3 σ)
y_{cal}	1.00076	$1.0006^{+0.0048}_{-0.0049}$ (+0.1 σ)	$r_{\text{drag}}h$	98.62	$98.6^{+2.1}_{-2.1}$ (+0.1 σ)	$H(0.51)$	89.52	$89.50^{+0.58}_{-0.56}$ (+0.4 σ)
A_{217}^{CIB}	47.5	47^{+10}_{-10} (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.456	$2.460^{+0.057}_{-0.056}$ (+0.2 σ)	$D_{\text{M}}(0.51)$	1990.8	1992^{+24}_{-24} (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.43	—	z_{re}	7.66	$7.7^{+1.6}_{-1.5}$ (+0.2 σ)	$H(0.61)$	95.196	$95.18^{+0.46}_{-0.44}$ (+0.5 σ)
A_{143}^{tSZ}	7.14	$5.3^{+3.7}_{-4.0}$ (+0.1 σ)	$10^9 A_{\text{s}}$	2.103	$2.105^{+0.070}_{-0.064}$ (+0.4 σ)	$D_{\text{M}}(0.61)$	2315.6	2316^{+26}_{-26} (−0.3 σ)
A_{100}^{PS}	252	261^{+60}_{-50} (−0.1 σ)	$10^9 A_{\text{s}}e^{-2\tau}$	1.8879	$1.887^{+0.023}_{-0.023}$ (+0.2 σ)	$H(2.33)$	236.93	$237.0^{+1.6}_{-1.6}$ (+0.2 σ)
A_{143}^{PS}	48.5	47^{+20}_{-20} (−0.3 σ)	D_{40}	1235.0	1238^{+26}_{-26} (+0.3 σ)	$D_{\text{M}}(2.33)$	5766.7	5767^{+21}_{-21} (−0.6 σ)
$A_{143 \times 217}^{\text{PS}}$	48.0	42^{+20}_{-20} (−0.1 σ)	D_{220}	5738	5739^{+76}_{-76} (+0.6 σ)	$f\sigma_8(0.15)$	0.4634	$0.464^{+0.016}_{-0.016}$ (+0.0 σ)
A_{217}^{PS}	119.8	115^{+20}_{-20} (−0.0 σ)	D_{810}	2542.6	2540^{+26}_{-26} (+0.3 σ)	$\sigma_8(0.15)$	0.7510	$0.751^{+0.013}_{-0.013}$ (+0.2 σ)
A^{kSZ}	0.01	< 8.34 (−0.1 σ)	D_{1420}	818.0	$816.5^{+9.3}_{-9.5}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.4801	$0.480^{+0.013}_{-0.013}$ (+0.1 σ)
A_{100}^{dustTT}	8.79	$8.8^{+3.6}_{-3.6}$ (−0.1 σ)	D_{2000}	231.10	$230.6^{+3.1}_{-3.1}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6649	$0.665^{+0.011}_{-0.011}$ (+0.3 σ)
A_{143}^{dustTT}	10.98	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9638	$0.9625^{+0.0088}_{-0.0089}$ (−0.0 σ)	$f\sigma_8(0.51)$	0.4779	$0.478^{+0.012}_{-0.012}$ (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	Y_{P}	0.245387	$0.24538^{+0.00011}_{-0.00012}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6219	$0.622^{+0.011}_{-0.0098}$ (+0.3 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246713	$0.24670^{+0.00011}_{-0.00012}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4723	$0.472^{+0.011}_{-0.011}$ (+0.1 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.076}_{-0.074}$	10^5D/H	2.590	$2.593^{+0.055}_{-0.054}$ (−1.0 σ)	$\sigma_8(0.61)$	0.5916	$0.592^{+0.010}_{-0.0093}$ (+0.3 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.058}$	Age/Gyr	13.8040	$13.806^{+0.046}_{-0.047}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.29799	$0.2979^{+0.0050}_{-0.0047}$ (+0.4 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.484	$0.48^{+0.16}_{-0.16}$	z_*	1090.00	$1090.03^{+0.55}_{-0.54}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3069	$0.3068^{+0.0054}_{-0.0049}$ (+0.4 σ)
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	r_*	144.29	$144.29^{+0.60}_{-0.59}$ (−0.4 σ)	f_{2000}^{143}	29.3	30^{+5}_{-5} (−0.4 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.67^{+0.16}_{-0.15}$	$100\theta_*$	1.04104	$1.04104^{+0.00060}_{-0.00059}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	32.33	33^{+4}_{-4} (−0.5 σ)
A_{217}^{dustTE}	2.09	$2.09^{+0.52}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.861	$13.860^{+0.056}_{-0.055}$ (−0.4 σ)	f_{2000}^{217}	106.90	$107.4^{+3.5}_{-3.4}$ (−0.4 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.93	$1059.90^{+0.61}_{-0.57}$ (+1.1 σ)	χ_{simall}^2	396.06	$397.2 (\nu: 2.1)$ (+0.1 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	146.96	$146.96^{+0.60}_{-0.58}$ (−0.5 σ)	χ_{plik}^2	2344.5	$2359.4 (\nu: 16.6)$ (+291.3 σ)
H_0	67.11	$67.1^{+1.2}_{-1.2}$ (+0.2 σ)	k_{D}	0.14099	$0.14098^{+0.00062}_{-0.00064}$ (+0.8 σ)	χ_{prior}^2	1.7	$11.5 (\nu: 10.0)$ (+1.1 σ)
Ω_{Λ}	0.6811	$0.681^{+0.016}_{-0.017}$ (+0.1 σ)	$100\theta_{\text{D}}$	0.160761	$0.16078^{+0.00035}_{-0.00035}$ (−1.1 σ)	χ_{CMB}^2	2740.5	$2756.7 (\nu: 16.8)$ (+284.9 σ)
Ω_{m}	0.3189	$0.319^{+0.017}_{-0.016}$ (−0.1 σ)	z_{eq}	3416	3417^{+61}_{-61} (+0.1 σ)			
$\Omega_{\text{m}}h^2$	0.14359	$0.1436^{+0.0026}_{-0.0025}$ (+0.1 σ)	k_{eq}	0.010426	$0.01043^{+0.00019}_{-0.00019}$ (+0.1 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2742.24$; $\bar{\chi}_{\text{eff}}^2 = 2768.16$; $R - 1 = 0.00605$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 plik_rd12_HM_v22b_TTTEEE: 2344.46

2.222 base_CamSpecHM_TT

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02257	$0.02248^{+0.00057}_{-0.00057}$ (+1.6 σ)	S_8	0.875	$0.871^{+0.051}_{-0.051}$ (+1.3 σ)	k_{eq}	0.010181	$0.01023^{+0.00037}_{-0.00036}$ (−1.3 σ)
$\Omega_c h^2$	0.1170	$0.1178^{+0.0055}_{-0.0052}$ (−1.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4793	$0.477^{+0.028}_{-0.028}$ (+1.3 σ)	$100\theta_{\text{eq}}$	0.8263	$0.823^{+0.023}_{-0.024}$ (+1.4 σ)
$100\theta_{\text{MC}}$	1.04136	$1.0413^{+0.0011}_{-0.0011}$ (+1.0 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6493	$0.644^{+0.032}_{-0.034}$ (+2.8 σ)	$100\theta_{\text{s,eq}}$	0.4560	$0.454^{+0.012}_{-0.012}$ (+1.4 σ)
τ	0.149	$0.134^{+0.068}_{-0.077}$ (+10.2 σ)	$\sigma_8/h^{0.5}$	1.061	$1.051^{+0.053}_{-0.057}$ (+3.7 σ)	$H(0.15)$	73.86	$73.5^{+2.2}_{-2.2}$ (+1.6 σ)
$\ln(10^{10} A_s)$	3.224	$3.20^{+0.13}_{-0.15}$ (+9.4 σ)	$r_{\text{drag}} h$	101.48	$100.9^{+4.4}_{-4.4}$ (+1.5 σ)	$D_M(0.15)$	631.8	635^{+22}_{-21} (−1.6 σ)
n_s	0.9767	$0.973^{+0.017}_{-0.017}$ (+1.8 σ)	$\langle d^2 \rangle^{1/2}$	2.615	$2.60^{+0.12}_{-0.14}$ (+3.7 σ)	$H(0.38)$	83.71	$83.5^{+1.6}_{-1.6}$ (+1.7 σ)
A_{100}^{PS}	218	232^{+50}_{-50} (−1.1 σ)	z_{re}	15.5	$14.3^{+5.1}_{-5.6}$ (+8.2 σ)	$D_M(0.38)$	1510.3	1517^{+43}_{-42} (−1.6 σ)
A_{143}^{PS}	45.5	35^{+20}_{-20} (−1.8 σ)	$10^9 A_s$	2.512	$2.45^{+0.33}_{-0.34}$ (+10.4 σ)	$H(0.51)$	90.29	$90.1^{+1.3}_{-1.2}$ (+1.8 σ)
A_{217}^{PS}	108.9	104^{+20}_{-30} (−1.1 σ)	$10^9 A_s e^{-2\tau}$	1.8666	$1.869^{+0.033}_{-0.032}$ (−1.1 σ)	$D_M(0.51)$	1959	1966^{+51}_{-49} (−1.6 σ)
A_{217}^{CIB}	37.5	37^{+10}_{-10} (−1.6 σ)	D_{40}	1251.9	1253^{+37}_{-34} (+1.2 σ)	$H(0.61)$	95.79	$95.6^{+1.1}_{-1.0}$ (+1.8 σ)
A_{143}^{tSZ}	6.29	< 7.57 (−0.5 σ)	D_{220}	5717	5717^{+81}_{-81} (+0.1 σ)	$D_M(0.61)$	2281	2289^{+55}_{-54} (−1.6 σ)
$r_{143 \times 217}^{\text{PS}}$	0.787	$0.68^{+0.26}_{-0.27}$	D_{810}	2527.8	2527^{+28}_{-28} (−0.7 σ)	$H(2.33)$	234.84	$235.2^{+3.2}_{-3.0}$ (−1.2 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.78	—	D_{1420}	816.1	814^{+10}_{-10} (−0.0 σ)	$D_M(2.33)$	5742.0	5749^{+45}_{-46} (−1.8 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.99	—	D_{2000}	232.89	$231.9^{+4.4}_{-4.3}$ (+1.3 σ)	$f\sigma_8(0.15)$	0.4855	$0.483^{+0.027}_{-0.027}$ (+1.6 σ)
A^{kSZ}	0.0	—	$n_{\text{s},0.002}$	0.9767	$0.973^{+0.017}_{-0.017}$ (+1.8 σ)	$\sigma_8(0.15)$	0.8144	$0.804^{+0.046}_{-0.051}$ (+7.3 σ)
A_{100}^{dust}	0.992	$0.998^{+0.39}_{-0.38}$	Y_{P}	0.245470	$0.24543^{+0.00024}_{-0.00024}$ (+1.5 σ)	$f\sigma_8(0.38)$	0.5089	$0.505^{+0.026}_{-0.027}$ (+2.6 σ)
A_{143}^{dust}	0.958	$0.95^{+0.35}_{-0.34}$	$Y_{\text{P}}^{\text{BBN}}$	0.246797	$0.24676^{+0.00024}_{-0.00024}$ (+1.5 σ)	$\sigma_8(0.38)$	0.7236	$0.714^{+0.043}_{-0.048}$ (+8.5 σ)
A_{217}^{dust}	0.992	$0.98^{+0.21}_{-0.20}$	10^5D/H	2.549	$2.57^{+0.11}_{-0.10}$ (−1.6 σ)	$f\sigma_8(0.51)$	0.5093	$0.505^{+0.025}_{-0.027}$ (+3.4 σ)
$A_{143 \times 217}^{\text{dust}}$	1.017	$1.02^{+0.31}_{-0.31}$	Age/Gyr	13.751	$13.77^{+0.10}_{-0.10}$ (−1.7 σ)	$\sigma_8(0.51)$	0.6779	$0.669^{+0.042}_{-0.046}$ (+8.9 σ)
y_{cal}	1.00009	$1.0002^{+0.0050}_{-0.0049}$ (−0.1 σ)	z_*	1089.41	$1089.6^{+1.1}_{-1.1}$ (−1.7 σ)	$f\sigma_8(0.61)$	0.5052	$0.500^{+0.025}_{-0.028}$ (+4.0 σ)
c_{100}	0.99785	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_*	145.05	$144.9^{+1.1}_{-1.2}$ (+1.0 σ)	$\sigma_8(0.61)$	0.6455	$0.637^{+0.040}_{-0.044}$ (+9.1 σ)
c_{217}	1.00088	$1.0009^{+0.0031}_{-0.0031}$ (+4.2 σ)	$100\theta_*$	1.04153	$1.0414^{+0.0010}_{-0.0011}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3261	$0.322^{+0.021}_{-0.023}$ (+9.6 σ)
H_0	68.73	$68.4^{+2.5}_{-2.5}$ (+1.6 σ)	$D_M(z_*)/\text{Gpc}$	13.927	$13.92^{+0.10}_{-0.10}$ (+0.9 σ)	$\sigma_8(2.33)$	0.3370	$0.332^{+0.023}_{-0.025}$ (+9.8 σ)
Ω_Λ	0.7031	$0.698^{+0.031}_{-0.035}$ (+1.4 σ)	z_{drag}	1060.20	$1060.0^{+1.1}_{-1.0}$ (+1.4 σ)	f_{2000}^{143}	25.9	27^{+7}_{-7} (−1.4 σ)
Ω_m	0.2969	$0.302^{+0.035}_{-0.031}$ (−1.4 σ)	r_{drag}	147.66	$147.6^{+1.1}_{-1.1}$ (+0.8 σ)	f_{2000}^{217}	103.71	$104.9^{+4.9}_{-4.9}$ (−1.7 σ)
$\Omega_m h^2$	0.1402	$0.1409^{+0.0051}_{-0.0049}$ (−1.3 σ)	k_{D}	0.14042	$0.1404^{+0.0011}_{-0.0011}$ (−0.2 σ)	$f_{2000}^{143 \times 217}$	29.0	30^{+5}_{-5} (−1.8 σ)
$\Omega_m h^3$	0.09638	$0.09628^{+0.00097}_{-0.00095}$ (+0.9 σ)	$100\theta_{\text{D}}$	0.16065	$0.16074^{+0.00059}_{-0.00057}$ (−1.2 σ)	χ_{CamSpec}^2	7045.3	7059.6 (ν : 14.0)
σ_8	0.880	$0.869^{+0.048}_{-0.053}$ (+6.4 σ)	z_{eq}	3336	3351^{+120}_{-120} (−1.3 σ)	χ_{prior}^2	1.4	7.3 (ν : 5.7) (−0.0 σ)

Best-fit $\chi_{\text{eff}}^2 = 7046.70$; $\bar{\chi}_{\text{eff}}^2 = 7066.87$; $R - 1 = 0.00646$
 χ_{eff}^2 : CMB - CamSpec like_10.7HM: 7045.25

2.223 base_CamSpecHM_TT_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02253	$0.02242^{+0.00054}_{-0.00054}$ (+1.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4693	$0.468^{+0.027}_{-0.027}$ (+0.6 σ)	$100\theta_{s,eq}$	0.4563	$0.455^{+0.011}_{-0.011}$ (+1.4 σ)
$\Omega_c h^2$	0.1169	$0.1177^{+0.0052}_{-0.0050}$ (−1.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6359	$0.631^{+0.030}_{-0.032}$ (+1.7 σ)	$H(0.15)$	73.84	$73.5^{+2.1}_{-2.0}$ (+1.6 σ)
$100\theta_{MC}$	1.04132	$1.0412^{+0.0010}_{-0.0010}$ (+1.0 σ)	$\sigma_8/h^{0.5}$	1.039	$1.030^{+0.049}_{-0.052}$ (+2.3 σ)	$D_M(0.15)$	631.9	635^{+20}_{-19} (−1.5 σ)
τ	0.128	$0.113^{+0.063}_{-0.069}$ (+7.6 σ)	$r_{drag}h$	101.52	$100.9^{+4.1}_{-4.1}$ (+1.5 σ)	$H(0.38)$	83.69	$83.4^{+1.5}_{-1.5}$ (+1.6 σ)
$\ln(10^{10}A_s)$	3.183	$3.15^{+0.12}_{-0.13}$ (+6.9 σ)	$\langle d^2 \rangle^{1/2}$	2.560	$2.54^{+0.11}_{-0.12}$ (+2.3 σ)	$D_M(0.38)$	1510.7	1518^{+40}_{-39} (−1.6 σ)
n_s	0.9775	$0.973^{+0.016}_{-0.016}$ (+1.9 σ)	z_{re}	14.0	$12.7^{+4.9}_{-5.4}$ (+6.3 σ)	$H(0.51)$	90.26	$90.1^{+1.2}_{-1.2}$ (+1.7 σ)
y_{cal}	1.00018	$1.0003^{+0.0048}_{-0.0048}$ (−0.0 σ)	$10^9 A_s$	2.411	$2.35^{+0.29}_{-0.29}$ (+7.4 σ)	$D_M(0.51)$	1959.3	1967^{+47}_{-46} (−1.6 σ)
A_{100}^{PS}	219	233^{+50}_{-50} (−1.1 σ)	$10^9 A_s e^{-2\tau}$	1.8656	$1.868^{+0.030}_{-0.030}$ (−1.2 σ)	$H(0.61)$	95.76	$95.60^{+0.99}_{-0.92}$ (+1.7 σ)
A_{143}^{PS}	45.0	36^{+20}_{-20} (−1.7 σ)	D_{40}	1234.6	1237^{+32}_{-31} (+0.2 σ)	$D_M(0.61)$	2282	2291^{+51}_{-50} (−1.6 σ)
A_{217}^{PS}	109.7	104^{+30}_{-30} (−1.1 σ)	D_{220}	5706	5708^{+80}_{-81} (−0.1 σ)	$H(2.33)$	234.71	$235.1^{+3.0}_{-2.9}$ (−1.2 σ)
A_{217}^{CIB}	37.6	38^{+10}_{-10} (−1.5 σ)	D_{810}	2529.3	2528^{+27}_{-27} (−0.6 σ)	$D_M(2.33)$	5744.2	5752^{+41}_{-43} (−1.6 σ)
A_{143}^{tSZ}	6.20	< 7.57 (−0.5 σ)	D_{1420}	817.0	815^{+10}_{-10} (+0.1 σ)	$f\sigma_8(0.15)$	0.4754	$0.473^{+0.026}_{-0.026}$ (+0.8 σ)
$r_{143 \times 217}^{PS}$	0.807	$0.67^{+0.26}_{-0.27}$	D_{2000}	232.68	$231.6^{+4.2}_{-4.3}$ (+1.1 σ)	$\sigma_8(0.15)$	0.7978	$0.788^{+0.042}_{-0.045}$ (+5.1 σ)
$r_{143 \times 217}^{CIB}$	0.70	—	$n_{s,0.002}$	0.9775	$0.973^{+0.016}_{-0.016}$ (+1.9 σ)	$f\sigma_8(0.38)$	0.4984	$0.495^{+0.024}_{-0.025}$ (+1.6 σ)
$\xi^{tSZ \times CIB}$	0.96	—	Y_P	0.245453	$0.24541^{+0.00022}_{-0.00023}$ (+1.3 σ)	$\sigma_8(0.38)$	0.7089	$0.700^{+0.039}_{-0.042}$ (+6.0 σ)
A^{kSZ}	0.1	—	Y_P^{BBN}	0.246780	$0.24674^{+0.00022}_{-0.00023}$ (+1.3 σ)	$f\sigma_8(0.51)$	0.4988	$0.495^{+0.024}_{-0.025}$ (+2.1 σ)
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.39}$	$10^5 D/H$	2.557	$2.58^{+0.10}_{-0.098}$ (−1.4 σ)	$\sigma_8(0.51)$	0.6642	$0.655^{+0.037}_{-0.040}$ (+6.4 σ)
A_{143}^{dust}	0.962	$0.96^{+0.35}_{-0.35}$	Age/Gyr	13.756	$13.773^{+0.092}_{-0.093}$ (−1.6 σ)	$f\sigma_8(0.61)$	0.4948	$0.490^{+0.024}_{-0.025}$ (+2.6 σ)
A_{217}^{dust}	0.978	$0.98^{+0.20}_{-0.20}$	z_*	1089.46	$1089.7^{+1.0}_{-1.0}$ (−1.6 σ)	$\sigma_8(0.61)$	0.6324	$0.624^{+0.036}_{-0.039}$ (+6.6 σ)
$A_{143 \times 217}^{dust}$	1.030	$1.02^{+0.32}_{-0.32}$	r_*	145.12	$145.0^{+1.1}_{-1.1}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3195	$0.315^{+0.019}_{-0.020}$ (+7.0 σ)
c_{100}	0.99783	$0.9975^{+0.0021}_{-0.0021}$ (−3.5 σ)	$100\theta_*$	1.04150	$1.0414^{+0.0010}_{-0.0010}$ (+0.9 σ)	$\sigma_8(2.33)$	0.3302	$0.325^{+0.021}_{-0.022}$ (+7.2 σ)
c_{217}	1.00070	$1.0009^{+0.0031}_{-0.0031}$ (+4.3 σ)	$D_M(z_*)/\text{Gpc}$	13.934	$13.922^{+0.098}_{-0.10}$ (+1.0 σ)	f_{2000}^{143}	25.9	27^{+7}_{-7} (−1.3 σ)
H_0	68.72	$68.3^{+2.4}_{-2.4}$ (+1.6 σ)	z_{drag}	1060.09	$1059.9^{+1.0}_{-1.0}$ (+1.1 σ)	f_{2000}^{217}	103.94	$105.3^{+4.7}_{-4.7}$ (−1.5 σ)
Ω_Λ	0.7034	$0.698^{+0.029}_{-0.032}$ (+1.4 σ)	r_{drag}	147.74	$147.6^{+1.0}_{-1.1}$ (+0.9 σ)	$f_{2000}^{143 \times 217}$	29.3	30^{+5}_{-5} (−1.6 σ)
Ω_m	0.2966	$0.302^{+0.032}_{-0.029}$ (−1.4 σ)	k_D	0.14030	$0.1403^{+0.0011}_{-0.0010}$ (−0.4 σ)	χ_{lowl}^2	24.50	24.8 (ν : 1.4) (+0.7 σ)
$\Omega_m h^2$	0.14008	$0.1408^{+0.0048}_{-0.0046}$ (−1.3 σ)	$100\theta_D$	0.16071	$0.16081^{+0.00059}_{-0.00057}$ (−1.0 σ)	$\chi_{CamSpec}^2$	7046.4	7060.1 (ν : 15.0)
$\Omega_m h^3$	0.09626	$0.09616^{+0.00097}_{-0.00092}$ (+0.6 σ)	z_{eq}	3332	3349^{+110}_{-110} (−1.3 σ)	χ_{prior}^2	1.4	7.4 (ν : 5.6) (+0.0 σ)
σ_8	0.8616	$0.851^{+0.044}_{-0.048}$ (+4.4 σ)	k_{eq}	0.010170	$0.01022^{+0.00035}_{-0.00034}$ (−1.3 σ)	χ_{CMB}^2	7070.9	7084.8 (ν : 14.5) (+1073.1 σ)
S_8	0.8568	$0.854^{+0.050}_{-0.049}$ (+0.6 σ)	$100\theta_{eq}$	0.8268	$0.824^{+0.022}_{-0.022}$ (+1.4 σ)			

Best-fit $\chi_{eff}^2 = 7072.29$; $\bar{\chi}_{eff}^2 = 7092.24$; $R - 1 = 0.00797$

χ_{eff}^2 : CMB - commander_dx12_v3_2_29: 24.50 CamSpec like_10.7HM: 7046.38

2.224 base_CamSpecHM_TT_lowl_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02239^{+0.00043}_{-0.00042} \quad (+1.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.631^{+0.030}_{-0.032} \quad (+1.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.9^{+9.9}_{-9.8} \quad (-1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0025}_{-0.0025} \quad (-1.2\sigma)$	$\sigma_8/h^{0.5}$	$1.030^{+0.049}_{-0.052} \quad (+2.3\sigma)$	$H(0.38)$	$83.31^{+0.78}_{-0.76} \quad (+1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04117^{+0.00088}_{-0.00085} \quad (+0.9\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+2.0}_{-2.0} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+20}_{-20} \quad (-1.4\sigma)$
τ	$0.109^{+0.052}_{-0.056} \quad (+7.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.54^{+0.11}_{-0.12} \quad (+2.3\sigma)$	$H(0.51)$	$89.96^{+0.65}_{-0.63} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.15^{+0.10}_{-0.11} \quad (+6.5\sigma)$	z_{re}	$12.5^{+4.2}_{-4.5} \quad (+6.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1971^{+24}_{-24} \quad (-1.4\sigma)$
n_{s}	$0.9721^{+0.0099}_{-0.0098} \quad (+1.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.33^{+0.24}_{-0.25} \quad (+7.0\sigma)$	$H(0.61)$	$95.52^{+0.56}_{-0.53} \quad (+1.4\sigma)$
y_{cal}	$1.0003^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.023}_{-0.023} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2294^{+25}_{-26} \quad (-1.4\sigma)$
A_{100}^{PS}	$234^{+50}_{-50} \quad (-1.1\sigma)$	D_{40}	$1237^{+31}_{-30} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.6} \quad (-1.1\sigma)$
A_{143}^{PS}	$36^{+20}_{-20} \quad (-1.6\sigma)$	D_{220}	$5707^{+79}_{-78} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+26}_{-27} \quad (-1.4\sigma)$
A_{217}^{PS}	$104^{+20}_{-30} \quad (-1.1\sigma)$	D_{810}	$2529^{+27}_{-27} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.024}_{-0.024} \quad (+0.9\sigma)$
A_{217}^{CIB}	$38^{+20}_{-10} \quad (-1.5\sigma)$	D_{1420}	$814.9^{+9.7}_{-9.8} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.786^{+0.040}_{-0.041} \quad (+4.9\sigma)$
A_{143}^{tSZ}	$< 7.57 \quad (-0.5\sigma)$	D_{2000}	$231.4^{+3.8}_{-3.8} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.024}_{-0.025} \quad (+1.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9721^{+0.0099}_{-0.0098} \quad (+1.7\sigma)$	$\sigma_8(0.38)$	$0.698^{+0.036}_{-0.037} \quad (+5.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24540^{+0.00016}_{-0.00017} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.494^{+0.024}_{-0.025} \quad (+2.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00016}_{-0.00017} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.653^{+0.033}_{-0.035} \quad (+6.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.583^{+0.079}_{-0.077} \quad (-1.2\sigma)$	$f\sigma_8(0.61)$	$0.490^{+0.024}_{-0.025} \quad (+2.5\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.780^{+0.060}_{-0.062} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.622^{+0.032}_{-0.034} \quad (+6.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.36}$	z_*	$1089.73^{+0.64}_{-0.63} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	$0.314^{+0.017}_{-0.017} \quad (+6.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.91^{+0.62}_{-0.62} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.324^{+0.017}_{-0.018} \quad (+6.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04136^{+0.00087}_{-0.00083} \quad (+0.8\sigma)$	f_{2000}^{143}	$28^{+7}_{-6} \quad (-1.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.916^{+0.061}_{-0.061} \quad (+0.9\sigma)$	f_{2000}^{217}	$105.5^{+4.5}_{-4.4} \quad (-1.4\sigma)$
c_{217}	$1.0010^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	z_{drag}	$1059.84^{+0.93}_{-0.90} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-1.5\sigma)$
H_0	$68.1^{+1.2}_{-1.2} \quad (+1.4\sigma)$	r_{drag}	$147.58^{+0.67}_{-0.69} \quad (+0.8\sigma)$	χ_{lowl}^2	$24.7 \quad (\nu: 1.4) \quad (+0.6\sigma)$
Ω_{Λ}	$0.696^{+0.015}_{-0.015} \quad (+1.3\sigma)$	k_{D}	$0.14037^{+0.00090}_{-0.00089} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7059.6 \quad (\nu: 14.6)$
Ω_{m}	$0.304^{+0.015}_{-0.015} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00054}_{-0.00053} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	z_{eq}	$3357^{+58}_{-57} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.82 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.09615^{+0.00098}_{-0.00092} \quad (+0.6\sigma)$	k_{eq}	$0.01025^{+0.00018}_{-0.00017} \quad (-1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.1 \quad (\nu: 0.6)$
σ_8	$0.850^{+0.042}_{-0.044} \quad (+4.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (+1.2\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 5.5) \quad (+0.0\sigma)$
S_8	$0.856^{+0.044}_{-0.044} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0057}_{-0.0056} \quad (+1.2\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.469^{+0.024}_{-0.024} \quad (+0.7\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (+1.4\sigma)$	χ_{CMB}^2	$7084.3 \quad (\nu: 14.0) \quad (+1073.0\sigma)$
$\bar{\chi}_{\mathrm{eff}}^2 = 7097.63; R - 1 = 0.01179$					

2.225 base_CamSpecHM_TT_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02243^{+0.00054}_{-0.00052} \quad (+1.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.468^{+0.027}_{-0.026} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.455^{+0.011}_{-0.011} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1176^{+0.0050}_{-0.0049} \quad (-1.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.632^{+0.030}_{-0.030} \quad (+1.8\sigma)$	$H(0.15)$	$73.5^{+2.0}_{-1.9} \quad (+1.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0010}_{-0.0010} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$1.031^{+0.048}_{-0.048} \quad (+2.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+19}_{-19} \quad (-1.6\sigma)$
τ	$0.115^{+0.061}_{-0.060} \quad (+7.8\sigma)$	$r_{\mathrm{drag}} h$	$100.9^{+4.1}_{-4.0} \quad (+1.5\sigma)$	$H(0.38)$	$83.5^{+1.5}_{-1.4} \quad (+1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.16^{+0.11}_{-0.11} \quad (+7.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.54^{+0.11}_{-0.11} \quad (+2.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1517^{+39}_{-39} \quad (-1.6\sigma)$
n_{s}	$0.974^{+0.016}_{-0.015} \quad (+1.9\sigma)$	z_{re}	$12.9^{+4.4}_{-5.1} \quad (+6.5\sigma)$	$H(0.51)$	$90.1^{+1.2}_{-1.1} \quad (+1.7\sigma)$
y_{cal}	$1.0003^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.36^{+0.27}_{-0.26} \quad (+7.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1967^{+45}_{-46} \quad (-1.6\sigma)$
A_{100}^{PS}	$232^{+50}_{-50} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.868^{+0.030}_{-0.029} \quad (-1.2\sigma)$	$H(0.61)$	$95.61^{+0.98}_{-0.90} \quad (+1.7\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-1.7\sigma)$	D_{40}	$1237^{+32}_{-31} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2290^{+49}_{-50} \quad (-1.6\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.1\sigma)$	D_{220}	$5708^{+80}_{-80} \quad (-0.1\sigma)$	$H(2.33)$	$235.1^{+2.9}_{-2.9} \quad (-1.3\sigma)$
A_{217}^{CIB}	$38^{+10}_{-10} \quad (-1.5\sigma)$	D_{810}	$2528^{+27}_{-27} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5751^{+40}_{-42} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$< 7.57 \quad (-0.5\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.026}_{-0.025} \quad (+0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.26}_{-0.27}$	D_{2000}	$231.6^{+4.2}_{-4.2} \quad (+1.2\sigma)$	$\sigma_8(0.15)$	$0.789^{+0.041}_{-0.040} \quad (+5.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.974^{+0.016}_{-0.015} \quad (+1.9\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.024}_{-0.024} \quad (+1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24542^{+0.00022}_{-0.00022} \quad (+1.3\sigma)$	$\sigma_8(0.38)$	$0.701^{+0.038}_{-0.037} \quad (+6.2\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00022}_{-0.00022} \quad (+1.3\sigma)$	$f\sigma_8(0.51)$	$0.495^{+0.023}_{-0.023} \quad (+2.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.576^{+0.098}_{-0.097} \quad (-1.4\sigma)$	$\sigma_8(0.51)$	$0.656^{+0.037}_{-0.035} \quad (+6.6\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.771^{+0.089}_{-0.092} \quad (-1.6\sigma)$	$f\sigma_8(0.61)$	$0.491^{+0.023}_{-0.023} \quad (+2.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.6^{+1.0}_{-0.99} \quad (-1.6\sigma)$	$\sigma_8(0.61)$	$0.625^{+0.035}_{-0.034} \quad (+6.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	r_*	$145.0^{+1.1}_{-1.1} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.315^{+0.019}_{-0.018} \quad (+7.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$100\theta_*$	$1.0414^{+0.0010}_{-0.00098} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.326^{+0.020}_{-0.019} \quad (+7.4\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.924^{+0.098}_{-0.098} \quad (+1.0\sigma)$	f_{2000}^{143}	$27^{+7}_{-7} \quad (-1.3\sigma)$
H_0	$68.4^{+2.3}_{-2.3} \quad (+1.6\sigma)$	z_{drag}	$1059.9^{+1.0}_{-1.0} \quad (+1.1\sigma)$	f_{2000}^{217}	$105.2^{+4.6}_{-4.6} \quad (-1.5\sigma)$
Ω_{Λ}	$0.698^{+0.029}_{-0.031} \quad (+1.5\sigma)$	r_{drag}	$147.7^{+1.0}_{-1.0} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-1.6\sigma)$
Ω_{m}	$0.302^{+0.031}_{-0.029} \quad (-1.5\sigma)$	k_{D}	$0.1403^{+0.0011}_{-0.0010} \quad (-0.4\sigma)$	χ_{lowl}^2	$24.8 \quad (\nu: 1.4) \quad (+0.7\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1407^{+0.0046}_{-0.0046} \quad (-1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16081^{+0.00058}_{-0.00056} \quad (-1.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7060.0 \quad (\nu: 14.7)$
$\Omega_{\mathrm{m}} h^3$	$0.09616^{+0.00097}_{-0.00092} \quad (+0.6\sigma)$	z_{eq}	$3347^{+110}_{-110} \quad (-1.4\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 5.6) \quad (+0.0\sigma)$
σ_8	$0.853^{+0.043}_{-0.042} \quad (+4.6\sigma)$	k_{eq}	$0.01022^{+0.00034}_{-0.00033} \quad (-1.4\sigma)$	χ_{CMB}^2	$7084.8 \quad (\nu: 14.3) \quad (+1073.0\sigma)$
S_8	$0.854^{+0.050}_{-0.048} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.824^{+0.022}_{-0.021} \quad (+1.5\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7092.14; R - 1 = 0.00760$

2.226 base_CamSpecHM_TT_lowl_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02239^{+0.00042}_{-0.00041} \quad (+1.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.632^{+0.030}_{-0.030} \quad (+1.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.8^{+9.8}_{-9.8} \quad (-1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0025}_{-0.0025} \quad (-1.2\sigma)$	$\sigma_8/h^{0.5}$	$1.030^{+0.049}_{-0.049} \quad (+2.4\sigma)$	$H(0.38)$	$83.32^{+0.78}_{-0.75} \quad (+1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04117^{+0.00088}_{-0.00085} \quad (+0.9\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+2.0}_{-1.9} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+20}_{-20} \quad (-1.4\sigma)$
τ	$0.110^{+0.052}_{-0.053} \quad (+7.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.54^{+0.11}_{-0.11} \quad (+2.3\sigma)$	$H(0.51)$	$89.96^{+0.64}_{-0.63} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.149^{+0.099}_{-0.10} \quad (+6.6\sigma)$	z_{re}	$12.6^{+3.8}_{-4.5} \quad (+6.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1971^{+23}_{-23} \quad (-1.4\sigma)$
n_{s}	$0.9722^{+0.0098}_{-0.0097} \quad (+1.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.33^{+0.24}_{-0.23} \quad (+7.1\sigma)$	$H(0.61)$	$95.52^{+0.56}_{-0.53} \quad (+1.5\sigma)$
y_{cal}	$1.0003^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.023}_{-0.023} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2294^{+25}_{-25} \quad (-1.4\sigma)$
A_{100}^{PS}	$233^{+50}_{-50} \quad (-1.1\sigma)$	D_{40}	$1237^{+31}_{-30} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+1.5}_{-1.5} \quad (-1.1\sigma)$
A_{143}^{PS}	$36^{+20}_{-20} \quad (-1.6\sigma)$	D_{220}	$5707^{+79}_{-78} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+26}_{-27} \quad (-1.4\sigma)$
A_{217}^{PS}	$104^{+20}_{-30} \quad (-1.1\sigma)$	D_{810}	$2529^{+27}_{-27} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.023}_{-0.023} \quad (+0.9\sigma)$
A_{217}^{CIB}	$38^{+20}_{-10} \quad (-1.5\sigma)$	D_{1420}	$814.9^{+9.8}_{-9.8} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.787^{+0.039}_{-0.039} \quad (+5.0\sigma)$
A_{143}^{tSZ}	$< 7.57 \quad (-0.5\sigma)$	D_{2000}	$231.4^{+3.8}_{-3.8} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.023}_{-0.023} \quad (+1.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9722^{+0.0098}_{-0.0097} \quad (+1.7\sigma)$	$\sigma_8(0.38)$	$0.698^{+0.035}_{-0.035} \quad (+5.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24540^{+0.00016}_{-0.00017} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.495^{+0.024}_{-0.023} \quad (+2.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00016}_{-0.00017} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.654^{+0.033}_{-0.033} \quad (+6.2\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.582^{+0.078}_{-0.076} \quad (-1.2\sigma)$	$f\sigma_8(0.61)$	$0.490^{+0.023}_{-0.023} \quad (+2.6\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.779^{+0.060}_{-0.061} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.622^{+0.032}_{-0.032} \quad (+6.3\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.36}$	z_*	$1089.73^{+0.62}_{-0.63} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	$0.314^{+0.016}_{-0.016} \quad (+6.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.91^{+0.62}_{-0.62} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.324^{+0.017}_{-0.017} \quad (+6.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04136^{+0.00087}_{-0.00083} \quad (+0.8\sigma)$	f_{2000}^{143}	$28^{+6}_{-6} \quad (-1.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.916^{+0.061}_{-0.061} \quad (+0.9\sigma)$	f_{2000}^{217}	$105.5^{+4.4}_{-4.4} \quad (-1.4\sigma)$
c_{217}	$1.0010^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	z_{drag}	$1059.85^{+0.93}_{-0.91} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-1.5\sigma)$
H_0	$68.1^{+1.2}_{-1.1} \quad (+1.4\sigma)$	r_{drag}	$147.58^{+0.67}_{-0.69} \quad (+0.8\sigma)$	χ_{lowl}^2	$24.7 \quad (\nu: 1.3) \quad (+0.7\sigma)$
Ω_{Λ}	$0.696^{+0.015}_{-0.015} \quad (+1.3\sigma)$	k_{D}	$0.14037^{+0.00090}_{-0.00089} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7059.5 \quad (\nu: 14.2)$
Ω_{m}	$0.304^{+0.015}_{-0.015} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00054}_{-0.00053} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.043 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0024}_{-0.0024} \quad (-1.2\sigma)$	z_{eq}	$3357^{+57}_{-57} \quad (-1.2\sigma)$	χ_{MGS}^2	$1.82 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.09615^{+0.00098}_{-0.00093} \quad (+0.6\sigma)$	k_{eq}	$0.01025^{+0.00018}_{-0.00017} \quad (-1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.1 \quad (\nu: 0.5)$
σ_8	$0.851^{+0.042}_{-0.041} \quad (+4.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (+1.2\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 5.5) \quad (+0.0\sigma)$
S_8	$0.856^{+0.043}_{-0.043} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0057}_{-0.0056} \quad (+1.2\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.469^{+0.024}_{-0.023} \quad (+0.7\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (+1.4\sigma)$	χ_{CMB}^2	$7084.2 \quad (\nu: 13.8) \quad (+1072.9\sigma)$
$\bar{\chi}_{\mathrm{eff}}^2 = 7097.56; R - 1 = 0.01150$					

2.227 base_CamSpecHM_TT_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022053	$0.02207^{+0.00043}_{-0.00041} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4653	$0.465^{+0.027}_{-0.026} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4462	$0.4464^{+0.0092}_{-0.0091} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12163	$0.1216^{+0.0043}_{-0.0042} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6154	$0.615^{+0.023}_{-0.024} \quad (+0.4\sigma)$	$H(0.15)$	71.90	$71.9^{+1.6}_{-1.5} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	1.04072	$1.04073^{+0.00094}_{-0.00094} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9985	$0.998^{+0.032}_{-0.033} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	651.2	$651^{+16}_{-16} \quad (+0.4\sigma)$
τ	0.0513	$0.052^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	97.71	$97.8^{+3.2}_{-3.2} \quad (-0.4\sigma)$	$H(0.38)$	82.27	$82.3^{+1.1}_{-1.1} \quad (-0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0400	$3.041^{+0.032}_{-0.032} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.471	$2.469^{+0.076}_{-0.078} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	1549.3	$1549^{+32}_{-31} \quad (+0.4\sigma)$
n_{s}	0.9590	$0.960^{+0.012}_{-0.012} \quad (-0.5\sigma)$	z_{re}	7.47	$7.5^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.51)$	89.13	$89.17^{+0.89}_{-0.83} \quad (-0.4\sigma)$
y_{cal}	1.00029	$1.0004^{+0.0050}_{-0.0050} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	2.091	$2.092^{+0.067}_{-0.067} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	2004.6	$2004^{+37}_{-37} \quad (+0.4\sigma)$
A_{100}^{PS}	248.9	$245^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8866	$1.887^{+0.027}_{-0.027} \quad (+0.2\sigma)$	$H(0.61)$	94.87	$94.90^{+0.71}_{-0.65} \quad (-0.3\sigma)$
A_{143}^{PS}	39.9	$42^{+20}_{-20} \quad (-0.8\sigma)$	D_{40}	1240.5	$1239^{+32}_{-31} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	2330.7	$2330^{+39}_{-39} \quad (+0.4\sigma)$
A_{217}^{PS}	97.9	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{220}	5710	$5709^{+81}_{-81} \quad (-0.1\sigma)$	$H(2.33)$	237.30	$237.3^{+2.6}_{-2.5} \quad (+0.4\sigma)$
A_{217}^{CIB}	44.6	$42^{+10}_{-10} \quad (-0.9\sigma)$	D_{810}	2533.3	$2534^{+27}_{-28} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5783.3	$5782^{+31}_{-32} \quad (+0.3\sigma)$
A_{143}^{tSZ}	4.22	$< 7.28 \quad (-0.7\sigma)$	D_{1420}	812.1	$813^{+10}_{-10} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.4686	$0.468^{+0.024}_{-0.024} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.539	$0.64^{+0.25}_{-0.25}$	D_{2000}	228.72	$229.0^{+3.6}_{-3.5} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.7507	$0.751^{+0.015}_{-0.015} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.69	—	$n_{\mathrm{s},0.002}$	0.9590	$0.960^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$f\sigma_8(0.38)$	0.4836	$0.483^{+0.019}_{-0.019} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.01	—	Y_{P}	0.245264	$0.24526^{+0.00018}_{-0.00020} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	0.6638	$0.664^{+0.012}_{-0.012} \quad (+0.1\sigma)$
A^{kSZ}	3.9	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246590	$0.24659^{+0.00018}_{-0.00020} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	0.4804	$0.480^{+0.016}_{-0.017} \quad (+0.4\sigma)$
A_{100}^{dust}	1.005	$1.01^{+0.38}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	2.646	$2.643^{+0.080}_{-0.082} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	0.6206	$0.621^{+0.011}_{-0.011} \quad (+0.1\sigma)$
A_{143}^{dust}	0.986	$0.97^{+0.34}_{-0.35}$	Age/Gyr	13.842	$13.839^{+0.069}_{-0.072} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	0.4742	$0.474^{+0.014}_{-0.015} \quad (+0.3\sigma)$
A_{217}^{dust}	0.958	$0.97^{+0.20}_{-0.20}$	z_*	1090.47	$1090.44^{+0.80}_{-0.80} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	0.5901	$0.590^{+0.010}_{-0.010} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.001	$1.03^{+0.32}_{-0.31}$	r_*	144.25	$144.26^{+0.96}_{-0.96} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	0.29692	$0.2971^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$
c_{100}	0.99748	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	1.04094	$1.04094^{+0.00092}_{-0.00093} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	0.3055	$0.3056^{+0.0053}_{-0.0052} \quad (-0.1\sigma)$
c_{217}	1.00140	$1.0013^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.858	$13.859^{+0.088}_{-0.090} \quad (-0.4\sigma)$	f_{2000}^{143}	32.3	$32^{+6}_{-6} \quad (+0.1\sigma)$
H_0	66.46	$66.5^{+1.8}_{-1.8} \quad (-0.4\sigma)$	z_{drag}	1059.32	$1059.35^{+0.89}_{-0.87} \quad (-0.1\sigma)$	f_{2000}^{217}	108.39	$108.0^{+4.0}_{-4.0} \quad (-0.1\sigma)$
Ω_{Λ}	0.6733	$0.674^{+0.026}_{-0.028} \quad (-0.4\sigma)$	r_{drag}	147.02	$147.02^{+0.96}_{-0.96} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	33.80	$34^{+4}_{-4} \quad (+0.0\sigma)$
Ω_{m}	0.3267	$0.326^{+0.028}_{-0.026} \quad (+0.4\sigma)$	k_{D}	0.14070	$0.1407^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	χ_{small}^2	395.83	$397.0 \quad (\nu: 1.4) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14433	$0.1443^{+0.0041}_{-0.0040} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	0.16112	$0.16111^{+0.00051}_{-0.00052} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	7049.7	$7062.9 \quad (\nu: 14.0)$
$\Omega_{\mathrm{m}}h^3$	0.09592	$0.09594^{+0.00089}_{-0.00087} \quad (+0.1\sigma)$	z_{eq}	3434	$3432^{+98}_{-95} \quad (+0.4\sigma)$	χ_{prior}^2	2.3	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
σ_8	0.8140	$0.814^{+0.017}_{-0.018} \quad (+0.3\sigma)$	k_{eq}	0.010479	$0.01048^{+0.00030}_{-0.00029} \quad (+0.4\sigma)$	χ_{CMB}^2	7445.5	$7459.8 \quad (\nu: 15.0) \quad (+1141.4\sigma)$
S_8	0.8495	$0.849^{+0.049}_{-0.048} \quad (+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	0.8067	$0.807^{+0.018}_{-0.018} \quad (-0.4\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 7447.83$; $\bar{\chi}_{\mathrm{eff}}^2 = 7467.49$; $R - 1 = 0.00861$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.83 CamSpec like_10.7HM: 7049.71

2.228 base_CamSpecHM_TTTEE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022485	$0.02246^{+0.00039}_{-0.00037}$ (+1.6 σ)	σ_8	0.8525	$0.850^{+0.051}_{-0.046}$ (+4.3 σ)	k_{eq}	0.010269	$0.01027^{+0.00023}_{-0.00023}$ (−1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.11831	$0.1183^{+0.0033}_{-0.0034}$ (−1.1 σ)	S_8	0.8597	$0.858^{+0.044}_{-0.043}$ (+0.8 σ)	$100\theta_{\mathrm{eq}}$	0.8205	$0.821^{+0.015}_{-0.014}$ (+1.1 σ)
$100\theta_{\mathrm{MC}}$	1.04104	$1.04104^{+0.00067}_{-0.00065}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4709	$0.470^{+0.024}_{-0.023}$ (+0.8 σ)	$100\theta_{\mathrm{s,eq}}$	0.4531	$0.4531^{+0.0076}_{-0.0073}$ (+1.0 σ)
τ	0.112	$0.110^{+0.069}_{-0.063}$ (+7.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6336	$0.632^{+0.033}_{-0.031}$ (+1.8 σ)	$H(0.15)$	73.30	$73.3^{+1.4}_{-1.3}$ (+1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.154	$3.15^{+0.13}_{-0.12}$ (+6.6 σ)	$\sigma_8/h^{0.5}$	1.033	$1.031^{+0.055}_{-0.052}$ (+2.4 σ)	$D_{\mathrm{M}}(0.15)$	637.2	637^{+13}_{-13} (−1.3 σ)
n_{s}	0.9714	$0.970^{+0.012}_{-0.011}$ (+1.4 σ)	$r_{\mathrm{drag}}h$	100.37	$100.4^{+2.8}_{-2.6}$ (+1.2 σ)	$H(0.38)$	83.31	$83.3^{+1.0}_{-0.95}$ (+1.4 σ)
A_{100}^{PS}	221.2	233^{+50}_{-50} (−1.1 σ)	$\langle d^2 \rangle^{1/2}$	2.551	$2.55^{+0.13}_{-0.13}$ (+2.5 σ)	$D_{\mathrm{M}}(0.38)$	1521.1	1522^{+26}_{-27} (−1.3 σ)
A_{143}^{PS}	48.6	36^{+20}_{-20} (−1.6 σ)	z_{re}	12.8	$12.4^{+5.0}_{-5.5}$ (+6.0 σ)	$H(0.51)$	89.96	$89.95^{+0.82}_{-0.75}$ (+1.4 σ)
A_{217}^{PS}	107.7	104^{+20}_{-30} (−1.0 σ)	$10^9 A_{\mathrm{s}}$	2.343	$2.34^{+0.32}_{-0.27}$ (+7.1 σ)	$D_{\mathrm{M}}(0.51)$	1971.5	1972^{+30}_{-32} (−1.3 σ)
A_{217}^{CIB}	39.2	37^{+10}_{-10} (−1.6 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8728	$1.872^{+0.025}_{-0.025}$ (−0.9 σ)	$H(0.61)$	95.53	$95.52^{+0.66}_{-0.60}$ (+1.5 σ)
A_{143}^{tSZ}	6.49	< 7.56 (−0.5 σ)	D_{40}	1240.1	1243^{+32}_{-31} (+0.6 σ)	$D_{\mathrm{M}}(0.61)$	2295.0	2295^{+33}_{-34} (−1.3 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.774	$0.68^{+0.25}_{-0.26}$	D_{220}	5721	5722^{+77}_{-74} (+0.2 σ)	$H(2.33)$	235.57	$235.6^{+1.9}_{-2.0}$ (−0.9 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.87	—	D_{810}	2531.0	2529^{+27}_{-27} (−0.5 σ)	$D_{\mathrm{M}}(2.33)$	5753.1	5754^{+27}_{-29} (−1.5 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.999	—	D_{1420}	815.9	$814.7^{+9.5}_{-9.3}$ (+0.0 σ)	$f\sigma_8(0.15)$	0.4762	$0.475^{+0.024}_{-0.023}$ (+0.9 σ)
A^{kSZ}	0.0	—	D_{2000}	231.86	$231.4^{+3.7}_{-3.5}$ (+1.0 σ)	$\sigma_8(0.15)$	0.7884	$0.786^{+0.049}_{-0.044}$ (+5.0 σ)
A_{100}^{dust}	0.995	$1.00^{+0.38}_{-0.38}$	$n_{\mathrm{s},0.002}$	0.9714	$0.970^{+0.012}_{-0.011}$ (+1.4 σ)	$f\sigma_8(0.38)$	0.4971	$0.496^{+0.026}_{-0.025}$ (+1.7 σ)
A_{143}^{dust}	0.963	$0.95^{+0.34}_{-0.34}$	Y_{P}	0.245439	$0.24543^{+0.00015}_{-0.00015}$ (+1.5 σ)	$\sigma_8(0.38)$	0.6996	$0.698^{+0.045}_{-0.040}$ (+5.7 σ)
A_{217}^{dust}	0.987	$0.98^{+0.20}_{-0.20}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246766	$0.24676^{+0.00015}_{-0.00015}$ (+1.5 σ)	$f\sigma_8(0.51)$	0.4964	$0.495^{+0.026}_{-0.025}$ (+2.2 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	0.998	$1.02^{+0.32}_{-0.31}$	$10^5 \mathrm{D}/\mathrm{H}$	2.565	$2.569^{+0.070}_{-0.070}$ (−1.5 σ)	$\sigma_8(0.51)$	0.6550	$0.653^{+0.043}_{-0.038}$ (+6.1 σ)
y_{cal}	1.00001	$1.0001^{+0.0049}_{-0.0048}$ (−0.1 σ)	Age/Gyr	13.775	$13.777^{+0.060}_{-0.064}$ (−1.5 σ)	$f\sigma_8(0.61)$	0.4917	$0.490^{+0.027}_{-0.025}$ (+2.6 σ)
c_{100}	0.99792	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	z_*	1089.63	$1089.66^{+0.69}_{-0.71}$ (−1.6 σ)	$\sigma_8(0.61)$	0.6235	$0.622^{+0.041}_{-0.036}$ (+6.2 σ)
c_{217}	1.00103	$1.0009^{+0.0031}_{-0.0031}$ (+4.2 σ)	r_*	144.78	$144.80^{+0.72}_{-0.70}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.3146	$0.314^{+0.021}_{-0.019}$ (+6.6 σ)
c_{TE}	0.9925	$0.992^{+0.011}_{-0.011}$	$100\theta_*$	1.04122	$1.04122^{+0.00065}_{-0.00064}$ (+0.5 σ)	$\sigma_8(2.33)$	0.3247	$0.324^{+0.023}_{-0.020}$ (+6.7 σ)
c_{EE}	0.9903	$0.9903^{+0.010}_{-0.0098}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.905	$13.907^{+0.065}_{-0.065}$ (+0.7 σ)	f_{2000}^{143}	27.3	27^{+6}_{-6} (−1.3 σ)
H_0	68.09	$68.1^{+1.6}_{-1.5}$ (+1.3 σ)	z_{drag}	1060.09	$1060.03^{+0.74}_{-0.71}$ (+1.4 σ)	f_{2000}^{217}	104.70	$105.3^{+4.3}_{-4.3}$ (−1.5 σ)
Ω_{Λ}	0.6949	$0.695^{+0.020}_{-0.021}$ (+1.2 σ)	r_{drag}	147.41	$147.44^{+0.69}_{-0.68}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	30.06	30^{+5}_{-5} (−1.6 σ)
Ω_{m}	0.3051	$0.305^{+0.021}_{-0.020}$ (−1.2 σ)	k_{D}	0.14062	$0.14057^{+0.00070}_{-0.00071}$ (+0.1 σ)	$\chi_{\mathrm{CamSpec}}^2$	11495.8	11512.0 (ν : 15.9)
$\Omega_{\mathrm{m}}h^2$	0.14144	$0.1414^{+0.0031}_{-0.0031}$ (−1.0 σ)	$100\theta_{\mathrm{D}}$	0.160674	$0.16071^{+0.00042}_{-0.00043}$ (−1.4 σ)	χ_{prior}^2	1.9	7.7 (ν : 5.5) (+0.1 σ)
$\Omega_{\mathrm{m}}h^3$	0.09630	$0.09626^{+0.00064}_{-0.00063}$ (+0.8 σ)	z_{eq}	3364	3364^{+74}_{-75} (−1.0 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11497.65$; $\bar{\chi}_{\mathrm{eff}}^2 = 11519.77$; $R - 1 = 0.00880$
 χ_{eff}^2 : CMB - CamSpec like_10.7HM_1400_unified: 11495.79

2.229 base_CamSpecHM_TTTEEE_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022467	$0.02243^{+0.00038}_{-0.00035}$ (+1.4 σ)	S_8	0.8498	$0.846^{+0.041}_{-0.041}$ (+0.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.4533	$0.4530^{+0.0068}_{-0.0067}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.11820	$0.1184^{+0.0031}_{-0.0030}$ (−1.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4655	$0.463^{+0.022}_{-0.022}$ (+0.2 σ)	$H(0.15)$	73.32	$73.2^{+1.2}_{-1.2}$ (+1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04104	$1.04102^{+0.00064}_{-0.00066}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6265	$0.623^{+0.029}_{-0.029}$ (+1.0 σ)	$D_{\mathrm{M}}(0.15)$	637.0	638^{+12}_{-12} (−1.2 σ)
τ	0.101	$0.094^{+0.055}_{-0.057}$ (+5.2 σ)	$\sigma_8/h^{0.5}$	1.0219	$1.015^{+0.047}_{-0.048}$ (+1.4 σ)	$H(0.38)$	83.31	$83.25^{+0.93}_{-0.88}$ (+1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.132	$3.12^{+0.11}_{-0.11}$ (+4.7 σ)	$r_{\mathrm{drag}}h$	100.44	$100.3^{+2.5}_{-2.4}$ (+1.1 σ)	$D_{\mathrm{M}}(0.38)$	1520.8	1523^{+24}_{-24} (−1.2 σ)
n_{s}	0.9723	$0.971^{+0.011}_{-0.010}$ (+1.4 σ)	$\langle d^2 \rangle^{1/2}$	2.521	$2.51^{+0.11}_{-0.11}$ (+1.4 σ)	$H(0.51)$	89.96	$89.91^{+0.74}_{-0.70}$ (+1.3 σ)
y_{cal}	1.00023	$1.0002^{+0.0049}_{-0.0047}$ (−0.1 σ)	z_{re}	11.89	$11.2^{+4.6}_{-5.0}$ (+4.4 σ)	$D_{\mathrm{M}}(0.51)$	1971.2	1973^{+28}_{-29} (−1.3 σ)
A_{100}^{PS}	221.6	234^{+50}_{-50} (−1.1 σ)	$10^9 A_{\mathrm{s}}$	2.293	$2.26^{+0.25}_{-0.24}$ (+5.0 σ)	$H(0.61)$	95.53	$95.48^{+0.60}_{-0.56}$ (+1.4 σ)
A_{143}^{PS}	48.3	37^{+20}_{-20} (−1.6 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8726	$1.872^{+0.024}_{-0.023}$ (−0.9 σ)	$D_{\mathrm{M}}(0.61)$	2294.6	2297^{+30}_{-31} (−1.3 σ)
A_{217}^{PS}	108.5	104^{+30}_{-30} (−1.0 σ)	D_{40}	1231.7	1233^{+28}_{-26} (−0.1 σ)	$H(2.33)$	235.48	$235.6^{+1.8}_{-1.8}$ (−0.9 σ)
A_{217}^{CIB}	38.8	38^{+10}_{-10} (−1.5 σ)	D_{220}	5716	5716^{+74}_{-73} (+0.1 σ)	$D_{\mathrm{M}}(2.33)$	5753.6	5756^{+26}_{-27} (−1.3 σ)
A_{143}^{tSZ}	6.38	< 7.53 (−0.5 σ)	D_{810}	2532.6	2531^{+27}_{-26} (−0.4 σ)	$f\sigma_8(0.15)$	0.4708	$0.468^{+0.022}_{-0.022}$ (+0.4 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.768	$0.67^{+0.26}_{-0.26}$	D_{1420}	816.9	$815.5^{+9.4}_{-9.2}$ (+0.2 σ)	$\sigma_8(0.15)$	0.7800	$0.774^{+0.039}_{-0.040}$ (+3.4 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.84	—	D_{2000}	231.94	$231.3^{+3.4}_{-3.4}$ (+1.0 σ)	$f\sigma_8(0.38)$	0.4915	$0.489^{+0.022}_{-0.023}$ (+0.9 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.96	—	$n_{\mathrm{s},0.002}$	0.9723	$0.971^{+0.011}_{-0.010}$ (+1.4 σ)	$\sigma_8(0.38)$	0.6922	$0.687^{+0.036}_{-0.036}$ (+4.0 σ)
A^{kSZ}	0.0	—	Y_{P}	0.245433	$0.24542^{+0.00014}_{-0.00014}$ (+1.3 σ)	$f\sigma_8(0.51)$	0.4909	$0.488^{+0.023}_{-0.023}$ (+1.3 σ)
A_{100}^{dust}	1.000	$1.00^{+0.39}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246759	$0.24674^{+0.00014}_{-0.00014}$ (+1.3 σ)	$\sigma_8(0.51)$	0.6481	$0.643^{+0.034}_{-0.034}$ (+4.2 σ)
A_{143}^{dust}	0.960	$0.95^{+0.34}_{-0.35}$	$10^5\mathrm{D}/\mathrm{H}$	2.568	$2.575^{+0.066}_{-0.067}$ (−1.4 σ)	$f\sigma_8(0.61)$	0.4863	$0.483^{+0.022}_{-0.023}$ (+1.6 σ)
A_{217}^{dust}	0.993	$0.98^{+0.20}_{-0.20}$	Age/Gyr	13.776	$13.781^{+0.057}_{-0.059}$ (−1.3 σ)	$\sigma_8(0.61)$	0.6169	$0.612^{+0.033}_{-0.033}$ (+4.4 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.008	$1.01^{+0.32}_{-0.32}$	z_*	1089.64	$1089.70^{+0.64}_{-0.66}$ (−1.5 σ)	$f\sigma_8(2.33)$	0.3114	$0.309^{+0.017}_{-0.017}$ (+4.7 σ)
c_{100}	0.99782	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_*	144.82	$144.81^{+0.66}_{-0.66}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3213	$0.319^{+0.018}_{-0.018}$ (+4.8 σ)
c_{217}	1.00104	$1.0009^{+0.0032}_{-0.0031}$ (+4.3 σ)	$100\theta_*$	1.04122	$1.04120^{+0.00063}_{-0.00064}$ (+0.5 σ)	f_{2000}^{143}	27.4	28^{+6}_{-6} (−1.2 σ)
c_{TE}	0.9932	$0.994^{+0.011}_{-0.010}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.909	$13.908^{+0.061}_{-0.061}$ (+0.7 σ)	f_{2000}^{217}	104.79	$105.5^{+4.2}_{-4.2}$ (−1.4 σ)
c_{EE}	0.9906	$0.9907^{+0.0097}_{-0.0097}$	z_{drag}	1060.05	$1059.96^{+0.74}_{-0.67}$ (+1.2 σ)	$f_{2000}^{143\times 217}$	30.07	31^{+4}_{-5} (−1.5 σ)
H_0	68.11	$68.0^{+1.4}_{-1.4}$ (+1.2 σ)	r_{drag}	147.46	$147.46^{+0.65}_{-0.63}$ (+0.5 σ)	χ_{lowl}^2	23.92	24.1 (ν : 0.9) (+0.2 σ)
Ω_{Λ}	0.6954	$0.694^{+0.018}_{-0.019}$ (+1.1 σ)	k_{D}	0.14055	$0.14053^{+0.00066}_{-0.00068}$ (−0.0 σ)	$\chi_{\mathrm{CamSpec}}^2$	11496.2	11512.2 (ν : 16.0)
Ω_{m}	0.3046	$0.306^{+0.019}_{-0.018}$ (−1.1 σ)	$100\theta_{\mathrm{D}}$	0.160702	$0.16075^{+0.00040}_{-0.00041}$ (−1.2 σ)	χ_{prior}^2	1.9	7.8 (ν : 5.7) (+0.1 σ)
$\Omega_{\mathrm{m}}h^2$	0.14131	$0.1415^{+0.0029}_{-0.0028}$ (−1.0 σ)	z_{eq}	3361	3365^{+69}_{-68} (−1.0 σ)	χ_{CMB}^2	11520.1	11536.3 (ν : 15.7) (+1883.7 σ)
$\Omega_{\mathrm{m}}h^3$	0.09625	$0.09620^{+0.00062}_{-0.00063}$ (+0.7 σ)	k_{eq}	0.010259	$0.01027^{+0.00021}_{-0.00021}$ (−1.0 σ)			
σ_8	0.8434	$0.837^{+0.042}_{-0.042}$ (+2.9 σ)	$100\theta_{\mathrm{eq}}$	0.8210	$0.820^{+0.013}_{-0.013}$ (+1.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11522.05$; $\bar{\chi}_{\mathrm{eff}}^2 = 11544.10$; $R - 1 = 0.00836$

χ_{eff}^2 : CMB - commander_dx12.v3.2.29: 23.92 CamSpec like_10.7HM_1400_unified: 11496.23

2.230 base_CamSpecHM_TTTEEE_lowl_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02244^{+0.00032}_{-0.00031} \quad (+1.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.463^{+0.021}_{-0.022} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.4^{+8.2}_{-8.1} \quad (-1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1183^{+0.0021}_{-0.0021} \quad (-1.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.623^{+0.028}_{-0.029} \quad (+1.0\sigma)$	$H(0.38)$	$83.28^{+0.63}_{-0.62} \quad (+1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04103^{+0.00058}_{-0.00058} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$1.015^{+0.045}_{-0.048} \quad (+1.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+17}_{-17} \quad (-1.3\sigma)$
τ	$0.095^{+0.049}_{-0.053} \quad (+5.3\sigma)$	$r_{\mathrm{drag}} h$	$100.4^{+1.7}_{-1.6} \quad (+1.2\sigma)$	$H(0.51)$	$89.93^{+0.51}_{-0.50} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.119^{+0.095}_{-0.10} \quad (+4.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.11} \quad (+1.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+19}_{-20} \quad (-1.3\sigma)$
n_{s}	$0.9709^{+0.0087}_{-0.0085} \quad (+1.5\sigma)$	z_{re}	$11.3^{+4.1}_{-4.5} \quad (+4.6\sigma)$	$H(0.61)$	$95.50^{+0.43}_{-0.41} \quad (+1.4\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0047} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.26^{+0.22}_{-0.23} \quad (+5.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+21}_{-21} \quad (-1.3\sigma)$
A_{100}^{PS}	$233^{+50}_{-50} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.022}_{-0.021} \quad (-0.9\sigma)$	$H(2.33)$	$235.5^{+1.3}_{-1.3} \quad (-1.0\sigma)$
A_{143}^{PS}	$36^{+20}_{-20} \quad (-1.6\sigma)$	D_{40}	$1232^{+28}_{-26} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+20}_{-20} \quad (-1.4\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.0\sigma)$	D_{220}	$5717^{+74}_{-72} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.468^{+0.021}_{-0.022} \quad (+0.4\sigma)$
A_{217}^{CIB}	$38^{+10}_{-10} \quad (-1.5\sigma)$	D_{810}	$2530^{+27}_{-26} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.775^{+0.036}_{-0.038} \quad (+3.4\sigma)$
A_{143}^{tSZ}	$< 7.60 \quad (-0.5\sigma)$	D_{1420}	$815.6^{+9.4}_{-9.1} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.488^{+0.022}_{-0.023} \quad (+0.9\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.26}$	D_{2000}	$231.3^{+3.3}_{-3.2} \quad (+1.0\sigma)$	$\sigma_8(0.38)$	$0.688^{+0.033}_{-0.034} \quad (+4.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9709^{+0.0087}_{-0.0085} \quad (+1.5\sigma)$	$f\sigma_8(0.51)$	$0.488^{+0.022}_{-0.023} \quad (+1.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24542^{+0.00012}_{-0.00012} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.644^{+0.031}_{-0.032} \quad (+4.3\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00012}_{-0.00012} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.483^{+0.022}_{-0.023} \quad (+1.6\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.574^{+0.057}_{-0.057} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.613^{+0.030}_{-0.031} \quad (+4.5\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.780^{+0.044}_{-0.046} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	$0.309^{+0.015}_{-0.016} \quad (+4.8\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.68^{+0.50}_{-0.50} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.319^{+0.016}_{-0.016} \quad (+4.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.31}_{-0.31}$	r_*	$144.83^{+0.49}_{-0.48} \quad (+0.8\sigma)$	f_{2000}^{143}	$28^{+6}_{-6} \quad (-1.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04121^{+0.00057}_{-0.00058} \quad (+0.5\sigma)$	f_{2000}^{217}	$105.5^{+4.0}_{-4.0} \quad (-1.4\sigma)$
c_{217}	$1.0009^{+0.0032}_{-0.0031} \quad (+4.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.046}_{-0.046} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-1.5\sigma)$
c_{TE}	$0.994^{+0.010}_{-0.010}$	z_{drag}	$1059.97^{+0.65}_{-0.64} \quad (+1.3\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 0.9) \quad (+0.1\sigma)$
c_{EE}	$0.9907^{+0.0097}_{-0.0096}$	r_{drag}	$147.48^{+0.51}_{-0.49} \quad (+0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11511.7 \quad (\nu: 15.0)$
H_0	$68.06^{+0.97}_{-0.96} \quad (+1.3\sigma)$	k_{D}	$0.14051^{+0.00060}_{-0.00061} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.030 \quad (\nu: 0.0)$
Ω_{Λ}	$0.695^{+0.012}_{-0.013} \quad (+1.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00038}_{-0.00038} \quad (-1.3\sigma)$	χ_{MGS}^2	$1.69 \quad (\nu: 0.1)$
Ω_{m}	$0.305^{+0.013}_{-0.012} \quad (-1.2\sigma)$	z_{eq}	$3362^{+47}_{-47} \quad (-1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.03 \quad (\nu: 0.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1413^{+0.0020}_{-0.0020} \quad (-1.0\sigma)$	k_{eq}	$0.01026^{+0.00014}_{-0.00014} \quad (-1.0\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.7) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09620^{+0.00062}_{-0.00063} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8208^{+0.0091}_{-0.0091} \quad (+1.1\sigma)$	χ_{BAO}^2	$5.76 \quad (\nu: 0.3)$
σ_8	$0.838^{+0.039}_{-0.041} \quad (+2.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4532^{+0.0047}_{-0.0046} \quad (+1.1\sigma)$	χ_{CMB}^2	$11535.7 \quad (\nu: 14.4) \quad (+1883.6\sigma)$
S_8	$0.845^{+0.039}_{-0.040} \quad (+0.2\sigma)$	$H(0.15)$	$73.28^{+0.84}_{-0.83} \quad (+1.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11549.23; R - 1 = 0.01419$

2.231 base_CamSpecHM_TTTEEE_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02244^{+0.00037}_{-0.00034} \quad (+1.5\sigma)$	S_8	$0.847^{+0.040}_{-0.038} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4532^{+0.0067}_{-0.0065} \quad (+1.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1183^{+0.0030}_{-0.0030} \quad (-1.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.464^{+0.022}_{-0.021} \quad (+0.3\sigma)$	$H(0.15)$	$73.3^{+1.2}_{-1.2} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04102^{+0.00064}_{-0.00065} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.624^{+0.028}_{-0.025} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$638^{+12}_{-12} \quad (-1.3\sigma)$
τ	$0.097^{+0.048}_{-0.049} \quad (+5.5\sigma)$	$\sigma_8/h^{0.5}$	$1.018^{+0.045}_{-0.041} \quad (+1.5\sigma)$	$H(0.38)$	$83.27^{+0.91}_{-0.86} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.122^{+0.093}_{-0.093} \quad (+5.0\sigma)$	$r_{\mathrm{drag}} h$	$100.3^{+2.4}_{-2.3} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+23}_{-24} \quad (-1.3\sigma)$
n_{s}	$0.971^{+0.011}_{-0.010} \quad (+1.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.097} \quad (+1.6\sigma)$	$H(0.51)$	$89.93^{+0.73}_{-0.68} \quad (+1.4\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0047} \quad (-0.1\sigma)$	z_{re}	$11.4^{+3.8}_{-4.4} \quad (+4.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+27}_{-28} \quad (-1.3\sigma)$
A_{100}^{PS}	$233^{+50}_{-50} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.27^{+0.22}_{-0.21} \quad (+5.3\sigma)$	$H(0.61)$	$95.50^{+0.60}_{-0.55} \quad (+1.4\sigma)$
A_{143}^{PS}	$36^{+20}_{-20} \quad (-1.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.024}_{-0.023} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+29}_{-30} \quad (-1.3\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.0\sigma)$	D_{40}	$1233^{+28}_{-26} \quad (-0.0\sigma)$	$H(2.33)$	$235.5^{+1.7}_{-1.8} \quad (-0.9\sigma)$
A_{217}^{CIB}	$38^{+10}_{-10} \quad (-1.5\sigma)$	D_{220}	$5716^{+74}_{-73} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+25}_{-26} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.5\sigma)$	D_{810}	$2530^{+27}_{-26} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.469^{+0.022}_{-0.020} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.26}_{-0.26}$	D_{1420}	$815.5^{+9.4}_{-9.2} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.776^{+0.035}_{-0.034} \quad (+3.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$231.3^{+3.4}_{-3.3} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.489^{+0.022}_{-0.020} \quad (+1.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.971^{+0.011}_{-0.010} \quad (+1.5\sigma)$	$\sigma_8(0.38)$	$0.689^{+0.032}_{-0.031} \quad (+4.3\sigma)$
A^{kSZ}	—	Y_{P}	$0.24542^{+0.00014}_{-0.00014} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.489^{+0.022}_{-0.020} \quad (+1.4\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00014}_{-0.00014} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.645^{+0.030}_{-0.029} \quad (+4.5\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.35}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.574^{+0.064}_{-0.067} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.484^{+0.021}_{-0.020} \quad (+1.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.780^{+0.056}_{-0.058} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.614^{+0.029}_{-0.028} \quad (+4.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.32}_{-0.32}$	z_*	$1089.69^{+0.62}_{-0.65} \quad (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.310^{+0.015}_{-0.015} \quad (+5.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_*	$144.82^{+0.66}_{-0.64} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.320^{+0.016}_{-0.015} \quad (+5.2\sigma)$
c_{217}	$1.0009^{+0.0032}_{-0.0031} \quad (+4.2\sigma)$	$100\theta_*$	$1.04120^{+0.00063}_{-0.00064} \quad (+0.5\sigma)$	f_{2000}^{143}	$28^{+6}_{-6} \quad (-1.2\sigma)$
c_{TE}	$0.994^{+0.010}_{-0.010}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.909^{+0.061}_{-0.059} \quad (+0.7\sigma)$	f_{2000}^{217}	$105.4^{+4.1}_{-4.1} \quad (-1.4\sigma)$
c_{EE}	$0.9906^{+0.0097}_{-0.0097}$	z_{drag}	$1059.97^{+0.72}_{-0.69} \quad (+1.3\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-1.5\sigma)$
H_0	$68.0^{+1.4}_{-1.4} \quad (+1.3\sigma)$	r_{drag}	$147.47^{+0.64}_{-0.62} \quad (+0.5\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 0.9) \quad (+0.2\sigma)$
Ω_{Λ}	$0.694^{+0.018}_{-0.018} \quad (+1.2\sigma)$	k_{D}	$0.14052^{+0.00066}_{-0.00068} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11512.0 \quad (\nu: 15.5)$
Ω_{m}	$0.306^{+0.018}_{-0.018} \quad (-1.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00039}_{-0.00041} \quad (-1.3\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.6) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1414^{+0.0028}_{-0.0028} \quad (-1.0\sigma)$	z_{eq}	$3363^{+66}_{-67} \quad (-1.0\sigma)$	χ_{CMB}^2	$11536.2 \quad (\nu: 15.4) \quad (+1883.7\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09620^{+0.00063}_{-0.00063} \quad (+0.7\sigma)$	k_{eq}	$0.01027^{+0.00020}_{-0.00020} \quad (-1.0\sigma)$		
σ_8	$0.839^{+0.037}_{-0.036} \quad (+3.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.013}_{-0.013} \quad (+1.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11543.93; R - 1 = 0.00900$

2.232 base_CamSpecHM_TTTEEE_lowl_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02244^{+0.00032}_{-0.00030}$ (+1.5 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.463^{+0.021}_{-0.020}$ (+0.3 σ)	$D_{\mathrm{M}}(0.15)$	$637.3^{+8.1}_{-8.1}$ (−1.3 σ)
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0021}_{-0.0021}$ (−1.1 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.624^{+0.027}_{-0.026}$ (+1.1 σ)	$H(0.38)$	$83.29^{+0.62}_{-0.61}$ (+1.4 σ)
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00058}_{-0.00058}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	$1.017^{+0.044}_{-0.042}$ (+1.5 σ)	$D_{\mathrm{M}}(0.38)$	1522^{+16}_{-16} (−1.3 σ)
τ	$0.097^{+0.047}_{-0.045}$ (+5.5 σ)	$r_{\mathrm{drag}} h$	$100.4^{+1.7}_{-1.6}$ (+1.2 σ)	$H(0.51)$	$89.94^{+0.51}_{-0.49}$ (+1.4 σ)
$\ln(10^{10} A_{\mathrm{s}})$	$3.122^{+0.092}_{-0.087}$ (+5.0 σ)	$\langle d^2 \rangle^{1/2}$	$2.51^{+0.10}_{-0.10}$ (+1.5 σ)	$D_{\mathrm{M}}(0.51)$	1972^{+19}_{-19} (−1.3 σ)
n_{s}	$0.9711^{+0.0086}_{-0.0084}$ (+1.5 σ)	z_{re}	$11.4^{+3.7}_{-4.0}$ (+4.8 σ)	$H(0.61)$	$95.51^{+0.43}_{-0.41}$ (+1.4 σ)
y_{cal}	$1.0002^{+0.0049}_{-0.0047}$ (−0.1 σ)	$10^9 A_{\mathrm{s}}$	$2.27^{+0.20}_{-0.20}$ (+5.3 σ)	$D_{\mathrm{M}}(0.61)$	2296^{+21}_{-21} (−1.3 σ)
A_{100}^{PS}	233^{+50}_{-50} (−1.1 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.022}_{-0.021}$ (−0.9 σ)	$H(2.33)$	$235.5^{+1.3}_{-1.2}$ (−1.0 σ)
A_{143}^{PS}	36^{+20}_{-20} (−1.6 σ)	D_{40}	1233^{+27}_{-26} (−0.1 σ)	$D_{\mathrm{M}}(2.33)$	5755^{+20}_{-20} (−1.4 σ)
A_{217}^{PS}	105^{+30}_{-30} (−1.0 σ)	D_{220}	5717^{+74}_{-72} (+0.1 σ)	$f\sigma_8(0.15)$	$0.469^{+0.021}_{-0.020}$ (+0.4 σ)
A_{217}^{CIB}	38^{+10}_{-10} (−1.5 σ)	D_{810}	2530^{+26}_{-26} (−0.4 σ)	$\sigma_8(0.15)$	$0.776^{+0.033}_{-0.033}$ (+3.6 σ)
A_{143}^{tSZ}	< 7.60 (−0.5 σ)	D_{1420}	$815.5^{+9.4}_{-9.1}$ (+0.2 σ)	$f\sigma_8(0.38)$	$0.489^{+0.021}_{-0.020}$ (+1.0 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.26}$	D_{2000}	$231.3^{+3.3}_{-3.2}$ (+1.0 σ)	$\sigma_8(0.38)$	$0.689^{+0.030}_{-0.030}$ (+4.2 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9711^{+0.0086}_{-0.0084}$ (+1.5 σ)	$f\sigma_8(0.51)$	$0.489^{+0.021}_{-0.020}$ (+1.4 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24542^{+0.00012}_{-0.00012}$ (+1.4 σ)	$\sigma_8(0.51)$	$0.645^{+0.028}_{-0.028}$ (+4.5 σ)
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00012}_{-0.00012}$ (+1.4 σ)	$f\sigma_8(0.61)$	$0.484^{+0.021}_{-0.020}$ (+1.7 σ)
A_{100}^{dust}	$1.00^{+0.37}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.573^{+0.056}_{-0.056}$ (−1.5 σ)	$\sigma_8(0.61)$	$0.614^{+0.027}_{-0.027}$ (+4.7 σ)
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.779^{+0.044}_{-0.046}$ (−1.4 σ)	$f\sigma_8(2.33)$	$0.310^{+0.014}_{-0.014}$ (+5.0 σ)
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.68^{+0.49}_{-0.50}$ (−1.5 σ)	$\sigma_8(2.33)$	$0.320^{+0.014}_{-0.014}$ (+5.2 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.31}_{-0.31}$	r_*	$144.83^{+0.49}_{-0.48}$ (+0.8 σ)	f_{2000}^{143}	28^{+6}_{-6} (−1.2 σ)
c_{100}	$0.9975^{+0.0020}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	$1.04121^{+0.00057}_{-0.00057}$ (+0.5 σ)	f_{2000}^{217}	$105.5^{+4.0}_{-4.0}$ (−1.4 σ)
c_{217}	$1.0009^{+0.0032}_{-0.0031}$ (+4.2 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.046}_{-0.046}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	30^{+4}_{-4} (−1.5 σ)
c_{TE}	$0.994^{+0.010}_{-0.010}$	z_{drag}	$1059.98^{+0.68}_{-0.65}$ (+1.3 σ)	χ_{lowl}^2	24.1 (ν : 0.9) (+0.2 σ)
c_{EE}	$0.9906^{+0.0096}_{-0.0096}$	r_{drag}	$147.48^{+0.50}_{-0.49}$ (+0.6 σ)	$\chi_{\mathrm{CamSpec}}^2$	11511.5 (ν : 14.6)
H_0	$68.08^{+0.97}_{-0.95}$ (+1.3 σ)	k_{D}	$0.14051^{+0.00060}_{-0.00061}$ (−0.1 σ)	$\chi_{6\mathrm{DF}}^2$	0.030 (ν : 0.0)
Ω_{Λ}	$0.695^{+0.012}_{-0.013}$ (+1.2 σ)	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00038}_{-0.00038}$ (−1.3 σ)	χ_{MGS}^2	1.71 (ν : 0.1)
Ω_{m}	$0.305^{+0.013}_{-0.012}$ (−1.2 σ)	z_{eq}	3362^{+47}_{-47} (−1.0 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.01 (ν : 0.4)
$\Omega_{\mathrm{m}} h^2$	$0.1413^{+0.0020}_{-0.0020}$ (−1.0 σ)	k_{eq}	$0.01026^{+0.00014}_{-0.00014}$ (−1.0 σ)	χ_{prior}^2	7.7 (ν : 5.7) (+0.1 σ)
$\Omega_{\mathrm{m}} h^3$	$0.09621^{+0.00061}_{-0.00062}$ (+0.7 σ)	$100\theta_{\mathrm{eq}}$	$0.8209^{+0.0090}_{-0.0090}$ (+1.1 σ)	χ_{BAO}^2	5.75 (ν : 0.3)
σ_8	$0.839^{+0.038}_{-0.035}$ (+3.1 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4533^{+0.0046}_{-0.0045}$ (+1.1 σ)	χ_{CMB}^2	11535.6 (ν : 14.3) (+1883.6 σ)
S_8	$0.846^{+0.038}_{-0.037}$ (+0.3 σ)	$H(0.15)$	$73.29^{+0.84}_{-0.82}$ (+1.3 σ)		

$\bar{\chi}_{\mathrm{eff}}^2 = 11549.09$; $R - 1 = 0.01512$

2.233 base_CamSpecHM_TTTEEE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022266	$0.02227^{+0.00032}_{-0.00031}$ (+0.7 σ)	S_8	0.8311	$0.831^{+0.033}_{-0.032}$ (−0.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.4495	$0.4495^{+0.0060}_{-0.0059}$ (+0.3 σ)
$\Omega_{\mathrm{c}}h^2$	0.12002	$0.1200^{+0.0027}_{-0.0027}$ (−0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4552	$0.455^{+0.018}_{-0.018}$ (−0.4 σ)	$H(0.15)$	72.56	$72.6^{+1.0}_{-1.0}$ (+0.4 σ)
$100\theta_{\mathrm{MC}}$	1.04083	$1.04084^{+0.00063}_{-0.00062}$ (+0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6070	$0.607^{+0.017}_{-0.016}$ (−0.3 σ)	$D_{\mathrm{M}}(0.15)$	644.5	644^{+10}_{-10} (−0.4 σ)
τ	0.0527	$0.053^{+0.016}_{-0.015}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9872	$0.987^{+0.024}_{-0.023}$ (−0.4 σ)	$H(0.38)$	82.75	$82.76^{+0.76}_{-0.74}$ (+0.4 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0397	$3.040^{+0.032}_{-0.031}$ (−0.0 σ)	$r_{\mathrm{drag}}h$	98.96	$99.0^{+2.1}_{-2.1}$ (+0.3 σ)	$D_{\mathrm{M}}(0.38)$	1536.0	1536^{+21}_{-21} (−0.4 σ)
n_{s}	0.9640	$0.9639^{+0.0089}_{-0.0089}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.443	$2.443^{+0.057}_{-0.056}$ (−0.3 σ)	$H(0.51)$	89.52	$89.53^{+0.60}_{-0.58}$ (+0.5 σ)
y_{cal}	1.00037	$1.0005^{+0.0050}_{-0.0049}$ (+0.0 σ)	z_{re}	7.54	$7.5^{+1.5}_{-1.6}$ (+0.0 σ)	$D_{\mathrm{M}}(0.51)$	1989.0	1989^{+24}_{-24} (−0.4 σ)
A_{100}^{PS}	238.7	242^{+50}_{-50} (−0.8 σ)	$10^9 A_{\mathrm{s}}$	2.090	$2.090^{+0.067}_{-0.064}$ (−0.0 σ)	$H(0.61)$	95.173	$95.18^{+0.49}_{-0.47}$ (+0.5 σ)
A_{143}^{PS}	43.9	40^{+20}_{-20} (−1.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8808	$1.881^{+0.023}_{-0.023}$ (−0.2 σ)	$D_{\mathrm{M}}(0.61)$	2313.8	2314^{+26}_{-26} (−0.4 σ)
A_{217}^{PS}	101.4	102^{+30}_{-30} (−1.3 σ)	D_{40}	1230.7	1231^{+26}_{-26} (−0.2 σ)	$H(2.33)$	236.46	$236.5^{+1.7}_{-1.6}$ (−0.2 σ)
A_{217}^{CIB}	43.3	40^{+10}_{-10} (−1.1 σ)	D_{220}	5723	5724^{+76}_{-76} (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5769.4	5769^{+22}_{-22} (−0.5 σ)
A_{143}^{tSZ}	5.45	< 7.41 (−0.6 σ)	D_{810}	2535.1	2535^{+27}_{-26} (−0.1 σ)	$f\sigma_8(0.15)$	0.4594	$0.459^{+0.017}_{-0.016}$ (−0.4 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.637	$0.65^{+0.25}_{-0.25}$	D_{1420}	815.0	$815.0^{+9.6}_{-9.3}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7475	$0.747^{+0.013}_{-0.013}$ (−0.2 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.78	—	D_{2000}	229.94	$229.9^{+3.3}_{-3.1}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4766	$0.477^{+0.013}_{-0.013}$ (−0.3 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.39	—	$n_{\mathrm{s},0.002}$	0.9640	$0.9639^{+0.0089}_{-0.0089}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6621	$0.662^{+0.011}_{-0.011}$ (−0.2 σ)
A^{kSZ}	1.9	—	Y_{P}	0.245353	$0.24535^{+0.00012}_{-0.00013}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4747	$0.475^{+0.012}_{-0.012}$ (−0.3 σ)
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246680	$0.24668^{+0.00012}_{-0.00013}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6194	$0.619^{+0.010}_{-0.010}$ (−0.1 σ)
A_{143}^{dust}	0.977	$0.96^{+0.35}_{-0.34}$	$10^5\mathrm{D}/\mathrm{H}$	2.605	$2.606^{+0.059}_{-0.058}$ (−0.7 σ)	$f\sigma_8(0.61)$	0.4693	$0.469^{+0.011}_{-0.011}$ (−0.3 σ)
A_{217}^{dust}	0.968	$0.97^{+0.20}_{-0.20}$	Age/Gyr	13.8109	$13.810^{+0.049}_{-0.050}$ (−0.5 σ)	$\sigma_8(0.61)$	0.5892	$0.5892^{+0.0096}_{-0.0094}$ (−0.1 σ)
$A_{143\times 217}^{\mathrm{dust}}$	0.996	$1.03^{+0.32}_{-0.32}$	z_*	1090.05	$1090.05^{+0.56}_{-0.55}$ (−0.6 σ)	$f\sigma_8(2.33)$	0.29691	$0.2969^{+0.0049}_{-0.0047}$ (−0.1 σ)
c_{100}	0.99769	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	r_*	144.51	$144.51^{+0.62}_{-0.61}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3059	$0.3059^{+0.0051}_{-0.0050}$ (+0.0 σ)
c_{217}	1.00131	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	$100\theta_*$	1.04102	$1.04103^{+0.00062}_{-0.00061}$ (+0.1 σ)	f_{2000}^{143}	30.7	30^{+6}_{-6} (−0.3 σ)
c_{TE}	0.9966	$0.9966^{+0.0098}_{-0.0095}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.881	$13.881^{+0.058}_{-0.057}$ (+0.1 σ)	f_{2000}^{217}	107.15	$107.2^{+3.8}_{-3.7}$ (−0.5 σ)
c_{EE}	0.9925	$0.9924^{+0.0098}_{-0.0096}$	z_{drag}	1059.70	$1059.70^{+0.66}_{-0.64}$ (+0.7 σ)	$f_{2000}^{143\times 217}$	32.59	33^{+4}_{-4} (−0.5 σ)
H_0	67.23	$67.2^{+1.2}_{-1.2}$ (+0.4 σ)	r_{drag}	147.20	$147.21^{+0.63}_{-0.61}$ (−0.0 σ)	χ_{small}^2	395.86	396.9 (ν : 1.4) (−0.0 σ)
Ω_{Λ}	0.6838	$0.684^{+0.017}_{-0.017}$ (+0.4 σ)	k_{D}	0.14067	$0.14067^{+0.00069}_{-0.00069}$ (+0.2 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.5	11514.4 (ν : 15.7)
Ω_{m}	0.3162	$0.316^{+0.017}_{-0.017}$ (−0.4 σ)	$100\theta_{\mathrm{D}}$	0.160888	$0.16089^{+0.00038}_{-0.00038}$ (−0.7 σ)	χ_{prior}^2	2.1	7.8 (ν : 5.9) (+0.1 σ)
$\Omega_{\mathrm{m}}h^2$	0.14293	$0.1429^{+0.0026}_{-0.0026}$ (−0.2 σ)	z_{eq}	3400	3400^{+62}_{-62} (−0.2 σ)	χ_{CMB}^2	11895.4	11911.3 (ν : 16.5) (+1952.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.09609	$0.09609^{+0.00065}_{-0.00062}$ (+0.5 σ)	k_{eq}	0.010378	$0.01038^{+0.00019}_{-0.00019}$ (−0.2 σ)			
σ_8	0.8094	$0.809^{+0.015}_{-0.015}$ (−0.3 σ)	$100\theta_{\mathrm{eq}}$	0.8133	$0.813^{+0.012}_{-0.011}$ (+0.3 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11897.49$; $\bar{\chi}_{\mathrm{eff}}^2 = 11919.09$; $R - 1 = 0.00575$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.86 CamSpec like_10.7HM_1400_unified: 11499.49

2.234 base_WMAP

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02261	$0.02265^{+0.00097}_{-0.00094}$ (+2.4 σ)	D_{40}	1219.6	1219^{+48}_{-45} (−0.9 σ)	$H(0.15)$	74.44	$74.6^{+3.7}_{-3.6}$ (+3.0 σ)
$\Omega_c h^2$	0.1141	$0.1136^{+0.0090}_{-0.0086}$ (−3.4 σ)	D_{220}	5752	5748^{+68}_{-68} (+0.8 σ)	$D_M(0.15)$	626.0	625^{+35}_{-33} (−2.9 σ)
$100\theta_{MC}$	1.04031	$1.0401^{+0.0043}_{-0.0042}$ (−1.3 σ)	D_{810}	2517	2507^{+63}_{-63} (−2.1 σ)	$H(0.38)$	84.04	$84.2^{+2.9}_{-2.7}$ (+3.0 σ)
τ	0.0878	$0.089^{+0.029}_{-0.025}$ (+4.6 σ)	D_{1420}	811.2	808^{+30}_{-30} (−1.3 σ)	$D_M(0.38)$	1499	1496^{+70}_{-68} (−2.9 σ)
$\ln(10^{10} A_s)$	3.093	$3.092^{+0.061}_{-0.058}$ (+3.1 σ)	D_{2000}	229.4	228^{+12}_{-11} (−0.6 σ)	$H(0.51)$	90.46	$90.6^{+2.3}_{-2.0}$ (+2.9 σ)
n_s	0.9737	$0.973^{+0.025}_{-0.024}$ (+1.9 σ)	$n_{s,0.002}$	0.9737	$0.973^{+0.025}_{-0.024}$ (+1.9 σ)	$D_M(0.51)$	1947	1943^{+83}_{-81} (−2.9 σ)
A_{tsz}	0.08	—	Y_P	0.245483	$0.24550^{+0.00041}_{-0.00042}$ (+2.2 σ)	$H(0.61)$	95.85	$95.9^{+2.0}_{-2.0}$ (+2.7 σ)
H_0	69.46	$69.7^{+4.2}_{-4.1}$ (+3.1 σ)	Y_P^{BBN}	0.246810	$0.24683^{+0.00041}_{-0.00042}$ (+2.2 σ)	$D_M(0.61)$	2269	2265^{+89}_{-88} (−2.9 σ)
Ω_Λ	0.7152	$0.717^{+0.048}_{-0.050}$ (+2.9 σ)	$10^5 D/H$	2.543	$2.54^{+0.18}_{-0.17}$ (−2.3 σ)	$H(2.33)$	232.9	$232.5^{+5.8}_{-5.5}$ (−3.3 σ)
Ω_m	0.2848	$0.283^{+0.050}_{-0.048}$ (−2.9 σ)	Age/Gyr	13.765	$13.76^{+0.21}_{-0.22}$ (−1.9 σ)	$D_M(2.33)$	5746	5744^{+93}_{-97} (−2.1 σ)
$\Omega_m h^2$	0.1374	$0.1369^{+0.0088}_{-0.0084}$ (−3.3 σ)	z_*	1089.11	$1089.0^{+1.6}_{-1.5}$ (−3.1 σ)	$f\sigma_8(0.15)$	0.440	$0.436^{+0.056}_{-0.052}$ (−2.3 σ)
$\Omega_m h^3$	0.09543	$0.0953^{+0.0035}_{-0.0034}$ (−1.2 σ)	r_*	145.79	$145.9^{+2.3}_{-2.3}$ (+3.0 σ)	$\sigma_8(0.15)$	0.7525	$0.749^{+0.039}_{-0.039}$ (+0.0 σ)
σ_8	0.8114	$0.808^{+0.046}_{-0.045}$ (−0.5 σ)	$100\theta_*$	1.04047	$1.0403^{+0.0043}_{-0.0041}$ (−1.4 σ)	$f\sigma_8(0.38)$	0.4639	$0.461^{+0.046}_{-0.045}$ (−2.0 σ)
S_8	0.790	$0.78^{+0.11}_{-0.10}$ (−2.3 σ)	$D_M(z_*)/\text{Gpc}$	14.012	$14.03^{+0.23}_{-0.23}$ (+3.4 σ)	$\sigma_8(0.38)$	0.6701	$0.668^{+0.031}_{-0.031}$ (+0.7 σ)
$\sigma_8 \Omega_m^{0.5}$	0.433	$0.430^{+0.059}_{-0.055}$ (−2.3 σ)	z_{drag}	1060.05	$1060.1^{+2.1}_{-2.2}$ (+1.5 σ)	$f\sigma_8(0.51)$	0.4657	$0.463^{+0.040}_{-0.040}$ (−1.8 σ)
$\sigma_8 \Omega_m^{0.25}$	0.593	$0.589^{+0.055}_{-0.053}$ (−1.9 σ)	r_{drag}	148.40	$148.5^{+2.4}_{-2.4}$ (+2.7 σ)	$\sigma_8(0.51)$	0.6284	$0.626^{+0.028}_{-0.028}$ (+1.1 σ)
$\sigma_8/h^{0.5}$	0.974	$0.968^{+0.076}_{-0.074}$ (−1.5 σ)	k_D	0.13967	$0.1396^{+0.0027}_{-0.0027}$ (−1.9 σ)	$f\sigma_8(0.61)$	0.4630	$0.460^{+0.036}_{-0.036}$ (−1.6 σ)
$r_{\text{drag}} h$	103.1	$103.5^{+7.3}_{-7.2}$ (+3.1 σ)	$100\theta_D$	0.16053	$0.1605^{+0.0010}_{-0.00095}$ (−2.2 σ)	$\sigma_8(0.61)$	0.5987	$0.597^{+0.026}_{-0.026}$ (+1.3 σ)
$\langle d^2 \rangle^{1/2}$	2.429	$2.42^{+0.15}_{-0.14}$ (−0.8 σ)	z_{eq}	3268	3256^{+210}_{-200} (−3.3 σ)	$f\sigma_8(2.33)$	0.3030	$0.302^{+0.013}_{-0.012}$ (+2.0 σ)
z_{re}	10.61	$10.7^{+2.2}_{-2.2}$ (+3.8 σ)	k_{eq}	0.00997	$0.00994^{+0.00064}_{-0.00061}$ (−3.3 σ)	$\sigma_8(2.33)$	0.3137	$0.313^{+0.013}_{-0.012}$ (+2.6 σ)
$10^9 A_s$	2.205	$2.20^{+0.14}_{-0.13}$ (+3.2 σ)	$100\theta_{\text{eq}}$	0.8384	$0.841^{+0.041}_{-0.040}$ (+3.4 σ)	χ^2_{WMAP}	7557.9	7564.0 (ν : 5.6)
$10^9 A_s e^{-2\tau}$	1.850	$1.843^{+0.061}_{-0.059}$ (−3.1 σ)	$100\theta_{s,\text{eq}}$	0.4623	$0.464^{+0.021}_{-0.021}$ (+3.4 σ)			

Best-fit $\chi^2_{\text{eff}} = 7557.95$; $\bar{\chi}^2_{\text{eff}} = 7563.97$; $R - 1 = 0.00844$

χ^2_{eff} : CMB - WMAP: 7557.95

2.235 base_WMAP_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02240	$0.02246^{+0.00086}_{-0.00088}$ (+1.6 σ)	D_{220}	5740	5739^{+63}_{-62} (+0.6 σ)	$H(0.38)$	83.14	$83.2^{+1.2}_{-1.2}$ (+1.2 σ)
$\Omega_{\mathrm{c}}h^2$	0.11645	$0.1167^{+0.0041}_{-0.0041}$ (−1.9 σ)	D_{810}	2518	2516^{+61}_{-60} (−1.5 σ)	$D_{\mathrm{M}}(0.38)$	1522.4	1522^{+27}_{-26} (−1.3 σ)
$100\theta_{\mathrm{MC}}$	1.03933	$1.0395^{+0.0040}_{-0.0039}$ (−2.6 σ)	D_{1420}	809.4	809^{+32}_{-30} (−1.1 σ)	$H(0.51)$	89.72	$89.8^{+1.2}_{-1.2}$ (+1.1 σ)
τ	0.0862	$0.086^{+0.026}_{-0.024}$ (+4.2 σ)	D_{2000}	228.7	229^{+12}_{-12} (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1973.9	1973^{+33}_{-32} (−1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.096	$3.095^{+0.062}_{-0.057}$ (+3.3 σ)	$n_{\mathrm{s},0.002}$	0.9678	$0.967^{+0.020}_{-0.020}$ (+0.8 σ)	$H(0.61)$	95.23	$95.3^{+1.2}_{-1.2}$ (+0.8 σ)
n_{s}	0.9678	$0.967^{+0.020}_{-0.020}$ (+0.8 σ)	Y_{P}	0.245409	$0.24543^{+0.00037}_{-0.00039}$ (+1.4 σ)	$D_{\mathrm{M}}(0.61)$	2298.3	2297^{+37}_{-36} (−1.3 σ)
A_{tSZ}	0.03	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246735	$0.24675^{+0.00037}_{-0.00040}$ (+1.4 σ)	$H(2.33)$	234.09	$234.4^{+3.4}_{-3.4}$ (−1.9 σ)
H_0	68.11	$68.1^{+1.4}_{-1.4}$ (+1.4 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.579	$2.57^{+0.17}_{-0.15}$ (−1.5 σ)	$D_{\mathrm{M}}(2.33)$	5774	5769^{+73}_{-69} (−0.5 σ)
Ω_{Λ}	0.6993	$0.699^{+0.016}_{-0.016}$ (+1.5 σ)	Age/Gyr	13.826	$13.82^{+0.18}_{-0.17}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4547	$0.455^{+0.027}_{-0.025}$ (−0.7 σ)
Ω_{m}	0.3007	$0.301^{+0.016}_{-0.016}$ (−1.5 σ)	z_*	1089.57	$1089.5^{+1.0}_{-0.99}$ (−1.9 σ)	$\sigma_8(0.15)$	0.7580	$0.759^{+0.034}_{-0.031}$ (+1.2 σ)
$\Omega_{\mathrm{m}}h^2$	0.13949	$0.1398^{+0.0044}_{-0.0044}$ (−1.8 σ)	r_*	145.33	$145.2^{+1.4}_{-1.4}$ (+1.6 σ)	$f\sigma_8(0.38)$	0.4757	$0.476^{+0.025}_{-0.023}$ (−0.4 σ)
$\Omega_{\mathrm{m}}h^3$	0.09501	$0.0953^{+0.0035}_{-0.0035}$ (−1.3 σ)	$100\theta_*$	1.03951	$1.0397^{+0.0040}_{-0.0039}$ (−2.7 σ)	$\sigma_8(0.38)$	0.6732	$0.674^{+0.029}_{-0.027}$ (+1.7 σ)
σ_8	0.8192	$0.820^{+0.037}_{-0.034}$ (+0.9 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.981	$13.97^{+0.18}_{-0.18}$ (+2.0 σ)	$f\sigma_8(0.51)$	0.4756	$0.476^{+0.024}_{-0.022}$ (−0.2 σ)
S_8	0.8201	$0.821^{+0.051}_{-0.047}$ (−0.8 σ)	z_{drag}	1059.74	$1059.9^{+2.1}_{-2.1}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6305	$0.631^{+0.027}_{-0.025}$ (+1.9 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4492	$0.450^{+0.028}_{-0.026}$ (−0.8 σ)	r_{drag}	148.00	$147.9^{+1.7}_{-1.7}$ (+1.4 σ)	$f\sigma_8(0.61)$	0.4714	$0.472^{+0.023}_{-0.021}$ (+0.0 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6066	$0.607^{+0.032}_{-0.029}$ (−0.3 σ)	k_{D}	0.13993	$0.1401^{+0.0023}_{-0.0023}$ (−0.8 σ)	$\sigma_8(0.61)$	0.6002	$0.600^{+0.026}_{-0.024}$ (+2.1 σ)
$\sigma_8/h^{0.5}$	0.9926	$0.993^{+0.046}_{-0.041}$ (+0.0 σ)	$100\theta_{\mathrm{D}}$	0.16058	$0.1605^{+0.0010}_{-0.00098}$ (−2.0 σ)	$f\sigma_8(2.33)$	0.3031	$0.303^{+0.013}_{-0.012}$ (+2.4 σ)
$r_{\mathrm{drag}}h$	100.81	$100.8^{+2.2}_{-2.1}$ (+1.4 σ)	z_{eq}	3318	3326^{+110}_{-110} (−1.8 σ)	$\sigma_8(2.33)$	0.3130	$0.313^{+0.013}_{-0.012}$ (+2.7 σ)
$\langle d^2 \rangle^{1/2}$	2.472	$2.474^{+0.080}_{-0.078}$ (+0.5 σ)	k_{eq}	0.010127	$0.01015^{+0.00032}_{-0.00032}$ (−1.8 σ)	χ_{WMAP}^2	7558.3	7563.6 (ν : 5.2)
z_{re}	10.59	$10.5^{+2.2}_{-2.2}$ (+3.7 σ)	$100\theta_{\mathrm{eq}}$	0.8275	$0.826^{+0.017}_{-0.016}$ (+1.8 σ)	$\chi_{6\mathrm{DF}}^2$	0.004	0.055 (ν : 0.0)
10^9A_{s}	2.210	$2.21^{+0.14}_{-0.12}$ (+3.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.4567	$0.4561^{+0.0090}_{-0.0087}$ (+1.7 σ)	χ_{MGS}^2	1.89	1.94 (ν : 0.2)
$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8604	$1.859^{+0.043}_{-0.042}$ (−1.8 σ)	$H(0.15)$	73.26	$73.3^{+1.3}_{-1.3}$ (+1.3 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.47	4.3 (ν : 0.7)
D_{40}	1231.4	1233^{+35}_{-34} (−0.1 σ)	$D_{\mathrm{M}}(0.15)$	637.3	637^{+12}_{-12} (−1.3 σ)	χ_{BAO}^2	5.37	6.3 (ν : 0.9)

Best-fit $\chi_{\mathrm{eff}}^2 = 7563.66$; $\bar{\chi}_{\mathrm{eff}}^2 = 7569.93$; $R - 1 = 0.00961$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.89 DR12BAO: 3.47 CMB - WMAP: 7558.29

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Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02220	$0.02220^{+0.00097}_{-0.0010}$ (+0.4 σ)	$\Omega_{\mathrm{m}}h^2$	0.1256	$0.130^{+0.024}_{-0.022}$ (−6.6 σ)	k_{D}	0.1356	$0.1369^{+0.0072}_{-0.0067}$ (−7.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.1028	$0.107^{+0.024}_{-0.022}$ (−6.3 σ)	$\Omega_{\mathrm{m}}h^3$	0.0888	$0.095^{+0.039}_{-0.031}$ (−2.5 σ)	$100\theta_{\mathrm{D}}$	0.1602	$0.161^{+0.011}_{-0.0085}$ (+1.1 σ)
$100\theta_{\mathrm{MC}}$	1.032	$1.040^{+0.077}_{-0.059}$ (−1.1 σ)	σ_8	0.872	$0.87^{+0.18}_{-0.15}$ (+6.1 σ)	z_{eq}	2987	3097^{+600}_{-500} (−6.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.375	$3.30^{+0.30}_{-0.32}$ (+15.7 σ)	S_8	0.799	$0.790^{+0.051}_{-0.050}$ (−2.0 σ)	k_{eq}	0.00912	$0.0095^{+0.0017}_{-0.0016}$ (−6.6 σ)
n_{s}	0.9617	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4374	$0.433^{+0.028}_{-0.027}$ (−2.0 σ)	$100\theta_{\mathrm{eq}}$	0.888	$0.875^{+0.065}_{-0.070}$ (+7.2 σ)
b_{DES}^1	1.339	$1.36^{+0.30}_{-0.31}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.618	$0.612^{+0.078}_{-0.069}$ (+0.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.4883	$0.481^{+0.032}_{-0.035}$ (+7.3 σ)
b_{DES}^2	1.534	$1.56^{+0.31}_{-0.32}$	$\sigma_8/h^{0.5}$	1.038	$1.02^{+0.11}_{-0.11}$ (+1.7 σ)	$H(0.15)$	75.2	77^{+20}_{-10} (+5.8 σ)
b_{DES}^3	1.521	$1.55^{+0.30}_{-0.31}$	$r_{\mathrm{drag}}h$	107.5	109^{+20}_{-20} (+6.4 σ)	$D_{\mathrm{M}}(0.15)$	617	611^{+100}_{-100} (−4.6 σ)
b_{DES}^4	1.835	$1.87^{+0.37}_{-0.37}$	$\langle d^2 \rangle^{1/2}$	2.717	$2.65^{+0.30}_{-0.31}$ (+5.1 σ)	$H(0.38)$	83.9	86^{+20}_{-10} (+5.6 σ)
b_{DES}^5	1.893	$1.93^{+0.39}_{-0.39}$	z_{re}	7.49	$7.58^{+0.56}_{-0.52}$ (+0.1 σ)	$D_{\mathrm{M}}(0.38)$	1487	1470^{+300}_{-300} (−4.6 σ)
m_{DES}^1	0.0132	$0.012^{+0.045}_{-0.045}$	10^9A_{s}	2.92	$2.74^{+0.85}_{-0.82}$ (+18.8 σ)	$H(0.51)$	89.8	92^{+20}_{-10} (+5.3 σ)
m_{DES}^2	0.0154	$0.014^{+0.044}_{-0.044}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	2.62	$2.45^{+0.76}_{-0.73}$ (+41.8 σ)	$D_{\mathrm{M}}(0.51)$	1936	1913^{+300}_{-400} (−4.5 σ)
m_{DES}^3	0.0062	$0.009^{+0.042}_{-0.042}$	D_{40}	1795	1680^{+500}_{-500} (+29.3 σ)	$H(0.61)$	94.8	97^{+20}_{-10} (+4.8 σ)
m_{DES}^4	0.0087	$0.011^{+0.041}_{-0.041}$	D_{220}	8615	7948^{+3000}_{-3000} (+53.2 σ)	$D_{\mathrm{M}}(0.61)$	2261	2233^{+400}_{-400} (−4.5 σ)
$A_{\mathrm{IA,DES}}$	0.507	$0.49^{+0.42}_{-0.37}$	D_{810}	3566	3256^{+1000}_{-1000} (+52.1 σ)	$H(2.33)$	224.0	228^{+23}_{-21} (−6.9 σ)
$\alpha_{\mathrm{IA,DES}}$	−1.2	—	D_{1420}	1125	1013^{+400}_{-300} (+38.8 σ)	$D_{\mathrm{M}}(2.33)$	5835	5754^{+700}_{-900} (−1.5 σ)
$\Delta z_{\mathrm{l,DES}}^1$	0.0041	$0.004^{+0.015}_{-0.015}$	D_{2000}	319	297^{+100}_{-100} (+37.6 σ)	$f\sigma_8(0.15)$	0.4467	$0.442^{+0.031}_{-0.031}$ (−1.8 σ)
$\Delta z_{\mathrm{l,DES}}^2$	0.0017	$0.002^{+0.013}_{-0.013}$	$n_{\mathrm{s},0.002}$	0.9617	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	$\sigma_8(0.15)$	0.813	$0.81^{+0.18}_{-0.15}$ (+7.8 σ)
$\Delta z_{\mathrm{l,DES}}^3$	0.0044	$0.004^{+0.013}_{-0.013}$	Y_{P}	0.245325	$0.24531^{+0.00042}_{-0.00044}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4806	$0.475^{+0.050}_{-0.049}$ (−0.5 σ)
$\Delta z_{\mathrm{l,DES}}^4$	0.0029	$0.002^{+0.018}_{-0.018}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246652	$0.24664^{+0.00042}_{-0.00044}$ (+0.3 σ)	$\sigma_8(0.38)$	0.728	$0.72^{+0.17}_{-0.14}$ (+10.1 σ)
$\Delta z_{\mathrm{l,DES}}^5$	0.0012	$0.001^{+0.019}_{-0.019}$	$10^5\mathrm{D}/\mathrm{H}$	2.618	$2.62^{+0.20}_{-0.18}$ (−0.3 σ)	$f\sigma_8(0.51)$	0.487	$0.482^{+0.061}_{-0.058}$ (+0.5 σ)
$\Delta z_{\mathrm{s,DES}}^1$	−0.0011	$−0.003^{+0.027}_{-0.027}$	Age/Gyr	14.00	$13.8^{+1.8}_{-2.0}$ (−0.8 σ)	$\sigma_8(0.51)$	0.685	$0.68^{+0.17}_{-0.14}$ (+11.1 σ)
$\Delta z_{\mathrm{s,DES}}^2$	−0.0288	$−0.030^{+0.021}_{-0.021}$	z_*	1088.58	$1089.0^{+2.4}_{-2.2}$ (−3.2 σ)	$f\sigma_8(0.61)$	0.487	$0.482^{+0.068}_{-0.065}$ (+1.4 σ)
$\Delta z_{\mathrm{s,DES}}^3$	0.0059	$0.007^{+0.019}_{-0.019}$	r_*	149.3	$148.1^{+6.3}_{-6.6}$ (+7.6 σ)	$\sigma_8(0.61)$	0.654	$0.65^{+0.16}_{-0.13}$ (+11.8 σ)
$\Delta z_{\mathrm{s,DES}}^4$	−0.0266	$−0.024^{+0.037}_{-0.037}$	$100\theta_*$	1.032	$1.040^{+0.077}_{-0.059}$ (−1.1 σ)	$f\sigma_8(2.33)$	0.333	$0.331^{+0.089}_{-0.071}$ (+13.4 σ)
H_0	70.7	72^{+20}_{-10} (+5.8 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.46	$14.3^{+1.4}_{-1.6}$ (+8.6 σ)	$\sigma_8(2.33)$	0.347	$0.345^{+0.10}_{-0.078}$ (+14.8 σ)
Ω_{Λ}	0.749	$0.745^{+0.077}_{-0.073}$ (+5.1 σ)	z_{drag}	1058.25	$1058.6^{+3.0}_{-3.0}$ (−1.8 σ)	χ_{DES}^2	500.5	512.8 (ν : 13.4)
Ω_{m}	0.251	$0.255^{+0.073}_{-0.077}$ (−5.1 σ)	r_{drag}	152.1	$150.9^{+6.5}_{-6.8}$ (+7.7 σ)	χ_{prior}^2	1.3	14.3 (ν : 14.0) (+1.9 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 501.82$; $\bar{\chi}_{\mathrm{eff}}^2 = 527.14$; $R - 1 = 0.00444$
 χ_{eff}^2 : WL - DES_1YR_final: 500.49

2.237 base_DESlens_lenspriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02216	$0.02219^{+0.00098}_{-0.00096}$ (+0.4 σ)	$r_{\mathrm{drag}} h$	110.1	112^{+30}_{-30} (+8.6 σ)	$100\theta_{\mathrm{eq}}$	0.830	$0.80^{+0.17}_{-0.17}$ (−1.6 σ)
$\Omega_{\mathrm{c}} h^2$	0.120	$0.137^{+0.070}_{-0.056}$ (+8.0 σ)	$\langle d^2 \rangle^{1/2}$	2.54	$2.39^{+0.78}_{-0.74}$ (−1.8 σ)	$100\theta_{\mathrm{s,eq}}$	0.459	$0.441^{+0.088}_{-0.090}$ (−1.6 σ)
$100\theta_{\mathrm{MC}}$	1.064	$1.084^{+0.098}_{-0.10}$ (+93.5 σ)	z_{re}	7.85	$8.1^{+1.2}_{-1.1}$ (+0.8 σ)	$H(0.15)$	79.7	84^{+20}_{-20} (+14.6 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.15	$2.95^{+0.95}_{-0.87}$ (−5.7 σ)	$10^9 A_{\mathrm{s}}$	2.34	$2.1^{+2.1}_{-1.6}$ (+1.3 σ)	$D_{\mathrm{M}}(0.15)$	583	570^{+200}_{-100} (−9.8 σ)
n_{s}	0.9598	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	2.10	$1.9^{+1.9}_{-1.4}$ (+2.1 σ)	$H(0.38)$	89.1	94^{+20}_{-20} (+19.8 σ)
m_{DES}^1	0.0147	$0.014^{+0.045}_{-0.045}$	D_{40}	1407	1288^{+1000}_{-1000} (+3.5 σ)	$D_{\mathrm{M}}(0.38)$	1403	1365^{+400}_{-300} (−11.2 σ)
m_{DES}^2	0.0136	$0.013^{+0.043}_{-0.044}$	D_{220}	6383	5754^{+7000}_{-5000} (+1.0 σ)	$H(0.51)$	95.4	100^{+20}_{-20} (+25.1 σ)
m_{DES}^3	0.0017	$0.005^{+0.042}_{-0.042}$	D_{810}	2800	2357^{+3000}_{-2000} (−13.0 σ)	$D_{\mathrm{M}}(0.51)$	1826	1774^{+500}_{-400} (−12.1 σ)
m_{DES}^4	0.0162	$0.017^{+0.042}_{-0.042}$	D_{1420}	883	704^{+800}_{-600} (−21.6 σ)	$H(0.61)$	100.7	106^{+20}_{-20} (+31.4 σ)
$A_{\mathrm{IA,DES}}$	1.34	$0.7^{+2.0}_{-2.3}$	D_{2000}	252	208^{+300}_{-200} (−12.2 σ)	$D_{\mathrm{M}}(0.61)$	2132	2068^{+600}_{-500} (−12.8 σ)
$\alpha_{\mathrm{IA,DES}}$	3.38	> -2.80	$n_{\mathrm{s},0.002}$	0.9598	$0.960^{+0.039}_{-0.039}$ (−0.5 σ)	$H(2.33)$	239.0	252^{+50}_{-50} (+11.7 σ)
$\Delta z_{\mathrm{s,DES}}^1$	0.0029	$0.002^{+0.029}_{-0.030}$	Y_{P}	0.245311	$0.24531^{+0.00042}_{-0.00042}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5488	5288^{+1000}_{-1000} (−30.1 σ)
$\Delta z_{\mathrm{s,DES}}^2$	−0.0192	$-0.020^{+0.023}_{-0.024}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246637	$0.24664^{+0.00042}_{-0.00042}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.453	$0.440^{+0.047}_{-0.055}$ (−2.0 σ)
$\Delta z_{\mathrm{s,DES}}^3$	0.0080	$0.009^{+0.021}_{-0.021}$	$10^5 \mathrm{D}/\mathrm{H}$	2.625	$2.62^{+0.19}_{-0.18}$ (−0.3 σ)	$\sigma_8(0.15)$	0.818	$0.80^{+0.26}_{-0.30}$ (+6.7 σ)
$\Delta z_{\mathrm{s,DES}}^4$	−0.0164	$-0.016^{+0.040}_{-0.040}$	Age/Gyr	13.16	$12.7^{+2.8}_{-2.5}$ (−31.2 σ)	$f\sigma_8(0.38)$	0.486	$0.470^{+0.077}_{-0.091}$ (−1.0 σ)
H_0	74.8	> 56.7 (+12.6 σ)	z_*	1090.2	$1091.5^{+5.7}_{-4.9}$ (+2.9 σ)	$\sigma_8(0.38)$	0.732	$0.72^{+0.25}_{-0.29}$ (+8.9 σ)
Ω_{Λ}	0.744	$0.72^{+0.14}_{-0.20}$ (+3.4 σ)	r_*	144.5	141^{+14}_{-15} (−7.2 σ)	$f\sigma_8(0.51)$	0.492	$0.475^{+0.094}_{-0.11}$ (−0.2 σ)
Ω_{m}	0.256	$0.28^{+0.20}_{-0.14}$ (−3.4 σ)	$100\theta_*$	1.064	$1.085^{+0.098}_{-0.10}$ (+95.1 σ)	$\sigma_8(0.51)$	0.688	$0.67^{+0.25}_{-0.28}$ (+9.9 σ)
$\Omega_{\mathrm{m}} h^2$	0.143	$0.160^{+0.070}_{-0.056}$ (+8.5 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.58	$13.1^{+2.5}_{-2.4}$ (−18.5 σ)	$f\sigma_8(0.61)$	0.492	$0.48^{+0.10}_{-0.12}$ (+0.5 σ)
$\Omega_{\mathrm{m}} h^3$	0.107	$0.127^{+0.080}_{-0.068}$ (+68.5 σ)	z_{drag}	1059.47	$1060.6^{+5.1}_{-4.7}$ (+2.7 σ)	$\sigma_8(0.61)$	0.657	$0.64^{+0.24}_{-0.27}$ (+10.5 σ)
σ_8	0.878	$0.86^{+0.27}_{-0.29}$ (+5.2 σ)	r_{drag}	147.2	144^{+14}_{-15} (−7.4 σ)	$f\sigma_8(2.33)$	0.334	$0.33^{+0.13}_{-0.14}$ (+12.1 σ)
S_8	0.811	$0.791^{+0.075}_{-0.079}$ (−2.0 σ)	k_{D}	0.1406	$0.145^{+0.018}_{-0.015}$ (+8.0 σ)	$\sigma_8(2.33)$	0.347	$0.34^{+0.15}_{-0.15}$ (+13.8 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4442	$0.433^{+0.041}_{-0.043}$ (−2.0 σ)	$100\theta_{\mathrm{D}}$	0.1646	$0.167^{+0.014}_{-0.015}$ (+23.9 σ)	χ_{DES}^2	228.7	233.7 (ν : 4.0)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.625	$0.61^{+0.11}_{-0.13}$ (−0.3 σ)	z_{eq}	3408	3814^{+2000}_{-1000} (+8.5 σ)	χ_{prior}^2	0.3	9.4 (ν : 9.3) (+0.6 σ)
$\sigma_8/h^{0.5}$	1.015	$0.97^{+0.21}_{-0.23}$ (−1.6 σ)	k_{eq}	0.01040	$0.0116^{+0.0051}_{-0.0041}$ (+8.5 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 229.04$; $\bar{\chi}_{\mathrm{eff}}^2 = 243.17$; $R - 1 = 0.00629$

χ_{eff}^2 : WL - DES_1YR_final: 228.72

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Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02221^{+0.00098}_{-0.00097} \quad (+0.4\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.092^{+0.023}_{-0.020} \quad (-9.6\sigma)$	z_{eq}	$3119^{+400}_{-400} \quad (-6.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.108^{+0.016}_{-0.015} \quad (-5.9\sigma)$	σ_8	$0.816^{+0.067}_{-0.060} \quad (+0.5\sigma)$	k_{eq}	$0.0095^{+0.0012}_{-0.0011} \quad (-6.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.034^{+0.045}_{-0.039} \quad (-13.9\sigma)$	S_8	$0.776^{+0.030}_{-0.029} \quad (-2.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.864^{+0.047}_{-0.049} \quad (+6.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.18^{+0.14}_{-0.14} \quad (+8.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.425^{+0.016}_{-0.016} \quad (-2.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.476^{+0.024}_{-0.025} \quad (+6.0\sigma)$
n_{s}	$0.961^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.589^{+0.027}_{-0.026} \quad (-1.9\sigma)$	$H(0.15)$	$74^{+9}_{-8} \quad (+2.6\sigma)$
b_{DES}^1	$1.44^{+0.19}_{-0.18}$	$\sigma_8/h^{0.5}$	$0.979^{+0.033}_{-0.033} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+80}_{-80} \quad (-2.4\sigma)$
b_{DES}^2	$1.65^{+0.16}_{-0.16}$	$r_{\mathrm{drag}}h$	$105^{+11}_{-9.8} \quad (+3.8\sigma)$	$H(0.38)$	$83.5^{+8.8}_{-8.3} \quad (+1.8\sigma)$
b_{DES}^3	$1.64^{+0.15}_{-0.14}$	$\langle d^2 \rangle^{1/2}$	$2.518^{+0.086}_{-0.086} \quad (+1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1508^{+200}_{-200} \quad (-2.2\sigma)$
b_{DES}^4	$1.98^{+0.17}_{-0.17}$	z_{re}	$7.58^{+0.41}_{-0.36} \quad (+0.1\sigma)$	$H(0.51)$	$89.7^{+8.9}_{-8.3} \quad (+0.8\sigma)$
b_{DES}^5	$2.06^{+0.20}_{-0.19}$	$10^9 A_{\mathrm{s}}$	$2.41^{+0.35}_{-0.32} \quad (+9.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1960^{+210}_{-220} \quad (-2.0\sigma)$
m_{DES}^1	$0.012^{+0.044}_{-0.045}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$2.16^{+0.31}_{-0.29} \quad (+20.3\sigma)$	$H(0.61)$	$94.9^{+9.0}_{-8.4} \quad (-0.4\sigma)$
m_{DES}^2	$0.015^{+0.044}_{-0.044}$	D_{40}	$1462^{+200}_{-200} \quad (+15.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2286^{+240}_{-250} \quad (-1.8\sigma)$
m_{DES}^3	$0.012^{+0.040}_{-0.041}$	D_{220}	$6949^{+1000}_{-1000} \quad (+29.5\sigma)$	$H(2.33)$	$228^{+15}_{-14} \quad (-6.9\sigma)$
m_{DES}^4	$0.013^{+0.042}_{-0.041}$	D_{810}	$2906^{+400}_{-500} \quad (+26.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5827^{+490}_{-520} \quad (+3.0\sigma)$
$A_{\mathrm{IA,DES}}$	$0.46^{+0.39}_{-0.35}$	D_{1420}	$916^{+200}_{-200} \quad (+19.8\sigma)$	$f\sigma_8(0.15)$	$0.432^{+0.016}_{-0.015} \quad (-2.6\sigma)$
$\alpha_{\mathrm{IA,DES}}$	—	D_{2000}	$264^{+60}_{-50} \quad (+19.2\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.067}_{-0.060} \quad (+1.2\sigma)$
$\Delta z_{\mathrm{l,DES}}^1$	$0.004^{+0.015}_{-0.015}$	$n_{\mathrm{s},0.002}$	$0.961^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.019}_{-0.018} \quad (-2.1\sigma)$
$\Delta z_{\mathrm{l,DES}}^2$	$0.002^{+0.013}_{-0.013}$	Y_{P}	$0.24532^{+0.00042}_{-0.00043} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.677^{+0.066}_{-0.058} \quad (+2.3\sigma)$
$\Delta z_{\mathrm{l,DES}}^3$	$0.004^{+0.013}_{-0.013}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.022}_{-0.022} \quad (-1.7\sigma)$
$\Delta z_{\mathrm{l,DES}}^4$	$0.002^{+0.018}_{-0.018}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.635^{+0.064}_{-0.057} \quad (+2.8\sigma)$
$\Delta z_{\mathrm{l,DES}}^5$	$0.000^{+0.019}_{-0.019}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.0^{+1.2}_{-1.2} \quad (+3.7\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.025}_{-0.024} \quad (-1.4\sigma)$
$\Delta z_{\mathrm{s,DES}}^1$	$-0.004^{+0.028}_{-0.028}$	z_*	$1089.1^{+1.9}_{-1.7} \quad (-3.0\sigma)$	$\sigma_8(0.61)$	$0.606^{+0.063}_{-0.055} \quad (+3.1\sigma)$
$\Delta z_{\mathrm{s,DES}}^2$	$-0.029^{+0.021}_{-0.022}$	r_*	$147.7^{+4.3}_{-4.8} \quad (+6.9\sigma)$	$f\sigma_8(2.33)$	$0.307^{+0.034}_{-0.030} \quad (+4.0\sigma)$
$\Delta z_{\mathrm{s,DES}}^3$	$0.008^{+0.019}_{-0.019}$	$100\theta_*$	$1.034^{+0.045}_{-0.039} \quad (-14.1\sigma)$	$\sigma_8(2.33)$	$0.319^{+0.038}_{-0.033} \quad (+4.9\sigma)$
$\Delta z_{\mathrm{s,DES}}^4$	$-0.021^{+0.036}_{-0.036}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.29^{+0.97}_{-1.0} \quad (+9.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.0 \quad (\nu: 1.1)$
H_0	$70^{+9}_{-8} \quad (+2.9\sigma)$	z_{drag}	$1058.7^{+2.7}_{-2.7} \quad (-1.5\sigma)$	χ_{DES}^2	$512.9 \quad (\nu: 10.2)$
Ω_{Λ}	$0.727^{+0.043}_{-0.046} \quad (+3.7\sigma)$	r_{drag}	$150.5^{+4.6}_{-5.0} \quad (+7.0\sigma)$	χ_{prior}^2	$14.1 \quad (\nu: 13.3) \quad (+1.8\sigma)$
Ω_{m}	$0.273^{+0.046}_{-0.043} \quad (-3.7\sigma)$	k_{D}	$0.1372^{+0.0054}_{-0.0049} \quad (-6.4\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.131^{+0.016}_{-0.015} \quad (-6.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1604^{+0.0065}_{-0.0057} \quad (-2.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 535.95; R - 1 = 0.00951$$

2.239 base_DESlens_lenspriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02221	$0.02221^{+0.00096}_{-0.00097}$ (+0.4 σ)	$r_{\mathrm{drag}}h$	102.8	108^{+20}_{-20} (+6.0 σ)	$100\theta_{\mathrm{eq}}$	0.842	$0.845^{+0.064}_{-0.063}$ (+3.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.1132	$0.115^{+0.023}_{-0.021}$ (−2.5 σ)	$\langle d^2 \rangle^{1/2}$	2.496	$2.49^{+0.10}_{-0.10}$ (+0.9 σ)	$100\theta_{\mathrm{s,eq}}$	0.4645	$0.466^{+0.033}_{-0.032}$ (+3.9 σ)
$100\theta_{\mathrm{MC}}$	1.039	$1.051^{+0.069}_{-0.060}$ (+22.6 σ)	z_{re}	7.67	$7.73^{+0.54}_{-0.50}$ (+0.3 σ)	$H(0.15)$	73.9	78^{+20}_{-10} (+6.9 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.126	$3.13^{+0.18}_{-0.18}$ (+5.7 σ)	10^9A_{s}	2.278	$2.31^{+0.42}_{-0.40}$ (+6.2 σ)	$D_{\mathrm{M}}(0.15)$	630	605^{+100}_{-100} (−5.4 σ)
n_{s}	0.9597	$0.960^{+0.039}_{-0.040}$ (−0.4 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	2.041	$2.07^{+0.37}_{-0.36}$ (+13.3 σ)	$H(0.38)$	83.5	87^{+20}_{-10} (+7.9 σ)
m_{DES}^1	0.0143	$0.013^{+0.045}_{-0.045}$	D_{40}	1371	1390^{+300}_{-200} (+10.3 σ)	$D_{\mathrm{M}}(0.38)$	1510	1452^{+300}_{-300} (−5.7 σ)
m_{DES}^2	0.0140	$0.013^{+0.044}_{-0.044}$	D_{220}	6416	6444^{+2000}_{-2000} (+17.4 σ)	$H(0.51)$	89.9	93^{+20}_{-10} (+8.9 σ)
m_{DES}^3	0.0027	$0.005^{+0.042}_{-0.042}$	D_{810}	2764	2727^{+600}_{-600} (+13.8 σ)	$D_{\mathrm{M}}(0.51)$	1959	1888^{+300}_{-400} (−5.9 σ)
m_{DES}^4	0.0180	$0.018^{+0.041}_{-0.042}$	D_{1420}	881	850^{+200}_{-200} (+6.9 σ)	$H(0.61)$	95.3	99^{+20}_{-10} (+9.9 σ)
$A_{\mathrm{IA,DES}}$	1.27	< 1.85	D_{2000}	248	246^{+70}_{-80} (+9.1 σ)	$D_{\mathrm{M}}(0.61)$	2283	2203^{+400}_{-400} (−6.0 σ)
$\alpha_{\mathrm{IA,DES}}$	3.31	> −2.75	$n_{\mathrm{s},0.002}$	0.9597	$0.960^{+0.039}_{-0.040}$ (−0.4 σ)	$H(2.33)$	231.7	234^{+22}_{-19} (−1.8 σ)
$\Delta z_{\mathrm{s,DES}}^1$	0.0026	$0.001^{+0.029}_{-0.030}$	Y_{P}	0.245331	$0.24532^{+0.00041}_{-0.00043}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5780	5638^{+700}_{-800} (−8.6 σ)
$\Delta z_{\mathrm{s,DES}}^2$	−0.0191	$−0.020^{+0.023}_{-0.023}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246658	$0.24664^{+0.00041}_{-0.00043}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4438	$0.436^{+0.029}_{-0.046}$ (−2.2 σ)
$\Delta z_{\mathrm{s,DES}}^3$	0.0082	$0.009^{+0.021}_{-0.021}$	$10^5\mathrm{D}/\mathrm{H}$	2.615	$2.62^{+0.19}_{-0.17}$ (−0.3 σ)	$\sigma_8(0.15)$	0.758	$0.779^{+0.11}_{-0.089}$ (+3.9 σ)
$\Delta z_{\mathrm{s,DES}}^4$	−0.0166	$−0.016^{+0.040}_{-0.040}$	Age/Gyr	13.85	$13.5^{+1.8}_{-1.8}$ (−8.5 σ)	$f\sigma_8(0.38)$	0.4680	$0.466^{+0.026}_{-0.029}$ (−1.5 σ)
H_0	69.0	73^{+20}_{-10} (+6.5 σ)	z_*	1089.52	$1089.7^{+2.5}_{-2.2}$ (−1.4 σ)	$\sigma_8(0.38)$	0.675	$0.697^{+0.10}_{-0.093}$ (+5.5 σ)
Ω_{Λ}	0.714	$0.734^{+0.098}_{-0.075}$ (+4.2 σ)	r_*	146.3	$145.9^{+5.8}_{-6.2}$ (+2.9 σ)	$f\sigma_8(0.51)$	0.4697	$0.470^{+0.029}_{-0.029}$ (−0.8 σ)
Ω_{m}	0.286	$0.266^{+0.075}_{-0.098}$ (−4.2 σ)	$100\theta_*$	1.039	$1.052^{+0.069}_{-0.060}$ (+23.0 σ)	$\sigma_8(0.51)$	0.633	$0.655^{+0.10}_{-0.091}$ (+6.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.1361	$0.138^{+0.023}_{-0.022}$ (−2.6 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.08	$13.9^{+1.4}_{-1.3}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4668	$0.470^{+0.032}_{-0.033}$ (−0.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.0939	$0.101^{+0.037}_{-0.032}$ (+11.9 σ)	z_{drag}	1059.09	$1059.2^{+2.8}_{-2.9}$ (−0.4 σ)	$\sigma_8(0.61)$	0.603	$0.625^{+0.10}_{-0.090}$ (+6.8 σ)
σ_8	0.817	$0.837^{+0.10}_{-0.089}$ (+2.8 σ)	r_{drag}	149.1	$148.6^{+6.0}_{-6.4}$ (+3.0 σ)	$f\sigma_8(2.33)$	0.305	$0.317^{+0.056}_{-0.049}$ (+8.0 σ)
S_8	0.798	$0.783^{+0.057}_{-0.095}$ (−2.4 σ)	k_{D}	0.1387	$0.1392^{+0.0070}_{-0.0064}$ (−2.6 σ)	$\sigma_8(2.33)$	0.316	$0.330^{+0.065}_{-0.056}$ (+9.1 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4372	$0.429^{+0.031}_{-0.052}$ (−2.4 σ)	$100\theta_{\mathrm{D}}$	0.1609	$0.163^{+0.010}_{-0.0087}$ (+6.4 σ)	$\chi^2_{\mathrm{lensing}}$	7.71	9.6 (ν : 2.0)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5978	$0.599^{+0.035}_{-0.034}$ (−1.1 σ)	z_{eq}	3236	3289^{+600}_{-500} (−2.6 σ)	χ^2_{DES}	228.96	232.8 (ν : 3.2)
$\sigma_8/h^{0.5}$	0.9843	$0.982^{+0.036}_{-0.037}$ (−0.7 σ)	k_{eq}	0.00988	$0.0100^{+0.0017}_{-0.0016}$ (−2.6 σ)	χ^2_{prior}	0.3	9.3 (ν : 8.8) (+0.5 σ)

Best-fit $\chi^2_{\mathrm{eff}} = 236.98$; $\bar{\chi}^2_{\mathrm{eff}} = 251.72$; $R - 1 = 0.00394$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.71 WL - DES_1YR_final: 228.96

2.240 base_DES_lenspriors_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02223	$0.0222^{+0.0010}_{-0.00099}$ (+0.5 σ)	σ_8	0.817	$0.803^{+0.059}_{-0.058}$ (−1.0 σ)	$100\theta_{\text{eq}}$	0.882	$0.873^{+0.058}_{-0.057}$ (+7.0 σ)
$\Omega_c h^2$	0.1020	$0.105^{+0.015}_{-0.014}$ (−7.7 σ)	S_8	0.7899	$0.780^{+0.042}_{-0.042}$ (−2.5 σ)	$100\theta_{\text{s,eq}}$	0.4844	$0.480^{+0.029}_{-0.029}$ (+6.9 σ)
$100\theta_{\text{MC}}$	1.0188	$1.023^{+0.023}_{-0.022}$ (−38.9 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4326	$0.427^{+0.023}_{-0.023}$ (−2.5 σ)	$H(0.15)$	71.45	$71.8^{+2.5}_{-2.3}$ (−0.6 σ)
$\ln(10^{10} A_{\text{s}})$	3.279	$3.21^{+0.29}_{-0.30}$ (+10.4 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5946	$0.586^{+0.035}_{-0.035}$ (−2.1 σ)	$D_{\text{M}}(0.15)$	651.9	649^{+20}_{-21} (+0.2 σ)
n_{s}	0.9578	$0.958^{+0.039}_{-0.038}$ (−0.9 σ)	$\sigma_8/h^{0.5}$	1.000	$0.981^{+0.077}_{-0.074}$ (−0.7 σ)	$H(0.38)$	80.55	$81.0^{+3.1}_{-2.8}$ (−2.6 σ)
b_{DES}^1	1.443	$1.47^{+0.18}_{-0.17}$	$r_{\text{drag}} h$	101.63	$101.6^{+2.2}_{-2.2}$ (+1.9 σ)	$D_{\text{M}}(0.38)$	1563	1555^{+51}_{-52} (+0.8 σ)
b_{DES}^2	1.646	$1.68^{+0.17}_{-0.16}$	$\langle d^2 \rangle^{1/2}$	2.626	$2.56^{+0.28}_{-0.27}$ (+2.8 σ)	$H(0.51)$	86.64	$87.2^{+3.6}_{-3.2}$ (−4.8 σ)
b_{DES}^3	1.629	$1.66^{+0.17}_{-0.15}$	z_{re}	7.439	$7.49^{+0.35}_{-0.33}$ (−0.0 σ)	$D_{\text{M}}(0.51)$	2029	2019^{+68}_{-70} (+1.2 σ)
b_{DES}^4	1.966	$2.01^{+0.20}_{-0.19}$	$10^9 A_{\text{s}}$	2.65	$2.51^{+0.75}_{-0.70}$ (+12.1 σ)	$H(0.61)$	91.75	$92.4^{+3.9}_{-3.6}$ (−7.4 σ)
b_{DES}^5	2.034	$2.08^{+0.25}_{-0.23}$	$10^9 A_{\text{s}} e^{-2\tau}$	2.38	$2.25^{+0.67}_{-0.63}$ (+26.6 σ)	$D_{\text{M}}(0.61)$	2366	2353^{+81}_{-83} (+1.6 σ)
m_{DES}^1	0.0133	$0.012^{+0.044}_{-0.044}$	D_{40}	1634	1539^{+500}_{-400} (+20.0 σ)	$H(2.33)$	222.2	224^{+13}_{-12} (−9.8 σ)
m_{DES}^2	0.0148	$0.014^{+0.043}_{-0.044}$	D_{220}	7889	7399^{+3000}_{-2000} (+40.2 σ)	$D_{\text{M}}(2.33)$	6006	5964^{+250}_{-260} (+11.5 σ)
m_{DES}^3	0.0054	$0.009^{+0.042}_{-0.041}$	D_{810}	3202	3022^{+900}_{-800} (+35.2 σ)	$f\sigma_8(0.15)$	0.4397	$0.434^{+0.024}_{-0.024}$ (−2.4 σ)
m_{DES}^4	0.0082	$0.011^{+0.043}_{-0.041}$	D_{1420}	1002	949^{+300}_{-300} (+26.2 σ)	$\sigma_8(0.15)$	0.758	$0.745^{+0.057}_{-0.055}$ (−0.6 σ)
$A_{\text{IA,DES}}$	0.464	$0.45^{+0.38}_{-0.34}$	D_{2000}	290	275^{+100}_{-90} (+25.4 σ)	$f\sigma_8(0.38)$	0.4652	$0.458^{+0.027}_{-0.027}$ (−2.2 σ)
$\alpha_{\text{IA,DES}}$	−1.6	—	$n_{\text{s},0.002}$	0.9578	$0.958^{+0.039}_{-0.038}$ (−0.9 σ)	$\sigma_8(0.38)$	0.676	$0.664^{+0.053}_{-0.051}$ (+0.1 σ)
$\Delta z_{\text{l,DES}}^1$	0.0039	$0.004^{+0.015}_{-0.015}$	Y_{P}	0.245339	$0.24532^{+0.00043}_{-0.00043}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4675	$0.460^{+0.028}_{-0.029}$ (−2.1 σ)
$\Delta z_{\text{l,DES}}^2$	0.0015	$0.002^{+0.013}_{-0.013}$	$Y_{\text{P}}^{\text{BBN}}$	0.246665	$0.24665^{+0.00044}_{-0.00043}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6339	$0.622^{+0.050}_{-0.049}$ (+0.4 σ)
$\Delta z_{\text{l,DES}}^3$	0.0040	$0.004^{+0.013}_{-0.013}$	10^5D/H	2.612	$2.62^{+0.19}_{-0.18}$ (−0.4 σ)	$f\sigma_8(0.61)$	0.4651	$0.458^{+0.030}_{-0.029}$ (−1.9 σ)
$\Delta z_{\text{l,DES}}^4$	0.0019	$0.002^{+0.018}_{-0.018}$	Age/Gyr	14.39	$14.29^{+0.61}_{-0.62}$ (+12.6 σ)	$\sigma_8(0.61)$	0.6042	$0.593^{+0.048}_{-0.047}$ (+0.6 σ)
$\Delta z_{\text{l,DES}}^5$	0.0001	$0.000^{+0.019}_{-0.019}$	z_*	1088.46	$1088.7^{+1.7}_{-1.6}$ (−3.9 σ)	$f\sigma_8(2.33)$	0.3061	$0.300^{+0.025}_{-0.024}$ (+1.3 σ)
$\Delta z_{\text{s,DES}}^1$	−0.0014	$−0.004^{+0.027}_{-0.028}$	r_*	149.47	$148.8^{+4.2}_{-4.5}$ (+9.0 σ)	$\sigma_8(2.33)$	0.3171	$0.311^{+0.027}_{-0.026}$ (+1.9 σ)
$\Delta z_{\text{s,DES}}^2$	−0.0290	$−0.029^{+0.021}_{-0.021}$	$100\theta_*$	1.0190	$1.023^{+0.023}_{-0.022}$ (−39.6 σ)	$\chi_{6\text{DF}}^2$	0.039	0.09 (ν : 0.0)
$\Delta z_{\text{s,DES}}^3$	0.0059	$0.007^{+0.019}_{-0.019}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.67	$14.55^{+0.73}_{-0.74}$ (+15.2 σ)	χ_{MGS}^2	2.27	2.34 (ν : 0.3)
$\Delta z_{\text{s,DES}}^4$	−0.0249	$−0.023^{+0.037}_{-0.037}$	z_{drag}	1058.29	$1058.4^{+2.7}_{-2.7}$ (−2.1 σ)	χ_{DR12BAO}^2	4.64	5.3 (ν : 1.2)
H_0	66.74	$67.0^{+2.2}_{-2.0}$ (+0.2 σ)	r_{drag}	152.30	$151.6^{+4.4}_{-4.7}$ (+9.2 σ)	χ_{DES}^2	501.4	512.8 (ν : 12.0)
Ω_{Λ}	0.7197	$0.716^{+0.023}_{-0.025}$ (+2.9 σ)	k_{D}	0.13541	$0.1361^{+0.0052}_{-0.0048}$ (−8.4 σ)	χ_{prior}^2	1.2	14.2 (ν : 13.3) (+1.9 σ)
Ω_{m}	0.2803	$0.284^{+0.025}_{-0.023}$ (−2.9 σ)	$100\theta_{\text{D}}$	0.15816	$0.1587^{+0.0031}_{-0.0030}$ (−8.9 σ)	χ_{BAO}^2	6.95	7.7 (ν : 1.5)
$\Omega_{\text{m}} h^2$	0.1249	$0.127^{+0.016}_{-0.014}$ (−8.0 σ)	z_{eq}	2968	3031^{+400}_{-300} (−8.0 σ)			
$\Omega_{\text{m}} h^3$	0.0833	$0.086^{+0.012}_{-0.012}$ (−22.7 σ)	k_{eq}	0.00906	$0.0093^{+0.0012}_{-0.0010}$ (−8.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 509.62$; $\bar{\chi}_{\text{eff}}^2 = 534.74$; $R - 1 = 0.00577$

χ_{eff}^2 : BAO - 6DF: 0.04 MGS: 2.27 DR12BAO: 4.64 WL - DES_1YR_final: 501.43

2.241 base_DESlens_lenspriors_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02217	$0.02220^{+0.00097}_{-0.0010}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.10	$2.05^{+0.53}_{-0.50}$ (−10.7 σ)	$H(0.15)$	76.2	$77.0^{+6.7}_{-6.1}$ (+6.0 σ)
$\Omega_c h^2$	0.146	$0.153^{+0.063}_{-0.056}$ (+15.5 σ)	z_{re}	8.26	$8.35^{+1.1}_{-0.93}$ (+1.0 σ)	$D_{\text{M}}(0.15)$	615.6	611^{+44}_{-49} (−4.6 σ)
$100\theta_{\text{MC}}$	1.074	$1.078^{+0.060}_{-0.060}$ (+80.2 σ)	$10^9 A_{\text{s}}$	1.37	$1.36^{+1.1}_{-0.85}$ (−21.4 σ)	$H(0.38)$	87.6	$88.7^{+9.6}_{-8.8}$ (+10.9 σ)
$\ln(10^{10} A_{\text{s}})$	2.62	$2.53^{+0.76}_{-0.73}$ (−30.8 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.23	$1.21^{+0.97}_{-0.76}$ (−49.1 σ)	$D_{\text{M}}(0.38)$	1461	1449^{+120}_{-130} (−5.9 σ)
n_{s}	0.9583	$0.959^{+0.039}_{-0.039}$ (−0.6 σ)	D_{40}	784	782^{+700}_{-500} (−29.6 σ)	$H(0.51)$	95.1	96^{+10}_{-10} (+16.0 σ)
m_{DES}^1	0.0146	$0.013^{+0.044}_{-0.044}$	D_{220}	3383	3439^{+4000}_{-3000} (−54.2 σ)	$D_{\text{M}}(0.51)$	1888	1872^{+160}_{-180} (−6.7 σ)
m_{DES}^2	0.0131	$0.012^{+0.044}_{-0.043}$	D_{810}	1575	1546^{+1000}_{-1000} (−71.7 σ)	$H(0.61)$	101.4	103^{+10}_{-10} (+22.0 σ)
m_{DES}^3	0.0008	$0.002^{+0.042}_{-0.042}$	D_{1420}	499	482^{+500}_{-400} (−64.8 σ)	$D_{\text{M}}(0.61)$	2194	2175^{+200}_{-210} (−7.4 σ)
m_{DES}^4	0.0189	$0.019^{+0.042}_{-0.042}$	D_{2000}	144	139^{+100}_{-100} (−50.3 σ)	$H(2.33)$	255.9	260^{+40}_{-40} (+18.7 σ)
$A_{\text{IA,DES}}$	1.37	$1.0^{+1.2}_{-1.1}$	$n_{\text{s},0.002}$	0.9583	$0.959^{+0.039}_{-0.039}$ (−0.6 σ)	$D_{\text{M}}(2.33)$	5408	5355^{+700}_{-700} (−26.0 σ)
$\alpha_{\text{IA,DES}}$	2.71	> -2.55	Y_{P}	0.245314	$0.24531^{+0.00042}_{-0.00044}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4367	$0.429^{+0.030}_{-0.032}$ (−2.9 σ)
$\Delta z_{\text{s,DES}}^1$	0.0041	$0.003^{+0.029}_{-0.029}$	$Y_{\text{P}}^{\text{BBN}}$	0.246641	$0.24664^{+0.00042}_{-0.00044}$ (+0.3 σ)	$\sigma_8(0.15)$	0.685	$0.670^{+0.10}_{-0.096}$ (−10.6 σ)
$\Delta z_{\text{s,DES}}^2$	−0.0206	$-0.021^{+0.023}_{-0.023}$	10^5D/H	2.623	$2.62^{+0.20}_{-0.18}$ (−0.3 σ)	$f\sigma_8(0.38)$	0.4472	$0.438^{+0.040}_{-0.042}$ (−4.4 σ)
$\Delta z_{\text{s,DES}}^3$	0.0075	$0.008^{+0.021}_{-0.021}$	Age/Gyr	12.94	$12.8^{+1.6}_{-1.6}$ (−27.8 σ)	$\sigma_8(0.38)$	0.604	$0.591^{+0.098}_{-0.089}$ (−12.0 σ)
$\Delta z_{\text{s,DES}}^4$	−0.0167	$-0.016^{+0.040}_{-0.040}$	z_*	1092.33	$1092.8^{+4.9}_{-4.6}$ (+6.1 σ)	$f\sigma_8(0.51)$	0.4427	$0.433^{+0.046}_{-0.047}$ (−5.4 σ)
H_0	70.19	$70.8^{+5.1}_{-4.7}$ (+4.3 σ)	r_*	138.5	137^{+12}_{-13} (−15.0 σ)	$\sigma_8(0.51)$	0.564	$0.551^{+0.094}_{-0.086}$ (−12.6 σ)
Ω_{Λ}	0.658	$0.652^{+0.070}_{-0.079}$ (−2.1 σ)	$100\theta_*$	1.074	$1.078^{+0.060}_{-0.060}$ (+81.6 σ)	$f\sigma_8(0.61)$	0.4360	$0.426^{+0.049}_{-0.050}$ (−6.2 σ)
Ω_{m}	0.342	$0.348^{+0.079}_{-0.070}$ (+2.1 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	12.89	$12.8^{+1.9}_{-1.9}$ (−25.3 σ)	$\sigma_8(0.61)$	0.536	$0.524^{+0.091}_{-0.083}$ (−12.9 σ)
$\Omega_{\text{m}} h^2$	0.168	$0.176^{+0.063}_{-0.056}$ (+16.4 σ)	z_{drag}	1061.23	$1061.7^{+5.0}_{-4.5}$ (+5.1 σ)	$f\sigma_8(2.33)$	0.2692	$0.263^{+0.046}_{-0.045}$ (−13.4 σ)
$\Omega_{\text{m}} h^3$	0.118	$0.125^{+0.054}_{-0.047}$ (+64.3 σ)	r_{drag}	141.0	140^{+13}_{-14} (−15.3 σ)	$\sigma_8(2.33)$	0.2765	$0.270^{+0.049}_{-0.048}$ (−13.4 σ)
σ_8	0.744	$0.728^{+0.10}_{-0.099}$ (−9.4 σ)	k_{D}	0.1473	$0.149^{+0.017}_{-0.014}$ (+16.0 σ)	$\chi_{6\text{DF}}^2$	0.059	0.17 (ν : 0.0)
S_8	0.794	$0.781^{+0.051}_{-0.054}$ (−2.5 σ)	$100\theta_{\text{D}}$	0.1654	$0.1661^{+0.0083}_{-0.0079}$ (+18.8 σ)	χ_{MGS}^2	1.10	1.20 (ν : 0.3)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4350	$0.428^{+0.028}_{-0.030}$ (−2.5 σ)	z_{eq}	4008	4189^{+2000}_{-1000} (+16.4 σ)	χ_{DR12BAO}^2	2.31	3.5 (ν : 1.2)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.569	$0.558^{+0.053}_{-0.053}$ (−4.6 σ)	k_{eq}	0.01223	$0.0128^{+0.0046}_{-0.0041}$ (+16.4 σ)	χ_{DES}^2	229.5	233.6 (ν : 4.1)
$\sigma_8/h^{0.5}$	0.888	$0.87^{+0.15}_{-0.14}$ (−7.9 σ)	$100\theta_{\text{eq}}$	0.743	$0.73^{+0.14}_{-0.14}$ (−8.6 σ)	χ_{prior}^2	0.5	9.6 (ν : 9.1) (+0.6 σ)
$r_{\text{drag}} h$	99.00	$98.9^{+3.6}_{-3.5}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.413	$0.409^{+0.078}_{-0.071}$ (−8.7 σ)	χ_{BAO}^2	3.46	4.9 (ν : 1.7)

Best-fit $\chi_{\text{eff}}^2 = 233.41$; $\bar{\chi}_{\text{eff}}^2 = 248.10$; $R - 1 = 0.01028$

χ_{eff}^2 : BAO - 6DF: 0.06 MGS: 1.10 DR12BAO: 2.31 WL - DES_1YR_final: 229.45

2.242 base_DES_lenspriors_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02222	$0.02220^{+0.00098}_{-0.00099}$ (+0.4 σ)	σ_8	0.8009	$0.799^{+0.026}_{-0.026}$ (−1.4 σ)	$100\theta_{\text{eq}}$	0.8646	$0.866^{+0.040}_{-0.040}$ (+6.2 σ)
$\Omega_c h^2$	0.1063	$0.106^{+0.011}_{-0.010}$ (−6.9 σ)	S_8	0.7833	$0.780^{+0.029}_{-0.030}$ (−2.5 σ)	$100\theta_{\text{s,eq}}$	0.4758	$0.476^{+0.021}_{-0.020}$ (+6.2 σ)
$100\theta_{\text{MC}}$	1.0251	$1.025^{+0.016}_{-0.017}$ (−33.7 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4290	$0.427^{+0.016}_{-0.016}$ (−2.5 σ)	$H(0.15)$	71.92	$72.0^{+2.1}_{-2.0}$ (−0.4 σ)
$\ln(10^{10} A_{\text{s}})$	3.180	$3.18^{+0.13}_{-0.13}$ (+8.4 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5862	$0.584^{+0.019}_{-0.019}$ (−2.3 σ)	$D_{\text{M}}(0.15)$	648.1	648^{+18}_{-18} (+0.0 σ)
n_{s}	0.9591	$0.959^{+0.039}_{-0.039}$ (−0.6 σ)	$\sigma_8/h^{0.5}$	0.9778	$0.975^{+0.031}_{-0.031}$ (−1.1 σ)	$H(0.38)$	81.26	$81.3^{+2.5}_{-2.4}$ (−2.2 σ)
b_{DES}^1	1.484	$1.48^{+0.14}_{-0.15}$	$r_{\text{drag}} h$	101.33	$101.5^{+2.0}_{-2.0}$ (+1.9 σ)	$D_{\text{M}}(0.38)$	1551.6	1551^{+45}_{-44} (+0.5 σ)
b_{DES}^2	1.686	$1.69^{+0.11}_{-0.11}$	$\langle d^2 \rangle^{1/2}$	2.528	$2.524^{+0.081}_{-0.080}$ (+1.8 σ)	$H(0.51)$	87.50	$87.5^{+2.7}_{-2.7}$ (−4.1 σ)
b_{DES}^3	1.672	$1.673^{+0.094}_{-0.094}$	z_{re}	7.527	$7.53^{+0.28}_{-0.27}$ (+0.0 σ)	$D_{\text{M}}(0.51)$	2014	2013^{+58}_{-57} (+0.9 σ)
b_{DES}^4	2.021	$2.02^{+0.11}_{-0.11}$	$10^9 A_{\text{s}}$	2.405	$2.41^{+0.34}_{-0.30}$ (+9.2 σ)	$H(0.61)$	92.74	$92.7^{+3.0}_{-2.9}$ (−6.4 σ)
b_{DES}^5	2.102	$2.10^{+0.15}_{-0.16}$	$10^9 A_{\text{s}} e^{-2\tau}$	2.155	$2.16^{+0.30}_{-0.27}$ (+19.9 σ)	$D_{\text{M}}(0.61)$	2347	2346^{+69}_{-67} (+1.2 σ)
m_{DES}^1	0.0129	$0.012^{+0.044}_{-0.044}$	D_{40}	1464	1464^{+200}_{-200} (+15.1 σ)	$H(2.33)$	225.7	$225.6^{+9.0}_{-8.7}$ (−8.8 σ)
m_{DES}^2	0.0165	$0.014^{+0.043}_{-0.043}$	D_{220}	6995	7009^{+1000}_{-1000} (+30.9 σ)	$D_{\text{M}}(2.33)$	5937	5939^{+200}_{-190} (+9.9 σ)
m_{DES}^3	0.0084	$0.009^{+0.039}_{-0.039}$	D_{810}	2913	2910^{+400}_{-400} (+27.1 σ)	$f\sigma_8(0.15)$	0.4355	$0.434^{+0.015}_{-0.016}$ (−2.5 σ)
m_{DES}^4	0.0098	$0.011^{+0.041}_{-0.041}$	D_{1420}	919	917^{+100}_{-100} (+20.1 σ)	$\sigma_8(0.15)$	0.7425	$0.741^{+0.025}_{-0.025}$ (−1.1 σ)
$A_{\text{IA,DES}}$	0.458	$0.45^{+0.37}_{-0.33}$	D_{2000}	261.1	262^{+50}_{-40} (+18.3 σ)	$f\sigma_8(0.38)$	0.4590	$0.458^{+0.015}_{-0.015}$ (−2.3 σ)
$\alpha_{\text{IA,DES}}$	−1.5	—	$n_{\text{s},0.002}$	0.9591	$0.959^{+0.039}_{-0.039}$ (−0.6 σ)	$\sigma_8(0.38)$	0.6609	$0.660^{+0.023}_{-0.023}$ (−0.6 σ)
$\Delta z_{\text{l,DES}}^1$	0.0045	$0.004^{+0.015}_{-0.015}$	Y_{P}	0.245332	$0.24531^{+0.00042}_{-0.00043}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4605	$0.459^{+0.014}_{-0.015}$ (−2.2 σ)
$\Delta z_{\text{l,DES}}^2$	0.0013	$0.002^{+0.013}_{-0.013}$	$Y_{\text{P}}^{\text{BBN}}$	0.246659	$0.24664^{+0.00043}_{-0.00043}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6197	$0.619^{+0.022}_{-0.022}$ (−0.3 σ)
$\Delta z_{\text{l,DES}}^3$	0.0037	$0.004^{+0.013}_{-0.013}$	10^5D/H	2.615	$2.62^{+0.20}_{-0.18}$ (−0.3 σ)	$f\sigma_8(0.61)$	0.4576	$0.456^{+0.014}_{-0.014}$ (−2.1 σ)
$\Delta z_{\text{l,DES}}^4$	0.0015	$0.002^{+0.018}_{-0.018}$	Age/Gyr	14.222	$14.23^{+0.47}_{-0.46}$ (+10.9 σ)	$\sigma_8(0.61)$	0.5904	$0.589^{+0.021}_{-0.021}$ (−0.1 σ)
$\Delta z_{\text{l,DES}}^5$	0.0000	$0.000^{+0.019}_{-0.019}$	z_*	1088.88	$1088.9^{+1.5}_{-1.4}$ (−3.4 σ)	$f\sigma_8(2.33)$	0.2988	$0.298^{+0.011}_{-0.011}$ (+0.5 σ)
$\Delta z_{\text{s,DES}}^1$	−0.0020	$−0.004^{+0.028}_{-0.028}$	r_*	148.25	$148.3^{+3.1}_{-3.2}$ (+8.1 σ)	$\sigma_8(2.33)$	0.3091	$0.309^{+0.012}_{-0.012}$ (+1.1 σ)
$\Delta z_{\text{s,DES}}^2$	−0.0286	$−0.029^{+0.021}_{-0.021}$	$100\theta_*$	1.0253	$1.025^{+0.016}_{-0.017}$ (−34.3 σ)	χ_{lensing}^2	7.73	8.8 (ν : 0.9)
$\Delta z_{\text{s,DES}}^3$	0.0064	$0.007^{+0.019}_{-0.019}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.46	$14.47^{+0.54}_{-0.52}$ (+13.4 σ)	$\chi_{6\text{DF}}^2$	0.021	0.075 (ν : 0.0)
$\Delta z_{\text{s,DES}}^4$	−0.0238	$−0.023^{+0.036}_{-0.036}$	z_{drag}	1058.56	$1058.5^{+2.5}_{-2.6}$ (−1.9 σ)	χ_{MGS}^2	2.12	2.27 (ν : 0.2)
H_0	67.08	$67.1^{+1.9}_{-1.9}$ (+0.3 σ)	r_{drag}	151.05	$151.1^{+3.4}_{-3.4}$ (+8.2 σ)	χ_{DR12BAO}^2	4.25	5.1 (ν : 1.0)
Ω_{Λ}	0.7130	$0.714^{+0.017}_{-0.018}$ (+2.7 σ)	k_{D}	0.13665	$0.1366^{+0.0038}_{-0.0038}$ (−7.6 σ)	χ_{DES}^2	502.6	512.5 (ν : 9.8)
Ω_{m}	0.2870	$0.286^{+0.018}_{-0.017}$ (−2.7 σ)	$100\theta_{\text{D}}$	0.15900	$0.1590^{+0.0024}_{-0.0024}$ (−7.6 σ)	χ_{prior}^2	1.1	13.9 (ν : 13.1) (+1.8 σ)
$\Omega_{\text{m}} h^2$	0.1291	$0.129^{+0.011}_{-0.010}$ (−7.2 σ)	z_{eq}	3071	3067^{+260}_{-240} (−7.2 σ)	χ_{BAO}^2	6.39	7.4 (ν : 1.1)
$\Omega_{\text{m}} h^3$	0.0866	$0.0866^{+0.0094}_{-0.0087}$ (−20.2 σ)	k_{eq}	0.00937	$0.00936^{+0.00080}_{-0.00075}$ (−7.2 σ)			

Best-fit $\chi_{\text{eff}}^2 = 517.88$; $\bar{\chi}_{\text{eff}}^2 = 542.64$; $R - 1 = 0.00500$

χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 2.12 DR12BAO: 4.25 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8_CMBmargd: 7.73 WL - DES_1YR_final: 502.63

2.243 base_DESlens_lenspriors_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02219	$0.02220^{+0.00097}_{-0.00096}$ (+0.4 σ)	z_{re}	7.671	$7.65^{+0.33}_{-0.31}$ (+0.2 σ)	$H(0.38)$	82.42	$82.3^{+2.9}_{-2.8}$ (−0.4 σ)
$\Omega_c h^2$	0.1133	$0.112^{+0.014}_{-0.013}$ (−4.1 σ)	$10^9 A_s$	2.242	$2.27^{+0.36}_{-0.32}$ (+5.3 σ)	$D_M(0.38)$	1534.3	1537^{+49}_{-49} (−0.4 σ)
$100\theta_{\text{MC}}$	1.0350	$1.033^{+0.020}_{-0.020}$ (−16.0 σ)	$10^9 A_s e^{-2\tau}$	2.009	$2.04^{+0.32}_{-0.29}$ (+11.1 σ)	$H(0.51)$	88.90	$88.7^{+3.3}_{-3.1}$ (−1.4 σ)
$\ln(10^{10} A_s)$	3.110	$3.12^{+0.15}_{-0.15}$ (+4.9 σ)	D_{40}	1353	1371^{+200}_{-200} (+9.0 σ)	$D_M(0.51)$	1990	1993^{+65}_{-65} (−0.2 σ)
n_s	0.9569	$0.958^{+0.037}_{-0.038}$ (−0.8 σ)	D_{220}	6328	6454^{+1000}_{-1000} (+17.7 σ)	$H(0.61)$	94.33	$94.1^{+3.6}_{-3.4}$ (−2.6 σ)
m_{DES}^1	0.0151	$0.014^{+0.044}_{-0.045}$	D_{810}	2715	2747^{+400}_{-400} (+15.2 σ)	$D_M(0.61)$	2317	2321^{+77}_{-77} (−0.0 σ)
m_{DES}^2	0.0137	$0.013^{+0.044}_{-0.043}$	D_{1420}	864	872^{+100}_{-100} (+11.2 σ)	$H(2.33)$	231.4	230^{+11}_{-11} (−5.0 σ)
m_{DES}^3	−0.0004	$0.000^{+0.041}_{-0.041}$	D_{2000}	242.8	247^{+50}_{-40} (+9.7 σ)	$D_M(2.33)$	5831	5849^{+230}_{-230} (+4.4 σ)
m_{DES}^4	0.0162	$0.015^{+0.041}_{-0.041}$	$n_{s,0.002}$	0.9569	$0.958^{+0.037}_{-0.038}$ (−0.8 σ)	$f\sigma_8(0.15)$	0.4461	$0.443^{+0.020}_{-0.020}$ (−1.7 σ)
$A_{\text{IA,DES}}$	1.30	$1.0^{+1.1}_{-1.0}$	Y_{P}	0.245322	$0.24531^{+0.00042}_{-0.00042}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7475	$0.746^{+0.026}_{-0.026}$ (−0.5 σ)
$\alpha_{\text{IA,DES}}$	2.80	> -2.60	$Y_{\text{P}}^{\text{BBN}}$	0.246648	$0.24664^{+0.00042}_{-0.00042}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4675	$0.465^{+0.018}_{-0.018}$ (−1.5 σ)
$\Delta z_{s,\text{DES}}^1$	0.0030	$0.003^{+0.028}_{-0.029}$	10^5D/H	2.620	$2.62^{+0.19}_{-0.18}$ (−0.3 σ)	$\sigma_8(0.38)$	0.6641	$0.663^{+0.024}_{-0.024}$ (−0.0 σ)
$\Delta z_{s,\text{DES}}^2$	−0.0192	$-0.020^{+0.023}_{-0.023}$	Age/Gyr	13.96	$14.01^{+0.55}_{-0.54}$ (+4.9 σ)	$f\sigma_8(0.51)$	0.4677	$0.466^{+0.017}_{-0.017}$ (−1.4 σ)
$\Delta z_{s,\text{DES}}^3$	0.0068	$0.007^{+0.021}_{-0.021}$	z_*	1089.55	$1089.4^{+1.6}_{-1.6}$ (−2.1 σ)	$\sigma_8(0.51)$	0.6222	$0.621^{+0.023}_{-0.022}$ (+0.2 σ)
$\Delta z_{s,\text{DES}}^4$	−0.0187	$-0.018^{+0.040}_{-0.039}$	r_*	146.34	$146.7^{+3.8}_{-3.8}$ (+4.7 σ)	$f\sigma_8(0.61)$	0.4639	$0.462^{+0.017}_{-0.017}$ (−1.3 σ)
H_0	67.64	$67.6^{+2.1}_{-2.0}$ (+0.8 σ)	$100\theta_*$	1.0352	$1.033^{+0.020}_{-0.020}$ (−16.3 σ)	$\sigma_8(0.61)$	0.5924	$0.592^{+0.022}_{-0.021}$ (+0.3 σ)
Ω_Λ	0.7025	$0.705^{+0.020}_{-0.021}$ (+2.0 σ)	$D_M(z_*)/\text{Gpc}$	14.14	$14.20^{+0.64}_{-0.62}$ (+7.2 σ)	$f\sigma_8(2.33)$	0.2993	$0.299^{+0.011}_{-0.011}$ (+0.8 σ)
Ω_{m}	0.2975	$0.295^{+0.021}_{-0.020}$ (−2.0 σ)	z_{drag}	1059.02	$1058.9^{+2.5}_{-2.7}$ (−1.0 σ)	$\sigma_8(2.33)$	0.3092	$0.309^{+0.012}_{-0.012}$ (+1.2 σ)
$\Omega_{\text{m}} h^2$	0.1361	$0.135^{+0.014}_{-0.013}$ (−4.2 σ)	r_{drag}	149.10	$149.5^{+4.0}_{-4.0}$ (+4.7 σ)	χ_{lensing}^2	7.72	8.9 (ν : 1.1)
$\Omega_{\text{m}} h^3$	0.0921	$0.091^{+0.012}_{-0.011}$ (−10.0 σ)	k_{D}	0.13863	$0.1383^{+0.0045}_{-0.0044}$ (−4.3 σ)	$\chi_{6\text{DF}}^2$	0.004	0.057 (ν : 0.0)
σ_8	0.8074	$0.805^{+0.028}_{-0.028}$ (−0.7 σ)	$100\theta_{\text{D}}$	0.16031	$0.1601^{+0.0030}_{-0.0028}$ (−3.7 σ)	χ_{MGS}^2	1.89	2.06 (ν : 0.2)
S_8	0.8041	$0.799^{+0.038}_{-0.039}$ (−1.7 σ)	z_{eq}	3238	3210^{+340}_{-310} (−4.2 σ)	χ_{DR12BAO}^2	3.71	4.7 (ν : 1.1)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4404	$0.437^{+0.021}_{-0.021}$ (−1.7 σ)	k_{eq}	0.00988	$0.00980^{+0.0010}_{-0.00096}$ (−4.2 σ)	χ_{DES}^2	228.94	232.1 (ν : 2.6)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5963	$0.594^{+0.022}_{-0.023}$ (−1.5 σ)	$100\theta_{\text{eq}}$	0.8387	$0.844^{+0.050}_{-0.047}$ (+3.7 σ)	χ_{prior}^2	0.5	9.3 (ν : 8.3) (+0.5 σ)
$\sigma_8/h^{0.5}$	0.9817	$0.979^{+0.032}_{-0.032}$ (−0.8 σ)	$100\theta_{s,\text{eq}}$	0.4626	$0.465^{+0.025}_{-0.024}$ (+3.7 σ)	χ_{BAO}^2	5.60	6.8 (ν : 1.2)
$r_{\text{drag}} h$	100.86	$101.0^{+2.1}_{-2.1}$ (+1.6 σ)	$H(0.15)$	72.70	$72.6^{+2.4}_{-2.3}$ (+0.5 σ)			
$\langle d^2 \rangle^{1/2}$	2.493	$2.494^{+0.090}_{-0.089}$ (+1.1 σ)	$D_M(0.15)$	641.9	643^{+20}_{-20} (−0.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 242.74$; $\bar{\chi}_{\text{eff}}^2 = 257.11$; $R - 1 = 0.00702$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.89 DR12BAO: 3.71 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.71 WL - DES_1YR_final: 228.94

2.244 base_DES_DESpriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.238	$0.256^{+0.058}_{-0.054}$ (−5.0 σ)	m_{DES}^3	0.0080	$0.008^{+0.042}_{-0.041}$	$\Delta z_{s,\text{DES}}^4$	−0.0268	$-0.025^{+0.037}_{-0.037}$
Ω_b	0.0660	—	m_{DES}^4	0.0098	$0.010^{+0.042}_{-0.042}$	$\Omega_b h^2$	0.0543	$0.029^{+0.021}_{-0.018}$ (+33.3 σ)
H_0	90.8	—	$A_{\text{IA,DES}}$	0.533	$0.49^{+0.41}_{-0.36}$	$\Omega_c h^2$	0.1409	$0.112^{+0.042}_{-0.040}$ (−4.2 σ)
$10^9 A_s$	2.72	$2.9^{+1.2}_{-1.1}$ (+22.3 σ)	$\alpha_{\text{IA,DES}}$	−1.1	—	Ω_Λ	0.762	$0.744^{+0.054}_{-0.058}$ (+5.0 σ)
n_s	1.026	—	$\Delta z_{l,\text{DES}}^1$	0.0041	$0.005^{+0.015}_{-0.014}$	$\ln(10^{10} A_s)$	3.303	$3.33^{+0.40}_{-0.41}$ (+17.6 σ)
b_{DES}^1	1.307	$1.37^{+0.25}_{-0.24}$	$\Delta z_{l,\text{DES}}^2$	0.0020	$0.002^{+0.013}_{-0.013}$	σ_8	0.908	$0.86^{+0.13}_{-0.12}$ (+5.7 σ)
b_{DES}^2	1.504	$1.57^{+0.25}_{-0.24}$	$\Delta z_{l,\text{DES}}^3$	0.0045	$0.004^{+0.013}_{-0.013}$	S_8	0.8081	$0.793^{+0.047}_{-0.048}$ (−1.9 σ)
b_{DES}^3	1.493	$1.55^{+0.24}_{-0.23}$	$\Delta z_{l,\text{DES}}^4$	0.0032	$0.003^{+0.018}_{-0.017}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4426	$0.434^{+0.026}_{-0.026}$ (−1.9 σ)
b_{DES}^4	1.805	$1.88^{+0.30}_{-0.28}$	$\Delta z_{l,\text{DES}}^5$	0.0007	$0.001^{+0.019}_{-0.019}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.634	$0.612^{+0.059}_{-0.060}$ (+0.1 σ)
b_{DES}^5	1.867	$1.94^{+0.33}_{-0.31}$	$\Delta z_{s,\text{DES}}^1$	−0.0012	$-0.004^{+0.028}_{-0.028}$	χ_{DES}^2	498.6	511.6 (ν : 12.6)
m_{DES}^1	0.0135	$0.012^{+0.046}_{-0.045}$	$\Delta z_{s,\text{DES}}^2$	−0.0290	$-0.030^{+0.021}_{-0.021}$	χ_{prior}^2	1.3	12.4 (ν : 11.8) (+1.4 σ)
m_{DES}^2	0.0155	$0.015^{+0.045}_{-0.043}$	$\Delta z_{s,\text{DES}}^3$	0.0064	$0.007^{+0.019}_{-0.019}$			

Best-fit $\chi^2_{\text{eff}} = 499.92$; $\bar{\chi}^2_{\text{eff}} = 523.99$; $R - 1 = 0.00668$
 χ^2_{eff} : WL - DES_1YR_final: 498.64

2.245 base_DESlens_DESpriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.256	$0.28^{+0.13}_{-0.11} \quad (-3.2\sigma)$	$A_{\text{IA,DES}}$	1.33	$0.7^{+1.7}_{-1.6}$	$\ln(10^{10} A_{\text{s}})$	3.18	$3.13^{+0.77}_{-0.90} \quad (+5.7\sigma)$
Ω_b	0.0380	—	$\alpha_{\text{IA,DES}}$	3.29	> -2.77	σ_8	0.878	$0.84^{+0.19}_{-0.21} \quad (+2.6\sigma)$
H_0	72.8	—	$\Delta z_{\text{s,DES}}^1$	0.0027	$0.002^{+0.029}_{-0.029}$	S_8	0.811	$0.790^{+0.064}_{-0.065} \quad (-2.0\sigma)$
$10^9 A_{\text{s}}$	2.41	$2.5^{+2.1}_{-1.8} \quad (+12.7\sigma)$	$\Delta z_{\text{s,DES}}^2$	-0.0193	$-0.020^{+0.023}_{-0.023}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4443	$0.433^{+0.035}_{-0.035} \quad (-2.0\sigma)$
n_{s}	0.975	—	$\Delta z_{\text{s,DES}}^3$	0.0080	$0.008^{+0.021}_{-0.021}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.625	$0.601^{+0.083}_{-0.095} \quad (-0.9\sigma)$
m_{DES}^1	0.0147	$0.013^{+0.044}_{-0.045}$	$\Delta z_{\text{s,DES}}^4$	-0.0162	$-0.016^{+0.040}_{-0.040}$	χ_{DES}^2	228.7	$233.3 \quad (\nu: 3.7)$
m_{DES}^2	0.0132	$0.013^{+0.044}_{-0.044}$	$\Omega_{\text{b}} h^2$	0.0201	$0.027^{+0.020}_{-0.016} \quad (+20.0\sigma)$	χ_{prior}^2	0.3	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
m_{DES}^3	0.0027	$0.003^{+0.042}_{-0.042}$	$\Omega_{\text{c}} h^2$	0.115	$0.122^{+0.068}_{-0.054} \quad (+0.6\sigma)$			
m_{DES}^4	0.0173	$0.017^{+0.042}_{-0.042}$	Ω_{Λ}	0.744	$0.72^{+0.11}_{-0.13} \quad (+3.2\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 229.04$; $\bar{\chi}^2_{\text{eff}} = 240.73$; $R - 1 = 0.00678$
 χ^2_{eff} : WL - DES_1YR_final: 228.74

2.246 base_DESwt_DESpriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.274	$0.275^{+0.069}_{-0.061} \quad (-3.5\sigma)$	m_{DES}^3	0.0194	$0.022^{+0.043}_{-0.042}$	$\Delta z_{\text{s,DES}}^4$	-0.0264	$-0.024^{+0.038}_{-0.037}$
Ω_b	0.0599	—	m_{DES}^4	0.0051	$0.007^{+0.043}_{-0.043}$	$\Omega_{\text{b}} h^2$	0.0406	$0.026^{+0.022}_{-0.016} \quad (+19.1\sigma)$
H_0	82.3	—	$A_{\text{IA,DES}}$	0.381	$0.43^{+0.40}_{-0.34}$	$\Omega_{\text{c}} h^2$	0.1445	$0.107^{+0.044}_{-0.036} \quad (-6.4\sigma)$
$10^9 A_{\text{s}}$	2.20	$2.8^{+1.3}_{-1.1} \quad (+19.2\sigma)$	$\alpha_{\text{IA,DES}}$	-2.8	—	Ω_{Λ}	0.726	$0.725^{+0.061}_{-0.069} \quad (+3.5\sigma)$
n_{s}	0.877	—	$\Delta z_{\text{l,DES}}^1$	0.0028	$0.004^{+0.015}_{-0.015}$	$\ln(10^{10} A_{\text{s}})$	3.093	$3.29^{+0.45}_{-0.42} \quad (+15.2\sigma)$
b_{DES}^1	1.372	$1.40^{+0.28}_{-0.27}$	$\Delta z_{\text{l,DES}}^2$	0.0018	$0.002^{+0.013}_{-0.013}$	σ_8	0.829	$0.82^{+0.14}_{-0.14} \quad (+1.5\sigma)$
b_{DES}^2	1.600	$1.63^{+0.30}_{-0.28}$	$\Delta z_{\text{l,DES}}^3$	0.0051	$0.005^{+0.013}_{-0.013}$	S_8	0.792	$0.785^{+0.070}_{-0.068} \quad (-2.3\sigma)$
b_{DES}^3	1.587	$1.62^{+0.29}_{-0.27}$	$\Delta z_{\text{l,DES}}^4$	0.0035	$0.003^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4337	$0.430^{+0.038}_{-0.037} \quad (-2.3\sigma)$
b_{DES}^4	1.914	$1.95^{+0.35}_{-0.33}$	$\Delta z_{\text{l,DES}}^5$	0.0009	$0.000^{+0.019}_{-0.019}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.599	$0.595^{+0.073}_{-0.070} \quad (-1.3\sigma)$
b_{DES}^5	1.973	$2.01^{+0.37}_{-0.35}$	$\Delta z_{\text{s,DES}}^1$	0.0003	$-0.004^{+0.029}_{-0.028}$	χ_{DES}^2	249.6	$261.2 \quad (\nu: 11.7)$
m_{DES}^1	0.0126	$0.011^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^2$	-0.0303	$-0.031^{+0.021}_{-0.022}$	χ_{prior}^2	1.6	$13.1 \quad (\nu: 12.9) \quad (+1.6\sigma)$
m_{DES}^2	0.0099	$0.009^{+0.044}_{-0.044}$	$\Delta z_{\text{s,DES}}^3$	0.0067	$0.008^{+0.019}_{-0.019}$			

Best-fit $\chi^2_{\text{eff}} = 251.17$; $\bar{\chi}^2_{\text{eff}} = 274.25$; $R - 1 = 0.00686$
 χ^2_{eff} : WL - DES_1YR_final: 249.62

2.247 base_DES_DESpriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.2607	$0.269^{+0.041}_{-0.039} \quad (-3.9\sigma)$	m_{DES}^3	0.0140	$0.013^{+0.041}_{-0.041}$	$\Delta z_{\text{s,DES}}^4$	-0.0228	$-0.021^{+0.036}_{-0.037}$
Ω_b	0.0634	—	m_{DES}^4	0.0138	$0.014^{+0.041}_{-0.041}$	$\Omega_{\text{b}} h^2$	0.0408	$0.029^{+0.021}_{-0.018} \quad (+30.1\sigma)$
H_0	80.2	—	$A_{\text{IA,DES}}$	0.489	$0.46^{+0.40}_{-0.35}$	$\Omega_{\text{c}} h^2$	0.1262	$0.114^{+0.043}_{-0.039} \quad (-3.3\sigma)$
$10^9 A_{\text{s}}$	2.44	$2.51^{+0.80}_{-0.70} \quad (+12.2\sigma)$	$\alpha_{\text{IA,DES}}$	-0.9	—	Ω_{Λ}	0.7393	$0.731^{+0.039}_{-0.041} \quad (+3.9\sigma)$
n_{s}	1.021	—	$\Delta z_{\text{l,DES}}^1$	0.0039	$0.004^{+0.015}_{-0.014}$	$\ln(10^{10} A_{\text{s}})$	3.195	$3.21^{+0.31}_{-0.29} \quad (+10.4\sigma)$
b_{DES}^1	1.416	$1.44^{+0.18}_{-0.17}$	$\Delta z_{\text{l,DES}}^2$	0.0018	$0.002^{+0.013}_{-0.013}$	σ_8	0.840	$0.822^{+0.062}_{-0.062} \quad (+1.2\sigma)$
b_{DES}^2	1.628	$1.65^{+0.15}_{-0.14}$	$\Delta z_{\text{l,DES}}^3$	0.0042	$0.004^{+0.013}_{-0.013}$	S_8	0.7831	$0.778^{+0.030}_{-0.030} \quad (-2.6\sigma)$
b_{DES}^3	1.618	$1.64^{+0.13}_{-0.13}$	$\Delta z_{\text{l,DES}}^4$	0.0019	$0.002^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4289	$0.426^{+0.016}_{-0.016} \quad (-2.6\sigma)$
b_{DES}^4	1.960	$1.98^{+0.16}_{-0.15}$	$\Delta z_{\text{l,DES}}^5$	0.0002	$0.000^{+0.019}_{-0.019}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6003	$0.592^{+0.028}_{-0.028} \quad (-1.6\sigma)$
b_{DES}^5	2.038	$2.05^{+0.19}_{-0.18}$	$\Delta z_{\text{s,DES}}^1$	-0.0020	$-0.004^{+0.028}_{-0.028}$	χ_{lensing}^2	7.76	$9.0 \quad (\nu: 1.2)$
m_{DES}^1	0.0132	$0.012^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^2$	-0.0284	$-0.029^{+0.021}_{-0.021}$	χ_{DES}^2	501.3	$512.3 \quad (\nu: 10.1)$
m_{DES}^2	0.0162	$0.015^{+0.044}_{-0.043}$	$\Delta z_{\text{s,DES}}^3$	0.0079	$0.008^{+0.019}_{-0.019}$	χ_{prior}^2	0.99	$12.1 \quad (\nu: 11.3) \quad (+1.3\sigma)$

Best-fit $\chi^2_{\text{eff}} = 510.00$; $\bar{\chi}^2_{\text{eff}} = 533.39$; $R - 1 = 0.00725$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8.CMBmarged: 7.76 WL - DES_1YR_final: 501.25

2.248 base_DESlens_DESpriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.284	$0.277^{+0.062}_{-0.058} \quad (-3.4\sigma)$	$A_{\text{IA,DES}}$	1.33	$0.8^{+1.5}_{-1.4}$	$\ln(10^{10} A_{\text{s}})$	3.406	$3.17^{+0.31}_{-0.30} \quad (+7.7\sigma)$
Ω_b	0.0564	—	$\alpha_{\text{IA,DES}}$	3.35	> -2.76	σ_8	0.827	$0.826^{+0.082}_{-0.074} \quad (+1.6\sigma)$
H_0	63.5	—	$\Delta z_{\text{s,DES}}^1$	0.0027	$0.002^{+0.028}_{-0.029}$	S_8	0.8046	$0.790^{+0.044}_{-0.046} \quad (-2.1\sigma)$
$10^9 A_{\text{s}}$	3.01	$2.41^{+0.78}_{-0.69} \quad (+9.1\sigma)$	$\Delta z_{\text{s,DES}}^2$	-0.0192	$-0.020^{+0.023}_{-0.024}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4407	$0.433^{+0.024}_{-0.025} \quad (-2.1\sigma)$
n_{s}	1.070	—	$\Delta z_{\text{s,DES}}^3$	0.0081	$0.008^{+0.021}_{-0.021}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6036	$0.598^{+0.034}_{-0.032} \quad (-1.1\sigma)$
m_{DES}^1	0.0146	$0.013^{+0.044}_{-0.045}$	$\Delta z_{\text{s,DES}}^4$	-0.0165	$-0.016^{+0.040}_{-0.040}$	χ^2_{lensing}	7.37	$9.3 \quad (\nu: 1.4)$
m_{DES}^2	0.0141	$0.013^{+0.043}_{-0.043}$	$\Omega_{\text{b}} h^2$	0.0228	$0.027^{+0.020}_{-0.016} \quad (+20.7\sigma)$	χ^2_{DES}	228.89	$232.6 \quad (\nu: 2.9)$
m_{DES}^3	0.0017	$0.004^{+0.042}_{-0.042}$	$\Omega_{\text{c}} h^2$	0.0913	$0.116^{+0.046}_{-0.039} \quad (-2.1\sigma)$	χ^2_{prior}	0.4	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
m_{DES}^4	0.0178	$0.018^{+0.042}_{-0.041}$	Ω_{Λ}	0.716	$0.723^{+0.058}_{-0.062} \quad (+3.4\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 236.62$; $\bar{\chi}^2_{\text{eff}} = 249.24$; $R - 1 = 0.00861$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8.CMBmarged: 7.37 WL - DES_1YR_final: 228.89

2.249 base_DESwt_DESpriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.273	$0.277^{+0.056}_{-0.051} \quad (-3.4\sigma)$	m_{DES}^3	0.0225	$0.023^{+0.041}_{-0.041}$	$\Delta z_{\text{s,DES}}^4$	-0.0229	$-0.022^{+0.037}_{-0.036}$
Ω_b	0.0606	—	m_{DES}^4	0.0088	$0.009^{+0.042}_{-0.042}$	$\Omega_{\text{b}} h^2$	0.0392	$0.027^{+0.022}_{-0.017} \quad (+24.2\sigma)$
H_0	80.5	—	$A_{\text{IA,DES}}$	0.399	$0.43^{+0.40}_{-0.34}$	$\Omega_{\text{c}} h^2$	0.1368	$0.112^{+0.044}_{-0.038} \quad (-4.0\sigma)$
$10^9 A_{\text{s}}$	2.12	$2.46^{+0.82}_{-0.67} \quad (+10.8\sigma)$	$\alpha_{\text{IA,DES}}$	-2.4	—	Ω_{Λ}	0.727	$0.723^{+0.051}_{-0.056} \quad (+3.4\sigma)$
n_{s}	0.941	—	$\Delta z_{\text{l,DES}}^1$	0.0028	$0.003^{+0.015}_{-0.015}$	$\ln(10^{10} A_{\text{s}})$	3.056	$3.19^{+0.31}_{-0.29} \quad (+9.1\sigma)$
b_{DES}^1	1.424	$1.43^{+0.19}_{-0.18}$	$\Delta z_{\text{l,DES}}^2$	0.0013	$0.002^{+0.013}_{-0.013}$	σ_8	0.810	$0.806^{+0.070}_{-0.070} \quad (-0.6\sigma)$
b_{DES}^2	1.661	$1.67^{+0.17}_{-0.16}$	$\Delta z_{\text{l,DES}}^3$	0.0043	$0.004^{+0.013}_{-0.013}$	S_8	0.7725	$0.772^{+0.039}_{-0.038} \quad (-2.8\sigma)$
b_{DES}^3	1.653	$1.66^{+0.16}_{-0.14}$	$\Delta z_{\text{l,DES}}^4$	0.0027	$0.003^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4231	$0.423^{+0.022}_{-0.021} \quad (-2.8\sigma)$
b_{DES}^4	1.999	$2.01^{+0.18}_{-0.17}$	$\Delta z_{\text{l,DES}}^5$	-0.0001	$0.000^{+0.019}_{-0.019}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5854	$0.584^{+0.030}_{-0.029} \quad (-2.3\sigma)$
b_{DES}^5	2.071	$2.08^{+0.21}_{-0.20}$	$\Delta z_{\text{s,DES}}^1$	-0.0007	$-0.004^{+0.028}_{-0.029}$	χ^2_{lensing}	7.87	$9.3 \quad (\nu: 1.3)$
m_{DES}^1	0.0122	$0.011^{+0.044}_{-0.045}$	$\Delta z_{\text{s,DES}}^2$	-0.0300	$-0.030^{+0.021}_{-0.022}$	χ^2_{DES}	251.2	$261.4 \quad (\nu: 10.2)$
m_{DES}^2	0.0094	$0.009^{+0.044}_{-0.044}$	$\Delta z_{\text{s,DES}}^3$	0.0083	$0.009^{+0.019}_{-0.019}$	χ^2_{prior}	1.3	$12.7 \quad (\nu: 12.2) \quad (+1.5\sigma)$

Best-fit $\chi^2_{\text{eff}} = 260.41$; $\bar{\chi}^2_{\text{eff}} = 283.37$; $R - 1 = 0.00571$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8.CMBmarged: 7.87 WL - DES_1YR_final: 251.25

2.250 base_DES_DESpriors_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.2934	$0.283^{+0.033}_{-0.032} \quad (-2.9\sigma)$	m_{DES}^4	0.0085	$0.011^{+0.041}_{-0.040}$	$\Omega_{\text{c}} h^2$	0.1110	$0.104^{+0.021}_{-0.020} \quad (-8.0\sigma)$
Ω_b	0.04868	$0.0497^{+0.0037}_{-0.0036}$	$A_{\text{IA,DES}}$	0.443	$0.45^{+0.38}_{-0.34}$	Ω_{Λ}	0.7066	$0.717^{+0.032}_{-0.033} \quad (+2.9\sigma)$
H_0	67.54	$66.9^{+2.5}_{-2.4} \quad (+0.0\sigma)$	$\alpha_{\text{IA,DES}}$	-1.8	—	$\ln(10^{10} A_{\text{s}})$	3.144	$3.23^{+0.39}_{-0.39} \quad (+11.7\sigma)$
$10^9 A_{\text{s}}$	2.32	$2.59^{+1.0}_{-0.93} \quad (+14.3\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0036	$0.004^{+0.015}_{-0.014}$	σ_8	0.794	$0.806^{+0.077}_{-0.075} \quad (-0.6\sigma)$
n_{s}	0.901	—	$\Delta z_{\text{l,DES}}^2$	0.0011	$0.002^{+0.013}_{-0.013}$	S_8	0.7849	$0.782^{+0.045}_{-0.046} \quad (-2.4\sigma)$
b_{DES}^1	1.477	$1.46^{+0.20}_{-0.18}$	$\Delta z_{\text{l,DES}}^3$	0.0039	$0.004^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4299	$0.428^{+0.025}_{-0.025} \quad (-2.4\sigma)$
b_{DES}^2	1.682	$1.67^{+0.19}_{-0.17}$	$\Delta z_{\text{l,DES}}^4$	0.0020	$0.002^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5841	$0.588^{+0.043}_{-0.043} \quad (-2.0\sigma)$
b_{DES}^3	1.663	$1.66^{+0.18}_{-0.17}$	$\Delta z_{\text{l,DES}}^5$	0.0002	$0.000^{+0.019}_{-0.019}$	$\chi_{6\text{DF}}^2$	0.014	$0.09 \quad (\nu: 0.0)$
b_{DES}^4	2.006	$2.00^{+0.22}_{-0.21}$	$\Delta z_{\text{s,DES}}^1$	-0.0009	$-0.004^{+0.027}_{-0.028}$	χ_{MGS}^2	2.04	$2.31 \quad (\nu: 0.3)$
b_{DES}^5	2.072	$2.07^{+0.28}_{-0.25}$	$\Delta z_{\text{s,DES}}^2$	-0.0286	$-0.030^{+0.021}_{-0.021}$	χ_{DR12BAO}^2	3.83	$5.5 \quad (\nu: 1.6)$
m_{DES}^1	0.0133	$0.012^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^3$	0.0059	$0.007^{+0.020}_{-0.019}$	χ_{DES}^2	502.4	$512.7 \quad (\nu: 12.2)$
m_{DES}^2	0.0149	$0.014^{+0.044}_{-0.043}$	$\Delta z_{\text{s,DES}}^4$	-0.0249	$-0.023^{+0.037}_{-0.036}$	χ_{prior}^2	1.2	$13.2 \quad (\nu: 12.6) \quad (+1.6\sigma)$
m_{DES}^3	0.0045	$0.008^{+0.041}_{-0.041}$	$\Omega_{\text{b}} h^2$	0.02221	$0.0222^{+0.0010}_{-0.00098} \quad (+0.4\sigma)$	χ_{BAO}^2	5.88	$7.9 \quad (\nu: 2.0)$

Best-fit $\chi_{\text{eff}}^2 = 509.50$; $\bar{\chi}_{\text{eff}}^2 = 533.77$; $R - 1 = 0.00944$

χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 2.04 DR12BAO: 3.83 WL - DES_1YR_final: 502.44

2.251 base_DESlens_DESpriors_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.345	$0.330^{+0.073}_{-0.070} \quad (+0.7\sigma)$	$\alpha_{\text{IA,DES}}$	2.72	> -2.56	S_8	0.791	$0.785^{+0.052}_{-0.056} \quad (-2.3\sigma)$
Ω_b	0.0445	$0.0460^{+0.0059}_{-0.0063}$	$\Delta z_{\text{s,DES}}^1$	0.0038	$0.003^{+0.029}_{-0.029}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4331	$0.430^{+0.028}_{-0.031} \quad (-2.3\sigma)$
H_0	70.58	$69.6^{+4.9}_{-4.5} \quad (+3.0\sigma)$	$\Delta z_{\text{s,DES}}^2$	-0.0204	$-0.021^{+0.023}_{-0.023}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.565	$0.569^{+0.054}_{-0.056} \quad (-3.6\sigma)$
$10^9 A_{\text{s}}$	1.34	$1.6^{+1.3}_{-1.1} \quad (-13.0\sigma)$	$\Delta z_{\text{s,DES}}^3$	0.0077	$0.008^{+0.021}_{-0.021}$	$\chi_{6\text{DF}}^2$	0.061	$0.13 \quad (\nu: 0.0)$
n_{s}	0.922	—	$\Delta z_{\text{s,DES}}^4$	-0.0164	$-0.016^{+0.040}_{-0.040}$	χ_{MGS}^2	1.10	$1.43 \quad (\nu: 0.3)$
m_{DES}^1	0.0146	$0.014^{+0.045}_{-0.045}$	$\Omega_{\text{b}} h^2$	0.02219	$0.02220^{+0.00096}_{-0.00095} \quad (+0.4\sigma)$	χ_{DR12BAO}^2	2.20	$3.9 \quad (\nu: 1.5)$
m_{DES}^2	0.0135	$0.012^{+0.044}_{-0.044}$	$\Omega_{\text{c}} h^2$	0.149	$0.139^{+0.058}_{-0.052} \quad (+8.6\sigma)$	χ_{DES}^2	229.41	$233.2 \quad (\nu: 3.7)$
m_{DES}^3	0.0012	$0.002^{+0.042}_{-0.042}$	Ω_{Λ}	0.655	$0.670^{+0.070}_{-0.073} \quad (-0.7\sigma)$	χ_{prior}^2	0.4	$8.5 \quad (\nu: 8.0) \quad (+0.3\sigma)$
m_{DES}^4	0.0187	$0.018^{+0.042}_{-0.042}$	$\ln(10^{10} A_{\text{s}})$	2.59	$2.73^{+0.74}_{-0.76} \quad (-19.1\sigma)$	χ_{BAO}^2	3.36	$5.4 \quad (\nu: 2.1)$
$A_{\text{IA,DES}}$	1.33	$0.99^{+1.2}_{-1.2}$	σ_8	0.737	$0.75^{+0.11}_{-0.10} \quad (-6.7\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 233.21$; $\bar{\chi}_{\text{eff}}^2 = 247.19$; $R - 1 = 0.00929$

χ_{eff}^2 : BAO - 6DF: 0.06 MGS: 1.10 DR12BAO: 2.20 WL - DES_1YR_final: 229.41

2.252 base_DESwt_DESpriors_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.2999	$0.287^{+0.030}_{-0.032} \quad (-2.6\sigma)$	m_{DES}^4	0.0056	$0.007^{+0.043}_{-0.043}$	$\Omega_{\text{c}} h^2$	0.1148	$0.106^{+0.020}_{-0.020} \quad (-6.9\sigma)$
Ω_b	0.04840	$0.0495^{+0.0036}_{-0.0033}$	$A_{\text{IA,DES}}$	0.354	$0.41^{+0.37}_{-0.33}$	Ω_{Λ}	0.7001	$0.713^{+0.032}_{-0.030} \quad (+2.6\sigma)$
H_0	67.76	$67.0^{+2.3}_{-2.3} \quad (+0.1\sigma)$	$\alpha_{\text{IA,DES}}$	-3.1	—	$\ln(10^{10} A_{\text{s}})$	3.086	$3.19^{+0.41}_{-0.38} \quad (+9.4\sigma)$
$10^9 A_{\text{s}}$	2.19	$2.49^{+1.1}_{-0.90} \quad (+11.6\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0026	$0.003^{+0.015}_{-0.015}$	σ_8	0.780	$0.797^{+0.093}_{-0.087} \quad (-1.7\sigma)$
n_{s}	0.870	$< 1.04 \quad (-5.1\sigma)$	$\Delta z_{\text{l,DES}}^2$	0.0015	$0.002^{+0.013}_{-0.013}$	S_8	0.780	$0.779^{+0.068}_{-0.068} \quad (-2.5\sigma)$
b_{DES}^1	1.456	$1.44^{+0.23}_{-0.21}$	$\Delta z_{\text{l,DES}}^3$	0.0049	$0.005^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4272	$0.426^{+0.037}_{-0.037} \quad (-2.5\sigma)$
b_{DES}^2	1.693	$1.68^{+0.22}_{-0.20}$	$\Delta z_{\text{l,DES}}^4$	0.0031	$0.003^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.577	$0.583^{+0.057}_{-0.056} \quad (-2.4\sigma)$
b_{DES}^3	1.681	$1.67^{+0.22}_{-0.19}$	$\Delta z_{\text{l,DES}}^5$	0.0005	$0.000^{+0.019}_{-0.019}$	χ_{6DF}^2	0.002	$0.08 \quad (\nu: 0.0)$
b_{DES}^4	2.028	$2.01^{+0.26}_{-0.25}$	$\Delta z_{\text{s,DES}}^1$	0.0000	$-0.004^{+0.029}_{-0.029}$	χ_{MGS}^2	1.82	$2.16 \quad (\nu: 0.3)$
b_{DES}^5	2.090	$2.08^{+0.31}_{-0.27}$	$\Delta z_{\text{s,DES}}^2$	-0.0300	$-0.031^{+0.022}_{-0.022}$	χ_{DR12BAO}^2	3.63	$5.3 \quad (\nu: 1.5)$
m_{DES}^1	0.0125	$0.011^{+0.046}_{-0.044}$	$\Delta z_{\text{s,DES}}^3$	0.0070	$0.008^{+0.020}_{-0.020}$	χ_{DES}^2	250.4	$261.1 \quad (\nu: 12.3)$
m_{DES}^2	0.0102	$0.009^{+0.044}_{-0.044}$	$\Delta z_{\text{s,DES}}^4$	-0.0247	$-0.024^{+0.038}_{-0.038}$	χ_{prior}^2	1.4	$14.1 \quad (\nu: 13.7) \quad (+1.8\sigma)$
m_{DES}^3	0.0191	$0.021^{+0.042}_{-0.042}$	$\Omega_{\text{b}} h^2$	0.02222	$0.0222^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	χ_{BAO}^2	5.45	$7.5 \quad (\nu: 1.8)$

Best-fit $\chi_{\text{eff}}^2 = 257.28$; $\bar{\chi}_{\text{eff}}^2 = 282.67$; $R - 1 = 0.00957$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.63 WL - DES_1YR_final: 250.45

2.253 base_DES_DESpriors_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.2919	$0.285^{+0.027}_{-0.026} \quad (-2.8\sigma)$	$A_{\text{IA,DES}}$	0.455	$0.45^{+0.38}_{-0.34}$	$\ln(10^{10} A_{\text{s}})$	3.130	$3.20^{+0.25}_{-0.23} \quad (+9.7\sigma)$
Ω_b	0.04891	$0.0495^{+0.0034}_{-0.0033}$	$\alpha_{\text{IA,DES}}$	-1.5	—	σ_8	0.7917	$0.802^{+0.045}_{-0.042} \quad (-1.1\sigma)$
H_0	67.42	$67.0^{+2.4}_{-2.2} \quad (+0.1\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0041	$0.004^{+0.015}_{-0.015}$	S_8	0.7809	$0.780^{+0.030}_{-0.029} \quad (-2.5\sigma)$
$10^9 A_{\text{s}}$	2.29	$2.47^{+0.64}_{-0.55} \quad (+11.1\sigma)$	$\Delta z_{\text{l,DES}}^2$	0.0011	$0.002^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4277	$0.427^{+0.016}_{-0.016} \quad (-2.5\sigma)$
n_{s}	0.935	—	$\Delta z_{\text{l,DES}}^3$	0.0036	$0.004^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5819	$0.585^{+0.025}_{-0.024} \quad (-2.2\sigma)$
b_{DES}^1	1.494	$1.47^{+0.15}_{-0.16}$	$\Delta z_{\text{l,DES}}^4$	0.0015	$0.002^{+0.018}_{-0.018}$	χ_{lensing}^2	7.91	$8.9 \quad (\nu: 1.1)$
b_{DES}^2	1.701	$1.69^{+0.12}_{-0.12}$	$\Delta z_{\text{l,DES}}^5$	-0.0001	$0.000^{+0.019}_{-0.019}$	χ_{6DF}^2	0.014	$0.08 \quad (\nu: 0.0)$
b_{DES}^3	1.685	$1.67^{+0.11}_{-0.11}$	$\Delta z_{\text{s,DES}}^1$	-0.0012	$-0.004^{+0.028}_{-0.027}$	χ_{MGS}^2	2.04	$2.27 \quad (\nu: 0.3)$
b_{DES}^4	2.035	$2.02^{+0.13}_{-0.12}$	$\Delta z_{\text{s,DES}}^2$	-0.0287	$-0.029^{+0.021}_{-0.021}$	χ_{DR12BAO}^2	3.94	$5.3 \quad (\nu: 1.4)$
b_{DES}^5	2.112	$2.09^{+0.16}_{-0.16}$	$\Delta z_{\text{s,DES}}^3$	0.0066	$0.007^{+0.019}_{-0.019}$	χ_{DES}^2	502.9	$512.4 \quad (\nu: 9.8)$
m_{DES}^1	0.0135	$0.012^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^4$	-0.0236	$-0.023^{+0.036}_{-0.036}$	χ_{prior}^2	1.1	$13.0 \quad (\nu: 12.2) \quad (+1.5\sigma)$
m_{DES}^2	0.0148	$0.015^{+0.044}_{-0.044}$	$\Omega_{\text{b}} h^2$	0.02223	$0.02219^{+0.00098}_{-0.00096} \quad (+0.3\sigma)$	χ_{BAO}^2	6.00	$7.7 \quad (\nu: 1.6)$
m_{DES}^3	0.0078	$0.009^{+0.040}_{-0.040}$	$\Omega_{\text{c}} h^2$	0.1098	$0.105^{+0.017}_{-0.017} \quad (-7.5\sigma)$			
m_{DES}^4	0.0102	$0.011^{+0.041}_{-0.041}$	Ω_{Λ}	0.7081	$0.715^{+0.026}_{-0.027} \quad (+2.8\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 517.86$; $\bar{\chi}_{\text{eff}}^2 = 541.96$; $R - 1 = 0.00592$

χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 2.04 DR12BAO: 3.94 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.91 WL - DES_1YR_final: 502.90

2.254 base_DESlens_DESpriors_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.3106	$0.295^{+0.031}_{-0.031} \quad (-2.0\sigma)$	$\alpha_{\text{IA,DES}}$	2.80	> -2.66	S_8	0.8009	$0.798^{+0.039}_{-0.040} \quad (-1.7\sigma)$
Ω_b	0.04731	$0.0487^{+0.0037}_{-0.0035}$	$\Delta z_{\text{s,DES}}^1$	0.0034	$0.003^{+0.029}_{-0.029}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4387	$0.437^{+0.021}_{-0.022} \quad (-1.7\sigma)$
H_0	68.49	$67.6^{+2.5}_{-2.4} \quad (+0.7\sigma)$	$\Delta z_{\text{s,DES}}^2$	-0.0195	$-0.020^{+0.023}_{-0.023}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5876	$0.593^{+0.028}_{-0.026} \quad (-1.5\sigma)$
$10^9 A_{\text{s}}$	1.99	$2.30^{+0.64}_{-0.54} \quad (+6.2\sigma)$	$\Delta z_{\text{s,DES}}^3$	0.0067	$0.007^{+0.020}_{-0.021}$	χ_{lensing}^2	7.79	$9.0 \quad (\nu: 1.1)$
n_{s}	0.902	—	$\Delta z_{\text{s,DES}}^4$	-0.0190	$-0.018^{+0.041}_{-0.040}$	$\chi_{6\text{DF}}^2$	0.000	$0.066 \quad (\nu: 0.0)$
m_{DES}^1	0.0142	$0.013^{+0.045}_{-0.044}$	$\Omega_{\text{b}} h^2$	0.02219	$0.02219^{+0.00096}_{-0.00098} \quad (+0.3\sigma)$	χ_{MGS}^2	1.68	$2.05 \quad (\nu: 0.3)$
m_{DES}^2	0.0138	$0.013^{+0.043}_{-0.044}$	$\Omega_{\text{c}} h^2$	0.1229	$0.112^{+0.021}_{-0.021} \quad (-4.1\sigma)$	χ_{DR12BAO}^2	3.08	$4.8 \quad (\nu: 1.3)$
m_{DES}^3	-0.0018	$0.000^{+0.041}_{-0.041}$	Ω_{Λ}	0.6894	$0.705^{+0.031}_{-0.031} \quad (+2.0\sigma)$	χ_{DES}^2	229.27	$232.2 \quad (\nu: 2.7)$
m_{DES}^4	0.0157	$0.015^{+0.042}_{-0.041}$	$\ln(10^{10} A_{\text{s}})$	2.992	$3.13^{+0.27}_{-0.24} \quad (+5.3\sigma)$	χ_{prior}^2	0.5	$8.4 \quad (\nu: 7.9) \quad (+0.3\sigma)$
$A_{\text{IA,DES}}$	1.30	$1.0^{+1.1}_{-1.1}$	σ_8	0.7871	$0.806^{+0.046}_{-0.043} \quad (-0.7\sigma)$	χ_{BAO}^2	4.76	$6.9 \quad (\nu: 1.6)$

Best-fit $\chi_{\text{eff}}^2 = 242.34$; $\bar{\chi}_{\text{eff}}^2 = 256.54$; $R - 1 = 0.00700$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.08 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.79 WL - DES_1YR_final: 229.27

2.255 base_DESwt_DESpriors_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.3056	$0.289^{+0.027}_{-0.029} \quad (-2.4\sigma)$	$A_{\text{IA,DES}}$	0.350	$0.42^{+0.38}_{-0.33}$	$\ln(10^{10} A_{\text{s}})$	3.000	$3.15^{+0.26}_{-0.21} \quad (+6.9\sigma)$
Ω_b	0.04763	$0.0492^{+0.0033}_{-0.0032}$	$\alpha_{\text{IA,DES}}$	-3.1	—	σ_8	0.7686	$0.791^{+0.046}_{-0.040} \quad (-2.3\sigma)$
H_0	68.30	$67.2^{+2.3}_{-2.2} \quad (+0.3\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0026	$0.003^{+0.015}_{-0.015}$	S_8	0.7757	$0.776^{+0.036}_{-0.035} \quad (-2.6\sigma)$
$10^9 A_{\text{s}}$	2.01	$2.36^{+0.64}_{-0.49} \quad (+7.9\sigma)$	$\Delta z_{\text{l,DES}}^2$	0.0013	$0.002^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4249	$0.425^{+0.020}_{-0.019} \quad (-2.6\sigma)$
n_{s}	0.872	$< 1.04 \quad (-3.5\sigma)$	$\Delta z_{\text{l,DES}}^3$	0.0046	$0.005^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5714	$0.580^{+0.027}_{-0.025} \quad (-2.7\sigma)$
b_{DES}^1	1.487	$1.45^{+0.16}_{-0.16}$	$\Delta z_{\text{l,DES}}^4$	0.0030	$0.003^{+0.018}_{-0.018}$	χ_{lensing}^2	8.54	$9.2 \quad (\nu: 1.3)$
b_{DES}^2	1.729	$1.69^{+0.12}_{-0.12}$	$\Delta z_{\text{l,DES}}^5$	0.0002	$0.000^{+0.019}_{-0.019}$	$\chi_{6\text{DF}}^2$	0.001	$0.070 \quad (\nu: 0.0)$
b_{DES}^3	1.716	$1.68^{+0.10}_{-0.11}$	$\Delta z_{\text{s,DES}}^1$	0.0003	$-0.004^{+0.028}_{-0.029}$	χ_{MGS}^2	1.82	$2.14 \quad (\nu: 0.3)$
b_{DES}^4	2.075	$2.04^{+0.12}_{-0.12}$	$\Delta z_{\text{s,DES}}^2$	-0.0302	$-0.031^{+0.021}_{-0.022}$	χ_{DR12BAO}^2	3.23	$5.1 \quad (\nu: 1.2)$
b_{DES}^5	2.147	$2.11^{+0.16}_{-0.17}$	$\Delta z_{\text{s,DES}}^3$	0.0075	$0.008^{+0.019}_{-0.019}$	χ_{DES}^2	251.4	$260.8 \quad (\nu: 10.2)$
m_{DES}^1	0.0126	$0.011^{+0.044}_{-0.044}$	$\Delta z_{\text{s,DES}}^4$	-0.0241	$-0.023^{+0.037}_{-0.036}$	χ_{prior}^2	1.4	$13.7 \quad (\nu: 13.3) \quad (+1.7\sigma)$
m_{DES}^2	0.0097	$0.009^{+0.044}_{-0.044}$	$\Omega_{\text{b}} h^2$	0.02222	$0.02219^{+0.00099}_{-0.0010} \quad (+0.3\sigma)$	χ_{BAO}^2	5.05	$7.3 \quad (\nu: 1.5)$
m_{DES}^3	0.0199	$0.022^{+0.042}_{-0.041}$	$\Omega_{\text{c}} h^2$	0.1197	$0.108^{+0.017}_{-0.018} \quad (-6.1\sigma)$			
m_{DES}^4	0.0062	$0.007^{+0.042}_{-0.042}$	Ω_{Λ}	0.6944	$0.711^{+0.029}_{-0.027} \quad (+2.4\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 266.38$; $\bar{\chi}_{\text{eff}}^2 = 291.02$; $R - 1 = 0.00577$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.23 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 8.54 WL - DES_1YR_final: 251.43

2.256 base_plikHM_TTTEEE_lowl_lowE_DES

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022524	$0.02252^{+0.00028}_{-0.00027}$ (+1.8 σ)	$\Delta z_{\text{l,DES}}^1$	0.0030	$0.004^{+0.015}_{-0.014}$	z_{drag}	1060.16	$1060.12^{+0.57}_{-0.57}$ (+1.6 σ)
$\Omega_c h^2$	0.11811	$0.1179^{+0.0021}_{-0.0021}$ (−1.3 σ)	$\Delta z_{\text{l,DES}}^2$	0.0007	$0.001^{+0.013}_{-0.013}$	r_{drag}	147.42	$147.49^{+0.51}_{-0.50}$ (+0.6 σ)
$100\theta_{\text{MC}}$	1.04112	$1.04112^{+0.00059}_{-0.00059}$ (+0.8 σ)	$\Delta z_{\text{l,DES}}^3$	0.0035	$0.003^{+0.013}_{-0.013}$	k_{D}	0.14064	$0.14056^{+0.00058}_{-0.00058}$ (+0.0 σ)
τ	0.0552	$0.055^{+0.016}_{-0.016}$ (+0.3 σ)	$\Delta z_{\text{l,DES}}^4$	0.0007	$0.001^{+0.018}_{-0.018}$	$100\theta_{\text{D}}$	0.160639	$0.16066^{+0.00033}_{-0.00034}$ (−1.6 σ)
$\ln(10^{10} A_{\text{s}})$	3.0416	$3.039^{+0.032}_{-0.032}$ (−0.1 σ)	$\Delta z_{\text{l,DES}}^5$	−0.0004	$−0.001^{+0.020}_{-0.019}$	z_{eq}	3360.8	3355^{+47}_{-48} (−1.2 σ)
n_{s}	0.9700	$0.9696^{+0.0077}_{-0.0079}$ (+1.2 σ)	$\Delta z_{\text{s,DES}}^1$	0.0007	$−0.003^{+0.028}_{-0.028}$	k_{eq}	0.010257	$0.01024^{+0.00014}_{-0.00015}$ (−1.2 σ)
y_{cal}	1.00041	$1.0005^{+0.0049}_{-0.0049}$ (+0.0 σ)	$\Delta z_{\text{s,DES}}^2$	−0.0301	$−0.031^{+0.021}_{-0.021}$	$100\theta_{\text{eq}}$	0.8214	$0.8224^{+0.0093}_{-0.0089}$ (+1.3 σ)
A_{217}^{CIB}	47.6	47^{+10}_{-10} (−0.2 σ)	$\Delta z_{\text{s,DES}}^3$	0.0029	$0.004^{+0.019}_{-0.019}$	$100\theta_{\text{s,eq}}$	0.45348	$0.4540^{+0.0048}_{-0.0046}$ (+1.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.44	—	$\Delta z_{\text{s,DES}}^4$	−0.0301	$−0.030^{+0.036}_{-0.035}$	$H(0.15)$	73.42	$73.48^{+0.84}_{-0.81}$ (+1.6 σ)
A_{143}^{tSZ}	7.25	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	H_0	68.21	$68.30^{+0.97}_{-0.94}$ (+1.5 σ)	$D_{\text{M}}(0.15)$	636.1	$635.4^{+8.0}_{-8.1}$ (−1.5 σ)
A_{100}^{PS}	249	259^{+50}_{-50} (−0.2 σ)	Ω_{Λ}	0.6964	$0.698^{+0.013}_{-0.012}$ (+1.4 σ)	$H(0.38)$	83.40	$83.44^{+0.62}_{-0.60}$ (+1.6 σ)
A_{143}^{PS}	46.7	45^{+10}_{-20} (−0.5 σ)	Ω_{m}	0.3036	$0.302^{+0.012}_{-0.013}$ (−1.4 σ)	$D_{\text{M}}(0.38)$	1518.9	1518^{+16}_{-16} (−1.6 σ)
$A_{143 \times 217}^{\text{PS}}$	46.9	41^{+20}_{-20} (−0.2 σ)	$\Omega_{\text{m}} h^2$	0.14128	$0.1410^{+0.0020}_{-0.0020}$ (−1.2 σ)	$H(0.51)$	90.037	$90.07^{+0.50}_{-0.48}$ (+1.7 σ)
A_{217}^{PS}	118.5	114^{+20}_{-20} (−0.1 σ)	$\Omega_{\text{m}} h^3$	0.09638	$0.09632^{+0.00058}_{-0.00057}$ (+1.0 σ)	$D_{\text{M}}(0.51)$	1968.9	1967^{+19}_{-19} (−1.6 σ)
A^{kSZ}	0.00	< 8.14 (−0.1 σ)	σ_8	0.8048	$0.803^{+0.013}_{-0.013}$ (−1.0 σ)	$H(0.61)$	95.598	$95.62^{+0.42}_{-0.40}$ (+1.7 σ)
A_{100}^{dustTT}	8.78	$8.9^{+3.5}_{-3.5}$ (−0.0 σ)	S_8	0.8097	$0.806^{+0.024}_{-0.024}$ (−1.4 σ)	$D_{\text{M}}(0.61)$	2292.1	2291^{+20}_{-21} (−1.6 σ)
A_{143}^{dustTT}	11.04	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4435	$0.442^{+0.013}_{-0.013}$ (−1.4 σ)	$H(2.33)$	235.49	$235.3^{+1.3}_{-1.3}$ (−1.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.7^{+6.4}_{-6.4}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5974	$0.595^{+0.013}_{-0.013}$ (−1.3 σ)	$D_{\text{M}}(2.33)$	5750.0	5750^{+19}_{-19} (−1.7 σ)
A_{217}^{dustTT}	94.7	94^{+10}_{-10} (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9745	$0.972^{+0.019}_{-0.019}$ (−1.3 σ)	$f\sigma_8(0.15)$	0.4487	$0.447^{+0.012}_{-0.012}$ (−1.4 σ)
A_{100}^{dustTE}	0.115	$0.114^{+0.076}_{-0.075}$	$r_{\text{drag}} h$	100.56	$100.7^{+1.7}_{-1.6}$ (+1.4 σ)	$\sigma_8(0.15)$	0.7445	$0.743^{+0.012}_{-0.012}$ (−0.8 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.058}$	$\langle d^2 \rangle^{1/2}$	2.4120	$2.408^{+0.046}_{-0.046}$ (−1.2 σ)	$f\sigma_8(0.38)$	0.4686	$0.467^{+0.010}_{-0.011}$ (−1.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.16}$	z_{re}	7.71	$7.6^{+1.5}_{-1.6}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6608	$0.660^{+0.011}_{-0.011}$ (−0.6 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.10}_{-0.11}$	$10^9 A_{\text{s}}$	2.094	$2.090^{+0.069}_{-0.066}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4682	$0.4667^{+0.0095}_{-0.0096}$ (−1.3 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.66^{+0.16}_{-0.16}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8750	$1.873^{+0.021}_{-0.022}$ (−0.8 σ)	$\sigma_8(0.51)$	0.6187	$0.618^{+0.010}_{-0.0098}$ (−0.5 σ)
A_{217}^{dustTE}	2.07	$2.06^{+0.52}_{-0.52}$	D_{40}	1220.3	1221^{+23}_{-23} (−0.8 σ)	$f\sigma_8(0.61)$	0.4639	$0.4625^{+0.0088}_{-0.0089}$ (−1.3 σ)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{220}	5741	5744^{+75}_{-76} (+0.7 σ)	$\sigma_8(0.61)$	0.5890	$0.5880^{+0.0096}_{-0.0094}$ (−0.4 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{810}	2538.6	2537^{+26}_{-27} (+0.0 σ)	$f\sigma_8(2.33)$	0.29728	$0.2968^{+0.0049}_{-0.0048}$ (−0.1 σ)
b_{DES}^1	1.506	$1.51^{+0.14}_{-0.15}$	D_{1420}	818.9	$817.9^{+9.4}_{-9.5}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3068	$0.3064^{+0.0052}_{-0.0051}$ (+0.2 σ)
b_{DES}^2	1.710	$1.71^{+0.10}_{-0.10}$	D_{2000}	231.56	$231.2^{+3.1}_{-3.2}$ (+0.9 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (−0.7 σ)
b_{DES}^3	1.697	$1.698^{+0.085}_{-0.088}$	$n_{\text{s},0.002}$	0.9700	$0.9696^{+0.0077}_{-0.0079}$ (+1.2 σ)	$f_{2000}^{143 \times 217}$	31.72	32^{+4}_{-4} (−0.8 σ)
b_{DES}^4	2.058	$2.06^{+0.10}_{-0.10}$	Y_{P}	0.245453	$0.24545^{+0.00010}_{-0.00011}$ (+1.7 σ)	f_{2000}^{217}	106.29	$106.7^{+3.5}_{-3.5}$ (−0.7 σ)
b_{DES}^5	2.161	$2.16^{+0.15}_{-0.15}$	$Y_{\text{P}}^{\text{BBN}}$	0.246780	$0.24678^{+0.00010}_{-0.00011}$ (+1.7 σ)	χ_{simall}^2	396.08	$397.0 (\nu: 1.6)$ (+0.0 σ)
m_{DES}^1	0.0133	$0.012^{+0.044}_{-0.045}$	10^5D/H	2.558	$2.559^{+0.051}_{-0.050}$ (−1.8 σ)	χ_{lowl}^2	22.49	$22.59 (\nu: 0.3)$ (−1.0 σ)
m_{DES}^2	0.0137	$0.012^{+0.044}_{-0.043}$	Age/Gyr	13.7679	$13.767^{+0.043}_{-0.042}$ (−1.7 σ)	χ_{plik}^2	2348.0	$2363.4 (\nu: 20.7)$ (+292.1 σ)
m_{DES}^3	−0.0028	$−0.002^{+0.039}_{-0.039}$	z_*	1089.564	$1089.55^{+0.46}_{-0.46}$ (−1.8 σ)	χ_{DES}^2	509.2	$518.0 (\nu: 11.8)$
m_{DES}^4	0.0018	$0.003^{+0.041}_{-0.040}$	r_*	144.803	$144.87^{+0.49}_{-0.48}$ (+0.9 σ)	χ_{prior}^2	4.0	$25 (\nu: 23.0)$ (+4.7 σ)
$A_{\text{IA,DES}}$	0.434	$0.47^{+0.34}_{-0.32}$	$100\theta_*$	1.04129	$1.04129^{+0.00058}_{-0.00058}$ (+0.7 σ)	χ_{CMB}^2	2766.6	$2783.0 (\nu: 20.0)$ (+289.7 σ)
$\alpha_{\text{IA,DES}}$	−2.55	< 2.97	$D_{\text{M}}(z_*)/\text{Gpc}$	13.9061	$13.912^{+0.047}_{-0.045}$ (+0.8 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3279.69$; $\bar{\chi}_{\text{eff}}^2 = 3325.69$; $R - 1 = 0.00524$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.08 commander_dx12_v3.2_29: 22.49 plik_rd12_HM_v22b_TTTEEE: 2347.99 WL - DES_1YR_final: 509.16

2.257 base_plikHM_TTTEEE_lowl_lowE_DES_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022502	$0.02251^{+0.00026}_{-0.00026}$ (+1.8 σ)	$\Delta z_{\text{l,DES}}^2$	0.0005	$0.001^{+0.013}_{-0.013}$	k_{D}	0.14059	$0.14057^{+0.00056}_{-0.00055}$ (+0.1 σ)
$\Omega_c h^2$	0.11810	$0.1180^{+0.0017}_{-0.0017}$ (−1.3 σ)	$\Delta z_{\text{l,DES}}^3$	0.0034	$0.003^{+0.013}_{-0.013}$	$100\theta_{\text{D}}$	0.160668	$0.16066^{+0.00033}_{-0.00033}$ (−1.5 σ)
$100\theta_{\text{MC}}$	1.04112	$1.04111^{+0.00057}_{-0.00057}$ (+0.7 σ)	$\Delta z_{\text{l,DES}}^4$	0.0008	$0.000^{+0.018}_{-0.018}$	z_{eq}	3359.9	3358^{+39}_{-39} (−1.1 σ)
τ	0.0552	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	$\Delta z_{\text{l,DES}}^5$	−0.0003	$0.000^{+0.019}_{-0.019}$	k_{eq}	0.010255	$0.01025^{+0.00012}_{-0.00012}$ (−1.1 σ)
$\ln(10^{10} A_{\text{s}})$	3.0412	$3.039^{+0.032}_{-0.032}$ (−0.1 σ)	$\Delta z_{\text{s,DES}}^1$	0.0007	$−0.003^{+0.028}_{-0.028}$	$100\theta_{\text{eq}}$	0.8214	$0.8219^{+0.0075}_{-0.0073}$ (+1.2 σ)
n_{s}	0.9699	$0.9693^{+0.0071}_{-0.0073}$ (+1.2 σ)	$\Delta z_{\text{s,DES}}^2$	−0.0301	$−0.031^{+0.021}_{-0.021}$	$100\theta_{\text{s,eq}}$	0.45354	$0.4537^{+0.0038}_{-0.0037}$ (+1.2 σ)
y_{cal}	1.00029	$1.0004^{+0.0048}_{-0.0049}$ (+0.0 σ)	$\Delta z_{\text{s,DES}}^3$	0.0033	$0.004^{+0.019}_{-0.019}$	$H(0.15)$	73.40	$73.43^{+0.68}_{-0.67}$ (+1.5 σ)
A_{217}^{CIB}	48.1	47^{+10}_{-10} (−0.2 σ)	$\Delta z_{\text{s,DES}}^4$	−0.0300	$−0.030^{+0.036}_{-0.035}$	$D_{\text{M}}(0.15)$	636.2	$635.9^{+6.5}_{-6.6}$ (−1.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.34	—	H_0	68.20	$68.24^{+0.78}_{-0.77}$ (+1.5 σ)	$H(0.38)$	83.38	$83.40^{+0.52}_{-0.50}$ (+1.6 σ)
A_{143}^{tSZ}	7.33	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	Ω_{Λ}	0.6963	$0.697^{+0.010}_{-0.010}$ (+1.4 σ)	$D_{\text{M}}(0.38)$	1519.2	1519^{+13}_{-13} (−1.5 σ)
A_{100}^{PS}	251	258^{+50}_{-50} (−0.2 σ)	Ω_{m}	0.3037	$0.303^{+0.010}_{-0.010}$ (−1.4 σ)	$H(0.51)$	90.021	$90.04^{+0.43}_{-0.41}$ (+1.6 σ)
A_{143}^{PS}	45.5	45^{+10}_{-20} (−0.5 σ)	$\Omega_{\text{m}} h^2$	0.14125	$0.1412^{+0.0016}_{-0.0016}$ (−1.1 σ)	$D_{\text{M}}(0.51)$	1969.3	1969^{+16}_{-16} (−1.5 σ)
$A_{143 \times 217}^{\text{PS}}$	44.5	41^{+20}_{-20} (−0.2 σ)	$\Omega_{\text{m}} h^3$	0.09633	$0.09632^{+0.00058}_{-0.00057}$ (+0.9 σ)	$H(0.61)$	95.582	$95.59^{+0.36}_{-0.35}$ (+1.7 σ)
A_{217}^{PS}	117.7	114^{+20}_{-20} (−0.1 σ)	σ_8	0.8046	$0.803^{+0.013}_{-0.013}$ (−1.0 σ)	$D_{\text{M}}(0.61)$	2292.5	2292^{+17}_{-17} (−1.5 σ)
A^{kSZ}	0.00	< 8.20 (−0.1 σ)	S_8	0.8095	$0.808^{+0.021}_{-0.021}$ (−1.3 σ)	$H(2.33)$	235.46	$235.4^{+1.0}_{-1.1}$ (−1.0 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4434	$0.442^{+0.011}_{-0.011}$ (−1.3 σ)	$D_{\text{M}}(2.33)$	5750.9	5751^{+17}_{-17} (−1.7 σ)
A_{143}^{dustTT}	11.12	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5973	$0.596^{+0.012}_{-0.012}$ (−1.3 σ)	$f\sigma_8(0.15)$	0.4486	$0.448^{+0.011}_{-0.011}$ (−1.3 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.7^{+6.5}_{-6.4}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9743	$0.972^{+0.018}_{-0.018}$ (−1.3 σ)	$\sigma_8(0.15)$	0.7443	$0.743^{+0.012}_{-0.012}$ (−0.8 σ)
A_{217}^{dustTT}	94.9	94^{+10}_{-10} (+0.1 σ)	$r_{\text{drag}} h$	100.56	$100.6^{+1.3}_{-1.3}$ (+1.4 σ)	$f\sigma_8(0.38)$	0.4685	$0.4675^{+0.0095}_{-0.0096}$ (−1.3 σ)
A_{100}^{dustTE}	0.113	$0.115^{+0.076}_{-0.075}$	$\langle d^2 \rangle^{1/2}$	2.4118	$2.410^{+0.044}_{-0.044}$ (−1.2 σ)	$\sigma_8(0.38)$	0.6606	$0.660^{+0.011}_{-0.011}$ (−0.6 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	z_{re}	7.71	$7.6^{+1.5}_{-1.6}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4681	$0.4671^{+0.0089}_{-0.0089}$ (−1.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	$10^9 A_{\text{s}}$	2.093	$2.089^{+0.067}_{-0.066}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6186	$0.618^{+0.010}_{-0.010}$ (−0.5 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.10}_{-0.11}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8741	$1.874^{+0.021}_{-0.021}$ (−0.8 σ)	$f\sigma_8(0.61)$	0.4638	$0.4628^{+0.0084}_{-0.0084}$ (−1.2 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	D_{40}	1219.9	1222^{+22}_{-22} (−0.8 σ)	$\sigma_8(0.61)$	0.5888	$0.5879^{+0.0096}_{-0.0095}$ (−0.4 σ)
A_{217}^{dustTE}	2.06	$2.07^{+0.52}_{-0.52}$	D_{220}	5738	5743^{+75}_{-77} (+0.7 σ)	$f\sigma_8(2.33)$	0.29720	$0.2968^{+0.0049}_{-0.0048}$ (−0.1 σ)
c_{100}	0.99969	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{810}	2537.2	2537^{+27}_{-27} (+0.0 σ)	$\sigma_8(2.33)$	0.3067	$0.3063^{+0.0051}_{-0.0050}$ (+0.2 σ)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{1420}	818.3	$817.8^{+9.3}_{-9.3}$ (+0.7 σ)	f_{2000}^{143}	28.7	29^{+5}_{-5} (−0.6 σ)
b_{DES}^1	1.508	$1.51^{+0.14}_{-0.15}$	D_{2000}	231.33	$231.1^{+3.0}_{-3.1}$ (+0.9 σ)	$f_{2000}^{143 \times 217}$	31.86	32^{+4}_{-4} (−0.8 σ)
b_{DES}^2	1.709	$1.71^{+0.10}_{-0.10}$	$n_{\text{s},0.002}$	0.9699	$0.9693^{+0.0071}_{-0.0073}$ (+1.2 σ)	f_{2000}^{217}	106.48	$106.8^{+3.6}_{-3.4}$ (−0.7 σ)
b_{DES}^3	1.697	$1.697^{+0.086}_{-0.088}$	Y_{P}	0.245445	$0.245446^{+0.000097}_{-0.00010}$ (+1.7 σ)	χ_{simall}^2	396.08	397.0 (ν : 1.5) (−0.0 σ)
b_{DES}^4	2.058	$2.06^{+0.10}_{-0.10}$	$Y_{\text{P}}^{\text{BBN}}$	0.246772	$0.246773^{+0.000098}_{-0.00010}$ (+1.7 σ)	χ_{lowl}^2	22.50	22.63 (ν : 0.3) (−1.0 σ)
b_{DES}^5	2.162	$2.16^{+0.15}_{-0.15}$	10^5D/H	2.5616	$2.561^{+0.048}_{-0.047}$ (−1.7 σ)	χ_{plik}^2	2347.8	2362.9 (ν : 19.2) (+292.0 σ)
m_{DES}^1	0.0132	$0.011^{+0.044}_{-0.045}$	Age/Gyr	13.7702	$13.769^{+0.038}_{-0.038}$ (−1.7 σ)	$\chi_{6\text{DF}}^2$	0.0002	0.021 (ν : 0.0)
m_{DES}^2	0.0141	$0.012^{+0.044}_{-0.043}$	z_*	1089.590	$1089.57^{+0.41}_{-0.41}$ (−1.8 σ)	χ_{MGS}^2	1.75	1.84 (ν : 0.1)
m_{DES}^3	−0.0024	$−0.003^{+0.038}_{-0.038}$	r_*	144.823	$144.84^{+0.42}_{-0.42}$ (+0.8 σ)	χ_{DR12BAO}^2	3.46	3.74 (ν : 0.1)
m_{DES}^4	0.0026	$0.003^{+0.040}_{-0.040}$	$100\theta_*$	1.04129	$1.04128^{+0.00056}_{-0.00056}$ (+0.7 σ)	χ_{DES}^2	509.3	518.2 (ν : 11.7)
$A_{\text{IA,DES}}$	0.444	$0.47^{+0.34}_{-0.31}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.9080	$13.910^{+0.040}_{-0.041}$ (+0.7 σ)	χ_{prior}^2	4.0	25 (ν : 22.7) (+4.7 σ)
$\alpha_{\text{IA,DES}}$	−2.44	< 2.95	z_{drag}	1060.09	$1060.11^{+0.59}_{-0.56}$ (+1.6 σ)	χ_{BAO}^2	5.21	5.60 (ν : 0.1)
$\Delta z_{\text{l,DES}}^1$	0.0029	$0.004^{+0.015}_{-0.014}$	r_{drag}	147.450	$147.47^{+0.44}_{-0.44}$ (+0.5 σ)	χ_{CMB}^2	2766.4	2782.5 (ν : 18.8) (+289.6 σ)

Best-fit $\chi_{\text{eff}}^2 = 3284.92$; $\bar{\chi}_{\text{eff}}^2 = 3331.02$; $R - 1 = 0.00830$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.46 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.08 commander_dx12_v3_2_29: 22.50 plik_rd12_HM_v22b_TTTEEE: 2347.84 WL - DES_1YR_final: 509.26

2.258 base_plikHM_TTTEEE_lowl_lowE_DES_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022522	$0.02251^{+0.00027}_{-0.00027}$ (+1.8 σ)	$\alpha_{\text{IA,DES}}$	-2.59	< 2.86	$100\theta_*$	1.04124	$1.04127^{+0.00058}_{-0.00057}$ (+0.6 σ)
$\Omega_c h^2$	0.11831	$0.1181^{+0.0019}_{-0.0020}$ (-1.2 σ)	$\Delta z_{\text{l,DES}}^1$	0.0029	$0.004^{+0.015}_{-0.015}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.9019	$13.907^{+0.043}_{-0.044}$ (+0.7 σ)
$100\theta_{\text{MC}}$	1.04107	$1.04109^{+0.00058}_{-0.00058}$ (+0.7 σ)	$\Delta z_{\text{l,DES}}^2$	0.0005	$0.001^{+0.013}_{-0.013}$	z_{drag}	1060.16	$1060.13^{+0.57}_{-0.58}$ (+1.6 σ)
τ	0.0560	$0.057^{+0.016}_{-0.014}$ (+0.6 σ)	$\Delta z_{\text{l,DES}}^3$	0.0035	$0.003^{+0.013}_{-0.013}$	r_{drag}	147.370	$147.43^{+0.47}_{-0.48}$ (+0.5 σ)
$\ln(10^{10} A_{\text{s}})$	3.0441	$3.046^{+0.030}_{-0.028}$ (+0.3 σ)	$\Delta z_{\text{l,DES}}^4$	0.0008	$0.000^{+0.018}_{-0.018}$	k_{D}	0.14069	$0.14062^{+0.00057}_{-0.00057}$ (+0.1 σ)
n_{s}	0.9691	$0.9688^{+0.0076}_{-0.0077}$ (+1.1 σ)	$\Delta z_{\text{l,DES}}^5$	-0.0009	$-0.001^{+0.020}_{-0.019}$	$100\theta_{\text{D}}$	0.160626	$0.16065^{+0.00034}_{-0.00034}$ (-1.6 σ)
y_{cal}	1.00055	$1.0007^{+0.0048}_{-0.0049}$ (+0.1 σ)	$\Delta z_{\text{s,DES}}^1$	0.0007	$-0.003^{+0.028}_{-0.029}$	z_{eq}	3365.5	3361^{+45}_{-44} (-1.1 σ)
A_{217}^{CIB}	47.3	47^{+10}_{-10} (-0.2 σ)	$\Delta z_{\text{s,DES}}^2$	-0.0303	$-0.031^{+0.021}_{-0.021}$	k_{eq}	0.010272	$0.01026^{+0.00014}_{-0.00013}$ (-1.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.40	—	$\Delta z_{\text{s,DES}}^3$	0.0030	$0.003^{+0.019}_{-0.019}$	$100\theta_{\text{eq}}$	0.8205	$0.8213^{+0.0086}_{-0.0084}$ (+1.2 σ)
A_{143}^{tSZ}	7.26	$5.5^{+3.7}_{-3.9}$ (+0.2 σ)	$\Delta z_{\text{s,DES}}^4$	-0.0310	$-0.031^{+0.036}_{-0.035}$	$100\theta_{\text{s,eq}}$	0.45301	$0.4534^{+0.0044}_{-0.0043}$ (+1.1 σ)
A_{100}^{PS}	250	258^{+50}_{-50} (-0.2 σ)	H_0	68.13	$68.19^{+0.91}_{-0.87}$ (+1.4 σ)	$H(0.15)$	73.34	$73.39^{+0.79}_{-0.75}$ (+1.5 σ)
A_{143}^{PS}	46.2	45^{+10}_{-20} (-0.5 σ)	Ω_{Λ}	0.6952	$0.696^{+0.012}_{-0.012}$ (+1.3 σ)	$D_{\text{M}}(0.15)$	636.8	$636.3^{+7.3}_{-7.6}$ (-1.4 σ)
$A_{143 \times 217}^{\text{PS}}$	46.0	42^{+20}_{-20} (-0.2 σ)	Ω_{m}	0.3048	$0.304^{+0.012}_{-0.012}$ (-1.3 σ)	$H(0.38)$	83.34	$83.38^{+0.60}_{-0.56}$ (+1.5 σ)
A_{217}^{PS}	118.9	115^{+20}_{-20} (-0.0 σ)	$\Omega_{\text{m}} h^2$	0.14148	$0.1413^{+0.0019}_{-0.0018}$ (-1.1 σ)	$D_{\text{M}}(0.38)$	1520.4	1519^{+15}_{-16} (-1.5 σ)
A^{kSZ}	0.00	< 8.01 (-0.2 σ)	$\Omega_{\text{m}} h^3$	0.09638	$0.09634^{+0.00058}_{-0.00057}$ (+1.0 σ)	$H(0.51)$	89.997	$90.02^{+0.49}_{-0.45}$ (+1.6 σ)
A_{100}^{dustTT}	8.85	$8.9^{+3.5}_{-3.6}$ (-0.0 σ)	σ_8	0.8062	$0.806^{+0.012}_{-0.011}$ (-0.6 σ)	$D_{\text{M}}(0.51)$	1970.6	1969^{+17}_{-18} (-1.5 σ)
A_{143}^{dustTT}	11.06	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	S_8	0.8126	$0.811^{+0.020}_{-0.020}$ (-1.2 σ)	$H(0.61)$	95.568	$95.58^{+0.41}_{-0.38}$ (+1.6 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.6^{+6.5}_{-6.3}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4451	$0.444^{+0.011}_{-0.011}$ (-1.2 σ)	$D_{\text{M}}(0.61)$	2293.9	2293^{+19}_{-20} (-1.5 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5990	$0.599^{+0.011}_{-0.011}$ (-1.1 σ)	$H(2.33)$	235.61	$235.5^{+1.2}_{-1.2}$ (-1.0 σ)
A_{100}^{dustTE}	0.113	$0.115^{+0.076}_{-0.075}$	$\sigma_8/h^{0.5}$	0.9767	$0.976^{+0.015}_{-0.016}$ (-1.0 σ)	$D_{\text{M}}(2.33)$	5751.2	5751^{+17}_{-19} (-1.6 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.058}$	$r_{\text{drag}} h$	100.40	$100.5^{+1.5}_{-1.5}$ (+1.3 σ)	$f\sigma_8(0.15)$	0.4502	$0.450^{+0.010}_{-0.010}$ (-1.2 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.484	$0.48^{+0.17}_{-0.17}$	$\langle d^2 \rangle^{1/2}$	2.4188	$2.420^{+0.039}_{-0.038}$ (-0.9 σ)	$\sigma_8(0.15)$	0.7456	$0.746^{+0.011}_{-0.010}$ (-0.5 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.10}_{-0.11}$	z_{re}	7.79	$7.9^{+1.5}_{-1.5}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.4699	$0.4695^{+0.0087}_{-0.0088}$ (-1.1 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.663	$0.66^{+0.16}_{-0.16}$	$10^9 A_{\text{s}}$	2.099	$2.102^{+0.064}_{-0.059}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6617	$0.6618^{+0.0098}_{-0.0091}$ (-0.2 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.53}_{-0.52}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8768	$1.876^{+0.021}_{-0.020}$ (-0.6 σ)	$f\sigma_8(0.51)$	0.4693	$0.4690^{+0.0079}_{-0.0078}$ (-1.0 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{40}	1223.3	1225^{+22}_{-22} (-0.6 σ)	$\sigma_8(0.51)$	0.6195	$0.6197^{+0.0092}_{-0.0085}$ (-0.1 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	D_{220}	5747	5749^{+75}_{-75} (+0.9 σ)	$f\sigma_8(0.61)$	0.4649	$0.4647^{+0.0073}_{-0.0073}$ (-1.0 σ)
b_{DES}^1	1.508	$1.50^{+0.14}_{-0.15}$	D_{810}	2539.5	2539^{+26}_{-26} (+0.2 σ)	$\sigma_8(0.61)$	0.5897	$0.5899^{+0.0087}_{-0.0082}$ (+0.0 σ)
b_{DES}^2	1.706	$1.70^{+0.10}_{-0.10}$	D_{1420}	818.9	$818.3^{+9.4}_{-9.4}$ (+0.8 σ)	$f\sigma_8(2.33)$	0.29758	$0.2977^{+0.0046}_{-0.0043}$ (+0.3 σ)
b_{DES}^3	1.694	$1.691^{+0.085}_{-0.088}$	D_{2000}	231.55	$231.3^{+3.0}_{-3.1}$ (+1.0 σ)	$\sigma_8(2.33)$	0.30709	$0.3073^{+0.0050}_{-0.0046}$ (+0.5 σ)
b_{DES}^4	2.055	$2.052^{+0.099}_{-0.10}$	$n_{\text{s},0.002}$	0.9691	$0.9688^{+0.0076}_{-0.0077}$ (+1.1 σ)	χ_{lensing}^2	9.04	9.44 (ν : 0.5)
b_{DES}^5	2.159	$2.15^{+0.15}_{-0.15}$	Y_{P}	0.245452	$0.24545^{+0.00010}_{-0.00010}$ (+1.7 σ)	χ_{small}^2	396.23	397.3 (ν : 2.0) (+0.2 σ)
m_{DES}^1	0.0137	$0.012^{+0.044}_{-0.045}$	$Y_{\text{P}}^{\text{BBN}}$	0.246779	$0.24677^{+0.00010}_{-0.00011}$ (+1.7 σ)	χ_{lowl}^2	22.70	22.82 (ν : 0.3) (-0.8 σ)
m_{DES}^2	0.0141	$0.012^{+0.044}_{-0.043}$	$10^5 \text{D}/\text{H}$	2.5580	$2.560^{+0.050}_{-0.049}$ (-1.8 σ)	χ_{plik}^2	2347.2	2361.9 (ν : 18.1) (+291.8 σ)
m_{DES}^3	-0.0043	$-0.004^{+0.038}_{-0.038}$	Age/Gyr	13.7704	$13.770^{+0.041}_{-0.042}$ (-1.6 σ)	χ_{DES}^2	509.5	518.5 (ν : 12.5)
m_{DES}^4	0.0017	$0.001^{+0.039}_{-0.041}$	z_*	1089.584	$1089.58^{+0.44}_{-0.45}$ (-1.8 σ)	χ_{prior}^2	4.2	25 (ν : 22.7) (+4.8 σ)
$A_{\text{IA,DES}}$	0.439	$0.47^{+0.33}_{-0.31}$	r_*	144.752	$144.81^{+0.46}_{-0.47}$ (+0.7 σ)	χ_{CMB}^2	2775.1	2791.5 (ν : 20.0) (+291.2 σ)

Best-fit $\chi_{\text{eff}}^2 = 3288.86$; $\bar{\chi}_{\text{eff}}^2 = 3334.91$; $R - 1 = 0.01020$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.04 simall_100x143_offlike5_EE_Aplanck_B: 396.23 commander_dx12_v3.2_29: 22.70 plik_rd12_HM_v22b_TTTEEE: 2347.17 WL - DES_1YR_final: 509.51

2.259 base_plikHM_TTTEEE_lowl_lowE_DES_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022513	$0.02251^{+0.00026}_{-0.00026}$ (+1.8 σ)	$\Delta z_{\text{l,DES}}^2$	0.0005	$0.001^{+0.013}_{-0.013}$	k_D	0.14065	$0.14062^{+0.00056}_{-0.00055}$ (+0.1 σ)
$\Omega_c h^2$	0.11824	$0.1182^{+0.0016}_{-0.0017}$ (−1.2 σ)	$\Delta z_{\text{l,DES}}^3$	0.0034	$0.003^{+0.013}_{-0.013}$	$100\theta_D$	0.160643	$0.16066^{+0.00033}_{-0.00033}$ (−1.6 σ)
$100\theta_{\text{MC}}$	1.04108	$1.04109^{+0.00056}_{-0.00056}$ (+0.7 σ)	$\Delta z_{\text{l,DES}}^4$	0.0005	$0.000^{+0.018}_{-0.018}$	z_{eq}	3363.5	3362^{+37}_{-38} (−1.0 σ)
τ	0.0561	$0.057^{+0.015}_{-0.014}$ (+0.6 σ)	$\Delta z_{\text{l,DES}}^5$	−0.0005	$−0.001^{+0.019}_{-0.019}$	k_{eq}	0.010266	$0.01026^{+0.00011}_{-0.00011}$ (−1.0 σ)
$\ln(10^{10} A_s)$	3.0444	$3.045^{+0.029}_{-0.028}$ (+0.3 σ)	$\Delta z_{\text{s,DES}}^1$	0.00099	$−0.003^{+0.028}_{-0.029}$	$100\theta_{\text{eq}}$	0.8208	$0.8211^{+0.0072}_{-0.0070}$ (+1.1 σ)
n_s	0.9694	$0.9687^{+0.0069}_{-0.0072}$ (+1.1 σ)	$\Delta z_{\text{s,DES}}^2$	−0.0301	$−0.031^{+0.021}_{-0.021}$	$100\theta_{\text{s,eq}}$	0.45320	$0.4534^{+0.0037}_{-0.0036}$ (+1.1 σ)
y_{cal}	1.00068	$1.0007^{+0.0048}_{-0.0049}$ (+0.1 σ)	$\Delta z_{\text{s,DES}}^3$	0.0029	$0.003^{+0.019}_{-0.019}$	$H(0.15)$	73.36	$73.37^{+0.67}_{-0.64}$ (+1.4 σ)
A_{217}^{CIB}	47.5	47^{+10}_{-10} (−0.2 σ)	$\Delta z_{\text{s,DES}}^4$	−0.0310	$−0.031^{+0.036}_{-0.035}$	$D_{\text{M}}(0.15)$	636.6	$636.5^{+6.2}_{-6.4}$ (−1.4 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.39	—	H_0	68.15	$68.17^{+0.77}_{-0.73}$ (+1.4 σ)	$H(0.38)$	83.352	$83.36^{+0.50}_{-0.48}$ (+1.5 σ)
A_{143}^{tSZ}	7.28	$5.5^{+3.6}_{-3.9}$ (+0.2 σ)	Ω_{Λ}	0.6955	$0.6958^{+0.0097}_{-0.0096}$ (+1.3 σ)	$D_{\text{M}}(0.38)$	1520.1	1520^{+13}_{-13} (−1.4 σ)
A_{100}^{PS}	251	258^{+60}_{-50} (−0.2 σ)	Ω_{m}	0.3045	$0.3042^{+0.0096}_{-0.0097}$ (−1.3 σ)	$H(0.51)$	90.002	$90.01^{+0.41}_{-0.40}$ (+1.6 σ)
A_{143}^{PS}	46.4	45^{+10}_{-20} (−0.5 σ)	$\Omega_{\text{m}} h^2$	0.14140	$0.1413^{+0.0015}_{-0.0016}$ (−1.0 σ)	$D_{\text{M}}(0.51)$	1970.2	1970^{+15}_{-15} (−1.4 σ)
$A_{143 \times 217}^{\text{PS}}$	46.1	42^{+20}_{-20} (−0.2 σ)	$\Omega_{\text{m}} h^3$	0.09636	$0.09634^{+0.00058}_{-0.00057}$ (+1.0 σ)	$H(0.61)$	95.570	$95.57^{+0.35}_{-0.34}$ (+1.6 σ)
A_{217}^{PS}	118.9	115^{+20}_{-20} (−0.0 σ)	σ_8	0.8062	$0.806^{+0.012}_{-0.011}$ (−0.6 σ)	$D_{\text{M}}(0.61)$	2293.5	2293^{+16}_{-17} (−1.5 σ)
A^{kSZ}	0.00	< 8.02 (−0.2 σ)	S_8	0.8121	$0.812^{+0.018}_{-0.018}$ (−1.2 σ)	$H(2.33)$	235.56	$235.5^{+1.0}_{-1.0}$ (−1.0 σ)
A_{100}^{dustTT}	8.88	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4448	$0.4446^{+0.0099}_{-0.0098}$ (−1.2 σ)	$D_{\text{M}}(2.33)$	5751.2	5751^{+17}_{-17} (−1.6 σ)
A_{143}^{dustTT}	11.06	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5988	$0.5987^{+0.0099}_{-0.0099}$ (−1.0 σ)	$f\sigma_8(0.15)$	0.4500	$0.4498^{+0.0093}_{-0.0093}$ (−1.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.6^{+6.5}_{-6.3}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9766	$0.976^{+0.015}_{-0.015}$ (−1.0 σ)	$\sigma_8(0.15)$	0.7456	$0.746^{+0.011}_{-0.010}$ (−0.5 σ)
A_{217}^{dustTT}	94.9	94^{+10}_{-10} (+0.1 σ)	$r_{\text{drag}} h$	100.45	$100.5^{+1.3}_{-1.2}$ (+1.3 σ)	$f\sigma_8(0.38)$	0.4698	$0.4696^{+0.0080}_{-0.0081}$ (−1.1 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.076}_{-0.076}$	$\langle d^2 \rangle^{1/2}$	2.4181	$2.420^{+0.038}_{-0.036}$ (−0.9 σ)	$\sigma_8(0.38)$	0.6617	$0.6618^{+0.0098}_{-0.0090}$ (−0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.058}_{-0.057}$	z_{re}	7.80	$7.9^{+1.4}_{-1.4}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4692	$0.4691^{+0.0074}_{-0.0074}$ (−1.0 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	$10^9 A_s$	2.100	$2.102^{+0.062}_{-0.057}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6196	$0.6197^{+0.0091}_{-0.0085}$ (−0.1 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.10}_{-0.11}$	$10^9 A_s e^{-2\tau}$	1.8768	$1.876^{+0.021}_{-0.020}$ (−0.6 σ)	$f\sigma_8(0.61)$	0.4648	$0.4647^{+0.0071}_{-0.0070}$ (−0.9 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	D_{40}	1222.9	1225^{+22}_{-21} (−0.6 σ)	$\sigma_8(0.61)$	0.5898	$0.5898^{+0.0087}_{-0.0081}$ (−0.0 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.53}_{-0.52}$	D_{220}	5746	5749^{+75}_{-75} (+0.9 σ)	$f\sigma_8(2.33)$	0.29764	$0.2977^{+0.0045}_{-0.0042}$ (+0.3 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{810}	2539.8	2539^{+26}_{-26} (+0.2 σ)	$\sigma_8(2.33)$	0.30717	$0.3072^{+0.0048}_{-0.0045}$ (+0.5 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{1420}	819.0	$818.3^{+9.4}_{-9.3}$ (+0.8 σ)	χ_{lensing}^2	9.08	9.40 (ν : 0.4)
b_{DES}^1	1.507	$1.50^{+0.14}_{-0.15}$	D_{2000}	231.57	$231.3^{+3.0}_{-3.1}$ (+1.0 σ)	χ_{small}^2	396.28	397.3 (ν : 1.9) (+0.2 σ)
b_{DES}^2	1.704	$1.70^{+0.10}_{-0.10}$	$n_{\text{s},0.002}$	0.9694	$0.9687^{+0.0069}_{-0.0072}$ (+1.1 σ)	χ_{lowl}^2	22.65	22.83 (ν : 0.3) (−0.8 σ)
b_{DES}^3	1.695	$1.691^{+0.084}_{-0.088}$	Y_{P}	0.245449	$0.245446^{+0.000097}_{-0.00010}$ (+1.6 σ)	χ_{plik}^2	2347.3	2361.7 (ν : 17.5) (+291.8 σ)
b_{DES}^4	2.055	$2.05^{+0.10}_{-0.10}$	$Y_{\text{P}}^{\text{BBN}}$	0.246776	$0.246773^{+0.000097}_{-0.00010}$ (+1.6 σ)	$\chi_{6\text{DF}}^2$	0.0001	0.018 (ν : 0.0)
b_{DES}^5	2.158	$2.15^{+0.15}_{-0.15}$	10^5D/H	2.5596	$2.561^{+0.048}_{-0.046}$ (−1.7 σ)	χ_{MGS}^2	1.68	1.76 (ν : 0.1)
m_{DES}^1	0.0137	$0.012^{+0.044}_{-0.045}$	Age/Gyr	13.7707	$13.771^{+0.038}_{-0.037}$ (−1.6 σ)	χ_{DR12BAO}^2	3.52	3.78 (ν : 0.1)
m_{DES}^2	0.0137	$0.012^{+0.044}_{-0.043}$	z_*	1089.589	$1089.59^{+0.40}_{-0.41}$ (−1.7 σ)	χ_{DES}^2	509.4	518.5 (ν : 12.2)
m_{DES}^3	−0.0044	$−0.004^{+0.038}_{-0.037}$	r_*	144.778	$144.80^{+0.40}_{-0.40}$ (+0.7 σ)	χ_{prior}^2	4.2	25 (ν : 22.8) (+4.8 σ)
m_{DES}^4	0.0015	$0.001^{+0.039}_{-0.041}$	$100\theta_*$	1.04125	$1.04126^{+0.00055}_{-0.00056}$ (+0.6 σ)	χ_{CMB}^2	2775.3	2791.2 (ν : 18.9) (+291.2 σ)
$A_{\text{IA,DES}}$	0.437	$0.47^{+0.33}_{-0.30}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.9042	$13.906^{+0.039}_{-0.039}$ (+0.6 σ)	χ_{BAO}^2	5.20	5.55 (ν : 0.1)
$\alpha_{\text{IA,DES}}$	−2.62	< 2.85	z_{drag}	1060.12	$1060.12^{+0.57}_{-0.57}$ (+1.6 σ)			
$\Delta z_{\text{l,DES}}^1$	0.0031	$0.004^{+0.015}_{-0.015}$	r_{drag}	147.401	$147.42^{+0.42}_{-0.43}$ (+0.4 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3294.09$; $\bar{\chi}_{\text{eff}}^2 = 3340.17$; $R - 1 = 0.01031$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.52 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.08 small_100x143.offlike5_EE_Aplanck_B: 396.28 commander_dx12_v3.2.29: 22.65 plik_rd12_HM_v22b_TTTEEE: 2347.27 WL - DES_1YR_final: 509.38

2.260 base_plikHM_TTTEEE_lowl_lowE_DES_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02252^{+0.00028}_{-0.00027} \quad (+1.8\sigma)$	$\Delta z_{\text{l,DES}}^1$	$0.004^{+0.015}_{-0.014}$	z_{drag}	$1060.13^{+0.60}_{-0.58} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0020}_{-0.0021} \quad (-1.3\sigma)$	$\Delta z_{\text{l,DES}}^2$	$0.001^{+0.013}_{-0.013}$	r_{drag}	$147.50^{+0.51}_{-0.49} \quad (+0.6\sigma)$
$100\theta_{\text{MC}}$	$1.04112^{+0.00059}_{-0.00059} \quad (+0.8\sigma)$	$\Delta z_{\text{l,DES}}^3$	$0.003^{+0.013}_{-0.013}$	k_{D}	$0.14055^{+0.00058}_{-0.00059} \quad (+0.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\Delta z_{\text{l,DES}}^4$	$0.001^{+0.018}_{-0.018}$	$100\theta_{\text{D}}$	$0.16065^{+0.00033}_{-0.00034} \quad (-1.6\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.042^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$\Delta z_{\text{l,DES}}^5$	$-0.001^{+0.020}_{-0.019}$	z_{eq}	$3354^{+47}_{-48} \quad (-1.2\sigma)$
n_{s}	$0.9697^{+0.0076}_{-0.0078} \quad (+1.3\sigma)$	$\Delta z_{\text{s,DES}}^1$	$-0.003^{+0.028}_{-0.028}$	k_{eq}	$0.01024^{+0.00014}_{-0.00015} \quad (-1.2\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$\Delta z_{\text{s,DES}}^2$	$-0.031^{+0.021}_{-0.021}$	$100\theta_{\text{eq}}$	$0.8226^{+0.0093}_{-0.0088} \quad (+1.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\Delta z_{\text{s,DES}}^3$	$0.004^{+0.019}_{-0.019}$	$100\theta_{\text{s,eq}}$	$0.4541^{+0.0047}_{-0.0045} \quad (+1.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$\Delta z_{\text{s,DES}}^4$	$-0.030^{+0.036}_{-0.036}$	$H(0.15)$	$73.50^{+0.83}_{-0.80} \quad (+1.6\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	H_0	$68.32^{+0.97}_{-0.93} \quad (+1.6\sigma)$	$D_{\text{M}}(0.15)$	$635.3^{+7.9}_{-8.0} \quad (-1.6\sigma)$
A_{100}^{PS}	$258^{+60}_{-50} \quad (-0.2\sigma)$	Ω_{Λ}	$0.698^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$H(0.38)$	$83.45^{+0.62}_{-0.59} \quad (+1.7\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.5\sigma)$	Ω_{m}	$0.302^{+0.012}_{-0.012} \quad (-1.4\sigma)$	$D_{\text{M}}(0.38)$	$1517^{+16}_{-16} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (-0.2\sigma)$	$\Omega_{\text{m}} h^2$	$0.1410^{+0.0019}_{-0.0020} \quad (-1.2\sigma)$	$H(0.51)$	$90.08^{+0.50}_{-0.48} \quad (+1.7\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$\Omega_{\text{m}} h^3$	$0.09632^{+0.00058}_{-0.00057} \quad (+1.0\sigma)$	$D_{\text{M}}(0.51)$	$1967^{+19}_{-19} \quad (-1.6\sigma)$
A^{kSZ}	$< 8.11 \quad (-0.1\sigma)$	σ_8	$0.804^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$H(0.61)$	$95.63^{+0.41}_{-0.40} \quad (+1.8\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.5} \quad (-0.0\sigma)$	S_8	$0.807^{+0.024}_{-0.024} \quad (-1.4\sigma)$	$D_{\text{M}}(0.61)$	$2290^{+20}_{-21} \quad (-1.6\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.442^{+0.013}_{-0.013} \quad (-1.4\sigma)$	$H(2.33)$	$235.3^{+1.2}_{-1.3} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.7^{+6.5}_{-6.3} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.596^{+0.013}_{-0.013} \quad (-1.3\sigma)$	$D_{\text{M}}(2.33)$	$5749^{+19}_{-19} \quad (-1.7\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.973^{+0.018}_{-0.018} \quad (-1.3\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.012}_{-0.012} \quad (-1.4\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.075}$	$r_{\text{drag}} h$	$100.8^{+1.7}_{-1.6} \quad (+1.4\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.057}$	$\langle d^2 \rangle^{1/2}$	$2.410^{+0.045}_{-0.044} \quad (-1.2\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.010}_{-0.010} \quad (-1.3\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	z_{re}	$< 8.94 \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6603^{+0.0095}_{-0.0090} \quad (-0.5\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$10^9 A_{\text{s}}$	$2.095^{+0.059}_{-0.055} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.4671^{+0.0093}_{-0.0091} \quad (-1.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.873^{+0.021}_{-0.022} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.6184^{+0.0089}_{-0.0084} \quad (-0.3\sigma)$
A_{217}^{dustTE}	$2.06^{+0.52}_{-0.52}$	D_{40}	$1221^{+23}_{-23} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.4629^{+0.0086}_{-0.0083} \quad (-1.2\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	D_{220}	$5744^{+75}_{-76} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5886^{+0.0084}_{-0.0079} \quad (-0.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	D_{810}	$2536^{+26}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0043}_{-0.0040} \quad (+0.0\sigma)$
b_{DES}^1	$1.51^{+0.14}_{-0.15}$	D_{1420}	$817.9^{+9.5}_{-9.5} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3068^{+0.0045}_{-0.0042} \quad (+0.3\sigma)$
b_{DES}^2	$1.71^{+0.10}_{-0.10}$	D_{2000}	$231.2^{+3.1}_{-3.2} \quad (+0.9\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.7\sigma)$
b_{DES}^3	$1.696^{+0.084}_{-0.087}$	$n_{\text{s},0.002}$	$0.9697^{+0.0076}_{-0.0078} \quad (+1.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
b_{DES}^4	$2.057^{+0.099}_{-0.10}$	Y_{P}	$0.24545^{+0.00010}_{-0.00011} \quad (+1.7\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.5} \quad (-0.8\sigma)$
b_{DES}^5	$2.16^{+0.15}_{-0.15}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24678^{+0.00011}_{-0.00011} \quad (+1.7\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.6) \quad (-0.0\sigma)$
m_{DES}^1	$0.012^{+0.044}_{-0.045}$	10^5D/H	$2.558^{+0.050}_{-0.050} \quad (-1.8\sigma)$	χ_{lowl}^2	$22.59 \quad (\nu: 0.3) \quad (-1.0\sigma)$
m_{DES}^2	$0.012^{+0.044}_{-0.043}$	Age/Gyr	$13.767^{+0.042}_{-0.042} \quad (-1.7\sigma)$	χ_{plik}^2	$2363.2 \quad (\nu: 20.6) \quad (+292.0\sigma)$
m_{DES}^3	$-0.003^{+0.039}_{-0.039}$	z_*	$1089.54^{+0.45}_{-0.45} \quad (-1.9\sigma)$	χ_{DES}^2	$518.0 \quad (\nu: 11.8)$
m_{DES}^4	$0.003^{+0.040}_{-0.041}$	r_*	$144.88^{+0.49}_{-0.48} \quad (+0.9\sigma)$	χ_{prior}^2	$25 \quad (\nu: 23.0) \quad (+4.7\sigma)$
$A_{\text{IA,DES}}$	$0.47^{+0.34}_{-0.32}$	$100\theta_*$	$1.04130^{+0.00058}_{-0.00058} \quad (+0.7\sigma)$	χ_{CMB}^2	$2782.8 \quad (\nu: 19.7) \quad (+289.6\sigma)$
$\alpha_{\text{IA,DES}}$	< 2.97	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.913^{+0.047}_{-0.045} \quad (+0.8\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 3325.44; R - 1 = 0.00547$$

2.261 base_plikHM_TTTEEE_lowl_lowE_DES_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00026}_{-0.00026}$ (+1.8 σ)	$\Delta z_{\text{l,DES}}^2$	$0.001^{+0.013}_{-0.013}$	k_D	$0.14057^{+0.00056}_{-0.00056}$ (+0.0 σ)
$\Omega_c h^2$	$0.1180^{+0.0017}_{-0.0017}$ (−1.3 σ)	$\Delta z_{\text{l,DES}}^3$	$0.003^{+0.013}_{-0.013}$	$100\theta_D$	$0.16066^{+0.00033}_{-0.00033}$ (−1.5 σ)
$100\theta_{\text{MC}}$	$1.04111^{+0.00057}_{-0.00057}$ (+0.7 σ)	$\Delta z_{\text{l,DES}}^4$	$0.000^{+0.018}_{-0.018}$	z_{eq}	3357^{+38}_{-39} (−1.1 σ)
τ	$0.056^{+0.013}_{-0.012}$ (+0.4 σ)	$\Delta z_{\text{l,DES}}^5$	$0.000^{+0.019}_{-0.019}$	k_{eq}	$0.01025^{+0.00012}_{-0.00012}$ (−1.1 σ)
$\ln(10^{10} A_s)$	$3.042^{+0.028}_{-0.026}$ (+0.1 σ)	$\Delta z_{\text{s,DES}}^1$	$-0.003^{+0.028}_{-0.028}$	$100\theta_{\text{eq}}$	$0.8220^{+0.0075}_{-0.0072}$ (+1.2 σ)
n_s	$0.9694^{+0.0071}_{-0.0072}$ (+1.2 σ)	$\Delta z_{\text{s,DES}}^2$	$-0.031^{+0.021}_{-0.021}$	$100\theta_{\text{s,eq}}$	$0.4538^{+0.0038}_{-0.0037}$ (+1.2 σ)
y_{cal}	$1.0004^{+0.0048}_{-0.0049}$ (+0.0 σ)	$\Delta z_{\text{s,DES}}^3$	$0.004^{+0.019}_{-0.019}$	$H(0.15)$	$73.44^{+0.68}_{-0.66}$ (+1.5 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	$\Delta z_{\text{s,DES}}^4$	$-0.030^{+0.036}_{-0.036}$	$D_{\text{M}}(0.15)$	$635.8^{+6.4}_{-6.5}$ (−1.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	—	H_0	$68.25^{+0.78}_{-0.76}$ (+1.5 σ)	$H(0.38)$	$83.41^{+0.52}_{-0.50}$ (+1.6 σ)
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	Ω_{Λ}	$0.697^{+0.010}_{-0.0099}$ (+1.4 σ)	$D_{\text{M}}(0.38)$	1518^{+13}_{-13} (−1.5 σ)
A_{100}^{PS}	258^{+60}_{-50} (−0.2 σ)	Ω_{m}	$0.3030^{+0.0099}_{-0.010}$ (−1.4 σ)	$H(0.51)$	$90.04^{+0.43}_{-0.41}$ (+1.6 σ)
A_{143}^{PS}	45^{+10}_{-20} (−0.5 σ)	$\Omega_{\text{m}} h^2$	$0.1411^{+0.0016}_{-0.0016}$ (−1.1 σ)	$D_{\text{M}}(0.51)$	1968^{+15}_{-16} (−1.5 σ)
$A_{143 \times 217}^{\text{PS}}$	41^{+20}_{-20} (−0.2 σ)	$\Omega_{\text{m}} h^3$	$0.09632^{+0.00058}_{-0.00057}$ (+0.9 σ)	$H(0.61)$	$95.60^{+0.36}_{-0.35}$ (+1.7 σ)
A_{217}^{PS}	114^{+20}_{-20} (−0.1 σ)	σ_8	$0.804^{+0.012}_{-0.011}$ (−0.9 σ)	$D_{\text{M}}(0.61)$	2291^{+17}_{-17} (−1.5 σ)
A^{kSZ}	< 8.16 (−0.1 σ)	S_8	$0.808^{+0.020}_{-0.020}$ (−1.3 σ)	$H(2.33)$	$235.4^{+1.0}_{-1.1}$ (−1.1 σ)
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.443^{+0.011}_{-0.011}$ (−1.3 σ)	$D_{\text{M}}(2.33)$	5750^{+17}_{-17} (−1.7 σ)
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.597^{+0.011}_{-0.011}$ (−1.2 σ)	$f\sigma_8(0.15)$	$0.448^{+0.011}_{-0.010}$ (−1.3 σ)
$A_{143 \times 217}^{\text{dustTT}}$	$18.7^{+6.5}_{-6.3}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	$0.973^{+0.017}_{-0.016}$ (−1.2 σ)	$\sigma_8(0.15)$	$0.744^{+0.011}_{-0.010}$ (−0.7 σ)
A_{217}^{dustTT}	94^{+10}_{-10} (+0.1 σ)	$r_{\text{drag}} h$	$100.7^{+1.3}_{-1.3}$ (+1.4 σ)	$f\sigma_8(0.38)$	$0.4680^{+0.0092}_{-0.0090}$ (−1.2 σ)
A_{100}^{dustTE}	$0.115^{+0.076}_{-0.075}$	$\langle d^2 \rangle^{1/2}$	$2.412^{+0.043}_{-0.039}$ (−1.1 σ)	$\sigma_8(0.38)$	$0.6604^{+0.0094}_{-0.0089}$ (−0.5 σ)
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	z_{re}	< 8.90 (+0.3 σ)	$f\sigma_8(0.51)$	$0.4676^{+0.0085}_{-0.0081}$ (−1.2 σ)
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$10^9 A_s$	$2.094^{+0.058}_{-0.054}$ (+0.1 σ)	$\sigma_8(0.51)$	$0.6184^{+0.0088}_{-0.0083}$ (−0.3 σ)
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$10^9 A_s e^{-2\tau}$	$1.874^{+0.021}_{-0.021}$ (−0.8 σ)	$f\sigma_8(0.61)$	$0.4633^{+0.0080}_{-0.0075}$ (−1.1 σ)
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	D_{40}	1222^{+22}_{-22} (−0.8 σ)	$\sigma_8(0.61)$	$0.5887^{+0.0083}_{-0.0078}$ (−0.2 σ)
A_{217}^{dustTE}	$2.07^{+0.52}_{-0.53}$	D_{220}	5743^{+75}_{-77} (+0.7 σ)	$f\sigma_8(2.33)$	$0.2971^{+0.0042}_{-0.0040}$ (+0.0 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{810}	2537^{+27}_{-26} (+0.0 σ)	$\sigma_8(2.33)$	$0.3067^{+0.0044}_{-0.0041}$ (+0.3 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{1420}	$817.8^{+9.4}_{-9.4}$ (+0.7 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.7 σ)
b_{DES}^1	$1.51^{+0.14}_{-0.15}$	D_{2000}	$231.1^{+3.0}_{-3.1}$ (+0.9 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.8 σ)
b_{DES}^2	$1.71^{+0.10}_{-0.10}$	$n_{\text{s},0.002}$	$0.9694^{+0.0071}_{-0.0072}$ (+1.2 σ)	f_{2000}^{217}	$106.7^{+3.5}_{-3.4}$ (−0.7 σ)
b_{DES}^3	$1.695^{+0.083}_{-0.088}$	Y_{P}	$0.245447^{+0.000098}_{-0.00010}$ (+1.7 σ)	χ_{small}^2	396.9 (ν : 1.5) (−0.0 σ)
b_{DES}^4	$2.06^{+0.10}_{-0.10}$	$Y_{\text{P}}^{\text{BBN}}$	$0.246774^{+0.000099}_{-0.00010}$ (+1.7 σ)	χ_{lowl}^2	22.64 (ν : 0.3) (−1.0 σ)
b_{DES}^5	$2.16^{+0.15}_{-0.15}$	$10^5 \text{D}/\text{H}$	$2.560^{+0.048}_{-0.047}$ (−1.8 σ)	χ_{plik}^2	2362.7 (ν : 19.1) (+291.9 σ)
m_{DES}^1	$0.012^{+0.044}_{-0.045}$	Age/Gyr	$13.769^{+0.038}_{-0.038}$ (−1.7 σ)	$\chi_{6\text{DF}}^2$	0.021 (ν : 0.0)
m_{DES}^2	$0.012^{+0.044}_{-0.043}$	z_*	$1089.57^{+0.41}_{-0.41}$ (−1.8 σ)	χ_{MGS}^2	1.85 (ν : 0.1)
m_{DES}^3	$-0.003^{+0.038}_{-0.038}$	r_*	$144.85^{+0.42}_{-0.42}$ (+0.8 σ)	χ_{DR12BAO}^2	3.73 (ν : 0.1)
m_{DES}^4	$0.002^{+0.040}_{-0.040}$	$100\theta_*$	$1.04128^{+0.00057}_{-0.00056}$ (+0.7 σ)	χ_{DES}^2	518.2 (ν : 11.8)
$A_{\text{IA,DES}}$	$0.47^{+0.34}_{-0.31}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.911^{+0.040}_{-0.041}$ (+0.7 σ)	χ_{prior}^2	25 (ν : 22.8) (+4.7 σ)
$\alpha_{\text{IA,DES}}$	< 2.94	z_{drag}	$1060.11^{+0.58}_{-0.56}$ (+1.6 σ)	χ_{BAO}^2	5.60 (ν : 0.1)
$\Delta z_{\text{l,DES}}^1$	$0.004^{+0.015}_{-0.015}$	r_{drag}	$147.47^{+0.44}_{-0.44}$ (+0.6 σ)	χ_{CMB}^2	2782.2 (ν : 18.4) (+289.5 σ)

$$\bar{\chi}_{\text{eff}}^2 = 3330.75; R - 1 = 0.00777$$

2.262 base_plikHM_TTTEEE_lowl_lowE_DES_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00027}_{-0.00027} \quad (+1.8\sigma)$	$\Delta z_{\text{l,DES}}^1$	$0.004^{+0.015}_{-0.015}$	z_{drag}	$1060.13^{+0.56}_{-0.58} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0019}_{-0.0019} \quad (-1.2\sigma)$	$\Delta z_{\text{l,DES}}^2$	$0.001^{+0.013}_{-0.013}$	r_{drag}	$147.43^{+0.47}_{-0.47} \quad (+0.5\sigma)$
$100\theta_{\text{MC}}$	$1.04110^{+0.00058}_{-0.00058} \quad (+0.7\sigma)$	$\Delta z_{\text{l,DES}}^3$	$0.003^{+0.013}_{-0.013}$	k_{D}	$0.14061^{+0.00057}_{-0.00057} \quad (+0.1\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\Delta z_{\text{l,DES}}^4$	$0.000^{+0.018}_{-0.018}$	$100\theta_{\text{D}}$	$0.16065^{+0.00034}_{-0.00034} \quad (-1.6\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.047^{+0.027}_{-0.026} \quad (+0.4\sigma)$	$\Delta z_{\text{l,DES}}^5$	$-0.001^{+0.020}_{-0.019}$	z_{eq}	$3360^{+44}_{-44} \quad (-1.1\sigma)$
n_{s}	$0.9689^{+0.0075}_{-0.0075} \quad (+1.1\sigma)$	$\Delta z_{\text{s,DES}}^1$	$-0.003^{+0.028}_{-0.029}$	k_{eq}	$0.01026^{+0.00013}_{-0.00013} \quad (-1.1\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$\Delta z_{\text{s,DES}}^2$	$-0.031^{+0.021}_{-0.021}$	$100\theta_{\text{eq}}$	$0.8214^{+0.0085}_{-0.0081} \quad (+1.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\Delta z_{\text{s,DES}}^3$	$0.003^{+0.019}_{-0.019}$	$100\theta_{\text{s,eq}}$	$0.4535^{+0.0043}_{-0.0042} \quad (+1.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$\Delta z_{\text{s,DES}}^4$	$-0.031^{+0.036}_{-0.035}$	$H(0.15)$	$73.40^{+0.79}_{-0.74} \quad (+1.5\sigma)$
A_{143}^{tSZ}	$5.5^{+3.6}_{-3.9} \quad (+0.2\sigma)$	H_0	$68.20^{+0.91}_{-0.86} \quad (+1.4\sigma)$	$D_{\text{M}}(0.15)$	$636.2^{+7.2}_{-7.6} \quad (-1.4\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	Ω_{Λ}	$0.696^{+0.011}_{-0.011} \quad (+1.3\sigma)$	$H(0.38)$	$83.38^{+0.59}_{-0.55} \quad (+1.5\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.5\sigma)$	Ω_{m}	$0.304^{+0.011}_{-0.011} \quad (-1.3\sigma)$	$D_{\text{M}}(0.38)$	$1519^{+15}_{-15} \quad (-1.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$\Omega_{\text{m}} h^2$	$0.1413^{+0.0018}_{-0.0018} \quad (-1.1\sigma)$	$H(0.51)$	$90.03^{+0.48}_{-0.45} \quad (+1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$\Omega_{\text{m}} h^3$	$0.09634^{+0.00058}_{-0.00057} \quad (+1.0\sigma)$	$D_{\text{M}}(0.51)$	$1969^{+17}_{-18} \quad (-1.5\sigma)$
A^{kSZ}	$< 8.01 \quad (-0.2\sigma)$	σ_8	$0.806^{+0.011}_{-0.010} \quad (-0.6\sigma)$	$H(0.61)$	$95.59^{+0.41}_{-0.38} \quad (+1.6\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.6} \quad (-0.1\sigma)$	S_8	$0.811^{+0.020}_{-0.020} \quad (-1.2\sigma)$	$D_{\text{M}}(0.61)$	$2292^{+18}_{-20} \quad (-1.5\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.444^{+0.011}_{-0.011} \quad (-1.2\sigma)$	$H(2.33)$	$235.5^{+1.2}_{-1.2} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.3} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.599^{+0.011}_{-0.010} \quad (-1.0\sigma)$	$D_{\text{M}}(2.33)$	$5751^{+18}_{-19} \quad (-1.7\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.977^{+0.015}_{-0.015} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.010}_{-0.010} \quad (-1.2\sigma)$
A_{100}^{dustTE}	$0.115^{+0.076}_{-0.076}$	$r_{\text{drag}} h$	$100.6^{+1.5}_{-1.5} \quad (+1.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.010}_{-0.0096} \quad (-0.4\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.057}$	$\langle d^2 \rangle^{1/2}$	$2.420^{+0.038}_{-0.037} \quad (-0.9\sigma)$	$f\sigma_8(0.38)$	$0.4696^{+0.0086}_{-0.0086} \quad (-1.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_{re}	$7.9^{+1.3}_{-1.3} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6621^{+0.0089}_{-0.0084} \quad (-0.2\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$10^9 A_{\text{s}}$	$2.105^{+0.058}_{-0.054} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4691^{+0.0078}_{-0.0077} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.876^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$\sigma_8(0.51)$	$0.6200^{+0.0084}_{-0.0079} \quad (-0.0\sigma)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.52}$	D_{40}	$1224^{+22}_{-22} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.4648^{+0.0072}_{-0.0071} \quad (-0.9\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	D_{220}	$5749^{+75}_{-75} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0080}_{-0.0076} \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0042}_{-0.0039} \quad (+0.3\sigma)$
b_{DES}^1	$1.50^{+0.14}_{-0.15}$	D_{1420}	$818.3^{+9.4}_{-9.4} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0045}_{-0.0042} \quad (+0.6\sigma)$
b_{DES}^2	$1.70^{+0.10}_{-0.10}$	D_{2000}	$231.3^{+3.1}_{-3.1} \quad (+1.0\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.7\sigma)$
b_{DES}^3	$1.691^{+0.084}_{-0.088}$	$n_{\text{s},0.002}$	$0.9689^{+0.0075}_{-0.0075} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
b_{DES}^4	$2.051^{+0.098}_{-0.10}$	Y_{P}	$0.24545^{+0.00010}_{-0.00010} \quad (+1.7\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.4} \quad (-0.7\sigma)$
b_{DES}^5	$2.15^{+0.15}_{-0.15}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24678^{+0.00010}_{-0.00011} \quad (+1.7\sigma)$	χ_{lensing}^2	$9.39 \quad (\nu: 0.4)$
m_{DES}^1	$0.012^{+0.044}_{-0.045}$	10^5D/H	$2.560^{+0.050}_{-0.048} \quad (-1.8\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.1) \quad (+0.2\sigma)$
m_{DES}^2	$0.012^{+0.044}_{-0.043}$	Age/Gyr	$13.770^{+0.041}_{-0.042} \quad (-1.7\sigma)$	χ_{lowl}^2	$22.82 \quad (\nu: 0.3) \quad (-0.8\sigma)$
m_{DES}^3	$-0.004^{+0.038}_{-0.038}$	z_*	$1089.58^{+0.43}_{-0.44} \quad (-1.8\sigma)$	χ_{plik}^2	$2361.8 \quad (\nu: 18.1) \quad (+291.8\sigma)$
m_{DES}^4	$0.002^{+0.040}_{-0.041}$	r_*	$144.81^{+0.45}_{-0.45} \quad (+0.7\sigma)$	χ_{DES}^2	$518.4 \quad (\nu: 12.5)$
$A_{\text{IA,DES}}$	$0.47^{+0.33}_{-0.31}$	$100\theta_*$	$1.04127^{+0.00058}_{-0.00057} \quad (+0.6\sigma)$	χ_{prior}^2	$25 \quad (\nu: 22.8) \quad (+4.8\sigma)$
$\alpha_{\text{IA,DES}}$	< 2.86	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.907^{+0.043}_{-0.043} \quad (+0.7\sigma)$	χ_{CMB}^2	$2791.4 \quad (\nu: 19.9) \quad (+291.2\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 3334.75; R - 1 = 0.01067$$

2.263 base_plikHM_TTTEEE_lowl_lowE_DES_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00026}_{-0.00026}$ (+1.8 σ)	$\Delta z_{\text{l,DES}}^3$	$0.003^{+0.013}_{-0.013}$	z_{eq}	3361^{+36}_{-37} (−1.1 σ)
$\Omega_c h^2$	$0.1182^{+0.0016}_{-0.0016}$ (−1.2 σ)	$\Delta z_{\text{l,DES}}^4$	$0.000^{+0.018}_{-0.018}$	k_{eq}	$0.01026^{+0.00011}_{-0.00011}$ (−1.1 σ)
$100\theta_{\text{MC}}$	$1.04109^{+0.00056}_{-0.00056}$ (+0.7 σ)	$\Delta z_{\text{l,DES}}^5$	$-0.001^{+0.019}_{-0.019}$	$100\theta_{\text{eq}}$	$0.8212^{+0.0072}_{-0.0069}$ (+1.2 σ)
τ	$0.057^{+0.013}_{-0.012}$ (+0.6 σ)	$\Delta z_{\text{s,DES}}^1$	$-0.003^{+0.028}_{-0.029}$	$100\theta_{\text{s,eq}}$	$0.4534^{+0.0037}_{-0.0035}$ (+1.1 σ)
$\ln(10^{10} A_s)$	$3.046^{+0.027}_{-0.025}$ (+0.4 σ)	$\Delta z_{\text{s,DES}}^2$	$-0.031^{+0.021}_{-0.021}$	$H(0.15)$	$73.38^{+0.66}_{-0.63}$ (+1.4 σ)
n_s	$0.9688^{+0.0069}_{-0.0071}$ (+1.1 σ)	$\Delta z_{\text{s,DES}}^3$	$0.003^{+0.019}_{-0.019}$	$D_{\text{M}}(0.15)$	$636.4^{+6.2}_{-6.4}$ (−1.4 σ)
y_{cal}	$1.0007^{+0.0049}_{-0.0049}$ (+0.1 σ)	$\Delta z_{\text{s,DES}}^4$	$-0.031^{+0.036}_{-0.035}$	$H(0.38)$	$83.37^{+0.50}_{-0.48}$ (+1.5 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	H_0	$68.18^{+0.76}_{-0.73}$ (+1.4 σ)	$D_{\text{M}}(0.38)$	1520^{+12}_{-13} (−1.4 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Ω_{Λ}	$0.6959^{+0.0096}_{-0.0094}$ (+1.3 σ)	$H(0.51)$	$90.01^{+0.41}_{-0.40}$ (+1.6 σ)
A_{143}^{tSZ}	$5.5^{+3.6}_{-3.9}$ (+0.2 σ)	Ω_{m}	$0.3041^{+0.0094}_{-0.0096}$ (−1.3 σ)	$D_{\text{M}}(0.51)$	1970^{+15}_{-15} (−1.5 σ)
A_{100}^{PS}	258^{+60}_{-50} (−0.2 σ)	$\Omega_{\text{m}} h^2$	$0.1413^{+0.0015}_{-0.0016}$ (−1.1 σ)	$H(0.61)$	$95.58^{+0.35}_{-0.34}$ (+1.6 σ)
A_{143}^{PS}	45^{+10}_{-20} (−0.5 σ)	$\Omega_{\text{m}} h^3$	$0.09634^{+0.00058}_{-0.00057}$ (+1.0 σ)	$D_{\text{M}}(0.61)$	2293^{+16}_{-17} (−1.5 σ)
$A_{143 \times 217}^{\text{PS}}$	42^{+20}_{-20} (−0.2 σ)	σ_8	$0.806^{+0.011}_{-0.010}$ (−0.6 σ)	$H(2.33)$	$235.5^{+1.0}_{-1.0}$ (−1.0 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.0 σ)	S_8	$0.812^{+0.018}_{-0.018}$ (−1.2 σ)	$D_{\text{M}}(2.33)$	5751^{+17}_{-17} (−1.6 σ)
A^{kSZ}	< 8.01 (−0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.4447^{+0.0098}_{-0.0098}$ (−1.2 σ)	$f\sigma_8(0.15)$	$0.4498^{+0.0092}_{-0.0092}$ (−1.1 σ)
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.5989^{+0.0099}_{-0.0097}$ (−1.0 σ)	$\sigma_8(0.15)$	$0.7460^{+0.0099}_{-0.0095}$ (−0.4 σ)
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	$0.977^{+0.015}_{-0.014}$ (−1.0 σ)	$f\sigma_8(0.38)$	$0.4698^{+0.0080}_{-0.0079}$ (−1.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.3}$ (+0.1 σ)	$r_{\text{drag}} h$	$100.5^{+1.3}_{-1.2}$ (+1.3 σ)	$\sigma_8(0.38)$	$0.6621^{+0.0088}_{-0.0084}$ (−0.2 σ)
A_{217}^{dustTT}	94^{+10}_{-10} (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	$2.421^{+0.037}_{-0.035}$ (−0.9 σ)	$f\sigma_8(0.51)$	$0.4692^{+0.0074}_{-0.0072}$ (−1.0 σ)
A_{100}^{dustTE}	$0.115^{+0.076}_{-0.076}$	z_{re}	$7.9^{+1.2}_{-1.3}$ (+0.5 σ)	$\sigma_8(0.51)$	$0.6199^{+0.0083}_{-0.0079}$ (−0.0 σ)
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.057}$	$10^9 A_s$	$2.104^{+0.056}_{-0.053}$ (+0.4 σ)	$f\sigma_8(0.61)$	$0.4649^{+0.0070}_{-0.0067}$ (−0.9 σ)
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.020}_{-0.020}$ (−0.6 σ)	$\sigma_8(0.61)$	$0.5901^{+0.0080}_{-0.0075}$ (+0.0 σ)
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	D_{40}	1225^{+21}_{-21} (−0.6 σ)	$f\sigma_8(2.33)$	$0.2978^{+0.0041}_{-0.0039}$ (+0.3 σ)
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	D_{220}	5749^{+75}_{-75} (+0.9 σ)	$\sigma_8(2.33)$	$0.3074^{+0.0044}_{-0.0041}$ (+0.6 σ)
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.52}$	D_{810}	2539^{+26}_{-26} (+0.2 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.7 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{1420}	$818.2^{+9.4}_{-9.3}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.8 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{2000}	$231.3^{+3.0}_{-3.1}$ (+1.0 σ)	f_{2000}^{217}	$106.7^{+3.5}_{-3.4}$ (−0.7 σ)
b_{DES}^1	$1.50^{+0.14}_{-0.15}$	$n_{\text{s},0.002}$	$0.9688^{+0.0069}_{-0.0071}$ (+1.1 σ)	χ_{lensing}^2	9.35 (ν : 0.4)
b_{DES}^2	$1.70^{+0.10}_{-0.10}$	Y_{P}	$0.245447^{+0.000096}_{-0.00010}$ (+1.7 σ)	χ_{small}^2	397.3 (ν : 1.9) (+0.2 σ)
b_{DES}^3	$1.691^{+0.084}_{-0.088}$	$Y_{\text{P}}^{\text{BBN}}$	$0.246773^{+0.000097}_{-0.00010}$ (+1.7 σ)	χ_{lowl}^2	22.83 (ν : 0.3) (−0.8 σ)
b_{DES}^4	$2.051^{+0.099}_{-0.10}$	10^5D/H	$2.561^{+0.048}_{-0.046}$ (−1.7 σ)	χ_{plik}^2	2361.6 (ν : 17.5) (+291.7 σ)
b_{DES}^5	$2.15^{+0.15}_{-0.15}$	Age/Gyr	$13.770^{+0.038}_{-0.037}$ (−1.6 σ)	$\chi_{6\text{DF}}^2$	0.018 (ν : 0.0)
m_{DES}^1	$0.012^{+0.044}_{-0.045}$	z_*	$1089.59^{+0.40}_{-0.41}$ (−1.8 σ)	χ_{MGS}^2	1.77 (ν : 0.1)
m_{DES}^2	$0.012^{+0.044}_{-0.043}$	r_*	$144.80^{+0.40}_{-0.40}$ (+0.7 σ)	χ_{DR12BAO}^2	3.77 (ν : 0.1)
m_{DES}^3	$-0.004^{+0.038}_{-0.037}$	$100\theta_*$	$1.04126^{+0.00055}_{-0.00056}$ (+0.6 σ)	χ_{DES}^2	518.5 (ν : 12.2)
m_{DES}^4	$0.001^{+0.039}_{-0.041}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.906^{+0.038}_{-0.039}$ (+0.7 σ)	χ_{prior}^2	25 (ν : 22.8) (+4.8 σ)
$A_{\text{IA,DES}}$	$0.47^{+0.33}_{-0.31}$	z_{drag}	$1060.12^{+0.57}_{-0.57}$ (+1.6 σ)	χ_{CMB}^2	2791.1 (ν : 18.6) (+291.1 σ)
$\alpha_{\text{IA,DES}}$	< 2.85	r_{drag}	$147.43^{+0.42}_{-0.43}$ (+0.5 σ)	χ_{BAO}^2	5.55 (ν : 0.1)
$\Delta z_{\text{l,DES}}^1$	$0.004^{+0.015}_{-0.015}$	k_{D}	$0.14062^{+0.00056}_{-0.00055}$ (+0.1 σ)		
$\Delta z_{\text{l,DES}}^2$	$0.001^{+0.013}_{-0.013}$	$100\theta_{\text{D}}$	$0.16065^{+0.00033}_{-0.00033}$ (−1.6 σ)		

$\bar{\chi}_{\text{eff}}^2 = 3340.03$; $R - 1 = 0.01092$

2.264 base_plikHM_TTTEEE_lowl_lowE_DESlens

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022441	$0.02244^{+0.00027}_{-0.00027}$ $(+1.4\sigma)$	$\Delta z_{s,DES}^3$	0.0048	$0.004^{+0.020}_{-0.020}$	z_{eq}	3384.2	3380^{+49}_{-50} (-0.7σ)
$\Omega_c h^2$	0.11918	$0.1190^{+0.0022}_{-0.0022}$ (-0.8σ)	$\Delta z_{s,DES}^4$	-0.0218	$-0.022^{+0.039}_{-0.039}$	k_{eq}	0.010329	$0.01032^{+0.00015}_{-0.00015}$ (-0.7σ)
$100\theta_{MC}$	1.04099	$1.04103^{+0.00059}_{-0.00058}$ $(+0.6\sigma)$	H_0	67.72	$67.8^{+1.0}_{-0.96}$ $(+1.0\sigma)$	$100\theta_{eq}$	0.8168	$0.8176^{+0.0096}_{-0.0091}$ $(+0.7\sigma)$
τ	0.0533	$0.053^{+0.016}_{-0.015}$ $(+0.2\sigma)$	Ω_Λ	0.6898	$0.691^{+0.013}_{-0.013}$ $(+0.9\sigma)$	$100\theta_{s,eq}$	0.45114	$0.4516^{+0.0049}_{-0.0047}$ $(+0.7\sigma)$
$\ln(10^{10} A_s)$	3.0403	$3.040^{+0.032}_{-0.030}$ (-0.0σ)	Ω_m	0.3102	$0.309^{+0.013}_{-0.013}$ (-0.9σ)	$H(0.15)$	72.99	$73.06^{+0.87}_{-0.82}$ $(+1.0\sigma)$
n_s	0.9678	$0.9673^{+0.0078}_{-0.0077}$ $(+0.8\sigma)$	$\Omega_m h^2$	0.14226	$0.1421^{+0.0021}_{-0.0021}$ (-0.7σ)	$D_M(0.15)$	640.2	$639.6^{+8.2}_{-8.5}$ (-1.0σ)
y_{cal}	1.00045	$1.0005^{+0.0049}_{-0.0048}$ $(+0.0\sigma)$	$\Omega_m h^3$	0.09635	$0.09633^{+0.00057}_{-0.00058}$ $(+1.0\sigma)$	$H(0.38)$	83.09	$83.13^{+0.64}_{-0.60}$ $(+1.1\sigma)$
A_{217}^{CIB}	47.0	47^{+10}_{-10} (-0.2σ)	σ_8	0.8075	$0.807^{+0.013}_{-0.013}$ (-0.6σ)	$D_M(0.38)$	1527.2	1526^{+16}_{-17} (-1.0σ)
$\xi^{tSZ \times CIB}$	0.44	—	S_8	0.8211	$0.819^{+0.025}_{-0.025}$ (-0.9σ)	$H(0.51)$	89.799	$89.83^{+0.51}_{-0.48}$ $(+1.2\sigma)$
A_{143}^{tSZ}	7.23	$5.5^{+3.8}_{-3.8}$ $(+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4497	$0.449^{+0.013}_{-0.014}$ (-0.9σ)	$D_M(0.51)$	1978.6	1977^{+19}_{-20} (-1.0σ)
A_{100}^{PS}	250	259^{+60}_{-60} (-0.2σ)	$\sigma_8 \Omega_m^{0.25}$	0.6026	$0.601^{+0.013}_{-0.013}$ (-0.8σ)	$H(0.61)$	95.412	$95.44^{+0.42}_{-0.40}$ $(+1.2\sigma)$
A_{143}^{PS}	47.3	45^{+20}_{-20} (-0.5σ)	$\sigma_8/h^{0.5}$	0.9812	$0.980^{+0.019}_{-0.019}$ (-0.8σ)	$D_M(0.61)$	2302.5	2301^{+21}_{-22} (-1.1σ)
$A_{143 \times 217}^{PS}$	47.5	42^{+20}_{-20} (-0.2σ)	$r_{drag} h$	99.71	$99.9^{+1.7}_{-1.7}$ $(+0.9\sigma)$	$H(2.33)$	236.09	$236.0^{+1.3}_{-1.3}$ (-0.6σ)
A_{217}^{PS}	119.8	115^{+20}_{-20} (-0.1σ)	$\langle d^2 \rangle^{1/2}$	2.4261	$2.425^{+0.046}_{-0.045}$ (-0.8σ)	$D_M(2.33)$	5757.8	5757^{+19}_{-19} (-1.3σ)
A^{kSZ}	0.00	< 8.07 (-0.1σ)	z_{re}	7.55	$7.5^{+1.5}_{-1.6}$ $(+0.0\sigma)$	$f\sigma_8(0.15)$	0.4544	$0.453^{+0.013}_{-0.013}$ (-0.9σ)
A_{100}^{dustTT}	8.81	$8.9^{+3.6}_{-3.5}$ (-0.0σ)	$10^9 A_s$	2.091	$2.091^{+0.067}_{-0.063}$ (-0.0σ)	$\sigma_8(0.15)$	0.7463	$0.746^{+0.012}_{-0.011}$ (-0.5σ)
A_{143}^{dustTT}	11.08	$10.9^{+3.4}_{-3.5}$ $(+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8797	$1.879^{+0.022}_{-0.021}$ (-0.4σ)	$f\sigma_8(0.38)$	0.4730	$0.472^{+0.011}_{-0.011}$ (-0.8σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.4}_{-6.5}$ $(+0.1\sigma)$	D_{40}	1224.4	1226^{+23}_{-23} (-0.5σ)	$\sigma_8(0.38)$	0.6617	$0.661^{+0.011}_{-0.010}$ (-0.3σ)
A_{217}^{dustTT}	95.2	94^{+10}_{-10} $(+0.1\sigma)$	D_{220}	5734	5737^{+76}_{-74} $(+0.6\sigma)$	$f\sigma_8(0.51)$	0.4717	$0.4709^{+0.0094}_{-0.0096}$ (-0.8σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.075}$	D_{810}	2539.7	2538^{+27}_{-25} $(+0.1\sigma)$	$\sigma_8(0.51)$	0.6193	$0.619^{+0.010}_{-0.0094}$ (-0.2σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.059}_{-0.058}$	D_{1420}	818.5	$817.7^{+9.5}_{-9.1}$ $(+0.6\sigma)$	$f\sigma_8(0.61)$	0.4669	$0.4661^{+0.0088}_{-0.0088}$ (-0.8σ)
$A_{100 \times 217}^{dustTE}$	0.483	$0.48^{+0.17}_{-0.17}$	D_{2000}	231.35	$231.0^{+3.2}_{-3.0}$ $(+0.8\sigma)$	$\sigma_8(0.61)$	0.5893	$0.5889^{+0.0095}_{-0.0090}$ (-0.2σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	$n_{s,0.002}$	0.9678	$0.9673^{+0.0078}_{-0.0077}$ $(+0.8\sigma)$	$f\sigma_8(2.33)$	0.29717	$0.2970^{+0.0049}_{-0.0046}$ (-0.0σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.66^{+0.16}_{-0.16}$	Y_P	0.245423	$0.24542^{+0.00010}_{-0.00011}$ $(+1.4\sigma)$	$\sigma_8(2.33)$	0.3064	$0.3063^{+0.0052}_{-0.0049}$ $(+0.2\sigma)$
A_{217}^{dustTE}	2.07	$2.08^{+0.52}_{-0.52}$	Y_P^{BBN}	0.246749	$0.24675^{+0.00010}_{-0.00011}$ $(+1.4\sigma)$	f_{2000}^{143}	28.7	29^{+5}_{-5} (-0.6σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$10^5 D/H$	2.572	$2.574^{+0.051}_{-0.049}$ (-1.4σ)	$f_{2000}^{143 \times 217}$	31.88	32^{+4}_{-4} (-0.8σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	Age/Gyr	13.7848	$13.783^{+0.042}_{-0.043}$ (-1.3σ)	f_{2000}^{217}	106.55	$106.9^{+3.5}_{-3.4}$ (-0.7σ)
m_{DES}^1	0.0151	$0.014^{+0.044}_{-0.045}$	z_*	1089.759	$1089.75^{+0.46}_{-0.46}$ (-1.3σ)	χ_{simall}^2	395.86	$396.9 (\nu: 1.4)$ (-0.0σ)
m_{DES}^2	0.0119	$0.012^{+0.044}_{-0.044}$	r_*	144.59	$144.64^{+0.51}_{-0.49}$ $(+0.4\sigma)$	χ_{lowl}^2	22.84	$22.99 (\nu: 0.3)$ (-0.7σ)
m_{DES}^3	-0.0072	$-0.008^{+0.040}_{-0.039}$	$100\theta_*$	1.04117	$1.04121^{+0.00058}_{-0.00057}$ $(+0.5\sigma)$	χ_{plik}^2	2346.0	$2360.9 (\nu: 17.6)$ $(+291.6\sigma)$
m_{DES}^4	0.0127	$0.011^{+0.041}_{-0.042}$	$D_M(z_*)/\text{Gpc}$	13.8873	$13.891^{+0.048}_{-0.046}$ $(+0.3\sigma)$	χ_{DES}^2	229.20	$232.0 (\nu: 3.2)$
$A_{IA,DES}$	1.44	$1.24^{+0.97}_{-0.95}$	z_{drag}	1060.05	$1060.02^{+0.56}_{-0.58}$ $(+1.4\sigma)$	χ_{prior}^2	2.8	$19.5 (\nu: 18.0)$ $(+3.3\sigma)$
$\alpha_{IA,DES}$	2.49	> -2.09	r_{drag}	147.23	$147.28^{+0.52}_{-0.49}$ $(+0.1\sigma)$	χ_{CMB}^2	2764.7	$2780.7 (\nu: 17.3)$ $(+289.3\sigma)$
$\Delta z_{s,DES}^1$	0.0046	$0.005^{+0.028}_{-0.028}$	k_D	0.14077	$0.14072^{+0.00057}_{-0.00059}$ $(+0.3\sigma)$			
$\Delta z_{s,DES}^2$	-0.0203	$-0.021^{+0.023}_{-0.023}$	$100\theta_D$	0.160699	$0.16072^{+0.00033}_{-0.00033}$ (-1.3σ)			

Best-fit $\chi_{eff}^2 = 2996.67$; $\bar{\chi}_{eff}^2 = 3032.33$; $R - 1 = 0.00975$

χ_{eff}^2 : CMB - simall_100x143_offlike5.EE.Aplanck_B: 395.86 commander_dx12_v3.2.29: 22.84 plik_rd12_HM_v22b_TTTEEE: 2346.01 WL - DES_1YR_final: 229.20

2.265 base_plikHM_TTTEEE_lowl_lowE_DESlens_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022468	$0.02245^{+0.00026}_{-0.00026}$ (+1.5 σ)	$\Delta z_{s,DES}^4$	-0.0212	$-0.022^{+0.038}_{-0.039}$	$100\theta_{eq}$	0.8182	$0.8187^{+0.0077}_{-0.0075}$ (+0.9 σ)
$\Omega_c h^2$	0.11885	$0.1187^{+0.0018}_{-0.0018}$ (-0.9 σ)	H_0	67.89	$67.91^{+0.80}_{-0.79}$ (+1.1 σ)	$100\theta_{s,eq}$	0.45187	$0.4521^{+0.0040}_{-0.0038}$ (+0.8 σ)
$100\theta_{MC}$	1.04107	$1.04107^{+0.00057}_{-0.00056}$ (+0.6 σ)	Ω_Λ	0.6920	$0.692^{+0.011}_{-0.011}$ (+1.0 σ)	$H(0.15)$	73.14	$73.16^{+0.69}_{-0.68}$ (+1.2 σ)
τ	0.0548	$0.054^{+0.016}_{-0.014}$ (+0.2 σ)	Ω_m	0.3080	$0.308^{+0.011}_{-0.011}$ (-1.0 σ)	$D_M(0.15)$	638.8	$638.6^{+6.8}_{-6.8}$ (-1.1 σ)
$\ln(10^{10} A_s)$	3.0430	$3.041^{+0.032}_{-0.030}$ (+0.0 σ)	$\Omega_m h^2$	0.14197	$0.1418^{+0.0017}_{-0.0017}$ (-0.8 σ)	$H(0.38)$	83.20	$83.21^{+0.52}_{-0.51}$ (+1.2 σ)
n_s	0.9690	$0.9680^{+0.0072}_{-0.0073}$ (+0.9 σ)	$\Omega_m h^3$	0.09638	$0.09633^{+0.00057}_{-0.00057}$ (+1.0 σ)	$D_M(0.38)$	1524.4	1524^{+14}_{-14} (-1.2 σ)
y_{cal}	1.00059	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	σ_8	0.8078	$0.806^{+0.013}_{-0.012}$ (-0.6 σ)	$H(0.51)$	89.883	$89.89^{+0.43}_{-0.41}$ (+1.3 σ)
A_{217}^{CIB}	46.7	47^{+10}_{-10} (-0.2 σ)	S_8	0.8185	$0.816^{+0.021}_{-0.021}$ (-1.0 σ)	$D_M(0.51)$	1975.3	1975^{+16}_{-16} (-1.2 σ)
$\xi^{tSZ \times CIB}$	0.56	—	$\sigma_8 \Omega_m^{0.5}$	0.4483	$0.447^{+0.012}_{-0.012}$ (-1.0 σ)	$H(0.61)$	95.479	$95.48^{+0.36}_{-0.34}$ (+1.3 σ)
A_{143}^{tSZ}	7.23	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6018	$0.600^{+0.012}_{-0.012}$ (-0.9 σ)	$D_M(0.61)$	2299.0	2299^{+17}_{-17} (-1.2 σ)
A_{100}^{PS}	248	259^{+60}_{-60} (-0.2 σ)	$\sigma_8/h^{0.5}$	0.9804	$0.978^{+0.018}_{-0.017}$ (-0.9 σ)	$H(2.33)$	235.92	$235.8^{+1.1}_{-1.1}$ (-0.7 σ)
A_{143}^{PS}	48.6	45^{+20}_{-20} (-0.5 σ)	$r_{drag} h$	99.99	$100.1^{+1.4}_{-1.4}$ (+1.0 σ)	$D_M(2.33)$	5754.8	5755^{+16}_{-17} (-1.4 σ)
$A_{143 \times 217}^{PS}$	50.4	42^{+20}_{-20} (-0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4236	$2.422^{+0.043}_{-0.042}$ (-0.9 σ)	$f\sigma_8(0.15)$	0.4532	$0.452^{+0.011}_{-0.011}$ (-1.0 σ)
A_{217}^{PS}	120.2	114^{+20}_{-20} (-0.1 σ)	z_{re}	7.70	$7.6^{+1.5}_{-1.5}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7468	$0.745^{+0.012}_{-0.011}$ (-0.5 σ)
A^{kSZ}	0.00	< 8.05 (-0.1 σ)	$10^9 A_s$	2.097	$2.092^{+0.067}_{-0.062}$ (+0.0 σ)	$f\sigma_8(0.38)$	0.4722	$0.4711^{+0.0095}_{-0.0094}$ (-0.9 σ)
A_{100}^{dustTT}	8.84	$8.9^{+3.5}_{-3.5}$ (-0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8790	$1.878^{+0.021}_{-0.020}$ (-0.5 σ)	$\sigma_8(0.38)$	0.6623	$0.661^{+0.011}_{-0.0098}$ (-0.3 σ)
A_{143}^{dustTT}	11.04	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	D_{40}	1222.6	1225^{+23}_{-22} (-0.6 σ)	$f\sigma_8(0.51)$	0.4712	$0.4702^{+0.0087}_{-0.0086}$ (-0.9 σ)
$A_{143 \times 217}^{dustTT}$	20.1	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	D_{220}	5736	5739^{+76}_{-72} (+0.6 σ)	$\sigma_8(0.51)$	0.6200	$0.619^{+0.010}_{-0.0092}$ (-0.2 σ)
A_{217}^{dustTT}	95.2	94^{+10}_{-10} (+0.0 σ)	D_{810}	2540.5	2538^{+27}_{-25} (+0.2 σ)	$f\sigma_8(0.61)$	0.4666	$0.4656^{+0.0084}_{-0.0081}$ (-0.8 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.076}$	D_{1420}	819.2	$818.0^{+9.5}_{-8.9}$ (+0.7 σ)	$\sigma_8(0.61)$	0.5900	$0.5890^{+0.0097}_{-0.0087}$ (-0.2 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.059}_{-0.059}$	D_{2000}	231.64	$231.1^{+3.2}_{-3.0}$ (+0.9 σ)	$f\sigma_8(2.33)$	0.29763	$0.2972^{+0.0050}_{-0.0044}$ (+0.0 σ)
$A_{100 \times 217}^{dustTE}$	0.479	$0.48^{+0.16}_{-0.17}$	$n_{s,0.002}$	0.9690	$0.9680^{+0.0072}_{-0.0073}$ (+0.9 σ)	$\sigma_8(2.33)$	0.30700	$0.3065^{+0.0052}_{-0.0047}$ (+0.2 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	Y_P	0.245433	$0.245426^{+0.000096}_{-0.00010}$ (+1.4 σ)	f_{2000}^{143}	28.4	29^{+5}_{-5} (-0.6 σ)
$A_{143 \times 217}^{dustTE}$	0.660	$0.66^{+0.16}_{-0.16}$	Y_P^{BBN}	0.246760	$0.246752^{+0.000096}_{-0.00010}$ (+1.4 σ)	$f_{2000}^{143 \times 217}$	31.74	32^{+4}_{-4} (-0.8 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.52}_{-0.52}$	$10^5 D/H$	2.5676	$2.571^{+0.048}_{-0.047}$ (-1.5 σ)	f_{2000}^{217}	106.29	$106.8^{+3.4}_{-3.4}$ (-0.7 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	Age/Gyr	13.7782	$13.779^{+0.037}_{-0.038}$ (-1.4 σ)	χ_{small}^2	396.05	$396.9 (\nu: 1.5)$ (-0.0 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	z_*	1089.697	$1089.71^{+0.40}_{-0.40}$ (-1.5 σ)	χ_{lowl}^2	22.68	$22.87 (\nu: 0.3)$ (-0.8 σ)
m_{DES}^1	0.0142	$0.014^{+0.044}_{-0.045}$	r_*	144.653	$144.69^{+0.44}_{-0.42}$ (+0.5 σ)	χ_{plik}^2	2346.4	$2361.0 (\nu: 17.4)$ (+291.6 σ)
m_{DES}^2	0.0126	$0.012^{+0.045}_{-0.043}$	$100\theta_*$	1.04125	$1.04124^{+0.00056}_{-0.00055}$ (+0.6 σ)	χ_{6DF}^2	0.010	$0.028 (\nu: 0.0)$
m_{DES}^3	-0.0062	$-0.007^{+0.038}_{-0.039}$	$D_M(z_*)/\text{Gpc}$	13.8923	$13.896^{+0.042}_{-0.040}$ (+0.4 σ)	χ_{MGS}^2	1.41	$1.50 (\nu: 0.1)$
m_{DES}^4	0.0129	$0.012^{+0.041}_{-0.042}$	z_{drag}	1060.09	$1060.04^{+0.58}_{-0.56}$ (+1.4 σ)	$\chi_{DR12BAO}^2$	3.94	$4.18 (\nu: 0.4)$
$A_{IA,DES}$	1.42	$1.21^{+0.96}_{-0.92}$	r_{drag}	147.285	$147.33^{+0.46}_{-0.44}$ (+0.3 σ)	χ_{DES}^2	229.06	$231.9 (\nu: 2.9)$
$\alpha_{IA,DES}$	2.58	> -2.14	k_D	0.14074	$0.14068^{+0.00054}_{-0.00056}$ (+0.3 σ)	χ_{prior}^2	2.6	$19.4 (\nu: 18.0)$ (+3.3 σ)
$\Delta z_{s,DES}^1$	0.0046	$0.004^{+0.029}_{-0.028}$	$100\theta_D$	0.160683	$0.16071^{+0.00033}_{-0.00032}$ (-1.4 σ)	χ_{BAO}^2	5.35	$5.71 (\nu: 0.2)$
$\Delta z_{s,DES}^2$	-0.0207	$-0.021^{+0.023}_{-0.023}$	z_{eq}	3377.1	3374^{+40}_{-41} (-0.8 σ)	χ_{CMB}^2	2765.1	$2780.8 (\nu: 17.0)$ (+289.3 σ)
$\Delta z_{s,DES}^3$	0.0053	$0.005^{+0.021}_{-0.021}$	k_{eq}	0.010307	$0.01030^{+0.00012}_{-0.00013}$ (-0.8 σ)			

Best-fit $\chi_{eff}^2 = 3002.12$; $\bar{\chi}_{eff}^2 = 3037.77$; $R - 1 = 0.01621$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.94 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.05 commander_dx12.v3.2.29: 22.68 plik_rd12_HM.v22b_TTTEEE: 2346.36 WL - DES_1YR_final: 229.06

2.266 base_plikHM_TTTEEE_lowl_lowE_DESlens_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022454	$0.02244^{+0.00027}_{-0.00027}$ $(+1.4\sigma)$	$\Delta z_{s,\text{DES}}^3$	0.0047	$0.004^{+0.020}_{-0.020}$	z_{eq}	3384.0	3383^{+46}_{-46} (-0.6σ)
$\Omega_c h^2$	0.11916	$0.1191^{+0.0020}_{-0.0020}$ (-0.7σ)	$\Delta z_{s,\text{DES}}^4$	-0.0220	$-0.023^{+0.038}_{-0.039}$	k_{eq}	0.010328	$0.01033^{+0.00014}_{-0.00014}$ (-0.6σ)
$100\theta_{\text{MC}}$	1.04100	$1.04102^{+0.00059}_{-0.00059}$ $(+0.5\sigma)$	H_0	67.75	$67.75^{+0.94}_{-0.90}$ $(+1.0\sigma)$	$100\theta_{\text{eq}}$	0.8168	$0.8170^{+0.0088}_{-0.0086}$ $(+0.7\sigma)$
τ	0.0554	$0.055^{+0.015}_{-0.014}$ $(+0.3\sigma)$	Ω_Λ	0.6900	$0.690^{+0.013}_{-0.012}$ $(+0.8\sigma)$	$100\theta_{s,\text{eq}}$	0.45118	$0.4513^{+0.0045}_{-0.0044}$ $(+0.6\sigma)$
$\ln(10^{10} A_s)$	3.0447	$3.043^{+0.029}_{-0.027}$ $(+0.2\sigma)$	Ω_m	0.3100	$0.310^{+0.012}_{-0.013}$ (-0.8σ)	$H(0.15)$	73.01	$73.02^{+0.82}_{-0.77}$ $(+1.0\sigma)$
n_s	0.9683	$0.9669^{+0.0078}_{-0.0075}$ $(+0.8\sigma)$	$\Omega_m h^2$	0.14225	$0.1422^{+0.0019}_{-0.0019}$ (-0.6σ)	$D_M(0.15)$	640.0	$640.0^{+7.7}_{-8.0}$ (-1.0σ)
y_{cal}	1.00043	$1.0007^{+0.0049}_{-0.0048}$ $(+0.1\sigma)$	$\Omega_m h^3$	0.09637	$0.09634^{+0.00057}_{-0.00058}$ $(+1.0\sigma)$	$H(0.38)$	83.11	$83.11^{+0.60}_{-0.57}$ $(+1.0\sigma)$
A_{217}^{CIB}	46.0	47^{+10}_{-10} (-0.2σ)	σ_8	0.8093	$0.808^{+0.012}_{-0.011}$ (-0.4σ)	$D_M(0.38)$	1526.8	1527^{+15}_{-16} (-1.0σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.62	—	S_8	0.8226	$0.821^{+0.021}_{-0.021}$ (-0.8σ)	$H(0.51)$	89.814	$89.81^{+0.49}_{-0.46}$ $(+1.1\sigma)$
A_{143}^{tSZ}	7.17	$5.5^{+3.7}_{-3.9}$ $(+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4505	$0.450^{+0.012}_{-0.011}$ (-0.8σ)	$D_M(0.51)$	1978.1	1978^{+18}_{-19} (-1.0σ)
A_{100}^{PS}	247	259^{+60}_{-60} (-0.2σ)	$\sigma_8 \Omega_m^{0.25}$	0.6038	$0.603^{+0.011}_{-0.011}$ (-0.7σ)	$H(0.61)$	95.426	$95.42^{+0.41}_{-0.38}$ $(+1.2\sigma)$
A_{143}^{PS}	49.3	45^{+20}_{-20} (-0.5σ)	$\sigma_8/h^{0.5}$	0.9832	$0.982^{+0.016}_{-0.016}$ (-0.7σ)	$D_M(0.61)$	2302.0	2302^{+20}_{-20} (-1.0σ)
$A_{143 \times 217}^{\text{PS}}$	52.0	42^{+20}_{-20} (-0.2σ)	$r_{\text{drag}} h$	99.74	$99.8^{+1.6}_{-1.6}$ $(+0.8\sigma)$	$H(2.33)$	236.09	$236.1^{+1.2}_{-1.2}$ (-0.5σ)
A_{217}^{PS}	121.4	115^{+20}_{-20} (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.4304	$2.431^{+0.038}_{-0.038}$ (-0.6σ)	$D_M(2.33)$	5757.1	5757^{+18}_{-19} (-1.2σ)
A^{kSZ}	0.00	< 8.07 (-0.1σ)	z_{re}	7.76	$7.7^{+1.5}_{-1.5}$ $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4553	$0.455^{+0.011}_{-0.011}$ (-0.7σ)
A_{100}^{dustTT}	8.78	$8.9^{+3.5}_{-3.5}$ (-0.0σ)	$10^9 A_s$	2.100	$2.097^{+0.062}_{-0.057}$ $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7480	$0.747^{+0.011}_{-0.010}$ (-0.3σ)
A_{143}^{dustTT}	11.01	$10.9^{+3.5}_{-3.5}$ $(+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8802	$1.880^{+0.021}_{-0.020}$ (-0.3σ)	$f\sigma_8(0.38)$	0.4739	$0.4732^{+0.0088}_{-0.0089}$ (-0.7σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.1	$18.6^{+6.3}_{-6.4}$ $(+0.1\sigma)$	D_{40}	1224.4	1228^{+23}_{-22} (-0.4σ)	$\sigma_8(0.38)$	0.6632	$0.6623^{+0.0097}_{-0.0089}$ (-0.1σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} $(+0.0\sigma)$	D_{220}	5735	5741^{+75}_{-74} $(+0.7\sigma)$	$f\sigma_8(0.51)$	0.4727	$0.4720^{+0.0080}_{-0.0079}$ (-0.7σ)
A_{100}^{dustTE}	0.114	$0.113^{+0.075}_{-0.076}$	D_{810}	2540.5	2539^{+26}_{-25} $(+0.2\sigma)$	$\sigma_8(0.51)$	0.6207	$0.6198^{+0.0092}_{-0.0084}$ (-0.1σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.060}_{-0.059}$	D_{1420}	819.0	$817.9^{+9.7}_{-9.2}$ $(+0.7\sigma)$	$f\sigma_8(0.61)$	0.4679	$0.4672^{+0.0073}_{-0.0072}$ (-0.6σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.16}_{-0.17}$	D_{2000}	231.57	$231.1^{+3.2}_{-3.0}$ $(+0.9\sigma)$	$\sigma_8(0.61)$	0.5906	$0.5898^{+0.0088}_{-0.0080}$ (-0.0σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	$n_{s,0.002}$	0.9683	$0.9669^{+0.0078}_{-0.0075}$ $(+0.8\sigma)$	$f\sigma_8(2.33)$	0.29787	$0.2975^{+0.0046}_{-0.0042}$ $(+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	Y_{P}	0.245428	$0.24542^{+0.00010}_{-0.00011}$ $(+1.4\sigma)$	$\sigma_8(2.33)$	0.30715	$0.3068^{+0.0050}_{-0.0045}$ $(+0.3\sigma)$
A_{217}^{dustTE}	2.08	$2.07^{+0.52}_{-0.52}$	$Y_{\text{P}}^{\text{BBN}}$	0.246754	$0.24675^{+0.00010}_{-0.00011}$ $(+1.4\sigma)$	f_{2000}^{143}	28.2	29^{+5}_{-5} (-0.6σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0013}$ $(+0.1\sigma)$	10^5D/H	2.5701	$2.574^{+0.050}_{-0.049}$ (-1.4σ)	$f_{2000}^{143 \times 217}$	31.68	32^{+4}_{-4} (-0.8σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	Age/Gyr	13.7831	$13.784^{+0.041}_{-0.043}$ (-1.3σ)	f_{2000}^{217}	106.24	$106.9^{+3.4}_{-3.4}$ (-0.7σ)
m_{DES}^1	0.0144	$0.014^{+0.044}_{-0.046}$	z_*	1089.740	$1089.76^{+0.45}_{-0.45}$ (-1.3σ)	χ_{lensing}^2	8.77	$9.16 (\nu: 0.2)$
m_{DES}^2	0.0120	$0.012^{+0.044}_{-0.043}$	r_*	144.586	$144.61^{+0.47}_{-0.46}$ $(+0.3\sigma)$	χ_{small}^2	396.20	$397.0 (\nu: 1.5)$ $(+0.0\sigma)$
m_{DES}^3	-0.0073	$-0.009^{+0.038}_{-0.039}$	$100\theta_*$	1.04118	$1.04120^{+0.00058}_{-0.00058}$ $(+0.5\sigma)$	χ_{lowl}^2	22.85	$23.12 (\nu: 0.3)$ (-0.6σ)
m_{DES}^4	0.0119	$0.010^{+0.041}_{-0.042}$	$D_M(z_*)/\text{Gpc}$	13.8868	$13.889^{+0.045}_{-0.043}$ $(+0.2\sigma)$	χ_{plik}^2	2345.8	$2360.1 (\nu: 16.3)$ $(+291.5\sigma)$
$A_{\text{IA,DES}}$	1.45	$1.25^{+0.95}_{-0.93}$	z_{drag}	1060.09	$1060.03^{+0.56}_{-0.59}$ $(+1.4\sigma)$	χ_{DES}^2	229.30	$232.1 (\nu: 3.3)$
$\alpha_{\text{IA,DES}}$	2.50	> -2.09	r_{drag}	147.220	$147.25^{+0.49}_{-0.46}$ $(+0.1\sigma)$	χ_{prior}^2	2.6	$19.7 (\nu: 18.2)$ $(+3.4\sigma)$
$\Delta z_{s,\text{DES}}^1$	0.0045	$0.005^{+0.029}_{-0.028}$	k_{D}	0.14079	$0.14075^{+0.00055}_{-0.00057}$ $(+0.4\sigma)$	χ_{CMB}^2	2773.6	$2789.4 (\nu: 17.2)$ $(+290.8\sigma)$
$\Delta z_{s,\text{DES}}^2$	-0.0204	$-0.021^{+0.023}_{-0.023}$	$100\theta_{\text{D}}$	0.160683	$0.16071^{+0.00033}_{-0.00032}$ (-1.4σ)			

Best-fit $\chi_{\text{eff}}^2 = 3005.49$; $\bar{\chi}_{\text{eff}}^2 = 3041.15$; $R - 1 = 0.01376$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.77 simall_100x143_offlike5_EE_Aplanck_B: 396.20 commander_dx12_v3.2_29: 22.85 plik_rd12_HM_v22b.TTTEEE: 2345.76 WL - DES_1YR_final: 229.30

2.267 base_plikHM_TTTEEE_lowl_lowE_DESlens_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022468	$0.02246^{+0.00026}_{-0.00026}$ (+1.5 σ)	$\Delta z_{s,DES}^4$	-0.0211	$-0.022^{+0.038}_{-0.040}$	$100\theta_{eq}$	0.8183	$0.8182^{+0.0073}_{-0.0071}$ (+0.8 σ)
$\Omega_c h^2$	0.11882	$0.1188^{+0.0017}_{-0.0017}$ (-0.9 σ)	H_0	67.89	$67.88^{+0.78}_{-0.76}$ (+1.1 σ)	$100\theta_{s,eq}$	0.45193	$0.4519^{+0.0038}_{-0.0037}$ (+0.8 σ)
$100\theta_{MC}$	1.04103	$1.04106^{+0.00057}_{-0.00056}$ (+0.6 σ)	Ω_Λ	0.6921	$0.692^{+0.010}_{-0.010}$ (+1.0 σ)	$H(0.15)$	73.14	$73.13^{+0.68}_{-0.66}$ (+1.1 σ)
τ	0.0555	$0.056^{+0.015}_{-0.013}$ (+0.4 σ)	Ω_m	0.3079	$0.308^{+0.010}_{-0.010}$ (-1.0 σ)	$D_M(0.15)$	638.8	$638.9^{+6.5}_{-6.6}$ (-1.1 σ)
$\ln(10^{10} A_s)$	3.0444	$3.044^{+0.029}_{-0.027}$ (+0.2 σ)	$\Omega_m h^2$	0.14193	$0.1419^{+0.0016}_{-0.0016}$ (-0.7 σ)	$H(0.38)$	83.19	$83.19^{+0.51}_{-0.49}$ (+1.2 σ)
n_s	0.9688	$0.9676^{+0.0072}_{-0.0072}$ (+0.9 σ)	$\Omega_m h^3$	0.09635	$0.09635^{+0.00057}_{-0.00058}$ (+1.0 σ)	$D_M(0.38)$	1524.4	1525^{+13}_{-13} (-1.1 σ)
y_{cal}	1.00060	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	σ_8	0.8081	$0.808^{+0.012}_{-0.011}$ (-0.4 σ)	$H(0.51)$	89.878	$89.87^{+0.42}_{-0.40}$ (+1.2 σ)
A_{217}^{CIB}	46.6	47^{+10}_{-10} (-0.2 σ)	S_8	0.8187	$0.819^{+0.018}_{-0.018}$ (-0.9 σ)	$D_M(0.51)$	1975.3	1976^{+15}_{-16} (-1.1 σ)
$\xi^{tSZ \times CIB}$	0.49	—	$\sigma_8 \Omega_m^{0.5}$	0.4484	$0.448^{+0.010}_{-0.0099}$ (-0.9 σ)	$H(0.61)$	95.473	$95.47^{+0.36}_{-0.34}$ (+1.3 σ)
A_{143}^{tSZ}	7.30	$5.5^{+3.7}_{-3.9}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6020	$0.6020^{+0.0099}_{-0.010}$ (-0.8 σ)	$D_M(0.61)$	2299.0	2299^{+17}_{-17} (-1.1 σ)
A_{100}^{PS}	248	259^{+60}_{-60} (-0.2 σ)	$\sigma_8/h^{0.5}$	0.9808	$0.981^{+0.015}_{-0.015}$ (-0.8 σ)	$H(2.33)$	235.89	$235.9^{+1.0}_{-1.0}$ (-0.6 σ)
A_{143}^{PS}	47.4	45^{+20}_{-20} (-0.5 σ)	$r_{drag} h$	99.997	$99.99^{+1.3}_{-1.3}$ (+1.0 σ)	$D_M(2.33)$	5755.2	5755^{+16}_{-17} (-1.4 σ)
$A_{143 \times 217}^{PS}$	48.7	42^{+20}_{-20} (-0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4254	$2.428^{+0.036}_{-0.037}$ (-0.7 σ)	$f\sigma_8(0.15)$	0.4533	$0.4533^{+0.0094}_{-0.0094}$ (-0.8 σ)
A_{217}^{PS}	120.2	115^{+20}_{-20} (-0.0 σ)	z_{re}	7.77	$7.8^{+1.4}_{-1.4}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7471	$0.747^{+0.011}_{-0.010}$ (-0.3 σ)
A^{kSZ}	0.00	< 8.04 (-0.2 σ)	$10^9 A_s$	2.100	$2.100^{+0.061}_{-0.056}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4724	$0.4724^{+0.0080}_{-0.0081}$ (-0.8 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.5}$ (-0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8789	$1.879^{+0.021}_{-0.019}$ (-0.4 σ)	$\sigma_8(0.38)$	0.6626	$0.6625^{+0.0098}_{-0.0089}$ (-0.1 σ)
A_{143}^{dustTT}	11.04	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	D_{40}	1223.4	1227^{+22}_{-22} (-0.5 σ)	$f\sigma_8(0.51)$	0.4714	$0.4714^{+0.0074}_{-0.0074}$ (-0.7 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.6^{+6.3}_{-6.5}$ (+0.1 σ)	D_{220}	5738	5743^{+76}_{-73} (+0.7 σ)	$\sigma_8(0.51)$	0.6203	$0.6201^{+0.0093}_{-0.0083}$ (-0.0 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.0 σ)	D_{810}	2540.4	2540^{+26}_{-25} (+0.2 σ)	$f\sigma_8(0.61)$	0.4667	$0.4667^{+0.0071}_{-0.0069}$ (-0.7 σ)
A_{100}^{dustTE}	0.114	$0.113^{+0.075}_{-0.076}$	D_{1420}	819.1	$818.2^{+9.6}_{-9.0}$ (+0.7 σ)	$\sigma_8(0.61)$	0.5903	$0.5901^{+0.0089}_{-0.0080}$ (+0.1 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.060}_{-0.059}$	D_{2000}	231.59	$231.2^{+3.1}_{-3.0}$ (+0.9 σ)	$f\sigma_8(2.33)$	0.29777	$0.2977^{+0.0046}_{-0.0041}$ (+0.3 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.16}_{-0.17}$	$n_{s,0.002}$	0.9688	$0.9676^{+0.0072}_{-0.0072}$ (+0.9 σ)	$\sigma_8(2.33)$	0.30715	$0.3071^{+0.0049}_{-0.0044}$ (+0.4 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	Y_P	0.245433	$0.245427^{+0.000095}_{-0.00010}$ (+1.4 σ)	f_{2000}^{143}	28.4	29^{+5}_{-5} (-0.7 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.66^{+0.16}_{-0.16}$	Y_P^{BBN}	0.246760	$0.246753^{+0.000095}_{-0.00010}$ (+1.4 σ)	$f_{2000}^{143 \times 217}$	31.70	32^{+4}_{-4} (-0.8 σ)
A_{217}^{dustTE}	2.08	$2.07^{+0.52}_{-0.51}$	$10^5 D/H$	2.5675	$2.570^{+0.048}_{-0.046}$ (-1.5 σ)	f_{2000}^{217}	106.38	$106.8^{+3.4}_{-3.4}$ (-0.7 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0013}$ (+0.1 σ)	Age/Gyr	13.7792	$13.780^{+0.037}_{-0.038}$ (-1.4 σ)	$\chi_{lensing}^2$	8.85	9.17 (ν : 0.2)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	z_*	1089.693	$1089.71^{+0.40}_{-0.40}$ (-1.4 σ)	χ_{small}^2	396.20	397.1 (ν : 1.6) (+0.1 σ)
m_{DES}^1	0.0139	$0.014^{+0.044}_{-0.046}$	r_*	144.662	$144.66^{+0.41}_{-0.40}$ (+0.4 σ)	χ_{lowl}^2	22.73	23.01 (ν : 0.3) (-0.7 σ)
m_{DES}^2	0.0120	$0.012^{+0.044}_{-0.043}$	$100\theta_*$	1.04121	$1.04124^{+0.00056}_{-0.00056}$ (+0.6 σ)	χ_{plik}^2	2346.1	2360.3 (ν : 16.3) (+291.5 σ)
m_{DES}^3	-0.0065	$-0.008^{+0.038}_{-0.039}$	$D_M(z_*)/\text{Gpc}$	13.8937	$13.894^{+0.040}_{-0.038}$ (+0.4 σ)	χ_{6DF}^2	0.010	0.030 (ν : 0.0)
m_{DES}^4	0.0134	$0.011^{+0.041}_{-0.042}$	z_{drag}	1060.09	$1060.05^{+0.57}_{-0.58}$ (+1.4 σ)	χ_{MGS}^2	1.41	1.45 (ν : 0.1)
$A_{IA,DES}$	1.42	$1.24^{+0.94}_{-0.92}$	r_{drag}	147.295	$147.30^{+0.44}_{-0.42}$ (+0.2 σ)	$\chi_{DR12BAO}^2$	3.93	4.24 (ν : 0.4)
$\alpha_{IA,DES}$	2.57	> -2.12	k_D	0.14073	$0.14071^{+0.00053}_{-0.00054}$ (+0.3 σ)	χ_{DES}^2	229.07	231.9 (ν : 3.0)
$\Delta z_{s,DES}^1$	0.0049	$0.005^{+0.029}_{-0.028}$	$100\theta_D$	0.160678	$0.16070^{+0.00033}_{-0.00032}$ (-1.4 σ)	χ_{prior}^2	2.7	19.5 (ν : 18.1) (+3.3 σ)
$\Delta z_{s,DES}^2$	-0.0205	$-0.021^{+0.023}_{-0.023}$	z_{eq}	3376.3	3377^{+38}_{-39} (-0.7 σ)	χ_{CMB}^2	2773.9	2789.5 (ν : 17.1) (+290.9 σ)
$\Delta z_{s,DES}^3$	0.0055	$0.005^{+0.020}_{-0.020}$	k_{eq}	0.010305	$0.01031^{+0.00012}_{-0.00012}$ (-0.7 σ)	χ_{BAO}^2	5.35	5.73 (ν : 0.2)

Best-fit $\chi_{eff}^2 = 3011.01$; $\bar{\chi}_{eff}^2 = 3046.67$; $R - 1 = 0.01525$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.93 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.85 small_100x143.offlike5_EE_Aplanck_B: 396.20 commander_dx12.v3.2.29: 22.73 plik_rd12_HM_v22b_TTTEEE: 2346.15 WL - DES.1YR_final: 229.07

2.268 base_plikHM_TTTEEE_lowl_lowE_DESlens_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02244^{+0.00027}_{-0.00027}$ (+1.5 σ)	$\Delta z_{\mathrm{s,DES}}^3$	$0.004^{+0.020}_{-0.020}$	z_{eq}	3379^{+48}_{-50} (−0.7 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1190^{+0.0021}_{-0.0022}$ (−0.8 σ)	$\Delta z_{\mathrm{s,DES}}^4$	$-0.023^{+0.039}_{-0.039}$	k_{eq}	$0.01031^{+0.00015}_{-0.00015}$ (−0.7 σ)
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00059}_{-0.00058}$ (+0.6 σ)	H_0	$67.8^{+1.0}_{-0.95}$ (+1.0 σ)	$100\theta_{\mathrm{eq}}$	$0.8178^{+0.0095}_{-0.0091}$ (+0.8 σ)
τ	$0.055^{+0.013}_{-0.011}$ (+0.3 σ)	Ω_{Λ}	$0.691^{+0.013}_{-0.013}$ (+0.9 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0049}_{-0.0047}$ (+0.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.042^{+0.027}_{-0.025}$ (+0.1 σ)	Ω_{m}	$0.309^{+0.013}_{-0.013}$ (−0.9 σ)	$H(0.15)$	$73.08^{+0.86}_{-0.82}$ (+1.1 σ)
n_{s}	$0.9675^{+0.0077}_{-0.0077}$ (+0.9 σ)	$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0020}_{-0.0021}$ (−0.7 σ)	$D_{\mathrm{M}}(0.15)$	$639.4^{+8.1}_{-8.4}$ (−1.0 σ)
y_{cal}	$1.0005^{+0.0049}_{-0.0048}$ (+0.0 σ)	$\Omega_{\mathrm{m}}h^3$	$0.09633^{+0.00057}_{-0.00058}$ (+1.0 σ)	$H(0.38)$	$83.15^{+0.63}_{-0.60}$ (+1.1 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	σ_8	$0.807^{+0.013}_{-0.011}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1526^{+16}_{-17} (−1.1 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	S_8	$0.819^{+0.024}_{-0.025}$ (−0.8 σ)	$H(0.51)$	$89.84^{+0.51}_{-0.48}$ (+1.2 σ)
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.013}_{-0.014}$ (−0.8 σ)	$D_{\mathrm{M}}(0.51)$	1977^{+19}_{-20} (−1.1 σ)
A_{100}^{PS}	258^{+60}_{-60} (−0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.013}_{-0.013}$ (−0.8 σ)	$H(0.61)$	$95.45^{+0.42}_{-0.39}$ (+1.2 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.5 σ)	$\sigma_8/h^{0.5}$	$0.981^{+0.018}_{-0.018}$ (−0.8 σ)	$D_{\mathrm{M}}(0.61)$	2301^{+21}_{-21} (−1.1 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.2 σ)	$r_{\mathrm{drag}}h$	$99.9^{+1.7}_{-1.7}$ (+0.9 σ)	$H(2.33)$	$236.0^{+1.3}_{-1.3}$ (−0.6 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.044}_{-0.043}$ (−0.7 σ)	$D_{\mathrm{M}}(2.33)$	5757^{+19}_{-19} (−1.3 σ)
A^{kSZ}	< 8.02 (−0.2 σ)	z_{re}	< 8.86 (+0.2 σ)	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.013}$ (−0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	$10^9 A_{\mathrm{s}}$	$2.096^{+0.058}_{-0.052}$ (+0.1 σ)	$\sigma_8(0.15)$	$0.746^{+0.011}_{-0.010}$ (−0.4 σ)
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.022}_{-0.020}$ (−0.4 σ)	$f\sigma_8(0.38)$	$0.472^{+0.010}_{-0.011}$ (−0.8 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	D_{40}	1226^{+23}_{-23} (−0.5 σ)	$\sigma_8(0.38)$	$0.6619^{+0.0094}_{-0.0087}$ (−0.2 σ)
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10} (+0.1 σ)	D_{220}	5737^{+76}_{-74} (+0.6 σ)	$f\sigma_8(0.51)$	$0.4713^{+0.0092}_{-0.0092}$ (−0.7 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.074}_{-0.075}$	D_{810}	2538^{+27}_{-25} (+0.1 σ)	$\sigma_8(0.51)$	$0.6196^{+0.0087}_{-0.0080}$ (−0.1 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.059}_{-0.058}$	D_{1420}	$817.7^{+9.5}_{-9.1}$ (+0.6 σ)	$f\sigma_8(0.61)$	$0.4666^{+0.0085}_{-0.0083}$ (−0.7 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	D_{2000}	$231.1^{+3.2}_{-3.0}$ (+0.9 σ)	$\sigma_8(0.61)$	$0.5896^{+0.0083}_{-0.0076}$ (−0.0 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$n_{\mathrm{s},0.002}$	$0.9675^{+0.0077}_{-0.0077}$ (+0.9 σ)	$f\sigma_8(2.33)$	$0.2974^{+0.0042}_{-0.0038}$ (+0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	Y_{P}	$0.24542^{+0.00010}_{-0.00011}$ (+1.4 σ)	$\sigma_8(2.33)$	$0.3067^{+0.0045}_{-0.0040}$ (+0.3 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.52}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00010}_{-0.00011}$ (+1.4 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.6 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$10^5 \mathrm{D}/\mathrm{H}$	$2.573^{+0.050}_{-0.049}$ (−1.5 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.8 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	Age/Gyr	$13.782^{+0.042}_{-0.043}$ (−1.3 σ)	f_{2000}^{217}	$106.8^{+3.5}_{-3.4}$ (−0.7 σ)
m_{DES}^1	$0.014^{+0.044}_{-0.045}$	z_*	$1089.74^{+0.46}_{-0.46}$ (−1.4 σ)	χ_{small}^2	396.8 (ν : 1.4) (−0.1 σ)
m_{DES}^2	$0.012^{+0.044}_{-0.044}$	r_*	$144.65^{+0.50}_{-0.48}$ (+0.4 σ)	χ_{lowl}^2	22.99 (ν : 0.3) (−0.7 σ)
m_{DES}^3	$-0.008^{+0.040}_{-0.039}$	$100\theta_*$	$1.04122^{+0.00058}_{-0.00057}$ (+0.5 σ)	χ_{plik}^2	2360.7 (ν : 17.4) (+291.6 σ)
m_{DES}^4	$0.011^{+0.040}_{-0.041}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.048}_{-0.045}$ (+0.3 σ)	χ_{DES}^2	232.1 (ν : 3.2)
$A_{\mathrm{IA,DES}}$	$1.24^{+0.97}_{-0.95}$	z_{drag}	$1060.02^{+0.56}_{-0.55}$ (+1.4 σ)	χ_{prior}^2	19.5 (ν : 18.1) (+3.3 σ)
$\alpha_{\mathrm{IA,DES}}$	> -2.07	r_{drag}	$147.29^{+0.52}_{-0.49}$ (+0.2 σ)	χ_{CMB}^2	2780.5 (ν : 16.9) (+289.2 σ)
$\Delta z_{\mathrm{s,DES}}^1$	$0.005^{+0.028}_{-0.028}$	k_{D}	$0.14071^{+0.00057}_{-0.00059}$ (+0.3 σ)		
$\Delta z_{\mathrm{s,DES}}^2$	$-0.021^{+0.023}_{-0.023}$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00033}_{-0.00033}$ (−1.4 σ)		

$\chi_{\mathrm{eff}}^2 = 3032.07$; $R - 1 = 0.00937$

2.269 base_plikHM_TTTEEE_lowl_lowE_DESlens_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02246^{+0.00026}_{-0.00025} \quad (+1.5\sigma)$	$\Delta z_{\mathrm{s,DES}}^4$	$-0.022^{+0.039}_{-0.040}$	$100\theta_{\mathrm{eq}}$	$0.8188^{+0.0077}_{-0.0074} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1187^{+0.0017}_{-0.0018} \quad (-0.9\sigma)$	H_0	$67.93^{+0.79}_{-0.79} \quad (+1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4522^{+0.0040}_{-0.0038} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00057}_{-0.00056} \quad (+0.7\sigma)$	Ω_{Λ}	$0.693^{+0.010}_{-0.011} \quad (+1.0\sigma)$	$H(0.15)$	$73.17^{+0.69}_{-0.68} \quad (+1.2\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	Ω_{m}	$0.307^{+0.011}_{-0.010} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$638.5^{+6.7}_{-6.7} \quad (-1.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.028}_{-0.025} \quad (+0.1\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1418^{+0.0016}_{-0.0017} \quad (-0.8\sigma)$	$H(0.38)$	$83.21^{+0.52}_{-0.50} \quad (+1.2\sigma)$
n_{s}	$0.9681^{+0.0072}_{-0.0073} \quad (+1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09633^{+0.00057}_{-0.00058} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+14}_{-14} \quad (-1.2\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	σ_8	$0.807^{+0.012}_{-0.011} \quad (-0.5\sigma)$	$H(0.51)$	$89.89^{+0.43}_{-0.41} \quad (+1.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	S_8	$0.817^{+0.021}_{-0.021} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1975^{+16}_{-16} \quad (-1.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.011}_{-0.012} \quad (-0.9\sigma)$	$H(0.61)$	$95.48^{+0.36}_{-0.34} \quad (+1.4\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.9} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.012}_{-0.011} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+17}_{-17} \quad (-1.2\sigma)$
A_{100}^{PS}	$258^{+60}_{-60} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.017}_{-0.016} \quad (-0.9\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.1} \quad (-0.7\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	$r_{\mathrm{drag}}h$	$100.1^{+1.4}_{-1.3} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+16}_{-17} \quad (-1.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.042}_{-0.040} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.011}_{-0.011} \quad (-0.9\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	z_{re}	$< 8.89 \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A^{kSZ}	$< 8.04 \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.059}_{-0.053} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.4715^{+0.0093}_{-0.0092} \quad (-0.9\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.5} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.6618^{+0.0096}_{-0.0088} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.4}_{-3.6} \quad (+0.1\sigma)$	D_{40}	$1225^{+23}_{-22} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.4706^{+0.0085}_{-0.0083} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.3}_{-6.5} \quad (+0.1\sigma)$	D_{220}	$5739^{+76}_{-72} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.6195^{+0.0089}_{-0.0082} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2538^{+26}_{-25} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4659^{+0.0081}_{-0.0076} \quad (-0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.075}_{-0.076}$	D_{1420}	$817.9^{+9.5}_{-8.9} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5896^{+0.0085}_{-0.0078} \quad (-0.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.060}_{-0.059}$	D_{2000}	$231.2^{+3.2}_{-3.0} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0043}_{-0.0039} \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	$n_{\mathrm{s},0.002}$	$0.9681^{+0.0072}_{-0.0073} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0045}_{-0.0041} \quad (+0.4\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	Y_{P}	$0.245427^{+0.000095}_{-0.00010} \quad (+1.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246754^{+0.000096}_{-0.00010} \quad (+1.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.52}_{-0.52}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.570^{+0.047}_{-0.046} \quad (-1.5\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.4} \quad (-0.7\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.779^{+0.037}_{-0.039} \quad (-1.4\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_*	$1089.70^{+0.40}_{-0.40} \quad (-1.5\sigma)$	χ_{lowl}^2	$22.88 \quad (\nu: 0.3) \quad (-0.8\sigma)$
m_{DES}^1	$0.014^{+0.044}_{-0.045}$	r_*	$144.70^{+0.44}_{-0.42} \quad (+0.5\sigma)$	χ_{plik}^2	$2360.8 \quad (\nu: 17.1) \quad (+291.6\sigma)$
m_{DES}^2	$0.012^{+0.045}_{-0.043}$	$100\theta_*$	$1.04125^{+0.00056}_{-0.00055} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.027 \quad (\nu: 0.0)$
m_{DES}^3	$-0.007^{+0.038}_{-0.039}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.042}_{-0.040} \quad (+0.4\sigma)$	χ_{MGS}^2	$1.51 \quad (\nu: 0.1)$
m_{DES}^4	$0.011^{+0.040}_{-0.042}$	z_{drag}	$1060.04^{+0.58}_{-0.57} \quad (+1.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.15 \quad (\nu: 0.4)$
$A_{\mathrm{IA,DES}}$	$1.22^{+0.96}_{-0.92}$	r_{drag}	$147.34^{+0.46}_{-0.43} \quad (+0.3\sigma)$	χ_{DES}^2	$231.9 \quad (\nu: 2.9)$
$\alpha_{\mathrm{IA,DES}}$	> -2.15	k_{D}	$0.14067^{+0.00054}_{-0.00056} \quad (+0.2\sigma)$	χ_{prior}^2	$19.4 \quad (\nu: 18.0) \quad (+3.3\sigma)$
$\Delta z_{\mathrm{s,DES}}^1$	$0.004^{+0.029}_{-0.028}$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00033}_{-0.00032} \quad (-1.4\sigma)$	χ_{BAO}^2	$5.69 \quad (\nu: 0.2)$
$\Delta z_{\mathrm{s,DES}}^2$	$-0.021^{+0.023}_{-0.023}$	z_{eq}	$3374^{+39}_{-41} \quad (-0.8\sigma)$	χ_{CMB}^2	$2780.5 \quad (\nu: 16.5) \quad (+289.2\sigma)$
$\Delta z_{\mathrm{s,DES}}^3$	$0.005^{+0.020}_{-0.021}$	k_{eq}	$0.01030^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$		

$\chi_{\mathrm{eff}}^2 = 3037.53$; $R - 1 = 0.01574$

2.270 base_plikHM_TTTEEE_lowl_lowE_DESlens_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02244^{+0.00027}_{-0.00027}$ (+1.5 σ)	$\Delta z_{\mathrm{s,DES}}^3$	$0.004^{+0.020}_{-0.020}$	z_{eq}	3382^{+45}_{-46} (−0.6 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0020}_{-0.0020}$ (−0.7 σ)	$\Delta z_{\mathrm{s,DES}}^4$	$-0.023^{+0.039}_{-0.039}$	k_{eq}	$0.01032^{+0.00014}_{-0.00014}$ (−0.6 σ)
$100\theta_{\mathrm{MC}}$	$1.04103^{+0.00059}_{-0.00059}$ (+0.6 σ)	H_0	$67.77^{+0.94}_{-0.88}$ (+1.0 σ)	$100\theta_{\mathrm{eq}}$	$0.8173^{+0.0087}_{-0.0084}$ (+0.7 σ)
τ	$0.055^{+0.013}_{-0.012}$ (+0.4 σ)	Ω_{Λ}	$0.690^{+0.012}_{-0.012}$ (+0.9 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4514^{+0.0045}_{-0.0043}$ (+0.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.027}_{-0.024}$ (+0.3 σ)	Ω_{m}	$0.310^{+0.012}_{-0.012}$ (−0.9 σ)	$H(0.15)$	$73.04^{+0.81}_{-0.76}$ (+1.0 σ)
n_{s}	$0.9671^{+0.0078}_{-0.0074}$ (+0.8 σ)	$\Omega_{\mathrm{m}}h^2$	$0.1422^{+0.0019}_{-0.0019}$ (−0.6 σ)	$D_{\mathrm{M}}(0.15)$	$639.8^{+7.6}_{-7.9}$ (−1.0 σ)
y_{cal}	$1.0006^{+0.0049}_{-0.0049}$ (+0.1 σ)	$\Omega_{\mathrm{m}}h^3$	$0.09634^{+0.00057}_{-0.00058}$ (+1.0 σ)	$H(0.38)$	$83.12^{+0.60}_{-0.55}$ (+1.1 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	σ_8	$0.809^{+0.011}_{-0.010}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1526^{+15}_{-16} (−1.0 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	S_8	$0.821^{+0.021}_{-0.021}$ (−0.8 σ)	$H(0.51)$	$89.82^{+0.49}_{-0.45}$ (+1.1 σ)
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.9}$ (+0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.011}$ (−0.8 σ)	$D_{\mathrm{M}}(0.51)$	1978^{+18}_{-19} (−1.0 σ)
A_{100}^{PS}	259^{+50}_{-60} (−0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011}$ (−0.7 σ)	$H(0.61)$	$95.43^{+0.41}_{-0.37}$ (+1.2 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.5 σ)	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.015}$ (−0.7 σ)	$D_{\mathrm{M}}(0.61)$	2302^{+19}_{-20} (−1.0 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.2 σ)	$r_{\mathrm{drag}}h$	$99.8^{+1.6}_{-1.5}$ (+0.8 σ)	$H(2.33)$	$236.0^{+1.2}_{-1.2}$ (−0.5 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.0 σ)	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.038}_{-0.037}$ (−0.6 σ)	$D_{\mathrm{M}}(2.33)$	5757^{+18}_{-19} (−1.3 σ)
A^{kSZ}	< 8.06 (−0.1 σ)	z_{re}	< 8.92 (+0.3 σ)	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011}$ (−0.7 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	$10^9 A_{\mathrm{s}}$	$2.100^{+0.056}_{-0.051}$ (+0.2 σ)	$\sigma_8(0.15)$	$0.7474^{+0.0098}_{-0.0093}$ (−0.2 σ)
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.021}_{-0.020}$ (−0.3 σ)	$f\sigma_8(0.38)$	$0.4733^{+0.0087}_{-0.0087}$ (−0.7 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	D_{40}	1228^{+22}_{-22} (−0.4 σ)	$\sigma_8(0.38)$	$0.6627^{+0.0087}_{-0.0081}$ (−0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10} (+0.0 σ)	D_{220}	5741^{+75}_{-74} (+0.7 σ)	$f\sigma_8(0.51)$	$0.4722^{+0.0078}_{-0.0078}$ (−0.6 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.075}_{-0.076}$	D_{810}	2539^{+26}_{-25} (+0.2 σ)	$\sigma_8(0.51)$	$0.6203^{+0.0082}_{-0.0076}$ (+0.0 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.060}_{-0.059}$	D_{1420}	$817.9^{+9.7}_{-9.2}$ (+0.7 σ)	$f\sigma_8(0.61)$	$0.4674^{+0.0072}_{-0.0071}$ (−0.6 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	D_{2000}	$231.1^{+3.2}_{-3.0}$ (+0.9 σ)	$\sigma_8(0.61)$	$0.5903^{+0.0079}_{-0.0072}$ (+0.1 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$n_{\mathrm{s},0.002}$	$0.9671^{+0.0078}_{-0.0074}$ (+0.8 σ)	$f\sigma_8(2.33)$	$0.2977^{+0.0041}_{-0.0037}$ (+0.3 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	Y_{P}	$0.24542^{+0.00010}_{-0.00011}$ (+1.4 σ)	$\sigma_8(2.33)$	$0.3070^{+0.0044}_{-0.0040}$ (+0.4 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.52}_{-0.52}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00010}_{-0.00011}$ (+1.4 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.6 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0013}$ (+0.1 σ)	$10^5 \mathrm{D}/\mathrm{H}$	$2.573^{+0.050}_{-0.048}$ (−1.4 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.8 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	Age/Gyr	$13.783^{+0.041}_{-0.042}$ (−1.3 σ)	f_{2000}^{217}	$106.9^{+3.4}_{-3.4}$ (−0.7 σ)
m_{DES}^1	$0.014^{+0.044}_{-0.046}$	z_*	$1089.75^{+0.44}_{-0.44}$ (−1.3 σ)	$\chi_{\mathrm{lensing}}^2$	9.12 (ν : 0.2)
m_{DES}^2	$0.012^{+0.043}_{-0.043}$	r_*	$144.62^{+0.47}_{-0.45}$ (+0.3 σ)	χ_{small}^2	396.9 (ν : 1.5) (−0.0 σ)
m_{DES}^3	$-0.009^{+0.038}_{-0.039}$	$100\theta_*$	$1.04120^{+0.00058}_{-0.00058}$ (+0.5 σ)	χ_{lowl}^2	23.12 (ν : 0.3) (−0.6 σ)
m_{DES}^4	$0.010^{+0.041}_{-0.042}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.890^{+0.045}_{-0.042}$ (+0.3 σ)	χ_{plik}^2	2360.0 (ν : 16.1) (+291.5 σ)
$A_{\mathrm{IA,DES}}$	$1.26^{+0.95}_{-0.93}$	z_{drag}	$1060.03^{+0.55}_{-0.55}$ (+1.4 σ)	χ_{DES}^2	232.1 (ν : 3.2)
$\alpha_{\mathrm{IA,DES}}$	> -2.10	r_{drag}	$147.26^{+0.49}_{-0.46}$ (+0.1 σ)	χ_{prior}^2	19.6 (ν : 18.4) (+3.4 σ)
$\Delta z_{\mathrm{s,DES}}^1$	$0.005^{+0.029}_{-0.028}$	k_{D}	$0.14074^{+0.00054}_{-0.00056}$ (+0.4 σ)	χ_{CMB}^2	2789.2 (ν : 16.7) (+290.8 σ)
$\Delta z_{\mathrm{s,DES}}^2$	$-0.021^{+0.023}_{-0.023}$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00033}_{-0.00032}$ (−1.4 σ)		

$\bar{\chi}_{\mathrm{eff}}^2 = 3040.94$; $R - 1 = 0.01565$

2.271 base_plikHM_TTTEEE_lowl_lowE_DESlens_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02246^{+0.00026}_{-0.00025} \quad (+1.5\sigma)$	$\Delta z_{\mathrm{s,DES}}^4$	$-0.022^{+0.038}_{-0.040}$	$100\theta_{\mathrm{eq}}$	$0.8184^{+0.0073}_{-0.0070} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1188^{+0.0016}_{-0.0017} \quad (-0.9\sigma)$	H_0	$67.89^{+0.77}_{-0.76} \quad (+1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4520^{+0.0037}_{-0.0036} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00057}_{-0.00056} \quad (+0.6\sigma)$	Ω_{Λ}	$0.692^{+0.010}_{-0.010} \quad (+1.0\sigma)$	$H(0.15)$	$73.14^{+0.67}_{-0.65} \quad (+1.1\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	Ω_{m}	$0.308^{+0.010}_{-0.010} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$638.8^{+6.5}_{-6.5} \quad (-1.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.027}_{-0.025} \quad (+0.3\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1419^{+0.0016}_{-0.0016} \quad (-0.7\sigma)$	$H(0.38)$	$83.19^{+0.50}_{-0.48} \quad (+1.2\sigma)$
n_{s}	$0.9677^{+0.0072}_{-0.0073} \quad (+0.9\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09635^{+0.00057}_{-0.00058} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+13}_{-13} \quad (-1.1\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	σ_8	$0.808^{+0.011}_{-0.010} \quad (-0.4\sigma)$	$H(0.51)$	$89.88^{+0.41}_{-0.40} \quad (+1.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	S_8	$0.819^{+0.018}_{-0.018} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1975^{+15}_{-16} \quad (-1.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.010}_{-0.0099} \quad (-0.9\sigma)$	$H(0.61)$	$95.47^{+0.35}_{-0.33} \quad (+1.3\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.9} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.6022^{+0.0098}_{-0.0098} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+17}_{-17} \quad (-1.2\sigma)$
A_{100}^{PS}	$259^{+60}_{-60} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$H(2.33)$	$235.9^{+1.0}_{-1.0} \quad (-0.7\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	$r_{\mathrm{drag}}h$	$100.0^{+1.3}_{-1.3} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+16}_{-17} \quad (-1.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.036}_{-0.036} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.4534^{+0.0094}_{-0.0093} \quad (-0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.7473^{+0.0099}_{-0.0094} \quad (-0.3\sigma)$
A^{kSZ}	$< 8.04 \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.056}_{-0.052} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4725^{+0.0079}_{-0.0079} \quad (-0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.021}_{-0.019} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.6628^{+0.0088}_{-0.0083} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	D_{40}	$1227^{+22}_{-22} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.4715^{+0.0072}_{-0.0072} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.3}_{-6.5} \quad (+0.1\sigma)$	D_{220}	$5743^{+75}_{-73} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6204^{+0.0083}_{-0.0078} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2539^{+26}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.4669^{+0.0069}_{-0.0067} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.075}_{-0.076}$	D_{1420}	$818.2^{+9.6}_{-9.0} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0080}_{-0.0074} \quad (+0.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.060}_{-0.059}$	D_{2000}	$231.2^{+3.1}_{-3.0} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0041}_{-0.0038} \quad (+0.3\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	$n_{\mathrm{s},0.002}$	$0.9677^{+0.0072}_{-0.0073} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0044}_{-0.0041} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	Y_{P}	$0.245427^{+0.000094}_{-0.00010} \quad (+1.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246754^{+0.000095}_{-0.00010} \quad (+1.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.52}_{-0.51}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.570^{+0.047}_{-0.046} \quad (-1.5\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.4} \quad (-0.7\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0013} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.779^{+0.037}_{-0.038} \quad (-1.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.13 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_*	$1089.71^{+0.40}_{-0.40} \quad (-1.5\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
m_{DES}^1	$0.014^{+0.044}_{-0.046}$	r_*	$144.67^{+0.41}_{-0.40} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.01 \quad (\nu: 0.3) \quad (-0.7\sigma)$
m_{DES}^2	$0.012^{+0.044}_{-0.043}$	$100\theta_*$	$1.04124^{+0.00056}_{-0.00056} \quad (+0.6\sigma)$	χ_{plik}^2	$2360.2 \quad (\nu: 16.2) \quad (+291.5\sigma)$
m_{DES}^3	$-0.008^{+0.038}_{-0.039}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.894^{+0.040}_{-0.038} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.028 \quad (\nu: 0.0)$
m_{DES}^4	$0.011^{+0.040}_{-0.042}$	z_{drag}	$1060.05^{+0.57}_{-0.54} \quad (+1.4\sigma)$	χ_{MGS}^2	$1.46 \quad (\nu: 0.1)$
$A_{\mathrm{IA,DES}}$	$1.24^{+0.94}_{-0.92}$	r_{drag}	$147.31^{+0.44}_{-0.42} \quad (+0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.21 \quad (\nu: 0.4)$
$\alpha_{\mathrm{IA,DES}}$	> -2.12	k_{D}	$0.14071^{+0.00052}_{-0.00054} \quad (+0.3\sigma)$	χ_{DES}^2	$231.9 \quad (\nu: 3.0)$
$\Delta z_{\mathrm{s,DES}}^1$	$0.005^{+0.029}_{-0.028}$	$100\theta_{\mathrm{D}}$	$0.16070^{+0.00033}_{-0.00032} \quad (-1.4\sigma)$	χ_{prior}^2	$19.5 \quad (\nu: 18.1) \quad (+3.3\sigma)$
$\Delta z_{\mathrm{s,DES}}^2$	$-0.021^{+0.023}_{-0.023}$	z_{eq}	$3376^{+37}_{-38} \quad (-0.7\sigma)$	χ_{CMB}^2	$2789.4 \quad (\nu: 16.8) \quad (+290.8\sigma)$
$\Delta z_{\mathrm{s,DES}}^3$	$0.005^{+0.020}_{-0.021}$	k_{eq}	$0.01030^{+0.00011}_{-0.00012} \quad (-0.7\sigma)$	χ_{BAO}^2	$5.71 \quad (\nu: 0.2)$

$\bar{\chi}_{\mathrm{eff}}^2 = 3046.49$; $R - 1 = 0.01631$

2.272 base_BAO_Cooke17

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02210	$0.0222^{+0.0010}_{-0.00095}$ (+0.6 σ)	r_*	137.0	130^{+20}_{-20} (−30.6 σ)	$D_{\mathrm{M}}(0.38)$	1447	1378^{+200}_{-200} (−10.4 σ)
$\Omega_{\mathrm{c}}h^2$	0.153	$0.194^{+0.096}_{-0.084}$ (+34.9 σ)	$100\theta_*$	1.081	$1.112^{+0.068}_{-0.075}$ (+154.9 σ)	$H(0.51)$	96.4	103^{+20}_{-10} (+31.7 σ)
$100\theta_{\mathrm{MC}}$	1.081	$1.112^{+0.068}_{-0.075}$ (+152.3 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	12.67	$11.7^{+2.2}_{-2.1}$ (−49.1 σ)	$D_{\mathrm{M}}(0.51)$	1869	1774^{+200}_{-200} (−12.0 σ)
H_0	70.7	$73.7^{+7.0}_{-6.5}$ (+7.4 σ)	z_{drag}	1061.5	$1064.2^{+6.1}_{-5.6}$ (+10.5 σ)	$H(0.61)$	102.8	111^{+20}_{-20} (+44.3 σ)
Ω_{Λ}	0.649	$0.607^{+0.093}_{-0.10}$ (−5.5 σ)	r_{drag}	139.5	132^{+20}_{-20} (−31.3 σ)	$D_{\mathrm{M}}(0.61)$	2171	2057^{+300}_{-300} (−13.4 σ)
Ω_{m}	0.351	$0.393^{+0.10}_{-0.093}$ (+5.5 σ)	k_{D}	0.1489	$0.158^{+0.022}_{-0.019}$ (+33.9 σ)	$H(2.33)$	261	287^{+60}_{-50} (+39.6 σ)
$\Omega_{\mathrm{m}}h^2$	0.175	$0.217^{+0.096}_{-0.084}$ (+36.8 σ)	$100\theta_{\mathrm{D}}$	0.1665	$0.171^{+0.010}_{-0.010}$ (+36.2 σ)	$D_{\mathrm{M}}(2.33)$	5329	4980^{+800}_{-800} (−49.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.124	$0.161^{+0.088}_{-0.074}$ (+143.0 σ)	z_{eq}	4177	5159^{+2000}_{-2000} (+36.8 σ)	$\chi^2_{\mathrm{Cooke17}}$	0.05	1.0 (ν : 1.0)
$r_{\mathrm{drag}}h$	98.64	$97.2^{+4.1}_{-3.9}$ (−0.8 σ)	k_{eq}	0.0127	$0.0157^{+0.0070}_{-0.0061}$ (+36.8 σ)	$\chi^2_{6\mathrm{DF}}$	0.09	0.42 (ν : 0.1)
Y_{P}	0.245282	$0.24533^{+0.00044}_{-0.00042}$ (+0.5 σ)	$100\theta_{\mathrm{eq}}$	0.726	$0.66^{+0.16}_{-0.15}$ (−17.2 σ)	χ^2_{MGS}	0.98	0.70 (ν : 0.2)
$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246608	$0.24666^{+0.00044}_{-0.00042}$ (+0.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.404	$0.369^{+0.085}_{-0.080}$ (−17.5 σ)	$\chi^2_{\mathrm{DR12BAO}}$	2.18	3.8 (ν : 1.5)
$10^5\mathrm{D}/\mathrm{H}$	2.638	$2.61^{+0.19}_{-0.18}$ (−0.5 σ)	$H(0.15)$	76.9	81^{+9}_{-9} (+11.1 σ)	χ^2_{BAO}	3.26	5.0 (ν : 1.8)
Age/Gyr	12.75	$11.9^{+2.0}_{-1.8}$ (−52.4 σ)	$D_{\mathrm{M}}(0.15)$	611	584^{+58}_{-60} (−8.0 σ)			
z_*	1093.0	$1095.7^{+6.7}_{-6.3}$ (+13.2 σ)	$H(0.38)$	88.6	94^{+10}_{-10} (+21.2 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 3.30$; $\bar{\chi}^2_{\mathrm{eff}} = 5.96$; $R - 1 = 0.00985$

χ^2_{eff} : Abund - D.Cooke2017: 0.04 BAO - 6DF: 0.09 MGS: 0.98 DR12BAO: 2.18

2.273 base_BAO_Cooke17_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02222	$0.02223^{+0.00098}_{-0.00097}$ (+0.5 σ)	r_*	143.3	$143.0^{+7.6}_{-7.3}$ (−3.0 σ)	$D_{\mathrm{M}}(0.38)$	1504	1501^{+82}_{-79} (−2.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.1250	$0.127^{+0.031}_{-0.028}$ (+2.9 σ)	$100\theta_*$	1.0507	$1.052^{+0.036}_{-0.039}$ (+23.4 σ)	$H(0.51)$	91.3	$91.6^{+6.3}_{-6.0}$ (+5.2 σ)
$100\theta_{\mathrm{MC}}$	1.0505	$1.052^{+0.036}_{-0.039}$ (+23.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.64	$13.6^{+1.2}_{-1.2}$ (−6.1 σ)	$D_{\mathrm{M}}(0.51)$	1948	1944^{+110}_{-110} (−2.8 σ)
H_0	68.74	$68.9^{+3.3}_{-3.1}$ (+2.2 σ)	z_{drag}	1059.93	$1060.0^{+3.2}_{-3.1}$ (+1.4 σ)	$H(0.61)$	97.1	$97.4^{+7.1}_{-6.7}$ (+6.7 σ)
Ω_{Λ}	0.6870	$0.686^{+0.038}_{-0.038}$ (+0.5 σ)	r_{drag}	146.0	$145.7^{+7.9}_{-7.5}$ (−3.2 σ)	$D_{\mathrm{M}}(0.61)$	2266	2262^{+130}_{-130} (−3.0 σ)
Ω_{m}	0.3130	$0.314^{+0.038}_{-0.038}$ (−0.5 σ)	k_{D}	0.1420	$0.1423^{+0.0086}_{-0.0084}$ (+3.4 σ)	$H(2.33)$	240.6	242^{+23}_{-22} (+3.9 σ)
$\Omega_{\mathrm{m}}h^2$	0.1479	$0.150^{+0.031}_{-0.028}$ (+3.1 σ)	$100\theta_{\mathrm{D}}$	0.1623	$0.1625^{+0.0049}_{-0.0051}$ (+5.2 σ)	$D_{\mathrm{M}}(2.33)$	5659	5648^{+430}_{-400} (−8.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.1016	$0.103^{+0.027}_{-0.023}$ (+16.1 σ)	z_{eq}	3518	3559^{+700}_{-700} (+3.1 σ)	$\chi^2_{\mathrm{Cooke17}}$	0.00	1.0 (ν : 1.0)
$r_{\mathrm{drag}}h$	100.33	$100.3^{+2.3}_{-2.2}$ (+1.1 σ)	k_{eq}	0.01074	$0.0109^{+0.0022}_{-0.0021}$ (+3.1 σ)	χ^2_{JLA}	1035.14	1036.0 (ν : 1.1)
Y_{P}	0.245335	$0.24532^{+0.00042}_{-0.00043}$ (+0.4 σ)	$100\theta_{\mathrm{eq}}$	0.800	$0.799^{+0.090}_{-0.088}$ (−1.4 σ)	$\chi^2_{6\mathrm{DF}}$	0.000	0.051 (ν : 0.0)
$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246661	$0.24665^{+0.00043}_{-0.00043}$ (+0.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.4428	$0.442^{+0.046}_{-0.045}$ (−1.4 σ)	χ^2_{MGS}	1.68	1.75 (ν : 0.2)
$10^5\mathrm{D}/\mathrm{H}$	2.614	$2.62^{+0.19}_{-0.18}$ (−0.4 σ)	$H(0.15)$	74.13	$74.3^{+4.0}_{-3.8}$ (+2.6 σ)	$\chi^2_{\mathrm{DR12BAO}}$	2.95	4.0 (ν : 1.2)
Age/Gyr	13.55	$13.5^{+1.0}_{-0.97}$ (−8.4 σ)	$D_{\mathrm{M}}(0.15)$	630.6	630^{+31}_{-31} (−2.3 σ)	χ^2_{BAO}	4.63	5.8 (ν : 1.6)
z_*	1090.55	$1090.7^{+2.7}_{-2.6}$ (+0.9 σ)	$H(0.38)$	84.5	$84.7^{+5.4}_{-5.1}$ (+3.9 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 1039.76$; $\bar{\chi}^2_{\mathrm{eff}} = 1042.72$; $R - 1 = 0.00647$

χ^2_{eff} : Abund - D.Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 2.95 SN - JLA Pantheon18: 1035.14

2.274 base_BAO_Cooke17_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathbf{b}}h^2$	0.02217	$0.0223^{+0.0010}_{-0.00095}$ (+0.7 σ)	z_*	1091.08	$1091.4^{+3.7}_{-3.3}$ (+2.6 σ)	$D_{\text{M}}(0.38)$	1493	1481^{+94}_{-98} (−3.9 σ)
$\Omega_{\mathbf{c}}h^2$	0.1306	$0.136^{+0.042}_{-0.038}$ (+7.4 σ)	r_*	141.9	$140.8^{+9.4}_{-9.8}$ (−7.6 σ)	$H(0.51)$	92.3	$93.4^{+8.1}_{-7.6}$ (+9.2 σ)
$100\theta_{\text{MC}}$	1.0571	$1.062^{+0.046}_{-0.047}$ (+44.8 σ)	$100\theta_*$	1.0573	$1.062^{+0.046}_{-0.047}$ (+45.5 σ)	$D_{\text{M}}(0.51)$	1932	1916^{+130}_{-130} (−4.4 σ)
α_{JLA}	0.1411	$0.141^{+0.013}_{-0.013}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.43	$13.3^{+1.5}_{-1.4}$ (−13.5 σ)	$H(0.61)$	98.2	$99.4^{+9.1}_{-8.6}$ (+12.4 σ)
β_{JLA}	3.096	$3.10^{+0.16}_{-0.16}$	z_{drag}	1060.24	$1060.8^{+3.7}_{-3.7}$ (+3.0 σ)	$D_{\text{M}}(0.61)$	2247	2228^{+160}_{-160} (−4.7 σ)
H_0	69.08	$69.6^{+3.8}_{-3.7}$ (+3.0 σ)	r_{drag}	144.6	$143.5^{+9.8}_{-10}$ (−7.8 σ)	$H(2.33)$	244.8	249^{+30}_{-30} (+9.3 σ)
Ω_{Λ}	0.679	$0.673^{+0.050}_{-0.055}$ (−0.4 σ)	k_{D}	0.1434	$0.145^{+0.011}_{-0.010}$ (+8.2 σ)	$D_{\text{M}}(2.33)$	5590	5535^{+510}_{-510} (−14.9 σ)
Ω_{m}	0.321	$0.327^{+0.055}_{-0.050}$ (+0.4 σ)	$100\theta_{\text{D}}$	0.1632	$0.1638^{+0.0063}_{-0.0062}$ (+10.0 σ)	χ^2_{Cooke17}	0.00	1.0 (ν : 1.0)
$\Omega_{\text{m}}h^2$	0.1534	$0.159^{+0.042}_{-0.038}$ (+7.8 σ)	z_{eq}	3650	3784^{+1000}_{-900} (+7.8 σ)	χ^2_{JLA}	695.68	698.5 (ν : 3.6)
$\Omega_{\text{m}}h^3$	0.1060	$0.111^{+0.035}_{-0.032}$ (+33.2 σ)	k_{eq}	0.01114	$0.0115^{+0.0031}_{-0.0028}$ (+7.8 σ)	$\chi^2_{6\text{DF}}$	0.008	0.08 (ν : 0.0)
$r_{\text{drag}}h$	99.89	$99.8^{+2.7}_{-2.6}$ (+0.8 σ)	$100\theta_{\text{eq}}$	0.783	$0.77^{+0.12}_{-0.11}$ (−4.2 σ)	χ^2_{MGS}	1.47	1.54 (ν : 0.3)
Y_{P}	0.245314	$0.24534^{+0.00043}_{-0.00042}$ (+0.6 σ)	$100\theta_{\text{s,eq}}$	0.434	$0.429^{+0.061}_{-0.056}$ (−4.2 σ)	χ^2_{DR12BAO}	2.73	3.7 (ν : 1.1)
$Y_{\text{P}}^{\text{BBN}}$	0.246640	$0.24667^{+0.00044}_{-0.00042}$ (+0.6 σ)	$H(0.15)$	74.64	$75.3^{+4.9}_{-4.6}$ (+3.9 σ)	χ^2_{BAO}	4.21	5.3 (ν : 1.6)
$10^5\text{D}/\text{H}$	2.623	$2.61^{+0.19}_{-0.18}$ (−0.6 σ)	$D_{\text{M}}(0.15)$	626.9	622^{+36}_{-37} (−3.2 σ)			
Age/Gyr	13.38	$13.2^{+1.2}_{-1.2}$ (−15.9 σ)	$H(0.38)$	85.3	$86.2^{+6.8}_{-6.5}$ (+6.5 σ)			

Best-fit $\chi^2_{\text{eff}} = 699.89$; $\bar{\chi}^2_{\text{eff}} = 704.85$; $R - 1 = 0.01324$

χ^2_{eff} : Abund - D.Cooke2017: 0.00 BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 2.73 SN - JLA December_2013: 695.68

2.275 base_BAO_Cooke17_Pantheon18_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathbf{b}}h^2$	0.02219	$0.0222^{+0.0010}_{-0.00093}$ (+0.5 σ)	r_*	145.15	$145.1^{+1.2}_{-1.2}$ (+1.4 σ)	$D_{\text{M}}(0.38)$	1523.6	1523^{+22}_{-21} (−1.2 σ)
$\Omega_{\mathbf{c}}h^2$	0.11776	$0.1178^{+0.0033}_{-0.0032}$ (−1.3 σ)	$100\theta_*$	1.04111	$1.0411^{+0.0012}_{-0.0012}$ (+0.3 σ)	$H(0.51)$	89.78	$89.80^{+0.82}_{-0.76}$ (+1.1 σ)
$100\theta_{\text{MC}}$	1.04091	$1.0409^{+0.0012}_{-0.0012}$ (+0.3 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.942	$13.94^{+0.12}_{-0.12}$ (+1.4 σ)	$D_{\text{M}}(0.51)$	1974.9	1975^{+26}_{-25} (−1.2 σ)
H_0	68.00	$68.0^{+1.2}_{-1.3}$ (+1.2 σ)	z_{drag}	1059.36	$1059.4^{+2.5}_{-2.2}$ (+0.1 σ)	$H(0.61)$	95.33	$95.35^{+0.81}_{-0.72}$ (+1.0 σ)
Ω_{Λ}	0.6959	$0.696^{+0.016}_{-0.017}$ (+1.3 σ)	r_{drag}	147.89	$147.8^{+1.5}_{-1.5}$ (+1.3 σ)	$D_{\text{M}}(0.61)$	2299.0	2299^{+28}_{-28} (−1.2 σ)
Ω_{m}	0.3041	$0.304^{+0.017}_{-0.016}$ (−1.3 σ)	k_{D}	0.13989	$0.1400^{+0.0023}_{-0.0022}$ (−1.1 σ)	$H(2.33)$	234.90	$235.0^{+2.5}_{-2.5}$ (−1.4 σ)
$\Omega_{\text{m}}h^2$	0.14059	$0.1407^{+0.0036}_{-0.0035}$ (−1.4 σ)	$100\theta_{\text{D}}$	0.16108	$0.1611^{+0.0014}_{-0.0014}$ (−0.1 σ)	$D_{\text{M}}(2.33)$	5766.1	5765^{+41}_{-45} (−0.8 σ)
$\Omega_{\text{m}}h^3$	0.09560	$0.0957^{+0.0022}_{-0.0020}$ (−0.5 σ)	z_{eq}	3344	3347^{+85}_{-84} (−1.4 σ)	χ^2_{Cooke17}	0.00	0.99 (ν : 0.9)
$r_{\text{drag}}h$	100.56	$100.5^{+2.2}_{-2.2}$ (+1.3 σ)	k_{eq}	0.010207	$0.01021^{+0.00026}_{-0.00026}$ (−1.4 σ)	χ^2_{JLA}	1034.789	1034.94 (ν : 0.0)
Y_{P}	0.245322	$0.24532^{+0.00045}_{-0.00041}$ (+0.4 σ)	$100\theta_{\text{eq}}$	0.8233	$0.823^{+0.015}_{-0.014}$ (+1.4 σ)	$\chi^2_{6\text{DF}}$	0.000	0.051 (ν : 0.0)
$Y_{\text{P}}^{\text{BBN}}$	0.246648	$0.24665^{+0.00045}_{-0.00041}$ (+0.4 σ)	$100\theta_{\text{s,eq}}$	0.4547	$0.4546^{+0.0077}_{-0.0077}$ (+1.4 σ)	χ^2_{MGS}	1.75	1.81 (ν : 0.2)
$10^5\text{D}/\text{H}$	2.620	$2.62^{+0.18}_{-0.19}$ (−0.4 σ)	$H(0.15)$	73.19	$73.2^{+1.1}_{-1.1}$ (+1.2 σ)	χ^2_{DR12BAO}	3.42	4.2 (ν : 0.8)
Age/Gyr	13.806	$13.803^{+0.096}_{-0.11}$ (−0.7 σ)	$D_{\text{M}}(0.15)$	638.1	638^{+11}_{-10} (−1.2 σ)	χ^2_{prior}	0.00	1.1 (ν : 1.3) (−1.7 σ)
z_*	1089.95	$1089.9^{+1.2}_{-1.2}$ (−0.9 σ)	$H(0.38)$	83.15	$83.16^{+0.89}_{-0.85}$ (+1.1 σ)	χ^2_{BAO}	5.17	6.1 (ν : 0.8)

Best-fit $\chi^2_{\text{eff}} = 1039.96$; $\bar{\chi}^2_{\text{eff}} = 1043.12$; $R - 1 = 0.00669$

χ^2_{eff} : Abund - D.Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.42 SN - JLA Pantheon18: 1034.79

2.276 base_BAO_Cooke17_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.02216	$0.0222^{+0.0010}_{-0.00098}$ (+0.6 σ)	r_*	145.14	$145.0^{+1.2}_{-1.2}$ (+1.2 σ)	$D_{\text{M}}(0.38)$	1525.0	1524^{+24}_{-23} (−1.1 σ)
$\Omega_{\text{c}}h^2$	0.11790	$0.1180^{+0.0034}_{-0.0033}$ (−1.2 σ)	$100\theta_*$	1.04110	$1.0411^{+0.0011}_{-0.0011}$ (+0.3 σ)	$H(0.51)$	89.73	$89.79^{+0.85}_{-0.81}$ (+1.1 σ)
$100\theta_{\text{MC}}$	1.04088	$1.0409^{+0.0011}_{-0.0011}$ (+0.3 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.941	$13.93^{+0.12}_{-0.12}$ (+1.2 σ)	$D_{\text{M}}(0.51)$	1976.5	1976^{+28}_{-27} (−1.1 σ)
H_0	67.92	$67.9^{+1.3}_{-1.4}$ (+1.2 σ)	z_{drag}	1059.32	$1059.5^{+2.4}_{-2.2}$ (+0.2 σ)	$H(0.61)$	95.29	$95.35^{+0.81}_{-0.76}$ (+1.0 σ)
Ω_{Λ}	0.6950	$0.695^{+0.017}_{-0.018}$ (+1.2 σ)	r_{drag}	147.88	$147.8^{+1.5}_{-1.5}$ (+1.2 σ)	$D_{\text{M}}(0.61)$	2300.8	2300^{+31}_{-30} (−1.1 σ)
Ω_{m}	0.3050	$0.305^{+0.018}_{-0.017}$ (−1.2 σ)	k_{D}	0.13988	$0.1401^{+0.0023}_{-0.0021}$ (−0.9 σ)	$H(2.33)$	234.96	$235.1^{+2.6}_{-2.5}$ (−1.3 σ)
$\Omega_{\text{m}}h^2$	0.14071	$0.1409^{+0.0037}_{-0.0036}$ (−1.2 σ)	$100\theta_{\text{D}}$	0.16111	$0.1610^{+0.0014}_{-0.0014}$ (−0.2 σ)	$D_{\text{M}}(2.33)$	5767.8	5764^{+42}_{-45} (−0.8 σ)
$\Omega_{\text{m}}h^3$	0.09556	$0.0957^{+0.0022}_{-0.0020}$ (−0.3 σ)	z_{eq}	3347	3352^{+88}_{-85} (−1.2 σ)	χ^2_{Cooke17}	0.01	1.0 (ν : 1.1)
$r_{\text{drag}}h$	100.44	$100.4^{+2.2}_{-2.3}$ (+1.2 σ)	k_{eq}	0.010216	$0.01023^{+0.00027}_{-0.00026}$ (−1.2 σ)	$\chi^2_{6\text{DF}}$	0.000	0.057 (ν : 0.0)
Y_{P}	0.245311	$0.24533^{+0.00042}_{-0.00044}$ (+0.5 σ)	$100\theta_{\text{eq}}$	0.8227	$0.822^{+0.015}_{-0.014}$ (+1.3 σ)	χ^2_{MGS}	1.68	1.74 (ν : 0.2)
$Y_{\text{P}}^{\text{BBN}}$	0.246637	$0.24666^{+0.00042}_{-0.00044}$ (+0.5 σ)	$100\theta_{\text{s,eq}}$	0.4544	$0.4541^{+0.0079}_{-0.0079}$ (+1.3 σ)	χ^2_{DR12BAO}	3.48	4.4 (ν : 1.1)
$10^5\text{D}/\text{H}$	2.625	$2.61^{+0.18}_{-0.19}$ (−0.5 σ)	$H(0.15)$	73.12	$73.2^{+1.2}_{-1.2}$ (+1.2 σ)	χ^2_{prior}	0.00	0.97 (ν : 0.9) (−1.7 σ)
Age/Gyr	13.810	$13.802^{+0.099}_{-0.11}$ (−0.8 σ)	$D_{\text{M}}(0.15)$	638.8	639^{+12}_{-11} (−1.2 σ)	χ^2_{BAO}	5.16	6.2 (ν : 1.0)
z_*	1090.00	$1089.9^{+1.2}_{-1.3}$ (−0.9 σ)	$H(0.38)$	83.10	$83.14^{+0.92}_{-0.92}$ (+1.1 σ)			

Best-fit $\chi^2_{\text{eff}} = 5.17$; $\bar{\chi}^2_{\text{eff}} = 8.20$; $R - 1 = 0.00680$

χ^2_{eff} : Abund - D.Cooke2017: 0.01 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.48

3 Alens

3.1 base_Alens_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02270	$0.02260^{+0.00058}_{-0.00056}$	$\sigma_8 \Omega_m^{0.5}$	0.4291	$0.432^{+0.031}_{-0.031}$	$100\theta_{s,eq}$	0.4579	$0.457^{+0.011}_{-0.011}$
$\Omega_c h^2$	0.11613	$0.1166^{+0.0048}_{-0.0048}$	$\sigma_8 \Omega_m^{0.25}$	0.5840	$0.586^{+0.028}_{-0.029}$	$H(0.15)$	74.25	$74.0^{+2.1}_{-1.9}$
$100\theta_{MC}$	1.04143	$1.0414^{+0.0011}_{-0.0010}$	$\sigma_8/h^{0.5}$	0.9556	$0.958^{+0.039}_{-0.040}$	$D_M(0.15)$	628.1	630^{+19}_{-19}
τ	0.0519	$0.050^{+0.016}_{-0.019}$	$r_{drag}h$	102.21	$101.8^{+4.1}_{-3.8}$	$H(0.38)$	84.01	$83.8^{+1.6}_{-1.4}$
A_L	1.263	$1.24^{+0.19}_{-0.18}$	$\langle d^2 \rangle^{1/2}$	2.656	$2.64^{+0.15}_{-0.15}$	$D_M(0.38)$	1502.8	1507^{+38}_{-39}
$\ln(10^{10} A_s)$	3.0300	$3.027^{+0.034}_{-0.039}$	z_{re}	7.30	$7.1^{+1.7}_{-1.9}$	$H(0.51)$	90.52	$90.4^{+1.3}_{-1.1}$
n_s	0.9769	$0.974^{+0.014}_{-0.014}$	$10^9 A_s$	2.070	$2.064^{+0.070}_{-0.079}$	$D_M(0.51)$	1949.9	1955^{+45}_{-47}
y_{cal}	0.99986	$1.0000^{+0.0049}_{-0.0049}$	$10^9 A_s e^{-2\tau}$	1.8656	$1.867^{+0.028}_{-0.028}$	$H(0.61)$	95.99	$95.9^{+1.1}_{-0.93}$
A_{217}^{CIB}	42.5	45^{+10}_{-10}	D_{40}	1203.3	1209^{+33}_{-33}	$D_M(0.61)$	2271.5	2277^{+49}_{-51}
$\xi^{tSZ \times CIB}$	0.999	—	D_{220}	5737	5736^{+84}_{-80}	$H(2.33)$	234.39	$234.6^{+2.8}_{-2.8}$
A_{143}^{tSZ}	6.83	$5.6^{+3.7}_{-3.7}$	D_{810}	2527.7	2527^{+27}_{-27}	$D_M(2.33)$	5733.4	5739^{+42}_{-46}
A_{100}^{PS}	238	250^{+60}_{-50}	D_{1420}	815.8	$814^{+10}_{-9.8}$	$f\sigma_8(0.15)$	0.4351	$0.437^{+0.029}_{-0.029}$
A_{143}^{PS}	48.5	42^{+20}_{-20}	D_{2000}	233.15	$232.3^{+4.0}_{-3.9}$	$\sigma_8(0.15)$	0.7364	$0.736^{+0.018}_{-0.019}$
$A_{143 \times 217}^{PS}$	56.6	41^{+20}_{-20}	$n_{s,0.002}$	0.9769	$0.974^{+0.014}_{-0.014}$	$f\sigma_8(0.38)$	0.4575	$0.459^{+0.023}_{-0.024}$
A_{217}^{PS}	123.0	115^{+20}_{-20}	Y_P	0.245516	$0.24549^{+0.00025}_{-0.00022}$	$\sigma_8(0.38)$	0.6550	$0.654^{+0.014}_{-0.015}$
A^{kSZ}	0.00	< 7.09	Y_P^{BBN}	0.246843	$0.24681^{+0.00025}_{-0.00022}$	$f\sigma_8(0.51)$	0.4584	$0.459^{+0.020}_{-0.021}$
A_{100}^{dustTT}	8.91	$8.9^{+3.6}_{-3.5}$	$10^5 D/H$	2.527	$2.54^{+0.10}_{-0.10}$	$\sigma_8(0.51)$	0.6139	$0.613^{+0.012}_{-0.013}$
A_{143}^{dustTT}	10.60	$10.5^{+3.4}_{-3.5}$	Age/Gyr	13.732	$13.745^{+0.093}_{-0.10}$	$f\sigma_8(0.61)$	0.4552	$0.456^{+0.018}_{-0.019}$
$A_{143 \times 217}^{dustTT}$	19.6	$17.9^{+6.4}_{-6.5}$	z_*	1089.18	$1089.3^{+1.0}_{-1.0}$	$\sigma_8(0.61)$	0.5847	$0.584^{+0.011}_{-0.012}$
A_{217}^{dustTT}	95.6	94^{+10}_{-10}	r_*	145.19	$145.1^{+1.0}_{-1.0}$	$f\sigma_8(2.33)$	0.2956	$0.2951^{+0.0052}_{-0.0060}$
c_{100}	0.99973	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04157	$1.0416^{+0.0010}_{-0.00099}$	$\sigma_8(2.33)$	0.3057	$0.3050^{+0.0053}_{-0.0061}$
c_{217}	0.99813	$0.9982^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.939	$13.934^{+0.094}_{-0.093}$	f_{2000}^{143}	25.1	27^{+7}_{-6}
H_0	69.18	$68.9^{+2.4}_{-2.2}$	z_{drag}	1060.43	$1060.2^{+1.1}_{-1.1}$	$f_{2000}^{143 \times 217}$	29.23	30^{+5}_{-5}
Ω_Λ	0.7085	$0.705^{+0.028}_{-0.029}$	r_{drag}	147.75	$147.7^{+1.0}_{-0.98}$	f_{2000}^{217}	103.90	$105.0^{+4.4}_{-4.3}$
Ω_m	0.2915	$0.295^{+0.029}_{-0.028}$	k_D	0.14041	$0.1404^{+0.0010}_{-0.0010}$	χ_{simall}^2	395.66	$396.8 (\nu: 1.3)$
$\Omega_m h^2$	0.13947	$0.1399^{+0.0044}_{-0.0045}$	$100\theta_D$	0.16051	$0.16063^{+0.00060}_{-0.00058}$	χ_{lowl}^2	21.34	$21.8 (\nu: 0.6)$
$\Omega_m h^3$	0.09648	$0.0964^{+0.0010}_{-0.00098}$	z_{eq}	3318	3328^{+110}_{-110}	χ_{plik}^2	752.9	$767.3 (\nu: 15.4)$
σ_8	0.7948	$0.795^{+0.021}_{-0.023}$	k_{eq}	0.010126	$0.01016^{+0.00032}_{-0.00032}$	χ_{prior}^2	0.97	$7.1 (\nu: 6.2)$
S_8	0.783	$0.788^{+0.057}_{-0.056}$	$100\theta_{eq}$	0.8301	$0.828^{+0.022}_{-0.021}$	χ_{CMB}^2	1169.9	$1186.0 (\nu: 16.6)$

Best-fit $\chi_{eff}^2 = 1170.89$; $\Delta\chi_{eff}^2 = -8.69$; $\bar{\chi}_{eff}^2 = 1193.04$; $\Delta\bar{\chi}_{eff}^2 = -6.54$; $R - 1 = 0.00760$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.66 (Δ -0.21) commander_dx12.v3.2.29: 21.34 (Δ -2.26) plik_rd12_HM.v22.TT: 752.92 (Δ -5.83)

3.2 base_Alens_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022567	$0.02249^{+0.00042}_{-0.00044} \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9675	$0.967^{+0.024}_{-0.026} \quad (+0.5\sigma)$	$D_M(0.38)$	1515.3	$1517^{+20}_{-20} \quad (+0.5\sigma)$
$\Omega_c h^2$	0.11772	$0.1179^{+0.0025}_{-0.0025} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	100.91	$100.8^{+2.0}_{-2.0} \quad (-0.5\sigma)$	$H(0.51)$	90.15	$90.08^{+0.66}_{-0.64} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	1.04123	$1.04122^{+0.00086}_{-0.00085} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.652	$2.63^{+0.15}_{-0.15} \quad (-0.1\sigma)$	$D_M(0.51)$	1964.6	$1967^{+24}_{-24} \quad (+0.5\sigma)$
τ	0.0507	$0.049^{+0.016}_{-0.018} \quad (-0.1\sigma)$	z_{re}	7.24	$7.1^{+1.7}_{-1.8} \quad (-0.0\sigma)$	$H(0.61)$	95.69	$95.62^{+0.57}_{-0.55} \quad (-0.5\sigma)$
A_L	1.231	$1.21^{+0.16}_{-0.15} \quad (-0.3\sigma)$	$10^9 A_s$	2.073	$2.066^{+0.070}_{-0.078} \quad (+0.1\sigma)$	$D_M(0.61)$	2287.5	$2290^{+26}_{-26} \quad (+0.5\sigma)$
$\ln(10^{10} A_s)$	3.0317	$3.028^{+0.033}_{-0.038} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8731	$1.872^{+0.022}_{-0.022} \quad (+0.3\sigma)$	$H(2.33)$	235.28	$235.3^{+1.6}_{-1.6} \quad (+0.5\sigma)$
n_s	0.9730	$0.9709^{+0.0086}_{-0.0087} \quad (-0.5\sigma)$	D_{40}	1211.7	$1215^{+25}_{-24} \quad (+0.4\sigma)$	$D_M(2.33)$	5745.9	$5749^{+27}_{-27} \quad (+0.5\sigma)$
y_{cal}	0.999996	$0.99998^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	D_{220}	5731	$5730^{+79}_{-78} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4444	$0.445^{+0.016}_{-0.016} \quad (+0.5\sigma)$
A_{217}^{CIB}	42.8	$45^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	2530.5	$2528^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7405	$0.739^{+0.014}_{-0.016} \quad (+0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.999	—	D_{1420}	815.5	$813.8^{+9.8}_{-9.8} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4648	$0.465^{+0.014}_{-0.014} \quad (+0.5\sigma)$
A_{143}^{tSZ}	6.67	$5.6^{+3.7}_{-3.8} \quad (-0.0\sigma)$	D_{2000}	232.70	$231.7^{+3.6}_{-3.6} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	0.6576	$0.656^{+0.012}_{-0.013} \quad (+0.3\sigma)$
A_{100}^{PS}	240	$251^{+60}_{-50} \quad (+0.0\sigma)$	$n_{s,0.002}$	0.9730	$0.9709^{+0.0086}_{-0.0087} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	0.4647	$0.464^{+0.012}_{-0.013} \quad (+0.5\sigma)$
A_{143}^{PS}	50.3	$43^{+20}_{-20} \quad (+0.1\sigma)$	Y_P	0.245468	$0.24544^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	0.6159	$0.615^{+0.011}_{-0.012} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	57.4	$42^{+20}_{-20} \quad (+0.1\sigma)$	Y_P^{BBN}	0.246795	$0.24677^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	0.4606	$0.460^{+0.011}_{-0.012} \quad (+0.5\sigma)$
A_{217}^{PS}	123.5	$115^{+20}_{-20} \quad (+0.0\sigma)$	$10^5 \text{D}/\text{H}$	2.550	$2.564^{+0.081}_{-0.076} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	0.5863	$0.585^{+0.010}_{-0.012} \quad (+0.2\sigma)$
A^{kSZ}	0.00	$< 7.23 \quad (+0.0\sigma)$	Age/Gyr	13.759	$13.767^{+0.061}_{-0.061} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	0.2960	$0.2954^{+0.0051}_{-0.0058} \quad (+0.1\sigma)$
A_{100}^{dustTT}	8.85	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	1089.48	$1089.58^{+0.64}_{-0.63} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	0.3057	$0.3049^{+0.0052}_{-0.0060} \quad (-0.0\sigma)$
A_{143}^{dustTT}	10.67	$10.5^{+3.4}_{-3.5} \quad (+0.0\sigma)$	r_*	144.87	$144.89^{+0.63}_{-0.62} \quad (-0.5\sigma)$	f_{2000}^{143}	25.9	$27^{+6}_{-6} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.0^{+6.2}_{-6.3} \quad (+0.0\sigma)$	$100\theta_*$	1.04139	$1.04139^{+0.00084}_{-0.00083} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	29.80	$31^{+4}_{-4} \quad (+0.2\sigma)$
A_{217}^{dustTT}	95.9	$94^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.911	$13.913^{+0.062}_{-0.061} \quad (-0.4\sigma)$	f_{2000}^{217}	104.42	$105.5^{+4.0}_{-4.0} \quad (+0.2\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	1060.24	$1060.07^{+0.93}_{-0.98} \quad (-0.3\sigma)$	χ_{simall}^2	395.68	$396.8 \quad (\nu: 1.3) \quad (+0.0\sigma)$
c_{217}	0.99814	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	147.48	$147.52^{+0.69}_{-0.68} \quad (-0.4\sigma)$	χ_{lowl}^2	21.89	$22.23 \quad (\nu: 0.3) \quad (+0.4\sigma)$
H_0	68.43	$68.3^{+1.2}_{-1.2} \quad (-0.5\sigma)$	k_D	0.14061	$0.14051^{+0.00091}_{-0.00089} \quad (+0.3\sigma)$	χ_{plik}^2	752.7	$766.3 \quad (\nu: 14.2) \quad (-0.2\sigma)$
Ω_Λ	0.6990	$0.698^{+0.015}_{-0.015} \quad (-0.5\sigma)$	$100\theta_D$	0.16061	$0.16071^{+0.00055}_{-0.00052} \quad (+0.3\sigma)$	$\chi_{6\text{DF}}^2$	0.008	$0.046 \quad (\nu: 0.0)$
Ω_m	0.3010	$0.302^{+0.015}_{-0.015} \quad (+0.5\sigma)$	z_{eq}	3352	$3354^{+57}_{-57} \quad (+0.5\sigma)$	χ_{MGS}^2	1.97	$1.95 \quad (\nu: 0.2)$
$\Omega_m h^2$	0.14093	$0.1410^{+0.0024}_{-0.0024} \quad (+0.5\sigma)$	k_{eq}	0.010232	$0.01024^{+0.00017}_{-0.00017} \quad (+0.5\sigma)$	χ_{DR12BAO}^2	3.38	$4.05 \quad (\nu: 0.5)$
$\Omega_m h^3$	0.09643	$0.09632^{+0.00098}_{-0.00095} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	0.8231	$0.823^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{prior}^2	1.0	$7.1 \quad (\nu: 6.3) \quad (+0.0\sigma)$
σ_8	0.8003	$0.799^{+0.016}_{-0.018} \quad (+0.4\sigma)$	$100\theta_{s,\text{eq}}$	0.4544	$0.4541^{+0.0056}_{-0.0055} \quad (-0.5\sigma)$	χ_{BAO}^2	5.35	$6.0 \quad (\nu: 0.7)$
S_8	0.8016	$0.802^{+0.031}_{-0.031} \quad (+0.5\sigma)$	$H(0.15)$	73.60	$73.5^{+1.0}_{-1.0} \quad (-0.5\sigma)$	χ_{CMB}^2	1170.2	$1185.3 \quad (\nu: 15.6) \quad (-0.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4391	$0.439^{+0.017}_{-0.017} \quad (+0.5\sigma)$	$D_M(0.15)$	634.3	$635^{+10}_{-9.8} \quad (+0.5\sigma)$			
$\sigma_8 \Omega_m^{0.25}$	0.5928	$0.592^{+0.017}_{-0.017} \quad (+0.5\sigma)$	$H(0.38)$	83.53	$83.45^{+0.79}_{-0.76} \quad (-0.5\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 1176.61$; $\Delta\chi_{\text{eff}}^2 = -9.14$; $\bar{\chi}_{\text{eff}}^2 = 1198.50$; $\Delta\bar{\chi}_{\text{eff}}^2 = -7.53$; $R - 1 = 0.01593$

χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.01) MGS: 1.97 (Δ 0.69) DR12BAO: 3.38 (Δ -0.80) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.68 (Δ -0.21) commander_dx12_v3_2_29: 21.89 (Δ -0.93) plik_rd12_HM_v22_TT: 752.66 (Δ -7.44)

3.3 base_Alens_plikHM_TT_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02301	$0.02292^{+0.00050}_{-0.00052}$ (+1.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5656	$0.568^{+0.024}_{-0.024}$ (−1.2 σ)	$D_M(0.15)$	615.3	617^{+16}_{-16} (−1.3 σ)
$\Omega_c h^2$	0.11302	$0.1135^{+0.0040}_{-0.0040}$ (−1.3 σ)	$\sigma_8/h^{0.5}$	0.9302	$0.933^{+0.034}_{-0.034}$ (−1.2 σ)	$H(0.38)$	85.05	$84.9^{+1.3}_{-1.3}$ (+1.4 σ)
$100\theta_{MC}$	1.04193	$1.04189^{+0.00099}_{-0.00098}$ (+0.9 σ)	$r_{drag}h$	104.90	$104.5^{+3.4}_{-3.4}$ (+1.3 σ)	$D_M(0.38)$	1476.7	1481^{+33}_{-32} (−1.3 σ)
τ	0.0520	$0.052^{+0.016}_{-0.019}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.680	$2.67^{+0.14}_{-0.14}$ (+0.4 σ)	$H(0.51)$	91.37	$91.2^{+1.1}_{-1.1}$ (+1.4 σ)
A_L	1.351	$1.33^{+0.19}_{-0.18}$ (+0.9 σ)	z_{re}	7.21	$7.2^{+1.7}_{-1.7}$ (+0.1 σ)	$D_M(0.51)$	1919.0	1924^{+39}_{-38} (−1.3 σ)
$\ln(10^{10} A_s)$	3.0238	$3.024^{+0.035}_{-0.038}$ (−0.2 σ)	$10^9 A_s$	2.057	$2.058^{+0.074}_{-0.077}$ (−0.2 σ)	$H(0.61)$	96.68	$96.56^{+0.91}_{-0.88}$ (+1.3 σ)
n_s	0.9852	$0.983^{+0.012}_{-0.012}$ (+1.2 σ)	$10^9 A_s e^{-2\tau}$	1.8537	$1.854^{+0.026}_{-0.027}$ (−0.9 σ)	$D_M(0.61)$	2238.0	2243^{+42}_{-42} (−1.3 σ)
y_{cal}	0.99995	$1.0000^{+0.0050}_{-0.0051}$ (+0.0 σ)	D_{40}	1187.1	1192^{+31}_{-30} (−1.0 σ)	$H(2.33)$	232.71	$232.9^{+2.3}_{-2.3}$ (−1.2 σ)
A_{217}^{CIB}	41.8	44^{+10}_{-10} (−0.2 σ)	D_{220}	5758	5755^{+85}_{-79} (+0.5 σ)	$D_M(2.33)$	5704.7	5710^{+38}_{-40} (−1.3 σ)
$\xi^{tSZ \times CIB}$	0.999	—	D_{810}	2525.0	2523^{+29}_{-27} (−0.3 σ)	$f\sigma_8(0.15)$	0.4159	$0.419^{+0.024}_{-0.025}$ (−1.3 σ)
A_{143}^{tSZ}	6.87	$5.8^{+3.7}_{-3.6}$ (+0.1 σ)	D_{1420}	817.4	$816^{+10}_{-9.9}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7269	$0.728^{+0.017}_{-0.017}$ (−0.9 σ)
A_{100}^{PS}	234	245^{+60}_{-50} (−0.2 σ)	D_{2000}	234.60	$233.7^{+4.0}_{-3.9}$ (+0.7 σ)	$f\sigma_8(0.38)$	0.4419	$0.444^{+0.020}_{-0.021}$ (−1.2 σ)
A_{143}^{PS}	44.0	38^{+20}_{-20} (−0.4 σ)	$n_{s,0.002}$	0.9852	$0.983^{+0.012}_{-0.012}$ (+1.2 σ)	$\sigma_8(0.38)$	0.6486	$0.649^{+0.014}_{-0.014}$ (−0.7 σ)
$A_{143 \times 217}^{PS}$	53.2	39^{+20}_{-20} (−0.2 σ)	Y_P	0.245654	$0.24562^{+0.00022}_{-0.00021}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4450	$0.447^{+0.018}_{-0.018}$ (−1.2 σ)
A_{217}^{PS}	121.0	114^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.246982	$0.24694^{+0.00022}_{-0.00021}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6088	$0.609^{+0.013}_{-0.012}$ (−0.6 σ)
A^{kSZ}	0.00	< 6.40 (−0.1 σ)	$10^5 D/H$	2.471	$2.488^{+0.092}_{-0.086}$ (−1.1 σ)	$f\sigma_8(0.61)$	0.4433	$0.445^{+0.016}_{-0.016}$ (−1.2 σ)
A_{100}^{dustTT}	8.96	$8.9^{+3.5}_{-3.5}$ (+0.0 σ)	Age/Gyr	13.671	$13.683^{+0.084}_{-0.087}$ (−1.3 σ)	$\sigma_8(0.61)$	0.5805	$0.581^{+0.011}_{-0.012}$ (−0.5 σ)
A_{143}^{dustTT}	10.61	$10.4^{+3.4}_{-3.5}$ (−0.0 σ)	z_*	1088.54	$1088.69^{+0.87}_{-0.82}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.2943	$0.2943^{+0.0055}_{-0.0058}$ (−0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.3	$17.8^{+6.3}_{-6.6}$ (−0.0 σ)	r_*	145.77	$145.73^{+0.88}_{-0.89}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3053	$0.3051^{+0.0055}_{-0.0059}$ (+0.1 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-20} (+0.0 σ)	$100\theta_*$	1.04205	$1.04203^{+0.00096}_{-0.00096}$ (+0.9 σ)	f_{2000}^{143}	23.1	25^{+6}_{-6} (−0.6 σ)
c_{100}	0.99973	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.989	$13.985^{+0.083}_{-0.082}$ (+1.1 σ)	$f_{2000}^{143 \times 217}$	27.59	28^{+4}_{-4} (−0.6 σ)
c_{217}	0.99813	$0.9981^{+0.0012}_{-0.0013}$ (−0.1 σ)	z_{drag}	1060.89	$1060.7^{+1.0}_{-1.1}$ (+0.9 σ)	f_{2000}^{217}	102.52	$103.7^{+4.1}_{-4.1}$ (−0.6 σ)
H_0	70.76	$70.5^{+2.0}_{-2.0}$ (+1.3 σ)	r_{drag}	148.25	$148.24^{+0.89}_{-0.87}$ (+1.0 σ)	χ_{small}^2	395.66	396.8 (ν : 1.3) (−0.0 σ)
Ω_Λ	0.7270	$0.724^{+0.022}_{-0.023}$ (+1.3 σ)	k_D	0.14010	$0.14005^{+0.00096}_{-0.00097}$ (−0.6 σ)	χ_{lowl}^2	20.46	20.80 (ν : 0.2) (−1.0 σ)
Ω_m	0.2730	$0.276^{+0.023}_{-0.022}$ (−1.3 σ)	$100\theta_D$	0.16030	$0.16040^{+0.00056}_{-0.00055}$ (−0.8 σ)	χ_{plik}^2	755.6	769.6 (ν : 17.8) (+0.4 σ)
$\Omega_m h^2$	0.13668	$0.1370^{+0.0037}_{-0.0037}$ (−1.3 σ)	z_{eq}	3251	3259^{+89}_{-88} (−1.3 σ)	$\chi_{H073p45}^2$	2.63	3.5 (ν : 2.4)
$\Omega_m h^3$	0.09671	$0.0966^{+0.0010}_{-0.00099}$ (+0.4 σ)	k_{eq}	0.009922	$0.00995^{+0.00027}_{-0.00027}$ (−1.3 σ)	χ_{prior}^2	1.0	7.1 (ν : 6.1) (+0.0 σ)
σ_8	0.7825	$0.784^{+0.020}_{-0.020}$ (−1.0 σ)	$100\theta_{eq}$	0.8441	$0.842^{+0.018}_{-0.018}$ (+1.3 σ)	χ_{CMB}^2	1171.7	1187.2 (ν : 18.1) (+0.2 σ)
S_8	0.7464	$0.752^{+0.047}_{-0.048}$ (−1.3 σ)	$100\theta_{s,eq}$	0.4650	$0.4641^{+0.0093}_{-0.0092}$ (+1.3 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4088	$0.412^{+0.026}_{-0.026}$ (−1.3 σ)	$H(0.15)$	75.63	$75.4^{+1.8}_{-1.7}$ (+1.4 σ)			

Best-fit $\chi_{eff}^2 = 1175.32$; $\Delta\chi_{eff}^2 = -16.25$; $\bar{\chi}_{eff}^2 = 1197.77$; $\Delta\bar{\chi}_{eff}^2 = -14.31$; $R - 1 = 0.01750$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.66 (Δ -0.42) commander_dx12_v3_2_29: 20.46 (Δ -1.62) plik_rd12_HM_v22_TT: 755.56 (Δ -7.46) Hubble - H073p45: 2.63 (Δ -6.36)

3.4 base_Alens_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02261^{+0.00058}_{-0.00056} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.433^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$100\theta_{s,eq}$	$0.457^{+0.011}_{-0.011} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1166^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.587^{+0.028}_{-0.029} \quad (+0.1\sigma)$	$H(0.15)$	$74.1^{+2.1}_{-1.9} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.0414^{+0.0011}_{-0.0010} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.960^{+0.039}_{-0.040} \quad (+0.1\sigma)$	$D_M(0.15)$	$630^{+19}_{-20} \quad (-0.0\sigma)$
τ	$0.0533^{+0.012}_{-0.0099} \quad (+0.4\sigma)$	$r_{drag}h$	$101.9^{+4.1}_{-3.9} \quad (+0.0\sigma)$	$H(0.38)$	$83.9^{+1.6}_{-1.4} \quad (+0.0\sigma)$
A_L	$1.24^{+0.19}_{-0.18} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.64^{+0.15}_{-0.15} \quad (+0.0\sigma)$	$D_M(0.38)$	$1507^{+38}_{-40} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	$3.033^{+0.027}_{-0.025} \quad (+0.4\sigma)$	z_{re}	$< 8.55 \quad (+0.4\sigma)$	$H(0.51)$	$90.4^{+1.3}_{-1.2} \quad (+0.0\sigma)$
n_s	$0.974^{+0.014}_{-0.014} \quad (+0.0\sigma)$	$10^9 A_s$	$2.077^{+0.056}_{-0.051} \quad (+0.4\sigma)$	$D_M(0.51)$	$1955^{+45}_{-47} \quad (-0.0\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.867^{+0.028}_{-0.028} \quad (-0.0\sigma)$	$H(0.61)$	$95.9^{+1.1}_{-0.94} \quad (+0.0\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1209^{+34}_{-33} \quad (+0.0\sigma)$	$D_M(0.61)$	$2277^{+49}_{-51} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5736^{+83}_{-80} \quad (+0.0\sigma)$	$H(2.33)$	$234.6^{+2.8}_{-2.8} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.7} \quad (+0.0\sigma)$	D_{810}	$2527^{+27}_{-27} \quad (-0.0\sigma)$	$D_M(2.33)$	$5738^{+42}_{-46} \quad (-0.0\sigma)$
A_{100}^{PS}	$250^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$814.4^{+9.9}_{-9.8} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.438^{+0.029}_{-0.029} \quad (+0.1\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$232.3^{+4.1}_{-3.9} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.016}_{-0.017} \quad (+0.2\sigma)$
$A_{143 \times 217}^{PS}$	$41^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.974^{+0.014}_{-0.014} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.023}_{-0.024} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.24549^{+0.00025}_{-0.00022} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.012}_{-0.012} \quad (+0.3\sigma)$
A^{kSZ}	$< 7.06 \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24681^{+0.00025}_{-0.00022} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.020}_{-0.021} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$10^5 D/H$	$2.54^{+0.10}_{-0.10} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.011}_{-0.010} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.5^{+3.4}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.743^{+0.093}_{-0.10} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.018}_{-0.019} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	$17.9^{+6.4}_{-6.5} \quad (+0.0\sigma)$	z_*	$1089.3^{+1.0}_{-1.0} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5857^{+0.0097}_{-0.0091} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$145.1^{+1.0}_{-1.0} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2960^{+0.0043}_{-0.0041} \quad (+0.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.0416^{+0.0010}_{-0.00099} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0042}_{-0.0038} \quad (+0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.935^{+0.094}_{-0.093} \quad (+0.0\sigma)$	f_{2000}^{143}	$27^{+7}_{-6} \quad (-0.0\sigma)$
H_0	$69.0^{+2.4}_{-2.3} \quad (+0.0\sigma)$	z_{drag}	$1060.2^{+1.1}_{-1.1} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.0\sigma)$
Ω_Λ	$0.705^{+0.028}_{-0.029} \quad (+0.0\sigma)$	r_{drag}	$147.7^{+1.0}_{-0.97} \quad (+0.0\sigma)$	f_{2000}^{217}	$105.0^{+4.4}_{-4.3} \quad (-0.0\sigma)$
Ω_m	$0.295^{+0.029}_{-0.028} \quad (-0.0\sigma)$	k_D	$0.1404^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
$\Omega_m h^2$	$0.1398^{+0.0044}_{-0.0045} \quad (-0.0\sigma)$	$100\theta_D$	$0.16063^{+0.00060}_{-0.00058} \quad (-0.0\sigma)$	χ_{lowl}^2	$21.9 \quad (\nu: 0.6) \quad (+0.0\sigma)$
$\Omega_m h^3$	$0.0964^{+0.0010}_{-0.00097} \quad (+0.0\sigma)$	z_{eq}	$3326^{+110}_{-110} \quad (-0.0\sigma)$	χ_{plik}^2	$767.3 \quad (\nu: 15.5) \quad (+0.0\sigma)$
σ_8	$0.797^{+0.020}_{-0.021} \quad (+0.2\sigma)$	k_{eq}	$0.01015^{+0.00032}_{-0.00033} \quad (-0.0\sigma)$	χ_{prior}^2	$7.1 \quad (\nu: 6.2) \quad (+0.0\sigma)$
S_8	$0.790^{+0.057}_{-0.057} \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.828^{+0.022}_{-0.021} \quad (+0.0\sigma)$	χ_{CMB}^2	$1185.5 \quad (\nu: 16.1) \quad (-0.1\sigma)$

$\bar{\chi}_{eff}^2 = 1192.62$; $\Delta\bar{\chi}_{eff}^2 = -6.69$; $R - 1 = 0.00588$

3.5 base_Alens_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02249^{+0.00042}_{-0.00043} \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.970^{+0.022}_{-0.022} \quad (+0.6\sigma)$	$D_M(0.38)$	$1517^{+20}_{-20} \quad (+0.5\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0025}_{-0.0025} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$100.8^{+2.0}_{-2.0} \quad (-0.5\sigma)$	$H(0.51)$	$90.08^{+0.65}_{-0.63} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	$1.04122^{+0.00086}_{-0.00084} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.63^{+0.15}_{-0.15} \quad (-0.1\sigma)$	$D_M(0.51)$	$1967^{+24}_{-24} \quad (+0.5\sigma)$
τ	$0.0526^{+0.012}_{-0.0096} \quad (+0.3\sigma)$	z_{re}	$< 8.51 \quad (+0.4\sigma)$	$H(0.61)$	$95.63^{+0.57}_{-0.54} \quad (-0.5\sigma)$
A_L	$1.20^{+0.15}_{-0.15} \quad (-0.4\sigma)$	$10^9 A_s$	$2.080^{+0.054}_{-0.048} \quad (+0.4\sigma)$	$D_M(0.61)$	$2290^{+26}_{-26} \quad (+0.5\sigma)$
$\ln(10^{10} A_s)$	$3.035^{+0.026}_{-0.023} \quad (+0.4\sigma)$	$10^9 A_s e^{-2\tau}$	$1.872^{+0.022}_{-0.022} \quad (+0.3\sigma)$	$H(2.33)$	$235.3^{+1.5}_{-1.6} \quad (+0.5\sigma)$
n_s	$0.9710^{+0.0085}_{-0.0087} \quad (-0.4\sigma)$	D_{40}	$1216^{+26}_{-24} \quad (+0.4\sigma)$	$D_M(2.33)$	$5749^{+27}_{-27} \quad (+0.5\sigma)$
y_{cal}	$0.99999^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	D_{220}	$5729^{+79}_{-78} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.016}_{-0.015} \quad (+0.6\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2528^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.012}_{-0.011} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$813.9^{+9.6}_{-9.6} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.013}_{-0.013} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.8} \quad (-0.0\sigma)$	D_{2000}	$231.8^{+3.5}_{-3.6} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.6585^{+0.0097}_{-0.0091} \quad (+0.6\sigma)$
A_{100}^{PS}	$251^{+60}_{-50} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.9710^{+0.0085}_{-0.0087} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.011}_{-0.011} \quad (+0.6\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (+0.1\sigma)$	Y_P	$0.24544^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.6167^{+0.0088}_{-0.0082} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.24677^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.010}_{-0.010} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$10^5 D/H$	$2.564^{+0.080}_{-0.076} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5871^{+0.0083}_{-0.0077} \quad (+0.5\sigma)$
A^{kSZ}	$< 7.23 \quad (+0.0\sigma)$	Age/Gyr	$13.767^{+0.060}_{-0.061} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2964^{+0.0040}_{-0.0037} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1089.58^{+0.64}_{-0.64} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0041}_{-0.0037} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$10.5^{+3.4}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.89^{+0.64}_{-0.62} \quad (-0.4\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.0^{+6.3}_{-6.3} \quad (+0.0\sigma)$	$100\theta_*$	$1.04140^{+0.00085}_{-0.00082} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.913^{+0.062}_{-0.061} \quad (-0.4\sigma)$	f_{2000}^{217}	$105.4^{+4.0}_{-4.0} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1060.07^{+0.93}_{-0.97} \quad (-0.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
c_{217}	$0.9982^{+0.0013}_{-0.0013} \quad (+0.0\sigma)$	r_{drag}	$147.52^{+0.69}_{-0.68} \quad (-0.4\sigma)$	χ_{lowl}^2	$22.29 \quad (\nu: 0.3) \quad (+0.4\sigma)$
H_0	$68.3^{+1.2}_{-1.2} \quad (-0.5\sigma)$	k_D	$0.14050^{+0.00088}_{-0.00090} \quad (+0.3\sigma)$	χ_{plik}^2	$766.2 \quad (\nu: 14.3) \quad (-0.2\sigma)$
Ω_Λ	$0.698^{+0.015}_{-0.015} \quad (-0.5\sigma)$	$100\theta_D$	$0.16071^{+0.00054}_{-0.00052} \quad (+0.3\sigma)$	$\chi_{6\text{DF}}^2$	$0.046 \quad (\nu: 0.0)$
Ω_m	$0.302^{+0.015}_{-0.015} \quad (+0.5\sigma)$	z_{eq}	$3354^{+57}_{-57} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.96 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.1410^{+0.0024}_{-0.0024} \quad (+0.5\sigma)$	k_{eq}	$0.01024^{+0.00017}_{-0.00017} \quad (+0.5\sigma)$	χ_{DR12BAO}^2	$4.04 \quad (\nu: 0.5)$
$\Omega_m h^3$	$0.09632^{+0.00097}_{-0.00093} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.3) \quad (+0.0\sigma)$
σ_8	$0.802^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$100\theta_{s,\text{eq}}$	$0.4542^{+0.0056}_{-0.0055} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.7)$
S_8	$0.805^{+0.031}_{-0.030} \quad (+0.6\sigma)$	$H(0.15)$	$73.5^{+1.0}_{-1.0} \quad (-0.5\sigma)$	χ_{CMB}^2	$1184.9 \quad (\nu: 15.0) \quad (-0.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.441^{+0.017}_{-0.016} \quad (+0.6\sigma)$	$D_M(0.15)$	$635^{+10}_{-9.8} \quad (+0.5\sigma)$		
$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.016}_{-0.015} \quad (+0.6\sigma)$	$H(0.38)$	$83.45^{+0.78}_{-0.76} \quad (-0.5\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1198.08; \Delta \bar{\chi}_{\text{eff}}^2 = -7.68; R - 1 = 0.01471$$

3.6 base_Alens_plikHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02292^{+0.00050}_{-0.00052} \quad (+1.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.569^{+0.024}_{-0.024} \quad (-1.1\sigma)$	$D_M(0.15)$	$617^{+16}_{-15} \quad (-1.4\sigma)$
$\Omega_c h^2$	$0.1134^{+0.0040}_{-0.0039} \quad (-1.3\sigma)$	$\sigma_8/h^{0.5}$	$0.936^{+0.033}_{-0.033} \quad (-1.1\sigma)$	$H(0.38)$	$84.9^{+1.3}_{-1.3} \quad (+1.4\sigma)$
$100\theta_{MC}$	$1.04190^{+0.00098}_{-0.00098} \quad (+1.0\sigma)$	$r_{drag} h$	$104.6^{+3.4}_{-3.4} \quad (+1.4\sigma)$	$D_M(0.38)$	$1480^{+33}_{-32} \quad (-1.4\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.67^{+0.14}_{-0.14} \quad (+0.4\sigma)$	$H(0.51)$	$91.2^{+1.1}_{-1.1} \quad (+1.4\sigma)$
A_L	$1.32^{+0.19}_{-0.18} \quad (+0.9\sigma)$	z_{re}	$< 8.61 \quad (+0.4\sigma)$	$D_M(0.51)$	$1923^{+39}_{-37} \quad (-1.4\sigma)$
$\ln(10^{10} A_s)$	$3.030^{+0.028}_{-0.025} \quad (+0.1\sigma)$	$10^9 A_s$	$2.069^{+0.059}_{-0.052} \quad (+0.1\sigma)$	$H(0.61)$	$96.57^{+0.89}_{-0.88} \quad (+1.4\sigma)$
n_s	$0.983^{+0.012}_{-0.012} \quad (+1.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.854^{+0.026}_{-0.026} \quad (-0.9\sigma)$	$D_M(0.61)$	$2243^{+42}_{-41} \quad (-1.4\sigma)$
y_{cal}	$1.0001^{+0.0052}_{-0.0051} \quad (+0.0\sigma)$	D_{40}	$1192^{+31}_{-31} \quad (-1.0\sigma)$	$H(2.33)$	$232.9^{+2.3}_{-2.3} \quad (-1.2\sigma)$
A_{217}^{CIB}	$44^{+10}_{-10} \quad (-0.2\sigma)$	D_{220}	$5755^{+82}_{-79} \quad (+0.4\sigma)$	$D_M(2.33)$	$5710^{+39}_{-38} \quad (-1.3\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{810}	$2523^{+29}_{-28} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.419^{+0.024}_{-0.023} \quad (-1.2\sigma)$
A_{143}^{tSZ}	$5.8^{+3.7}_{-3.6} \quad (+0.1\sigma)$	D_{1420}	$816^{+10}_{-9.8} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.730^{+0.016}_{-0.015} \quad (-0.7\sigma)$
A_{100}^{PS}	$245^{+60}_{-50} \quad (-0.2\sigma)$	D_{2000}	$233.7^{+4.0}_{-3.9} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.445^{+0.020}_{-0.020} \quad (-1.2\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-0.4\sigma)$	$n_{s,0.002}$	$0.983^{+0.012}_{-0.012} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	$0.651^{+0.013}_{-0.012} \quad (-0.5\sigma)$
$A_{143 \times 217}^{PS}$	$39^{+20}_{-20} \quad (-0.2\sigma)$	Y_P	$0.24562^{+0.00022}_{-0.00021} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.448^{+0.017}_{-0.018} \quad (-1.1\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	Y_P^{BBN}	$0.24694^{+0.00022}_{-0.00021} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.611^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A^{kSZ}	$< 6.37 \quad (-0.1\sigma)$	$10^5 D/H$	$2.488^{+0.092}_{-0.086} \quad (-1.1\sigma)$	$f\sigma_8(0.61)$	$0.446^{+0.016}_{-0.016} \quad (-1.1\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.682^{+0.084}_{-0.085} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.010}_{-0.0092} \quad (-0.3\sigma)$
A_{143}^{dustTT}	$10.4^{+3.4}_{-3.4} \quad (-0.0\sigma)$	z_*	$1088.68^{+0.87}_{-0.81} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2951^{+0.0046}_{-0.0043} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$17.8^{+6.3}_{-6.5} \quad (-0.0\sigma)$	r_*	$145.74^{+0.86}_{-0.89} \quad (+1.2\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0045}_{-0.0040} \quad (+0.4\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-20} \quad (+0.0\sigma)$	$100\theta_*$	$1.04203^{+0.00095}_{-0.00095} \quad (+0.9\sigma)$	f_{2000}^{143}	$25^{+6}_{-6} \quad (-0.6\sigma)$
c_{100}	$0.9996^{+0.0013}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.986^{+0.082}_{-0.081} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$28^{+4}_{-4} \quad (-0.7\sigma)$
c_{217}	$0.9981^{+0.0012}_{-0.0013} \quad (-0.1\sigma)$	z_{drag}	$1060.7^{+1.0}_{-1.1} \quad (+0.9\sigma)$	f_{2000}^{217}	$103.6^{+4.2}_{-4.1} \quad (-0.6\sigma)$
H_0	$70.5^{+1.9}_{-2.0} \quad (+1.4\sigma)$	r_{drag}	$148.25^{+0.91}_{-0.87} \quad (+1.0\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
Ω_Λ	$0.724^{+0.022}_{-0.023} \quad (+1.3\sigma)$	k_D	$0.14004^{+0.00096}_{-0.00095} \quad (-0.6\sigma)$	χ_{lowl}^2	$20.81 \quad (\nu: 0.2) \quad (-0.9\sigma)$
Ω_m	$0.276^{+0.023}_{-0.022} \quad (-1.3\sigma)$	$100\theta_D$	$0.16040^{+0.00057}_{-0.00055} \quad (-0.8\sigma)$	χ_{plik}^2	$769.7 \quad (\nu: 17.8) \quad (+0.4\sigma)$
$\Omega_m h^2$	$0.1370^{+0.0037}_{-0.0036} \quad (-1.3\sigma)$	z_{eq}	$3258^{+90}_{-87} \quad (-1.3\sigma)$	$\chi_{H073p45}^2$	$3.4 \quad (\nu: 2.4)$
$\Omega_m h^3$	$0.09660^{+0.00098}_{-0.00099} \quad (+0.4\sigma)$	k_{eq}	$0.00994^{+0.00027}_{-0.00027} \quad (-1.3\sigma)$	χ_{prior}^2	$7.1 \quad (\nu: 6.2) \quad (+0.0\sigma)$
σ_8	$0.786^{+0.019}_{-0.019} \quad (-0.8\sigma)$	$100\theta_{eq}$	$0.843^{+0.018}_{-0.018} \quad (+1.3\sigma)$	χ_{CMB}^2	$1186.9 \quad (\nu: 17.7) \quad (+0.2\sigma)$
S_8	$0.753^{+0.047}_{-0.044} \quad (-1.2\sigma)$	$100\theta_{s,eq}$	$0.4643^{+0.0093}_{-0.0093} \quad (+1.3\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.412^{+0.026}_{-0.024} \quad (-1.2\sigma)$	$H(0.15)$	$75.4^{+1.7}_{-1.7} \quad (+1.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1197.44; \Delta \bar{\chi}_{\text{eff}}^2 = -14.36; R - 1 = 0.01845$$

3.7 base_Alens_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022631	$0.02259^{+0.00034}_{-0.00033} \quad (-0.1\sigma)$	$\Omega_m h^2$	0.14113	$0.1413^{+0.0028}_{-0.0029} \quad (+0.6\sigma)$	k_{eq}	0.010247	$0.01026^{+0.00021}_{-0.00021} \quad (+0.6\sigma)$
$\Omega_c h^2$	0.11786	$0.1181^{+0.0030}_{-0.0031} \quad (+0.6\sigma)$	$\Omega_m h^3$	0.09656	$0.09650^{+0.00061}_{-0.00058} \quad (+0.2\sigma)$	$100\theta_{\text{eq}}$	0.8224	$0.821^{+0.013}_{-0.013} \quad (-0.6\sigma)$
$100\theta_{\text{MC}}$	1.04118	$1.04114^{+0.00064}_{-0.00062} \quad (-0.5\sigma)$	σ_8	0.8010	$0.800^{+0.017}_{-0.018} \quad (+0.4\sigma)$	$100\theta_{\text{s,eq}}$	0.4539	$0.4534^{+0.0069}_{-0.0066} \quad (-0.6\sigma)$
τ	0.0511	$0.049^{+0.017}_{-0.017} \quad (-0.1\sigma)$	S_8	0.8030	$0.804^{+0.038}_{-0.038} \quad (+0.6\sigma)$	$H(0.15)$	73.60	$73.5^{+1.2}_{-1.2} \quad (-0.5\sigma)$
A_L	1.191	$1.18^{+0.13}_{-0.13} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4398	$0.440^{+0.021}_{-0.021} \quad (+0.6\sigma)$	$D_M(0.15)$	634.4	$636^{+12}_{-12} \quad (+0.5\sigma)$
$\ln(10^{10} A_s)$	3.0331	$3.029^{+0.035}_{-0.036} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.5935	$0.593^{+0.020}_{-0.020} \quad (+0.5\sigma)$	$H(0.38)$	83.54	$83.46^{+0.91}_{-0.86} \quad (-0.5\sigma)$
n_s	0.9729	$0.9708^{+0.0094}_{-0.0094} \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	0.9683	$0.968^{+0.028}_{-0.029} \quad (+0.5\sigma)$	$D_M(0.38)$	1515.3	$1518^{+24}_{-24} \quad (+0.5\sigma)$
y_{cal}	0.99999	$1.0000^{+0.0047}_{-0.0046} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	100.82	$100.6^{+2.5}_{-2.4} \quad (-0.6\sigma)$	$H(0.51)$	90.17	$90.10^{+0.72}_{-0.69} \quad (-0.5\sigma)$
A_{217}^{CIB}	42.2	$45^{+10}_{-10} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.612	$2.60^{+0.11}_{-0.12} \quad (-0.5\sigma)$	$D_M(0.51)$	1964.6	$1967^{+28}_{-28} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.999	—	z_{re}	7.27	$7.1^{+1.7}_{-1.8} \quad (-0.1\sigma)$	$H(0.61)$	95.72	$95.66^{+0.59}_{-0.55} \quad (-0.4\sigma)$
A_{143}^{tSZ}	6.93	$5.8^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$10^9 A_s$	2.076	$2.068^{+0.069}_{-0.079} \quad (+0.1\sigma)$	$D_M(0.61)$	2287.3	$2290^{+30}_{-30} \quad (+0.5\sigma)$
A_{100}^{PS}	237	$249^{+60}_{-50} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8743	$1.874^{+0.024}_{-0.023} \quad (+0.5\sigma)$	$H(2.33)$	235.43	$235.6^{+1.8}_{-1.8} \quad (+0.6\sigma)$
A_{143}^{PS}	49.1	$42^{+20}_{-20} \quad (+0.0\sigma)$	D_{40}	1212.9	$1217^{+27}_{-26} \quad (+0.5\sigma)$	$D_M(2.33)$	5744.0	$5747^{+24}_{-26} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	57.2	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	5737	$5739^{+74}_{-74} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4451	$0.446^{+0.020}_{-0.020} \quad (+0.5\sigma)$
A_{217}^{PS}	124.1	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	2533.2	$2531^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	0.7411	$0.740^{+0.015}_{-0.016} \quad (+0.4\sigma)$
A^{kSZ}	0.00	$< 6.74 \quad (-0.1\sigma)$	D_{1420}	817.0	$815.6^{+9.4}_{-9.1} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	0.4655	$0.465^{+0.016}_{-0.016} \quad (+0.5\sigma)$
A_{100}^{dustTT}	8.72	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	D_{2000}	232.94	$232.2^{+3.1}_{-3.1} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	0.6580	$0.657^{+0.012}_{-0.014} \quad (+0.3\sigma)$
A_{143}^{dustTT}	10.68	$10.6^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$n_{\text{s},0.002}$	0.9729	$0.9708^{+0.0094}_{-0.0094} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	0.4652	$0.465^{+0.014}_{-0.015} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.1^{+6.4}_{-6.3} \quad (+0.1\sigma)$	Y_{P}	0.245491	$0.24548^{+0.00014}_{-0.00013} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6163	$0.615^{+0.011}_{-0.013} \quad (+0.3\sigma)$
A_{217}^{dustTT}	95.7	$94^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	0.246818	$0.24680^{+0.00014}_{-0.00013} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	0.4611	$0.461^{+0.013}_{-0.013} \quad (+0.5\sigma)$
A_{100}^{dustTE}	0.112	$0.114^{+0.076}_{-0.075}$	10^5D/H	2.539	$2.546^{+0.061}_{-0.061} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	0.5867	$0.585^{+0.010}_{-0.012} \quad (+0.2\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.059}_{-0.059}$	Age/Gyr	13.754	$13.761^{+0.054}_{-0.057} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	0.2962	$0.2954^{+0.0053}_{-0.0054} \quad (+0.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	z_*	1089.41	$1089.48^{+0.62}_{-0.63} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	0.3058	$0.3050^{+0.0054}_{-0.0055} \quad (-0.0\sigma)$
A_{143}^{dustTE}	0.224	$0.22^{+0.10}_{-0.11}$	r_*	144.79	$144.76^{+0.66}_{-0.65} \quad (-0.7\sigma)$	f_{2000}^{143}	25.4	$27^{+6}_{-6} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.659	$0.66^{+0.15}_{-0.16}$	$100\theta_*$	1.04134	$1.04130^{+0.00063}_{-0.00061} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	29.48	$30^{+4}_{-4} \quad (-0.0\sigma)$
A_{217}^{dustTE}	2.05	$2.05^{+0.53}_{-0.52}$	$D_M(z_*)/\text{Gpc}$	13.904	$13.902^{+0.060}_{-0.061} \quad (-0.7\sigma)$	f_{2000}^{217}	104.23	$105.0^{+3.7}_{-3.7} \quad (+0.0\sigma)$
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	1060.39	$1060.30^{+0.66}_{-0.64} \quad (+0.1\sigma)$	χ_{small}^2	395.67	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{217}	0.99810	$0.9981^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	147.37	$147.35^{+0.63}_{-0.63} \quad (-0.7\sigma)$	χ_{lowl}^2	21.96	$22.32 \quad (\nu: 0.4) \quad (+0.5\sigma)$
H_0	68.42	$68.3^{+1.4}_{-1.4} \quad (-0.5\sigma)$	k_{D}	0.14077	$0.14076^{+0.00065}_{-0.00065} \quad (+0.7\sigma)$	χ_{plik}^2	2337.1	$2353.8 \quad (\nu: 16.5) \quad (+285.8\sigma)$
Ω_Λ	0.6985	$0.697^{+0.018}_{-0.019} \quad (-0.6\sigma)$	$100\theta_{\text{D}}$	0.160510	$0.16056^{+0.00037}_{-0.00037} \quad (-0.2\sigma)$	χ_{prior}^2	1.4	$11.3 \quad (\nu: 9.5) \quad (+1.2\sigma)$
Ω_{m}	0.3015	$0.303^{+0.019}_{-0.018} \quad (+0.6\sigma)$	z_{eq}	3357	$3362^{+68}_{-69} \quad (+0.6\sigma)$	χ_{CMB}^2	2754.7	$2773.0 \quad (\nu: 17.8) \quad (+275.5\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 2756.11$; $\Delta\chi_{\text{eff}}^2 = -9.66$; $\bar{\chi}_{\text{eff}}^2 = 2784.27$; $\Delta\bar{\chi}_{\text{eff}}^2 = -7.49$; $R - 1 = 0.01070$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.67 (Δ -0.38) commander_dx12.v3.2.29: 21.96 (Δ -1.30) plik_rd12_HM.v22b.TTTEEE: 2337.11 (Δ -7.54)

3.8 base_Alens_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022617	$0.02258^{+0.00030}_{-0.00029}$ (-0.1σ)	σ_8	0.8011	$0.800^{+0.015}_{-0.017}$ $(+0.5\sigma)$	$D_M(0.15)$	635.1	$635.9^{+8.3}_{-8.2}$ $(+0.6\sigma)$
$\Omega_c h^2$	0.11802	$0.1182^{+0.0021}_{-0.0021}$ $(+0.6\sigma)$	S_8	0.8046	$0.805^{+0.028}_{-0.028}$ $(+0.6\sigma)$	$H(0.38)$	83.49	$83.43^{+0.64}_{-0.62}$ (-0.5σ)
$100\theta_{MC}$	1.04115	$1.04113^{+0.00058}_{-0.00057}$ (-0.5σ)	$\sigma_8 \Omega_m^{0.5}$	0.4407	$0.441^{+0.015}_{-0.015}$ $(+0.6\sigma)$	$D_M(0.38)$	1516.7	1518^{+17}_{-17} $(+0.6\sigma)$
τ	0.0507	$0.049^{+0.017}_{-0.017}$ (-0.1σ)	$\sigma_8 \Omega_m^{0.25}$	0.5942	$0.594^{+0.015}_{-0.016}$ $(+0.6\sigma)$	$H(0.51)$	90.13	$90.07^{+0.52}_{-0.49}$ (-0.5σ)
A_L	1.185	$1.18^{+0.12}_{-0.12}$ (-0.7σ)	$\sigma_8/h^{0.5}$	0.9691	$0.969^{+0.022}_{-0.024}$ $(+0.5\sigma)$	$D_M(0.51)$	1966.2	1968^{+20}_{-20} $(+0.6\sigma)$
$\ln(10^{10} A_s)$	3.0325	$3.029^{+0.035}_{-0.036}$ $(+0.1\sigma)$	$r_{drag} h$	100.68	$100.5^{+1.7}_{-1.7}$ (-0.6σ)	$H(0.61)$	95.682	$95.64^{+0.43}_{-0.40}$ (-0.5σ)
n_s	0.9722	$0.9705^{+0.0078}_{-0.0077}$ (-0.5σ)	$\langle d^2 \rangle^{1/2}$	2.607	$2.60^{+0.11}_{-0.12}$ (-0.5σ)	$D_M(0.61)$	2289.1	2291^{+21}_{-21} $(+0.5\sigma)$
y_{cal}	0.99994	$1.0000^{+0.0048}_{-0.0047}$ $(+0.0\sigma)$	z_{re}	7.23	$7.0^{+1.7}_{-1.9}$ (-0.1σ)	$H(2.33)$	235.52	$235.6^{+1.3}_{-1.3}$ $(+0.7\sigma)$
A_{217}^{CIB}	42.4	45^{+10}_{-10} (-0.1σ)	$10^9 A_s$	2.075	$2.068^{+0.069}_{-0.079}$ $(+0.1\sigma)$	$D_M(2.33)$	5745.5	5748^{+19}_{-20} $(+0.4\sigma)$
$\xi^{tSZ \times CIB}$	0.997	—	$10^9 A_s e^{-2\tau}$	1.8747	$1.875^{+0.021}_{-0.021}$ $(+0.5\sigma)$	$f\sigma_8(0.15)$	0.4459	$0.446^{+0.014}_{-0.015}$ $(+0.6\sigma)$
A_{143}^{tSZ}	6.86	$5.8^{+3.6}_{-3.5}$ $(+0.1\sigma)$	D_{40}	1214.3	1217^{+24}_{-23} $(+0.5\sigma)$	$\sigma_8(0.15)$	0.7412	$0.740^{+0.014}_{-0.014}$ $(+0.4\sigma)$
A_{100}^{PS}	238	249^{+60}_{-50} (-0.0σ)	D_{220}	5737	5738^{+74}_{-74} $(+0.0\sigma)$	$f\sigma_8(0.38)$	0.4660	$0.466^{+0.012}_{-0.013}$ $(+0.6\sigma)$
A_{143}^{PS}	49.8	42^{+10}_{-20} $(+0.0\sigma)$	D_{810}	2533.0	2531^{+26}_{-26} $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6580	$0.657^{+0.012}_{-0.012}$ $(+0.3\sigma)$
$A_{143 \times 217}^{PS}$	57.6	42^{+20}_{-20} $(+0.1\sigma)$	D_{1420}	816.8	$815.5^{+9.3}_{-9.0}$ $(+0.2\sigma)$	$f\sigma_8(0.51)$	0.4657	$0.465^{+0.011}_{-0.012}$ $(+0.6\sigma)$
A_{217}^{PS}	124.3	116^{+20}_{-20} $(+0.1\sigma)$	D_{2000}	232.76	$232.2^{+3.0}_{-3.0}$ (-0.1σ)	$\sigma_8(0.51)$	0.6161	$0.615^{+0.011}_{-0.012}$ $(+0.3\sigma)$
A^{kSZ}	0.00	< 6.73 (-0.1σ)	$n_{s,0.002}$	0.9722	$0.9705^{+0.0078}_{-0.0077}$ (-0.5σ)	$f\sigma_8(0.61)$	0.4615	$0.461^{+0.010}_{-0.011}$ $(+0.6\sigma)$
A_{100}^{dustTT}	8.76	$8.8^{+3.5}_{-3.6}$ (-0.1σ)	Y_P	0.245486	$0.24547^{+0.00012}_{-0.00011}$ (-0.1σ)	$\sigma_8(0.61)$	0.5865	$0.585^{+0.011}_{-0.011}$ $(+0.3\sigma)$
A_{143}^{dustTT}	10.62	$10.6^{+3.5}_{-3.5}$ $(+0.1\sigma)$	Y_P^{BBN}	0.246813	$0.24680^{+0.00012}_{-0.00011}$ (-0.1σ)	$f\sigma_8(2.33)$	0.2961	$0.2955^{+0.0053}_{-0.0054}$ $(+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	19.7	$18.1^{+6.3}_{-6.3}$ $(+0.1\sigma)$	$10^5 D/H$	2.541	$2.548^{+0.053}_{-0.053}$ $(+0.1\sigma)$	$\sigma_8(2.33)$	0.3056	$0.3050^{+0.0055}_{-0.0056}$ (-0.0σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} $(+0.0\sigma)$	Age/Gyr	13.7574	$13.763^{+0.043}_{-0.044}$ $(+0.4\sigma)$	f_{2000}^{143}	25.8	27^{+5}_{-6} (-0.0σ)
A_{100}^{dustTE}	0.115	$0.114^{+0.077}_{-0.077}$	z_*	1089.441	$1089.50^{+0.48}_{-0.48}$ $(+0.3\sigma)$	$f_{2000}^{143 \times 217}$	29.74	30^{+4}_{-4} $(+0.0\sigma)$
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.057}_{-0.059}$	r_*	144.755	$144.74^{+0.47}_{-0.48}$ (-0.7σ)	f_{2000}^{217}	104.44	$105.1^{+3.6}_{-3.6}$ $(+0.1\sigma)$
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04130	$1.04129^{+0.00057}_{-0.00056}$ (-0.5σ)	χ_{small}^2	395.67	$396.9 (\nu: 1.4)$ $(+0.0\sigma)$
A_{143}^{dustTE}	0.220	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.9013	$13.900^{+0.045}_{-0.045}$ (-0.7σ)	χ_{lowl}^2	22.06	$22.34 (\nu: 0.3)$ $(+0.5\sigma)$
$A_{143 \times 217}^{dustTE}$	0.659	$0.66^{+0.15}_{-0.16}$	z_{drag}	1060.35	$1060.29^{+0.60}_{-0.58}$ $(+0.1\sigma)$	χ_{plik}^2	2337.1	$2353.2 (\nu: 15.5)$ $(+285.7\sigma)$
A_{217}^{dustTE}	2.05	$2.06^{+0.54}_{-0.54}$	r_{drag}	147.342	$147.34^{+0.48}_{-0.48}$ (-0.8σ)	χ_{6DF}^2	0.002	$0.030 (\nu: 0.0)$
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	k_D	0.14079	$0.14076^{+0.00059}_{-0.00058}$ $(+0.8\sigma)$	χ_{MGS}^2	1.82	$1.79 (\nu: 0.1)$
c_{217}	0.99814	$0.9981^{+0.0012}_{-0.0013}$ (-0.1σ)	$100\theta_D$	0.160519	$0.16056^{+0.00035}_{-0.00036}$ (-0.2σ)	$\chi_{DR12BAO}^2$	3.43	$3.95 (\nu: 0.3)$
H_0	68.33	$68.23^{+0.99}_{-0.97}$ (-0.6σ)	z_{eq}	3360.8	3364^{+48}_{-47} $(+0.7\sigma)$	χ_{prior}^2	1.3	$11.3 (\nu: 9.7)$ $(+1.2\sigma)$
Ω_Λ	0.6974	$0.696^{+0.012}_{-0.013}$ (-0.6σ)	k_{eq}	0.010258	$0.01027^{+0.00015}_{-0.00014}$ $(+0.7\sigma)$	χ_{BAO}^2	5.25	$5.77 (\nu: 0.3)$
Ω_m	0.3026	$0.304^{+0.013}_{-0.012}$ $(+0.6\sigma)$	$100\theta_{eq}$	0.8216	$0.8209^{+0.0092}_{-0.0091}$ (-0.7σ)	χ_{CMB}^2	2754.9	$2772.4 (\nu: 17.0)$ $(+275.4\sigma)$
$\Omega_m h^2$	0.14128	$0.1414^{+0.0020}_{-0.0020}$ $(+0.7\sigma)$	$100\theta_{s,eq}$	0.45355	$0.4532^{+0.0047}_{-0.0047}$ (-0.7σ)			
$\Omega_m h^3$	0.09654	$0.09649^{+0.00061}_{-0.00057}$ $(+0.2\sigma)$	$H(0.15)$	73.52	$73.44^{+0.86}_{-0.84}$ (-0.6σ)			

Best-fit $\chi_{eff}^2 = 2761.40$; $\Delta\chi_{eff}^2 = -10.51$; $\bar{\chi}_{eff}^2 = 2789.54$; $\Delta\bar{\chi}_{eff}^2 = -8.37$; $R - 1 = 0.01310$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.82 (Δ 0.60) DR12BAO: 3.43 (Δ -0.99) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.67 (Δ -0.54) commander_dx12_v3_2_29: 22.06 (Δ -0.81) plik_rd12_HM_v22b_TTTEEE: 2337.12 (Δ -8.38)

3.9 base_Alens_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022780	$0.02274^{+0.00032}_{-0.00032}$ (+0.5 σ)	$\Omega_m h^3$	0.09663	$0.09658^{+0.00059}_{-0.00062}$ (+0.4 σ)	$100\theta_{s,eq}$	0.4574	$0.4571^{+0.0058}_{-0.0061}$ (+0.0 σ)
$\Omega_c h^2$	0.11629	$0.1164^{+0.0027}_{-0.0026}$ (-0.1 σ)	σ_8	0.7953	$0.794^{+0.016}_{-0.017}$ (-0.1 σ)	$H(0.15)$	74.24	$74.2^{+1.0}_{-1.1}$ (+0.2 σ)
$100\theta_{MC}$	1.04135	$1.04135^{+0.00068}_{-0.00060}$ (-0.1 σ)	S_8	0.7848	$0.785^{+0.034}_{-0.030}$ (-0.1 σ)	$D_M(0.15)$	628.2	$629^{+11}_{-9.6}$ (-0.2 σ)
τ	0.0519	$0.050^{+0.017}_{-0.017}$ (+0.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4298	$0.430^{+0.019}_{-0.016}$ (-0.1 σ)	$H(0.38)$	84.02	$83.97^{+0.80}_{-0.82}$ (+0.2 σ)
A_L	1.229	$1.22^{+0.13}_{-0.13}$ (-0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5847	$0.584^{+0.018}_{-0.017}$ (-0.1 σ)	$D_M(0.38)$	1502.8	1504^{+21}_{-20} (-0.2 σ)
$\ln(10^{10} A_s)$	3.0310	$3.027^{+0.033}_{-0.037}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9564	$0.955^{+0.026}_{-0.026}$ (-0.1 σ)	$H(0.51)$	90.55	$90.50^{+0.66}_{-0.66}$ (+0.2 σ)
n_s	0.9769	$0.9750^{+0.0086}_{-0.0089}$ (+0.1 σ)	$r_{drag} h$	102.10	$102.0^{+2.1}_{-2.2}$ (+0.1 σ)	$D_M(0.51)$	1949.8	1951^{+25}_{-23} (-0.2 σ)
y_{cal}	0.99991	$0.99996^{+0.0046}_{-0.0046}$ (-0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.622	$2.61^{+0.11}_{-0.11}$ (-0.4 σ)	$H(0.61)$	96.02	$95.98^{+0.54}_{-0.54}$ (+0.2 σ)
A_{217}^{CIB}	41.8	44^{+10}_{-10} (-0.1 σ)	z_{re}	7.29	$7.1^{+1.7}_{-1.8}$ (-0.0 σ)	$D_M(0.61)$	2271.4	2273^{+27}_{-26} (-0.2 σ)
$\xi^{tSZ \times CIB}$	1.00	—	$10^9 A_s$	2.072	$2.064^{+0.069}_{-0.076}$ (+0.0 σ)	$H(2.33)$	234.57	$234.6^{+1.6}_{-1.5}$ (-0.0 σ)
A_{143}^{tSZ}	7.03	$5.9^{+3.5}_{-3.4}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8675	$1.867^{+0.023}_{-0.022}$ (-0.0 σ)	$D_M(2.33)$	5731.3	5733^{+24}_{-24} (-0.3 σ)
A_{100}^{PS}	234	246^{+50}_{-50} (-0.1 σ)	D_{40}	1204.5	1208^{+25}_{-26} (-0.0 σ)	$f\sigma_8(0.15)$	0.4358	$0.436^{+0.018}_{-0.016}$ (-0.1 σ)
A_{143}^{PS}	46.5	40^{+10}_{-20} (-0.2 σ)	D_{220}	5745	5748^{+72}_{-76} (+0.3 σ)	$\sigma_8(0.15)$	0.7369	$0.735^{+0.014}_{-0.016}$ (-0.1 σ)
$A_{143 \times 217}^{PS}$	55.7	41^{+20}_{-20} (-0.0 σ)	D_{810}	2530.9	2529^{+25}_{-27} (+0.1 σ)	$f\sigma_8(0.38)$	0.4581	$0.458^{+0.015}_{-0.014}$ (-0.1 σ)
A_{217}^{PS}	123.3	116^{+20}_{-20} (+0.1 σ)	D_{1420}	817.5	$816.1^{+8.7}_{-8.9}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6553	$0.654^{+0.012}_{-0.013}$ (-0.1 σ)
A^{kSZ}	0.00	< 6.36 (-0.2 σ)	D_{2000}	233.55	$232.8^{+2.9}_{-3.0}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4590	$0.458^{+0.013}_{-0.013}$ (-0.1 σ)
A_{100}^{dustTT}	8.60	$8.9^{+3.7}_{-3.5}$ (-0.0 σ)	$n_{s,0.002}$	0.9769	$0.9750^{+0.0086}_{-0.0089}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6142	$0.613^{+0.011}_{-0.012}$ (-0.0 σ)
A_{143}^{dustTT}	10.61	$10.5^{+3.4}_{-3.5}$ (+0.0 σ)	Y_P	0.245548	$0.24554^{+0.00014}_{-0.00012}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4557	$0.455^{+0.012}_{-0.012}$ (-0.1 σ)
$A_{143 \times 217}^{dustTT}$	19.6	$18.0^{+6.3}_{-6.1}$ (+0.0 σ)	Y_P^{BBN}	0.246875	$0.24686^{+0.00014}_{-0.00012}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5850	$0.584^{+0.011}_{-0.011}$ (-0.0 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (-0.0 σ)	$10^5 D/H$	2.512	$2.519^{+0.058}_{-0.056}$ (-0.5 σ)	$f\sigma_8(2.33)$	0.2957	$0.2950^{+0.0053}_{-0.0053}$ (-0.0 σ)
A_{100}^{dustTE}	0.113	$0.115^{+0.076}_{-0.077}$	Age/Gyr	13.727	$13.731^{+0.052}_{-0.054}$ (-0.3 σ)	$\sigma_8(2.33)$	0.3058	$0.3050^{+0.0054}_{-0.0055}$ (+0.0 σ)
$A_{100 \times 143}^{dustTE}$	0.133	$0.136^{+0.059}_{-0.058}$	z_*	1089.09	$1089.15^{+0.58}_{-0.52}$ (-0.4 σ)	f_{2000}^{143}	24.3	26^{+6}_{-6} (-0.3 σ)
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.17}_{-0.17}$	r_*	145.08	$145.08^{+0.57}_{-0.58}$ (-0.1 σ)	$f_{2000}^{143 \times 217}$	28.64	29^{+4}_{-4} (-0.3 σ)
A_{143}^{dustTE}	0.215	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	1.04150	$1.04150^{+0.00067}_{-0.00059}$ (-0.1 σ)	f_{2000}^{217}	103.54	$104.3^{+3.6}_{-3.7}$ (-0.3 σ)
$A_{143 \times 217}^{dustTE}$	0.657	$0.66^{+0.16}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.930	$13.930^{+0.054}_{-0.055}$ (-0.1 σ)	χ_{simall}^2	395.65	$396.8 (\nu: 1.3)$ (-0.0 σ)
A_{217}^{dustTE}	2.03	$2.04^{+0.53}_{-0.57}$	z_{drag}	1060.62	$1060.53^{+0.62}_{-0.64}$ (+0.5 σ)	χ_{lowl}^2	21.38	$21.66 (\nu: 0.3)$ (-0.2 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.62	$147.63^{+0.57}_{-0.59}$ (-0.2 σ)	χ_{plik}^2	2338.7	$2355.3 (\nu: 18.6)$ (+286.0 σ)
c_{217}	0.99809	$0.9981^{+0.0012}_{-0.0013}$ (-0.1 σ)	k_D	0.14061	$0.14057^{+0.00061}_{-0.00060}$ (+0.4 σ)	$\chi_{H073p45}^2$	6.67	$7.1 (\nu: 2.1)$
H_0	69.16	$69.1^{+1.2}_{-1.3}$ (+0.1 σ)	$100\theta_D$	0.160391	$0.16044^{+0.00036}_{-0.00033}$ (-0.6 σ)	χ_{prior}^2	1.4	$11.3 (\nu: 9.5)$ (+1.2 σ)
Ω_Λ	0.7079	$0.707^{+0.015}_{-0.016}$ (+0.1 σ)	z_{eq}	3323	3326^{+60}_{-57} (-0.0 σ)	χ_{CMB}^2	2755.8	$2773.8 (\nu: 18.8)$ (+275.6 σ)
Ω_m	0.2921	$0.293^{+0.016}_{-0.015}$ (-0.1 σ)	k_{eq}	0.010143	$0.01015^{+0.00018}_{-0.00017}$ (-0.0 σ)			
$\Omega_m h^2$	0.13972	$0.1398^{+0.0025}_{-0.0024}$ (-0.0 σ)	$100\theta_{eq}$	0.8292	$0.829^{+0.011}_{-0.012}$ (+0.1 σ)			

Best-fit $\chi_{eff}^2 = 2763.88$; $\Delta\chi_{eff}^2 = -14.05$; $\bar{\chi}_{eff}^2 = 2792.09$; $\Delta\bar{\chi}_{eff}^2 = -12.07$; $R - 1 = 0.02684$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck.B: 395.65 (Δ -0.82) commander_dx12.v3.2.29: 21.38 (Δ -1.16) plik_rd12_HM_v22b_TTTEEE: 2338.75 (Δ -8.01) Hubble
- H073p45: 6.67 (Δ -3.91)

3.10 base_Alens_plikHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02259^{+0.00034}_{-0.00034} \quad (-0.1\sigma)$	$\Omega_{\text{m}}h^2$	$0.1413^{+0.0029}_{-0.0029} \quad (+0.6\sigma)$	k_{eq}	$0.01026^{+0.00021}_{-0.00021} \quad (+0.6\sigma)$
$\Omega_{\text{c}}h^2$	$0.1181^{+0.0031}_{-0.0031} \quad (+0.6\sigma)$	$\Omega_{\text{m}}h^3$	$0.09650^{+0.00060}_{-0.00058} \quad (+0.2\sigma)$	$100\theta_{\text{eq}}$	$0.822^{+0.014}_{-0.013} \quad (-0.6\sigma)$
$100\theta_{\text{MC}}$	$1.04114^{+0.00064}_{-0.00062} \quad (-0.5\sigma)$	σ_8	$0.802^{+0.015}_{-0.014} \quad (+0.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4535^{+0.0069}_{-0.0067} \quad (-0.6\sigma)$
τ	$0.0527^{+0.011}_{-0.0093} \quad (+0.3\sigma)$	S_8	$0.806^{+0.037}_{-0.037} \quad (+0.6\sigma)$	$H(0.15)$	$73.5^{+1.2}_{-1.2} \quad (-0.5\sigma)$
A_{L}	$1.17^{+0.12}_{-0.12} \quad (-0.7\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.442^{+0.020}_{-0.020} \quad (+0.6\sigma)$	$D_{\text{M}}(0.15)$	$635^{+12}_{-12} \quad (+0.5\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.036^{+0.026}_{-0.023} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.595^{+0.019}_{-0.019} \quad (+0.7\sigma)$	$H(0.38)$	$83.46^{+0.90}_{-0.88} \quad (-0.5\sigma)$
n_{s}	$0.9709^{+0.0094}_{-0.0095} \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.971^{+0.026}_{-0.026} \quad (+0.7\sigma)$	$D_{\text{M}}(0.38)$	$1518^{+24}_{-24} \quad (+0.5\sigma)$
y_{cal}	$1.0000^{+0.0047}_{-0.0046} \quad (-0.0\sigma)$	$r_{\text{drag}}h$	$100.6^{+2.5}_{-2.4} \quad (-0.6\sigma)$	$H(0.51)$	$90.10^{+0.72}_{-0.70} \quad (-0.5\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.60^{+0.11}_{-0.12} \quad (-0.5\sigma)$	$D_{\text{M}}(0.51)$	$1967^{+28}_{-28} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 8.49 \quad (+0.4\sigma)$	$H(0.61)$	$95.66^{+0.59}_{-0.56} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.8^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$10^9 A_{\text{s}}$	$2.082^{+0.054}_{-0.048} \quad (+0.5\sigma)$	$D_{\text{M}}(0.61)$	$2290^{+30}_{-30} \quad (+0.5\sigma)$
A_{100}^{PS}	$249^{+60}_{-50} \quad (-0.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.874^{+0.024}_{-0.023} \quad (+0.5\sigma)$	$H(2.33)$	$235.5^{+1.8}_{-1.8} \quad (+0.6\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (+0.0\sigma)$	D_{40}	$1217^{+26}_{-26} \quad (+0.5\sigma)$	$D_{\text{M}}(2.33)$	$5747^{+25}_{-26} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	$5739^{+74}_{-74} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.019}_{-0.019} \quad (+0.6\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2531^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.013}_{-0.012} \quad (+0.7\sigma)$
A^{kSZ}	$< 6.73 \quad (-0.1\sigma)$	D_{1420}	$815.5^{+9.4}_{-9.1} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.015}_{-0.015} \quad (+0.7\sigma)$
A_{100}^{dustTT}	$8.8^{+3.7}_{-3.6} \quad (-0.1\sigma)$	D_{2000}	$232.2^{+3.0}_{-3.1} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.010}_{-0.0095} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.6^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.9709^{+0.0094}_{-0.0095} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.014}_{-0.013} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.1^{+6.4}_{-6.3} \quad (+0.1\sigma)$	Y_{P}	$0.24548^{+0.00014}_{-0.00013} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6170^{+0.0091}_{-0.0084} \quad (+0.6\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24680^{+0.00014}_{-0.00013} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.012}_{-0.012} \quad (+0.7\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.074}$	$10^5 \text{D}/\text{H}$	$2.546^{+0.062}_{-0.060} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.5873^{+0.0084}_{-0.0077} \quad (+0.6\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.059}_{-0.059}$	Age/Gyr	$13.760^{+0.055}_{-0.057} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2965^{+0.0040}_{-0.0036} \quad (+0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.48^{+0.64}_{-0.63} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0040}_{-0.0036} \quad (+0.4\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	r_*	$144.76^{+0.66}_{-0.66} \quad (-0.7\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	$100\theta_*$	$1.04130^{+0.00063}_{-0.00061} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.0\sigma)$
A_{217}^{dustTE}	$2.05^{+0.53}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.902^{+0.060}_{-0.061} \quad (-0.7\sigma)$	f_{2000}^{217}	$105.0^{+3.8}_{-3.7} \quad (+0.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.30^{+0.66}_{-0.64} \quad (+0.1\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
c_{217}	$0.9981^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.36^{+0.63}_{-0.63} \quad (-0.7\sigma)$	χ_{lowl}^2	$22.38 \quad (\nu: 0.4) \quad (+0.5\sigma)$
H_0	$68.3^{+1.4}_{-1.4} \quad (-0.5\sigma)$	k_{D}	$0.14075^{+0.00065}_{-0.00064} \quad (+0.7\sigma)$	χ_{plik}^2	$2353.8 \quad (\nu: 16.4) \quad (+285.8\sigma)$
Ω_{Λ}	$0.697^{+0.018}_{-0.019} \quad (-0.5\sigma)$	$100\theta_{\text{D}}$	$0.16056^{+0.00037}_{-0.00036} \quad (-0.2\sigma)$	χ_{prior}^2	$11.3 \quad (\nu: 9.5) \quad (+1.2\sigma)$
Ω_{m}	$0.303^{+0.019}_{-0.018} \quad (+0.5\sigma)$	z_{eq}	$3361^{+69}_{-69} \quad (+0.6\sigma)$	χ_{CMB}^2	$2772.6 \quad (\nu: 17.1) \quad (+275.4\sigma)$

$\bar{\chi}_{\text{eff}}^2 = 2783.87$; $\Delta\bar{\chi}_{\text{eff}}^2 = -7.66$; $R - 1 = 0.01066$

3.11 base_Alens_plikHM_TTTEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02258^{+0.00029}_{-0.00029} \quad (-0.1\sigma)$	σ_8	$0.803^{+0.013}_{-0.012} \quad (+0.7\sigma)$	$D_M(0.15)$	$635.9^{+8.2}_{-8.2} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0021}_{-0.0021} \quad (+0.6\sigma)$	S_8	$0.808^{+0.026}_{-0.026} \quad (+0.7\sigma)$	$H(0.38)$	$83.43^{+0.64}_{-0.62} \quad (-0.5\sigma)$
$100\theta_{MC}$	$1.04113^{+0.00059}_{-0.00057} \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.442^{+0.015}_{-0.014} \quad (+0.7\sigma)$	$D_M(0.38)$	$1518^{+17}_{-17} \quad (+0.6\sigma)$
τ	$0.0527^{+0.011}_{-0.0094} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.596^{+0.014}_{-0.014} \quad (+0.7\sigma)$	$H(0.51)$	$90.07^{+0.52}_{-0.50} \quad (-0.5\sigma)$
A_L	$1.17^{+0.12}_{-0.11} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.972^{+0.020}_{-0.019} \quad (+0.7\sigma)$	$D_M(0.51)$	$1968^{+19}_{-20} \quad (+0.5\sigma)$
$\ln(10^{10} A_s)$	$3.036^{+0.025}_{-0.023} \quad (+0.5\sigma)$	$r_{drag} h$	$100.5^{+1.7}_{-1.7} \quad (-0.6\sigma)$	$H(0.61)$	$95.64^{+0.43}_{-0.41} \quad (-0.5\sigma)$
n_s	$0.9706^{+0.0079}_{-0.0078} \quad (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.60^{+0.11}_{-0.12} \quad (-0.5\sigma)$	$D_M(0.61)$	$2291^{+21}_{-21} \quad (+0.5\sigma)$
y_{cal}	$1.0000^{+0.0048}_{-0.0047} \quad (-0.0\sigma)$	z_{re}	$< 8.50 \quad (+0.4\sigma)$	$H(2.33)$	$235.6^{+1.3}_{-1.3} \quad (+0.7\sigma)$
A_{217}^{CIB}	$44^{+10}_{-10} \quad (-0.1\sigma)$	$10^9 A_s$	$2.083^{+0.053}_{-0.047} \quad (+0.5\sigma)$	$D_M(2.33)$	$5748^{+19}_{-19} \quad (+0.4\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.874^{+0.021}_{-0.021} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.014}_{-0.013} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.8^{+3.5}_{-3.6} \quad (+0.1\sigma)$	D_{40}	$1218^{+24}_{-23} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.011}_{-0.011} \quad (+0.7\sigma)$
A_{100}^{PS}	$250^{+60}_{-50} \quad (-0.0\sigma)$	D_{220}	$5738^{+75}_{-74} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.012}_{-0.011} \quad (+0.7\sigma)$
A_{143}^{PS}	$42^{+10}_{-20} \quad (+0.0\sigma)$	D_{810}	$2531^{+27}_{-25} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6591^{+0.0093}_{-0.0086} \quad (+0.7\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{1420}	$815.5^{+9.4}_{-9.1} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.010}_{-0.0099} \quad (+0.7\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.2\sigma)$	D_{2000}	$232.2^{+3.0}_{-3.0} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.6172^{+0.0085}_{-0.0078} \quad (+0.6\sigma)$
A^{kSZ}	$< 6.62 \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9706^{+0.0079}_{-0.0078} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.4627^{+0.0094}_{-0.0089} \quad (+0.7\sigma)$
A_{100}^{dustTT}	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	Y_P	$0.24547^{+0.00011}_{-0.00011} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5875^{+0.0080}_{-0.0073} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.6^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.24680^{+0.00011}_{-0.00011} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2965^{+0.0039}_{-0.0035} \quad (+0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.2^{+6.3}_{-6.4} \quad (+0.1\sigma)$	$10^5 D/H$	$2.548^{+0.052}_{-0.052} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0040}_{-0.0036} \quad (+0.4\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.762^{+0.043}_{-0.044} \quad (+0.4\sigma)$	f_{2000}^{143}	$27^{+5}_{-6} \quad (-0.0\sigma)$
A_{100}^{dustTE}	$0.114^{+0.077}_{-0.076}$	z_*	$1089.50^{+0.48}_{-0.47} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.0\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.059}$	r_*	$144.74^{+0.47}_{-0.47} \quad (-0.7\sigma)$	f_{2000}^{217}	$105.1^{+3.6}_{-3.6} \quad (+0.0\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04129^{+0.00059}_{-0.00056} \quad (-0.5\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.900^{+0.045}_{-0.044} \quad (-0.7\sigma)$	χ_{lowl}^2	$22.40 \quad (\nu: 0.3) \quad (+0.5\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1060.29^{+0.60}_{-0.58} \quad (+0.1\sigma)$	χ_{plik}^2	$2353.2 \quad (\nu: 15.4) \quad (+285.7\sigma)$
A_{217}^{dustTE}	$2.06^{+0.54}_{-0.54}$	r_{drag}	$147.34^{+0.48}_{-0.48} \quad (-0.8\sigma)$	χ_{6DF}^2	$0.030 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0011}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14076^{+0.00057}_{-0.00057} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.79 \quad (\nu: 0.1)$
c_{217}	$0.9981^{+0.0012}_{-0.0013} \quad (-0.1\sigma)$	$100\theta_D$	$0.16056^{+0.00035}_{-0.00034} \quad (-0.2\sigma)$	$\chi_{DR12BAO}^2$	$3.95 \quad (\nu: 0.3)$
H_0	$68.24^{+0.99}_{-0.97} \quad (-0.6\sigma)$	z_{eq}	$3364^{+47}_{-48} \quad (+0.7\sigma)$	χ_{prior}^2	$11.3 \quad (\nu: 9.7) \quad (+1.2\sigma)$
Ω_Λ	$0.696^{+0.013}_{-0.013} \quad (-0.6\sigma)$	k_{eq}	$0.01027^{+0.00014}_{-0.00015} \quad (+0.7\sigma)$	χ_{BAO}^2	$5.78 \quad (\nu: 0.3)$
Ω_m	$0.304^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$100\theta_{eq}$	$0.8210^{+0.0093}_{-0.0090} \quad (-0.6\sigma)$	χ_{CMB}^2	$2772.0 \quad (\nu: 16.2) \quad (+275.3\sigma)$
$\Omega_m h^2$	$0.1414^{+0.0020}_{-0.0020} \quad (+0.7\sigma)$	$100\theta_{s,eq}$	$0.4532^{+0.0047}_{-0.0046} \quad (-0.7\sigma)$		
$\Omega_m h^3$	$0.09649^{+0.00060}_{-0.00056} \quad (+0.2\sigma)$	$H(0.15)$	$73.44^{+0.86}_{-0.84} \quad (-0.6\sigma)$		

$$\bar{\chi}_{eff}^2 = 2789.13; \Delta \bar{\chi}_{eff}^2 = -8.59; R - 1 = 0.01550$$

3.12 base_Alens_plikHM_TTTEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02274^{+0.00031}_{-0.00032} \quad (+0.5\sigma)$	$\Omega_{\text{m}}h^3$	$0.09658^{+0.00058}_{-0.00062} \quad (+0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4572^{+0.0059}_{-0.0062} \quad (+0.1\sigma)$
$\Omega_{\text{c}}h^2$	$0.1164^{+0.0028}_{-0.0026} \quad (-0.1\sigma)$	σ_8	$0.796^{+0.015}_{-0.013} \quad (+0.1\sigma)$	$H(0.15)$	$74.2^{+1.0}_{-1.1} \quad (+0.2\sigma)$
$100\theta_{\text{MC}}$	$1.04136^{+0.00069}_{-0.00060} \quad (-0.1\sigma)$	S_8	$0.787^{+0.033}_{-0.029} \quad (-0.0\sigma)$	$D_{\text{M}}(0.15)$	$629^{+11}_{-9.6} \quad (-0.2\sigma)$
τ	$0.0534^{+0.012}_{-0.0096} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.431^{+0.018}_{-0.016} \quad (-0.0\sigma)$	$H(0.38)$	$83.98^{+0.81}_{-0.82} \quad (+0.2\sigma)$
A_{L}	$1.21^{+0.14}_{-0.13} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.586^{+0.017}_{-0.015} \quad (+0.0\sigma)$	$D_{\text{M}}(0.38)$	$1504^{+21}_{-20} \quad (-0.2\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.033^{+0.026}_{-0.023} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.958^{+0.025}_{-0.022} \quad (+0.0\sigma)$	$H(0.51)$	$90.51^{+0.68}_{-0.66} \quad (+0.2\sigma)$
n_{s}	$0.9751^{+0.0087}_{-0.0089} \quad (+0.1\sigma)$	$r_{\text{drag}}h$	$102.0^{+2.0}_{-2.2} \quad (+0.1\sigma)$	$D_{\text{M}}(0.51)$	$1951^{+25}_{-24} \quad (-0.2\sigma)$
y_{cal}	$0.9999^{+0.0047}_{-0.0045} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.61^{+0.11}_{-0.12} \quad (-0.3\sigma)$	$H(0.61)$	$95.99^{+0.57}_{-0.54} \quad (+0.2\sigma)$
A_{217}^{CIB}	$44^{+10}_{-10} \quad (-0.1\sigma)$	z_{re}	$< 8.51 \quad (+0.4\sigma)$	$D_{\text{M}}(0.61)$	$2273^{+27}_{-26} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}$	$2.077^{+0.055}_{-0.048} \quad (+0.4\sigma)$	$H(2.33)$	$234.6^{+1.6}_{-1.5} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.867^{+0.023}_{-0.023} \quad (-0.0\sigma)$	$D_{\text{M}}(2.33)$	$5733^{+24}_{-25} \quad (-0.3\sigma)$
A_{100}^{PS}	$246^{+50}_{-60} \quad (-0.1\sigma)$	D_{40}	$1208^{+25}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.437^{+0.017}_{-0.015} \quad (-0.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5747^{+70}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.013}_{-0.011} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2528^{+25}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.459^{+0.014}_{-0.013} \quad (-0.0\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{1420}	$816.0^{+8.5}_{-8.8} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.010}_{-0.0089} \quad (+0.2\sigma)$
A^{kSZ}	$< 6.35 \quad (-0.2\sigma)$	D_{2000}	$232.8^{+2.9}_{-2.9} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.013}_{-0.011} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	$n_{\text{s},0.002}$	$0.9751^{+0.0087}_{-0.0089} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6147^{+0.0094}_{-0.0080} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.6^{+3.3}_{-3.6} \quad (+0.0\sigma)$	Y_{P}	$0.24554^{+0.00014}_{-0.00012} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.012}_{-0.010} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$17.9^{+6.3}_{-6.3} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24686^{+0.00014}_{-0.00012} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5854^{+0.0087}_{-0.0074} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.519^{+0.057}_{-0.056} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2959^{+0.0041}_{-0.0037} \quad (+0.3\sigma)$
A_{100}^{dustTE}	$0.115^{+0.077}_{-0.077}$	Age/Gyr	$13.731^{+0.052}_{-0.054} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0040}_{-0.0036} \quad (+0.4\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.058}$	z_*	$1089.15^{+0.58}_{-0.53} \quad (-0.4\sigma)$	f_{2000}^{143}	$26^{+6}_{-6} \quad (-0.3\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.18}$	r_*	$145.09^{+0.58}_{-0.58} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$29^{+4}_{-4} \quad (-0.4\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	$1.04151^{+0.00068}_{-0.00059} \quad (-0.1\sigma)$	f_{2000}^{217}	$104.3^{+3.6}_{-3.7} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.17}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.930^{+0.054}_{-0.055} \quad (-0.1\sigma)$	χ_{small}^2	$396.3 \quad (\nu: 0.5) \quad (-0.3\sigma)$
A_{217}^{dustTE}	$2.04^{+0.53}_{-0.56}$	z_{drag}	$1060.53^{+0.63}_{-0.63} \quad (+0.5\sigma)$	χ_{lowl}^2	$21.71 \quad (\nu: 0.3) \quad (-0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.64^{+0.57}_{-0.59} \quad (-0.2\sigma)$	χ_{plik}^2	$2355.4 \quad (\nu: 18.7) \quad (+286.1\sigma)$
c_{217}	$0.9981^{+0.0012}_{-0.0013} \quad (-0.1\sigma)$	k_{D}	$0.14056^{+0.00060}_{-0.00060} \quad (+0.4\sigma)$	χ_{H073p45}^2	$7.0 \quad (\nu: 2.1)$
H_0	$69.1^{+1.2}_{-1.3} \quad (+0.2\sigma)$	$100\theta_{\text{D}}$	$0.16044^{+0.00036}_{-0.00034} \quad (-0.6\sigma)$	χ_{prior}^2	$11.3 \quad (\nu: 9.5) \quad (+1.2\sigma)$
Ω_{Λ}	$0.707^{+0.014}_{-0.016} \quad (+0.1\sigma)$	z_{eq}	$3325^{+61}_{-58} \quad (-0.1\sigma)$	χ_{CMB}^2	$2773.4 \quad (\nu: 18.3) \quad (+275.5\sigma)$
Ω_{m}	$0.293^{+0.016}_{-0.014} \quad (-0.1\sigma)$	k_{eq}	$0.01015^{+0.00019}_{-0.00018} \quad (-0.1\sigma)$		
$\Omega_{\text{m}}h^2$	$0.1398^{+0.0026}_{-0.0024} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.829^{+0.012}_{-0.012} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2791.77; \Delta\bar{\chi}_{\text{eff}}^2 = -12.12; R - 1 = 0.03556$$

3.13 base_Alens_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02270	$0.02263^{+0.00056}_{-0.00058}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4286	$0.430^{+0.033}_{-0.031}$ (−0.1 σ)	$H(0.15)$	74.25	$74.1^{+2.1}_{-2.1}$ (+0.1 σ)
$\Omega_c h^2$	0.11620	$0.1164^{+0.0050}_{-0.0048}$ (−0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5833	$0.584^{+0.030}_{-0.029}$ (−0.1 σ)	$D_M(0.15)$	628.1	629^{+20}_{-19} (−0.1 σ)
$100\theta_{MC}$	1.04149	$1.0414^{+0.0010}_{-0.0011}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9543	$0.956^{+0.041}_{-0.040}$ (−0.1 σ)	$H(0.38)$	84.02	$83.9^{+1.6}_{-1.5}$ (+0.1 σ)
τ	0.0502	$0.050^{+0.017}_{-0.017}$ (+0.0 σ)	$r_{\text{drag}} h$	102.20	$102.0^{+4.1}_{-4.1}$ (+0.1 σ)	$D_M(0.38)$	1502.7	1505^{+41}_{-40} (−0.1 σ)
A_L	1.270	$1.25^{+0.20}_{-0.19}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.656	$2.64^{+0.15}_{-0.16}$ (−0.1 σ)	$H(0.51)$	90.53	$90.5^{+1.3}_{-1.2}$ (+0.1 σ)
$\ln(10^{10} A_s)$	3.0260	$3.026^{+0.033}_{-0.037}$ (−0.0 σ)	z_{re}	7.14	$7.1^{+1.7}_{-1.8}$ (+0.0 σ)	$D_M(0.51)$	1949.8	1953^{+48}_{-47} (−0.1 σ)
n_s	0.9776	$0.976^{+0.014}_{-0.014}$ (+0.2 σ)	$10^9 A_s$	2.061	$2.062^{+0.069}_{-0.075}$ (−0.0 σ)	$H(0.61)$	96.00	$95.9^{+1.1}_{-0.99}$ (+0.1 σ)
y_{cal}	0.99990	$1.0001^{+0.0049}_{-0.0049}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8643	$1.864^{+0.029}_{-0.028}$ (−0.2 σ)	$D_M(0.61)$	2271	2275^{+51}_{-51} (−0.1 σ)
A_{100}^{PS}	217.0	229^{+50}_{-50} (−0.7 σ)	D_{40}	1200.1	1204^{+35}_{-33} (−0.3 σ)	$H(2.33)$	234.44	$234.5^{+2.9}_{-2.8}$ (−0.1 σ)
A_{143}^{PS}	44.2	33^{+20}_{-20} (−1.0 σ)	D_{220}	5727	5728^{+84}_{-84} (−0.2 σ)	$D_M(2.33)$	5732.6	5737^{+44}_{-45} (−0.1 σ)
A_{217}^{PS}	109.9	104^{+30}_{-30} (−1.1 σ)	D_{810}	2526.2	2525^{+28}_{-27} (−0.1 σ)	$f\sigma_8(0.15)$	0.4346	$0.436^{+0.030}_{-0.029}$ (−0.1 σ)
A_{217}^{CIB}	36.7	37^{+10}_{-10} (−1.2 σ)	D_{1420}	815.6	814^{+10}_{-10} (−0.0 σ)	$\sigma_8(0.15)$	0.7354	$0.735^{+0.018}_{-0.019}$ (−0.1 σ)
A_{143}^{tSZ}	6.24	$4.2^{+3.6}_{-4.1}$ (−0.7 σ)	D_{2000}	233.18	$232.3^{+4.1}_{-4.2}$ (+0.0 σ)	$f\sigma_8(0.38)$	0.4569	$0.458^{+0.024}_{-0.024}$ (−0.1 σ)
$r_{143 \times 217}^{\text{PS}}$	0.796	$0.68^{+0.28}_{-0.25}$	$n_{s,0.002}$	0.9776	$0.976^{+0.014}_{-0.014}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6541	$0.654^{+0.014}_{-0.015}$ (−0.1 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.74	—	Y_P	0.245516	$0.24549^{+0.00025}_{-0.00023}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4579	$0.458^{+0.021}_{-0.021}$ (−0.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.996	—	Y_P^{BBN}	0.246843	$0.24682^{+0.00025}_{-0.00023}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6130	$0.613^{+0.012}_{-0.013}$ (−0.0 σ)
A^{kSZ}	0.0	—	10^5D/H	2.527	$2.54^{+0.11}_{-0.10}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4546	$0.455^{+0.019}_{-0.019}$ (−0.1 σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	Age/Gyr	13.730	$13.740^{+0.098}_{-0.099}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5839	$0.584^{+0.011}_{-0.012}$ (−0.0 σ)
A_{143}^{dust}	0.948	$0.95^{+0.35}_{-0.34}$	z_*	1089.18	$1089.3^{+1.1}_{-1.0}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2952	$0.2950^{+0.0052}_{-0.0057}$ (−0.0 σ)
A_{217}^{dust}	0.990	$0.98^{+0.20}_{-0.20}$	r_*	145.17	$145.2^{+1.0}_{-1.0}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3053	$0.3050^{+0.0053}_{-0.0057}$ (+0.0 σ)
$A_{143 \times 217}^{\text{dust}}$	1.016	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	1.04165	$1.0416^{+0.0010}_{-0.0010}$ (+0.1 σ)	f_{2000}^{143}	25.2	26^{+7}_{-7} (−0.2 σ)
c_{100}	0.99788	$0.9975^{+0.0021}_{-0.0020}$ (−3.4 σ)	$D_M(z_*)/\text{Gpc}$	13.936	$13.938^{+0.093}_{-0.093}$ (+0.1 σ)	f_{2000}^{217}	103.32	$104.3^{+4.6}_{-4.7}$ (−0.3 σ)
c_{217}	1.00076	$1.0008^{+0.0031}_{-0.0030}$ (+4.1 σ)	z_{drag}	1060.43	$1060.3^{+1.1}_{-1.1}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	28.5	29^{+5}_{-5} (−0.3 σ)
H_0	69.18	$69.0^{+2.4}_{-2.4}$ (+0.1 σ)	r_{drag}	147.74	$147.77^{+0.97}_{-0.98}$ (+0.1 σ)	χ_{simall}^2	395.71	396.8 (ν : 1.2) (−0.0 σ)
Ω_Λ	0.7084	$0.707^{+0.028}_{-0.031}$ (+0.1 σ)	k_D	0.14043	$0.14034^{+0.00099}_{-0.0010}$ (−0.1 σ)	χ_{lowl}^2	21.18	21.6 (ν : 0.5) (−0.2 σ)
Ω_m	0.2916	$0.293^{+0.031}_{-0.028}$ (−0.1 σ)	$100\theta_D$	0.16052	$0.16061^{+0.00061}_{-0.00057}$ (−0.0 σ)	χ_{CamSpec}^2	7046.0	7059.9 (ν : 14.2)
$\Omega_m h^2$	0.13955	$0.1397^{+0.0046}_{-0.0044}$ (−0.1 σ)	z_{eq}	3319	3322^{+110}_{-110} (−0.1 σ)	χ_{prior}^2	1.4	7.2 (ν : 5.4) (+0.0 σ)
$\Omega_m h^3$	0.09654	$0.09640^{+0.00098}_{-0.0010}$ (+0.0 σ)	k_{eq}	0.010131	$0.01014^{+0.00034}_{-0.00032}$ (−0.1 σ)	χ_{CMB}^2	7462.8	7478.3 (ν : 15.1) (+1092.2 σ)
σ_8	0.7937	$0.794^{+0.021}_{-0.022}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8298	$0.829^{+0.022}_{-0.022}$ (+0.1 σ)			
S_8	0.783	$0.785^{+0.060}_{-0.056}$ (−0.1 σ)	$100\theta_{s,\text{eq}}$	0.4578	$0.457^{+0.011}_{-0.011}$ (+0.1 σ)			

Best-fit $\chi_{\text{eff}}^2 = 7464.21$; $\Delta\chi_{\text{eff}}^2 = -7.53$; $\bar{\chi}_{\text{eff}}^2 = 7485.53$; $\Delta\bar{\chi}_{\text{eff}}^2 = -6.01$; $R - 1 = 0.00653$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.71 (Δ -0.12) commander_dx12.v3.2.29: 21.18 (Δ -2.22) CamSpec like_10.7HM: 7045.95 (Δ -4.38)

3.14 base_Alens_CamSpecHM_TT_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02250^{+0.00043}_{-0.00044} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.592^{+0.017}_{-0.017} \quad (+0.4\sigma)$	$H(0.38)$	$83.47^{+0.80}_{-0.80} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1178^{+0.0026}_{-0.0025} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.966^{+0.024}_{-0.025} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1517^{+21}_{-20} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04124^{+0.00084}_{-0.00087} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$100.8^{+2.0}_{-2.0} \quad (-0.5\sigma)$	$H(0.51)$	$90.10^{+0.67}_{-0.66} \quad (-0.5\sigma)$
τ	$0.050^{+0.016}_{-0.018} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.62^{+0.15}_{-0.15} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1966^{+24}_{-24} \quad (+0.5\sigma)$
A_{L}	$1.21^{+0.16}_{-0.15} \quad (-0.4\sigma)$	z_{re}	$7.1^{+1.7}_{-1.9} \quad (-0.0\sigma)$	$H(0.61)$	$95.64^{+0.57}_{-0.57} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.028^{+0.033}_{-0.038} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.065^{+0.069}_{-0.077} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2289^{+27}_{-26} \quad (+0.5\sigma)$
n_{s}	$0.9719^{+0.0092}_{-0.0091} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.6} \quad (+0.4\sigma)$
y_{cal}	$1.0001^{+0.0052}_{-0.0050} \quad (+0.0\sigma)$	D_{40}	$1212^{+26}_{-26} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5749^{+28}_{-28} \quad (+0.4\sigma)$
A_{100}^{PS}	$230^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5720^{+82}_{-84} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.016}_{-0.017} \quad (+0.5\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	D_{810}	$2526^{+28}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.014}_{-0.015} \quad (+0.3\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.1\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.014}_{-0.014} \quad (+0.4\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$231.8^{+3.7}_{-3.8} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.012}_{-0.013} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$4.1^{+3.5}_{-4.0} \quad (-0.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.9719^{+0.0092}_{-0.0091} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.012}_{-0.013} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.26}_{-0.26}$	Y_{P}	$0.24544^{+0.00017}_{-0.00018} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.011}_{-0.012} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00017}_{-0.00018} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.011}_{-0.012} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.563^{+0.083}_{-0.078} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.010}_{-0.012} \quad (+0.2\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.765^{+0.065}_{-0.063} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2954^{+0.0050}_{-0.0057} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.57^{+0.66}_{-0.64} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3050^{+0.0053}_{-0.0059} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	r_*	$144.90^{+0.63}_{-0.60} \quad (-0.4\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04141^{+0.00082}_{-0.00085} \quad (-0.3\sigma)$	f_{2000}^{217}	$104.8^{+4.3}_{-4.3} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.914^{+0.062}_{-0.059} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.0\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1060.08^{+0.92}_{-0.98} \quad (-0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (+0.0\sigma)$
c_{217}	$1.0008^{+0.0032}_{-0.0031} \quad (+4.2\sigma)$	r_{drag}	$147.53^{+0.68}_{-0.65} \quad (-0.4\sigma)$	χ_{lowl}^2	$22.00 \quad (\nu: 0.3) \quad (+0.2\sigma)$
H_0	$68.4^{+1.2}_{-1.2} \quad (-0.5\sigma)$	k_{D}	$0.14050^{+0.00083}_{-0.00088} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7058.9 \quad (\nu: 13.4)$
Ω_{Λ}	$0.698^{+0.015}_{-0.016} \quad (-0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16070^{+0.00056}_{-0.00052} \quad (+0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.049 \quad (\nu: 0.0)$
Ω_{m}	$0.302^{+0.016}_{-0.015} \quad (+0.5\sigma)$	z_{eq}	$3353^{+58}_{-57} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.99 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1409^{+0.0024}_{-0.0024} \quad (+0.5\sigma)$	k_{eq}	$0.01023^{+0.00018}_{-0.00017} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.06 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.09633^{+0.00095}_{-0.00099} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 5.6) \quad (+0.1\sigma)$
σ_8	$0.799^{+0.016}_{-0.017} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4543^{+0.0056}_{-0.0057} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
S_8	$0.801^{+0.032}_{-0.032} \quad (+0.5\sigma)$	$H(0.15)$	$73.5^{+1.0}_{-1.0} \quad (-0.5\sigma)$	χ_{CMB}^2	$7477.8 \quad (\nu: 14.8) \quad (+1092.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.439^{+0.017}_{-0.017} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+10}_{-9.9} \quad (+0.5\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7491.23$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -6.32$; $R - 1 = 0.01433$

3.15 base_Alens_CamSpecHM_TT_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02293^{+0.00050}_{-0.00050} \quad (+1.1\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.411^{+0.025}_{-0.023} \quad (-1.3\sigma)$	$H(0.15)$	$75.5^{+1.6}_{-1.7} \quad (+1.4\sigma)$
$\Omega_{\text{c}}h^2$	$0.1133^{+0.0040}_{-0.0037} \quad (-1.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.567^{+0.024}_{-0.022} \quad (-1.3\sigma)$	$D_{\text{M}}(0.15)$	$617^{+16}_{-14} \quad (-1.4\sigma)$
$100\theta_{\text{MC}}$	$1.04192^{+0.00098}_{-0.00095} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.932^{+0.034}_{-0.032} \quad (-1.2\sigma)$	$H(0.38)$	$84.9^{+1.3}_{-1.3} \quad (+1.4\sigma)$
τ	$0.052^{+0.017}_{-0.017} \quad (+0.3\sigma)$	$r_{\text{drag}}h$	$104.7^{+3.2}_{-3.3} \quad (+1.4\sigma)$	$D_{\text{M}}(0.38)$	$1480^{+32}_{-30} \quad (-1.4\sigma)$
A_{L}	$1.33^{+0.20}_{-0.18} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.67^{+0.15}_{-0.15} \quad (+0.4\sigma)$	$H(0.51)$	$91.3^{+1.0}_{-1.0} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.023^{+0.034}_{-0.034} \quad (-0.2\sigma)$	z_{re}	$7.2^{+1.7}_{-1.7} \quad (+0.1\sigma)$	$D_{\text{M}}(0.51)$	$1922^{+38}_{-36} \quad (-1.4\sigma)$
n_{s}	$0.984^{+0.011}_{-0.012} \quad (+1.4\sigma)$	$10^9 A_{\text{s}}$	$2.056^{+0.071}_{-0.069} \quad (-0.2\sigma)$	$H(0.61)$	$96.60^{+0.84}_{-0.86} \quad (+1.4\sigma)$
y_{cal}	$1.0001^{+0.0046}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.852^{+0.026}_{-0.025} \quad (-1.1\sigma)$	$D_{\text{M}}(0.61)$	$2242^{+41}_{-39} \quad (-1.4\sigma)$
A_{100}^{PS}	$225^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1188^{+31}_{-27} \quad (-1.2\sigma)$	$H(2.33)$	$232.8^{+2.3}_{-2.1} \quad (-1.3\sigma)$
A_{143}^{PS}	$30^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5746^{+84}_{-80} \quad (+0.2\sigma)$	$D_{\text{M}}(2.33)$	$5709^{+38}_{-38} \quad (-1.4\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	D_{810}	$2521^{+27}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.418^{+0.024}_{-0.022} \quad (-1.3\sigma)$
A_{217}^{CIB}	$35^{+10}_{-10} \quad (-1.5\sigma)$	D_{1420}	$815.5^{+9.8}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.727^{+0.016}_{-0.016} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$4.4^{+3.6}_{-4.2} \quad (-0.7\sigma)$	D_{2000}	$233.8^{+3.8}_{-3.9} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.443^{+0.020}_{-0.018} \quad (-1.3\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.69^{+0.28}_{-0.25}$	$n_{\text{s},0.002}$	$0.984^{+0.011}_{-0.012} \quad (+1.4\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.013}_{-0.013} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.24562^{+0.00022}_{-0.00020} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.446^{+0.018}_{-0.017} \quad (-1.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24695^{+0.00022}_{-0.00020} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.609^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A^{kSZ}	$< 8.44 \quad (+0.4\sigma)$	$10^5 \text{D}/\text{H}$	$2.486^{+0.089}_{-0.086} \quad (-1.1\sigma)$	$f\sigma_8(0.61)$	$0.444^{+0.016}_{-0.015} \quad (-1.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.680^{+0.083}_{-0.080} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.581^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.34}$	z_*	$1088.65^{+0.86}_{-0.80} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2943^{+0.0054}_{-0.0051} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.76^{+0.83}_{-0.88} \quad (+1.2\sigma)$	$\sigma_8(2.33)$	$0.3052^{+0.0054}_{-0.0053} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.01^{+0.34}_{-0.32}$	$100\theta_*$	$1.04206^{+0.00095}_{-0.00093} \quad (+1.0\sigma)$	f_{2000}^{143}	$24^{+6}_{-6} \quad (-0.8\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.987^{+0.079}_{-0.081} \quad (+1.1\sigma)$	f_{2000}^{217}	$102.9^{+4.4}_{-4.4} \quad (-1.0\sigma)$
c_{217}	$1.0006^{+0.0030}_{-0.0030} \quad (+3.8\sigma)$	z_{drag}	$1060.7^{+1.0}_{-1.0} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$28^{+5}_{-5} \quad (-1.0\sigma)$
H_0	$70.6^{+1.8}_{-1.9} \quad (+1.4\sigma)$	r_{drag}	$148.26^{+0.87}_{-0.86} \quad (+1.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.2) \quad (-0.0\sigma)$
Ω_{Λ}	$0.725^{+0.020}_{-0.023} \quad (+1.4\sigma)$	k_{D}	$0.14004^{+0.00094}_{-0.00098} \quad (-0.6\sigma)$	χ_{lowl}^2	$20.64 \quad (\nu: 0.2) \quad (-1.1\sigma)$
Ω_{m}	$0.275^{+0.023}_{-0.020} \quad (-1.4\sigma)$	$100\theta_{\text{D}}$	$0.16039^{+0.00054}_{-0.00052} \quad (-0.8\sigma)$	χ_{CamSpec}^2	$7062.5 \quad (\nu: 16.4)$
$\Omega_{\text{m}}h^2$	$0.1369^{+0.0037}_{-0.0034} \quad (-1.3\sigma)$	z_{eq}	$3256^{+89}_{-82} \quad (-1.3\sigma)$	χ_{H073p45}^2	$3.3 \quad (\nu: 2.2)$
$\Omega_{\text{m}}h^3$	$0.09662^{+0.00096}_{-0.00094} \quad (+0.5\sigma)$	k_{eq}	$0.00994^{+0.00027}_{-0.00025} \quad (-1.3\sigma)$	χ_{prior}^2	$6.9 \quad (\nu: 4.7) \quad (-0.0\sigma)$
σ_8	$0.783^{+0.019}_{-0.019} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.843^{+0.017}_{-0.018} \quad (+1.4\sigma)$	χ_{CMB}^2	$7479.9 \quad (\nu: 16.9) \quad (+1092.4\sigma)$
S_8	$0.750^{+0.046}_{-0.043} \quad (-1.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4645^{+0.0087}_{-0.0091} \quad (+1.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 7490.17; \Delta\bar{\chi}_{\text{eff}}^2 = -12.71; R - 1 = 0.03353$$

3.16 base_Alens_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02263^{+0.00056}_{-0.00058} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.431^{+0.033}_{-0.031} \quad (-0.0\sigma)$	$H(0.15)$	$74.1^{+2.1}_{-2.1} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1164^{+0.0050}_{-0.0048} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.586^{+0.029}_{-0.028} \quad (+0.0\sigma)$	$D_M(0.15)$	$629^{+20}_{-19} \quad (-0.1\sigma)$
$100\theta_{MC}$	$1.0414^{+0.0010}_{-0.0011} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.958^{+0.040}_{-0.039} \quad (+0.0\sigma)$	$H(0.38)$	$83.9^{+1.6}_{-1.5} \quad (+0.1\sigma)$
τ	$0.053^{+0.012}_{-0.010} \quad (+0.4\sigma)$	$r_{drag} h$	$102.1^{+4.0}_{-4.1} \quad (+0.1\sigma)$	$D_M(0.38)$	$1505^{+41}_{-39} \quad (-0.1\sigma)$
A_L	$1.24^{+0.20}_{-0.18} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.64^{+0.15}_{-0.16} \quad (-0.1\sigma)$	$H(0.51)$	$90.5^{+1.3}_{-1.2} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.032^{+0.027}_{-0.025} \quad (+0.3\sigma)$	z_{re}	$< 8.55 \quad (+0.4\sigma)$	$D_M(0.51)$	$1953^{+48}_{-47} \quad (-0.1\sigma)$
n_s	$0.976^{+0.014}_{-0.014} \quad (+0.2\sigma)$	$10^9 A_s$	$2.075^{+0.056}_{-0.051} \quad (+0.3\sigma)$	$H(0.61)$	$95.9^{+1.1}_{-0.99} \quad (+0.1\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.864^{+0.029}_{-0.028} \quad (-0.2\sigma)$	$D_M(0.61)$	$2274^{+52}_{-51} \quad (-0.1\sigma)$
A_{100}^{PS}	$228^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1205^{+34}_{-33} \quad (-0.3\sigma)$	$H(2.33)$	$234.5^{+2.9}_{-2.7} \quad (-0.1\sigma)$
A_{143}^{PS}	$33^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5727^{+84}_{-85} \quad (-0.2\sigma)$	$D_M(2.33)$	$5736^{+44}_{-45} \quad (-0.1\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.1\sigma)$	D_{810}	$2525^{+28}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.437^{+0.031}_{-0.029} \quad (-0.0\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.016}_{-0.016} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$4.2^{+3.6}_{-4.1} \quad (-0.7\sigma)$	D_{2000}	$232.4^{+4.1}_{-4.3} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.459^{+0.024}_{-0.024} \quad (+0.0\sigma)$
$r_{143 \times 217}^{PS}$	$0.68^{+0.28}_{-0.25}$	$n_{s,0.002}$	$0.976^{+0.014}_{-0.014} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$r_{143 \times 217}^{CIB}$	—	Y_P	$0.24549^{+0.00025}_{-0.00023} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.021}_{-0.020} \quad (+0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P^{BBN}	$0.24682^{+0.00025}_{-0.00023} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.011}_{-0.0099} \quad (+0.2\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.54^{+0.11}_{-0.10} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.018}_{-0.018} \quad (+0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.739^{+0.098}_{-0.098} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5854^{+0.0097}_{-0.0089} \quad (+0.3\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.34}$	z_*	$1089.3^{+1.1}_{-1.0} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2959^{+0.0043}_{-0.0040} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.2^{+1.0}_{-1.0} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0043}_{-0.0039} \quad (+0.3\sigma)$
$A_{143 \times 217}^{dust}$	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	$1.0416^{+0.0010}_{-0.0010} \quad (+0.1\sigma)$	f_{2000}^{143}	$26^{+7}_{-7} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$D_M(z_*)/Gpc$	$13.939^{+0.092}_{-0.093} \quad (+0.1\sigma)$	f_{2000}^{217}	$104.3^{+4.6}_{-4.7} \quad (-0.3\sigma)$
c_{217}	$1.0008^{+0.0031}_{-0.0030} \quad (+4.1\sigma)$	z_{drag}	$1060.3^{+1.1}_{-1.1} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$29^{+5}_{-5} \quad (-0.4\sigma)$
H_0	$69.1^{+2.4}_{-2.4} \quad (+0.1\sigma)$	r_{drag}	$147.78^{+0.97}_{-0.98} \quad (+0.1\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
Ω_Λ	$0.707^{+0.028}_{-0.031} \quad (+0.1\sigma)$	k_D	$0.14033^{+0.00098}_{-0.0010} \quad (-0.1\sigma)$	χ_{lowl}^2	$21.6 \quad (\nu: 0.6) \quad (-0.2\sigma)$
Ω_m	$0.293^{+0.031}_{-0.028} \quad (-0.1\sigma)$	$100\theta_D$	$0.16061^{+0.00061}_{-0.00056} \quad (-0.0\sigma)$	$\chi_{CamSpec}^2$	$7059.9 \quad (\nu: 14.3)$
$\Omega_m h^2$	$0.1396^{+0.0047}_{-0.0044} \quad (-0.1\sigma)$	z_{eq}	$3321^{+110}_{-110} \quad (-0.1\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 5.4) \quad (+0.0\sigma)$
$\Omega_m h^3$	$0.09640^{+0.00097}_{-0.00099} \quad (+0.0\sigma)$	k_{eq}	$0.01014^{+0.00034}_{-0.00032} \quad (-0.1\sigma)$	χ_{CMB}^2	$7477.9 \quad (\nu: 14.6) \quad (+1092.1\sigma)$
σ_8	$0.796^{+0.020}_{-0.020} \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.829^{+0.022}_{-0.022} \quad (+0.1\sigma)$		
S_8	$0.787^{+0.060}_{-0.056} \quad (-0.0\sigma)$	$100\theta_{s,eq}$	$0.458^{+0.011}_{-0.011} \quad (+0.1\sigma)$		

$$\bar{\chi}_{eff}^2 = 7485.10; \Delta \bar{\chi}_{eff}^2 = -6.16; R - 1 = 0.00928$$

3.17 base_Alens_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02250^{+0.00043}_{-0.00044} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.594^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$H(0.38)$	$83.48^{+0.80}_{-0.80} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1178^{+0.0026}_{-0.0025} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.969^{+0.022}_{-0.022} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1517^{+21}_{-20} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04123^{+0.00084}_{-0.00087} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$100.8^{+2.0}_{-2.0} \quad (-0.5\sigma)$	$H(0.51)$	$90.10^{+0.66}_{-0.66} \quad (-0.5\sigma)$
τ	$0.0528^{+0.011}_{-0.0096} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.62^{+0.15}_{-0.15} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1966^{+24}_{-24} \quad (+0.5\sigma)$
A_{L}	$1.20^{+0.15}_{-0.15} \quad (-0.4\sigma)$	z_{re}	$< 8.49 \quad (+0.4\sigma)$	$H(0.61)$	$95.64^{+0.57}_{-0.58} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.034^{+0.026}_{-0.024} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.078^{+0.055}_{-0.050} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2289^{+27}_{-26} \quad (+0.5\sigma)$
n_{s}	$0.9721^{+0.0093}_{-0.0091} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.6} \quad (+0.4\sigma)$
y_{cal}	$1.0001^{+0.0052}_{-0.0051} \quad (+0.0\sigma)$	D_{40}	$1212^{+25}_{-26} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5749^{+29}_{-27} \quad (+0.4\sigma)$
A_{100}^{PS}	$230^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5719^{+83}_{-86} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.016}_{-0.016} \quad (+0.5\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	D_{810}	$2526^{+28}_{-28} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.012}_{-0.011} \quad (+0.6\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.1\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.013}_{-0.013} \quad (+0.6\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$231.8^{+3.7}_{-3.8} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.6584^{+0.0099}_{-0.0094} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$4.1^{+3.5}_{-4.0} \quad (-0.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.9721^{+0.0093}_{-0.0091} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.011}_{-0.012} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.24}$	Y_{P}	$0.24544^{+0.00017}_{-0.00018} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.6166^{+0.0090}_{-0.0085} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00017}_{-0.00018} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.010}_{-0.010} \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.563^{+0.083}_{-0.077} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5870^{+0.0084}_{-0.0079} \quad (+0.5\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.765^{+0.065}_{-0.062} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2964^{+0.0041}_{-0.0038} \quad (+0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.38}$	z_*	$1089.57^{+0.66}_{-0.64} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0042}_{-0.0039} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	r_*	$144.91^{+0.63}_{-0.59} \quad (-0.4\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04141^{+0.00082}_{-0.00085} \quad (-0.3\sigma)$	f_{2000}^{217}	$104.8^{+4.3}_{-4.3} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.915^{+0.062}_{-0.058} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.5\sigma)$	z_{drag}	$1060.07^{+0.93}_{-0.98} \quad (-0.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
c_{217}	$1.0008^{+0.0032}_{-0.0030} \quad (+4.2\sigma)$	r_{drag}	$147.54^{+0.68}_{-0.64} \quad (-0.4\sigma)$	χ_{lowl}^2	$22.05 \quad (\nu: 0.3) \quad (+0.2\sigma)$
H_0	$68.4^{+1.2}_{-1.2} \quad (-0.5\sigma)$	k_{D}	$0.14049^{+0.00083}_{-0.00088} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7058.9 \quad (\nu: 13.3)$
Ω_{Λ}	$0.698^{+0.015}_{-0.016} \quad (-0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00056}_{-0.00052} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.049 \quad (\nu: 0.0)$
Ω_{m}	$0.302^{+0.016}_{-0.015} \quad (+0.5\sigma)$	z_{eq}	$3352^{+58}_{-57} \quad (+0.5\sigma)$	χ_{MGS}^2	$2.00 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1409^{+0.0024}_{-0.0024} \quad (+0.5\sigma)$	k_{eq}	$0.01023^{+0.00018}_{-0.00017} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.06 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.09632^{+0.00093}_{-0.00098} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 5.7) \quad (+0.1\sigma)$
σ_8	$0.801^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4543^{+0.0056}_{-0.0057} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
S_8	$0.804^{+0.031}_{-0.030} \quad (+0.5\sigma)$	$H(0.15)$	$73.5^{+1.0}_{-1.0} \quad (-0.5\sigma)$	χ_{CMB}^2	$7477.4 \quad (\nu: 13.9) \quad (+1092.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.440^{+0.017}_{-0.016} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+10}_{-9.9} \quad (+0.5\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7490.78$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -6.53$; $R - 1 = 0.01851$

3.18 base_Alens_CamSpecHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02293^{+0.00050}_{-0.00050} \quad (+1.1\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.412^{+0.025}_{-0.024} \quad (-1.3\sigma)$	$H(0.15)$	$75.5^{+1.7}_{-1.7} \quad (+1.4\sigma)$
$\Omega_{\text{c}}h^2$	$0.1133^{+0.0040}_{-0.0037} \quad (-1.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.569^{+0.023}_{-0.021} \quad (-1.2\sigma)$	$D_{\text{M}}(0.15)$	$617^{+16}_{-15} \quad (-1.4\sigma)$
$100\theta_{\text{MC}}$	$1.04192^{+0.00099}_{-0.00095} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.935^{+0.033}_{-0.030} \quad (-1.1\sigma)$	$H(0.38)$	$84.9^{+1.3}_{-1.3} \quad (+1.4\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.6\sigma)$	$r_{\text{drag}}h$	$104.7^{+3.1}_{-3.3} \quad (+1.4\sigma)$	$D_{\text{M}}(0.38)$	$1479^{+32}_{-31} \quad (-1.4\sigma)$
A_{L}	$1.33^{+0.19}_{-0.18} \quad (+0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.67^{+0.15}_{-0.15} \quad (+0.3\sigma)$	$H(0.51)$	$91.3^{+1.0}_{-1.0} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.029^{+0.029}_{-0.026} \quad (+0.1\sigma)$	z_{re}	$< 8.67 \quad (+0.5\sigma)$	$D_{\text{M}}(0.51)$	$1922^{+38}_{-36} \quad (-1.4\sigma)$
n_{s}	$0.984^{+0.011}_{-0.012} \quad (+1.4\sigma)$	$10^9 A_{\text{s}}$	$2.068^{+0.059}_{-0.053} \quad (+0.1\sigma)$	$H(0.61)$	$96.60^{+0.84}_{-0.86} \quad (+1.4\sigma)$
y_{cal}	$1.0000^{+0.0046}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.851^{+0.026}_{-0.025} \quad (-1.1\sigma)$	$D_{\text{M}}(0.61)$	$2242^{+41}_{-39} \quad (-1.4\sigma)$
A_{100}^{PS}	$225^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1188^{+31}_{-28} \quad (-1.2\sigma)$	$H(2.33)$	$232.8^{+2.3}_{-2.2} \quad (-1.3\sigma)$
A_{143}^{PS}	$30^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5744^{+84}_{-81} \quad (+0.2\sigma)$	$D_{\text{M}}(2.33)$	$5709^{+38}_{-36} \quad (-1.4\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	D_{810}	$2520^{+27}_{-28} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.419^{+0.024}_{-0.023} \quad (-1.3\sigma)$
A_{217}^{CIB}	$35^{+10}_{-10} \quad (-1.5\sigma)$	D_{1420}	$815.4^{+9.5}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.729^{+0.015}_{-0.015} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$4.4^{+3.7}_{-4.2} \quad (-0.6\sigma)$	D_{2000}	$233.7^{+3.8}_{-3.9} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.444^{+0.020}_{-0.019} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.69^{+0.29}_{-0.25}$	$n_{\text{s},0.002}$	$0.984^{+0.011}_{-0.012} \quad (+1.4\sigma)$	$\sigma_8(0.38)$	$0.651^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.24562^{+0.00022}_{-0.00020} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.447^{+0.017}_{-0.016} \quad (-1.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24695^{+0.00022}_{-0.00020} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.611^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A^{kSZ}	$< 8.50 \quad (+0.4\sigma)$	$10^5 \text{D}/\text{H}$	$2.486^{+0.089}_{-0.086} \quad (-1.1\sigma)$	$f\sigma_8(0.61)$	$0.445^{+0.015}_{-0.014} \quad (-1.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.680^{+0.084}_{-0.080} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.010}_{-0.0092} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.34}$	z_*	$1088.65^{+0.86}_{-0.78} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2951^{+0.0045}_{-0.0042} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	r_*	$145.77^{+0.82}_{-0.88} \quad (+1.2\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0045}_{-0.0041} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.00^{+0.35}_{-0.33}$	$100\theta_*$	$1.04206^{+0.00099}_{-0.00093} \quad (+1.0\sigma)$	f_{2000}^{143}	$24^{+6}_{-6} \quad (-0.8\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.988^{+0.078}_{-0.081} \quad (+1.1\sigma)$	f_{2000}^{217}	$102.9^{+4.4}_{-4.4} \quad (-1.0\sigma)$
c_{217}	$1.0005^{+0.0031}_{-0.0031} \quad (+3.8\sigma)$	z_{drag}	$1060.7^{+1.0}_{-1.0} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$28^{+5}_{-5} \quad (-1.0\sigma)$
H_0	$70.6^{+1.9}_{-1.9} \quad (+1.4\sigma)$	r_{drag}	$148.27^{+0.88}_{-0.86} \quad (+1.1\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 0.8) \quad (-0.2\sigma)$
Ω_{Λ}	$0.725^{+0.020}_{-0.023} \quad (+1.4\sigma)$	k_{D}	$0.14003^{+0.00092}_{-0.00099} \quad (-0.7\sigma)$	χ_{lowl}^2	$20.65 \quad (\nu: 0.2) \quad (-1.1\sigma)$
Ω_{m}	$0.275^{+0.023}_{-0.020} \quad (-1.4\sigma)$	$100\theta_{\text{D}}$	$0.16039^{+0.00054}_{-0.00053} \quad (-0.8\sigma)$	χ_{CamSpec}^2	$7062.6 \quad (\nu: 16.9)$
$\Omega_{\text{m}}h^2$	$0.1369^{+0.0037}_{-0.0035} \quad (-1.3\sigma)$	z_{eq}	$3255^{+88}_{-83} \quad (-1.3\sigma)$	χ_{H073p45}^2	$3.3 \quad (\nu: 2.2)$
$\Omega_{\text{m}}h^3$	$0.09661^{+0.00094}_{-0.00095} \quad (+0.5\sigma)$	k_{eq}	$0.00993^{+0.00027}_{-0.00025} \quad (-1.3\sigma)$	χ_{prior}^2	$6.9 \quad (\nu: 4.8) \quad (-0.0\sigma)$
σ_8	$0.785^{+0.018}_{-0.018} \quad (-0.8\sigma)$	$100\theta_{\text{eq}}$	$0.843^{+0.017}_{-0.018} \quad (+1.4\sigma)$	χ_{CMB}^2	$7479.7 \quad (\nu: 17.3) \quad (+1092.4\sigma)$
S_8	$0.752^{+0.046}_{-0.043} \quad (-1.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4645^{+0.0087}_{-0.0091} \quad (+1.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 7489.90; \Delta\bar{\chi}_{\text{eff}}^2 = -12.74; R - 1 = 0.05184$$

3.19 base_Alens_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022542	$0.02251^{+0.00038}_{-0.00038} \quad (-0.3\sigma)$	σ_8	0.8000	$0.799^{+0.017}_{-0.017} \quad (+0.4\sigma)$	$100\theta_{\text{eq}}$	0.8228	$0.822^{+0.014}_{-0.013} \quad (-0.5\sigma)$
$\Omega_c h^2$	0.11776	$0.1179^{+0.0030}_{-0.0031} \quad (+0.5\sigma)$	S_8	0.8023	$0.802^{+0.037}_{-0.037} \quad (+0.5\sigma)$	$100\theta_{\text{s,eq}}$	0.4542	$0.4540^{+0.0069}_{-0.0066} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	1.04109	$1.04108^{+0.00067}_{-0.00065} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4394	$0.439^{+0.021}_{-0.020} \quad (+0.5\sigma)$	$H(0.15)$	73.53	$73.5^{+1.3}_{-1.2} \quad (-0.5\sigma)$
τ	0.0508	$0.050^{+0.015}_{-0.017} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5929	$0.592^{+0.019}_{-0.019} \quad (+0.5\sigma)$	$D_{\text{M}}(0.15)$	635.0	$636^{+12}_{-12} \quad (+0.5\sigma)$
A_{L}	1.155	$1.15^{+0.14}_{-0.14} \quad (-1.0\sigma)$	$\sigma_8/h^{0.5}$	0.9676	$0.967^{+0.027}_{-0.027} \quad (+0.5\sigma)$	$H(0.38)$	83.47	$83.42^{+0.94}_{-0.90} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\text{s}})$	3.0309	$3.028^{+0.032}_{-0.035} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	100.81	$100.7^{+2.5}_{-2.4} \quad (-0.5\sigma)$	$D_{\text{M}}(0.38)$	1516.8	$1518^{+24}_{-24} \quad (+0.5\sigma)$
n_{s}	0.9725	$0.971^{+0.010}_{-0.010} \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.570	$2.56^{+0.13}_{-0.13} \quad (-1.0\sigma)$	$H(0.51)$	90.09	$90.05^{+0.76}_{-0.72} \quad (-0.5\sigma)$
y_{cal}	1.00007	$1.0000^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	z_{re}	7.25	$7.1^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$D_{\text{M}}(0.51)$	1966.4	$1968^{+28}_{-29} \quad (+0.5\sigma)$
A_{100}^{PS}	223.5	$232^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\text{s}}$	2.072	$2.065^{+0.068}_{-0.072} \quad (+0.0\sigma)$	$H(0.61)$	95.64	$95.60^{+0.62}_{-0.58} \quad (-0.5\sigma)$
A_{143}^{PS}	46.5	$36^{+20}_{-20} \quad (-0.7\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8715	$1.870^{+0.024}_{-0.023} \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	2289.4	$2291^{+31}_{-31} \quad (+0.5\sigma)$
A_{217}^{PS}	109.5	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{40}	1211.5	$1213^{+27}_{-26} \quad (+0.2\sigma)$	$H(2.33)$	235.27	$235.3^{+1.8}_{-1.8} \quad (+0.5\sigma)$
A_{217}^{CIB}	37.8	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	5726	$5723^{+76}_{-76} \quad (-0.3\sigma)$	$D_{\text{M}}(2.33)$	5748.6	$5750^{+27}_{-28} \quad (+0.5\sigma)$
A_{143}^{tSZ}	6.07	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{810}	2531.0	$2528^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4447	$0.445^{+0.019}_{-0.019} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.792	$0.68^{+0.27}_{-0.25}$	D_{1420}	816.1	$814.6^{+9.4}_{-9.4} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7402	$0.739^{+0.014}_{-0.015} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.70	—	D_{2000}	232.14	$231.5^{+3.4}_{-3.5} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	0.4650	$0.465^{+0.016}_{-0.016} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.94	—	$n_{\text{s},0.002}$	0.9725	$0.971^{+0.010}_{-0.010} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	0.6572	$0.656^{+0.012}_{-0.013} \quad (+0.2\sigma)$
A^{kSZ}	0.2	—	Y_{P}	0.245459	$0.24545^{+0.00015}_{-0.00015} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	0.4647	$0.464^{+0.014}_{-0.014} \quad (+0.5\sigma)$
A_{100}^{dust}	1.021	$1.01^{+0.38}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.246786	$0.24677^{+0.00015}_{-0.00015} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	0.6155	$0.614^{+0.011}_{-0.012} \quad (+0.2\sigma)$
A_{143}^{dust}	0.946	$0.95^{+0.34}_{-0.34}$	$10^5 \text{D}/\text{H}$	2.555	$2.561^{+0.071}_{-0.069} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	0.4606	$0.460^{+0.013}_{-0.013} \quad (+0.4\sigma)$
A_{217}^{dust}	0.993	$0.98^{+0.21}_{-0.20}$	Age/Gyr	13.765	$13.769^{+0.059}_{-0.061} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	0.5859	$0.585^{+0.010}_{-0.011} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.050	$1.02^{+0.32}_{-0.31}$	z_*	1089.51	$1089.56^{+0.67}_{-0.67} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	0.2958	$0.2952^{+0.0050}_{-0.0053} \quad (+0.1\sigma)$
c_{100}	0.99794	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_*	144.88	$144.88^{+0.66}_{-0.63} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	0.3054	$0.3048^{+0.0051}_{-0.0055} \quad (-0.1\sigma)$
c_{217}	1.00093	$1.0009^{+0.0031}_{-0.0030} \quad (+4.4\sigma)$	$100\theta_*$	1.04127	$1.04125^{+0.00065}_{-0.00063} \quad (-0.6\sigma)$	f_{2000}^{143}	26.7	$27^{+6}_{-6} \quad (+0.1\sigma)$
c_{TE}	0.9917	$0.992^{+0.010}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.914	$13.914^{+0.060}_{-0.058} \quad (-0.4\sigma)$	f_{2000}^{217}	104.43	$105.1^{+4.1}_{-4.0} \quad (+0.0\sigma)$
c_{EE}	0.9902	$0.9903^{+0.0097}_{-0.0096}$	z_{drag}	1060.16	$1060.10^{+0.74}_{-0.78} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	29.81	$30^{+4}_{-4} \quad (+0.0\sigma)$
H_0	68.35	$68.3^{+1.4}_{-1.4} \quad (-0.5\sigma)$	r_{drag}	147.50	$147.50^{+0.64}_{-0.61} \quad (-0.4\sigma)$	χ_{small}^2	395.68	$396.8 \quad (\nu: 1.1) \quad (-0.0\sigma)$
Ω_{Λ}	0.6983	$0.697^{+0.018}_{-0.019} \quad (-0.5\sigma)$	k_{D}	0.14057	$0.14054^{+0.00066}_{-0.00069} \quad (+0.3\sigma)$	χ_{lowl}^2	21.90	$22.12 \quad (\nu: 0.4) \quad (+0.3\sigma)$
Ω_{m}	0.3017	$0.303^{+0.019}_{-0.018} \quad (+0.5\sigma)$	$100\theta_{\text{D}}$	0.160623	$0.16066^{+0.00044}_{-0.00042} \quad (+0.1\sigma)$	χ_{CamSpec}^2	11496.5	$11512.3 \quad (\nu: 16.0)$
$\Omega_{\text{m}} h^2$	0.14095	$0.1410^{+0.0028}_{-0.0028} \quad (+0.5\sigma)$	z_{eq}	3353	$3355^{+67}_{-68} \quad (+0.5\sigma)$	χ_{prior}^2	1.9	$7.7 \quad (\nu: 5.6) \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^3$	0.09633	$0.09629^{+0.00066}_{-0.00066} \quad (-0.2\sigma)$	k_{eq}	0.010233	$0.01024^{+0.00021}_{-0.00021} \quad (+0.5\sigma)$	χ_{CMB}^2	11914.1	$11931.2 \quad (\nu: 16.9) \quad (+1865.0\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 11915.94$; $\Delta\chi_{\text{eff}}^2 = -4.82$; $\bar{\chi}_{\text{eff}}^2 = 11938.97$; $\Delta\bar{\chi}_{\text{eff}}^2 = -3.49$; $R - 1 = 0.01096$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.68 (Δ -0.22) commander_dx12.v3.2.29: 21.90 (Δ -1.10) CamSpec like_10.7HM.1400.unified: 11496.51 (Δ -3.14)

3.20 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02249^{+0.00032}_{-0.00033} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.015}_{-0.015} \quad (+0.6\sigma)$	$H(0.38)$	$83.37^{+0.65}_{-0.64} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0021}_{-0.0021} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.593^{+0.015}_{-0.015} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1519^{+17}_{-17} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00060}_{-0.00058} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.968^{+0.022}_{-0.023} \quad (+0.5\sigma)$	$H(0.51)$	$90.01^{+0.53}_{-0.52} \quad (-0.6\sigma)$
τ	$0.049^{+0.015}_{-0.017} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+1.7}_{-1.7} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+20}_{-20} \quad (+0.6\sigma)$
A_{L}	$1.14^{+0.13}_{-0.13} \quad (-1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.56^{+0.12}_{-0.13} \quad (-1.0\sigma)$	$H(0.61)$	$95.57^{+0.45}_{-0.44} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.028^{+0.033}_{-0.036} \quad (+0.0\sigma)$	z_{re}	$7.1^{+1.7}_{-1.8} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2293^{+22}_{-22} \quad (+0.6\sigma)$
n_{s}	$0.9708^{+0.0081}_{-0.0084} \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.065^{+0.069}_{-0.074} \quad (+0.0\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.3} \quad (+0.6\sigma)$
y_{cal}	$1.0000^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.022}_{-0.021} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5752^{+21}_{-21} \quad (+0.6\sigma)$
A_{100}^{PS}	$232^{+50}_{-50} \quad (-0.6\sigma)$	D_{40}	$1214^{+25}_{-24} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.014}_{-0.014} \quad (+0.6\sigma)$
A_{143}^{PS}	$36^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5722^{+75}_{-74} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.014}_{-0.014} \quad (+0.4\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	D_{810}	$2528^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.012}_{-0.012} \quad (+0.5\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$814.6^{+9.4}_{-9.4} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.012}_{-0.012} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{2000}	$231.4^{+3.3}_{-3.3} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.011}_{-0.011} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9708^{+0.0081}_{-0.0084} \quad (-0.5\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24544^{+0.00012}_{-0.00013} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.010}_{-0.011} \quad (+0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00012}_{-0.00013} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.010}_{-0.011} \quad (+0.2\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.563^{+0.062}_{-0.058} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2953^{+0.0050}_{-0.0054} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.772^{+0.047}_{-0.047} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3047^{+0.0052}_{-0.0056} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	z_*	$1089.60^{+0.53}_{-0.51} \quad (+0.5\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	r_*	$144.84^{+0.49}_{-0.48} \quad (-0.5\sigma)$	f_{2000}^{217}	$105.1^{+3.9}_{-3.8} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	$1.04123^{+0.00059}_{-0.00057} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.047}_{-0.046} \quad (-0.5\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.2) \quad (-0.0\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0030} \quad (+4.4\sigma)$	z_{drag}	$1060.08^{+0.69}_{-0.72} \quad (-0.3\sigma)$	χ_{lowl}^2	$22.17 \quad (\nu: 0.3) \quad (+0.3\sigma)$
c_{TE}	$0.993^{+0.010}_{-0.010}$	r_{drag}	$147.47^{+0.51}_{-0.50} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11511.8 \quad (\nu: 15.2)$
c_{EE}	$0.9903^{+0.0098}_{-0.0096}$	k_{D}	$0.14056^{+0.00061}_{-0.00065} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.030 \quad (\nu: 0.0)$
H_0	$68.19^{+0.99}_{-0.99} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16067^{+0.00041}_{-0.00040} \quad (+0.2\sigma)$	χ_{MGS}^2	$1.81 \quad (\nu: 0.1)$
Ω_{Λ}	$0.696^{+0.013}_{-0.013} \quad (-0.6\sigma)$	z_{eq}	$3359^{+47}_{-48} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.93 \quad (\nu: 0.3)$
Ω_{m}	$0.304^{+0.013}_{-0.013} \quad (+0.6\sigma)$	k_{eq}	$0.01025^{+0.00014}_{-0.00015} \quad (+0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0020}_{-0.0020} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8216^{+0.0092}_{-0.0090} \quad (-0.6\sigma)$	χ_{BAO}^2	$5.77 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.09628^{+0.00064}_{-0.00066} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4536^{+0.0047}_{-0.0046} \quad (-0.6\sigma)$	χ_{CMB}^2	$11930.7 \quad (\nu: 16.4) \quad (+1865.0\sigma)$
σ_8	$0.799^{+0.015}_{-0.016} \quad (+0.4\sigma)$	$H(0.15)$	$73.39^{+0.86}_{-0.86} \quad (-0.6\sigma)$		
S_8	$0.804^{+0.027}_{-0.027} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.3^{+8.4}_{-8.3} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11944.29; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -3.99; R - 1 = 0.01598$$

3.21 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02268^{+0.00034}_{-0.00035} \quad (+0.3\sigma)$	S_8	$0.783^{+0.034}_{-0.034} \quad (-0.2\sigma)$	$H(0.15)$	$74.2^{+1.1}_{-1.1} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1161^{+0.0028}_{-0.0027} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.429^{+0.019}_{-0.019} \quad (-0.2\sigma)$	$D_M(0.15)$	$629^{+11}_{-11} \quad (-0.2\sigma)$
$100\theta_{MC}$	$1.04132^{+0.00069}_{-0.00065} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.583^{+0.018}_{-0.019} \quad (-0.2\sigma)$	$H(0.38)$	$83.97^{+0.84}_{-0.85} \quad (+0.2\sigma)$
τ	$0.051^{+0.016}_{-0.016} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.954^{+0.026}_{-0.026} \quad (-0.2\sigma)$	$D_M(0.38)$	$1504^{+22}_{-22} \quad (-0.2\sigma)$
A_L	$1.19^{+0.14}_{-0.14} \quad (-0.5\sigma)$	$r_{drag} h$	$102.1^{+2.3}_{-2.3} \quad (+0.2\sigma)$	$H(0.51)$	$90.49^{+0.66}_{-0.69} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.026^{+0.032}_{-0.034} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.58^{+0.13}_{-0.13} \quad (-0.8\sigma)$	$D_M(0.51)$	$1951^{+26}_{-25} \quad (-0.2\sigma)$
n_s	$0.9760^{+0.0092}_{-0.0096} \quad (+0.3\sigma)$	z_{re}	$7.2^{+1.5}_{-1.7} \quad (+0.1\sigma)$	$H(0.61)$	$95.95^{+0.57}_{-0.56} \quad (+0.2\sigma)$
y_{cal}	$1.0000^{+0.0046}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_s$	$2.063^{+0.066}_{-0.070} \quad (-0.0\sigma)$	$D_M(0.61)$	$2273^{+28}_{-27} \quad (-0.2\sigma)$
A_{100}^{PS}	$228^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s e^{-2\tau}$	$1.863^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$H(2.33)$	$234.4^{+1.6}_{-1.6} \quad (-0.2\sigma)$
A_{143}^{PS}	$33^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	$1204^{+26}_{-25} \quad (-0.3\sigma)$	$D_M(2.33)$	$5735^{+25}_{-26} \quad (-0.2\sigma)$
A_{217}^{PS}	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{220}	$5733^{+83}_{-76} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.435^{+0.018}_{-0.018} \quad (-0.2\sigma)$
A_{217}^{CIB}	$36^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2526^{+25}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.735^{+0.014}_{-0.016} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$4.2^{+3.6}_{-4.0} \quad (-0.7\sigma)$	D_{1420}	$815.5^{+9.1}_{-9.1} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.457^{+0.015}_{-0.015} \quad (-0.2\sigma)$
$r_{143 \times 217}^{PS}$	$0.68^{+0.27}_{-0.26}$	D_{2000}	$232.4^{+3.1}_{-3.2} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.654^{+0.012}_{-0.013} \quad (-0.1\sigma)$
$r_{143 \times 217}^{CIB}$	—	$n_{s,0.002}$	$0.9760^{+0.0092}_{-0.0096} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.458^{+0.013}_{-0.014} \quad (-0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P	$0.24551^{+0.00015}_{-0.00013} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.612^{+0.011}_{-0.011} \quad (-0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24684^{+0.00015}_{-0.00013} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.454^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$10^5 D/H$	$2.530^{+0.063}_{-0.061} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.010}_{-0.011} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.94^{+0.35}_{-0.33}$	Age/Gyr	$13.737^{+0.056}_{-0.058} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2949^{+0.0049}_{-0.0051} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.99^{+0.20}_{-0.20}$	z_*	$1089.20^{+0.61}_{-0.58} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3050^{+0.0051}_{-0.0053} \quad (-0.0\sigma)$
$A_{143 \times 217}^{dust}$	$1.01^{+0.31}_{-0.30}$	r_*	$145.20^{+0.62}_{-0.61} \quad (+0.1\sigma)$	f_{2000}^{143}	$26^{+6}_{-5} \quad (-0.3\sigma)$
c_{100}	$0.9976^{+0.0022}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04147^{+0.00068}_{-0.00064} \quad (-0.2\sigma)$	f_{2000}^{217}	$104.2^{+4.1}_{-3.7} \quad (-0.3\sigma)$
c_{217}	$1.0009^{+0.0030}_{-0.0031} \quad (+4.3\sigma)$	$D_M(z_*)/Gpc$	$13.941^{+0.058}_{-0.057} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$29^{+4}_{-4} \quad (-0.4\sigma)$
c_{TE}	$0.991^{+0.010}_{-0.010}$	z_{drag}	$1060.38^{+0.70}_{-0.71} \quad (+0.3\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.1) \quad (-0.1\sigma)$
c_{EE}	$0.9899^{+0.0098}_{-0.0097}$	r_{drag}	$147.77^{+0.60}_{-0.60} \quad (+0.1\sigma)$	χ_{lowl}^2	$21.45 \quad (\nu: 0.3) \quad (-0.4\sigma)$
H_0	$69.1^{+1.3}_{-1.3} \quad (+0.2\sigma)$	k_D	$0.14038^{+0.00068}_{-0.00067} \quad (+0.0\sigma)$	$\chi_{CamSpec}^2$	$11514.4 \quad (\nu: 19.8)$
Ω_Λ	$0.708^{+0.016}_{-0.017} \quad (+0.2\sigma)$	$100\theta_D$	$0.16053^{+0.00040}_{-0.00040} \quad (-0.3\sigma)$	$\chi_{H073p45}^2$	$7.0 \quad (\nu: 2.3)$
Ω_m	$0.292^{+0.017}_{-0.016} \quad (-0.2\sigma)$	z_{eq}	$3318^{+63}_{-60} \quad (-0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.6) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1395^{+0.0026}_{-0.0025} \quad (-0.2\sigma)$	k_{eq}	$0.01013^{+0.00019}_{-0.00018} \quad (-0.2\sigma)$	χ_{CMB}^2	$11932.6 \quad (\nu: 20.0) \quad (+1865.3\sigma)$
$\Omega_m h^3$	$0.09640^{+0.00068}_{-0.00064} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.830^{+0.012}_{-0.012} \quad (+0.2\sigma)$		
σ_8	$0.793^{+0.016}_{-0.018} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	$0.4579^{+0.0061}_{-0.0063} \quad (+0.2\sigma)$		

$$\bar{\chi}_{eff}^2 = 11947.36; \Delta\bar{\chi}_{eff}^2 = -6.91; R - 1 = 0.04484$$

3.22 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00038}_{-0.00038} \quad (-0.3\sigma)$	σ_8	$0.801^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.014}_{-0.013} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0031}_{-0.0031} \quad (+0.5\sigma)$	S_8	$0.804^{+0.037}_{-0.036} \quad (+0.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4541^{+0.0069}_{-0.0067} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	$1.04108^{+0.00067}_{-0.00065} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.441^{+0.020}_{-0.020} \quad (+0.6\sigma)$	$H(0.15)$	$73.5^{+1.3}_{-1.2} \quad (-0.5\sigma)$
τ	$0.0526^{+0.011}_{-0.0094} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.594^{+0.019}_{-0.018} \quad (+0.6\sigma)$	$D_{\text{M}}(0.15)$	$636^{+12}_{-12} \quad (+0.5\sigma)$
A_{L}	$1.14^{+0.14}_{-0.14} \quad (-1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.970^{+0.026}_{-0.026} \quad (+0.6\sigma)$	$H(0.38)$	$83.43^{+0.94}_{-0.91} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.034^{+0.026}_{-0.023} \quad (+0.4\sigma)$	$r_{\text{drag}} h$	$100.7^{+2.5}_{-2.5} \quad (-0.5\sigma)$	$D_{\text{M}}(0.38)$	$1518^{+25}_{-24} \quad (+0.5\sigma)$
n_{s}	$0.971^{+0.010}_{-0.010} \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.56^{+0.12}_{-0.13} \quad (-1.0\sigma)$	$H(0.51)$	$90.06^{+0.76}_{-0.72} \quad (-0.5\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	z_{re}	$< 8.51 \quad (+0.4\sigma)$	$D_{\text{M}}(0.51)$	$1968^{+29}_{-29} \quad (+0.5\sigma)$
A_{100}^{PS}	$231^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\text{s}}$	$2.078^{+0.054}_{-0.048} \quad (+0.4\sigma)$	$H(0.61)$	$95.61^{+0.62}_{-0.59} \quad (-0.5\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.7\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.870^{+0.024}_{-0.023} \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	$2291^{+31}_{-31} \quad (+0.5\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	D_{40}	$1213^{+27}_{-26} \quad (+0.3\sigma)$	$H(2.33)$	$235.3^{+1.8}_{-1.8} \quad (+0.5\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5723^{+76}_{-75} \quad (-0.3\sigma)$	$D_{\text{M}}(2.33)$	$5750^{+27}_{-28} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{810}	$2528^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.019}_{-0.019} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.68^{+0.27}_{-0.25}$	D_{1420}	$814.7^{+9.6}_{-9.6} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.013}_{-0.012} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	D_{2000}	$231.5^{+3.4}_{-3.5} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.015}_{-0.015} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$n_{\text{s},0.002}$	$0.971^{+0.010}_{-0.010} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.010}_{-0.0089} \quad (+0.5\sigma)$
A^{kSZ}	—	Y_{P}	$0.24545^{+0.00015}_{-0.00015} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.013}_{-0.013} \quad (+0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24677^{+0.00015}_{-0.00015} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.6162^{+0.0094}_{-0.0078} \quad (+0.5\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	$10^5 \text{D}/\text{H}$	$2.561^{+0.071}_{-0.069} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.012}_{-0.012} \quad (+0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	Age/Gyr	$13.769^{+0.060}_{-0.061} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.5866^{+0.0084}_{-0.0076} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	z_*	$1089.56^{+0.68}_{-0.67} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2961^{+0.0040}_{-0.0036} \quad (+0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_*	$144.89^{+0.65}_{-0.64} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3057^{+0.0041}_{-0.0036} \quad (+0.3\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0030} \quad (+4.3\sigma)$	$100\theta_*$	$1.04125^{+0.00065}_{-0.00064} \quad (-0.6\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
c_{TE}	$0.992^{+0.010}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.914^{+0.060}_{-0.059} \quad (-0.4\sigma)$	f_{2000}^{217}	$105.0^{+4.2}_{-4.0} \quad (+0.0\sigma)$
c_{EE}	$0.9903^{+0.0097}_{-0.0094}$	z_{drag}	$1060.10^{+0.75}_{-0.78} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (+0.0\sigma)$
H_0	$68.3^{+1.5}_{-1.4} \quad (-0.5\sigma)$	r_{drag}	$147.51^{+0.63}_{-0.61} \quad (-0.4\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
Ω_{Λ}	$0.698^{+0.018}_{-0.019} \quad (-0.5\sigma)$	k_{D}	$0.14053^{+0.00066}_{-0.00069} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.16 \quad (\nu: 0.4) \quad (+0.3\sigma)$
Ω_{m}	$0.302^{+0.019}_{-0.018} \quad (+0.5\sigma)$	$100\theta_{\text{D}}$	$0.16066^{+0.00044}_{-0.00043} \quad (+0.1\sigma)$	χ_{CamSpec}^2	$11512.3 \quad (\nu: 16.0)$
$\Omega_{\text{m}} h^2$	$0.1410^{+0.0029}_{-0.0029} \quad (+0.5\sigma)$	z_{eq}	$3354^{+68}_{-68} \quad (+0.5\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^3$	$0.09628^{+0.00066}_{-0.00066} \quad (-0.2\sigma)$	k_{eq}	$0.01024^{+0.00021}_{-0.00021} \quad (+0.5\sigma)$	χ_{CMB}^2	$11930.9 \quad (\nu: 16.5) \quad (+1865.0\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 11938.62; \Delta\bar{\chi}_{\text{eff}}^2 = -3.57; R - 1 = 0.01153$$

3.23 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02249^{+0.00032}_{-0.00034} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$H(0.38)$	$83.37^{+0.65}_{-0.65} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1180^{+0.0021}_{-0.0021} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.595^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1519^{+17}_{-17} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00060}_{-0.00058} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.971^{+0.020}_{-0.019} \quad (+0.7\sigma)$	$H(0.51)$	$90.01^{+0.53}_{-0.53} \quad (-0.6\sigma)$
τ	$0.0526^{+0.011}_{-0.0094} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+1.7}_{-1.7} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1969^{+20}_{-20} \quad (+0.6\sigma)$
A_{L}	$1.14^{+0.13}_{-0.12} \quad (-1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.56^{+0.12}_{-0.13} \quad (-1.0\sigma)$	$H(0.61)$	$95.57^{+0.45}_{-0.44} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.034^{+0.026}_{-0.023} \quad (+0.4\sigma)$	z_{re}	$< 8.51 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2293^{+22}_{-22} \quad (+0.6\sigma)$
n_{s}	$0.9710^{+0.0082}_{-0.0084} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.078^{+0.054}_{-0.047} \quad (+0.4\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.3} \quad (+0.5\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.022}_{-0.022} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5752^{+21}_{-21} \quad (+0.6\sigma)$
A_{100}^{PS}	$232^{+50}_{-50} \quad (-0.6\sigma)$	D_{40}	$1214^{+24}_{-24} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.014}_{-0.013} \quad (+0.6\sigma)$
A_{143}^{PS}	$36^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5722^{+75}_{-74} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.011}_{-0.010} \quad (+0.6\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	D_{810}	$2528^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.011}_{-0.011} \quad (+0.7\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$814.6^{+9.5}_{-9.4} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6584^{+0.0095}_{-0.0085} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{2000}	$231.5^{+3.4}_{-3.4} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.010}_{-0.0097} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9710^{+0.0082}_{-0.0084} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.6165^{+0.0087}_{-0.0077} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24544^{+0.00012}_{-0.00013} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.4621^{+0.0094}_{-0.0088} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00012}_{-0.00013} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5868^{+0.0081}_{-0.0072} \quad (+0.5\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.564^{+0.063}_{-0.058} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2962^{+0.0040}_{-0.0035} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.772^{+0.048}_{-0.047} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3057^{+0.0041}_{-0.0036} \quad (+0.3\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.35}$	z_*	$1089.60^{+0.53}_{-0.52} \quad (+0.5\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	r_*	$144.85^{+0.49}_{-0.48} \quad (-0.5\sigma)$	f_{2000}^{217}	$105.1^{+3.9}_{-3.8} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04124^{+0.00059}_{-0.00057} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.911^{+0.047}_{-0.045} \quad (-0.5\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0030} \quad (+4.3\sigma)$	z_{drag}	$1060.08^{+0.69}_{-0.72} \quad (-0.3\sigma)$	χ_{lowl}^2	$22.22 \quad (\nu: 0.3) \quad (+0.4\sigma)$
c_{TE}	$0.992^{+0.010}_{-0.010}$	r_{drag}	$147.48^{+0.51}_{-0.50} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11511.7 \quad (\nu: 15.1)$
c_{EE}	$0.9904^{+0.0099}_{-0.0093}$	k_{D}	$0.14055^{+0.00060}_{-0.00065} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.031 \quad (\nu: 0.0)$
H_0	$68.2^{+1.0}_{-1.0} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00041}_{-0.00040} \quad (+0.2\sigma)$	χ_{MGS}^2	$1.82 \quad (\nu: 0.1)$
Ω_{Λ}	$0.696^{+0.013}_{-0.013} \quad (-0.6\sigma)$	z_{eq}	$3358^{+47}_{-47} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.93 \quad (\nu: 0.3)$
Ω_{m}	$0.304^{+0.013}_{-0.013} \quad (+0.6\sigma)$	k_{eq}	$0.01025^{+0.00014}_{-0.00014} \quad (+0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0020}_{-0.0020} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8217^{+0.0092}_{-0.0091} \quad (-0.6\sigma)$	χ_{BAO}^2	$5.78 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.09628^{+0.00063}_{-0.00067} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4537^{+0.0047}_{-0.0046} \quad (-0.6\sigma)$	χ_{CMB}^2	$11930.3 \quad (\nu: 15.8) \quad (+1864.9\sigma)$
σ_8	$0.802^{+0.013}_{-0.011} \quad (+0.6\sigma)$	$H(0.15)$	$73.40^{+0.86}_{-0.86} \quad (-0.6\sigma)$		
S_8	$0.807^{+0.027}_{-0.026} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.3^{+8.5}_{-8.3} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11943.89; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -4.10; R - 1 = 0.01823$$

3.24 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02268^{+0.00034}_{-0.00034} \quad (+0.3\sigma)$	S_8	$0.785^{+0.033}_{-0.031} \quad (-0.1\sigma)$	$H(0.15)$	$74.2^{+1.0}_{-1.1} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1161^{+0.0028}_{-0.0026} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.430^{+0.018}_{-0.017} \quad (-0.1\sigma)$	$D_M(0.15)$	$629^{+11}_{-9.7} \quad (-0.2\sigma)$
$100\theta_{MC}$	$1.04132^{+0.00065}_{-0.00064} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.585^{+0.017}_{-0.015} \quad (-0.1\sigma)$	$H(0.38)$	$83.97^{+0.79}_{-0.84} \quad (+0.2\sigma)$
τ	$0.054^{+0.012}_{-0.010} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.957^{+0.024}_{-0.022} \quad (-0.0\sigma)$	$D_M(0.38)$	$1504^{+22}_{-20} \quad (-0.2\sigma)$
A_L	$1.19^{+0.14}_{-0.13} \quad (-0.6\sigma)$	$r_{drag} h$	$102.2^{+2.2}_{-2.2} \quad (+0.2\sigma)$	$H(0.51)$	$90.49^{+0.64}_{-0.68} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.032^{+0.026}_{-0.024} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.58^{+0.13}_{-0.13} \quad (-0.8\sigma)$	$D_M(0.51)$	$1951^{+26}_{-23} \quad (-0.2\sigma)$
n_s	$0.9761^{+0.0090}_{-0.0095} \quad (+0.3\sigma)$	z_{re}	$< 8.57 \quad (+0.4\sigma)$	$H(0.61)$	$95.95^{+0.53}_{-0.56} \quad (+0.2\sigma)$
y_{cal}	$1.0000^{+0.0047}_{-0.0050} \quad (-0.0\sigma)$	$10^9 A_s$	$2.074^{+0.054}_{-0.050} \quad (+0.3\sigma)$	$D_M(0.61)$	$2273^{+28}_{-25} \quad (-0.2\sigma)$
A_{100}^{PS}	$228^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s e^{-2\tau}$	$1.863^{+0.023}_{-0.021} \quad (-0.3\sigma)$	$H(2.33)$	$234.4^{+1.6}_{-1.6} \quad (-0.2\sigma)$
A_{143}^{PS}	$33^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	$1204^{+27}_{-25} \quad (-0.3\sigma)$	$D_M(2.33)$	$5736^{+25}_{-24} \quad (-0.2\sigma)$
A_{217}^{PS}	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{220}	$5733^{+81}_{-76} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.436^{+0.017}_{-0.016} \quad (-0.1\sigma)$
A_{217}^{CIB}	$36^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2526^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.737^{+0.013}_{-0.011} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$4.2^{+3.6}_{-4.0} \quad (-0.7\sigma)$	D_{1420}	$815.6^{+8.9}_{-9.4} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.458^{+0.014}_{-0.013} \quad (-0.1\sigma)$
$r_{143 \times 217}^{PS}$	$0.68^{+0.27}_{-0.26}$	D_{2000}	$232.4^{+3.2}_{-3.2} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.011}_{-0.0091} \quad (+0.1\sigma)$
$r_{143 \times 217}^{CIB}$	—	$n_{s,0.002}$	$0.9761^{+0.0090}_{-0.0095} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.013}_{-0.011} \quad (-0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P	$0.24551^{+0.00014}_{-0.00013} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6142^{+0.0090}_{-0.0084} \quad (+0.2\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24684^{+0.00014}_{-0.00013} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.011}_{-0.010} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$10^5 D/H$	$2.530^{+0.061}_{-0.061} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5850^{+0.0084}_{-0.0078} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.94^{+0.35}_{-0.34}$	Age/Gyr	$13.737^{+0.055}_{-0.053} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2958^{+0.0041}_{-0.0037} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.20^{+0.61}_{-0.55} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3058^{+0.0041}_{-0.0038} \quad (+0.3\sigma)$
$A_{143 \times 217}^{dust}$	$1.01^{+0.31}_{-0.31}$	r_*	$145.20^{+0.58}_{-0.60} \quad (+0.1\sigma)$	f_{2000}^{143}	$26^{+6}_{-5} \quad (-0.3\sigma)$
c_{100}	$0.9976^{+0.0022}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04147^{+0.00063}_{-0.00063} \quad (-0.2\sigma)$	f_{2000}^{217}	$104.2^{+3.9}_{-3.8} \quad (-0.4\sigma)$
c_{217}	$1.0008^{+0.0030}_{-0.0032} \quad (+4.2\sigma)$	$D_M(z_*)/Gpc$	$13.942^{+0.054}_{-0.056} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$29^{+4}_{-4} \quad (-0.4\sigma)$
c_{TE}	$0.991^{+0.010}_{-0.010}$	z_{drag}	$1060.37^{+0.67}_{-0.71} \quad (+0.2\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
c_{EE}	$0.9900^{+0.0096}_{-0.0097}$	r_{drag}	$147.78^{+0.59}_{-0.59} \quad (+0.1\sigma)$	χ_{lowl}^2	$21.48 \quad (\nu: 0.3) \quad (-0.3\sigma)$
H_0	$69.1^{+1.2}_{-1.3} \quad (+0.2\sigma)$	k_D	$0.14037^{+0.00066}_{-0.00067} \quad (+0.0\sigma)$	$\chi_{CamSpec}^2$	$11514.2 \quad (\nu: 17.4)$
Ω_Λ	$0.708^{+0.015}_{-0.016} \quad (+0.2\sigma)$	$100\theta_D$	$0.16053^{+0.00040}_{-0.00038} \quad (-0.3\sigma)$	$\chi_{H073p45}^2$	$6.9 \quad (\nu: 2.2)$
Ω_m	$0.292^{+0.016}_{-0.015} \quad (-0.2\sigma)$	z_{eq}	$3317^{+62}_{-57} \quad (-0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1395^{+0.0026}_{-0.0024} \quad (-0.2\sigma)$	k_{eq}	$0.01012^{+0.00019}_{-0.00017} \quad (-0.2\sigma)$	χ_{CMB}^2	$11932.1 \quad (\nu: 17.5) \quad (+1865.2\sigma)$
$\Omega_m h^3$	$0.09640^{+0.00069}_{-0.00064} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.830^{+0.011}_{-0.012} \quad (+0.2\sigma)$		
σ_8	$0.795^{+0.015}_{-0.013} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4579^{+0.0057}_{-0.0062} \quad (+0.2\sigma)$		

$$\bar{\chi}_{eff}^2 = 11946.84; \Delta\bar{\chi}_{eff}^2 = -7.17; R - 1 = 0.04629$$

3.25 base_Alens_plikHM_TE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02215	$0.02219^{+0.00073}_{-0.00072} \quad (-1.4\sigma)$	$r_{\text{drag}} h$	99.57	$99.7^{+4.1}_{-4.0} \quad (-1.1\sigma)$	$100\theta_{\text{s,eq}}$	0.4514	$0.451^{+0.011}_{-0.011} \quad (-1.0\sigma)$
$\Omega_c h^2$	0.1193	$0.1193^{+0.0052}_{-0.0051} \quad (+1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.09	$2.09^{+0.53}_{-0.58} \quad (-7.2\sigma)$	$H(0.15)$	72.78	$72.8^{+2.1}_{-2.1} \quad (-1.1\sigma)$
$100\theta_{\text{MC}}$	1.04120	$1.0412^{+0.0011}_{-0.0010} \quad (-0.3\sigma)$	z_{re}	7.14	$7.0^{+1.7}_{-1.8} \quad (-0.1\sigma)$	$D_{\text{M}}(0.15)$	642.3	$642^{+21}_{-20} \quad (+1.2\sigma)$
τ	0.0487	$0.048^{+0.016}_{-0.018} \quad (-0.2\sigma)$	$10^9 A_{\text{s}}$	2.022	$2.021^{+0.089}_{-0.091} \quad (-1.1\sigma)$	$H(0.38)$	82.89	$83.0^{+1.6}_{-1.5} \quad (-1.1\sigma)$
A_{L}	0.740	$0.76^{+0.44}_{-0.41} \quad (-5.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8340	$1.835^{+0.048}_{-0.045} \quad (-2.2\sigma)$	$D_{\text{M}}(0.38)$	1531.6	$1530^{+42}_{-41} \quad (+1.2\sigma)$
$\ln(10^{10} A_{\text{s}})$	3.0065	$3.006^{+0.043}_{-0.046} \quad (-1.2\sigma)$	D_{40}	1245	$1242^{+76}_{-72} \quad (+1.9\sigma)$	$H(0.51)$	89.61	$89.7^{+1.3}_{-1.2} \quad (-1.2\sigma)$
n_{s}	0.9471	$0.949^{+0.039}_{-0.039} \quad (-3.6\sigma)$	D_{220}	5679	$5677^{+120}_{-110} \quad (-1.4\sigma)$	$D_{\text{M}}(0.51)$	1984.0	$1983^{+49}_{-49} \quad (+1.2\sigma)$
A_{100}^{dustTE}	0.111	$0.115^{+0.076}_{-0.074}$	D_{810}	2473	$2475^{+75}_{-72} \quad (-3.7\sigma)$	$H(0.61)$	95.23	$95.3^{+1.1}_{-1.0} \quad (-1.2\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.137	$0.137^{+0.058}_{-0.057}$	D_{1420}	789.8	$791^{+37}_{-35} \quad (-4.5\sigma)$	$D_{\text{M}}(0.61)$	2309	$2307^{+53}_{-53} \quad (+1.2\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.474	$0.48^{+0.17}_{-0.16}$	D_{2000}	218.8	$220^{+17}_{-16} \quad (-6.2\sigma)$	$H(2.33)$	235.92	$236.0^{+2.9}_{-2.9} \quad (+0.9\sigma)$
A_{143}^{dustTE}	0.228	$0.22^{+0.11}_{-0.11}$	$n_{\text{s},0.002}$	0.9471	$0.949^{+0.039}_{-0.039} \quad (-3.6\sigma)$	$D_{\text{M}}(2.33)$	5768.1	$5765^{+47}_{-48} \quad (+1.2\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.654	$0.66^{+0.16}_{-0.16}$	Y_{P}	0.245303	$0.24531^{+0.00030}_{-0.00033} \quad (-1.5\sigma)$	$f\sigma_8(0.15)$	0.4455	$0.445^{+0.027}_{-0.026} \quad (+0.5\sigma)$
A_{217}^{dustTE}	2.03	$2.03^{+0.53}_{-0.53}$	$Y_{\text{P}}^{\text{BBN}}$	0.246630	$0.24664^{+0.00030}_{-0.00033} \quad (-1.5\sigma)$	$\sigma_8(0.15)$	0.7297	$0.730^{+0.020}_{-0.020} \quad (-0.7\sigma)$
c_{100}	1.00015	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	10^5D/H	2.628	$2.62^{+0.14}_{-0.13} \quad (+1.5\sigma)$	$f\sigma_8(0.38)$	0.4633	$0.463^{+0.021}_{-0.021} \quad (+0.3\sigma)$
c_{217}	0.99802	$0.9980^{+0.0013}_{-0.0013} \quad (-0.3\sigma)$	Age/Gyr	13.809	$13.80^{+0.11}_{-0.11} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	0.6468	$0.647^{+0.018}_{-0.018} \quad (-1.0\sigma)$
y_{cal}	1.00017	$1.0001^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	z_*	1090.15	$1090.1^{+1.3}_{-1.2} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	0.4619	$0.462^{+0.018}_{-0.018} \quad (+0.2\sigma)$
H_0	67.50	$67.6^{+2.4}_{-2.4} \quad (-1.1\sigma)$	r_*	144.78	$144.8^{+1.0}_{-1.0} \quad (-0.7\sigma)$	$\sigma_8(0.51)$	0.6052	$0.605^{+0.017}_{-0.017} \quad (-1.2\sigma)$
Ω_{Λ}	0.6881	$0.688^{+0.031}_{-0.034} \quad (-1.1\sigma)$	$100\theta_*$	1.04140	$1.0414^{+0.0010}_{-0.00099} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	0.4570	$0.457^{+0.016}_{-0.016} \quad (+0.1\sigma)$
Ω_{m}	0.3119	$0.312^{+0.034}_{-0.031} \quad (+1.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.902	$13.899^{+0.095}_{-0.097} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	0.5759	$0.576^{+0.016}_{-0.016} \quad (-1.3\sigma)$
$\Omega_{\text{m}} h^2$	0.14212	$0.1421^{+0.0047}_{-0.0046} \quad (+1.0\sigma)$	z_{drag}	1059.36	$1059.5^{+1.5}_{-1.5} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	0.2903	$0.2904^{+0.0085}_{-0.0085} \quad (-1.7\sigma)$
$\Omega_{\text{m}} h^3$	0.09593	$0.0960^{+0.0012}_{-0.0012} \quad (-0.7\sigma)$	r_{drag}	147.52	$147.5^{+1.0}_{-1.0} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	0.2993	$0.2994^{+0.0094}_{-0.0092} \quad (-2.0\sigma)$
σ_8	0.7897	$0.790^{+0.023}_{-0.022} \quad (-0.5\sigma)$	k_{D}	0.14024	$0.1403^{+0.0012}_{-0.0011} \quad (-0.1\sigma)$	χ_{small}^2	395.64	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
S_8	0.805	$0.805^{+0.053}_{-0.051} \quad (+0.6\sigma)$	$100\theta_{\text{D}}$	0.16114	$0.16109^{+0.00090}_{-0.00086} \quad (+1.5\sigma)$	χ_{plikTE}^2	851.4	$859.6 \quad (\nu: 8.2)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4411	$0.441^{+0.029}_{-0.028} \quad (+0.6\sigma)$	z_{eq}	3381	$3381^{+110}_{-110} \quad (+1.0\sigma)$	χ_{prior}^2	0.5	$7.4 \quad (\nu: 6.7) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5902	$0.590^{+0.025}_{-0.025} \quad (+0.3\sigma)$	k_{eq}	0.010318	$0.01032^{+0.00034}_{-0.00034} \quad (+1.0\sigma)$	χ_{CMB}^2	1247.1	$1256.5 \quad (\nu: 9.5) \quad (+12.2\sigma)$
$\sigma_8/h^{0.5}$	0.9612	$0.961^{+0.035}_{-0.035} \quad (+0.2\sigma)$	$100\theta_{\text{eq}}$	0.8167	$0.817^{+0.022}_{-0.022} \quad (-1.0\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 1247.61$; $\Delta\chi_{\text{eff}}^2 = -1.38$; $\bar{\chi}_{\text{eff}}^2 = 1263.86$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.15$; $R - 1 = 0.00958$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.64 (Δ -0.05) plik_rd12_HM_v22_TE: 851.43 (Δ -1.42)

3.26 base_Alens_plikHM_TE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02224	$0.02226^{+0.00059}_{-0.00057} \quad (-1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.141	$2.13^{+0.47}_{-0.51} \quad (-6.6\sigma)$	$D_M(0.15)$	639.0	$639^{+10}_{-10} \quad (+0.9\sigma)$
$\Omega_c h^2$	0.11854	$0.1186^{+0.0026}_{-0.0025} \quad (+0.8\sigma)$	z_{re}	7.17	$7.1^{+1.7}_{-1.8} \quad (-0.1\sigma)$	$H(0.38)$	83.14	$83.16^{+0.85}_{-0.82} \quad (-0.9\sigma)$
$100\theta_{\text{MC}}$	1.04129	$1.04132^{+0.00092}_{-0.00089} \quad (-0.1\sigma)$	$10^9 A_s$	2.026	$2.023^{+0.089}_{-0.090} \quad (-1.1\sigma)$	$D_M(0.38)$	1525.0	$1525^{+21}_{-21} \quad (+0.9\sigma)$
τ	0.0493	$0.049^{+0.016}_{-0.018} \quad (-0.2\sigma)$	$10^9 A_s e^{-2\tau}$	1.8362	$1.836^{+0.047}_{-0.045} \quad (-2.2\sigma)$	$H(0.51)$	89.81	$89.83^{+0.72}_{-0.69} \quad (-0.9\sigma)$
A_L	0.787	$0.79^{+0.36}_{-0.37} \quad (-4.7\sigma)$	D_{40}	1236	$1234^{+58}_{-56} \quad (+1.5\sigma)$	$D_M(0.51)$	1976.2	$1976^{+25}_{-25} \quad (+0.9\sigma)$
$\ln(10^{10} A_s)$	3.0089	$3.007^{+0.044}_{-0.045} \quad (-1.1\sigma)$	D_{220}	5684	$5681^{+110}_{-110} \quad (-1.3\sigma)$	$H(0.61)$	95.39	$95.41^{+0.63}_{-0.60} \quad (-0.9\sigma)$
n_s	0.9524	$0.953^{+0.031}_{-0.030} \quad (-3.0\sigma)$	D_{810}	2481	$2480^{+70}_{-66} \quad (-3.3\sigma)$	$D_M(0.61)$	2300.2	$2300^{+27}_{-28} \quad (+0.9\sigma)$
y_{cal}	1.00025	$1.0001^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	D_{1420}	794.0	$794^{+33}_{-30} \quad (-4.0\sigma)$	$H(2.33)$	235.50	$235.5^{+1.6}_{-1.5} \quad (+0.6\sigma)$
A_{100}^{dustTE}	0.115	$0.115^{+0.076}_{-0.074}$	D_{2000}	220.8	$221^{+14}_{-13} \quad (-5.5\sigma)$	$D_M(2.33)$	5761.0	$5760^{+31}_{-31} \quad (+0.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.137^{+0.058}_{-0.057}$	$n_{s,0.002}$	0.9524	$0.953^{+0.031}_{-0.030} \quad (-3.0\sigma)$	$f\sigma_8(0.15)$	0.4421	$0.442^{+0.017}_{-0.016} \quad (+0.3\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.476	$0.48^{+0.17}_{-0.17}$	Y_P	0.245343	$0.24534^{+0.00023}_{-0.00026} \quad (-1.2\sigma)$	$\sigma_8(0.15)$	0.7298	$0.729^{+0.020}_{-0.020} \quad (-0.7\sigma)$
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	Y_P^{BBN}	0.246670	$0.24667^{+0.00023}_{-0.00026} \quad (-1.2\sigma)$	$f\sigma_8(0.38)$	0.4609	$0.461^{+0.015}_{-0.015} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.651	$0.66^{+0.16}_{-0.15}$	10^5D/H	2.610	$2.61^{+0.11}_{-0.11} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	0.6474	$0.647^{+0.018}_{-0.018} \quad (-1.0\sigma)$
A_{217}^{dustTE}	2.02	$2.03^{+0.54}_{-0.54}$	Age/Gyr	13.793	$13.790^{+0.071}_{-0.072} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	0.4601	$0.460^{+0.014}_{-0.014} \quad (+0.0\sigma)$
c_{100}	1.00015	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	z_*	1089.95	$1089.94^{+0.83}_{-0.83} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	0.6060	$0.606^{+0.017}_{-0.017} \quad (-1.2\sigma)$
c_{217}	0.99802	$0.9980^{+0.0013}_{-0.0013} \quad (-0.3\sigma)$	r_*	144.91	$144.89^{+0.67}_{-0.66} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	0.4556	$0.455^{+0.014}_{-0.013} \quad (-0.1\sigma)$
H_0	67.88	$67.9^{+1.2}_{-1.2} \quad (-0.8\sigma)$	$100\theta_*$	1.04148	$1.04152^{+0.00093}_{-0.00088} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	0.5768	$0.576^{+0.016}_{-0.016} \quad (-1.3\sigma)$
Ω_Λ	0.6931	$0.693^{+0.015}_{-0.016} \quad (-0.8\sigma)$	$D_M(z_*)/\text{Gpc}$	13.914	$13.911^{+0.065}_{-0.064} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	0.2910	$0.2908^{+0.0082}_{-0.0082} \quad (-1.5\sigma)$
Ω_m	0.3069	$0.307^{+0.016}_{-0.015} \quad (+0.8\sigma)$	z_{drag}	1059.55	$1059.6^{+1.3}_{-1.3} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	0.3002	$0.3000^{+0.0085}_{-0.0086} \quad (-1.8\sigma)$
$\Omega_m h^2$	0.14143	$0.1415^{+0.0024}_{-0.0024} \quad (+0.7\sigma)$	r_{drag}	147.62	$147.60^{+0.76}_{-0.76} \quad (-0.3\sigma)$	χ_{small}^2	395.63	$396.8 \quad (\nu: 1.4) \quad (+0.0\sigma)$
$\Omega_m h^3$	0.09601	$0.0961^{+0.0011}_{-0.0011} \quad (-0.6\sigma)$	k_D	0.14021	$0.1402^{+0.0011}_{-0.0011} \quad (-0.2\sigma)$	χ_{plikTE}^2	851.6	$858.9 \quad (\nu: 7.1)$
σ_8	0.7893	$0.789^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$100\theta_D$	0.16104	$0.16103^{+0.00079}_{-0.00076} \quad (+1.3\sigma)$	$\chi_{6\text{DF}}^2$	0.003	$0.046 \quad (\nu: 0.0)$
S_8	0.7983	$0.798^{+0.032}_{-0.031} \quad (+0.3\sigma)$	z_{eq}	3364	$3365^{+58}_{-57} \quad (+0.7\sigma)$	χ_{MGS}^2	1.54	$1.62 \quad (\nu: 0.2)$
$\sigma_8 \Omega_m^{0.5}$	0.4372	$0.437^{+0.017}_{-0.017} \quad (+0.3\sigma)$	k_{eq}	0.010268	$0.01027^{+0.00018}_{-0.00017} \quad (+0.7\sigma)$	χ_{DR12BAO}^2	3.63	$4.3 \quad (\nu: 0.8)$
$\sigma_8 \Omega_m^{0.25}$	0.5874	$0.587^{+0.019}_{-0.018} \quad (+0.1\sigma)$	$100\theta_{\text{eq}}$	0.8201	$0.820^{+0.011}_{-0.011} \quad (-0.7\sigma)$	χ_{prior}^2	0.5	$7.4 \quad (\nu: 6.7) \quad (+0.1\sigma)$
$\sigma_8/h^{0.5}$	0.9579	$0.957^{+0.029}_{-0.028} \quad (-0.0\sigma)$	$100\theta_{s,\text{eq}}$	0.4530	$0.4530^{+0.0056}_{-0.0055} \quad (-0.7\sigma)$	χ_{BAO}^2	5.18	$6.0 \quad (\nu: 0.6)$
$r_{\text{drag}} h$	100.21	$100.2^{+2.0}_{-2.0} \quad (-0.8\sigma)$	$H(0.15)$	73.11	$73.1^{+1.1}_{-1.1} \quad (-0.9\sigma)$	χ_{CMB}^2	1247.3	$1255.8 \quad (\nu: 8.6) \quad (+12.1\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 1252.89$; $\Delta\chi_{\text{eff}}^2 = -1.34$; $\bar{\chi}_{\text{eff}}^2 = 1269.15$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.27$; $R - 1 = 0.01278$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.54 (Δ -0.21) DR12BAO: 3.63 (Δ 0.19) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.63 (Δ -0.03) plik_rd12_HM_v22_TE: 851.63 (Δ -1.31)

3.27 base_Alens_plikHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00074}_{-0.00072} \quad (-1.4\sigma)$	$r_{\text{drag}} h$	$99.7^{+4.1}_{-4.0} \quad (-1.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.452^{+0.011}_{-0.011} \quad (-0.9\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0052}_{-0.0051} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.10^{+0.54}_{-0.58} \quad (-7.0\sigma)$	$H(0.15)$	$72.9^{+2.1}_{-2.1} \quad (-1.1\sigma)$
$100\theta_{\text{MC}}$	$1.0413^{+0.0010}_{-0.0010} \quad (-0.3\sigma)$	z_{re}	$< 8.52 \quad (+0.4\sigma)$	$D_{\text{M}}(0.15)$	$641^{+21}_{-21} \quad (+1.1\sigma)$
τ	$0.0518^{+0.012}_{-0.0096} \quad (+0.2\sigma)$	$10^9 A_{\text{s}}$	$2.036^{+0.075}_{-0.072} \quad (-0.7\sigma)$	$H(0.38)$	$83.0^{+1.6}_{-1.5} \quad (-1.1\sigma)$
A_{L}	$0.76^{+0.44}_{-0.41} \quad (-5.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.836^{+0.048}_{-0.045} \quad (-2.2\sigma)$	$D_{\text{M}}(0.38)$	$1530^{+42}_{-42} \quad (+1.1\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.014^{+0.037}_{-0.036} \quad (-0.7\sigma)$	D_{40}	$1241^{+75}_{-72} \quad (+1.9\sigma)$	$H(0.51)$	$89.7^{+1.3}_{-1.2} \quad (-1.1\sigma)$
n_{s}	$0.950^{+0.039}_{-0.039} \quad (-3.4\sigma)$	D_{220}	$5677^{+120}_{-110} \quad (-1.4\sigma)$	$D_{\text{M}}(0.51)$	$1981^{+49}_{-50} \quad (+1.1\sigma)$
A_{100}^{dustTE}	$0.115^{+0.075}_{-0.074}$	D_{810}	$2477^{+76}_{-72} \quad (-3.6\sigma)$	$H(0.61)$	$95.3^{+1.1}_{-0.99} \quad (-1.1\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.137^{+0.058}_{-0.058}$	D_{1420}	$792^{+37}_{-35} \quad (-4.4\sigma)$	$D_{\text{M}}(0.61)$	$2306^{+53}_{-54} \quad (+1.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.16}$	D_{2000}	$220^{+17}_{-16} \quad (-6.0\sigma)$	$H(2.33)$	$235.9^{+3.0}_{-2.9} \quad (+0.9\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$n_{\text{s},0.002}$	$0.950^{+0.039}_{-0.039} \quad (-3.4\sigma)$	$D_{\text{M}}(2.33)$	$5764^{+47}_{-48} \quad (+1.1\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	Y_{P}	$0.24532^{+0.00030}_{-0.00033} \quad (-1.4\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.026}_{-0.026} \quad (+0.6\sigma)$
A_{217}^{dustTE}	$2.03^{+0.53}_{-0.53}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00030}_{-0.00033} \quad (-1.4\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.019}_{-0.017} \quad (-0.4\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	10^5D/H	$2.62^{+0.14}_{-0.14} \quad (+1.4\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.020} \quad (+0.4\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.3\sigma)$	Age/Gyr	$13.80^{+0.10}_{-0.11} \quad (+1.1\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.017}_{-0.015} \quad (-0.7\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	z_*	$1090.1^{+1.3}_{-1.3} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.017}_{-0.017} \quad (+0.3\sigma)$
H_0	$67.6^{+2.5}_{-2.4} \quad (-1.1\sigma)$	r_*	$144.8^{+1.0}_{-1.1} \quad (-0.7\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.015}_{-0.015} \quad (-0.8\sigma)$
Ω_{Λ}	$0.689^{+0.031}_{-0.034} \quad (-1.1\sigma)$	$100\theta_*$	$1.0415^{+0.0010}_{-0.00098} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.016}_{-0.015} \quad (+0.2\sigma)$
Ω_{m}	$0.311^{+0.034}_{-0.031} \quad (+1.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.901^{+0.095}_{-0.097} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.014}_{-0.014} \quad (-0.9\sigma)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0047}_{-0.0046} \quad (+0.9\sigma)$	z_{drag}	$1059.5^{+1.5}_{-1.5} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2916^{+0.0079}_{-0.0073} \quad (-1.2\sigma)$
$\Omega_{\text{m}} h^3$	$0.0960^{+0.0012}_{-0.0012} \quad (-0.7\sigma)$	r_{drag}	$147.5^{+1.0}_{-1.0} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3007^{+0.0088}_{-0.0081} \quad (-1.5\sigma)$
σ_8	$0.793^{+0.021}_{-0.020} \quad (-0.2\sigma)$	k_{D}	$0.1403^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.8) \quad (-0.3\sigma)$
S_8	$0.807^{+0.053}_{-0.052} \quad (+0.6\sigma)$	$100\theta_{\text{D}}$	$0.16108^{+0.00089}_{-0.00087} \quad (+1.5\sigma)$	χ_{plikTE}^2	$859.6 \quad (\nu: 8.3)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.442^{+0.029}_{-0.028} \quad (+0.6\sigma)$	z_{eq}	$3379^{+110}_{-110} \quad (+0.9\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.7) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.592^{+0.025}_{-0.024} \quad (+0.4\sigma)$	k_{eq}	$0.01031^{+0.00034}_{-0.00034} \quad (+0.9\sigma)$	χ_{CMB}^2	$1256.1 \quad (\nu: 9.1) \quad (+12.2\sigma)$
$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.033} \quad (+0.3\sigma)$	$100\theta_{\text{eq}}$	$0.817^{+0.022}_{-0.022} \quad (-1.0\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1263.45$; $\Delta \bar{\chi}_{\text{eff}}^2 = -0.20$; $R - 1 = 0.01017$

3.28 base_Alens_plikHM_TE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02226^{+0.00059}_{-0.00057} \quad (-1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.13^{+0.48}_{-0.51} \quad (-6.6\sigma)$	$D_M(0.15)$	$639^{+10}_{-11} \quad (+0.8\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0026}_{-0.0025} \quad (+0.8\sigma)$	z_{re}	$< 8.49 \quad (+0.4\sigma)$	$H(0.38)$	$83.17^{+0.86}_{-0.81} \quad (-0.9\sigma)$
$100\theta_{\text{MC}}$	$1.04133^{+0.00090}_{-0.00087} \quad (-0.1\sigma)$	$10^9 A_s$	$2.037^{+0.075}_{-0.071} \quad (-0.7\sigma)$	$D_M(0.38)$	$1524^{+21}_{-22} \quad (+0.9\sigma)$
τ	$0.0520^{+0.011}_{-0.0094} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.836^{+0.047}_{-0.044} \quad (-2.2\sigma)$	$H(0.51)$	$89.83^{+0.72}_{-0.68} \quad (-0.9\sigma)$
A_L	$0.79^{+0.37}_{-0.37} \quad (-4.7\sigma)$	D_{40}	$1235^{+58}_{-57} \quad (+1.5\sigma)$	$D_M(0.51)$	$1976^{+25}_{-26} \quad (+0.9\sigma)$
$\ln(10^{10} A_s)$	$3.014^{+0.036}_{-0.035} \quad (-0.7\sigma)$	D_{220}	$5680^{+120}_{-110} \quad (-1.3\sigma)$	$H(0.61)$	$95.41^{+0.63}_{-0.59} \quad (-0.9\sigma)$
n_s	$0.953^{+0.032}_{-0.030} \quad (-3.0\sigma)$	D_{810}	$2481^{+70}_{-66} \quad (-3.3\sigma)$	$D_M(0.61)$	$2299^{+27}_{-28} \quad (+0.9\sigma)$
y_{cal}	$1.0001^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	D_{1420}	$794^{+33}_{-30} \quad (-3.9\sigma)$	$H(2.33)$	$235.5^{+1.6}_{-1.6} \quad (+0.6\sigma)$
A_{100}^{dustTE}	$0.115^{+0.076}_{-0.074}$	D_{2000}	$221^{+14}_{-14} \quad (-5.5\sigma)$	$D_M(2.33)$	$5760^{+31}_{-31} \quad (+0.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.137^{+0.058}_{-0.057}$	$n_{s,0.002}$	$0.953^{+0.032}_{-0.030} \quad (-3.0\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.016}_{-0.015} \quad (+0.4\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	Y_P	$0.24534^{+0.00023}_{-0.00027} \quad (-1.2\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.018}_{-0.018} \quad (-0.4\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	Y_P^{BBN}	$0.24667^{+0.00023}_{-0.00027} \quad (-1.2\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.014}_{-0.013} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.15}$	10^5D/H	$2.61^{+0.11}_{-0.11} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.016}_{-0.016} \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.03^{+0.54}_{-0.52}$	Age/Gyr	$13.790^{+0.070}_{-0.071} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.014}_{-0.012} \quad (+0.2\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.94^{+0.83}_{-0.84} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.015}_{-0.015} \quad (-0.8\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.3\sigma)$	r_*	$144.89^{+0.67}_{-0.65} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.013}_{-0.012} \quad (+0.1\sigma)$
H_0	$67.9^{+1.2}_{-1.2} \quad (-0.8\sigma)$	$100\theta_*$	$1.04153^{+0.00091}_{-0.00087} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.579^{+0.014}_{-0.014} \quad (-0.9\sigma)$
Ω_Λ	$0.693^{+0.015}_{-0.016} \quad (-0.8\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.911^{+0.066}_{-0.064} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2919^{+0.0073}_{-0.0072} \quad (-1.1\sigma)$
Ω_m	$0.307^{+0.016}_{-0.015} \quad (+0.8\sigma)$	z_{drag}	$1059.6^{+1.3}_{-1.3} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3011^{+0.0080}_{-0.0073} \quad (-1.4\sigma)$
$\Omega_m h^2$	$0.1415^{+0.0024}_{-0.0024} \quad (+0.7\sigma)$	r_{drag}	$147.60^{+0.76}_{-0.75} \quad (-0.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
$\Omega_m h^3$	$0.0961^{+0.0011}_{-0.0012} \quad (-0.6\sigma)$	k_D	$0.1402^{+0.0011}_{-0.0011} \quad (-0.2\sigma)$	χ_{plikTE}^2	$859.0 \quad (\nu: 7.1)$
σ_8	$0.792^{+0.021}_{-0.018} \quad (-0.3\sigma)$	$100\theta_D$	$0.16103^{+0.00079}_{-0.00076} \quad (+1.3\sigma)$	$\chi_{6\text{DF}}^2$	$0.045 \quad (\nu: 0.0)$
S_8	$0.800^{+0.030}_{-0.029} \quad (+0.4\sigma)$	z_{eq}	$3365^{+58}_{-57} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.63 \quad (\nu: 0.2)$
$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.017}_{-0.016} \quad (+0.4\sigma)$	k_{eq}	$0.01027^{+0.00018}_{-0.00017} \quad (+0.7\sigma)$	χ_{DR12BAO}^2	$4.3 \quad (\nu: 0.8)$
$\sigma_8 \Omega_m^{0.25}$	$0.589^{+0.018}_{-0.016} \quad (+0.2\sigma)$	$100\theta_{\text{eq}}$	$0.820^{+0.011}_{-0.011} \quad (-0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.3) \quad (+0.1\sigma)$
$\sigma_8/h^{0.5}$	$0.961^{+0.027}_{-0.024} \quad (+0.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.4530^{+0.0056}_{-0.0055} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$r_{\text{drag}} h$	$100.2^{+2.0}_{-2.0} \quad (-0.8\sigma)$	$H(0.15)$	$73.1^{+1.1}_{-1.1} \quad (-0.9\sigma)$	χ_{CMB}^2	$1255.4 \quad (\nu: 7.9) \quad (+12.0\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 1268.67; \Delta \bar{\chi}_{\text{eff}}^2 = -0.32; R - 1 = 0.01556$$

3.29 base_Alens_plikHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02434	$0.0245^{+0.0026}_{-0.0025}$ (+6.7 σ)	D_{40}	1225	1222^{+61}_{-60} (+0.7 σ)	$D_M(0.15)$	614.1	612^{+47}_{-43} (−1.9 σ)
$\Omega_c h^2$	0.1140	$0.1135^{+0.0098}_{-0.0089}$ (−1.3 σ)	D_{220}	6006	6026^{+390}_{-390} (+6.9 σ)	$H(0.38)$	85.36	$85.7^{+4.2}_{-4.0}$ (+2.4 σ)
$100\theta_{MC}$	1.04001	$1.0401^{+0.0018}_{-0.0018}$ (−2.5 σ)	D_{810}	2590	2595^{+75}_{-76} (+4.9 σ)	$D_M(0.38)$	1473	1467^{+97}_{-91} (−2.0 σ)
τ	0.0541	$0.053^{+0.018}_{-0.019}$ (+0.4 σ)	D_{1420}	844.3	847^{+36}_{-37} (+6.5 σ)	$H(0.51)$	91.75	$92.1^{+3.7}_{-3.4}$ (+2.7 σ)
A_L	1.31	$1.32^{+0.53}_{-0.48}$ (+0.8 σ)	D_{2000}	244.7	246^{+15}_{-16} (+6.7 σ)	$D_M(0.51)$	1913	1907^{+120}_{-110} (−2.1 σ)
$\ln(10^{10} A_s)$	3.0553	$3.054^{+0.045}_{-0.046}$ (+1.5 σ)	$n_{s,0.002}$	0.9858	$0.989^{+0.032}_{-0.031}$ (+2.1 σ)	$H(0.61)$	97.13	$97.4^{+3.3}_{-2.9}$ (+3.0 σ)
n_s	0.9858	$0.989^{+0.032}_{-0.031}$ (+2.1 σ)	Y_P	0.24615	$0.24625^{+0.00097}_{-0.00098}$ (+6.5 σ)	$D_M(0.61)$	2231	2223^{+130}_{-120} (−2.1 σ)
y_{cal}	0.99985	$0.9999^{+0.0048}_{-0.0049}$ (−0.1 σ)	Y_P^{BBN}	0.24748	$0.24758^{+0.00097}_{-0.00099}$ (+6.5 σ)	$H(2.33)$	234.50	$234.4^{+4.1}_{-4.0}$ (−0.1 σ)
H_0	70.9	$71.3^{+5.7}_{-5.7}$ (+2.0 σ)	$10^5 D/H$	2.255	$2.24^{+0.39}_{-0.37}$ (−5.9 σ)	$D_M(2.33)$	5676	5664^{+140}_{-150} (−3.3 σ)
Ω_Λ	0.723	$0.725^{+0.056}_{-0.060}$ (+1.3 σ)	Age/Gyr	13.599	$13.58^{+0.31}_{-0.32}$ (−3.5 σ)	$f\sigma_8(0.15)$	0.423	$0.420^{+0.061}_{-0.055}$ (−1.2 σ)
Ω_m	0.277	$0.275^{+0.060}_{-0.056}$ (−1.3 σ)	z_*	1087.14	$1087.0^{+3.4}_{-3.3}$ (−4.5 σ)	$\sigma_8(0.15)$	0.7346	$0.732^{+0.029}_{-0.031}$ (−0.4 σ)
$\Omega_m h^2$	0.1390	$0.1387^{+0.0074}_{-0.0072}$ (−0.5 σ)	r_*	144.49	$144.5^{+1.3}_{-1.3}$ (−1.3 σ)	$f\sigma_8(0.38)$	0.4486	$0.446^{+0.048}_{-0.046}$ (−1.1 σ)
$\Omega_m h^3$	0.09847	$0.0988^{+0.0039}_{-0.0035}$ (+4.7 σ)	$100\theta_*$	1.03999	$1.0400^{+0.0017}_{-0.0017}$ (−3.0 σ)	$\sigma_8(0.38)$	0.6551	$0.653^{+0.020}_{-0.023}$ (−0.2 σ)
σ_8	0.7912	$0.788^{+0.037}_{-0.038}$ (−0.6 σ)	$D_M(z_*)/\text{Gpc}$	13.893	$13.89^{+0.12}_{-0.12}$ (−0.9 σ)	$f\sigma_8(0.51)$	0.4513	$0.448^{+0.041}_{-0.040}$ (−1.0 σ)
S_8	0.760	$0.75^{+0.11}_{-0.11}$ (−1.2 σ)	z_{drag}	1063.9	$1064.3^{+5.0}_{-5.0}$ (+7.2 σ)	$\sigma_8(0.51)$	0.6147	$0.613^{+0.017}_{-0.019}$ (−0.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.416	$0.413^{+0.063}_{-0.060}$ (−1.2 σ)	r_{drag}	146.53	$146.5^{+1.4}_{-1.4}$ (−2.5 σ)	$f\sigma_8(0.61)$	0.4493	$0.447^{+0.036}_{-0.036}$ (−1.0 σ)
$\sigma_8 \Omega_m^{0.25}$	0.574	$0.571^{+0.057}_{-0.053}$ (−1.0 σ)	k_D	0.14280	$0.1429^{+0.0025}_{-0.0025}$ (+4.9 σ)	$\sigma_8(0.61)$	0.5859	$0.584^{+0.016}_{-0.017}$ (+0.1 σ)
$\sigma_8/h^{0.5}$	0.940	$0.935^{+0.081}_{-0.077}$ (−1.1 σ)	$100\theta_D$	0.15836	$0.1583^{+0.0025}_{-0.0024}$ (−7.8 σ)	$f\sigma_8(2.33)$	0.2969	$0.2963^{+0.0071}_{-0.0075}$ (+0.4 σ)
$r_{drag} h$	103.8	$104.4^{+8.2}_{-8.4}$ (+1.3 σ)	z_{eq}	3305	3300^{+180}_{-170} (−0.5 σ)	$\sigma_8(2.33)$	0.3078	$0.3074^{+0.0072}_{-0.0074}$ (+0.9 σ)
$\langle d^2 \rangle^{1/2}$	2.684	$2.67^{+0.44}_{-0.49}$ (+0.3 σ)	k_{eq}	0.01009	$0.01007^{+0.00054}_{-0.00053}$ (−0.5 σ)	χ_{small}^2	395.57	$396.7 (\nu: 1.2)$ (−0.1 σ)
z_{re}	7.16	$7.0^{+1.7}_{-1.7}$ (−0.1 σ)	$100\theta_{eq}$	0.8360	$0.838^{+0.039}_{-0.040}$ (+0.9 σ)	χ_{plikEE}^2	737.6	$743.5 (\nu: 5.9)$
$10^9 A_s$	2.123	$2.122^{+0.096}_{-0.095}$ (+1.6 σ)	$100\theta_{s,eq}$	0.4596	$0.461^{+0.018}_{-0.019}$ (+0.7 σ)	χ_{prior}^2	0.00	$0.99 (\nu: 1.0)$ (−1.7 σ)
$10^9 A_s e^{-2\tau}$	1.9051	$1.907^{+0.048}_{-0.048}$ (+2.8 σ)	$H(0.15)$	75.8	$76.2^{+5.1}_{-5.0}$ (+2.1 σ)	χ_{CMB}^2	1133.1	$1140.3 (\nu: 7.1)$ (−7.9 σ)

Best-fit $\chi_{eff}^2 = 1133.14$; $\Delta\chi_{eff}^2 = -1.41$; $\bar{\chi}_{eff}^2 = 1141.29$; $\Delta\bar{\chi}_{eff}^2 = -0.32$; $R - 1 = 0.00947$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.57 (Δ -0.02) plik_rd12_HM_v22_EE: 737.57 (Δ -1.39)

3.30 base_Alens_plikHM_EE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02352	$0.0235^{+0.0013}_{-0.0012}$ (+3.3 σ)	D_{810}	2577	2577^{+67}_{-65} (+3.6 σ)	$D_M(0.51)$	1954.5	1954^{+35}_{-36} (−0.1 σ)
$\Omega_c h^2$	0.11747	$0.1174^{+0.0029}_{-0.0029}$ (+0.3 σ)	D_{1420}	836.5	836^{+29}_{-29} (+4.4 σ)	$H(0.61)$	96.10	$96.1^{+1.1}_{-1.1}$ (+0.5 σ)
$100\theta_{MC}$	1.03980	$1.0398^{+0.0017}_{-0.0016}$ (−3.1 σ)	D_{2000}	240.9	241^{+11}_{-11} (+4.2 σ)	$D_M(0.61)$	2275.9	2275^{+39}_{-39} (−0.1 σ)
τ	0.0521	$0.051^{+0.016}_{-0.017}$ (+0.1 σ)	$n_{s,0.002}$	0.9786	$0.978^{+0.021}_{-0.020}$ (+0.6 σ)	$H(2.33)$	235.93	$235.9^{+1.9}_{-1.9}$ (+0.9 σ)
A_L	1.234	$1.24^{+0.47}_{-0.44}$ (+0.0 σ)	Y_P	0.24587	$0.24587^{+0.00051}_{-0.00050}$ (+3.2 σ)	$D_M(2.33)$	5723	5722^{+57}_{-57} (−0.8 σ)
$\ln(10^{10} A_s)$	3.0511	$3.049^{+0.040}_{-0.044}$ (+1.2 σ)	Y_P^{BBN}	0.24720	$0.24720^{+0.00051}_{-0.00050}$ (+3.2 σ)	$f\sigma_8(0.15)$	0.4449	$0.444^{+0.019}_{-0.019}$ (+0.4 σ)
n_s	0.9786	$0.978^{+0.021}_{-0.020}$ (+0.6 σ)	$10^5 D/H$	2.386	$2.38^{+0.21}_{-0.21}$ (−3.1 σ)	$\sigma_8(0.15)$	0.7438	$0.743^{+0.017}_{-0.018}$ (+0.7 σ)
y_{cal}	0.99977	$0.9999^{+0.0047}_{-0.0050}$ (−0.0 σ)	Age/Gyr	13.704	$13.70^{+0.13}_{-0.13}$ (−0.9 σ)	$f\sigma_8(0.38)$	0.4659	$0.465^{+0.016}_{-0.016}$ (+0.5 σ)
H_0	68.83	$68.9^{+1.7}_{-1.6}$ (−0.0 σ)	z_*	1088.33	$1088.3^{+1.6}_{-1.5}$ (−2.0 σ)	$\sigma_8(0.38)$	0.6607	$0.660^{+0.015}_{-0.016}$ (+0.8 σ)
Ω_Λ	0.7011	$0.701^{+0.017}_{-0.018}$ (−0.3 σ)	r_*	144.21	$144.20^{+0.97}_{-0.96}$ (−1.8 σ)	$f\sigma_8(0.51)$	0.4660	$0.465^{+0.015}_{-0.015}$ (+0.5 σ)
Ω_m	0.2989	$0.299^{+0.018}_{-0.017}$ (+0.3 σ)	$100\theta_*$	1.03988	$1.0398^{+0.0017}_{-0.0016}$ (−3.4 σ)	$\sigma_8(0.51)$	0.6189	$0.618^{+0.014}_{-0.014}$ (+0.8 σ)
$\Omega_m h^2$	0.14163	$0.1416^{+0.0027}_{-0.0028}$ (+0.7 σ)	$D_M(z_*)/\text{Gpc}$	13.868	$13.868^{+0.098}_{-0.095}$ (−1.4 σ)	$f\sigma_8(0.61)$	0.4620	$0.461^{+0.013}_{-0.014}$ (+0.6 σ)
$\Omega_m h^3$	0.09748	$0.0975^{+0.0023}_{-0.0023}$ (+2.2 σ)	z_{drag}	1062.37	$1062.4^{+2.8}_{-2.7}$ (+3.9 σ)	$\sigma_8(0.61)$	0.5893	$0.588^{+0.013}_{-0.014}$ (+0.8 σ)
σ_8	0.8036	$0.802^{+0.019}_{-0.021}$ (+0.7 σ)	r_{drag}	146.50	$146.5^{+1.3}_{-1.3}$ (−2.5 σ)	$f\sigma_8(2.33)$	0.2976	$0.2972^{+0.0067}_{-0.0068}$ (+0.8 σ)
S_8	0.8022	$0.801^{+0.037}_{-0.036}$ (+0.4 σ)	k_D	0.14232	$0.1423^{+0.0022}_{-0.0022}$ (+3.8 σ)	$\sigma_8(2.33)$	0.3074	$0.3070^{+0.0069}_{-0.0071}$ (+0.7 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4394	$0.439^{+0.020}_{-0.020}$ (+0.4 σ)	$100\theta_D$	0.15917	$0.1592^{+0.0016}_{-0.0016}$ (−4.8 σ)	χ_{simall}^2	395.62	396.8 (ν : 1.2) (−0.0 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5942	$0.593^{+0.020}_{-0.020}$ (+0.5 σ)	z_{eq}	3369	3368^{+64}_{-66} (+0.7 σ)	χ_{plikEE}^2	738.1	743.1 (ν : 5.8)
$\sigma_8/h^{0.5}$	0.9686	$0.967^{+0.030}_{-0.029}$ (+0.5 σ)	k_{eq}	0.010283	$0.01028^{+0.00020}_{-0.00020}$ (+0.7 σ)	χ_{6DF}^2	0.004	0.060 (ν : 0.0)
$r_{drag} h$	100.83	$100.9^{+2.2}_{-2.3}$ (−0.5 σ)	$100\theta_{eq}$	0.8216	$0.822^{+0.012}_{-0.012}$ (−0.6 σ)	χ_{MGS}^2	1.89	2.00 (ν : 0.3)
$\langle d^2 \rangle^{1/2}$	2.662	$2.66^{+0.46}_{-0.50}$ (+0.3 σ)	$100\theta_{s,eq}$	0.4528	$0.4529^{+0.0062}_{-0.0060}$ (−0.7 σ)	$\chi_{DR12BAO}^2$	3.60	4.4 (ν : 0.7)
z_{re}	7.18	$7.0^{+1.6}_{-1.8}$ (−0.1 σ)	$H(0.15)$	74.00	$74.0^{+1.5}_{-1.5}$ (+0.0 σ)	χ_{prior}^2	0.01	1.0 (ν : 1.0) (−1.7 σ)
$10^9 A_s$	2.114	$2.111^{+0.085}_{-0.091}$ (+1.3 σ)	$D_M(0.15)$	630.7	631^{+14}_{-14} (+0.0 σ)	χ_{BAO}^2	5.50	6.5 (ν : 1.0)
$10^9 A_s e^{-2\tau}$	1.9046	$1.906^{+0.047}_{-0.046}$ (+2.7 σ)	$H(0.38)$	83.93	$84.0^{+1.3}_{-1.2}$ (+0.2 σ)	χ_{CMB}^2	1133.7	1139.9 (ν : 6.9) (−8.0 σ)
D_{40}	1225	1227^{+61}_{-60} (+1.1 σ)	$D_M(0.38)$	1507.3	1507^{+29}_{-29} (−0.0 σ)			
D_{220}	5885	5895^{+260}_{-270} (+3.8 σ)	$H(0.51)$	90.55	$90.6^{+1.2}_{-1.1}$ (+0.3 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1139.18$; $\Delta\chi_{\text{eff}}^2 = -0.98$; $\bar{\chi}_{\text{eff}}^2 = 1147.38$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.02$; $R - 1 = 0.01879$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.89 (Δ 0.00) DR12BAO: 3.60 (Δ 0.00) CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.62 (Δ 0.01) plik_rd12_HM_v22_EE: 738.06 (Δ -0.98)

3.31 base_Alens_plikHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0245^{+0.0026}_{-0.0025} \quad (+6.6\sigma)$	D_{40}	$1221^{+61}_{-60} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$612^{+47}_{-43} \quad (-1.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1136^{+0.0097}_{-0.0089} \quad (-1.3\sigma)$	D_{220}	$6020^{+390}_{-390} \quad (+6.8\sigma)$	$H(0.38)$	$85.7^{+4.2}_{-4.0} \quad (+2.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0401^{+0.0017}_{-0.0018} \quad (-2.5\sigma)$	D_{810}	$2594^{+75}_{-76} \quad (+4.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1468^{+97}_{-90} \quad (-2.0\sigma)$
τ	$0.057^{+0.014}_{-0.012} \quad (+0.8\sigma)$	D_{1420}	$847^{+36}_{-37} \quad (+6.4\sigma)$	$H(0.51)$	$92.0^{+3.7}_{-3.4} \quad (+2.7\sigma)$
A_{L}	$1.31^{+0.52}_{-0.47} \quad (+0.7\sigma)$	D_{2000}	$246^{+15}_{-16} \quad (+6.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1907^{+120}_{-110} \quad (-2.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.062^{+0.040}_{-0.037} \quad (+1.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.989^{+0.032}_{-0.031} \quad (+2.1\sigma)$	$H(0.61)$	$97.4^{+3.3}_{-2.9} \quad (+3.0\sigma)$
n_{s}	$0.989^{+0.032}_{-0.031} \quad (+2.1\sigma)$	Y_{P}	$0.24623^{+0.00096}_{-0.00097} \quad (+6.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2224^{+130}_{-120} \quad (-2.1\sigma)$
y_{cal}	$0.9999^{+0.0048}_{-0.0049} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24756^{+0.00097}_{-0.00098} \quad (+6.4\sigma)$	$H(2.33)$	$234.4^{+4.1}_{-4.0} \quad (-0.1\sigma)$
H_0	$71.2^{+5.7}_{-5.6} \quad (+2.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.24^{+0.39}_{-0.37} \quad (-5.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5665^{+140}_{-140} \quad (-3.3\sigma)$
Ω_{Λ}	$0.725^{+0.055}_{-0.060} \quad (+1.3\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.58^{+0.31}_{-0.32} \quad (-3.4\sigma)$	$f\sigma_{\mathrm{s}}(0.15)$	$0.422^{+0.060}_{-0.055} \quad (-1.0\sigma)$
Ω_{m}	$0.275^{+0.060}_{-0.055} \quad (-1.3\sigma)$	z_{*}	$1087.0^{+3.5}_{-3.1} \quad (-4.5\sigma)$	$\sigma_{\mathrm{s}}(0.15)$	$0.735^{+0.028}_{-0.029} \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1387^{+0.0074}_{-0.0072} \quad (-0.5\sigma)$	r_{*}	$144.5^{+1.3}_{-1.3} \quad (-1.3\sigma)$	$f\sigma_{\mathrm{s}}(0.38)$	$0.447^{+0.047}_{-0.046} \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0987^{+0.0039}_{-0.0035} \quad (+4.6\sigma)$	$100\theta_{*}$	$1.0400^{+0.0017}_{-0.0017} \quad (-3.0\sigma)$	$\sigma_{\mathrm{s}}(0.38)$	$0.656^{+0.019}_{-0.020} \quad (+0.2\sigma)$
σ_{s}	$0.791^{+0.036}_{-0.037} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.89^{+0.12}_{-0.12} \quad (-0.9\sigma)$	$f\sigma_{\mathrm{s}}(0.51)$	$0.450^{+0.040}_{-0.040} \quad (-0.9\sigma)$
S_{s}	$0.76^{+0.11}_{-0.11} \quad (-1.0\sigma)$	z_{drag}	$1064.2^{+5.0}_{-4.9} \quad (+7.1\sigma)$	$\sigma_{\mathrm{s}}(0.51)$	$0.615^{+0.016}_{-0.017} \quad (+0.4\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	$0.415^{+0.063}_{-0.060} \quad (-1.0\sigma)$	r_{drag}	$146.5^{+1.4}_{-1.4} \quad (-2.5\sigma)$	$f\sigma_{\mathrm{s}}(0.61)$	$0.448^{+0.035}_{-0.035} \quad (-0.8\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	$0.573^{+0.056}_{-0.053} \quad (-0.9\sigma)$	k_{D}	$0.1429^{+0.0025}_{-0.0025} \quad (+4.8\sigma)$	$\sigma_{\mathrm{s}}(0.61)$	$0.587^{+0.014}_{-0.015} \quad (+0.5\sigma)$
$\sigma_{\mathrm{s}}/h^{0.5}$	$0.939^{+0.079}_{-0.076} \quad (-0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1583^{+0.0025}_{-0.0024} \quad (-7.7\sigma)$	$f\sigma_{\mathrm{s}}(2.33)$	$0.2974^{+0.0064}_{-0.0062} \quad (+0.8\sigma)$
$r_{\mathrm{drag}}h$	$104.3^{+8.2}_{-8.3} \quad (+1.3\sigma)$	z_{eq}	$3299^{+180}_{-170} \quad (-0.5\sigma)$	$\sigma_{\mathrm{s}}(2.33)$	$0.3086^{+0.0066}_{-0.0060} \quad (+1.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.67^{+0.44}_{-0.48} \quad (+0.3\sigma)$	k_{eq}	$0.01007^{+0.00054}_{-0.00052} \quad (-0.5\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.8) \quad (-0.3\sigma)$
z_{re}	$< 8.44 \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.838^{+0.039}_{-0.040} \quad (+0.9\sigma)$	χ_{plikEE}^2	$743.5 \quad (\nu: 5.9)$
$10^9 A_{\mathrm{s}}$	$2.137^{+0.087}_{-0.077} \quad (+2.0\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.461^{+0.018}_{-0.019} \quad (+0.7\sigma)$	χ_{prior}^2	$0.99 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.906^{+0.049}_{-0.048} \quad (+2.7\sigma)$	$H(0.15)$	$76.2^{+5.1}_{-5.0} \quad (+2.1\sigma)$	χ_{CMB}^2	$1139.9 \quad (\nu: 6.6) \quad (-8.0\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1140.89; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.42; R - 1 = 0.00557$$

3.32 base_Alens_plikHM_EE_lowE_post_BAO_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_{\mathrm{b}}h^2$	$0.0235^{+0.0013}_{-0.0012}$	$(+3.2\sigma)$	D_{810}	2577^{+67}_{-64}	$(+3.6\sigma)$	$D_{\mathrm{M}}(0.51)$	1954^{+35}_{-35}	(-0.1σ)
$\Omega_{\mathrm{c}}h^2$	$0.1174^{+0.0030}_{-0.0029}$	$(+0.3\sigma)$	D_{1420}	836^{+29}_{-28}	$(+4.4\sigma)$	$H(0.61)$	$96.1^{+1.1}_{-1.1}$	$(+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0397^{+0.0016}_{-0.0016}$	(-3.1σ)	D_{2000}	241^{+11}_{-11}	$(+4.3\sigma)$	$D_{\mathrm{M}}(0.61)$	2275^{+39}_{-39}	(-0.1σ)
τ	$0.055^{+0.012}_{-0.010}$	$(+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.978^{+0.020}_{-0.020}$	$(+0.6\sigma)$	$H(2.33)$	$235.9^{+1.9}_{-1.9}$	$(+0.9\sigma)$
A_{L}	$1.23^{+0.46}_{-0.44}$	(-0.1σ)	Y_{P}	$0.24587^{+0.00049}_{-0.00049}$	$(+3.2\sigma)$	$D_{\mathrm{M}}(2.33)$	5722^{+57}_{-57}	(-0.7σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.056^{+0.034}_{-0.035}$	$(+1.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24719^{+0.00049}_{-0.00049}$	$(+3.2\sigma)$	$f\sigma_{\mathrm{s}}(0.15)$	$0.446^{+0.019}_{-0.018}$	$(+0.5\sigma)$
n_{s}	$0.978^{+0.020}_{-0.020}$	$(+0.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.39^{+0.21}_{-0.20}$	(-3.0σ)	$\sigma_{\mathrm{s}}(0.15)$	$0.745^{+0.016}_{-0.016}$	$(+1.0\sigma)$
y_{cal}	$0.9999^{+0.0048}_{-0.0051}$	(-0.1σ)	Age/Gyr	$13.70^{+0.13}_{-0.13}$	(-0.8σ)	$f\sigma_{\mathrm{s}}(0.38)$	$0.467^{+0.016}_{-0.016}$	$(+0.6\sigma)$
H_0	$68.9^{+1.6}_{-1.6}$	(-0.0σ)	z_{*}	$1088.3^{+1.6}_{-1.5}$	(-2.0σ)	$\sigma_{\mathrm{s}}(0.38)$	$0.662^{+0.013}_{-0.013}$	$(+1.1\sigma)$
Ω_{Λ}	$0.701^{+0.017}_{-0.018}$	(-0.2σ)	r_{*}	$144.21^{+0.96}_{-0.96}$	(-1.7σ)	$f\sigma_{\mathrm{s}}(0.51)$	$0.467^{+0.014}_{-0.014}$	$(+0.7\sigma)$
Ω_{m}	$0.299^{+0.018}_{-0.017}$	$(+0.2\sigma)$	$100\theta_{*}$	$1.0398^{+0.0017}_{-0.0016}$	(-3.4σ)	$\sigma_{\mathrm{s}}(0.51)$	$0.620^{+0.012}_{-0.012}$	$(+1.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1416^{+0.0027}_{-0.0028}$	$(+0.7\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.869^{+0.099}_{-0.095}$	(-1.3σ)	$f\sigma_{\mathrm{s}}(0.61)$	$0.463^{+0.013}_{-0.012}$	$(+0.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0975^{+0.0023}_{-0.0023}$	$(+2.2\sigma)$	z_{drag}	$1062.4^{+2.8}_{-2.7}$	$(+3.9\sigma)$	$\sigma_{\mathrm{s}}(0.61)$	$0.590^{+0.012}_{-0.011}$	$(+1.1\sigma)$
σ_{s}	$0.805^{+0.018}_{-0.017}$	$(+0.9\sigma)$	r_{drag}	$146.5^{+1.3}_{-1.3}$	(-2.4σ)	$f\sigma_{\mathrm{s}}(2.33)$	$0.2982^{+0.0058}_{-0.0057}$	$(+1.1\sigma)$
S_{s}	$0.803^{+0.037}_{-0.034}$	$(+0.5\sigma)$	k_{D}	$0.1423^{+0.0021}_{-0.0022}$	$(+3.7\sigma)$	$\sigma_{\mathrm{s}}(2.33)$	$0.3081^{+0.0060}_{-0.0059}$	$(+1.1\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	$0.440^{+0.020}_{-0.019}$	$(+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1592^{+0.0016}_{-0.0016}$	(-4.8σ)	χ_{small}^2	$396.4 (\nu: 0.8) \quad (-0.3\sigma)$	
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	$0.595^{+0.020}_{-0.018}$	$(+0.7\sigma)$	z_{eq}	3368^{+64}_{-66}	$(+0.7\sigma)$	χ_{plikEE}^2	$743.1 (\nu: 5.7)$	
$\sigma_{\mathrm{s}}/h^{0.5}$	$0.970^{+0.029}_{-0.027}$	$(+0.6\sigma)$	k_{eq}	$0.01028^{+0.00020}_{-0.00020}$	$(+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.060 (\nu: 0.0)$	
$r_{\mathrm{drag}}h$	$100.9^{+2.2}_{-2.3}$	(-0.5σ)	$100\theta_{\mathrm{eq}}$	$0.822^{+0.012}_{-0.012}$	(-0.6σ)	χ_{MGS}^2	$2.00 (\nu: 0.3)$	
$\langle d^2 \rangle^{1/2}$	$2.66^{+0.45}_{-0.50}$	$(+0.2\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4530^{+0.0062}_{-0.0061}$	(-0.7σ)	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 (\nu: 0.7)$	
z_{re}	< 8.49	$(+0.3\sigma)$	$H(0.15)$	$74.0^{+1.5}_{-1.5}$	$(+0.0\sigma)$	χ_{prior}^2	$1.0 (\nu: 1.1)$	(-1.7σ)
$10^9 A_{\mathrm{s}}$	$2.125^{+0.074}_{-0.073}$	$(+1.6\sigma)$	$D_{\mathrm{M}}(0.15)$	631^{+14}_{-14}	$(+0.0\sigma)$	χ_{BAO}^2	$6.5 (\nu: 0.9)$	
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.905^{+0.046}_{-0.045}$	$(+2.6\sigma)$	$H(0.38)$	$84.0^{+1.3}_{-1.2}$	$(+0.2\sigma)$	χ_{CMB}^2	$1139.5 (\nu: 6.5)$	(-8.1σ)
D_{40}	1227^{+60}_{-60}	$(+1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1507^{+29}_{-29}	(-0.0σ)			
D_{220}	5892^{+250}_{-260}	$(+3.7\sigma)$	$H(0.51)$	$90.6^{+1.2}_{-1.1}$	$(+0.3\sigma)$			

$\bar{\chi}_{\mathrm{eff}}^2 = 1146.99$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.07$; $R - 1 = 0.01334$

3.33 base_Alens_CamSpecHM_TE_lowE

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_b h^2$	0.02233	$0.02238^{+0.00078}_{-0.00076}$	(-0.8σ)	D_{40}	1216	1209^{+76}_{-74}	$(+0.0\sigma)$	$D_M(0.15)$	635.9	634^{+21}_{-20}	$(+0.4\sigma)$
$\Omega_c h^2$	0.1177	$0.1174^{+0.0051}_{-0.0050}$	$(+0.3\sigma)$	D_{220}	5715	5710^{+120}_{-120}	(-0.6σ)	$H(0.38)$	83.37	$83.5^{+1.7}_{-1.6}$	(-0.4σ)
$100\theta_{MC}$	1.04130	$1.0414^{+0.0010}_{-0.0010}$	(-0.0σ)	D_{810}	2532	2536^{+80}_{-77}	$(+0.6\sigma)$	$D_M(0.38)$	1518.8	1516^{+42}_{-42}	$(+0.4\sigma)$
τ	0.0504	$0.050^{+0.017}_{-0.018}$	$(+0.0\sigma)$	D_{1420}	816.5	819^{+40}_{-38}	$(+0.9\sigma)$	$H(0.51)$	89.99	$90.1^{+1.4}_{-1.3}$	(-0.5σ)
A_L	0.890	$0.93^{+0.46}_{-0.42}$	(-3.3σ)	D_{2000}	229.3	231^{+18}_{-17}	(-0.8σ)	$D_M(0.51)$	1968.9	1965^{+50}_{-49}	$(+0.4\sigma)$
$\ln(10^{10} A_s)$	3.0276	$3.027^{+0.046}_{-0.045}$	$(+0.0\sigma)$	$n_{s,0.002}$	0.9689	$0.973^{+0.041}_{-0.040}$	(-0.2σ)	$H(0.61)$	95.53	$95.6^{+1.1}_{-1.1}$	(-0.5σ)
n_s	0.9689	$0.973^{+0.041}_{-0.040}$	(-0.2σ)	Y_P	0.245379	$0.24539^{+0.00033}_{-0.00034}$	(-0.8σ)	$D_M(0.61)$	2292	2288^{+54}_{-54}	$(+0.4\sigma)$
y_{cal}	1.00006	$0.99997^{+0.0050}_{-0.0049}$	(-0.0σ)	Y_P^{BBN}	0.246705	$0.24672^{+0.00034}_{-0.00034}$	(-0.8σ)	$H(2.33)$	235.07	$234.9^{+2.9}_{-2.8}$	$(+0.2\sigma)$
H_0	68.25	$68.4^{+2.5}_{-2.4}$	(-0.4σ)	$10^5 D/H$	2.593	$2.59^{+0.14}_{-0.14}$	$(+0.8\sigma)$	$D_M(2.33)$	5755	5751^{+49}_{-51}	$(+0.5\sigma)$
Ω_Λ	0.6979	$0.700^{+0.030}_{-0.032}$	(-0.4σ)	Age/Gyr	13.780	$13.77^{+0.11}_{-0.11}$	$(+0.5\sigma)$	$f\sigma_8(0.15)$	0.4442	$0.443^{+0.027}_{-0.027}$	$(+0.3\sigma)$
Ω_m	0.3021	$0.300^{+0.032}_{-0.030}$	$(+0.4\sigma)$	z_*	1089.77	$1089.7^{+1.3}_{-1.3}$	$(+0.7\sigma)$	$\sigma_8(0.15)$	0.7388	$0.739^{+0.021}_{-0.021}$	$(+0.3\sigma)$
$\Omega_m h^2$	0.14072	$0.1404^{+0.0046}_{-0.0046}$	$(+0.2\sigma)$	r_*	145.05	$145.1^{+1.0}_{-1.0}$	(-0.1σ)	$f\sigma_8(0.38)$	0.4643	$0.463^{+0.021}_{-0.022}$	$(+0.3\sigma)$
$\Omega_m h^3$	0.09604	$0.0961^{+0.0013}_{-0.0012}$	(-0.6σ)	$100\theta_*$	1.04150	$1.0416^{+0.0010}_{-0.0010}$	(-0.0σ)	$\sigma_8(0.38)$	0.6560	$0.656^{+0.019}_{-0.018}$	$(+0.2\sigma)$
σ_8	0.7986	$0.798^{+0.024}_{-0.024}$	$(+0.3\sigma)$	$D_M(z_*)/\text{Gpc}$	13.927	$13.931^{+0.097}_{-0.094}$	(-0.1σ)	$f\sigma_8(0.51)$	0.4640	$0.463^{+0.019}_{-0.019}$	$(+0.3\sigma)$
S_8	0.801	$0.798^{+0.053}_{-0.053}$	$(+0.3\sigma)$	z_{drag}	1059.67	$1059.8^{+1.6}_{-1.6}$	(-0.8σ)	$\sigma_8(0.51)$	0.6143	$0.614^{+0.018}_{-0.017}$	$(+0.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4389	$0.437^{+0.029}_{-0.029}$	$(+0.3\sigma)$	r_{drag}	147.74	$147.8^{+1.0}_{-1.0}$	$(+0.1\sigma)$	$f\sigma_8(0.61)$	0.4599	$0.459^{+0.017}_{-0.018}$	$(+0.3\sigma)$
$\sigma_8 \Omega_m^{0.25}$	0.5920	$0.591^{+0.026}_{-0.027}$	$(+0.3\sigma)$	k_D	0.14016	$0.1402^{+0.0012}_{-0.0012}$	(-0.4σ)	$\sigma_8(0.61)$	0.5848	$0.585^{+0.017}_{-0.016}$	$(+0.2\sigma)$
$\sigma_8/h^{0.5}$	0.9666	$0.965^{+0.036}_{-0.037}$	$(+0.4\sigma)$	$100\theta_D$	0.16095	$0.16091^{+0.00093}_{-0.00089}$	$(+0.9\sigma)$	$f\sigma_8(2.33)$	0.2952	$0.2954^{+0.0091}_{-0.0085}$	$(+0.1\sigma)$
$r_{drag} h$	100.83	$101.1^{+4.1}_{-4.0}$	(-0.3σ)	z_{eq}	3347	3341^{+110}_{-110}	$(+0.2\sigma)$	$\sigma_8(2.33)$	0.3048	$0.3051^{+0.0099}_{-0.0092}$	$(+0.0\sigma)$
$\langle d^2 \rangle^{1/2}$	2.259	$2.28^{+0.47}_{-0.49}$	(-4.7σ)	k_{eq}	0.010216	$0.01020^{+0.00034}_{-0.00033}$	$(+0.2\sigma)$	χ_{small}^2	395.66	$396.9 (\nu: 1.5) (+0.0\sigma)$	
z_{re}	7.25	$7.2^{+1.8}_{-1.8}$	$(+0.1\sigma)$	$100\theta_{eq}$	0.8234	$0.825^{+0.022}_{-0.022}$	(-0.3σ)	$\chi_{CamSpec}^2$	2575.8	$2581.9 (\nu: 6.2)$	
$10^9 A_s$	2.065	$2.064^{+0.096}_{-0.092}$	$(+0.0\sigma)$	$100\theta_{s,eq}$	0.4547	$0.455^{+0.011}_{-0.011}$	(-0.3σ)	χ_{prior}^2	10.03	$11.0 (\nu: 1.0) (+1.1\sigma)$	
$10^9 A_s e^{-2\tau}$	1.8667	$1.867^{+0.049}_{-0.048}$	$(+0.0\sigma)$	$H(0.15)$	73.43	$73.6^{+2.2}_{-2.1}$	(-0.4σ)	χ_{CMB}^2	2971.5	$2978.8 (\nu: 7.6) (+311.2\sigma)$	

Best-fit $\chi_{eff}^2 = 2981.49$; $\Delta\chi_{eff}^2 = -0.15$; $\bar{\chi}_{eff}^2 = 2989.81$; $\Delta\bar{\chi}_{eff}^2 = 0.90$; $R - 1 = 0.00461$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.66 (Δ -0.01) CamSpec like_10.7HM_1400_unified: 2575.80 (Δ -0.15)

3.34 base_Alens_CamSpecHM_TE_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02230^{+0.00062}_{-0.00061} \quad (-1.1\sigma)$	D_{810}	$2530^{+72}_{-71} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+26}_{-26} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1181^{+0.0025}_{-0.0026} \quad (+0.6\sigma)$	D_{1420}	$816^{+35}_{-33} \quad (+0.3\sigma)$	$H(0.61)$	$95.48^{+0.65}_{-0.63} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04130^{+0.00096}_{-0.00092} \quad (-0.2\sigma)$	D_{2000}	$229^{+16}_{-15} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+28}_{-28} \quad (+0.7\sigma)$
τ	$0.050^{+0.018}_{-0.018} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.032}_{-0.030} \quad (-0.9\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.6} \quad (+0.4\sigma)$
A_{L}	$0.89^{+0.37}_{-0.36} \quad (-3.7\sigma)$	Y_{P}	$0.24536^{+0.00025}_{-0.00028} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+32}_{-33} \quad (+0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.026^{+0.045}_{-0.044} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00025}_{-0.00028} \quad (-1.1\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.017}_{-0.017} \quad (+0.6\sigma)$
n_{s}	$0.968^{+0.032}_{-0.030} \quad (-0.9\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.60^{+0.12}_{-0.11} \quad (+1.1\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.021}_{-0.020} \quad (+0.3\sigma)$
y_{cal}	$1.0000^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.785^{+0.074}_{-0.075} \quad (+0.8\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.016}_{-0.015} \quad (+0.5\sigma)$
H_0	$68.1^{+1.3}_{-1.2} \quad (-0.7\sigma)$	z_*	$1089.85^{+0.88}_{-0.86} \quad (+1.0\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.019}_{-0.018} \quad (+0.2\sigma)$
Ω_{Λ}	$0.696^{+0.015}_{-0.016} \quad (-0.6\sigma)$	r_*	$144.99^{+0.69}_{-0.68} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.015}_{-0.014} \quad (+0.5\sigma)$
Ω_{m}	$0.304^{+0.016}_{-0.015} \quad (+0.6\sigma)$	$100\theta_*$	$1.04149^{+0.00095}_{-0.00092} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.018}_{-0.017} \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1410^{+0.0024}_{-0.0024} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.921^{+0.068}_{-0.067} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.014}_{-0.014} \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0960^{+0.0012}_{-0.0012} \quad (-0.7\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (-1.1\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.017}_{-0.016} \quad (+0.1\sigma)$
σ_8	$0.799^{+0.023}_{-0.022} \quad (+0.4\sigma)$	r_{drag}	$147.69^{+0.80}_{-0.79} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2950^{+0.0088}_{-0.0082} \quad (-0.0\sigma)$
S_8	$0.804^{+0.033}_{-0.032} \quad (+0.6\sigma)$	k_{D}	$0.1402^{+0.0012}_{-0.0012} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3045^{+0.0093}_{-0.0085} \quad (-0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.018}_{-0.017} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16098^{+0.00084}_{-0.00080} \quad (+1.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.593^{+0.020}_{-0.018} \quad (+0.5\sigma)$	z_{eq}	$3354^{+58}_{-58} \quad (+0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$2581.1 \quad (\nu: 5.4)$
$\sigma_8/h^{0.5}$	$0.968^{+0.029}_{-0.028} \quad (+0.5\sigma)$	k_{eq}	$0.01024^{+0.00018}_{-0.00018} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
$r_{\mathrm{drag}}h$	$100.6^{+2.0}_{-2.0} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.84 \quad (\nu: 0.2)$
$\langle d^2 \rangle^{1/2}$	$2.24^{+0.43}_{-0.46} \quad (-5.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4540^{+0.0057}_{-0.0056} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.1 \quad (\nu: 0.5)$
z_{re}	$7.2^{+1.8}_{-1.8} \quad (+0.1\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.1} \quad (-0.7\sigma)$	χ_{prior}^2	$11.0 \quad (\nu: 1.0) \quad (+1.1\sigma)$
$10^9 A_{\mathrm{s}}$	$2.061^{+0.095}_{-0.090} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+11}_{-11} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.866^{+0.048}_{-0.048} \quad (-0.1\sigma)$	$H(0.38)$	$83.28^{+0.87}_{-0.84} \quad (-0.7\sigma)$	χ_{CMB}^2	$2978.0 \quad (\nu: 6.7) \quad (+311.0\sigma)$
D_{40}	$1217^{+61}_{-59} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+22}_{-22} \quad (+0.7\sigma)$		
D_{220}	$5707^{+120}_{-120} \quad (-0.7\sigma)$	$H(0.51)$	$89.92^{+0.74}_{-0.72} \quad (-0.8\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2995.04$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.94$; $R - 1 = 0.00758$

3.35 base_Alens_CamSpecHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00078}_{-0.00077} \quad (-0.8\sigma)$	D_{40}	$1209^{+76}_{-74} \quad (-0.0\sigma)$	$D_M(0.15)$	$634^{+21}_{-20} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1173^{+0.0051}_{-0.0050} \quad (+0.3\sigma)$	D_{220}	$5709^{+120}_{-120} \quad (-0.7\sigma)$	$H(0.38)$	$83.5^{+1.6}_{-1.6} \quad (-0.4\sigma)$
$100\theta_{MC}$	$1.0414^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	D_{810}	$2536^{+80}_{-78} \quad (+0.7\sigma)$	$D_M(0.38)$	$1515^{+43}_{-41} \quad (+0.4\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.4\sigma)$	D_{1420}	$819^{+40}_{-38} \quad (+1.0\sigma)$	$H(0.51)$	$90.1^{+1.3}_{-1.3} \quad (-0.4\sigma)$
A_L	$0.93^{+0.45}_{-0.42} \quad (-3.3\sigma)$	D_{2000}	$231^{+18}_{-17} \quad (-0.7\sigma)$	$D_M(0.51)$	$1965^{+50}_{-49} \quad (+0.4\sigma)$
$\ln(10^{10} A_s)$	$3.034^{+0.041}_{-0.036} \quad (+0.4\sigma)$	$n_{s,0.002}$	$0.973^{+0.041}_{-0.040} \quad (-0.1\sigma)$	$H(0.61)$	$95.6^{+1.1}_{-1.1} \quad (-0.5\sigma)$
n_s	$0.973^{+0.041}_{-0.040} \quad (-0.1\sigma)$	Y_P	$0.24539^{+0.00034}_{-0.00035} \quad (-0.8\sigma)$	$D_M(0.61)$	$2288^{+54}_{-53} \quad (+0.4\sigma)$
y_{cal}	$0.99995^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24672^{+0.00034}_{-0.00035} \quad (-0.8\sigma)$	$H(2.33)$	$234.9^{+2.9}_{-2.8} \quad (+0.2\sigma)$
H_0	$68.5^{+2.5}_{-2.5} \quad (-0.4\sigma)$	$10^5 D/H$	$2.58^{+0.15}_{-0.14} \quad (+0.8\sigma)$	$D_M(2.33)$	$5750^{+50}_{-51} \quad (+0.5\sigma)$
Ω_Λ	$0.700^{+0.030}_{-0.033} \quad (-0.3\sigma)$	Age/Gyr	$13.77^{+0.11}_{-0.11} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.027}_{-0.026} \quad (+0.4\sigma)$
Ω_m	$0.300^{+0.033}_{-0.030} \quad (+0.3\sigma)$	z_*	$1089.7^{+1.3}_{-1.3} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.020}_{-0.019} \quad (+0.5\sigma)$
$\Omega_m h^2$	$0.1404^{+0.0046}_{-0.0045} \quad (+0.2\sigma)$	r_*	$145.1^{+1.0}_{-1.0} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.021}_{-0.021} \quad (+0.4\sigma)$
$\Omega_m h^3$	$0.0961^{+0.0013}_{-0.0012} \quad (-0.6\sigma)$	$100\theta_*$	$1.0416^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.018}_{-0.016} \quad (+0.5\sigma)$
σ_8	$0.801^{+0.022}_{-0.021} \quad (+0.5\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.932^{+0.096}_{-0.094} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.018}_{-0.018} \quad (+0.5\sigma)$
S_8	$0.800^{+0.053}_{-0.052} \quad (+0.4\sigma)$	z_{drag}	$1059.8^{+1.6}_{-1.6} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.017}_{-0.015} \quad (+0.5\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.029}_{-0.028} \quad (+0.4\sigma)$	r_{drag}	$147.8^{+1.0}_{-0.99} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.016}_{-0.016} \quad (+0.5\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.025}_{-0.025} \quad (+0.5\sigma)$	k_D	$0.1401^{+0.0012}_{-0.0012} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.016}_{-0.015} \quad (+0.5\sigma)$
$\sigma_8/h^{0.5}$	$0.968^{+0.035}_{-0.035} \quad (+0.5\sigma)$	$100\theta_D$	$0.16090^{+0.00094}_{-0.00090} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2964^{+0.0083}_{-0.0080} \quad (+0.5\sigma)$
$r_{drag} h$	$101.2^{+4.1}_{-4.1} \quad (-0.3\sigma)$	z_{eq}	$3339^{+110}_{-110} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0093}_{-0.0086} \quad (+0.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.28^{+0.48}_{-0.50} \quad (-4.7\sigma)$	k_{eq}	$0.01019^{+0.00034}_{-0.00033} \quad (+0.2\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 0.9) \quad (-0.2\sigma)$
z_{re}	$< 8.68 \quad (+0.5\sigma)$	$100\theta_{eq}$	$0.825^{+0.022}_{-0.022} \quad (-0.3\sigma)$	$\chi_{CamSpec}^2$	$2581.9 \quad (\nu: 6.2)$
$10^9 A_s$	$2.078^{+0.083}_{-0.078} \quad (+0.4\sigma)$	$100\theta_{s,eq}$	$0.456^{+0.011}_{-0.011} \quad (-0.2\sigma)$	χ_{prior}^2	$11.0 \quad (\nu: 1.0) \quad (+1.1\sigma)$
$10^9 A_s e^{-2\tau}$	$1.868^{+0.049}_{-0.049} \quad (+0.0\sigma)$	$H(0.15)$	$73.6^{+2.2}_{-2.1} \quad (-0.4\sigma)$	χ_{CMB}^2	$2978.4 \quad (\nu: 7.1) \quad (+311.1\sigma)$

$\bar{\chi}_{eff}^2 = 2989.43$; $\Delta\bar{\chi}_{eff}^2 = 0.91$; $R - 1 = 0.00501$

3.36 base_Alens_CamSpecHM_TE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02230^{+0.00063}_{-0.00063} \quad (-1.1\sigma)$	D_{810}	$2531^{+73}_{-72} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+26}_{-26} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1180^{+0.0025}_{-0.0026} \quad (+0.6\sigma)$	D_{1420}	$816^{+35}_{-33} \quad (+0.3\sigma)$	$H(0.61)$	$95.48^{+0.65}_{-0.63} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04130^{+0.00096}_{-0.00092} \quad (-0.2\sigma)$	D_{2000}	$229^{+16}_{-15} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+28}_{-29} \quad (+0.7\sigma)$
τ	$0.053^{+0.013}_{-0.010} \quad (+0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.969^{+0.032}_{-0.032} \quad (-0.8\sigma)$	$H(2.33)$	$235.2^{+1.6}_{-1.6} \quad (+0.4\sigma)$
A_{L}	$0.88^{+0.37}_{-0.37} \quad (-3.8\sigma)$	Y_{P}	$0.24536^{+0.00025}_{-0.00029} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+33}_{-33} \quad (+0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.032^{+0.041}_{-0.036} \quad (+0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00025}_{-0.00029} \quad (-1.1\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.017}_{-0.016} \quad (+0.6\sigma)$
n_{s}	$0.969^{+0.032}_{-0.032} \quad (-0.8\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.60^{+0.12}_{-0.11} \quad (+1.1\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.020}_{-0.018} \quad (+0.6\sigma)$
y_{cal}	$1.0000^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.785^{+0.075}_{-0.075} \quad (+0.8\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.015}_{-0.014} \quad (+0.6\sigma)$
H_0	$68.1^{+1.3}_{-1.2} \quad (-0.7\sigma)$	z_*	$1089.84^{+0.89}_{-0.86} \quad (+1.0\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.018}_{-0.016} \quad (+0.5\sigma)$
Ω_{Λ}	$0.696^{+0.015}_{-0.016} \quad (-0.6\sigma)$	r_*	$144.99^{+0.69}_{-0.67} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.014}_{-0.013} \quad (+0.6\sigma)$
Ω_{m}	$0.304^{+0.016}_{-0.015} \quad (+0.6\sigma)$	$100\theta_*$	$1.04149^{+0.00095}_{-0.00091} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.017}_{-0.015} \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1410^{+0.0024}_{-0.0024} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.922^{+0.068}_{-0.067} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.013}_{-0.013} \quad (+0.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0960^{+0.0012}_{-0.0012} \quad (-0.7\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (-1.1\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.016}_{-0.014} \quad (+0.4\sigma)$
σ_8	$0.802^{+0.021}_{-0.020} \quad (+0.6\sigma)$	r_{drag}	$147.69^{+0.80}_{-0.78} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2960^{+0.0080}_{-0.0077} \quad (+0.3\sigma)$
S_8	$0.807^{+0.032}_{-0.030} \quad (+0.6\sigma)$	k_{D}	$0.1402^{+0.0012}_{-0.0012} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3055^{+0.0087}_{-0.0078} \quad (+0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.017}_{-0.017} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16098^{+0.00086}_{-0.00081} \quad (+1.2\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 1.0) \quad (-0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.595^{+0.019}_{-0.017} \quad (+0.6\sigma)$	z_{eq}	$3354^{+58}_{-58} \quad (+0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$2581.2 \quad (\nu: 5.4)$
$\sigma_8/h^{0.5}$	$0.971^{+0.028}_{-0.026} \quad (+0.7\sigma)$	k_{eq}	$0.01024^{+0.00018}_{-0.00018} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
$r_{\mathrm{drag}}h$	$100.6^{+2.0}_{-2.0} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.85 \quad (\nu: 0.2)$
$\langle d^2 \rangle^{1/2}$	$2.24^{+0.44}_{-0.47} \quad (-5.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4541^{+0.0057}_{-0.0056} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.1 \quad (\nu: 0.5)$
z_{re}	$< 8.72 \quad (+0.4\sigma)$	$H(0.15)$	$73.3^{+1.1}_{-1.1} \quad (-0.7\sigma)$	χ_{prior}^2	$11.0 \quad (\nu: 1.1) \quad (+1.1\sigma)$
$10^9 A_{\mathrm{s}}$	$2.075^{+0.083}_{-0.077} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+11}_{-11} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.866^{+0.050}_{-0.048} \quad (-0.1\sigma)$	$H(0.38)$	$83.29^{+0.87}_{-0.84} \quad (-0.7\sigma)$	χ_{CMB}^2	$2977.7 \quad (\nu: 6.3) \quad (+311.0\sigma)$
D_{40}	$1217^{+61}_{-59} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+22}_{-22} \quad (+0.7\sigma)$		
D_{220}	$5707^{+120}_{-120} \quad (-0.7\sigma)$	$H(0.51)$	$89.92^{+0.74}_{-0.72} \quad (-0.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2994.70$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.00$; $R - 1 = 0.00997$

3.37 base_Alens_CamSpecHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02349	$0.0236^{+0.0025}_{-0.0024}$ (+3.6 σ)	D_{40}	1258	1257^{+62}_{-60} (+2.8 σ)	$D_M(0.15)$	633.9	632^{+48}_{-45} (+0.2 σ)
$\Omega_c h^2$	0.1180	$0.118^{+0.010}_{-0.0094}$ (+0.4 σ)	D_{220}	5982	5998^{+400}_{-400} (+6.2 σ)	$H(0.38)$	83.67	$83.9^{+4.0}_{-3.7}$ (+0.1 σ)
$100\theta_{MC}$	1.03926	$1.0393^{+0.0017}_{-0.0017}$ (-3.9 σ)	D_{810}	2600	2601^{+75}_{-77} (+5.3 σ)	$D_M(0.38)$	1514	1510^{+98}_{-94} (+0.1 σ)
τ	0.0509	$0.051^{+0.017}_{-0.018}$ (+0.1 σ)	D_{1420}	841.1	842^{+36}_{-37} (+5.5 σ)	$H(0.51)$	90.32	$90.6^{+3.3}_{-3.2}$ (+0.3 σ)
A_L	1.136	$1.16^{+0.50}_{-0.45}$ (-0.8 σ)	D_{2000}	240.9	242^{+15}_{-16} (+4.6 σ)	$D_M(0.51)$	1962	1957^{+120}_{-110} (+0.1 σ)
$\ln(10^{10} A_s)$	3.0595	$3.059^{+0.042}_{-0.044}$ (+1.8 σ)	$n_{s,0.002}$	0.9702	$0.972^{+0.030}_{-0.029}$ (-0.3 σ)	$H(0.61)$	95.90	$96.1^{+2.9}_{-2.8}$ (+0.5 σ)
n_s	0.9702	$0.972^{+0.030}_{-0.029}$ (-0.3 σ)	Y_P	0.24586	$0.24589^{+0.00097}_{-0.0010}$ (+3.5 σ)	$D_M(0.61)$	2285	2279^{+130}_{-120} (+0.1 σ)
y_{cal}	1.00002	$0.9999^{+0.0049}_{-0.0049}$ (-0.0 σ)	Y_P^{BBN}	0.24719	$0.24722^{+0.00097}_{-0.0010}$ (+3.5 σ)	$H(2.33)$	236.17	$236.2^{+4.7}_{-4.1}$ (+1.1 σ)
H_0	68.4	$68.7^{+5.6}_{-5.5}$ (-0.1 σ)	$10^5 D/H$	2.390	$2.38^{+0.43}_{-0.38}$ (-3.2 σ)	$D_M(2.33)$	5732	5723^{+130}_{-140} (-0.7 σ)
Ω_Λ	0.697	$0.697^{+0.062}_{-0.067}$ (-0.5 σ)	Age/Gyr	13.725	$13.71^{+0.29}_{-0.31}$ (-0.8 σ)	$f\sigma_8(0.15)$	0.449	$0.447^{+0.063}_{-0.058}$ (+0.6 σ)
Ω_m	0.303	$0.303^{+0.067}_{-0.062}$ (+0.5 σ)	z_*	1088.40	$1088.3^{+3.7}_{-3.3}$ (-2.0 σ)	$\sigma_8(0.15)$	0.7453	$0.743^{+0.028}_{-0.030}$ (+0.8 σ)
$\Omega_m h^2$	0.1421	$0.1420^{+0.0082}_{-0.0074}$ (+0.9 σ)	r_*	144.10	$144.1^{+1.3}_{-1.3}$ (-2.0 σ)	$f\sigma_8(0.38)$	0.4690	$0.467^{+0.048}_{-0.047}$ (+0.6 σ)
$\Omega_m h^3$	0.09726	$0.0975^{+0.0037}_{-0.0034}$ (+2.2 σ)	$100\theta_*$	1.03933	$1.0394^{+0.0016}_{-0.0016}$ (-4.2 σ)	$\sigma_8(0.38)$	0.6616	$0.660^{+0.019}_{-0.021}$ (+0.8 σ)
σ_8	0.8057	$0.804^{+0.036}_{-0.038}$ (+0.8 σ)	$D_M(z_*)/\text{Gpc}$	13.865	$13.86^{+0.12}_{-0.13}$ (-1.5 σ)	$f\sigma_8(0.51)$	0.4685	$0.466^{+0.040}_{-0.040}$ (+0.7 σ)
S_8	0.810	$0.81^{+0.13}_{-0.11}$ (+0.6 σ)	z_{drag}	1062.34	$1062.6^{+4.9}_{-4.9}$ (+4.2 σ)	$\sigma_8(0.51)$	0.6195	$0.618^{+0.016}_{-0.018}$ (+0.8 σ)
$\sigma_8 \Omega_m^{0.5}$	0.444	$0.442^{+0.069}_{-0.062}$ (+0.6 σ)	r_{drag}	146.40	$146.3^{+1.4}_{-1.4}$ (-2.8 σ)	$f\sigma_8(0.61)$	0.4643	$0.462^{+0.034}_{-0.036}$ (+0.7 σ)
$\sigma_8 \Omega_m^{0.25}$	0.598	$0.596^{+0.059}_{-0.055}$ (+0.7 σ)	k_D	0.14241	$0.1425^{+0.0026}_{-0.0026}$ (+4.1 σ)	$\sigma_8(0.61)$	0.5897	$0.589^{+0.015}_{-0.016}$ (+0.8 σ)
$\sigma_8/h^{0.5}$	0.974	$0.970^{+0.082}_{-0.079}$ (+0.6 σ)	$100\theta_D$	0.15911	$0.1590^{+0.0027}_{-0.0026}$ (-5.2 σ)	$f\sigma_8(2.33)$	0.2977	$0.2972^{+0.0069}_{-0.0071}$ (+0.8 σ)
$r_{drag} h$	100.2	$100.6^{+8.2}_{-8.2}$ (-0.6 σ)	z_{eq}	3380	3377^{+200}_{-180} (+0.9 σ)	$\sigma_8(2.33)$	0.3072	$0.3070^{+0.0073}_{-0.0074}$ (+0.7 σ)
$\langle d^2 \rangle^{1/2}$	2.590	$2.60^{+0.46}_{-0.51}$ (-0.6 σ)	k_{eq}	0.01032	$0.01031^{+0.00060}_{-0.00054}$ (+0.9 σ)	χ^2_{small}	395.60	396.8 (ν : 1.3) (-0.0 σ)
z_{re}	7.07	$7.0^{+1.8}_{-1.7}$ (-0.1 σ)	$100\theta_{eq}$	0.8191	$0.821^{+0.040}_{-0.040}$ (-0.7 σ)	$\chi^2_{CamSpec}$	1886.1	1892.2 (ν : 6.2)
$10^9 A_s$	2.132	$2.132^{+0.091}_{-0.092}$ (+1.8 σ)	$100\theta_{s,eq}$	0.4515	$0.452^{+0.019}_{-0.019}$ (-0.9 σ)	χ^2_{prior}	10.03	11.0 (ν : 1.0) (+1.1 σ)
$10^9 A_s e^{-2\tau}$	1.9254	$1.927^{+0.050}_{-0.048}$ (+4.1 σ)	$H(0.15)$	73.66	$73.9^{+5.0}_{-4.8}$ (-0.1 σ)	χ^2_{CMB}	2281.7	2289.0 (ν : 7.4) (+191.5 σ)

Best-fit $\chi^2_{eff} = 2291.75$; $\Delta\chi^2_{eff} = -0.42$; $\bar{\chi}^2_{eff} = 2300.05$; $\Delta\bar{\chi}^2_{eff} = 0.70$; $R - 1 = 0.00814$

χ^2_{eff} : CMB - small_100x143_offlike5_EE_Aplanck_B: 395.60 (Δ -0.02) CamSpec like_10.7HM_1400_unified: 1886.12 (Δ -0.39)

3.38 base_Alens_CamSpecHM_EE_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0236^{+0.0013}_{-0.0013} \quad (+3.5\sigma)$	D_{810}	$2601^{+65}_{-64} \quad (+5.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1956^{+35}_{-36} \quad (+0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1175^{+0.0030}_{-0.0028} \quad (+0.3\sigma)$	D_{1420}	$842^{+28}_{-29} \quad (+5.5\sigma)$	$H(0.61)$	$96.1^{+1.1}_{-1.1} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0394^{+0.0015}_{-0.0016} \quad (-3.9\sigma)$	D_{2000}	$242^{+11}_{-11} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2278^{+39}_{-40} \quad (+0.0\sigma)$
τ	$0.051^{+0.017}_{-0.018} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.972^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$H(2.33)$	$236.0^{+2.1}_{-2.0} \quad (+1.0\sigma)$
A_{L}	$1.16^{+0.46}_{-0.41} \quad (-0.9\sigma)$	Y_{P}	$0.24589^{+0.00051}_{-0.00053} \quad (+3.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5725^{+58}_{-58} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.059^{+0.042}_{-0.043} \quad (+1.8\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24722^{+0.00051}_{-0.00053} \quad (+3.4\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.020}_{-0.020} \quad (+0.6\sigma)$
n_{s}	$0.972^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.37^{+0.23}_{-0.21} \quad (-3.3\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.018}_{-0.019} \quad (+0.9\sigma)$
y_{cal}	$0.99996^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.71^{+0.13}_{-0.13} \quad (-0.7\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.017}_{-0.017} \quad (+0.6\sigma)$
H_0	$68.8^{+1.7}_{-1.6} \quad (-0.1\sigma)$	z_*	$1088.3^{+1.6}_{-1.5} \quad (-2.1\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.015}_{-0.016} \quad (+0.9\sigma)$
Ω_{Λ}	$0.700^{+0.017}_{-0.018} \quad (-0.3\sigma)$	r_*	$144.1^{+1.1}_{-1.1} \quad (-1.9\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.015}_{-0.015} \quad (+0.7\sigma)$
Ω_{m}	$0.300^{+0.018}_{-0.017} \quad (+0.3\sigma)$	$100\theta_*$	$1.0394^{+0.0015}_{-0.0016} \quad (-4.2\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.014}_{-0.015} \quad (+0.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1417^{+0.0029}_{-0.0028} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.87^{+0.10}_{-0.11} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.014}_{-0.014} \quad (+0.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0974^{+0.0024}_{-0.0023} \quad (+2.1\sigma)$	z_{drag}	$1062.5^{+2.8}_{-2.8} \quad (+4.1\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.013}_{-0.014} \quad (+0.9\sigma)$
σ_8	$0.804^{+0.020}_{-0.021} \quad (+0.8\sigma)$	r_{drag}	$146.4^{+1.4}_{-1.4} \quad (-2.6\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0068}_{-0.0070} \quad (+0.9\sigma)$
S_8	$0.804^{+0.038}_{-0.038} \quad (+0.5\sigma)$	k_{D}	$0.1425^{+0.0022}_{-0.0023} \quad (+4.0\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0070}_{-0.0073} \quad (+0.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.440^{+0.021}_{-0.021} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1590^{+0.0017}_{-0.0016} \quad (-5.3\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.595^{+0.021}_{-0.020} \quad (+0.6\sigma)$	z_{eq}	$3371^{+70}_{-66} \quad (+0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$1891.3 \quad (\nu: 5.1)$
$\sigma_8/h^{0.5}$	$0.970^{+0.030}_{-0.031} \quad (+0.6\sigma)$	k_{eq}	$0.01029^{+0.00021}_{-0.00020} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
$r_{\mathrm{drag}}h$	$100.7^{+2.3}_{-2.3} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.012}_{-0.012} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.85 \quad (\nu: 0.3)$
$\langle d^2 \rangle^{1/2}$	$2.59^{+0.47}_{-0.50} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4525^{+0.0062}_{-0.0063} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.9)$
z_{re}	$7.0^{+1.7}_{-1.9} \quad (-0.1\sigma)$	$H(0.15)$	$73.9^{+1.5}_{-1.5} \quad (-0.1\sigma)$	χ_{prior}^2	$11.0 \quad (\nu: 1.0) \quad (+1.1\sigma)$
$10^9 A_{\mathrm{s}}$	$2.131^{+0.091}_{-0.091} \quad (+1.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$631^{+14}_{-14} \quad (+0.1\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.9)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.925^{+0.050}_{-0.049} \quad (+4.0\sigma)$	$H(0.38)$	$83.9^{+1.3}_{-1.2} \quad (+0.1\sigma)$	χ_{CMB}^2	$2288.1 \quad (\nu: 6.5) \quad (+191.3\sigma)$
D_{40}	$1256^{+61}_{-61} \quad (+2.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1509^{+29}_{-30} \quad (+0.1\sigma)$		
D_{220}	$5995^{+260}_{-280} \quad (+6.2\sigma)$	$H(0.51)$	$90.5^{+1.2}_{-1.1} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2305.61; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.72; R - 1 = 0.01338$$

3.39 base_Alens_CamSpecHM_EE_lowE_post_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_b h^2$	$0.0236^{+0.0025}_{-0.0024}$	$(+3.5\sigma)$	D_{40}	1256^{+61}_{-61}	$(+2.8\sigma)$	$D_M(0.15)$	633^{+49}_{-45}	$(+0.2\sigma)$
$\Omega_c h^2$	$0.118^{+0.010}_{-0.0094}$	$(+0.4\sigma)$	D_{220}	5990^{+400}_{-400}	$(+6.1\sigma)$	$H(0.38)$	$83.9^{+4.0}_{-3.7}$	$(+0.1\sigma)$
$100\theta_{MC}$	$1.0393^{+0.0017}_{-0.0017}$	(-3.9σ)	D_{810}	2600^{+74}_{-78}	$(+5.3\sigma)$	$D_M(0.38)$	1511^{+99}_{-93}	$(+0.2\sigma)$
τ	$0.054^{+0.013}_{-0.011}$	$(+0.5\sigma)$	D_{1420}	842^{+35}_{-38}	$(+5.4\sigma)$	$H(0.51)$	$90.5^{+3.4}_{-3.1}$	$(+0.2\sigma)$
A_L	$1.16^{+0.49}_{-0.44}$	(-0.9σ)	D_{2000}	241^{+15}_{-16}	$(+4.5\sigma)$	$D_M(0.51)$	1958^{+120}_{-110}	$(+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.066^{+0.038}_{-0.035}$	$(+2.2\sigma)$	$n_{s,0.002}$	$0.972^{+0.030}_{-0.029}$	(-0.3σ)	$H(0.61)$	$96.1^{+2.8}_{-2.8}$	$(+0.4\sigma)$
n_s	$0.972^{+0.030}_{-0.029}$	(-0.3σ)	Y_P	$0.24588^{+0.00097}_{-0.0010}$	$(+3.3\sigma)$	$D_M(0.61)$	2280^{+130}_{-120}	$(+0.1\sigma)$
y_{cal}	$0.99996^{+0.0049}_{-0.0049}$	(-0.0σ)	Y_P^{BBN}	$0.24721^{+0.00097}_{-0.0010}$	$(+3.3\sigma)$	$H(2.33)$	$236.2^{+4.8}_{-4.1}$	$(+1.1\sigma)$
H_0	$68.7^{+5.6}_{-5.6}$	(-0.2σ)	$10^5 D/H$	$2.38^{+0.44}_{-0.38}$	(-3.1σ)	$D_M(2.33)$	5725^{+130}_{-140}	(-0.6σ)
Ω_Λ	$0.697^{+0.062}_{-0.068}$	(-0.5σ)	Age/Gyr	$13.71^{+0.30}_{-0.31}$	(-0.7σ)	$f\sigma_8(0.15)$	$0.449^{+0.064}_{-0.059}$	$(+0.8\sigma)$
Ω_m	$0.303^{+0.068}_{-0.062}$	$(+0.5\sigma)$	z_*	$1088.3^{+3.8}_{-3.3}$	(-1.9σ)	$\sigma_8(0.15)$	$0.746^{+0.026}_{-0.029}$	$(+1.1\sigma)$
$\Omega_m h^2$	$0.1420^{+0.0082}_{-0.0074}$	$(+0.9\sigma)$	r_*	$144.1^{+1.3}_{-1.3}$	(-2.0σ)	$f\sigma_8(0.38)$	$0.469^{+0.048}_{-0.047}$	$(+0.8\sigma)$
$\Omega_m h^3$	$0.0974^{+0.0037}_{-0.0034}$	$(+2.1\sigma)$	$100\theta_*$	$1.0394^{+0.0016}_{-0.0016}$	(-4.2σ)	$\sigma_8(0.38)$	$0.663^{+0.018}_{-0.020}$	$(+1.2\sigma)$
σ_8	$0.807^{+0.035}_{-0.037}$	$(+1.1\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.86^{+0.12}_{-0.13}$	(-1.5σ)	$f\sigma_8(0.51)$	$0.468^{+0.040}_{-0.041}$	$(+0.8\sigma)$
S_8	$0.81^{+0.13}_{-0.11}$	$(+0.8\sigma)$	z_{drag}	$1062.5^{+4.9}_{-5.0}$	$(+4.1\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.015}_{-0.016}$	$(+1.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.070}_{-0.062}$	$(+0.8\sigma)$	r_{drag}	$146.4^{+1.4}_{-1.4}$	(-2.7σ)	$f\sigma_8(0.61)$	$0.464^{+0.034}_{-0.036}$	$(+0.9\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.598^{+0.059}_{-0.056}$	$(+0.9\sigma)$	k_D	$0.1425^{+0.0026}_{-0.0026}$	$(+4.0\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.013}_{-0.014}$	$(+1.2\sigma)$
$\sigma_8/h^{0.5}$	$0.974^{+0.082}_{-0.079}$	$(+0.8\sigma)$	$100\theta_D$	$0.1591^{+0.0028}_{-0.0026}$	(-5.1σ)	$f\sigma_8(2.33)$	$0.2983^{+0.0062}_{-0.0059}$	$(+1.2\sigma)$
$r_{drag} h$	$100.6^{+8.2}_{-8.3}$	(-0.6σ)	z_{eq}	3377^{+200}_{-180}	$(+0.9\sigma)$	$\sigma_8(2.33)$	$0.3081^{+0.0067}_{-0.0063}$	$(+1.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.60^{+0.46}_{-0.51}$	(-0.6σ)	k_{eq}	$0.01031^{+0.00060}_{-0.00054}$	$(+0.9\sigma)$	χ_{small}^2	$396.5 (\nu: 1.0)$	(-0.2σ)
z_{re}	< 8.48	$(+0.3\sigma)$	$100\theta_{eq}$	$0.821^{+0.039}_{-0.040}$	(-0.7σ)	$\chi_{CamSpec}^2$	$1892.2 (\nu: 6.3)$	
$10^9 A_s$	$2.147^{+0.082}_{-0.075}$	$(+2.2\sigma)$	$100\theta_{s,eq}$	$0.452^{+0.019}_{-0.020}$	(-0.9σ)	χ_{prior}^2	$11.0 (\nu: 1.0)$	$(+1.1\sigma)$
$10^9 A_s e^{-2\tau}$	$1.926^{+0.049}_{-0.049}$	$(+4.1\sigma)$	$H(0.15)$	$73.9^{+5.0}_{-4.9}$	(-0.1σ)	χ_{CMB}^2	$2288.7 (\nu: 7.1)$	$(+191.4\sigma)$

$$\bar{\chi}_{eff}^2 = 2299.69; \Delta\bar{\chi}_{eff}^2 = 0.72; R - 1 = 0.00845$$

3.40 base_Alens_CamSpecHM_EE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0236^{+0.0013}_{-0.0013} \quad (+3.4\sigma)$	D_{810}	$2601^{+65}_{-64} \quad (+5.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1957^{+35}_{-37} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1175^{+0.0029}_{-0.0029} \quad (+0.3\sigma)$	D_{1420}	$842^{+28}_{-29} \quad (+5.5\sigma)$	$H(0.61)$	$96.0^{+1.1}_{-1.1} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0393^{+0.0014}_{-0.0016} \quad (-3.9\sigma)$	D_{2000}	$242^{+11}_{-10} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2279^{+38}_{-41} \quad (+0.0\sigma)$
τ	$0.054^{+0.013}_{-0.010} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.972^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$H(2.33)$	$235.9^{+2.0}_{-1.9} \quad (+0.9\sigma)$
A_{L}	$1.15^{+0.46}_{-0.40} \quad (-1.0\sigma)$	Y_{P}	$0.24588^{+0.00051}_{-0.00052} \quad (+3.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5726^{+57}_{-58} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.066^{+0.036}_{-0.035} \quad (+2.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24721^{+0.00051}_{-0.00052} \quad (+3.3\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.019}_{-0.018} \quad (+0.7\sigma)$
n_{s}	$0.972^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.38^{+0.22}_{-0.21} \quad (-3.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.016}_{-0.015} \quad (+1.2\sigma)$
y_{cal}	$0.99997^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.71^{+0.13}_{-0.14} \quad (-0.7\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.016}_{-0.015} \quad (+0.8\sigma)$
H_0	$68.7^{+1.7}_{-1.6} \quad (-0.2\sigma)$	z_*	$1088.3^{+1.6}_{-1.5} \quad (-2.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.014}_{-0.012} \quad (+1.2\sigma)$
Ω_{Λ}	$0.700^{+0.017}_{-0.018} \quad (-0.3\sigma)$	r_*	$144.2^{+1.1}_{-1.1} \quad (-1.8\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.014}_{-0.014} \quad (+0.8\sigma)$
Ω_{m}	$0.300^{+0.018}_{-0.017} \quad (+0.3\sigma)$	$100\theta_*$	$1.0394^{+0.0015}_{-0.0016} \quad (-4.2\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.012} \quad (+1.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1417^{+0.0030}_{-0.0027} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.87^{+0.10}_{-0.11} \quad (-1.3\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.013}_{-0.012} \quad (+0.9\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0974^{+0.0024}_{-0.0023} \quad (+2.0\sigma)$	z_{drag}	$1062.5^{+2.8}_{-2.8} \quad (+4.0\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.012}_{-0.011} \quad (+1.3\sigma)$
σ_8	$0.807^{+0.018}_{-0.017} \quad (+1.1\sigma)$	r_{drag}	$146.4^{+1.4}_{-1.4} \quad (-2.5\sigma)$	$f\sigma_8(2.33)$	$0.2986^{+0.0060}_{-0.0055} \quad (+1.3\sigma)$
S_8	$0.807^{+0.036}_{-0.035} \quad (+0.7\sigma)$	k_{D}	$0.1424^{+0.0023}_{-0.0023} \quad (+3.9\sigma)$	$\sigma_8(2.33)$	$0.3084^{+0.0064}_{-0.0057} \quad (+1.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.020}_{-0.019} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1591^{+0.0017}_{-0.0016} \quad (-5.2\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 1.0) \quad (-0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.597^{+0.020}_{-0.019} \quad (+0.8\sigma)$	z_{eq}	$3370^{+71}_{-65} \quad (+0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$1891.3 \quad (\nu: 5.1)$
$\sigma_8/h^{0.5}$	$0.973^{+0.028}_{-0.027} \quad (+0.8\sigma)$	k_{eq}	$0.01029^{+0.00022}_{-0.00020} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
$r_{\mathrm{drag}}h$	$100.6^{+2.3}_{-2.2} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.012}_{-0.012} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.85 \quad (\nu: 0.2)$
$\langle d^2 \rangle^{1/2}$	$2.59^{+0.48}_{-0.50} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4526^{+0.0061}_{-0.0063} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.9)$
z_{re}	$< 8.53 \quad (+0.3\sigma)$	$H(0.15)$	$73.9^{+1.5}_{-1.5} \quad (-0.1\sigma)$	χ_{prior}^2	$11.0 \quad (\nu: 1.0) \quad (+1.1\sigma)$
$10^9 A_{\mathrm{s}}$	$2.146^{+0.079}_{-0.073} \quad (+2.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$632^{+14}_{-14} \quad (+0.1\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.9)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.924^{+0.048}_{-0.048} \quad (+4.0\sigma)$	$H(0.38)$	$83.9^{+1.3}_{-1.2} \quad (+0.0\sigma)$	χ_{CMB}^2	$2287.7 \quad (\nu: 6.1) \quad (+191.2\sigma)$
D_{40}	$1255^{+58}_{-63} \quad (+2.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1509^{+29}_{-30} \quad (+0.1\sigma)$		
D_{220}	$5988^{+260}_{-280} \quad (+6.0\sigma)$	$H(0.51)$	$90.5^{+1.2}_{-1.1} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2305.22$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.71$; $R - 1 = 0.01446$

3.41 base_Alens_plikHM_TT_lowl_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02241	$0.02239^{+0.00053}_{-0.00051} \quad (-0.7\sigma)$	S_8	0.766	$0.799^{+0.071}_{-0.064} \quad (+0.4\sigma)$	k_{eq}	0.010192	$0.01017^{+0.00033}_{-0.00032} \quad (+0.1\sigma)$
$\Omega_c h^2$	0.11733	$0.1171^{+0.0048}_{-0.0047} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4198	$0.438^{+0.039}_{-0.035} \quad (+0.4\sigma)$	$100\theta_{\text{eq}}$	0.8250	$0.826^{+0.021}_{-0.021} \quad (-0.2\sigma)$
$100\theta_{\text{MC}}$	1.04120	$1.0412^{+0.0010}_{-0.0010} \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.5673	$0.592^{+0.044}_{-0.039} \quad (+0.4\sigma)$	$100\theta_{\text{s,eq}}$	0.4555	$0.456^{+0.011}_{-0.011} \quad (-0.1\sigma)$
τ	0.010	$< 0.119 \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	0.927	$0.967^{+0.069}_{-0.060} \quad (+0.5\sigma)$	$H(0.15)$	73.58	$73.7^{+2.0}_{-1.9} \quad (-0.3\sigma)$
A_L	1.168	$1.07^{+0.15}_{-0.16} \quad (-1.8\sigma)$	$r_{\text{drag}} h$	101.10	$101.3^{+3.9}_{-3.8} \quad (-0.2\sigma)$	$D_M(0.15)$	634.4	$634^{+19}_{-19} \quad (+0.3\sigma)$
$\ln(10^{10} A_s)$	2.948	$3.04^{+0.13}_{-0.097} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	2.477	$2.478^{+0.062}_{-0.061} \quad (-2.1\sigma)$	$H(0.38)$	83.48	$83.5^{+1.5}_{-1.4} \quad (-0.4\sigma)$
n_s	0.9716	$0.972^{+0.014}_{-0.014} \quad (-0.3\sigma)$	z_{re}	2.1	$7.4^{+6.1}_{-5.3} \quad (+0.3\sigma)$	$D_M(0.38)$	1515.8	$1514^{+38}_{-38} \quad (+0.4\sigma)$
y_{cal}	1.00004	$1.0000^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_s$	1.908	$2.09^{+0.28}_{-0.20} \quad (+0.7\sigma)$	$H(0.51)$	90.07	$90.1^{+1.2}_{-1.1} \quad (-0.4\sigma)$
A_{217}^{CIB}	47.3	$47^{+10}_{-10} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	1.8694	$1.867^{+0.029}_{-0.029} \quad (-0.0\sigma)$	$D_M(0.51)$	1965.5	$1964^{+44}_{-45} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.48	—	D_{40}	1206.1	$1216^{+37}_{-35} \quad (+0.4\sigma)$	$H(0.61)$	95.60	$95.63^{+0.97}_{-0.89} \quad (-0.5\sigma)$
A_{143}^{tSZ}	7.02	$5.3^{+3.7}_{-3.9} \quad (-0.2\sigma)$	D_{220}	5724	$5722^{+80}_{-82} \quad (-0.3\sigma)$	$D_M(0.61)$	2288.6	$2287^{+48}_{-48} \quad (+0.4\sigma)$
A_{100}^{PS}	250	$259^{+60}_{-60} \quad (+0.3\sigma)$	D_{810}	2531.8	$2529^{+27}_{-28} \quad (+0.2\sigma)$	$H(2.33)$	234.86	$234.7^{+2.8}_{-2.7} \quad (+0.0\sigma)$
A_{143}^{PS}	48.8	$46^{+20}_{-20} \quad (+0.5\sigma)$	D_{1420}	815.8	$815^{+10}_{-10} \quad (+0.1\sigma)$	$D_M(2.33)$	5752.1	$5751^{+40}_{-42} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	48.9	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{2000}	230.95	$230.6^{+3.8}_{-3.7} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	0.4250	$0.443^{+0.038}_{-0.034} \quad (+0.4\sigma)$
A_{217}^{PS}	119.5	$114^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\text{s},0.002}$	0.9716	$0.972^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.7095	$0.741^{+0.050}_{-0.039} \quad (+0.5\sigma)$
A^{kSZ}	0.01	$< 8.15 \quad (+0.4\sigma)$	Y_{P}	0.245410	$0.24540^{+0.00021}_{-0.00022} \quad (-0.7\sigma)$	$f\sigma_8(0.38)$	0.4448	$0.464^{+0.036}_{-0.031} \quad (+0.4\sigma)$
A_{100}^{dustTT}	8.92	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	0.246736	$0.24673^{+0.00021}_{-0.00022} \quad (-0.7\sigma)$	$\sigma_8(0.38)$	0.6301	$0.658^{+0.044}_{-0.034} \quad (+0.6\sigma)$
A_{143}^{dustTT}	10.82	$10.7^{+3.6}_{-3.5} \quad (+0.1\sigma)$	10^5D/H	2.579	$2.582^{+0.097}_{-0.096} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	0.4448	$0.464^{+0.034}_{-0.030} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$18.3^{+6.5}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	13.774	$13.773^{+0.089}_{-0.091} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	0.5902	$0.617^{+0.041}_{-0.031} \quad (+0.6\sigma)$
A_{217}^{dustTT}	94.8	$94^{+10}_{-10} \quad (-0.0\sigma)$	z_*	1089.64	$1089.64^{+0.99}_{-0.98} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	0.4410	$0.460^{+0.033}_{-0.028} \quad (+0.5\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_*	145.10	$145.2^{+1.0}_{-1.0} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	0.5619	$0.587^{+0.039}_{-0.029} \quad (+0.6\sigma)$
c_{217}	0.99822	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_*$	1.04138	$1.04139^{+0.00099}_{-0.00098} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	0.2838	$0.297^{+0.020}_{-0.015} \quad (+0.6\sigma)$
H_0	68.42	$68.5^{+2.3}_{-2.2} \quad (-0.3\sigma)$	$D_M(z_*)/\text{Gpc}$	13.933	$13.941^{+0.094}_{-0.093} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	0.2931	$0.306^{+0.021}_{-0.015} \quad (+0.5\sigma)$
Ω_Λ	0.7002	$0.701^{+0.028}_{-0.030} \quad (-0.3\sigma)$	z_{drag}	1059.82	$1059.78^{+0.99}_{-0.99} \quad (-0.8\sigma)$	χ^2_{lensing}	9.30	$10.1 \quad (\nu: 2.0)$
Ω_m	0.2998	$0.299^{+0.030}_{-0.028} \quad (+0.3\sigma)$	r_{drag}	147.76	$147.85^{+0.98}_{-0.99} \quad (+0.2\sigma)$	χ^2_{lowl}	21.32	$22.5 \quad (\nu: 1.1) \quad (+0.6\sigma)$
$\Omega_m h^2$	0.14038	$0.1401^{+0.0045}_{-0.0044} \quad (+0.1\sigma)$	k_D	0.14019	$0.1401^{+0.0010}_{-0.00098} \quad (-0.5\sigma)$	χ^2_{plik}	757.8	$770.6 \quad (\nu: 15.9) \quad (+0.6\sigma)$
$\Omega_m h^3$	0.09605	$0.09598^{+0.00093}_{-0.00090} \quad (-0.8\sigma)$	$100\theta_D$	0.16084	$0.16087^{+0.00056}_{-0.00056} \quad (+0.8\sigma)$	χ^2_{prior}	1.3	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
σ_8	0.7666	$0.801^{+0.054}_{-0.043} \quad (+0.5\sigma)$	z_{eq}	3339	$3333^{+110}_{-100} \quad (+0.1\sigma)$	χ^2_{CMB}	788.4	$803.1 \quad (\nu: 16.0) \quad (-66.4\sigma)$

Best-fit $\chi^2_{\text{eff}} = 789.69$; $\Delta\chi^2_{\text{eff}} = -1.32$; $\bar{\chi}^2_{\text{eff}} = 810.42$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.64$; $R - 1 = 0.00995$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.30 (Δ 0.19) commander_dx12_v3.2_29: 21.32 (Δ -1.60) plik_rd12_HM_v22_TT: 757.80 (Δ 0.03)

3.42 base_Alens_plikHM_TT_lowl_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02233^{+0.00040}_{-0.00041} \quad (-1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.970^{+0.064}_{-0.050} \quad (+0.6\sigma)$	$D_M(0.38)$	$1521^{+20}_{-20} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0025}_{-0.0025} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$100.6^{+2.0}_{-1.9} \quad (-0.6\sigma)$	$H(0.51)$	$89.92^{+0.64}_{-0.62} \quad (-0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04110^{+0.00086}_{-0.00085} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.476^{+0.060}_{-0.060} \quad (-2.1\sigma)$	$D_M(0.51)$	$1971^{+23}_{-24} \quad (+0.7\sigma)$
τ	$< 0.111 \quad (+0.1\sigma)$	z_{re}	$7.0^{+6.0}_{-5.0} \quad (-0.1\sigma)$	$H(0.61)$	$95.47^{+0.54}_{-0.52} \quad (-0.8\sigma)$
A_L	$1.07^{+0.13}_{-0.14} \quad (-1.8\sigma)$	$10^9 A_s$	$2.08^{+0.27}_{-0.18} \quad (+0.3\sigma)$	$D_M(0.61)$	$2295^{+25}_{-26} \quad (+0.7\sigma)$
$\ln(10^{10} A_s)$	$3.03^{+0.12}_{-0.090} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$H(2.33)$	$235.1^{+1.5}_{-1.5} \quad (+0.3\sigma)$
n_s	$0.9696^{+0.0091}_{-0.0090} \quad (-0.6\sigma)$	D_{40}	$1219^{+31}_{-29} \quad (+0.6\sigma)$	$D_M(2.33)$	$5758^{+26}_{-26} \quad (+0.9\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5719^{+79}_{-80} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.031}_{-0.026} \quad (+0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.3\sigma)$	D_{810}	$2530^{+27}_{-28} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.047}_{-0.035} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$814.5^{+9.6}_{-9.7} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.032}_{-0.025} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-3.9} \quad (-0.2\sigma)$	D_{2000}	$230.4^{+3.4}_{-3.4} \quad (-0.9\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.042}_{-0.030} \quad (+0.5\sigma)$
A_{100}^{PS}	$260^{+60}_{-50} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.9696^{+0.0091}_{-0.0090} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.031}_{-0.024} \quad (+0.6\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (+0.6\sigma)$	Y_P	$0.24538^{+0.00016}_{-0.00017} \quad (-0.9\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.039}_{-0.028} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24670^{+0.00016}_{-0.00017} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.030}_{-0.024} \quad (+0.6\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.594^{+0.078}_{-0.073} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.037}_{-0.027} \quad (+0.4\sigma)$
A^{kSZ}	$< 8.26 \quad (+0.4\sigma)$	Age/Gyr	$13.787^{+0.059}_{-0.058} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.019}_{-0.013} \quad (+0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1089.79^{+0.63}_{-0.62} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.019}_{-0.014} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.6} \quad (+0.1\sigma)$	r_*	$145.02^{+0.60}_{-0.60} \quad (-0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.7}_{-6.5} \quad (+0.1\sigma)$	$100\theta_*$	$1.04129^{+0.00085}_{-0.00085} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+1.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.927^{+0.059}_{-0.059} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.1^{+3.7}_{-3.8} \quad (+0.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.68^{+0.90}_{-0.90} \quad (-1.0\sigma)$	χ_{lensing}^2	$10.1 \quad (\nu: 1.9)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.71^{+0.65}_{-0.66} \quad (-0.0\sigma)$	χ_{lowl}^2	$22.6 \quad (\nu: 0.8) \quad (+0.7\sigma)$
H_0	$68.1^{+1.2}_{-1.1} \quad (-0.7\sigma)$	k_D	$0.14019^{+0.00085}_{-0.00083} \quad (-0.4\sigma)$	χ_{plik}^2	$769.7 \quad (\nu: 13.8) \quad (+0.4\sigma)$
Ω_Λ	$0.697^{+0.015}_{-0.015} \quad (-0.6\sigma)$	$100\theta_D$	$0.16092^{+0.00052}_{-0.00052} \quad (+0.9\sigma)$	$\chi_{6\text{DF}}^2$	$0.043 \quad (\nu: 0.0)$
Ω_m	$0.303^{+0.015}_{-0.015} \quad (+0.6\sigma)$	z_{eq}	$3350^{+56}_{-57} \quad (+0.4\sigma)$	χ_{MGS}^2	$1.87 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.1408^{+0.0024}_{-0.0024} \quad (+0.4\sigma)$	k_{eq}	$0.01023^{+0.00017}_{-0.00017} \quad (+0.4\sigma)$	χ_{DR12BAO}^2	$4.06 \quad (\nu: 0.5)$
$\Omega_m h^3$	$0.09596^{+0.00088}_{-0.00087} \quad (-0.8\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (+0.0\sigma)$
σ_8	$0.801^{+0.052}_{-0.038} \quad (+0.5\sigma)$	$100\theta_{s,\text{eq}}$	$0.4544^{+0.0056}_{-0.0055} \quad (-0.5\sigma)$	χ_{CMB}^2	$802.4 \quad (\nu: 14.5) \quad (-66.6\sigma)$
S_8	$0.805^{+0.058}_{-0.048} \quad (+0.6\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-0.99} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\sigma_8 \Omega_m^{0.5}$	$0.441^{+0.032}_{-0.027} \quad (+0.6\sigma)$	$D_M(0.15)$	$636.9^{+9.7}_{-9.8} \quad (+0.7\sigma)$		
$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.040}_{-0.032} \quad (+0.6\sigma)$	$H(0.38)$	$83.29^{+0.78}_{-0.75} \quad (-0.7\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 815.62$; $\Delta \bar{\chi}_{\text{eff}}^2 = -0.69$; $R - 1 = 0.01089$

3.43 base_Alens_plikHM_TT_lowl_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00053}_{-0.00052} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.036}_{-0.034} \quad (+0.9\sigma)$	$100\theta_{s,eq}$	$0.457^{+0.011}_{-0.011} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1167^{+0.0049}_{-0.0047} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.040}_{-0.035} \quad (+1.2\sigma)$	$H(0.15)$	$73.8^{+2.0}_{-1.9} \quad (-0.2\sigma)$
$100\theta_{MC}$	$1.0412^{+0.0010}_{-0.0010} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.060}_{-0.054} \quad (+1.4\sigma)$	$D_M(0.15)$	$632^{+19}_{-19} \quad (+0.2\sigma)$
τ	$0.078^{+0.053}_{-0.036} \quad (+3.2\sigma)$	$r_{drag} h$	$101.6^{+3.9}_{-3.9} \quad (-0.1\sigma)$	$H(0.38)$	$83.6^{+1.5}_{-1.4} \quad (-0.3\sigma)$
A_L	$1.03^{+0.13}_{-0.13} \quad (-2.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.477^{+0.061}_{-0.062} \quad (-2.1\sigma)$	$D_M(0.38)$	$1512^{+38}_{-38} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.08^{+0.11}_{-0.075} \quad (+3.0\sigma)$	z_{re}	$< 14.1 \quad (+2.9\sigma)$	$H(0.51)$	$90.2^{+1.2}_{-1.1} \quad (-0.3\sigma)$
n_s	$0.973^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$10^9 A_s$	$2.18^{+0.24}_{-0.16} \quad (+3.2\sigma)$	$D_M(0.51)$	$1961^{+45}_{-45} \quad (+0.2\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0050} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.865^{+0.029}_{-0.029} \quad (-0.1\sigma)$	$H(0.61)$	$95.68^{+0.99}_{-0.92} \quad (-0.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.3\sigma)$	D_{40}	$1220^{+38}_{-35} \quad (+0.6\sigma)$	$D_M(0.61)$	$2284^{+48}_{-48} \quad (+0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5720^{+81}_{-83} \quad (-0.4\sigma)$	$H(2.33)$	$234.5^{+2.8}_{-2.7} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.3^{+3.6}_{-3.9} \quad (-0.1\sigma)$	D_{810}	$2528^{+28}_{-28} \quad (+0.1\sigma)$	$D_M(2.33)$	$5749^{+41}_{-43} \quad (+0.5\sigma)$
A_{100}^{PS}	$258^{+60}_{-50} \quad (+0.3\sigma)$	D_{1420}	$814.9^{+9.9}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.034}_{-0.032} \quad (+0.9\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (+0.4\sigma)$	D_{2000}	$230.8^{+3.8}_{-3.8} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.757^{+0.041}_{-0.033} \quad (+2.3\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.973^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.032}_{-0.029} \quad (+1.2\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	Y_P	$0.24541^{+0.00022}_{-0.00022} \quad (-0.7\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.036}_{-0.028} \quad (+2.6\sigma)$
A^{kSZ}	$< 8.04 \quad (+0.3\sigma)$	Y_P^{BBN}	$0.24673^{+0.00022}_{-0.00022} \quad (-0.7\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.031}_{-0.026} \quad (+1.3\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$10^5 D/H$	$2.579^{+0.098}_{-0.096} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.034}_{-0.025} \quad (+2.7\sigma)$
A_{143}^{dustTT}	$10.8^{+3.6}_{-3.4} \quad (+0.2\sigma)$	Age/Gyr	$13.769^{+0.091}_{-0.093} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.029}_{-0.024} \quad (+1.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.4} \quad (+0.1\sigma)$	z_*	$1089.6^{+1.0}_{-0.98} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.600^{+0.032}_{-0.024} \quad (+2.8\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (-0.0\sigma)$	r_*	$145.3^{+1.0}_{-1.0} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.303^{+0.016}_{-0.012} \quad (+2.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.0414^{+0.0010}_{-0.00098} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.313^{+0.017}_{-0.012} \quad (+3.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$D_M(z_*)/Gpc$	$13.948^{+0.092}_{-0.094} \quad (+0.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (+0.7\sigma)$
H_0	$68.7^{+2.3}_{-2.3} \quad (-0.2\sigma)$	z_{drag}	$1059.8^{+1.0}_{-1.0} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.8\sigma)$
Ω_Λ	$0.703^{+0.027}_{-0.030} \quad (-0.1\sigma)$	r_{drag}	$147.92^{+0.96}_{-1.0} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.6^{+4.1}_{-4.1} \quad (+0.7\sigma)$
Ω_m	$0.297^{+0.030}_{-0.027} \quad (+0.1\sigma)$	k_D	$0.1400^{+0.0010}_{-0.00098} \quad (-0.7\sigma)$	$\chi_{lensing}^2$	$10.0 \quad (\nu: 2.0)$
$\Omega_m h^2$	$0.1398^{+0.0045}_{-0.0043} \quad (-0.0\sigma)$	$100\theta_D$	$0.16086^{+0.00057}_{-0.00056} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 1.3) \quad (+1.0\sigma)$
$\Omega_m h^3$	$0.09597^{+0.00093}_{-0.00092} \quad (-0.8\sigma)$	z_{eq}	$3325^{+110}_{-100} \quad (-0.0\sigma)$	χ_{plik}^2	$770.8 \quad (\nu: 16.4) \quad (+0.6\sigma)$
σ_8	$0.818^{+0.045}_{-0.037} \quad (+2.0\sigma)$	k_{eq}	$0.01015^{+0.00033}_{-0.00031} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
S_8	$0.813^{+0.065}_{-0.061} \quad (+0.9\sigma)$	$100\theta_{eq}$	$0.828^{+0.021}_{-0.021} \quad (-0.0\sigma)$	χ_{CMB}^2	$803.8 \quad (\nu: 16.3) \quad (-66.3\sigma)$

$\bar{\chi}_{eff}^2 = 811.07; \Delta \bar{\chi}_{eff}^2 = 0.21; R - 1 = 0.01320$

3.44 base_Alens_plikHM_TT_lowl_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02233^{+0.00040}_{-0.00042} \quad (-0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.053}_{-0.042} \quad (+1.7\sigma)$	$D_M(0.38)$	$1520^{+20}_{-20} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1177^{+0.0026}_{-0.0025} \quad (+0.4\sigma)$	$r_{\text{drag}} h$	$100.7^{+2.0}_{-2.0} \quad (-0.5\sigma)$	$H(0.51)$	$89.94^{+0.65}_{-0.65} \quad (-0.7\sigma)$
$100\theta_{\text{MC}}$	$1.04111^{+0.00085}_{-0.00086} \quad (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.475^{+0.060}_{-0.063} \quad (-2.1\sigma)$	$D_M(0.51)$	$1970^{+24}_{-24} \quad (+0.6\sigma)$
τ	$0.074^{+0.048}_{-0.033} \quad (+2.8\sigma)$	z_{re}	$< 13.5 \quad (+2.6\sigma)$	$H(0.61)$	$95.49^{+0.55}_{-0.54} \quad (-0.8\sigma)$
A_L	$1.02^{+0.11}_{-0.12} \quad (-2.3\sigma)$	$10^9 A_s$	$2.17^{+0.22}_{-0.15} \quad (+2.9\sigma)$	$D_M(0.61)$	$2294^{+26}_{-26} \quad (+0.6\sigma)$
$\ln(10^{10} A_s)$	$3.077^{+0.098}_{-0.070} \quad (+2.8\sigma)$	$10^9 A_s e^{-2\tau}$	$1.870^{+0.023}_{-0.024} \quad (+0.2\sigma)$	$H(2.33)$	$235.0^{+1.6}_{-1.5} \quad (+0.3\sigma)$
n_s	$0.9703^{+0.0091}_{-0.0090} \quad (-0.5\sigma)$	D_{40}	$1224^{+32}_{-29} \quad (+0.9\sigma)$	$D_M(2.33)$	$5757^{+26}_{-26} \quad (+0.8\sigma)$
y_{cal}	$1.0001^{+0.0051}_{-0.0050} \quad (+0.0\sigma)$	D_{220}	$5716^{+79}_{-81} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.027}_{-0.023} \quad (+1.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.3\sigma)$	D_{810}	$2530^{+27}_{-28} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.039}_{-0.028} \quad (+2.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$814.6^{+9.4}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.026}_{-0.022} \quad (+1.4\sigma)$
A_{143}^{tSZ}	$5.3^{+3.8}_{-3.7} \quad (-0.2\sigma)$	D_{2000}	$230.4^{+3.3}_{-3.5} \quad (-0.9\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.034}_{-0.025} \quad (+2.5\sigma)$
A_{100}^{PS}	$259^{+60}_{-50} \quad (+0.3\sigma)$	$n_{s,0.002}$	$0.9703^{+0.0091}_{-0.0090} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.026}_{-0.021} \quad (+1.6\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (+0.6\sigma)$	Y_P	$0.24538^{+0.00016}_{-0.00017} \quad (-0.9\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.032}_{-0.023} \quad (+2.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24670^{+0.00016}_{-0.00017} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.025}_{-0.020} \quad (+1.7\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 D/H$	$2.594^{+0.080}_{-0.073} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.600^{+0.030}_{-0.022} \quad (+2.7\sigma)$
A^{kSZ}	$< 8.18 \quad (+0.3\sigma)$	Age/Gyr	$13.786^{+0.060}_{-0.058} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.303^{+0.015}_{-0.011} \quad (+2.7\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	z_*	$1089.77^{+0.65}_{-0.62} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.312^{+0.016}_{-0.011} \quad (+2.6\sigma)$
A_{143}^{dustTT}	$10.8^{+3.6}_{-3.4} \quad (+0.2\sigma)$	r_*	$145.05^{+0.61}_{-0.62} \quad (-0.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.3}_{-6.3} \quad (+0.2\sigma)$	$100\theta_*$	$1.04130^{+0.00083}_{-0.00086} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+1.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.930^{+0.060}_{-0.060} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.0^{+3.7}_{-3.8} \quad (+0.9\sigma)$
c_{100}	$0.9996^{+0.0013}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.68^{+0.90}_{-0.93} \quad (-1.0\sigma)$	χ_{lensing}^2	$10.1 \quad (\nu: 1.9)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.74^{+0.65}_{-0.68} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.0) \quad (+1.3\sigma)$
H_0	$68.2^{+1.2}_{-1.2} \quad (-0.6\sigma)$	k_D	$0.14015^{+0.00087}_{-0.00085} \quad (-0.4\sigma)$	χ_{plik}^2	$769.8 \quad (\nu: 14.5) \quad (+0.4\sigma)$
Ω_Λ	$0.697^{+0.014}_{-0.016} \quad (-0.5\sigma)$	$100\theta_D$	$0.16092^{+0.00054}_{-0.00053} \quad (+1.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.046 \quad (\nu: 0.0)$
Ω_m	$0.303^{+0.016}_{-0.014} \quad (+0.5\sigma)$	z_{eq}	$3347^{+58}_{-57} \quad (+0.4\sigma)$	χ_{MGS}^2	$1.93 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.1407^{+0.0024}_{-0.0024} \quad (+0.4\sigma)$	k_{eq}	$0.01022^{+0.00018}_{-0.00017} \quad (+0.4\sigma)$	χ_{DR12BAO}^2	$4.05 \quad (\nu: 0.5)$
$\Omega_m h^3$	$0.09594^{+0.00088}_{-0.00091} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.4\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 7.1) \quad (+0.1\sigma)$
σ_8	$0.819^{+0.042}_{-0.031} \quad (+2.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.4546^{+0.0056}_{-0.0057} \quad (-0.4\sigma)$	χ_{CMB}^2	$803.1 \quad (\nu: 15.0) \quad (-66.5\sigma)$
S_8	$0.823^{+0.050}_{-0.043} \quad (+1.2\sigma)$	$H(0.15)$	$73.4^{+1.0}_{-1.0} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.7)$
$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.027}_{-0.024} \quad (+1.2\sigma)$	$D_M(0.15)$	$636^{+10}_{-9.8} \quad (+0.6\sigma)$		
$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.033}_{-0.027} \quad (+1.5\sigma)$	$H(0.38)$	$83.32^{+0.78}_{-0.78} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 816.39; \Delta \bar{\chi}_{\text{eff}}^2 = 0.16; R - 1 = 0.01678$$

3.45 base_Alens_plikHM_TTTEEE_lowl_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022527	$0.02251^{+0.00033}_{-0.00032}$ (-0.3σ)	Ω_m	0.3046	$0.305^{+0.019}_{-0.018}$ $(+0.7\sigma)$	$100\theta_D$	0.160625	$0.16065^{+0.00036}_{-0.00035}$ $(+0.1\sigma)$
$\Omega_c h^2$	0.11828	$0.1183^{+0.0031}_{-0.0030}$ $(+0.7\sigma)$	$\Omega_m h^2$	0.14146	$0.1414^{+0.0029}_{-0.0028}$ $(+0.7\sigma)$	z_{eq}	3365	3365^{+70}_{-66} $(+0.7\sigma)$
$100\theta_{\text{MC}}$	1.04109	$1.04109^{+0.00061}_{-0.00060}$ (-0.6σ)	$\Omega_m h^3$	0.09640	$0.09636^{+0.00057}_{-0.00058}$ (-0.1σ)	k_{eq}	0.010270	$0.01027^{+0.00021}_{-0.00020}$ $(+0.7\sigma)$
τ	0.010	< 0.112 $(+0.3\sigma)$	σ_8	0.7698	$0.803^{+0.052}_{-0.039}$ $(+0.7\sigma)$	$100\theta_{\text{eq}}$	0.8206	$0.821^{+0.013}_{-0.013}$ (-0.7σ)
A_L	1.159	$1.07^{+0.13}_{-0.15}$ (-1.8σ)	S_8	0.776	$0.809^{+0.060}_{-0.053}$ $(+0.7\sigma)$	$100\theta_{\text{s,eq}}$	0.4531	$0.4531^{+0.0066}_{-0.0068}$ (-0.7σ)
$\ln(10^{10} A_s)$	2.951	$3.03^{+0.12}_{-0.092}$ $(+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4249	$0.443^{+0.033}_{-0.029}$ $(+0.7\sigma)$	$H(0.15)$	73.36	$73.3^{+1.2}_{-1.2}$ (-0.7σ)
n_s	0.9703	$0.9697^{+0.0098}_{-0.0096}$ (-0.6σ)	$\sigma_8 \Omega_m^{0.25}$	0.5719	$0.596^{+0.041}_{-0.034}$ $(+0.7\sigma)$	$D_M(0.15)$	636.7	637^{+12}_{-12} $(+0.7\sigma)$
y_{cal}	0.99990	$0.99995^{+0.0047}_{-0.0047}$ (-0.0σ)	$\sigma_8/h^{0.5}$	0.932	$0.973^{+0.065}_{-0.052}$ $(+0.7\sigma)$	$H(0.38)$	83.36	$83.35^{+0.88}_{-0.85}$ (-0.6σ)
A_{217}^{CIB}	45.6	46^{+10}_{-10} $(+0.2\sigma)$	$r_{\text{drag}} h$	100.43	$100.4^{+2.4}_{-2.4}$ (-0.7σ)	$D_M(0.38)$	1520.1	1520^{+23}_{-23} $(+0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.65	—	$\langle d^2 \rangle^{1/2}$	2.482	$2.483^{+0.059}_{-0.059}$ (-2.0σ)	$H(0.51)$	90.01	$90.00^{+0.70}_{-0.66}$ (-0.6σ)
A_{143}^{tSZ}	7.18	$5.6^{+3.8}_{-3.8}$ $(+0.0\sigma)$	z_{re}	2.1	$7.1^{+5.9}_{-5.1}$ (-0.0σ)	$D_M(0.51)$	1970.2	1971^{+27}_{-27} $(+0.6\sigma)$
A_{100}^{PS}	246	255^{+60}_{-50} $(+0.2\sigma)$	$10^9 A_s$	1.912	$2.08^{+0.27}_{-0.19}$ $(+0.5\sigma)$	$H(0.61)$	95.58	$95.57^{+0.57}_{-0.53}$ (-0.6σ)
A_{143}^{PS}	48.6	44^{+20}_{-20} $(+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	1.8740	$1.873^{+0.024}_{-0.024}$ $(+0.4\sigma)$	$D_M(0.61)$	2293.5	2294^{+29}_{-29} $(+0.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	51.7	41^{+20}_{-20} $(+0.1\sigma)$	D_{40}	1210.1	1221^{+32}_{-31} $(+0.7\sigma)$	$H(2.33)$	235.60	$235.6^{+1.8}_{-1.8}$ $(+0.7\sigma)$
A_{217}^{PS}	121.1	115^{+20}_{-20} (-0.0σ)	D_{220}	5731	5731^{+77}_{-76} (-0.1σ)	$D_M(2.33)$	5750.7	5751^{+24}_{-25} $(+0.6\sigma)$
A^{kSZ}	0.01	< 7.69 $(+0.2\sigma)$	D_{810}	2534.3	2532^{+26}_{-26} $(+0.4\sigma)$	$f\sigma_8(0.15)$	0.4297	$0.448^{+0.033}_{-0.029}$ $(+0.7\sigma)$
A_{100}^{dustTT}	8.87	$8.9^{+3.6}_{-3.5}$ $(+0.0\sigma)$	D_{1420}	817.2	$816.2^{+9.0}_{-8.9}$ $(+0.4\sigma)$	$\sigma_8(0.15)$	0.7120	$0.742^{+0.048}_{-0.036}$ $(+0.7\sigma)$
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.4}$ $(+0.2\sigma)$	D_{2000}	231.62	$231.3^{+3.0}_{-3.0}$ (-0.5σ)	$f\sigma_8(0.38)$	0.4486	$0.468^{+0.032}_{-0.027}$ $(+0.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	20.0	$18.5^{+6.3}_{-6.7}$ $(+0.2\sigma)$	$n_{\text{s},0.002}$	0.9703	$0.9697^{+0.0098}_{-0.0096}$ (-0.6σ)	$\sigma_8(0.38)$	0.6318	$0.659^{+0.042}_{-0.031}$ $(+0.6\sigma)$
A_{217}^{dustTT}	95.3	94^{+10}_{-10} $(+0.0\sigma)$	Y_{P}	0.245454	$0.24545^{+0.00013}_{-0.00012}$ (-0.3σ)	$f\sigma_8(0.51)$	0.4481	$0.467^{+0.032}_{-0.026}$ $(+0.7\sigma)$
A_{100}^{dustTE}	0.113	$0.114^{+0.076}_{-0.073}$	$Y_{\text{P}}^{\text{BBN}}$	0.246781	$0.24677^{+0.00013}_{-0.00012}$ (-0.3σ)	$\sigma_8(0.51)$	0.5916	$0.617^{+0.039}_{-0.029}$ $(+0.6\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.058}_{-0.059}$	10^5D/H	2.557	$2.561^{+0.059}_{-0.059}$ $(+0.3\sigma)$	$f\sigma_8(0.61)$	0.4439	$0.463^{+0.031}_{-0.025}$ $(+0.7\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.483	$0.48^{+0.16}_{-0.17}$	Age/Gyr	13.769	$13.771^{+0.052}_{-0.054}$ $(+0.5\sigma)$	$\sigma_8(0.61)$	0.5631	$0.587^{+0.038}_{-0.027}$ $(+0.6\sigma)$
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	z_*	1089.57	$1089.60^{+0.61}_{-0.61}$ $(+0.5\sigma)$	$f\sigma_8(2.33)$	0.2842	$0.296^{+0.019}_{-0.014}$ $(+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	r_*	144.76	$144.77^{+0.64}_{-0.67}$ (-0.7σ)	$\sigma_8(2.33)$	0.2933	$0.306^{+0.020}_{-0.014}$ $(+0.3\sigma)$
A_{217}^{dustTE}	2.06	$2.07^{+0.51}_{-0.51}$	$100\theta_*$	1.04126	$1.04126^{+0.00060}_{-0.00059}$ (-0.6σ)	χ^2_{lensing}	9.96	$10.6 (\nu: 2.7)$
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	13.902	$13.904^{+0.060}_{-0.062}$ (-0.6σ)	χ^2_{lowl}	21.55	$22.8 (\nu: 0.9)$ $(+0.8\sigma)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (-0.0σ)	z_{drag}	1060.16	$1060.13^{+0.61}_{-0.61}$ (-0.2σ)	χ^2_{plik}	2341.8	$2357.0 (\nu: 17.6)$ $(+286.4\sigma)$
H_0	68.15	$68.1^{+1.4}_{-1.4}$ (-0.7σ)	r_{drag}	147.37	$147.40^{+0.62}_{-0.65}$ (-0.7σ)	χ^2_{prior}	1.7	$11.5 (\nu: 9.8)$ $(+1.2\sigma)$
Ω_Λ	0.6954	$0.695^{+0.018}_{-0.019}$ (-0.7σ)	k_D	0.14069	$0.14065^{+0.00065}_{-0.00063}$ $(+0.5\sigma)$	χ^2_{CMB}	2373.3	$2390.4 (\nu: 17.6)$ $(+209.1\sigma)$

Best-fit $\chi^2_{\text{eff}} = 2375.01$; $\Delta\chi^2_{\text{eff}} = -1.33$; $\bar{\chi}^2_{\text{eff}} = 2401.86$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.63$; $R - 1 = 0.02631$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.96 (Δ 0.30) commander_dx12_v3.2.29: 21.55 (Δ -1.59) plik_rd12_HM_v22b_TTTEEE: 2341.84 (Δ -0.20)

3.46 base_Alens_plikHM_TTTEE_lowl_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00028}_{-0.00028} \quad (-0.3\sigma)$	σ_8	$0.802^{+0.050}_{-0.038} \quad (+0.7\sigma)$	$D_M(0.15)$	$636.8^{+7.9}_{-8.2} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1183^{+0.0021}_{-0.0022} \quad (+0.7\sigma)$	S_8	$0.809^{+0.055}_{-0.047} \quad (+0.7\sigma)$	$H(0.38)$	$83.34^{+0.62}_{-0.59} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04109^{+0.00057}_{-0.00055} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.030}_{-0.026} \quad (+0.7\sigma)$	$D_M(0.38)$	$1520^{+16}_{-16} \quad (+0.6\sigma)$
τ	$< 0.109 \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.596^{+0.039}_{-0.031} \quad (+0.7\sigma)$	$H(0.51)$	$90.00^{+0.50}_{-0.48} \quad (-0.6\sigma)$
A_L	$1.07^{+0.13}_{-0.14} \quad (-1.8\sigma)$	$\sigma_8/h^{0.5}$	$0.972^{+0.062}_{-0.049} \quad (+0.7\sigma)$	$D_M(0.51)$	$1971^{+19}_{-19} \quad (+0.6\sigma)$
$\ln(10^{10} A_s)$	$3.03^{+0.12}_{-0.090} \quad (+0.4\sigma)$	$r_{drag} h$	$100.4^{+1.7}_{-1.6} \quad (-0.7\sigma)$	$H(0.61)$	$95.57^{+0.41}_{-0.40} \quad (-0.6\sigma)$
n_s	$0.9697^{+0.0081}_{-0.0077} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.483^{+0.059}_{-0.060} \quad (-2.0\sigma)$	$D_M(0.61)$	$2294^{+20}_{-21} \quad (+0.6\sigma)$
y_{cal}	$0.99996^{+0.0048}_{-0.0046} \quad (-0.0\sigma)$	z_{re}	$7.1^{+5.8}_{-5.0} \quad (-0.1\sigma)$	$H(2.33)$	$235.6^{+1.3}_{-1.3} \quad (+0.7\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_s$	$2.08^{+0.26}_{-0.19} \quad (+0.5\sigma)$	$D_M(2.33)$	$5751^{+19}_{-19} \quad (+0.6\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.873^{+0.022}_{-0.021} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.030}_{-0.025} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.7^{+3.8}_{-3.8} \quad (+0.0\sigma)$	D_{40}	$1221^{+30}_{-29} \quad (+0.7\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.046}_{-0.035} \quad (+0.6\sigma)$
A_{100}^{PS}	$256^{+60}_{-50} \quad (+0.2\sigma)$	D_{220}	$5731^{+79}_{-76} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.031}_{-0.025} \quad (+0.7\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (+0.3\sigma)$	D_{810}	$2532^{+26}_{-25} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.041}_{-0.030} \quad (+0.6\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{1420}	$816.2^{+9.0}_{-8.7} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.030}_{-0.024} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.3^{+2.9}_{-2.9} \quad (-0.5\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.038}_{-0.028} \quad (+0.5\sigma)$
A^{kSZ}	$< 7.65 \quad (+0.2\sigma)$	$n_{s,0.002}$	$0.9697^{+0.0081}_{-0.0077} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.030}_{-0.023} \quad (+0.7\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	Y_P	$0.24545^{+0.00010}_{-0.00011} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.036}_{-0.027} \quad (+0.5\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.6} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24677^{+0.00010}_{-0.00011} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.018}_{-0.013} \quad (+0.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.3}_{-6.8} \quad (+0.2\sigma)$	$10^5 D/H$	$2.561^{+0.051}_{-0.049} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.019}_{-0.014} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.771^{+0.042}_{-0.042} \quad (+0.5\sigma)$	f_{2000}^{143}	$28^{+5}_{-5} \quad (+0.5\sigma)$
A_{100}^{dustTE}	$0.113^{+0.076}_{-0.074}$	z_*	$1089.60^{+0.46}_{-0.47} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.5\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.061}$	r_*	$144.77^{+0.48}_{-0.48} \quad (-0.7\sigma)$	f_{2000}^{217}	$106.1^{+3.6}_{-3.6} \quad (+0.5\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.04126^{+0.00056}_{-0.00055} \quad (-0.6\sigma)$	$\chi^2_{lensing}$	$10.6 \quad (\nu: 2.7)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.904^{+0.045}_{-0.047} \quad (-0.6\sigma)$	χ^2_{lowl}	$22.7 \quad (\nu: 0.8) \quad (+0.8\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.13^{+0.57}_{-0.57} \quad (-0.2\sigma)$	χ^2_{plik}	$2356.4 \quad (\nu: 16.6) \quad (+286.2\sigma)$
A_{217}^{dustTE}	$2.06^{+0.53}_{-0.52}$	r_{drag}	$147.40^{+0.49}_{-0.49} \quad (-0.7\sigma)$	χ^2_{6DF}	$0.030 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14065^{+0.00057}_{-0.00056} \quad (+0.5\sigma)$	χ^2_{MGS}	$1.72 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_D$	$0.16066^{+0.00034}_{-0.00033} \quad (+0.1\sigma)$	$\chi^2_{DR12BAO}$	$4.00 \quad (\nu: 0.3)$
H_0	$68.13^{+0.98}_{-0.93} \quad (-0.7\sigma)$	z_{eq}	$3364^{+47}_{-48} \quad (+0.7\sigma)$	χ^2_{prior}	$11.5 \quad (\nu: 9.6) \quad (+1.2\sigma)$
Ω_Λ	$0.695^{+0.013}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01027^{+0.00014}_{-0.00015} \quad (+0.7\sigma)$	χ^2_{CMB}	$2389.8 \quad (\nu: 16.3) \quad (+208.9\sigma)$
Ω_m	$0.305^{+0.013}_{-0.013} \quad (+0.7\sigma)$	$100\theta_{eq}$	$0.8207^{+0.0094}_{-0.0090} \quad (-0.7\sigma)$	χ^2_{BAO}	$5.75 \quad (\nu: 0.3)$
$\Omega_m h^2$	$0.1414^{+0.0020}_{-0.0020} \quad (+0.7\sigma)$	$100\theta_{s,eq}$	$0.4531^{+0.0048}_{-0.0046} \quad (-0.7\sigma)$		
$\Omega_m h^3$	$0.09636^{+0.00059}_{-0.00058} \quad (-0.1\sigma)$	$H(0.15)$	$73.34^{+0.84}_{-0.80} \quad (-0.7\sigma)$		

$$\bar{\chi}^2_{eff} = 2406.97; \Delta\bar{\chi}^2_{eff} = -0.67; R - 1 = 0.02917$$

3.47 base_Alens_plikHM_TTTEE_lowl_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02251^{+0.00034}_{-0.00032} \quad (-0.3\sigma)$	$\Omega_{\text{m}}h^2$	$0.1413^{+0.0028}_{-0.0028} \quad (+0.6\sigma)$	k_{eq}	$0.01026^{+0.00021}_{-0.00020} \quad (+0.6\sigma)$
$\Omega_{\text{c}}h^2$	$0.1181^{+0.0030}_{-0.0030} \quad (+0.6\sigma)$	$\Omega_{\text{m}}h^3$	$0.09634^{+0.00057}_{-0.00059} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.821^{+0.013}_{-0.013} \quad (-0.6\sigma)$
$100\theta_{\text{MC}}$	$1.04110^{+0.00061}_{-0.00061} \quad (-0.6\sigma)$	σ_8	$0.821^{+0.042}_{-0.033} \quad (+2.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4535^{+0.0067}_{-0.0066} \quad (-0.6\sigma)$
τ	$0.075^{+0.049}_{-0.033} \quad (+2.9\sigma)$	S_8	$0.826^{+0.056}_{-0.049} \quad (+1.3\sigma)$	$H(0.15)$	$73.4^{+1.2}_{-1.2} \quad (-0.6\sigma)$
A_{L}	$1.02^{+0.11}_{-0.12} \quad (-2.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.452^{+0.031}_{-0.027} \quad (+1.3\sigma)$	$D_{\text{M}}(0.15)$	$636^{+12}_{-12} \quad (+0.6\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.080^{+0.098}_{-0.070} \quad (+2.9\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.609^{+0.035}_{-0.030} \quad (+1.6\sigma)$	$H(0.38)$	$83.38^{+0.89}_{-0.85} \quad (-0.6\sigma)$
n_{s}	$0.9705^{+0.0098}_{-0.0097} \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.054}_{-0.046} \quad (+1.8\sigma)$	$D_{\text{M}}(0.38)$	$1519^{+23}_{-23} \quad (+0.6\sigma)$
y_{cal}	$0.99996^{+0.0047}_{-0.0047} \quad (-0.0\sigma)$	$r_{\text{drag}}h$	$100.5^{+2.4}_{-2.3} \quad (-0.6\sigma)$	$H(0.51)$	$90.02^{+0.71}_{-0.67} \quad (-0.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.482^{+0.058}_{-0.058} \quad (-2.0\sigma)$	$D_{\text{M}}(0.51)$	$1969^{+27}_{-28} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 13.6 \quad (+2.6\sigma)$	$H(0.61)$	$95.59^{+0.58}_{-0.53} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.7^{+3.8}_{-3.8} \quad (+0.0\sigma)$	$10^9 A_{\text{s}}$	$2.18^{+0.22}_{-0.15} \quad (+3.1\sigma)$	$D_{\text{M}}(0.61)$	$2293^{+29}_{-30} \quad (+0.6\sigma)$
A_{100}^{PS}	$255^{+50}_{-50} \quad (+0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.872^{+0.023}_{-0.024} \quad (+0.3\sigma)$	$H(2.33)$	$235.5^{+1.8}_{-1.8} \quad (+0.6\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (+0.2\sigma)$	D_{40}	$1226^{+34}_{-31} \quad (+1.0\sigma)$	$D_{\text{M}}(2.33)$	$5751^{+24}_{-25} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	$5729^{+79}_{-74} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.030}_{-0.026} \quad (+1.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2532^{+26}_{-26} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.039}_{-0.030} \quad (+2.5\sigma)$
A^{kSZ}	$< 7.62 \quad (+0.2\sigma)$	D_{1420}	$816.4^{+9.0}_{-9.1} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.028}_{-0.024} \quad (+1.6\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.0}_{-3.0} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.034}_{-0.025} \quad (+2.7\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$n_{\text{s},0.002}$	$0.9705^{+0.0098}_{-0.0097} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.027}_{-0.023} \quad (+1.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.3}_{-6.6} \quad (+0.2\sigma)$	Y_{P}	$0.24545^{+0.00013}_{-0.00013} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.032}_{-0.023} \quad (+2.8\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24677^{+0.00013}_{-0.00013} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.026}_{-0.022} \quad (+1.8\sigma)$
A_{100}^{dustTE}	$0.113^{+0.075}_{-0.073}$	$10^5 \text{D}/\text{H}$	$2.560^{+0.060}_{-0.060} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.030}_{-0.022} \quad (+2.8\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.058}_{-0.059}$	Age/Gyr	$13.770^{+0.053}_{-0.055} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.303^{+0.015}_{-0.011} \quad (+2.9\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.17}$	z_*	$1089.58^{+0.61}_{-0.62} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.313^{+0.016}_{-0.011} \quad (+2.8\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_*	$144.81^{+0.65}_{-0.65} \quad (-0.6\sigma)$	f_{2000}^{143}	$28^{+6}_{-5} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	$1.04127^{+0.00059}_{-0.00059} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.5\sigma)$
A_{217}^{dustTE}	$2.06^{+0.51}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.907^{+0.060}_{-0.061} \quad (-0.6\sigma)$	f_{2000}^{217}	$106.0^{+3.7}_{-3.6} \quad (+0.5\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.13^{+0.64}_{-0.65} \quad (-0.2\sigma)$	χ_{lensing}^2	$10.6 \quad (\nu: 2.6)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.43^{+0.63}_{-0.64} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 1.1) \quad (+1.4\sigma)$
H_0	$68.2^{+1.4}_{-1.4} \quad (-0.6\sigma)$	k_{D}	$0.14062^{+0.00066}_{-0.00064} \quad (+0.5\sigma)$	χ_{plik}^2	$2356.9 \quad (\nu: 18.0) \quad (+286.3\sigma)$
Ω_{Λ}	$0.696^{+0.018}_{-0.018} \quad (-0.6\sigma)$	$100\theta_{\text{D}}$	$0.16065^{+0.00036}_{-0.00036} \quad (+0.1\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.9) \quad (+1.3\sigma)$
Ω_{m}	$0.304^{+0.018}_{-0.018} \quad (+0.6\sigma)$	z_{eq}	$3361^{+68}_{-67} \quad (+0.6\sigma)$	χ_{CMB}^2	$2390.9 \quad (\nu: 17.5) \quad (+209.1\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 2402.39; \Delta\bar{\chi}_{\text{eff}}^2 = 0.03; R - 1 = 0.02911$$

3.48 base_Alens_plikHM_TTTEE_lowl_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00028}_{-0.00028} \quad (-0.3\sigma)$	σ_8	$0.820^{+0.041}_{-0.031} \quad (+2.3\sigma)$	$D_M(0.15)$	$636.6^{+7.9}_{-8.1} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0021}_{-0.0022} \quad (+0.6\sigma)$	S_8	$0.826^{+0.048}_{-0.041} \quad (+1.3\sigma)$	$H(0.38)$	$83.36^{+0.62}_{-0.59} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04110^{+0.00058}_{-0.00053} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.026}_{-0.023} \quad (+1.3\sigma)$	$D_M(0.38)$	$1520^{+16}_{-16} \quad (+0.6\sigma)$
τ	$0.074^{+0.047}_{-0.033} \quad (+2.8\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.032}_{-0.026} \quad (+1.6\sigma)$	$H(0.51)$	$90.01^{+0.50}_{-0.48} \quad (-0.6\sigma)$
A_L	$1.02^{+0.10}_{-0.11} \quad (-2.3\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.051}_{-0.041} \quad (+1.8\sigma)$	$D_M(0.51)$	$1970^{+19}_{-19} \quad (+0.6\sigma)$
$\ln(10^{10} A_s)$	$3.078^{+0.095}_{-0.070} \quad (+2.8\sigma)$	$r_{drag} h$	$100.5^{+1.7}_{-1.6} \quad (-0.7\sigma)$	$H(0.61)$	$95.57^{+0.41}_{-0.40} \quad (-0.6\sigma)$
n_s	$0.9703^{+0.0081}_{-0.0080} \quad (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.482^{+0.058}_{-0.058} \quad (-2.0\sigma)$	$D_M(0.61)$	$2293^{+20}_{-21} \quad (+0.6\sigma)$
y_{cal}	$0.99997^{+0.0048}_{-0.0047} \quad (-0.0\sigma)$	z_{re}	$< 13.4 \quad (+2.6\sigma)$	$H(2.33)$	$235.5^{+1.3}_{-1.3} \quad (+0.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (+0.1\sigma)$	$10^9 A_s$	$2.17^{+0.21}_{-0.15} \quad (+3.0\sigma)$	$D_M(2.33)$	$5751^{+19}_{-19} \quad (+0.6\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.872^{+0.022}_{-0.021} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.026}_{-0.022} \quad (+1.4\sigma)$
A_{143}^{tSZ}	$5.7^{+3.8}_{-3.8} \quad (+0.1\sigma)$	D_{40}	$1226^{+31}_{-30} \quad (+1.0\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.037}_{-0.028} \quad (+2.4\sigma)$
A_{100}^{PS}	$255^{+60}_{-50} \quad (+0.2\sigma)$	D_{220}	$5729^{+81}_{-73} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.026}_{-0.021} \quad (+1.6\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (+0.2\sigma)$	D_{810}	$2532^{+26}_{-26} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.033}_{-0.024} \quad (+2.6\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{1420}	$816.4^{+8.9}_{-8.9} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.025}_{-0.020} \quad (+1.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.4^{+2.9}_{-2.9} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.031}_{-0.023} \quad (+2.7\sigma)$
A^{kSZ}	$< 7.66 \quad (+0.2\sigma)$	$n_{s,0.002}$	$0.9703^{+0.0081}_{-0.0080} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.024}_{-0.019} \quad (+1.8\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	Y_P	$0.24545^{+0.00011}_{-0.00011} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.600^{+0.029}_{-0.021} \quad (+2.8\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.5} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24677^{+0.00011}_{-0.00011} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.303^{+0.015}_{-0.011} \quad (+2.8\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.2}_{-6.7} \quad (+0.2\sigma)$	$10^5 D/H$	$2.561^{+0.052}_{-0.050} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.313^{+0.015}_{-0.011} \quad (+2.7\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.771^{+0.043}_{-0.043} \quad (+0.5\sigma)$	f_{2000}^{143}	$28^{+6}_{-5} \quad (+0.4\sigma)$
A_{100}^{dustTE}	$0.112^{+0.076}_{-0.075}$	z_*	$1089.59^{+0.47}_{-0.46} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.5\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.061}$	r_*	$144.79^{+0.48}_{-0.47} \quad (-0.6\sigma)$	f_{2000}^{217}	$106.0^{+3.8}_{-3.5} \quad (+0.5\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.04127^{+0.00057}_{-0.00053} \quad (-0.6\sigma)$	$\chi^2_{lensing}$	$10.6 \quad (\nu: 2.7)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.905^{+0.047}_{-0.047} \quad (-0.6\sigma)$	χ^2_{lowl}	$23.3 \quad (\nu: 0.9) \quad (+1.4\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.12^{+0.58}_{-0.61} \quad (-0.2\sigma)$	χ^2_{plik}	$2356.3 \quad (\nu: 16.3) \quad (+286.2\sigma)$
A_{217}^{dustTE}	$2.06^{+0.50}_{-0.52}$	r_{drag}	$147.42^{+0.49}_{-0.49} \quad (-0.6\sigma)$	χ^2_{6DF}	$0.030 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14063^{+0.00057}_{-0.00056} \quad (+0.5\sigma)$	χ^2_{MGS}	$1.76 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_D$	$0.16066^{+0.00034}_{-0.00033} \quad (+0.1\sigma)$	$\chi^2_{DR12BAO}$	$3.97 \quad (\nu: 0.3)$
H_0	$68.16^{+0.96}_{-0.93} \quad (-0.6\sigma)$	z_{eq}	$3363^{+48}_{-48} \quad (+0.6\sigma)$	χ^2_{prior}	$11.5 \quad (\nu: 9.5) \quad (+1.3\sigma)$
Ω_Λ	$0.696^{+0.013}_{-0.013} \quad (-0.6\sigma)$	k_{eq}	$0.01026^{+0.00015}_{-0.00015} \quad (+0.6\sigma)$	χ^2_{CMB}	$2390.2 \quad (\nu: 16.1) \quad (+209.0\sigma)$
Ω_m	$0.304^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$100\theta_{eq}$	$0.8210^{+0.0094}_{-0.0092} \quad (-0.6\sigma)$	χ^2_{BAO}	$5.76 \quad (\nu: 0.3)$
$\Omega_m h^2$	$0.1414^{+0.0020}_{-0.0020} \quad (+0.6\sigma)$	$100\theta_{s,eq}$	$0.4533^{+0.0048}_{-0.0047} \quad (-0.7\sigma)$		
$\Omega_m h^3$	$0.09635^{+0.00058}_{-0.00059} \quad (-0.1\sigma)$	$H(0.15)$	$73.37^{+0.83}_{-0.81} \quad (-0.6\sigma)$		

$$\bar{\chi}^2_{eff} = 2407.51; \Delta \bar{\chi}^2_{eff} = -0.07; R - 1 = 0.04162$$

3.49 base_Alens_plikHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02243	$0.02239^{+0.00050}_{-0.00051}$ (-0.7σ)	$\sigma_8 \Omega_m^{0.25}$	0.5884	$0.589^{+0.027}_{-0.027}$ $(+0.2\sigma)$	$D_M(0.15)$	632.9	634^{+18}_{-18} $(+0.4\sigma)$
$\Omega_c h^2$	0.11690	$0.1172^{+0.0047}_{-0.0046}$ $(+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9620	$0.963^{+0.038}_{-0.037}$ $(+0.3\sigma)$	$H(0.38)$	83.59	$83.5^{+1.4}_{-1.3}$ (-0.4σ)
$100\theta_{MC}$	1.04121	$1.0412^{+0.0010}_{-0.0010}$ (-0.4σ)	$r_{drag}h$	101.43	$101.2^{+3.8}_{-3.7}$ (-0.3σ)	$D_M(0.38)$	1512.8	1515^{+37}_{-37} $(+0.4\sigma)$
τ	0.0509	$0.050^{+0.016}_{-0.018}$ (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.477	$2.479^{+0.060}_{-0.062}$ (-2.1σ)	$H(0.51)$	90.16	$90.1^{+1.1}_{-1.1}$ (-0.5σ)
A_L	1.084	$1.08^{+0.10}_{-0.10}$ (-1.7σ)	z_{re}	7.27	$7.1^{+1.7}_{-1.8}$ $(+0.0\sigma)$	$D_M(0.51)$	1962.0	1965^{+43}_{-43} $(+0.4\sigma)$
$\ln(10^{10} A_s)$	3.0285	$3.027^{+0.033}_{-0.036}$ (-0.0σ)	$10^9 A_s$	2.067	$2.063^{+0.069}_{-0.074}$ (-0.0σ)	$H(0.61)$	95.66	$95.61^{+0.93}_{-0.86}$ (-0.5σ)
n_s	0.9733	$0.971^{+0.013}_{-0.013}$ (-0.4σ)	$10^9 A_s e^{-2\tau}$	1.8666	$1.868^{+0.029}_{-0.028}$ $(+0.1\sigma)$	$D_M(0.61)$	2284.8	2288^{+46}_{-47} $(+0.4\sigma)$
y_{cal}	0.99984	$1.0001^{+0.0050}_{-0.0048}$ $(+0.0\sigma)$	D_{40}	1208.2	1214^{+34}_{-33} $(+0.3\sigma)$	$H(2.33)$	234.60	$234.8^{+2.8}_{-2.7}$ $(+0.1\sigma)$
A_{217}^{CIB}	46.7	47^{+10}_{-10} $(+0.3\sigma)$	D_{220}	5719	5725^{+80}_{-82} (-0.3σ)	$D_M(2.33)$	5749.6	5752^{+39}_{-40} $(+0.6\sigma)$
$\xi^{tSZ \times CIB}$	0.54	—	D_{810}	2530.3	2530^{+28}_{-27} $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4401	$0.441^{+0.028}_{-0.028}$ $(+0.3\sigma)$
A_{143}^{tSZ}	7.01	$5.3^{+3.7}_{-4.0}$ (-0.2σ)	D_{1420}	815.9	$815^{+10}_{-9.9}$ $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7377	$0.737^{+0.017}_{-0.018}$ $(+0.1\sigma)$
A_{100}^{PS}	249	260^{+50}_{-60} $(+0.3\sigma)$	D_{2000}	231.12	$230.5^{+3.7}_{-3.7}$ (-0.8σ)	$f\sigma_8(0.38)$	0.4613	$0.462^{+0.022}_{-0.023}$ $(+0.2\sigma)$
A_{143}^{PS}	48.8	46^{+20}_{-20} $(+0.5\sigma)$	$n_{s,0.002}$	0.9733	$0.971^{+0.013}_{-0.013}$ (-0.4σ)	$\sigma_8(0.38)$	0.6554	$0.655^{+0.013}_{-0.014}$ $(+0.1\sigma)$
$A_{143 \times 217}^{PS}$	50.1	42^{+20}_{-20} $(+0.1\sigma)$	Y_P	0.245419	$0.24540^{+0.00020}_{-0.00022}$ (-0.7σ)	$f\sigma_8(0.51)$	0.4615	$0.462^{+0.019}_{-0.020}$ $(+0.2\sigma)$
A_{217}^{PS}	120.0	114^{+20}_{-20} (-0.1σ)	Y_P^{BBN}	0.246746	$0.24672^{+0.00020}_{-0.00022}$ (-0.7σ)	$\sigma_8(0.51)$	0.6140	$0.613^{+0.012}_{-0.013}$ $(+0.0\sigma)$
A^{kSZ}	0.01	< 8.27 $(+0.4\sigma)$	$10^5 D/H$	2.574	$2.583^{+0.096}_{-0.091}$ $(+0.8\sigma)$	$f\sigma_8(0.61)$	0.4578	$0.458^{+0.017}_{-0.018}$ $(+0.2\sigma)$
A_{100}^{dustTT}	8.94	$9.0^{+3.6}_{-3.6}$ $(+0.0\sigma)$	Age/Gyr	13.769	$13.775^{+0.087}_{-0.087}$ $(+0.6\sigma)$	$\sigma_8(0.61)$	0.5847	$0.584^{+0.011}_{-0.012}$ $(+0.0\sigma)$
A_{143}^{dustTT}	10.81	$10.8^{+3.4}_{-3.5}$ $(+0.2\sigma)$	z_*	1089.57	$1089.65^{+0.95}_{-0.93}$ $(+0.6\sigma)$	$f\sigma_8(2.33)$	0.2954	$0.2949^{+0.0051}_{-0.0055}$ (-0.1σ)
$A_{143 \times 217}^{dustTT}$	19.5	$18.3^{+6.5}_{-6.5}$ $(+0.1\sigma)$	r_*	145.19	$145.1^{+1.0}_{-1.0}$ $(+0.0\sigma)$	$\sigma_8(2.33)$	0.3051	$0.3046^{+0.0052}_{-0.0056}$ (-0.1σ)
A_{217}^{dustTT}	94.9	93^{+10}_{-10} (-0.0σ)	$100\theta_*$	1.04140	$1.04138^{+0.00099}_{-0.00099}$ (-0.3σ)	f_{2000}^{143}	28.4	30^{+6}_{-6} $(+0.9\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ (-0.0σ)	$D_M(z_*)/\text{Gpc}$	13.942	$13.938^{+0.092}_{-0.092}$ $(+0.1\sigma)$	$f_{2000}^{143 \times 217}$	31.77	32^{+4}_{-4} $(+1.0\sigma)$
c_{217}	0.99823	$0.9982^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	z_{drag}	1059.86	$1059.78^{+0.96}_{-0.99}$ (-0.8σ)	f_{2000}^{217}	106.17	$106.9^{+4.0}_{-4.0}$ $(+0.9\sigma)$
H_0	68.61	$68.5^{+2.2}_{-2.1}$ (-0.4σ)	r_{drag}	147.85	$147.82^{+0.98}_{-0.98}$ $(+0.2\sigma)$	$\chi_{lensing}^2$	9.31	10.1 ($\nu: 2.0$)
Ω_Λ	0.7026	$0.700^{+0.027}_{-0.029}$ (-0.3σ)	k_D	0.14011	$0.14011^{+0.00098}_{-0.00099}$ (-0.5σ)	χ_{small}^2	395.67	396.8 ($\nu: 1.2$) (-0.0σ)
Ω_m	0.2974	$0.300^{+0.029}_{-0.027}$ $(+0.3\sigma)$	$100\theta_D$	0.16082	$0.16087^{+0.00056}_{-0.00053}$ $(+0.8\sigma)$	χ_{lowl}^2	21.74	22.2 ($\nu: 0.7$) $(+0.4\sigma)$
$\Omega_m h^2$	0.13997	$0.1402^{+0.0044}_{-0.0043}$ $(+0.1\sigma)$	z_{eq}	3329	3336^{+110}_{-100} $(+0.1\sigma)$	χ_{plik}^2	757.8	770.4 ($\nu: 15.4$) $(+0.6\sigma)$
$\Omega_m h^3$	0.09603	$0.09599^{+0.00088}_{-0.00091}$ (-0.8σ)	k_{eq}	0.010162	$0.01018^{+0.00032}_{-0.00031}$ $(+0.1\sigma)$	χ_{prior}^2	1.3	7.3 ($\nu: 6.8$) $(+0.1\sigma)$
σ_8	0.7968	$0.796^{+0.021}_{-0.021}$ $(+0.1\sigma)$	$100\theta_{eq}$	0.8269	$0.826^{+0.021}_{-0.020}$ (-0.2σ)	χ_{CMB}^2	1184.5	1199.5 ($\nu: 15.9$) $(+2.4\sigma)$
S_8	0.793	$0.796^{+0.055}_{-0.053}$ $(+0.3\sigma)$	$100\theta_{s,eq}$	0.4565	$0.456^{+0.011}_{-0.010}$ (-0.2σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4345	$0.436^{+0.030}_{-0.029}$ $(+0.3\sigma)$	$H(0.15)$	73.73	$73.6^{+1.9}_{-1.8}$ (-0.4σ)			

Best-fit $\chi_{eff}^2 = 1185.80$; $\Delta\chi_{eff}^2 = -2.77$; $\bar{\chi}_{eff}^2 = 1206.83$; $\Delta\bar{\chi}_{eff}^2 = -1.59$; $R - 1 = 0.00595$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.31 (Δ 0.41) small_100x143_offlike5_EE_Aplanck_B: 395.67 (Δ -0.20) commander_dx12_v3_2_29: 21.74 (Δ -1.49) plik_rd12_HM_v22_TT: 757.79 (Δ -1.53)

3.50 base_Alens_plikHM_TT_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022366	$0.02233^{+0.00040}_{-0.00041}$ (-0.9σ)	$\sigma_8/h^{0.5}$	0.9689	$0.968^{+0.025}_{-0.025}$ $(+0.5\sigma)$	$D_M(0.38)$	1520.0	1521^{+20}_{-20} $(+0.7\sigma)$
$\Omega_c h^2$	0.11787	$0.1179^{+0.0025}_{-0.0025}$ $(+0.5\sigma)$	$r_{\text{drag}} h$	100.67	$100.6^{+2.0}_{-2.0}$ (-0.6σ)	$H(0.51)$	89.95	$89.92^{+0.63}_{-0.62}$ (-0.7σ)
$100\theta_{\text{MC}}$	1.04114	$1.04110^{+0.00083}_{-0.00085}$ (-0.5σ)	$\langle d^2 \rangle^{1/2}$	2.478	$2.478^{+0.060}_{-0.063}$ (-2.1σ)	$D_M(0.51)$	1970.3	1971^{+24}_{-23} $(+0.7\sigma)$
τ	0.0504	$0.049^{+0.017}_{-0.017}$ (-0.1σ)	z_{re}	7.24	$7.1^{+1.7}_{-1.8}$ (-0.0σ)	$H(0.61)$	95.50	$95.48^{+0.53}_{-0.53}$ (-0.8σ)
A_L	1.070	$1.070^{+0.078}_{-0.076}$ (-1.8σ)	$10^9 A_s$	2.069	$2.065^{+0.069}_{-0.075}$ $(+0.0\sigma)$	$D_M(0.61)$	2293.8	2295^{+26}_{-25} $(+0.7\sigma)$
$\ln(10^{10} A_s)$	3.0297	$3.027^{+0.033}_{-0.037}$ $(+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8709	$1.871^{+0.023}_{-0.023}$ $(+0.2\sigma)$	$H(2.33)$	235.17	$235.1^{+1.6}_{-1.5}$ $(+0.4\sigma)$
n_s	0.9703	$0.9692^{+0.0089}_{-0.0090}$ (-0.7σ)	D_{40}	1214.8	1217^{+27}_{-26} $(+0.5\sigma)$	$D_M(2.33)$	5755.9	5758^{+27}_{-26} $(+0.8\sigma)$
y_{cal}	0.99995	$1.0001^{+0.0050}_{-0.0048}$ $(+0.0\sigma)$	D_{220}	5719	5722^{+79}_{-80} (-0.3σ)	$f\sigma_8(0.15)$	0.4456	$0.445^{+0.016}_{-0.016}$ $(+0.5\sigma)$
A_{217}^{CIB}	48.4	47^{+10}_{-10} $(+0.4\sigma)$	D_{810}	2531.3	2530^{+27}_{-27} $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7401	$0.739^{+0.014}_{-0.015}$ $(+0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.28	—	D_{1420}	815.3	814^{+10}_{-10} $(+0.0\sigma)$	$f\sigma_8(0.38)$	0.4656	$0.465^{+0.014}_{-0.014}$ $(+0.5\sigma)$
A_{143}^{tSZ}	7.11	$5.2^{+3.8}_{-3.9}$ (-0.2σ)	D_{2000}	230.72	$230.3^{+3.4}_{-3.4}$ (-1.0σ)	$\sigma_8(0.38)$	0.6569	$0.656^{+0.012}_{-0.013}$ $(+0.2\sigma)$
A_{100}^{PS}	252	261^{+60}_{-50} $(+0.4\sigma)$	$n_{s,0.002}$	0.9703	$0.9692^{+0.0089}_{-0.0090}$ (-0.7σ)	$f\sigma_8(0.51)$	0.4652	$0.465^{+0.012}_{-0.012}$ $(+0.5\sigma)$
A_{143}^{PS}	46.0	47^{+20}_{-20} $(+0.6\sigma)$	Y_P	0.245394	$0.24538^{+0.00016}_{-0.00017}$ (-0.9σ)	$\sigma_8(0.51)$	0.6152	$0.614^{+0.011}_{-0.012}$ $(+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	43.9	42^{+20}_{-20} $(+0.1\sigma)$	Y_P^{BBN}	0.246721	$0.24670^{+0.00016}_{-0.00017}$ (-0.9σ)	$f\sigma_8(0.61)$	0.4609	$0.460^{+0.011}_{-0.012}$ $(+0.5\sigma)$
A_{217}^{PS}	117.6	114^{+20}_{-20} (-0.1σ)	$10^5 \text{D}/\text{H}$	2.586	$2.593^{+0.078}_{-0.072}$ $(+0.9\sigma)$	$\sigma_8(0.61)$	0.5856	$0.585^{+0.011}_{-0.011}$ $(+0.1\sigma)$
A^{kSZ}	0.00	< 8.34 $(+0.4\sigma)$	Age/Gyr	13.782	$13.786^{+0.061}_{-0.058}$ $(+0.9\sigma)$	$f\sigma_8(2.33)$	0.2956	$0.2951^{+0.0052}_{-0.0056}$ $(+0.0\sigma)$
A_{100}^{dustTT}	8.98	$9.0^{+3.6}_{-3.6}$ $(+0.0\sigma)$	z_*	1089.74	$1089.78^{+0.63}_{-0.61}$ $(+0.8\sigma)$	$\sigma_8(2.33)$	0.3051	$0.3046^{+0.0053}_{-0.0058}$ (-0.1σ)
A_{143}^{dustTT}	10.86	$10.8^{+3.4}_{-3.4}$ $(+0.2\sigma)$	r_*	144.99	$145.01^{+0.61}_{-0.62}$ (-0.2σ)	f_{2000}^{143}	29.1	30^{+6}_{-6} $(+1.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.3	$18.3^{+6.6}_{-6.5}$ $(+0.1\sigma)$	$100\theta_*$	1.04132	$1.04129^{+0.00082}_{-0.00085}$ (-0.5σ)	$f_{2000}^{143 \times 217}$	32.18	33^{+4}_{-4} $(+1.1\sigma)$
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (-0.0σ)	$D_M(z_*)/\text{Gpc}$	13.923	$13.926^{+0.060}_{-0.059}$ (-0.2σ)	f_{2000}^{217}	106.71	$107.2^{+3.7}_{-3.7}$ $(+1.0\sigma)$
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (-0.1σ)	z_{drag}	1059.78	$1059.70^{+0.89}_{-0.91}$ (-1.0σ)	χ_{lensing}^2	9.42	10.1 $(\nu: 1.9)$
c_{217}	0.99825	$0.9982^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	r_{drag}	147.66	$147.70^{+0.66}_{-0.66}$ (-0.1σ)	χ_{simall}^2	395.68	396.8 $(\nu: 1.2)$ $(+0.0\sigma)$
H_0	68.18	$68.1^{+1.2}_{-1.2}$ (-0.7σ)	k_D	0.14026	$0.14020^{+0.00082}_{-0.00086}$ (-0.3σ)	χ_{lowl}^2	22.20	22.43 $(\nu: 0.4)$ $(+0.6\sigma)$
Ω_Λ	0.6969	$0.697^{+0.015}_{-0.015}$ (-0.6σ)	$100\theta_D$	0.16086	$0.16091^{+0.00054}_{-0.00051}$ $(+0.9\sigma)$	χ_{plik}^2	757.2	769.6 $(\nu: 14.3)$ $(+0.4\sigma)$
Ω_m	0.3031	$0.303^{+0.015}_{-0.015}$ $(+0.6\sigma)$	z_{eq}	3351	3350^{+58}_{-57} $(+0.4\sigma)$	$\chi_{6\text{DF}}^2$	0.002	0.044 $(\nu: 0.0)$
$\Omega_m h^2$	0.14088	$0.1409^{+0.0024}_{-0.0024}$ $(+0.4\sigma)$	k_{eq}	0.010228	$0.01023^{+0.00018}_{-0.00018}$ $(+0.4\sigma)$	χ_{MGS}^2	1.82	1.87 $(\nu: 0.2)$
$\Omega_m h^3$	0.09605	$0.09597^{+0.00087}_{-0.00091}$ (-0.8σ)	$100\theta_{\text{eq}}$	0.8227	$0.823^{+0.011}_{-0.011}$ (-0.5σ)	χ_{DR12BAO}^2	3.39	4.1 $(\nu: 0.5)$
σ_8	0.8000	$0.799^{+0.016}_{-0.017}$ $(+0.4\sigma)$	$100\theta_{s,\text{eq}}$	0.4543	$0.4543^{+0.0057}_{-0.0056}$ (-0.5σ)	χ_{prior}^2	1.5	7.4 $(\nu: 7.0)$ $(+0.1\sigma)$
S_8	0.8041	$0.803^{+0.032}_{-0.031}$ $(+0.5\sigma)$	$H(0.15)$	73.37	$73.3^{+1.0}_{-1.0}$ (-0.7σ)	χ_{CMB}^2	1184.5	1199.0 $(\nu: 15.3)$ $(+2.3\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4404	$0.440^{+0.017}_{-0.017}$ $(+0.5\sigma)$	$D_M(0.15)$	636.5	$636.8^{+9.9}_{-9.8}$ $(+0.7\sigma)$	χ_{BAO}^2	5.22	6.0 $(\nu: 0.6)$
$\sigma_8 \Omega_m^{0.25}$	0.5936	$0.593^{+0.017}_{-0.017}$ $(+0.5\sigma)$	$H(0.38)$	83.33	$83.29^{+0.77}_{-0.74}$ (-0.7σ)			

Best-fit $\chi_{\text{eff}}^2 = 1191.14$; $\Delta\chi_{\text{eff}}^2 = -3.55$; $\bar{\chi}_{\text{eff}}^2 = 1212.35$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.38$; $R - 1 = 0.01232$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.82 (Δ 0.60) DR12BAO: 3.40 (Δ -0.98) CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 9.42 (Δ 0.54) simall_100x143_offlike5.EE_Aplanck 395.68 (Δ -0.42) commander_dx12_v3.2.29: 22.20 (Δ -0.76) plik_rd12_HM_v22_TT: 757.15 (Δ -2.65)

3.51 base_Alens_plikHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02239^{+0.00051}_{-0.00051} \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.027}_{-0.027} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$634^{+18}_{-18} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1171^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.965^{+0.037}_{-0.037} \quad (+0.4\sigma)$	$H(0.38)$	$83.5^{+1.4}_{-1.4} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0010}_{-0.0010} \quad (-0.4\sigma)$	$r_{\mathrm{drag}} h$	$101.3^{+3.8}_{-3.8} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1515^{+37}_{-36} \quad (+0.4\sigma)$
τ	$0.0528^{+0.012}_{-0.0098} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.479^{+0.061}_{-0.063} \quad (-2.1\sigma)$	$H(0.51)$	$90.1^{+1.1}_{-1.1} \quad (-0.5\sigma)$
A_{L}	$1.08^{+0.10}_{-0.097} \quad (-1.7\sigma)$	z_{re}	$< 8.54 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1964^{+43}_{-43} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.027}_{-0.025} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.076^{+0.056}_{-0.051} \quad (+0.3\sigma)$	$H(0.61)$	$95.62^{+0.93}_{-0.87} \quad (-0.5\sigma)$
n_{s}	$0.971^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.868^{+0.029}_{-0.028} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2287^{+47}_{-46} \quad (+0.4\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0048} \quad (+0.0\sigma)$	D_{40}	$1214^{+34}_{-33} \quad (+0.3\sigma)$	$H(2.33)$	$234.7^{+2.8}_{-2.7} \quad (+0.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.3\sigma)$	D_{220}	$5725^{+79}_{-82} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5752^{+39}_{-40} \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2529^{+28}_{-28} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.442^{+0.028}_{-0.028} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0} \quad (-0.2\sigma)$	D_{1420}	$815^{+10}_{-9.9} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.016}_{-0.016} \quad (+0.3\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (+0.3\sigma)$	D_{2000}	$230.6^{+3.7}_{-3.7} \quad (-0.8\sigma)$	$f\sigma_8(0.38)$	$0.463^{+0.022}_{-0.022} \quad (+0.3\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.971^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.012}_{-0.011} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.24540^{+0.00020}_{-0.00022} \quad (-0.7\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.019}_{-0.019} \quad (+0.3\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00020}_{-0.00022} \quad (-0.7\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.011}_{-0.0097} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.21 \quad (+0.4\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.582^{+0.096}_{-0.091} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.017} \quad (+0.3\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.774^{+0.088}_{-0.087} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.5857^{+0.0097}_{-0.0087} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.4}_{-3.5} \quad (+0.2\sigma)$	z_*	$1089.64^{+0.96}_{-0.92} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.2958^{+0.0043}_{-0.0040} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.1\sigma)$	r_*	$145.2^{+1.0}_{-1.0} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3056^{+0.0042}_{-0.0038} \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.04139^{+0.00099}_{-0.00099} \quad (-0.3\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (+0.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.939^{+0.091}_{-0.091} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.78^{+0.99}_{-0.99} \quad (-0.8\sigma)$	f_{2000}^{217}	$106.9^{+4.0}_{-4.0} \quad (+0.9\sigma)$
H_0	$68.5^{+2.2}_{-2.2} \quad (-0.3\sigma)$	r_{drag}	$147.83^{+0.98}_{-0.97} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.1 \quad (\nu: 2.0)$
Ω_{Λ}	$0.701^{+0.027}_{-0.029} \quad (-0.3\sigma)$	k_{D}	$0.14010^{+0.00097}_{-0.00098} \quad (-0.5\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
Ω_{m}	$0.299^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16087^{+0.00056}_{-0.00054} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.3 \quad (\nu: 0.7) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1402^{+0.0044}_{-0.0043} \quad (+0.1\sigma)$	z_{eq}	$3334^{+110}_{-100} \quad (+0.1\sigma)$	χ_{plik}^2	$770.4 \quad (\nu: 15.6) \quad (+0.6\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09599^{+0.00088}_{-0.00090} \quad (-0.8\sigma)$	k_{eq}	$0.01018^{+0.00032}_{-0.00031} \quad (+0.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
σ_8	$0.799^{+0.019}_{-0.019} \quad (+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.021}_{-0.020} \quad (-0.2\sigma)$	χ_{CMB}^2	$1199.2 \quad (\nu: 15.7) \quad (+2.3\sigma)$
S_8	$0.798^{+0.055}_{-0.053} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.011}_{-0.010} \quad (-0.2\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.437^{+0.030}_{-0.029} \quad (+0.3\sigma)$	$H(0.15)$	$73.6^{+1.9}_{-1.9} \quad (-0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1206.48$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -1.68$; $R - 1 = 0.00707$

3.52 base_Alens_plikHM_TT_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02233^{+0.00040}_{-0.00041} \quad (-0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.971^{+0.023}_{-0.022} \quad (+0.7\sigma)$	$D_M(0.38)$	$1521^{+20}_{-20} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1178^{+0.0025}_{-0.0025} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$100.7^{+2.0}_{-2.0} \quad (-0.6\sigma)$	$H(0.51)$	$89.93^{+0.64}_{-0.61} \quad (-0.7\sigma)$
$100\theta_{\text{MC}}$	$1.04110^{+0.00083}_{-0.00085} \quad (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.477^{+0.061}_{-0.063} \quad (-2.1\sigma)$	$D_M(0.51)$	$1971^{+24}_{-24} \quad (+0.7\sigma)$
τ	$0.0526^{+0.011}_{-0.0096} \quad (+0.3\sigma)$	z_{re}	$< 8.54 \quad (+0.4\sigma)$	$H(0.61)$	$95.48^{+0.54}_{-0.53} \quad (-0.8\sigma)$
A_L	$1.063^{+0.073}_{-0.072} \quad (-1.9\sigma)$	$10^9 A_s$	$2.078^{+0.054}_{-0.049} \quad (+0.4\sigma)$	$D_M(0.61)$	$2295^{+25}_{-26} \quad (+0.7\sigma)$
$\ln(10^{10} A_s)$	$3.034^{+0.026}_{-0.024} \quad (+0.4\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$H(2.33)$	$235.1^{+1.6}_{-1.5} \quad (+0.3\sigma)$
n_s	$0.9693^{+0.0089}_{-0.0090} \quad (-0.7\sigma)$	D_{40}	$1218^{+27}_{-26} \quad (+0.5\sigma)$	$D_M(2.33)$	$5758^{+26}_{-26} \quad (+0.8\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0048} \quad (+0.0\sigma)$	D_{220}	$5722^{+79}_{-80} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.016}_{-0.016} \quad (+0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.3\sigma)$	D_{810}	$2530^{+27}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.013}_{-0.011} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$814.3^{+9.9}_{-9.9} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.013}_{-0.013} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9} \quad (-0.2\sigma)$	D_{2000}	$230.3^{+3.4}_{-3.4} \quad (-1.0\sigma)$	$\sigma_8(0.38)$	$0.6581^{+0.0099}_{-0.0092} \quad (+0.5\sigma)$
A_{100}^{PS}	$261^{+60}_{-50} \quad (+0.4\sigma)$	$n_{s,0.002}$	$0.9693^{+0.0089}_{-0.0090} \quad (-0.7\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.012}_{-0.011} \quad (+0.6\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (+0.6\sigma)$	Y_P	$0.24538^{+0.00016}_{-0.00017} \quad (-0.9\sigma)$	$\sigma_8(0.51)$	$0.6162^{+0.0090}_{-0.0083} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24670^{+0.00016}_{-0.00017} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.010}_{-0.010} \quad (+0.6\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 D/H$	$2.593^{+0.077}_{-0.072} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.5866^{+0.0084}_{-0.0078} \quad (+0.5\sigma)$
A^{kSZ}	$< 8.26 \quad (+0.4\sigma)$	Age/Gyr	$13.786^{+0.060}_{-0.059} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2961^{+0.0041}_{-0.0037} \quad (+0.4\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1089.78^{+0.63}_{-0.62} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3056^{+0.0042}_{-0.0038} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.2\sigma)$	r_*	$145.02^{+0.60}_{-0.61} \quad (-0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (+1.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.7}_{-6.6} \quad (+0.1\sigma)$	$100\theta_*$	$1.04129^{+0.00082}_{-0.00085} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.927^{+0.059}_{-0.058} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.2^{+3.7}_{-3.7} \quad (+1.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.69^{+0.89}_{-0.90} \quad (-1.0\sigma)$	χ_{lensing}^2	$10.1 \quad (\nu: 2.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.71^{+0.65}_{-0.65} \quad (-0.0\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
H_0	$68.1^{+1.2}_{-1.2} \quad (-0.6\sigma)$	k_D	$0.14019^{+0.00080}_{-0.00084} \quad (-0.3\sigma)$	χ_{lowl}^2	$22.50 \quad (\nu: 0.4) \quad (+0.6\sigma)$
Ω_Λ	$0.697^{+0.015}_{-0.015} \quad (-0.6\sigma)$	$100\theta_D$	$0.16091^{+0.00053}_{-0.00050} \quad (+0.9\sigma)$	χ_{plik}^2	$769.6 \quad (\nu: 14.6) \quad (+0.4\sigma)$
Ω_m	$0.303^{+0.015}_{-0.015} \quad (+0.6\sigma)$	z_{eq}	$3350^{+58}_{-57} \quad (+0.4\sigma)$	$\chi_{6\text{DF}}^2$	$0.045 \quad (\nu: 0.0)$
$\Omega_m h^2$	$0.1408^{+0.0024}_{-0.0024} \quad (+0.4\sigma)$	k_{eq}	$0.01022^{+0.00018}_{-0.00017} \quad (+0.4\sigma)$	χ_{MGS}^2	$1.88 \quad (\nu: 0.2)$
$\Omega_m h^3$	$0.09596^{+0.00087}_{-0.00090} \quad (-0.8\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$4.07 \quad (\nu: 0.5)$
σ_8	$0.801^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$100\theta_{s,\text{eq}}$	$0.4544^{+0.0057}_{-0.0056} \quad (-0.5\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 7.1) \quad (+0.1\sigma)$
S_8	$0.806^{+0.031}_{-0.030} \quad (+0.6\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (-0.7\sigma)$	χ_{CMB}^2	$1198.7 \quad (\nu: 15.1) \quad (+2.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.441^{+0.017}_{-0.017} \quad (+0.6\sigma)$	$D_M(0.15)$	$636.8^{+9.9}_{-9.8} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\sigma_8 \Omega_m^{0.25}$	$0.595^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$H(0.38)$	$83.30^{+0.77}_{-0.74} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1212.01; \Delta \bar{\chi}_{\text{eff}}^2 = -2.57; R - 1 = 0.01863$$

3.53 base_Alens_plikHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022553	$0.02251^{+0.00033}_{-0.00032}$ (-0.3σ)	$\Omega_{\mathrm{m}}h^3$	0.09641	$0.09637^{+0.00057}_{-0.00055}$ (-0.0σ)	$100\theta_{\mathrm{s,eq}}$	0.4536	$0.4532^{+0.0066}_{-0.0065}$ (-0.7σ)
$\Omega_{\mathrm{c}}h^2$	0.11803	$0.1182^{+0.0030}_{-0.0029}$ $(+0.6\sigma)$	σ_8	0.8008	$0.800^{+0.016}_{-0.017}$ $(+0.5\sigma)$	$H(0.15)$	73.46	$73.4^{+1.2}_{-1.2}$ (-0.6σ)
$100\theta_{\mathrm{MC}}$	1.04111	$1.04110^{+0.00063}_{-0.00063}$ (-0.5σ)	S_8	0.8049	$0.806^{+0.036}_{-0.036}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	635.7	637^{+11}_{-12} $(+0.6\sigma)$
τ	0.0506	$0.049^{+0.016}_{-0.017}$ (-0.1σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4409	$0.441^{+0.020}_{-0.020}$ $(+0.6\sigma)$	$H(0.38)$	83.43	$83.36^{+0.88}_{-0.84}$ (-0.6σ)
A_{L}	1.075	$1.071^{+0.082}_{-0.076}$ (-1.8σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5942	$0.594^{+0.019}_{-0.019}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	1518.0	1520^{+23}_{-23} $(+0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0314	$3.029^{+0.032}_{-0.036}$ $(+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9692	$0.969^{+0.027}_{-0.027}$ $(+0.6\sigma)$	$H(0.51)$	90.07	$90.01^{+0.71}_{-0.67}$ (-0.6σ)
n_{s}	0.9718	$0.9696^{+0.0094}_{-0.0097}$ (-0.6σ)	$r_{\mathrm{drag}}h$	100.63	$100.5^{+2.4}_{-2.3}$ (-0.7σ)	$D_{\mathrm{M}}(0.51)$	1967.8	1970^{+27}_{-27} $(+0.6\sigma)$
y_{cal}	0.99996	$1.0001^{+0.0050}_{-0.0048}$ $(+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.483	$2.482^{+0.058}_{-0.059}$ (-2.0σ)	$H(0.61)$	95.63	$95.58^{+0.57}_{-0.53}$ (-0.6σ)
A_{217}^{CIB}	44.2	46^{+10}_{-10} $(+0.2\sigma)$	z_{re}	7.23	$7.1^{+1.7}_{-1.8}$ (-0.1σ)	$D_{\mathrm{M}}(0.61)$	2290.9	2293^{+29}_{-30} $(+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.83	—	$10^9 A_{\mathrm{s}}$	2.073	$2.067^{+0.067}_{-0.073}$ $(+0.1\sigma)$	$H(2.33)$	235.46	$235.6^{+1.7}_{-1.7}$ $(+0.7\sigma)$
A_{143}^{tSZ}	7.00	$5.6^{+3.7}_{-3.7}$ $(+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8733	$1.874^{+0.024}_{-0.023}$ $(+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	5748.6	5751^{+24}_{-25} $(+0.5\sigma)$
A_{100}^{PS}	244	255^{+60}_{-50} $(+0.2\sigma)$	D_{40}	1213.7	1219^{+27}_{-27} $(+0.6\sigma)$	$f\sigma_8(0.15)$	0.4461	$0.446^{+0.019}_{-0.019}$ $(+0.6\sigma)$
A_{143}^{PS}	50.3	44^{+20}_{-20} $(+0.3\sigma)$	D_{220}	5730	5735^{+77}_{-76} (-0.0σ)	$\sigma_8(0.15)$	0.7408	$0.740^{+0.014}_{-0.015}$ $(+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	55.3	42^{+20}_{-20} $(+0.1\sigma)$	D_{810}	2535.0	2533^{+27}_{-26} $(+0.5\sigma)$	$f\sigma_8(0.38)$	0.4661	$0.466^{+0.015}_{-0.016}$ $(+0.6\sigma)$
A_{217}^{PS}	122.8	115^{+20}_{-20} (-0.0σ)	D_{1420}	818.0	$816.5^{+9.6}_{-9.4}$ $(+0.4\sigma)$	$\sigma_8(0.38)$	0.6576	$0.657^{+0.012}_{-0.013}$ $(+0.3\sigma)$
A^{kSZ}	0.01	< 7.71 $(+0.2\sigma)$	D_{2000}	232.01	$231.3^{+3.1}_{-3.2}$ (-0.5σ)	$f\sigma_8(0.51)$	0.4657	$0.465^{+0.014}_{-0.014}$ $(+0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.82	$8.9^{+3.6}_{-3.6}$ $(+0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9718	$0.9696^{+0.0094}_{-0.0097}$ (-0.6σ)	$\sigma_8(0.51)$	0.6158	$0.615^{+0.011}_{-0.012}$ $(+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	11.02	$10.9^{+3.4}_{-3.5}$ $(+0.2\sigma)$	Y_{P}	0.245463	$0.24545^{+0.00013}_{-0.00013}$ (-0.3σ)	$f\sigma_8(0.61)$	0.4614	$0.461^{+0.012}_{-0.013}$ $(+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.2	$18.5^{+6.4}_{-6.5}$ $(+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246790	$0.24678^{+0.00013}_{-0.00013}$ (-0.3σ)	$\sigma_8(0.61)$	0.5862	$0.5851^{+0.0099}_{-0.011}$ $(+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	95.7	94^{+10}_{-10} (-0.0σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.553	$2.560^{+0.060}_{-0.059}$ $(+0.3\sigma)$	$f\sigma_8(2.33)$	0.2959	$0.2953^{+0.0049}_{-0.0053}$ $(+0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.075}_{-0.075}$	Age/Gyr	13.765	$13.770^{+0.053}_{-0.055}$ $(+0.5\sigma)$	$\sigma_8(2.33)$	0.3054	$0.3048^{+0.0051}_{-0.0055}$ (-0.1σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.058}_{-0.058}$	z_*	1089.52	$1089.59^{+0.61}_{-0.60}$ $(+0.5\sigma)$	f_{2000}^{143}	27.2	28^{+5}_{-5} $(+0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.16}_{-0.17}$	r_*	144.80	$144.78^{+0.64}_{-0.63}$ (-0.7σ)	$f_{2000}^{143 \times 217}$	30.80	31^{+4}_{-4} $(+0.6\sigma)$
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	1.04128	$1.04128^{+0.00061}_{-0.00062}$ (-0.5σ)	f_{2000}^{217}	105.36	$106.2^{+3.7}_{-3.6}$ $(+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.661	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.906	$13.904^{+0.058}_{-0.058}$ (-0.6σ)	$\chi_{\mathrm{lensing}}^2$	10.18	$10.5 (\nu: 2.4)$
$A_{217}^{\mathrm{dustTE}}$	2.06	$2.06^{+0.52}_{-0.53}$	z_{drag}	1060.20	$1060.14^{+0.63}_{-0.63}$ (-0.2σ)	χ_{small}^2	395.66	$396.8 (\nu: 1.2)$ (-0.0σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	r_{drag}	147.41	$147.40^{+0.61}_{-0.60}$ (-0.6σ)	χ_{lowl}^2	22.06	$22.46 (\nu: 0.4)$ $(+0.6\sigma)$
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (-0.0σ)	k_{D}	0.14067	$0.14065^{+0.00062}_{-0.00062}$ $(+0.5\sigma)$	χ_{plik}^2	2341.8	$2357.1 (\nu: 17.7)$ $(+286.4\sigma)$
H_0	68.27	$68.2^{+1.4}_{-1.3}$ (-0.6σ)	$100\theta_{\mathrm{D}}$	0.160601	$0.16065^{+0.00036}_{-0.00036}$ $(+0.1\sigma)$	χ_{prior}^2	1.5	$11.5 (\nu: 10.2)$ $(+1.3\sigma)$
Ω_{Λ}	0.6969	$0.695^{+0.018}_{-0.018}$ (-0.6σ)	z_{eq}	3360	3364^{+67}_{-66} $(+0.7\sigma)$	χ_{CMB}^2	2769.7	$2786.9 (\nu: 17.8)$ $(+277.9\sigma)$
Ω_{m}	0.3031	$0.305^{+0.018}_{-0.018}$ $(+0.6\sigma)$	k_{eq}	0.010254	$0.01027^{+0.00020}_{-0.00020}$ $(+0.7\sigma)$			
$\Omega_{\mathrm{m}}h^2$	0.14123	$0.1414^{+0.0028}_{-0.0027}$ $(+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	0.8217	$0.821^{+0.013}_{-0.013}$ (-0.7σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2771.20$; $\Delta\chi_{\mathrm{eff}}^2 = -3.44$; $\bar{\chi}_{\mathrm{eff}}^2 = 2798.40$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.29$; $R - 1 = 0.01801$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 10.18 (Δ 1.31) small-100x143_offlike5_EE_Aplanck_B: 395.66 (Δ -0.39) commander_dx12_v3_2_29: 22.06 (Δ -1.20) plik_rd12_HM_v22b_TTTEEE: 2341.85 (Δ -3.08)

3.54 base_Alens_plikHM_TTTEE_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022543	$0.02251^{+0.00028}_{-0.00027}$ (-0.3σ)	σ_8	0.8002	$0.800^{+0.015}_{-0.016}$ $(+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	636.5	$636.7^{+8.1}_{-7.9}$ $(+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11826	$0.1183^{+0.0021}_{-0.0021}$ $(+0.7\sigma)$	S_8	0.8060	$0.806^{+0.027}_{-0.027}$ $(+0.6\sigma)$	$H(0.38)$	83.37	$83.36^{+0.62}_{-0.61}$ (-0.6σ)
$100\theta_{\mathrm{MC}}$	1.04109	$1.04111^{+0.00057}_{-0.00057}$ (-0.5σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4415	$0.442^{+0.015}_{-0.015}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	1519.7	1520^{+16}_{-16} $(+0.6\sigma)$
τ	0.0492	$0.049^{+0.016}_{-0.017}$ (-0.1σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5943	$0.594^{+0.015}_{-0.015}$ $(+0.6\sigma)$	$H(0.51)$	90.023	$90.01^{+0.50}_{-0.49}$ (-0.6σ)
A_{L}	1.072	$1.071^{+0.073}_{-0.068}$ (-1.8σ)	$\sigma_8/h^{0.5}$	0.9692	$0.969^{+0.022}_{-0.023}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	1969.7	1970^{+19}_{-19} $(+0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0288	$3.029^{+0.034}_{-0.035}$ $(+0.1\sigma)$	$r_{\mathrm{drag}}h$	100.45	$100.4^{+1.7}_{-1.6}$ (-0.7σ)	$H(0.61)$	95.591	$95.57^{+0.42}_{-0.40}$ (-0.6σ)
n_{s}	0.9704	$0.9695^{+0.0076}_{-0.0078}$ (-0.7σ)	$\langle d^2 \rangle^{1/2}$	2.482	$2.482^{+0.058}_{-0.058}$ (-2.0σ)	$D_{\mathrm{M}}(0.61)$	2293.0	2294^{+21}_{-20} $(+0.6\sigma)$
y_{cal}	0.99980	$1.0001^{+0.0050}_{-0.0048}$ $(+0.0\sigma)$	z_{re}	7.09	$7.1^{+1.7}_{-1.8}$ (-0.0σ)	$H(2.33)$	235.60	$235.6^{+1.2}_{-1.2}$ $(+0.7\sigma)$
A_{217}^{CIB}	45.8	46^{+10}_{-10} $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.067	$2.068^{+0.067}_{-0.074}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5750.0	5751^{+18}_{-19} $(+0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.62	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8735	$1.874^{+0.022}_{-0.021}$ $(+0.5\sigma)$	$f\sigma_8(0.15)$	0.4466	$0.447^{+0.014}_{-0.014}$ $(+0.6\sigma)$
A_{143}^{tSZ}	7.17	$5.6^{+3.8}_{-3.8}$ (-0.0σ)	D_{40}	1216.2	1219^{+24}_{-23} $(+0.6\sigma)$	$\sigma_8(0.15)$	0.7401	$0.740^{+0.013}_{-0.015}$ $(+0.4\sigma)$
A_{100}^{PS}	246	255^{+50}_{-50} $(+0.2\sigma)$	D_{220}	5732	5735^{+75}_{-74} (-0.0σ)	$f\sigma_8(0.38)$	0.4662	$0.466^{+0.012}_{-0.013}$ $(+0.6\sigma)$
A_{143}^{PS}	48.0	44^{+10}_{-20} $(+0.3\sigma)$	D_{810}	2533.8	2534^{+27}_{-26} $(+0.5\sigma)$	$\sigma_8(0.38)$	0.6568	$0.657^{+0.011}_{-0.012}$ $(+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	50.9	42^{+20}_{-20} $(+0.1\sigma)$	D_{1420}	817.1	$816.5^{+9.6}_{-9.2}$ $(+0.4\sigma)$	$f\sigma_8(0.51)$	0.4657	$0.466^{+0.011}_{-0.012}$ $(+0.6\sigma)$
A_{217}^{PS}	120.4	115^{+20}_{-20} (-0.0σ)	D_{2000}	231.65	$231.3^{+3.1}_{-3.1}$ (-0.4σ)	$\sigma_8(0.51)$	0.6150	$0.615^{+0.010}_{-0.011}$ $(+0.3\sigma)$
A^{kSZ}	0.01	< 7.80 $(+0.2\sigma)$	$n_{\mathrm{s},0.002}$	0.9704	$0.9695^{+0.0076}_{-0.0078}$ (-0.7σ)	$f\sigma_8(0.61)$	0.4613	$0.461^{+0.010}_{-0.011}$ $(+0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.88	$8.9^{+3.6}_{-3.6}$ $(+0.0\sigma)$	Y_{P}	0.245460	$0.24545^{+0.00011}_{-0.00011}$ (-0.3σ)	$\sigma_8(0.61)$	0.5854	$0.5853^{+0.0097}_{-0.011}$ $(+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	11.03	$10.9^{+3.5}_{-3.5}$ $(+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246786	$0.24677^{+0.00011}_{-0.00011}$ (-0.3σ)	$f\sigma_8(2.33)$	0.2954	$0.2954^{+0.0049}_{-0.0054}$ $(+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.9	$18.5^{+6.4}_{-6.6}$ $(+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.554	$2.560^{+0.050}_{-0.051}$ $(+0.3\sigma)$	$\sigma_8(2.33)$	0.3049	$0.3048^{+0.0050}_{-0.0055}$ (-0.1σ)
$A_{217}^{\mathrm{dustTT}}$	95.2	94^{+10}_{-10} (-0.0σ)	Age/Gyr	13.7677	$13.770^{+0.041}_{-0.043}$ $(+0.5\sigma)$	f_{2000}^{143}	27.7	28^{+5}_{-5} $(+0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.113^{+0.074}_{-0.075}$	z_*	1089.551	$1089.59^{+0.46}_{-0.46}$ $(+0.5\sigma)$	$f_{2000}^{143 \times 217}$	31.14	31^{+4}_{-4} $(+0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.058}_{-0.058}$	r_*	144.750	$144.77^{+0.47}_{-0.46}$ (-0.7σ)	f_{2000}^{217}	105.65	$106.2^{+3.6}_{-3.5}$ $(+0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.479	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	1.04126	$1.04128^{+0.00056}_{-0.00056}$ (-0.5σ)	$\chi_{\mathrm{lensing}}^2$	9.99	10.5 $(\nu: 2.4)$
$A_{143}^{\mathrm{dustTE}}$	0.222	$0.22^{+0.10}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.9015	$13.904^{+0.046}_{-0.045}$ (-0.6σ)	χ_{small}^2	395.70	396.8 $(\nu: 1.2)$ (-0.0σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.20	$1060.14^{+0.60}_{-0.59}$ (-0.2σ)	χ_{lowl}^2	22.25	22.46 $(\nu: 0.3)$ $(+0.6\sigma)$
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.06^{+0.52}_{-0.51}$	r_{drag}	147.362	$147.40^{+0.48}_{-0.47}$ (-0.7σ)	χ_{plik}^2	2341.7	2356.5 $(\nu: 17.1)$ $(+286.3\sigma)$
c_{100}	0.99971	$0.9997^{+0.0013}_{-0.0012}$ $(+0.1\sigma)$	k_{D}	0.14071	$0.14065^{+0.00056}_{-0.00055}$ $(+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.000	0.029 $(\nu: 0.0)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$100\theta_{\mathrm{D}}$	0.160604	$0.16065^{+0.00034}_{-0.00034}$ $(+0.1\sigma)$	χ_{MGS}^2	1.68	1.74 $(\nu: 0.1)$
H_0	68.17	$68.15^{+0.95}_{-0.96}$ (-0.6σ)	z_{eq}	3364.7	3364^{+46}_{-46} $(+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.53	3.98 $(\nu: 0.3)$
Ω_{Λ}	0.6956	$0.695^{+0.012}_{-0.013}$ (-0.6σ)	k_{eq}	0.010270	$0.01027^{+0.00014}_{-0.00014}$ $(+0.7\sigma)$	χ_{prior}^2	1.6	11.6 $(\nu: 10.1)$ $(+1.3\sigma)$
Ω_{m}	0.3044	$0.305^{+0.013}_{-0.012}$ $(+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	0.8207	$0.8207^{+0.0090}_{-0.0088}$ (-0.7σ)	χ_{CMB}^2	2769.6	2786.3 $(\nu: 17.1)$ $(+277.8\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14145	$0.1414^{+0.0019}_{-0.0019}$ $(+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.45310	$0.4532^{+0.0046}_{-0.0045}$ (-0.7σ)	χ_{BAO}^2	5.20	5.75 $(\nu: 0.3)$
$\Omega_{\mathrm{m}}h^3$	0.09642	$0.09637^{+0.00057}_{-0.00055}$ (-0.0σ)	$H(0.15)$	73.38	$73.36^{+0.82}_{-0.83}$ (-0.6σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2776.44$; $\Delta\chi_{\mathrm{eff}}^2 = -4.26$; $\bar{\chi}_{\mathrm{eff}}^2 = 2803.67$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -3.17$; $R - 1 = 0.02408$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.68 (Δ 0.46) DR12BAO: 3.53 (Δ -0.89) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 9.99 (Δ 1.26) small_100x143_offlike5_EE_Aplanck 395.70 (Δ -0.83) commander_dx12_v3.2_29: 22.25 (Δ -0.64) plik_rd12_HM_v22b_TTTEE: 2341.65 (Δ -3.67)

3.55 base_Alens_plikHM_TTTEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02252^{+0.00033}_{-0.00032} \quad (-0.3\sigma)$	$\Omega_{\text{m}}h^3$	$0.09637^{+0.00057}_{-0.00056} \quad (-0.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.4533^{+0.0066}_{-0.0066} \quad (-0.6\sigma)$
$\Omega_{\text{c}}h^2$	$0.1182^{+0.0030}_{-0.0029} \quad (+0.6\sigma)$	σ_8	$0.802^{+0.015}_{-0.014} \quad (+0.7\sigma)$	$H(0.15)$	$73.4^{+1.2}_{-1.2} \quad (-0.6\sigma)$
$100\theta_{\text{MC}}$	$1.04111^{+0.00062}_{-0.00063} \quad (-0.5\sigma)$	S_8	$0.808^{+0.036}_{-0.036} \quad (+0.7\sigma)$	$D_{\text{M}}(0.15)$	$636^{+12}_{-11} \quad (+0.6\sigma)$
τ	$0.0526^{+0.011}_{-0.0093} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.443^{+0.020}_{-0.019} \quad (+0.7\sigma)$	$H(0.38)$	$83.38^{+0.88}_{-0.85} \quad (-0.6\sigma)$
A_{L}	$1.065^{+0.079}_{-0.073} \quad (-1.9\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.596^{+0.018}_{-0.018} \quad (+0.7\sigma)$	$D_{\text{M}}(0.38)$	$1520^{+23}_{-23} \quad (+0.6\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.035^{+0.026}_{-0.023} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.972^{+0.025}_{-0.025} \quad (+0.7\sigma)$	$H(0.51)$	$90.02^{+0.70}_{-0.67} \quad (-0.6\sigma)$
n_{s}	$0.9698^{+0.0095}_{-0.0097} \quad (-0.6\sigma)$	$r_{\text{drag}}h$	$100.5^{+2.4}_{-2.3} \quad (-0.6\sigma)$	$D_{\text{M}}(0.51)$	$1970^{+27}_{-27} \quad (+0.6\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.482^{+0.058}_{-0.057} \quad (-2.0\sigma)$	$H(0.61)$	$95.59^{+0.57}_{-0.54} \quad (-0.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (+0.2\sigma)$	z_{re}	$< 8.49 \quad (+0.4\sigma)$	$D_{\text{M}}(0.61)$	$2293^{+29}_{-29} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}$	$2.081^{+0.054}_{-0.048} \quad (+0.5\sigma)$	$H(2.33)$	$235.5^{+1.8}_{-1.7} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.7} \quad (+0.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.873^{+0.024}_{-0.023} \quad (+0.4\sigma)$	$D_{\text{M}}(2.33)$	$5750^{+24}_{-25} \quad (+0.5\sigma)$
A_{100}^{PS}	$255^{+60}_{-50} \quad (+0.2\sigma)$	D_{40}	$1219^{+27}_{-27} \quad (+0.6\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.018}_{-0.018} \quad (+0.7\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (+0.3\sigma)$	D_{220}	$5734^{+77}_{-75} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.012}_{-0.012} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2533^{+27}_{-26} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.015}_{-0.015} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$816.5^{+9.6}_{-9.4} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.010}_{-0.0091} \quad (+0.6\sigma)$
A^{kSZ}	$< 7.68 \quad (+0.2\sigma)$	D_{2000}	$231.4^{+3.1}_{-3.2} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.013}_{-0.013} \quad (+0.7\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	$n_{\text{s},0.002}$	$0.9698^{+0.0095}_{-0.0097} \quad (-0.6\sigma)$	$\sigma_8(0.51)$	$0.6168^{+0.0091}_{-0.0080} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.5} \quad (+0.2\sigma)$	Y_{P}	$0.24545^{+0.00013}_{-0.00013} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.012}_{-0.012} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.3}_{-6.4} \quad (+0.2\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24678^{+0.00013}_{-0.00013} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5871^{+0.0082}_{-0.0077} \quad (+0.5\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.559^{+0.060}_{-0.059} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2963^{+0.0040}_{-0.0036} \quad (+0.4\sigma)$
A_{100}^{dustTE}	$0.113^{+0.076}_{-0.076}$	Age/Gyr	$13.769^{+0.054}_{-0.054} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.3058^{+0.0040}_{-0.0036} \quad (+0.3\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.057}$	z_*	$1089.58^{+0.62}_{-0.60} \quad (+0.5\sigma)$	f_{2000}^{143}	$28^{+5}_{-5} \quad (+0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.17}$	r_*	$144.79^{+0.63}_{-0.63} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.5\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	$1.04128^{+0.00061}_{-0.00062} \quad (-0.5\sigma)$	f_{2000}^{217}	$106.1^{+3.7}_{-3.6} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.905^{+0.058}_{-0.058} \quad (-0.6\sigma)$	χ_{lensing}^2	$10.5 \quad (\nu: 2.4)$
A_{217}^{dustTE}	$2.06^{+0.52}_{-0.53}$	z_{drag}	$1060.15^{+0.62}_{-0.64} \quad (-0.2\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.41^{+0.61}_{-0.60} \quad (-0.6\sigma)$	χ_{lowl}^2	$22.51 \quad (\nu: 0.4) \quad (+0.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{D}	$0.14064^{+0.00062}_{-0.00062} \quad (+0.5\sigma)$	χ_{plik}^2	$2357.1 \quad (\nu: 17.7) \quad (+286.4\sigma)$
H_0	$68.2^{+1.4}_{-1.4} \quad (-0.6\sigma)$	$100\theta_{\text{D}}$	$0.16064^{+0.00037}_{-0.00036} \quad (+0.1\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.3\sigma)$
Ω_{Λ}	$0.696^{+0.018}_{-0.018} \quad (-0.6\sigma)$	z_{eq}	$3362^{+67}_{-66} \quad (+0.6\sigma)$	χ_{CMB}^2	$2786.4 \quad (\nu: 17.2) \quad (+277.8\sigma)$
Ω_{m}	$0.304^{+0.018}_{-0.018} \quad (+0.6\sigma)$	k_{eq}	$0.01026^{+0.00021}_{-0.00020} \quad (+0.6\sigma)$		
$\Omega_{\text{m}}h^2$	$0.1414^{+0.0028}_{-0.0027} \quad (+0.6\sigma)$	$100\theta_{\text{eq}}$	$0.821^{+0.013}_{-0.013} \quad (-0.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2797.97; \Delta\bar{\chi}_{\text{eff}}^2 = -2.54; R - 1 = 0.02423$$

3.56 base_Alens_plikHM_TTTEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00028}_{-0.00028} \quad (-0.3\sigma)$	σ_8	$0.803^{+0.013}_{-0.012} \quad (+0.7\sigma)$	$D_M(0.15)$	$636.6^{+8.2}_{-8.0} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0021}_{-0.0021} \quad (+0.6\sigma)$	S_8	$0.809^{+0.025}_{-0.026} \quad (+0.7\sigma)$	$H(0.38)$	$83.36^{+0.62}_{-0.62} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04110^{+0.00057}_{-0.00058} \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.014}_{-0.014} \quad (+0.7\sigma)$	$D_M(0.38)$	$1520^{+17}_{-16} \quad (+0.6\sigma)$
τ	$0.0526^{+0.011}_{-0.0093} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.596^{+0.013}_{-0.014} \quad (+0.7\sigma)$	$H(0.51)$	$90.01^{+0.50}_{-0.49} \quad (-0.6\sigma)$
A_L	$1.064^{+0.067}_{-0.064} \quad (-1.9\sigma)$	$\sigma_8/h^{0.5}$	$0.972^{+0.019}_{-0.020} \quad (+0.7\sigma)$	$D_M(0.51)$	$1970^{+19}_{-19} \quad (+0.6\sigma)$
$\ln(10^{10} A_s)$	$3.036^{+0.026}_{-0.023} \quad (+0.5\sigma)$	$r_{drag} h$	$100.5^{+1.7}_{-1.6} \quad (-0.7\sigma)$	$H(0.61)$	$95.58^{+0.42}_{-0.40} \quad (-0.6\sigma)$
n_s	$0.9696^{+0.0077}_{-0.0078} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.482^{+0.058}_{-0.055} \quad (-2.0\sigma)$	$D_M(0.61)$	$2293^{+21}_{-20} \quad (+0.6\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0048} \quad (+0.0\sigma)$	z_{re}	$< 8.49 \quad (+0.4\sigma)$	$H(2.33)$	$235.6^{+1.2}_{-1.2} \quad (+0.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_s$	$2.082^{+0.054}_{-0.047} \quad (+0.5\sigma)$	$D_M(2.33)$	$5751^{+19}_{-19} \quad (+0.5\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.874^{+0.022}_{-0.021} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.013}_{-0.013} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.8} \quad (-0.0\sigma)$	D_{40}	$1219^{+24}_{-24} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.011}_{-0.010} \quad (+0.7\sigma)$
A_{100}^{PS}	$255^{+50}_{-50} \quad (+0.2\sigma)$	D_{220}	$5735^{+74}_{-73} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.011}_{-0.011} \quad (+0.7\sigma)$
A_{143}^{PS}	$44^{+10}_{-10} \quad (+0.3\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6589^{+0.0093}_{-0.0086} \quad (+0.6\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{1420}	$816.5^{+9.6}_{-9.3} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4671^{+0.0098}_{-0.010} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.0}_{-3.1} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.6169^{+0.0085}_{-0.0078} \quad (+0.6\sigma)$
A^{kSZ}	$< 7.74 \quad (+0.2\sigma)$	$n_{s,0.002}$	$0.9696^{+0.0077}_{-0.0078} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.4628^{+0.0091}_{-0.0091} \quad (+0.7\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	Y_P	$0.24545^{+0.00011}_{-0.00011} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5872^{+0.0080}_{-0.0073} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24677^{+0.00011}_{-0.00011} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2964^{+0.0039}_{-0.0036} \quad (+0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.4}_{-6.5} \quad (+0.2\sigma)$	$10^5 D/H$	$2.560^{+0.051}_{-0.051} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3059^{+0.0040}_{-0.0036} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (-0.0\sigma)$	Age/Gyr	$13.770^{+0.042}_{-0.043} \quad (+0.5\sigma)$	f_{2000}^{143}	$28^{+5}_{-5} \quad (+0.5\sigma)$
A_{100}^{dustTE}	$0.113^{+0.074}_{-0.075}$	z_*	$1089.59^{+0.47}_{-0.46} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.5\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.134^{+0.058}_{-0.058}$	r_*	$144.78^{+0.47}_{-0.46} \quad (-0.7\sigma)$	f_{2000}^{217}	$106.2^{+3.6}_{-3.5} \quad (+0.5\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.04128^{+0.00057}_{-0.00057} \quad (-0.5\sigma)$	$\chi_{lensing}^2$	$10.5 \quad (\nu: 2.5)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	$13.904^{+0.046}_{-0.045} \quad (-0.6\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.15}$	z_{drag}	$1060.14^{+0.60}_{-0.59} \quad (-0.2\sigma)$	χ_{lowl}^2	$22.52 \quad (\nu: 0.3) \quad (+0.6\sigma)$
A_{217}^{dustTE}	$2.06^{+0.52}_{-0.52}$	r_{drag}	$147.40^{+0.48}_{-0.47} \quad (-0.6\sigma)$	χ_{plik}^2	$2356.5 \quad (\nu: 17.0) \quad (+286.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14065^{+0.00056}_{-0.00056} \quad (+0.5\sigma)$	χ_{6DF}^2	$0.030 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_D$	$0.16065^{+0.00034}_{-0.00034} \quad (+0.1\sigma)$	χ_{MGS}^2	$1.75 \quad (\nu: 0.1)$
H_0	$68.16^{+0.96}_{-0.96} \quad (-0.6\sigma)$	z_{eq}	$3363^{+46}_{-47} \quad (+0.7\sigma)$	$\chi_{DR12BAO}^2$	$3.98 \quad (\nu: 0.3)$
Ω_Λ	$0.696^{+0.012}_{-0.013} \quad (-0.6\sigma)$	k_{eq}	$0.01027^{+0.00014}_{-0.00014} \quad (+0.7\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.1) \quad (+1.3\sigma)$
Ω_m	$0.304^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$100\theta_{eq}$	$0.8209^{+0.0091}_{-0.0088} \quad (-0.7\sigma)$	χ_{CMB}^2	$2785.9 \quad (\nu: 16.5) \quad (+277.7\sigma)$
$\Omega_m h^2$	$0.1414^{+0.0019}_{-0.0020} \quad (+0.7\sigma)$	$100\theta_{s,eq}$	$0.4532^{+0.0046}_{-0.0045} \quad (-0.7\sigma)$	χ_{BAO}^2	$5.75 \quad (\nu: 0.3)$
$\Omega_m h^3$	$0.09637^{+0.00057}_{-0.00055} \quad (-0.0\sigma)$	$H(0.15)$	$73.37^{+0.83}_{-0.83} \quad (-0.6\sigma)$		

$$\bar{\chi}_{eff}^2 = 2803.19; \Delta \bar{\chi}_{eff}^2 = -3.53; R - 1 = 0.03248$$

3.57 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022439	$0.02243^{+0.00036}_{-0.00035}$ (-0.6σ)	S_8	0.8055	$0.805^{+0.038}_{-0.037}$ $(+0.6\sigma)$	$H(0.15)$	73.34	$73.3^{+1.2}_{-1.2}$ (-0.7σ)
$\Omega_c h^2$	0.11807	$0.1182^{+0.0031}_{-0.0031}$ $(+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4412	$0.441^{+0.021}_{-0.020}$ $(+0.6\sigma)$	$D_M(0.15)$	636.8	637^{+12}_{-12} $(+0.7\sigma)$
$100\theta_{MC}$	1.04105	$1.04104^{+0.00062}_{-0.00064}$ (-0.7σ)	$\sigma_8 \Omega_m^{0.25}$	0.5941	$0.594^{+0.019}_{-0.020}$ $(+0.6\sigma)$	$H(0.38)$	83.32	$83.29^{+0.91}_{-0.88}$ (-0.7σ)
τ	0.0504	$0.049^{+0.015}_{-0.017}$ (-0.1σ)	$\sigma_8/h^{0.5}$	0.9693	$0.969^{+0.027}_{-0.028}$ $(+0.5\sigma)$	$D_M(0.38)$	1520.5	1521^{+24}_{-24} $(+0.7\sigma)$
A_L	1.062	$1.064^{+0.084}_{-0.080}$ (-1.9σ)	$r_{drag}h$	100.52	$100.5^{+2.5}_{-2.4}$ (-0.7σ)	$H(0.51)$	89.96	$89.94^{+0.73}_{-0.70}$ (-0.7σ)
$\ln(10^{10} A_s)$	3.0296	$3.027^{+0.032}_{-0.035}$ (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.472	$2.471^{+0.060}_{-0.059}$ (-2.2σ)	$D_M(0.51)$	1970.8	1972^{+28}_{-28} $(+0.7\sigma)$
n_s	0.9700	$0.9695^{+0.0097}_{-0.010}$ (-0.7σ)	z_{re}	7.24	$7.1^{+1.6}_{-1.7}$ (-0.0σ)	$H(0.61)$	95.52	$95.51^{+0.59}_{-0.56}$ (-0.7σ)
y_{cal}	1.00004	$1.0000^{+0.0048}_{-0.0048}$ (-0.0σ)	$10^9 A_s$	2.069	$2.063^{+0.066}_{-0.070}$ (-0.0σ)	$D_M(0.61)$	2294.3	2295^{+30}_{-31} $(+0.7\sigma)$
A_{100}^{PS}	240.0	237^{+50}_{-50} (-0.5σ)	$10^9 A_s e^{-2\tau}$	1.8704	$1.871^{+0.024}_{-0.024}$ $(+0.2\sigma)$	$H(2.33)$	235.37	$235.4^{+1.8}_{-1.8}$ $(+0.6\sigma)$
A_{143}^{PS}	36.7	38^{+20}_{-20} (-0.5σ)	D_{40}	1215.4	1216^{+29}_{-27} $(+0.4\sigma)$	$D_M(2.33)$	5754.4	5755^{+25}_{-26} $(+0.7\sigma)$
A_{217}^{PS}	105.3	103^{+20}_{-30} (-1.2σ)	D_{220}	5721	5721^{+77}_{-74} (-0.4σ)	$f\sigma_8(0.15)$	0.4463	$0.446^{+0.019}_{-0.019}$ $(+0.6\sigma)$
A_{217}^{CIB}	37.5	39^{+10}_{-10} (-0.9σ)	D_{810}	2530.1	2530^{+27}_{-27} $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7401	$0.739^{+0.014}_{-0.015}$ $(+0.3\sigma)$
A_{143}^{tSZ}	3.47	< 7.54 (-0.9σ)	D_{1420}	815.2	$815.0^{+9.4}_{-9.4}$ $(+0.1\sigma)$	$f\sigma_8(0.38)$	0.4661	$0.466^{+0.016}_{-0.016}$ $(+0.6\sigma)$
$r_{143 \times 217}^{PS}$	0.676	$0.66^{+0.25}_{-0.26}$	D_{2000}	230.79	$230.6^{+3.2}_{-3.1}$ (-0.8σ)	$\sigma_8(0.38)$	0.6569	$0.656^{+0.012}_{-0.013}$ $(+0.2\sigma)$
$r_{143 \times 217}^{CIB}$	0.41	—	$n_{s,0.002}$	0.9700	$0.9695^{+0.0097}_{-0.010}$ (-0.7σ)	$f\sigma_8(0.51)$	0.4656	$0.465^{+0.014}_{-0.014}$ $(+0.5\sigma)$
$\xi^{tSZ \times CIB}$	0.36	—	Y_P	0.245422	$0.24542^{+0.00014}_{-0.00014}$ (-0.6σ)	$\sigma_8(0.51)$	0.6150	$0.614^{+0.011}_{-0.012}$ $(+0.2\sigma)$
A^{kSZ}	4.7	—	Y_P^{BBN}	0.246749	$0.24674^{+0.00014}_{-0.00014}$ (-0.6σ)	$f\sigma_8(0.61)$	0.4612	$0.461^{+0.013}_{-0.013}$ $(+0.5\sigma)$
A_{100}^{dust}	1.019	$1.02^{+0.38}_{-0.38}$	$10^5 D/H$	2.573	$2.576^{+0.065}_{-0.065}$ $(+0.6\sigma)$	$\sigma_8(0.61)$	0.5854	$0.5846^{+0.0099}_{-0.011}$ $(+0.1\sigma)$
A_{143}^{dust}	0.957	$0.96^{+0.35}_{-0.35}$	Age/Gyr	13.778	$13.780^{+0.056}_{-0.058}$ $(+0.7\sigma)$	$f\sigma_8(2.33)$	0.2955	$0.2950^{+0.0049}_{-0.0053}$ (-0.0σ)
A_{217}^{dust}	0.971	$0.98^{+0.20}_{-0.20}$	z_*	1089.66	$1089.69^{+0.64}_{-0.65}$ $(+0.7\sigma)$	$\sigma_8(2.33)$	0.3050	$0.3045^{+0.0049}_{-0.0054}$ (-0.2σ)
$A_{143 \times 217}^{dust}$	1.052	$1.02^{+0.32}_{-0.32}$	r_*	144.88	$144.87^{+0.67}_{-0.66}$ (-0.5σ)	f_{2000}^{143}	28.5	29^{+6}_{-6} $(+0.6\sigma)$
c_{100}	0.99749	$0.9975^{+0.0020}_{-0.0021}$ (-3.4σ)	$100\theta_*$	1.04123	$1.04122^{+0.00061}_{-0.00063}$ (-0.7σ)	f_{2000}^{217}	105.95	$106.1^{+3.9}_{-3.9}$ $(+0.5\sigma)$
c_{217}	1.00069	$1.0010^{+0.0031}_{-0.0030}$ $(+4.6\sigma)$	$D_M(z_*)/\text{Gpc}$	13.914	$13.913^{+0.062}_{-0.060}$ (-0.4σ)	$f_{2000}^{143 \times 217}$	31.29	31^{+4}_{-4} $(+0.6\sigma)$
c_{TE}	0.9949	$0.995^{+0.010}_{-0.0097}$	z_{drag}	1059.97	$1059.94^{+0.72}_{-0.69}$ (-0.5σ)	$\chi^2_{lensing}$	9.02	$9.8 (\nu: 1.4)$
c_{EE}	0.9915	$0.9917^{+0.0096}_{-0.0096}$	r_{drag}	147.53	$147.52^{+0.66}_{-0.64}$ (-0.4σ)	χ^2_{small}	395.66	$396.8 (\nu: 1.1)$ (-0.0σ)
H_0	68.14	$68.1^{+1.4}_{-1.4}$ (-0.7σ)	k_D	0.14046	$0.14046^{+0.00067}_{-0.00067}$ $(+0.2\sigma)$	χ^2_{lowl}	22.23	$22.37 (\nu: 0.4)$ $(+0.5\sigma)$
Ω_Λ	0.6960	$0.695^{+0.018}_{-0.019}$ (-0.7σ)	$100\theta_D$	0.160745	$0.16076^{+0.00040}_{-0.00040}$ $(+0.4\sigma)$	$\chi^2_{CamSpec}$	11498.6	$11513.3 (\nu: 16.1)$
Ω_m	0.3040	$0.305^{+0.019}_{-0.018}$ $(+0.7\sigma)$	z_{eq}	3358	3360^{+69}_{-68} $(+0.6\sigma)$	χ^2_{prior}	2.1	$7.7 (\nu: 5.5)$ $(+0.2\sigma)$
$\Omega_m h^2$	0.14115	$0.1412^{+0.0029}_{-0.0028}$ $(+0.6\sigma)$	k_{eq}	0.010248	$0.01025^{+0.00021}_{-0.00021}$ $(+0.6\sigma)$	χ^2_{CMB}	11925.5	$11942.2 (\nu: 17.0)$ $(+1866.9\sigma)$
$\Omega_m h^3$	0.09618	$0.09616^{+0.00062}_{-0.00062}$ (-0.4σ)	$100\theta_{eq}$	0.8216	$0.821^{+0.013}_{-0.013}$ (-0.6σ)			
σ_8	0.8001	$0.799^{+0.016}_{-0.018}$ $(+0.4\sigma)$	$100\theta_{s,eq}$	0.4537	$0.4535^{+0.0068}_{-0.0067}$ (-0.6σ)			

Best-fit $\chi^2_{eff} = 11927.65$; $\Delta\chi^2_{eff} = -2.01$; $\bar{\chi}^2_{eff} = 11949.88$; $\Delta\bar{\chi}^2_{eff} = -1.56$; $R - 1 = 0.01480$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.02 (Δ 0.19) small_100x143_offlike5_EE_Aplanck_B: 395.66 (Δ -0.21) commander_dx12.v3.2.29: 22.23 (Δ -0.99) CamSpec like_10.7HM_1400_unified: 11498.60 (Δ -1.05)

3.58 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00032}_{-0.00030} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.015}_{-0.015} \quad (+0.6\sigma)$	$H(0.38)$	$83.29^{+0.64}_{-0.61} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0021}_{-0.0021} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.594^{+0.015}_{-0.016} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+16}_{-17} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00057}_{-0.00057} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.969^{+0.022}_{-0.023} \quad (+0.5\sigma)$	$H(0.51)$	$89.94^{+0.51}_{-0.49} \quad (-0.7\sigma)$
τ	$0.049^{+0.015}_{-0.017} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$100.4^{+1.7}_{-1.6} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+19}_{-20} \quad (+0.7\sigma)$
A_{L}	$1.064^{+0.074}_{-0.071} \quad (-1.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.471^{+0.060}_{-0.059} \quad (-2.2\sigma)$	$H(0.61)$	$95.50^{+0.43}_{-0.41} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.027^{+0.033}_{-0.034} \quad (-0.0\sigma)$	z_{re}	$7.1^{+1.6}_{-1.7} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+21}_{-21} \quad (+0.7\sigma)$
n_{s}	$0.9695^{+0.0082}_{-0.0083} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.063^{+0.068}_{-0.070} \quad (-0.0\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.3} \quad (+0.6\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.022}_{-0.022} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+19}_{-20} \quad (+0.7\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.5\sigma)$	D_{40}	$1216^{+26}_{-24} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.014}_{-0.015} \quad (+0.6\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-0.5\sigma)$	D_{220}	$5720^{+77}_{-73} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.013}_{-0.014} \quad (+0.3\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2530^{+27}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.012}_{-0.013} \quad (+0.6\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-0.9\sigma)$	D_{1420}	$814.9^{+9.6}_{-9.6} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.012}_{-0.012} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.9\sigma)$	D_{2000}	$230.6^{+3.1}_{-3.1} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.011}_{-0.012} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9695^{+0.0082}_{-0.0083} \quad (-0.7\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00012}_{-0.00012} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.010}_{-0.011} \quad (+0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00012}_{-0.00012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.5846^{+0.0099}_{-0.011} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.576^{+0.057}_{-0.057} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.2950^{+0.0050}_{-0.0052} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.40}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.781^{+0.044}_{-0.045} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3045^{+0.0050}_{-0.0054} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	z_*	$1089.69^{+0.48}_{-0.51} \quad (+0.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (+0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.87^{+0.50}_{-0.50} \quad (-0.5\sigma)$	f_{2000}^{217}	$106.1^{+3.9}_{-3.8} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	$100\theta_*$	$1.04122^{+0.00056}_{-0.00057} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.6\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.913^{+0.047}_{-0.047} \quad (-0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.8 \quad (\nu: 1.4)$
c_{217}	$1.0010^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.93^{+0.65}_{-0.64} \quad (-0.5\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.1) \quad (-0.0\sigma)$
c_{TE}	$0.995^{+0.010}_{-0.0096}$	r_{drag}	$147.52^{+0.51}_{-0.51} \quad (-0.4\sigma)$	χ_{lowl}^2	$22.35 \quad (\nu: 0.3) \quad (+0.5\sigma)$
c_{EE}	$0.9917^{+0.0098}_{-0.0098}$	k_{D}	$0.14046^{+0.00062}_{-0.00061} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11512.7 \quad (\nu: 15.3)$
H_0	$68.09^{+0.99}_{-0.96} \quad (-0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00038}_{-0.00038} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.031 \quad (\nu: 0.0)$
Ω_{Λ}	$0.695^{+0.013}_{-0.013} \quad (-0.7\sigma)$	z_{eq}	$3360^{+48}_{-48} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.74 \quad (\nu: 0.1)$
Ω_{m}	$0.305^{+0.013}_{-0.013} \quad (+0.7\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00015} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.99 \quad (\nu: 0.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0020}_{-0.0020} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8213^{+0.0093}_{-0.0091} \quad (-0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.5) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09616^{+0.00061}_{-0.00061} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4535^{+0.0048}_{-0.0047} \quad (-0.6\sigma)$	χ_{CMB}^2	$11941.7 \quad (\nu: 16.6) \quad (+1866.9\sigma)$
σ_8	$0.799^{+0.015}_{-0.016} \quad (+0.4\sigma)$	$H(0.15)$	$73.30^{+0.86}_{-0.83} \quad (-0.7\sigma)$	χ_{BAO}^2	$5.76 \quad (\nu: 0.3)$
S_8	$0.805^{+0.028}_{-0.028} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.2^{+8.2}_{-8.3} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11955.09; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.31; R - 1 = 0.01872$$

3.59 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02243^{+0.00036}_{-0.00035} \quad (-0.6\sigma)$	S_8	$0.808^{+0.037}_{-0.036} \quad (+0.7\sigma)$	$H(0.15)$	$73.3^{+1.2}_{-1.2} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0031}_{-0.0031} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.020}_{-0.020} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00063}_{-0.00065} \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.595^{+0.019}_{-0.018} \quad (+0.7\sigma)$	$H(0.38)$	$83.30^{+0.92}_{-0.90} \quad (-0.7\sigma)$
τ	$0.0522^{+0.011}_{-0.0091} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.971^{+0.026}_{-0.025} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+24}_{-24} \quad (+0.7\sigma)$
A_{L}	$1.058^{+0.080}_{-0.077} \quad (-1.9\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.5}_{-2.5} \quad (-0.7\sigma)$	$H(0.51)$	$89.95^{+0.74}_{-0.71} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.025}_{-0.023} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.471^{+0.060}_{-0.060} \quad (-2.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+29}_{-28} \quad (+0.7\sigma)$
n_{s}	$0.9697^{+0.0097}_{-0.010} \quad (-0.6\sigma)$	z_{re}	$< 8.45 \quad (+0.3\sigma)$	$H(0.61)$	$95.51^{+0.60}_{-0.57} \quad (-0.7\sigma)$
y_{cal}	$0.99998^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.076^{+0.052}_{-0.047} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+31}_{-31} \quad (+0.7\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.024}_{-0.024} \quad (+0.2\sigma)$	$H(2.33)$	$235.4^{+1.8}_{-1.8} \quad (+0.5\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1217^{+29}_{-27} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+26}_{-27} \quad (+0.7\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{220}	$5720^{+78}_{-74} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.019}_{-0.018} \quad (+0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-0.9\sigma)$	D_{810}	$2530^{+27}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.013}_{-0.012} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.9\sigma)$	D_{1420}	$814.9^{+9.5}_{-9.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.015}_{-0.015} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	D_{2000}	$230.7^{+3.2}_{-3.2} \quad (-0.8\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.010}_{-0.0089} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9697^{+0.0097}_{-0.010} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.013}_{-0.013} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24542^{+0.00014}_{-0.00014} \quad (-0.6\sigma)$	$\sigma_8(0.51)$	$0.6160^{+0.0088}_{-0.0082} \quad (+0.5\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00014}_{-0.00014} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.012}_{-0.012} \quad (+0.7\sigma)$
A_{100}^{dust}	$1.02^{+0.37}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.576^{+0.066}_{-0.065} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.5864^{+0.0081}_{-0.0076} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.780^{+0.057}_{-0.058} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2959^{+0.0039}_{-0.0036} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.69^{+0.65}_{-0.66} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3054^{+0.0039}_{-0.0035} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	r_*	$144.87^{+0.68}_{-0.66} \quad (-0.5\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (+0.6\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04122^{+0.00062}_{-0.00063} \quad (-0.7\sigma)$	f_{2000}^{217}	$106.1^{+3.9}_{-4.0} \quad (+0.5\sigma)$
c_{217}	$1.0010^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.914^{+0.063}_{-0.060} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.5\sigma)$
c_{TE}	$0.995^{+0.010}_{-0.0097}$	z_{drag}	$1059.93^{+0.72}_{-0.69} \quad (-0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.8 \quad (\nu: 1.5)$
c_{EE}	$0.9917^{+0.0096}_{-0.0096}$	r_{drag}	$147.52^{+0.66}_{-0.64} \quad (-0.4\sigma)$	χ_{small}^2	$396.31 \quad (\nu: 0.5) \quad (-0.3\sigma)$
H_0	$68.1^{+1.4}_{-1.4} \quad (-0.7\sigma)$	k_{D}	$0.14045^{+0.00068}_{-0.00067} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.43 \quad (\nu: 0.5) \quad (+0.5\sigma)$
Ω_{Λ}	$0.695^{+0.018}_{-0.019} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00040}_{-0.00041} \quad (+0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.3 \quad (\nu: 16.5)$
Ω_{m}	$0.305^{+0.019}_{-0.018} \quad (+0.6\sigma)$	z_{eq}	$3359^{+69}_{-69} \quad (+0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.5) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0029}_{-0.0029} \quad (+0.6\sigma)$	k_{eq}	$0.01025^{+0.00021}_{-0.00021} \quad (+0.6\sigma)$	χ_{CMB}^2	$11941.9 \quad (\nu: 17.0) \quad (+1866.9\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09616^{+0.00063}_{-0.00063} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.014}_{-0.013} \quad (-0.6\sigma)$		
σ_8	$0.802^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4536^{+0.0069}_{-0.0068} \quad (-0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.57; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.67; R - 1 = 0.01602$$

3.60 base_Alens_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00032}_{-0.00031} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.015}_{-0.014} \quad (+0.7\sigma)$	$H(0.38)$	$83.29^{+0.63}_{-0.61} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0021}_{-0.0021} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.596^{+0.014}_{-0.014} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+16}_{-17} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00057}_{-0.00058} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.972^{+0.021}_{-0.019} \quad (+0.7\sigma)$	$H(0.51)$	$89.94^{+0.51}_{-0.49} \quad (-0.7\sigma)$
τ	$0.0521^{+0.011}_{-0.0090} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+1.7}_{-1.6} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+19}_{-20} \quad (+0.7\sigma)$
A_{L}	$1.057^{+0.070}_{-0.068} \quad (-1.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.471^{+0.060}_{-0.059} \quad (-2.2\sigma)$	$H(0.61)$	$95.50^{+0.43}_{-0.41} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.025}_{-0.022} \quad (+0.3\sigma)$	z_{re}	$< 8.44 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+21}_{-21} \quad (+0.7\sigma)$
n_{s}	$0.9696^{+0.0082}_{-0.0082} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.076^{+0.053}_{-0.046} \quad (+0.3\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.3} \quad (+0.5\sigma)$
y_{cal}	$1.0000^{+0.0050}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.022}_{-0.022} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+19}_{-20} \quad (+0.7\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.5\sigma)$	D_{40}	$1217^{+26}_{-24} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.014}_{-0.014} \quad (+0.7\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-0.5\sigma)$	D_{220}	$5720^{+77}_{-72} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.012}_{-0.0099} \quad (+0.6\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2530^{+27}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.012}_{-0.011} \quad (+0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-0.9\sigma)$	D_{1420}	$814.9^{+9.6}_{-9.8} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6580^{+0.0093}_{-0.0085} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.9\sigma)$	D_{2000}	$230.6^{+3.1}_{-3.1} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.010}_{-0.010} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9696^{+0.0082}_{-0.0082} \quad (-0.6\sigma)$	$\sigma_8(0.51)$	$0.6161^{+0.0085}_{-0.0077} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00012}_{-0.00012} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.4623^{+0.0095}_{-0.0091} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00012}_{-0.00012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.5864^{+0.0080}_{-0.0072} \quad (+0.4\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.576^{+0.057}_{-0.057} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.2959^{+0.0039}_{-0.0035} \quad (+0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.40}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.781^{+0.044}_{-0.045} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3054^{+0.0039}_{-0.0035} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	z_*	$1089.69^{+0.49}_{-0.51} \quad (+0.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (+0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.87^{+0.50}_{-0.49} \quad (-0.5\sigma)$	f_{2000}^{217}	$106.1^{+3.9}_{-3.8} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	$100\theta_*$	$1.04122^{+0.00056}_{-0.00057} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.5\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.913^{+0.047}_{-0.047} \quad (-0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.8 \quad (\nu: 1.5)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.93^{+0.66}_{-0.68} \quad (-0.5\sigma)$	χ_{small}^2	$396.31 \quad (\nu: 0.5) \quad (-0.3\sigma)$
c_{TE}	$0.9951^{+0.0099}_{-0.0094}$	r_{drag}	$147.52^{+0.51}_{-0.51} \quad (-0.4\sigma)$	χ_{lowl}^2	$22.41 \quad (\nu: 0.3) \quad (+0.5\sigma)$
c_{EE}	$0.9917^{+0.0098}_{-0.0098}$	k_{D}	$0.14045^{+0.00063}_{-0.00061} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11512.7 \quad (\nu: 15.6)$
H_0	$68.09^{+0.99}_{-0.96} \quad (-0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00038}_{-0.00038} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.031 \quad (\nu: 0.0)$
Ω_{Λ}	$0.695^{+0.013}_{-0.013} \quad (-0.7\sigma)$	z_{eq}	$3359^{+48}_{-48} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.74 \quad (\nu: 0.1)$
Ω_{m}	$0.305^{+0.013}_{-0.013} \quad (+0.7\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00015} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.99 \quad (\nu: 0.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0020}_{-0.0020} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8213^{+0.0093}_{-0.0091} \quad (-0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.6) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09616^{+0.00062}_{-0.00063} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4535^{+0.0048}_{-0.0047} \quad (-0.6\sigma)$	χ_{CMB}^2	$11941.3 \quad (\nu: 16.5) \quad (+1866.8\sigma)$
σ_8	$0.802^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$H(0.15)$	$73.30^{+0.85}_{-0.83} \quad (-0.7\sigma)$	χ_{BAO}^2	$5.76 \quad (\nu: 0.3)$
S_8	$0.808^{+0.027}_{-0.026} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.2^{+8.1}_{-8.3} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11954.75; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.51; R - 1 = 0.02132$$

3.61 base_Alens_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02267	$0.02259^{+0.00057}_{-0.00057} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9570	$0.956^{+0.041}_{-0.041} \quad (-0.1\sigma)$	$D_M(0.15)$	628.9	$630^{+20}_{-19} \quad (-0.0\sigma)$
$\Omega_c h^2$	0.11638	$0.1165^{+0.0050}_{-0.0048} \quad (-0.0\sigma)$	$r_{\text{drag}} h$	102.03	$101.9^{+4.1}_{-4.0} \quad (+0.0\sigma)$	$H(0.38)$	83.95	$83.8^{+1.6}_{-1.5} \quad (+0.0\sigma)$
$100\theta_{\text{MC}}$	1.04145	$1.0414^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.656	$2.63^{+0.15}_{-0.16} \quad (-0.1\sigma)$	$D_M(0.38)$	1504.4	$1507^{+40}_{-39} \quad (-0.0\sigma)$
τ	0.0517	$0.050^{+0.016}_{-0.018} \quad (+0.0\sigma)$	z_{re}	7.30	$7.1^{+1.7}_{-1.8} \quad (+0.0\sigma)$	$H(0.51)$	90.48	$90.4^{+1.3}_{-1.2} \quad (+0.0\sigma)$
A_L	1.260	$1.24^{+0.20}_{-0.19} \quad (-0.1\sigma)$	$10^9 A_s$	2.068	$2.061^{+0.070}_{-0.078} \quad (-0.1\sigma)$	$D_M(0.51)$	1951.8	$1955^{+47}_{-46} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	3.0294	$3.025^{+0.034}_{-0.038} \quad (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8652	$1.864^{+0.029}_{-0.028} \quad (-0.2\sigma)$	$H(0.61)$	95.95	$95.9^{+1.0}_{-0.98} \quad (-0.0\sigma)$
n_s	0.9761	$0.974^{+0.014}_{-0.014} \quad (-0.1\sigma)$	D_{40}	1204.1	$1208^{+35}_{-34} \quad (-0.1\sigma)$	$D_M(0.61)$	2274	$2277^{+51}_{-50} \quad (-0.0\sigma)$
y_{cal}	0.99997	$1.0000^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	D_{220}	5732	$5730^{+82}_{-81} \quad (-0.1\sigma)$	$H(2.33)$	234.53	$234.5^{+2.9}_{-2.8} \quad (-0.1\sigma)$
A_{100}^{PS}	226	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{810}	2525.9	$2523^{+28}_{-28} \quad (-0.3\sigma)$	$D_M(2.33)$	5734.8	$5739^{+44}_{-45} \quad (+0.0\sigma)$
A_{143}^{tSZ}	6.42	$4.5^{+3.8}_{-4.3} \quad (-0.6\sigma)$	D_{1420}	814.9	$813^{+10}_{-10} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.4363	$0.436^{+0.030}_{-0.029} \quad (-0.1\sigma)$
A^{kSZ}	0.00	$< 8.43 \quad (+0.5\sigma)$	D_{2000}	232.82	$231.7^{+4.1}_{-4.1} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.7368	$0.735^{+0.018}_{-0.019} \quad (-0.1\sigma)$
A_{100}^{dust}	1.003	$1.01^{+0.38}_{-0.38}$	$n_{s,0.002}$	0.9761	$0.974^{+0.014}_{-0.014} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4584	$0.458^{+0.024}_{-0.024} \quad (-0.1\sigma)$
A_{143}^{power}	7.71	$8.0^{+4.6}_{-4.3}$	Y_P	0.245507	$0.24548^{+0.00025}_{-0.00023} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6552	$0.654^{+0.014}_{-0.015} \quad (-0.1\sigma)$
A_{217}^{power}	6.54	$6.6^{+3.8}_{-3.3}$	Y_P^{BBN}	0.246834	$0.24681^{+0.00025}_{-0.00023} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4592	$0.459^{+0.021}_{-0.021} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{power}}$	3.25	< 5.92	10^5D/H	2.531	$2.55^{+0.11}_{-0.10} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	0.6140	$0.612^{+0.012}_{-0.013} \quad (-0.1\sigma)$
$\gamma_{143}^{\text{power}}$	1.48	$1.34^{+1.1}_{-0.90}$	Age/Gyr	13.735	$13.746^{+0.097}_{-0.098} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4558	$0.455^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$\gamma_{217}^{\text{power}}$	2.38	> 0.443	z_*	1089.23	$1089.4^{+1.1}_{-1.0} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	0.5848	$0.583^{+0.011}_{-0.012} \quad (-0.1\sigma)$
$\gamma_{143 \times 217}^{\text{power}}$	2.17	—	r_*	145.14	$145.2^{+1.0}_{-1.0} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2956	$0.2947^{+0.0053}_{-0.0058} \quad (-0.1\sigma)$
c_{100}	0.99828	$0.9979^{+0.0020}_{-0.0021} \quad (-2.8\sigma)$	$100\theta_*$	1.04160	$1.0416^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	0.3056	$0.3047^{+0.0054}_{-0.0059} \quad (-0.1\sigma)$
c_{217}	0.99823	$0.9992^{+0.0029}_{-0.0026} \quad (+1.7\sigma)$	$D_M(z_*)/\text{Gpc}$	13.934	$13.938^{+0.093}_{-0.095} \quad (+0.1\sigma)$	f_{2000}^{143}	17.4	$19.4^{+6.7}_{-6.3} \quad (-2.2\sigma)$
H_0	69.07	$68.9^{+2.4}_{-2.4} \quad (+0.0\sigma)$	z_{drag}	1060.39	$1060.2^{+1.1}_{-1.1} \quad (-0.1\sigma)$	f_{2000}^{217}	12.96	$13.8^{+4.5}_{-4.4} \quad (-41.0\sigma)$
Ω_Λ	0.7072	$0.705^{+0.028}_{-0.031} \quad (+0.0\sigma)$	r_{drag}	147.72	$147.78^{+0.98}_{-1.0} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	6.07	$7.6^{+4.9}_{-4.7} \quad (-9.3\sigma)$
Ω_m	0.2928	$0.295^{+0.031}_{-0.028} \quad (-0.0\sigma)$	k_D	0.14043	$0.1403^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	χ_{small}^2	395.68	$396.8 \quad (\nu: 1.2) \quad (+0.0\sigma)$
$\Omega_m h^2$	0.13970	$0.1398^{+0.0046}_{-0.0045} \quad (-0.1\sigma)$	$100\theta_D$	0.16054	$0.16065^{+0.00061}_{-0.00058} \quad (+0.1\sigma)$	χ_{lowl}^2	21.40	$21.8 \quad (\nu: 0.6) \quad (-0.0\sigma)$
$\Omega_m h^3$	0.09650	$0.09633^{+0.00097}_{-0.00096} \quad (-0.1\sigma)$	z_{eq}	3323	$3325^{+110}_{-110} \quad (-0.1\sigma)$	χ_{CamSpec}^2	6699.1	$6713.2 \quad (\nu: 13.5)$
σ_8	0.7953	$0.794^{+0.022}_{-0.023} \quad (-0.1\sigma)$	k_{eq}	0.010142	$0.01015^{+0.00034}_{-0.00032} \quad (-0.1\sigma)$	χ_{prior}^2	1.6	$5.1 \quad (\nu: 4.0) \quad (-0.6\sigma)$
S_8	0.786	$0.786^{+0.059}_{-0.057} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	0.8290	$0.829^{+0.022}_{-0.022} \quad (+0.0\sigma)$	χ_{CMB}^2	7116.1	$7131.9 \quad (\nu: 14.7) \quad (+1032.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4304	$0.431^{+0.032}_{-0.031} \quad (-0.1\sigma)$	$100\theta_{s,\text{eq}}$	0.4574	$0.457^{+0.011}_{-0.011} \quad (+0.1\sigma)$			
$\sigma_8 \Omega_m^{0.25}$	0.5851	$0.585^{+0.029}_{-0.029} \quad (-0.1\sigma)$	$H(0.15)$	74.16	$74.0^{+2.1}_{-2.0} \quad (+0.0\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 7117.73$; $\Delta\chi_{\text{eff}}^2 = -7.38$; $\bar{\chi}_{\text{eff}}^2 = 7136.94$; $\Delta\bar{\chi}_{\text{eff}}^2 = -5.26$; $R - 1 = 0.00677$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.68 (Δ -0.11) commander_dx12_v3_2_29: 21.40 (Δ -2.30) CamSpec like_10.7cleaned: 6699.06 (Δ -5.37)

3.62 base_Alens_plikHM_TT

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02262	$0.02251^{+0.00057}_{-0.00057} \quad (-0.3\sigma)$	σ_8	0.848	$0.832^{+0.079}_{-0.070} \quad (+3.3\sigma)$	$100\theta_D$	0.16058	$0.16070^{+0.00061}_{-0.00058} \quad (+0.3\sigma)$
$\Omega_c h^2$	0.1169	$0.1176^{+0.0054}_{-0.0052} \quad (+0.4\sigma)$	S_8	0.842	$0.833^{+0.095}_{-0.090} \quad (+1.5\sigma)$	z_{eq}	3334	$3348^{+120}_{-120} \quad (+0.4\sigma)$
$100\theta_{\text{MC}}$	1.04136	$1.0413^{+0.0011}_{-0.0011} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.461	$0.456^{+0.052}_{-0.049} \quad (+1.5\sigma)$	k_{eq}	0.010174	$0.01022^{+0.00037}_{-0.00036} \quad (+0.4\sigma)$
τ	0.112	$< 0.178 \quad (+4.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.625	$0.616^{+0.063}_{-0.058} \quad (+2.1\sigma)$	$100\theta_{\text{eq}}$	0.8268	$0.824^{+0.023}_{-0.023} \quad (-0.4\sigma)$
A_L	1.100	$1.13^{+0.27}_{-0.25} \quad (-1.2\sigma)$	$\sigma_8/h^{0.5}$	1.022	$1.006^{+0.099}_{-0.091} \quad (+2.4\sigma)$	$100\theta_{\text{s,eq}}$	0.4563	$0.455^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$\ln(10^{10} A_s)$	3.152	$3.11^{+0.18}_{-0.16} \quad (+4.5\sigma)$	$r_{\text{drag}} h$	101.61	$101.0^{+4.3}_{-4.3} \quad (-0.4\sigma)$	$H(0.15)$	73.94	$73.6^{+2.2}_{-2.1} \quad (-0.4\sigma)$
n_s	0.9755	$0.972^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.648	$2.63^{+0.15}_{-0.15} \quad (-0.1\sigma)$	$D_M(0.15)$	631.0	$634^{+21}_{-20} \quad (+0.4\sigma)$
A_{217}^{CIB}	42.7	$45^{+10}_{-10} \quad (+0.1\sigma)$	z_{re}	12.7	$10.5^{+7.6}_{-7.9} \quad (+3.7\sigma)$	$H(0.38)$	83.78	$83.5^{+1.6}_{-1.6} \quad (-0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.999	—	$10^9 A_s$	2.339	$2.25^{+0.43}_{-0.35} \quad (+5.0\sigma)$	$D_M(0.38)$	1508.7	$1515^{+43}_{-42} \quad (+0.4\sigma)$
A_{143}^{tSZ}	6.71	$5.5^{+3.7}_{-3.7} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8686	$1.871^{+0.031}_{-0.031} \quad (+0.3\sigma)$	$H(0.51)$	90.34	$90.2^{+1.3}_{-1.2} \quad (-0.4\sigma)$
A_{100}^{PS}	239	$252^{+60}_{-50} \quad (+0.1\sigma)$	D_{40}	1233	$1235^{+55}_{-50} \quad (+1.6\sigma)$	$D_M(0.51)$	1956.9	$1965^{+50}_{-49} \quad (+0.4\sigma)$
A_{143}^{PS}	49.6	$43^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	5733	$5733^{+83}_{-82} \quad (-0.1\sigma)$	$H(0.61)$	95.84	$95.7^{+1.1}_{-0.99} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	56.8	$41^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	2528.8	$2528^{+28}_{-28} \quad (+0.1\sigma)$	$D_M(0.61)$	2279	$2287^{+54}_{-53} \quad (+0.4\sigma)$
A_{217}^{PS}	122.9	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	815.7	$814^{+10}_{-9.7} \quad (-0.1\sigma)$	$H(2.33)$	234.79	$235.2^{+3.1}_{-3.0} \quad (+0.4\sigma)$
A^{kSZ}	0.00	$< 7.31 \quad (+0.1\sigma)$	D_{2000}	232.97	$231.9^{+4.2}_{-4.1} \quad (-0.2\sigma)$	$D_M(2.33)$	5739.6	$5747^{+45}_{-46} \quad (+0.4\sigma)$
A_{100}^{dustTT}	8.73	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	$n_{\text{s},0.002}$	0.9755	$0.972^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.4671	$0.462^{+0.051}_{-0.048} \quad (+1.6\sigma)$
A_{143}^{dustTT}	10.53	$10.5^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Y_{P}	0.245488	$0.24545^{+0.00024}_{-0.00024} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.785	$0.770^{+0.073}_{-0.064} \quad (+3.6\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.6	$17.9^{+6.4}_{-6.5} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	0.246814	$0.24677^{+0.00024}_{-0.00024} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	0.4900	$0.483^{+0.050}_{-0.046} \quad (+2.0\sigma)$
A_{217}^{dustTT}	95.5	$94^{+10}_{-10} \quad (-0.0\sigma)$	10^5D/H	2.541	$2.56^{+0.11}_{-0.10} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	0.698	$0.684^{+0.064}_{-0.056} \quad (+4.1\sigma)$
c_{100}	0.99970	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	Age/Gyr	13.745	$13.762^{+0.099}_{-0.10} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	0.4905	$0.483^{+0.048}_{-0.044} \quad (+2.2\sigma)$
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_*	1089.33	$1089.5^{+1.1}_{-1.1} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	0.654	$0.640^{+0.060}_{-0.052} \quad (+4.2\sigma)$
y_{cal}	0.99987	$1.0001^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	r_*	145.05	$145.0^{+1.1}_{-1.1} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	0.4866	$0.479^{+0.047}_{-0.043} \quad (+2.4\sigma)$
H_0	68.82	$68.5^{+2.5}_{-2.5} \quad (-0.4\sigma)$	$100\theta_*$	1.04152	$1.0414^{+0.0010}_{-0.0010} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	0.622	$0.610^{+0.057}_{-0.049} \quad (+4.3\sigma)$
Ω_Λ	0.7041	$0.699^{+0.031}_{-0.034} \quad (-0.4\sigma)$	$D_M(z_*)/\text{Gpc}$	13.927	$13.92^{+0.10}_{-0.10} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	0.3145	$0.308^{+0.029}_{-0.025} \quad (+4.6\sigma)$
Ω_m	0.2959	$0.301^{+0.034}_{-0.031} \quad (+0.4\sigma)$	z_{drag}	1060.28	$1060.1^{+1.1}_{-1.1} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	0.3250	$0.318^{+0.030}_{-0.026} \quad (+4.6\sigma)$
$\Omega_m h^2$	0.14014	$0.1408^{+0.0050}_{-0.0049} \quad (+0.4\sigma)$	r_{drag}	147.64	$147.6^{+1.0}_{-1.1} \quad (-0.3\sigma)$	χ_{plik}^2	752.3	$767.2 \quad (\nu: 15.0) \quad (-0.0\sigma)$
$\Omega_m h^3$	0.09645	$0.09632^{+0.00096}_{-0.00095} \quad (-0.1\sigma)$	k_D	0.14047	$0.1405^{+0.0011}_{-0.0010} \quad (+0.2\sigma)$	χ_{prior}^2	0.97	$7.0 \quad (\nu: 6.2) \quad (-0.0\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 753.23$; $\Delta\chi_{\text{eff}}^2 = -0.49$; $\bar{\chi}_{\text{eff}}^2 = 774.27$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.20$; $R - 1 = 0.00661$
 χ_{eff}^2 : CMB - plik_rd12_HM_v22_TT: 752.27 (Δ -0.48)

3.63 base_Alens_plikHM_TT_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02252^{+0.00058}_{-0.00057} \quad (-0.3\sigma)$	S_8	$0.846^{+0.088}_{-0.083} \quad (+2.0\sigma)$	k_{eq}	$0.01021^{+0.00037}_{-0.00036} \quad (+0.3\sigma)$
$\Omega_c h^2$	$0.1175^{+0.0055}_{-0.0053} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.463^{+0.048}_{-0.046} \quad (+2.0\sigma)$	$100\theta_{\text{eq}}$	$0.825^{+0.024}_{-0.023} \quad (-0.3\sigma)$
$100\theta_{\text{MC}}$	$1.0413^{+0.0011}_{-0.0011} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.626^{+0.056}_{-0.052} \quad (+2.8\sigma)$	$100\theta_{\text{s,eq}}$	$0.455^{+0.012}_{-0.012} \quad (-0.3\sigma)$
τ	$0.107^{+0.079}_{-0.065} \quad (+6.6\sigma)$	$\sigma_8/h^{0.5}$	$1.022^{+0.088}_{-0.080} \quad (+3.2\sigma)$	$H(0.15)$	$73.7^{+2.2}_{-2.2} \quad (-0.3\sigma)$
A_L	$1.09^{+0.23}_{-0.22} \quad (-1.6\sigma)$	$r_{\text{drag}} h$	$101.1^{+4.4}_{-4.3} \quad (-0.3\sigma)$	$D_M(0.15)$	$634^{+21}_{-21} \quad (+0.3\sigma)$
$\ln(10^{10} A_s)$	$3.14^{+0.16}_{-0.13} \quad (+6.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.63^{+0.15}_{-0.15} \quad (-0.1\sigma)$	$H(0.38)$	$83.6^{+1.6}_{-1.6} \quad (-0.3\sigma)$
n_s	$0.973^{+0.017}_{-0.016} \quad (-0.2\sigma)$	z_{re}	$< 17.9 \quad (+5.6\sigma)$	$D_M(0.38)$	$1514^{+43}_{-42} \quad (+0.3\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (+0.0\sigma)$	$10^9 A_s$	$2.33^{+0.38}_{-0.30} \quad (+7.1\sigma)$	$H(0.51)$	$90.2^{+1.3}_{-1.2} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.870^{+0.031}_{-0.031} \quad (+0.2\sigma)$	$D_M(0.51)$	$1963^{+50}_{-49} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.7} \quad (-0.0\sigma)$	D_{40}	$1241^{+54}_{-50} \quad (+1.9\sigma)$	$H(0.61)$	$95.7^{+1.1}_{-0.99} \quad (-0.3\sigma)$
A_{100}^{PS}	$252^{+60}_{-60} \quad (+0.1\sigma)$	D_{220}	$5732^{+82}_{-82} \quad (-0.1\sigma)$	$D_M(0.61)$	$2286^{+54}_{-54} \quad (+0.3\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2528^{+28}_{-28} \quad (+0.1\sigma)$	$H(2.33)$	$235.1^{+3.2}_{-3.0} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$814^{+10}_{-9.7} \quad (-0.0\sigma)$	$D_M(2.33)$	$5746^{+45}_{-46} \quad (+0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$232.0^{+4.1}_{-4.0} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.469^{+0.047}_{-0.044} \quad (+2.1\sigma)$
A^{kSZ}	$< 7.27 \quad (+0.0\sigma)$	$n_{\text{s},0.002}$	$0.973^{+0.017}_{-0.016} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.783^{+0.064}_{-0.054} \quad (+5.0\sigma)$
A_{100}^{dustTT}	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	Y_{P}	$0.24545^{+0.00025}_{-0.00024} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.491^{+0.045}_{-0.041} \quad (+2.6\sigma)$
A_{143}^{dustTT}	$10.4^{+3.5}_{-3.5} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24678^{+0.00025}_{-0.00024} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.695^{+0.056}_{-0.047} \quad (+5.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$17.9^{+6.3}_{-6.5} \quad (+0.0\sigma)$	10^5D/H	$2.56^{+0.11}_{-0.10} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.491^{+0.043}_{-0.039} \quad (+3.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (-0.0\sigma)$	Age/Gyr	$13.760^{+0.099}_{-0.10} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.651^{+0.053}_{-0.043} \quad (+5.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_*	$1089.5^{+1.1}_{-1.1} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.486^{+0.042}_{-0.038} \quad (+3.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_*	$145.0^{+1.1}_{-1.1} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.620^{+0.050}_{-0.041} \quad (+6.1\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$100\theta_*$	$1.0415^{+0.0010}_{-0.0010} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.313^{+0.025}_{-0.021} \quad (+6.5\sigma)$
H_0	$68.5^{+2.5}_{-2.5} \quad (-0.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.92^{+0.10}_{-0.10} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.323^{+0.026}_{-0.021} \quad (+6.5\sigma)$
Ω_Λ	$0.700^{+0.031}_{-0.034} \quad (-0.3\sigma)$	z_{drag}	$1060.1^{+1.1}_{-1.1} \quad (-0.3\sigma)$	f_{2000}^{143}	$27^{+7}_{-7} \quad (+0.1\sigma)$
Ω_m	$0.300^{+0.034}_{-0.031} \quad (+0.3\sigma)$	r_{drag}	$147.6^{+1.1}_{-1.1} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1406^{+0.0051}_{-0.0049} \quad (+0.3\sigma)$	k_{D}	$0.1404^{+0.0011}_{-0.0010} \quad (+0.1\sigma)$	f_{2000}^{217}	$105.3^{+4.5}_{-4.5} \quad (+0.1\sigma)$
$\Omega_m h^3$	$0.09631^{+0.00096}_{-0.00096} \quad (-0.1\sigma)$	$100\theta_{\text{D}}$	$0.16070^{+0.00061}_{-0.00058} \quad (+0.2\sigma)$	χ_{plik}^2	$767.3 \quad (\nu: 15.2) \quad (-0.0\sigma)$
σ_8	$0.846^{+0.069}_{-0.059} \quad (+4.6\sigma)$	z_{eq}	$3345^{+120}_{-120} \quad (+0.3\sigma)$	χ_{prior}^2	$7.0 \quad (\nu: 6.2) \quad (-0.0\sigma)$

$\bar{\chi}_{\text{eff}}^2 = 774.31; R - 1 = 0.00620$

3.64 base_Alens_plikHM_TT_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02266	$0.02261^{+0.00057}_{-0.00058}$ (+0.0 σ)	S_8	0.757	$0.792^{+0.073}_{-0.069}$ (+0.1 σ)	k_{eq}	0.010159	$0.01014^{+0.00034}_{-0.00033}$ (−0.1 σ)
$\Omega_c h^2$	0.11662	$0.1165^{+0.0050}_{-0.0049}$ (−0.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4146	$0.434^{+0.040}_{-0.038}$ (+0.1 σ)	$100\theta_{\text{eq}}$	0.8279	$0.829^{+0.022}_{-0.022}$ (+0.1 σ)
$100\theta_{\text{MC}}$	1.04140	$1.0414^{+0.0011}_{-0.0010}$ (+0.0 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5629	$0.589^{+0.046}_{-0.042}$ (+0.3 σ)	$100\theta_{\text{s,eq}}$	0.4568	$0.457^{+0.011}_{-0.011}$ (+0.1 σ)
τ	0.010	< 0.123 (+0.9 σ)	$\sigma_8/h^{0.5}$	0.920	$0.964^{+0.072}_{-0.064}$ (+0.3 σ)	$H(0.15)$	74.06	$74.1^{+2.1}_{-2.0}$ (+0.1 σ)
A_L	1.360	$1.23^{+0.23}_{-0.23}$ (−0.1 σ)	$r_{\text{drag}} h$	101.83	$101.9^{+4.1}_{-4.1}$ (+0.1 σ)	$D_M(0.15)$	629.9	630^{+20}_{-19} (−0.1 σ)
$\ln(10^{10} A_s)$	2.948	$3.04^{+0.13}_{-0.10}$ (+0.8 σ)	$\langle d^2 \rangle^{1/2}$	2.654	$2.64^{+0.15}_{-0.15}$ (−0.0 σ)	$H(0.38)$	83.87	$83.9^{+1.6}_{-1.5}$ (+0.1 σ)
n_s	0.9753	$0.975^{+0.015}_{-0.014}$ (+0.1 σ)	z_{re}	2.1	$7.5^{+6.2}_{-5.5}$ (+0.5 σ)	$D_M(0.38)$	1506.4	1506^{+40}_{-40} (−0.1 σ)
y_{cal}	0.99995	$1.0001^{+0.0049}_{-0.0048}$ (+0.0 σ)	$10^9 A_s$	1.907	$2.10^{+0.29}_{-0.21}$ (+0.9 σ)	$H(0.51)$	90.42	$90.4^{+1.3}_{-1.2}$ (+0.1 σ)
A_{217}^{CIB}	42.8	45^{+10}_{-10} (−0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8686	$1.866^{+0.029}_{-0.028}$ (−0.1 σ)	$D_M(0.51)$	1954.1	1954^{+47}_{-47} (−0.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.93	—	D_{40}	1200.3	1212^{+40}_{-35} (+0.2 σ)	$H(0.61)$	95.91	$95.9^{+1.1}_{-0.99}$ (+0.0 σ)
A_{143}^{tSZ}	6.79	$5.6^{+3.7}_{-3.7}$ (+0.0 σ)	D_{220}	5739	5736^{+83}_{-81} (−0.0 σ)	$D_M(0.61)$	2276	2276^{+51}_{-51} (−0.1 σ)
A_{100}^{PS}	239	249^{+60}_{-60} (−0.0 σ)	D_{810}	2529.2	2527^{+27}_{-27} (−0.0 σ)	$H(2.33)$	234.67	$234.5^{+2.9}_{-2.8}$ (−0.1 σ)
A_{143}^{PS}	48.4	41^{+20}_{-20} (−0.0 σ)	D_{1420}	815.8	$814.5^{+9.8}_{-9.8}$ (+0.0 σ)	$D_M(2.33)$	5736.7	5738^{+44}_{-46} (−0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	55.5	41^{+20}_{-20} (−0.0 σ)	D_{2000}	232.96	$232.4^{+4.0}_{-4.1}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4202	$0.440^{+0.039}_{-0.037}$ (+0.2 σ)
A_{217}^{PS}	123.0	115^{+20}_{-20} (−0.0 σ)	$n_{\text{s},0.002}$	0.9753	$0.975^{+0.015}_{-0.014}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7079	$0.741^{+0.052}_{-0.041}$ (+0.6 σ)
A^{kSZ}	0.00	< 7.05 (−0.0 σ)	Y_{P}	0.245502	$0.24549^{+0.00025}_{-0.00023}$ (+0.0 σ)	$f\sigma_8(0.38)$	0.4411	$0.462^{+0.037}_{-0.034}$ (+0.2 σ)
A_{100}^{dustTT}	8.88	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246829	$0.24682^{+0.00025}_{-0.00023}$ (+0.0 σ)	$\sigma_8(0.38)$	0.6293	$0.659^{+0.046}_{-0.036}$ (+0.7 σ)
A_{143}^{dustTT}	10.64	$10.5^{+3.6}_{-3.6}$ (−0.0 σ)	10^5D/H	2.534	$2.54^{+0.11}_{-0.10}$ (−0.0 σ)	$f\sigma_8(0.51)$	0.4417	$0.462^{+0.035}_{-0.032}$ (+0.3 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$17.9^{+6.4}_{-6.4}$ (−0.0 σ)	Age/Gyr	13.739	$13.743^{+0.098}_{-0.099}$ (−0.0 σ)	$\sigma_8(0.51)$	0.5897	$0.618^{+0.043}_{-0.033}$ (+0.7 σ)
A_{217}^{dustTT}	95.5	94^{+10}_{-10} (−0.0 σ)	z_*	1089.26	$1089.3^{+1.1}_{-1.0}$ (−0.0 σ)	$f\sigma_8(0.61)$	0.4384	$0.459^{+0.034}_{-0.030}$ (+0.3 σ)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_*	145.09	$145.2^{+1.0}_{-1.0}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5616	$0.588^{+0.041}_{-0.031}$ (+0.8 σ)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (+0.0 σ)	$100\theta_*$	1.04155	$1.0416^{+0.0010}_{-0.0010}$ (−0.0 σ)	$f\sigma_8(2.33)$	0.2838	$0.297^{+0.021}_{-0.015}$ (+0.8 σ)
H_0	68.96	$69.0^{+2.4}_{-2.4}$ (+0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.930	$13.938^{+0.093}_{-0.095}$ (+0.1 σ)	$\sigma_8(2.33)$	0.2934	$0.307^{+0.021}_{-0.016}$ (+0.9 σ)
Ω_Λ	0.7057	$0.706^{+0.028}_{-0.031}$ (+0.1 σ)	z_{drag}	1060.35	$1060.2^{+1.1}_{-1.1}$ (+0.0 σ)	χ^2_{lowl}	20.98	22.2 (ν : 1.1) (+0.3 σ)
Ω_m	0.2943	$0.294^{+0.031}_{-0.028}$ (−0.1 σ)	r_{drag}	147.67	$147.77^{+0.98}_{-1.0}$ (+0.1 σ)	χ^2_{plik}	753.0	767.1 (ν : 14.8) (−0.0 σ)
$\Omega_m h^2$	0.13993	$0.1397^{+0.0046}_{-0.0045}$ (−0.1 σ)	k_D	0.14048	$0.1403^{+0.0010}_{-0.00099}$ (−0.1 σ)	χ^2_{prior}	1.1	7.1 (ν : 6.3) (+0.0 σ)
$\Omega_m h^3$	0.09649	$0.09637^{+0.00097}_{-0.00097}$ (−0.0 σ)	$100\theta_D$	0.16054	$0.16062^{+0.00061}_{-0.00058}$ (−0.0 σ)	χ^2_{CMB}	773.9	789.3 (ν : 15.4) (−68.8 σ)
σ_8	0.764	$0.800^{+0.056}_{-0.046}$ (+0.5 σ)	z_{eq}	3328	3324^{+110}_{-110} (−0.1 σ)			

Best-fit $\chi^2_{\text{eff}} = 775.00$; $\Delta\chi^2_{\text{eff}} = -4.48$; $\bar{\chi}^2_{\text{eff}} = 796.44$; $\Delta\bar{\chi}^2_{\text{eff}} = -3.76$; $R - 1 = 0.00820$
 χ^2_{eff} : CMB - commander_dx12_v3_2_29: 20.98 (Δ -3.91) plik_rd12_HM_v22_TT: 752.97 (Δ -0.57)

3.65 base_Alens_plikHM_TT_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02263^{+0.00057}_{-0.00058} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.442^{+0.039}_{-0.035} \quad (+0.7\sigma)$	$100\theta_{s,eq}$	$0.458^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1162^{+0.0050}_{-0.0050} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.601^{+0.041}_{-0.038} \quad (+1.1\sigma)$	$H(0.15)$	$74.2^{+2.1}_{-2.1} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.0414^{+0.0010}_{-0.0010} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.063}_{-0.057} \quad (+1.3\sigma)$	$D_M(0.15)$	$629^{+20}_{-20} \quad (-0.2\sigma)$
τ	$0.080^{+0.054}_{-0.038} \quad (+3.5\sigma)$	$r_{drag} h$	$102.2^{+4.2}_{-4.1} \quad (+0.2\sigma)$	$H(0.38)$	$84.0^{+1.6}_{-1.5} \quad (+0.2\sigma)$
A_L	$1.18^{+0.20}_{-0.20} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.64^{+0.15}_{-0.15} \quad (+0.0\sigma)$	$D_M(0.38)$	$1504^{+40}_{-40} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	$3.09^{+0.11}_{-0.079} \quad (+3.3\sigma)$	z_{re}	$< 14.3 \quad (+3.1\sigma)$	$H(0.51)$	$90.5^{+1.3}_{-1.2} \quad (+0.2\sigma)$
n_s	$0.976^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$10^9 A_s$	$2.19^{+0.25}_{-0.17} \quad (+3.5\sigma)$	$D_M(0.51)$	$1951^{+47}_{-48} \quad (-0.2\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.865^{+0.029}_{-0.028} \quad (-0.2\sigma)$	$H(0.61)$	$96.0^{+1.1}_{-1.0} \quad (+0.2\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1217^{+40}_{-36} \quad (+0.5\sigma)$	$D_M(0.61)$	$2273^{+51}_{-52} \quad (-0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5735^{+84}_{-82} \quad (-0.0\sigma)$	$H(2.33)$	$234.3^{+2.9}_{-2.8} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.7^{+3.7}_{-3.6} \quad (+0.0\sigma)$	D_{810}	$2526^{+27}_{-27} \quad (-0.0\sigma)$	$D_M(2.33)$	$5736^{+44}_{-46} \quad (-0.1\sigma)$
A_{100}^{PS}	$248^{+60}_{-50} \quad (-0.1\sigma)$	D_{1420}	$815^{+10}_{-9.6} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.037}_{-0.033} \quad (+0.7\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$232.6^{+4.0}_{-4.0} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.043}_{-0.035} \quad (+2.3\sigma)$
$A_{143 \times 217}^{PS}$	$41^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.976^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.034}_{-0.030} \quad (+1.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.24550^{+0.00025}_{-0.00023} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.038}_{-0.029} \quad (+2.7\sigma)$
A^{kSZ}	$< 6.92 \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24682^{+0.00025}_{-0.00023} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.031}_{-0.028} \quad (+1.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	$10^5 D/H$	$2.54^{+0.11}_{-0.10} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.036}_{-0.027} \quad (+2.9\sigma)$
A_{143}^{dustTT}	$10.4^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Age/Gyr	$13.738^{+0.098}_{-0.10} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.030}_{-0.027} \quad (+1.3\sigma)$
$A_{143 \times 217}^{dustTT}$	$17.9^{+6.4}_{-6.4} \quad (-0.0\sigma)$	z_*	$1089.3^{+1.1}_{-1.0} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.034}_{-0.025} \quad (+3.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$145.2^{+1.0}_{-1.1} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.304^{+0.017}_{-0.012} \quad (+3.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.0416^{+0.0010}_{-0.0010} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.314^{+0.018}_{-0.013} \quad (+3.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.943^{+0.094}_{-0.096} \quad (+0.2\sigma)$	f_{2000}^{143}	$26^{+7}_{-7} \quad (-0.1\sigma)$
H_0	$69.1^{+2.4}_{-2.4} \quad (+0.2\sigma)$	z_{drag}	$1060.3^{+1.1}_{-1.1} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.1\sigma)$
Ω_Λ	$0.708^{+0.029}_{-0.031} \quad (+0.2\sigma)$	r_{drag}	$147.83^{+0.97}_{-1.0} \quad (+0.2\sigma)$	f_{2000}^{217}	$104.7^{+4.4}_{-4.4} \quad (-0.1\sigma)$
Ω_m	$0.292^{+0.031}_{-0.029} \quad (-0.2\sigma)$	k_D	$0.1403^{+0.0010}_{-0.00099} \quad (-0.2\sigma)$	χ_{lowl}^2	$22.6 \quad (\nu: 1.3) \quad (+0.7\sigma)$
$\Omega_m h^2$	$0.1394^{+0.0046}_{-0.0045} \quad (-0.2\sigma)$	$100\theta_D$	$0.16061^{+0.00061}_{-0.00058} \quad (-0.1\sigma)$	χ_{plik}^2	$767.1 \quad (\nu: 15.1) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.09636^{+0.00097}_{-0.00098} \quad (-0.0\sigma)$	z_{eq}	$3317^{+110}_{-110} \quad (-0.2\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.4) \quad (+0.0\sigma)$
σ_8	$0.818^{+0.047}_{-0.039} \quad (+2.1\sigma)$	k_{eq}	$0.01012^{+0.00034}_{-0.00033} \quad (-0.2\sigma)$	χ_{CMB}^2	$789.8 \quad (\nu: 15.7) \quad (-68.8\sigma)$
S_8	$0.807^{+0.071}_{-0.063} \quad (+0.7\sigma)$	$100\theta_{eq}$	$0.830^{+0.022}_{-0.022} \quad (+0.2\sigma)$		

$\bar{\chi}_{eff}^2 = 796.93; \Delta\bar{\chi}_{eff}^2 = -3.15; R - 1 = 0.00997$

3.66 base_Alens_plikHM_TT_lowE

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_b h^2$	0.02259	0.02249	$^{+0.00059}_{-0.00059}$ (-0.4σ)	S_8	0.797	0.804	$^{+0.066}_{-0.062}$ $(+0.5\sigma)$	k_{eq}	0.010204	0.01025	$^{+0.00037}_{-0.00035}$ $(+0.5\sigma)$
$\Omega_c h^2$	0.1173	0.1180	$^{+0.0055}_{-0.0053}$ $(+0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4365	0.440	$^{+0.036}_{-0.034}$ $(+0.5\sigma)$	$100\theta_{\text{eq}}$	0.8249	0.822	$^{+0.024}_{-0.023}$ (-0.5σ)
$100\theta_{\text{MC}}$	1.04127	1.0412	$^{+0.0010}_{-0.0011}$ (-0.4σ)	$\sigma_8 \Omega_m^{0.25}$	0.5905	0.593	$^{+0.032}_{-0.031}$ $(+0.5\sigma)$	$100\theta_{\text{s,eq}}$	0.4553	0.454	$^{+0.012}_{-0.012}$ (-0.5σ)
τ	0.0508	0.050	$^{+0.016}_{-0.017}$ (-0.0σ)	$\sigma_8/h^{0.5}$	0.9644	0.968	$^{+0.044}_{-0.043}$ $(+0.5\sigma)$	$H(0.15)$	73.76	73.5	$^{+2.2}_{-2.2}$ (-0.5σ)
A_L	1.235	1.20	$^{+0.20}_{-0.19}$ (-0.4σ)	$r_{\text{drag}} h$	101.24	100.7	$^{+4.4}_{-4.4}$ (-0.5σ)	$D_M(0.15)$	632.8	636	$^{+22}_{-21}$ $(+0.5\sigma)$
$\ln(10^{10} A_s)$	3.0318	3.030	$^{+0.034}_{-0.037}$ $(+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.650	2.63	$^{+0.15}_{-0.16}$ (-0.1σ)	$H(0.38)$	83.65	83.4	$^{+1.6}_{-1.6}$ (-0.5σ)
n_s	0.9731	0.970	$^{+0.016}_{-0.015}$ (-0.6σ)	z_{re}	7.23	7.1	$^{+1.7}_{-1.8}$ $(+0.0\sigma)$	$D_M(0.38)$	1512.2	1518	$^{+44}_{-42}$ $(+0.5\sigma)$
y_{cal}	1.00029	1.0000	$^{+0.0048}_{-0.0048}$ $(+0.0\sigma)$	$10^9 A_s$	2.073	2.071	$^{+0.072}_{-0.075}$ $(+0.2\sigma)$	$H(0.51)$	90.24	90.1	$^{+1.3}_{-1.3}$ (-0.5σ)
A_{217}^{CIB}	42.7	46	$^{+10}_{-10}$ $(+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8730	1.874	$^{+0.031}_{-0.030}$ $(+0.4\sigma)$	$D_M(0.51)$	1961	1968	$^{+52}_{-50}$ $(+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.99	—		D_{40}	1213.0	1219	$^{+38}_{-38}$ $(+0.6\sigma)$	$H(0.61)$	95.76	95.6	$^{+1.1}_{-1.0}$ (-0.5σ)
A_{143}^{tSZ}	6.82	5.4	$^{+3.6}_{-3.9}$ (-0.1σ)	D_{220}	5742	5738	$^{+82}_{-81}$ $(+0.0\sigma)$	$D_M(0.61)$	2284	2291	$^{+56}_{-54}$ $(+0.5\sigma)$
A_{100}^{PS}	239	254	$^{+60}_{-60}$ $(+0.1\sigma)$	D_{810}	2531.8	2529	$^{+28}_{-28}$ $(+0.1\sigma)$	$H(2.33)$	235.04	235.4	$^{+3.1}_{-3.0}$ $(+0.5\sigma)$
A_{143}^{PS}	50.4	44	$^{+20}_{-20}$ $(+0.2\sigma)$	D_{1420}	815.8	814	$^{+10}_{-9.9}$ (-0.2σ)	$D_M(2.33)$	5743.1	5750	$^{+46}_{-47}$ $(+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	57.7	41	$^{+20}_{-20}$ $(+0.1\sigma)$	D_{2000}	232.77	231.5	$^{+4.2}_{-4.2}$ (-0.4σ)	$f\sigma_8(0.15)$	0.4420	0.445	$^{+0.033}_{-0.032}$ $(+0.5\sigma)$
A_{217}^{PS}	123.8	115	$^{+20}_{-20}$ (-0.0σ)	$n_{\text{s},0.002}$	0.9731	0.970	$^{+0.016}_{-0.015}$ (-0.6σ)	$\sigma_8(0.15)$	0.7395	0.740	$^{+0.019}_{-0.019}$ $(+0.4\sigma)$
A^{kSZ}	0.00	< 7.56	$(+0.1\sigma)$	Y_{P}	0.245477	0.24544	$^{+0.00025}_{-0.00025}$ (-0.4σ)	$f\sigma_8(0.38)$	0.4630	0.465	$^{+0.026}_{-0.026}$ $(+0.5\sigma)$
A_{100}^{dustTT}	8.72	8.9	$^{+3.6}_{-3.6}$ (-0.0σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246804	0.24677	$^{+0.00025}_{-0.00025}$ (-0.4σ)	$\sigma_8(0.38)$	0.6569	0.657	$^{+0.014}_{-0.015}$ $(+0.3\sigma)$
A_{143}^{dustTT}	10.61	10.5	$^{+3.5}_{-3.5}$ $(+0.0\sigma)$	10^5D/H	2.546	2.56	$^{+0.11}_{-0.11}$ $(+0.4\sigma)$	$f\sigma_8(0.51)$	0.4631	0.465	$^{+0.022}_{-0.023}$ $(+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	20.0	17.9	$^{+6.4}_{-6.5}$ $(+0.0\sigma)$	Age/Gyr	13.753	13.77	$^{+0.10}_{-0.10}$ $(+0.5\sigma)$	$\sigma_8(0.51)$	0.6153	0.615	$^{+0.012}_{-0.013}$ $(+0.3\sigma)$
A_{217}^{dustTT}	96.4	93	$^{+10}_{-10}$ (-0.0σ)	z_*	1089.41	1089.6	$^{+1.2}_{-1.1}$ $(+0.5\sigma)$	$f\sigma_8(0.61)$	0.4592	0.461	$^{+0.020}_{-0.020}$ $(+0.5\sigma)$
c_{100}	0.99969	0.9996	$^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	r_*	144.96	144.9	$^{+1.1}_{-1.1}$ (-0.5σ)	$\sigma_8(0.61)$	0.5859	0.585	$^{+0.011}_{-0.012}$ $(+0.3\sigma)$
c_{217}	0.99820	0.9982	$^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$100\theta_*$	1.04143	1.0414	$^{+0.0010}_{-0.0010}$ (-0.4σ)	$f\sigma_8(2.33)$	0.2959	0.2955	$^{+0.0053}_{-0.0056}$ $(+0.2\sigma)$
H_0	68.61	68.3	$^{+2.5}_{-2.5}$ (-0.5σ)	$D_M(z_*)/\text{Gpc}$	13.919	13.91	$^{+0.10}_{-0.10}$ (-0.5σ)	$\sigma_8(2.33)$	0.3057	0.3050	$^{+0.0054}_{-0.0057}$ $(+0.0\sigma)$
Ω_Λ	0.7014	0.697	$^{+0.033}_{-0.033}$ (-0.6σ)	z_{drag}	1060.24	1060.1	$^{+1.1}_{-1.1}$ (-0.3σ)	χ_{small}^2	395.66	396.8	$(\nu: 1.3)$ (-0.0σ)
Ω_m	0.2986	0.303	$^{+0.033}_{-0.033}$ $(+0.6\sigma)$	r_{drag}	147.56	147.5	$^{+1.1}_{-1.1}$ (-0.5σ)	χ_{plik}^2	752.6	767.3	$(\nu: 15.2)$ (-0.0σ)
$\Omega_m h^2$	0.14054	0.1411	$^{+0.0050}_{-0.0049}$ $(+0.5\sigma)$	k_D	0.14054	0.1405	$^{+0.0011}_{-0.0011}$ $(+0.3\sigma)$	χ_{prior}^2	1.1	7.0	$(\nu: 6.1)$ (-0.0σ)
$\Omega_m h^3$	0.09643	0.0963	$^{+0.0010}_{-0.00095}$ (-0.1σ)	$100\theta_D$	0.16059	0.16071	$^{+0.00063}_{-0.00060}$ $(+0.3\sigma)$	χ_{CMB}^2	1148.2	1164.1	$(\nu: 16.6)$ (-3.8σ)
σ_8	0.7988	0.800	$^{+0.023}_{-0.023}$ $(+0.4\sigma)$	z_{eq}	3343	3357	$^{+120}_{-120}$ $(+0.5\sigma)$				

Best-fit $\chi_{\text{eff}}^2 = 1149.29$; $\Delta\chi_{\text{eff}}^2 = -6.26$; $\bar{\chi}_{\text{eff}}^2 = 1171.08$; $\Delta\bar{\chi}_{\text{eff}}^2 = -4.29$; $R - 1 = 0.00738$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.66 (Δ -0.24) plik_rd12_HM_v22_TT: 752.58 (Δ -5.70)

3.67 base_Alens_plikHM_TTTEEE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022605	$0.02256^{+0.00035}_{-0.00034}$ (-0.2σ)	Ω_Λ	0.6966	$0.695^{+0.019}_{-0.019}$ (-0.7σ)	r_{drag}	147.32	$147.30^{+0.63}_{-0.64}$ (-0.9σ)
$\Omega_c h^2$	0.11816	$0.1184^{+0.0031}_{-0.0031}$ $(+0.7\sigma)$	Ω_m	0.3034	$0.305^{+0.019}_{-0.019}$ $(+0.7\sigma)$	k_D	0.14080	$0.14079^{+0.00066}_{-0.00065}$ $(+0.8\sigma)$
$100\theta_{\text{MC}}$	1.04113	$1.04110^{+0.00064}_{-0.00064}$ (-0.5σ)	$\Omega_m h^2$	0.14141	$0.1416^{+0.0029}_{-0.0029}$ $(+0.8\sigma)$	$100\theta_D$	0.160530	$0.16058^{+0.00038}_{-0.00037}$ (-0.2σ)
τ	0.108	< 0.168 $(+4.4\sigma)$	$\Omega_m h^3$	0.09654	$0.09649^{+0.00060}_{-0.00061}$ $(+0.2\sigma)$	z_{eq}	3364	3369^{+69}_{-69} $(+0.8\sigma)$
A_L	1.056	$1.09^{+0.22}_{-0.22}$ (-1.6σ)	σ_8	0.849	$0.833^{+0.074}_{-0.066}$ $(+3.4\sigma)$	k_{eq}	0.010267	$0.01028^{+0.00021}_{-0.00021}$ $(+0.8\sigma)$
$\ln(10^{10} A_s)$	3.147	$3.11^{+0.17}_{-0.16}$ $(+4.4\sigma)$	S_8	0.854	$0.840^{+0.082}_{-0.077}$ $(+1.8\sigma)$	$100\theta_{\text{eq}}$	0.8210	$0.820^{+0.014}_{-0.013}$ (-0.7σ)
n_s	0.9723	$0.970^{+0.010}_{-0.010}$ (-0.6σ)	$\sigma_8 \Omega_m^{0.5}$	0.4676	$0.460^{+0.045}_{-0.042}$ $(+1.8\sigma)$	$100\theta_{s,\text{eq}}$	0.4532	$0.4527^{+0.0069}_{-0.0067}$ (-0.8σ)
A_{217}^{CIB}	42.2	45^{+10}_{-10} (-0.0σ)	$\sigma_8 \Omega_m^{0.25}$	0.630	$0.619^{+0.057}_{-0.052}$ $(+2.3\sigma)$	$H(0.15)$	73.47	$73.3^{+1.3}_{-1.2}$ (-0.7σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.997	—	$\sigma_8/h^{0.5}$	1.027	$1.009^{+0.092}_{-0.084}$ $(+2.6\sigma)$	$D_M(0.15)$	635.6	637^{+12}_{-12} $(+0.7\sigma)$
A_{143}^{tSZ}	6.93	$5.7^{+3.7}_{-3.6}$ $(+0.0\sigma)$	$r_{\text{drag}} h$	100.57	$100.3^{+2.5}_{-2.4}$ (-0.7σ)	$H(0.38)$	83.45	$83.36^{+0.92}_{-0.89}$ (-0.6σ)
A_{100}^{PS}	238	251^{+60}_{-50} $(+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.609	$2.60^{+0.12}_{-0.11}$ (-0.6σ)	$D_M(0.38)$	1517.8	1520^{+24}_{-24} $(+0.6\sigma)$
A_{143}^{PS}	49.3	42^{+20}_{-20} $(+0.1\sigma)$	z_{re}	12.4	$10.3^{+7.2}_{-7.8}$ $(+3.6\sigma)$	$H(0.51)$	90.09	$90.02^{+0.74}_{-0.70}$ (-0.6σ)
$A_{143 \times 217}^{\text{PS}}$	57.2	41^{+20}_{-20} $(+0.1\sigma)$	$10^9 A_s$	2.327	$2.24^{+0.39}_{-0.34}$ $(+4.8\sigma)$	$D_M(0.51)$	1967.5	1970^{+28}_{-29} $(+0.6\sigma)$
A_{217}^{PS}	124.0	116^{+20}_{-20} $(+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8747	$1.875^{+0.024}_{-0.024}$ $(+0.5\sigma)$	$H(0.61)$	95.66	$95.60^{+0.60}_{-0.56}$ (-0.5σ)
A^{kSZ}	0.00	< 6.88 (-0.0σ)	D_{40}	1238.2	1238^{+51}_{-44} $(+1.7\sigma)$	$D_M(0.61)$	2290.5	2294^{+31}_{-31} $(+0.6\sigma)$
A_{100}^{dustTT}	8.60	$8.7^{+3.6}_{-3.6}$ (-0.1σ)	D_{220}	5736	5738^{+76}_{-78} $(+0.0\sigma)$	$H(2.33)$	235.60	$235.7^{+1.8}_{-1.8}$ $(+0.8\sigma)$
A_{143}^{dustTT}	10.62	$10.5^{+3.5}_{-3.5}$ $(+0.0\sigma)$	D_{810}	2532.6	2531^{+27}_{-27} $(+0.3\sigma)$	$D_M(2.33)$	5746.5	5749^{+25}_{-26} $(+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.1^{+6.4}_{-6.4}$ $(+0.1\sigma)$	D_{1420}	816.7	$815.2^{+9.3}_{-9.4}$ $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4731	$0.466^{+0.045}_{-0.042}$ $(+1.9\sigma)$
A_{217}^{dustTT}	95.8	94^{+10}_{-10} $(+0.0\sigma)$	D_{2000}	232.82	$232.0^{+3.2}_{-3.2}$ (-0.1σ)	$\sigma_8(0.15)$	0.785	$0.770^{+0.068}_{-0.061}$ $(+3.7\sigma)$
A_{100}^{dustTE}	0.111	$0.113^{+0.075}_{-0.074}$	$n_{s,0.002}$	0.9723	$0.970^{+0.010}_{-0.010}$ (-0.6σ)	$f\sigma_8(0.38)$	0.4942	$0.486^{+0.045}_{-0.041}$ $(+2.2\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.134^{+0.058}_{-0.058}$	Y_P	0.245482	$0.24547^{+0.00014}_{-0.00013}$ (-0.2σ)	$\sigma_8(0.38)$	0.697	$0.684^{+0.060}_{-0.054}$ $(+4.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	Y_P^{BBN}	0.246808	$0.24679^{+0.00014}_{-0.00013}$ (-0.2σ)	$f\sigma_8(0.51)$	0.4937	$0.485^{+0.044}_{-0.041}$ $(+2.4\sigma)$
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	$10^5 \text{D}/\text{H}$	2.544	$2.552^{+0.063}_{-0.062}$ $(+0.2\sigma)$	$\sigma_8(0.51)$	0.653	$0.640^{+0.056}_{-0.050}$ $(+4.2\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	Age/Gyr	13.760	$13.766^{+0.056}_{-0.058}$ $(+0.4\sigma)$	$f\sigma_8(0.61)$	0.4892	$0.481^{+0.043}_{-0.040}$ $(+2.6\sigma)$
A_{217}^{dustTE}	2.06	$2.06^{+0.53}_{-0.52}$	z_*	1089.47	$1089.55^{+0.65}_{-0.64}$ $(+0.4\sigma)$	$\sigma_8(0.61)$	0.621	$0.609^{+0.053}_{-0.048}$ $(+4.3\sigma)$
c_{100}	0.99977	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	r_*	144.73	$144.69^{+0.66}_{-0.66}$ (-0.8σ)	$f\sigma_8(2.33)$	0.3136	$0.307^{+0.027}_{-0.024}$ $(+4.4\sigma)$
c_{217}	0.99813	$0.9981^{+0.0012}_{-0.0012}$ (-0.1σ)	$100\theta_*$	1.04130	$1.04127^{+0.00063}_{-0.00063}$ (-0.6σ)	$\sigma_8(2.33)$	0.3237	$0.317^{+0.028}_{-0.025}$ $(+4.4\sigma)$
y_{cal}	0.99985	$0.9999^{+0.0048}_{-0.0049}$ (-0.0σ)	$D_M(z_*)/\text{Gpc}$	13.899	$13.896^{+0.061}_{-0.062}$ (-0.8σ)	χ_{plik}^2	2336.5	$2354.1 (\nu: 17.3)$ $(+285.8\sigma)$
H_0	68.27	$68.1^{+1.5}_{-1.4}$ (-0.7σ)	z_{drag}	1060.35	$1060.26^{+0.67}_{-0.67}$ $(+0.0\sigma)$	χ_{prior}^2	1.4	$11.3 (\nu: 9.8)$ $(+1.2\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 2337.89$; $\Delta\chi_{\text{eff}}^2 = -0.47$; $\bar{\chi}_{\text{eff}}^2 = 2365.39$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.26$; $R - 1 = 0.00672$
 χ_{eff}^2 : CMB - plik_rd12_HM_v22b_TTTEEE: 2336.52 (Δ -0.53)

3.68 base_Alens_plikHM_TTTEE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02256^{+0.00034}_{-0.00035} \quad (-0.2\sigma)$	Ω_{m}	$0.305^{+0.019}_{-0.019} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16058^{+0.00038}_{-0.00037} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1184^{+0.0031}_{-0.0031} \quad (+0.7\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1416^{+0.0029}_{-0.0029} \quad (+0.7\sigma)$	z_{eq}	$3368^{+69}_{-69} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04111^{+0.00065}_{-0.00064} \quad (-0.5\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09648^{+0.00060}_{-0.00060} \quad (+0.2\sigma)$	k_{eq}	$0.01028^{+0.00021}_{-0.00021} \quad (+0.7\sigma)$
τ	$0.104^{+0.072}_{-0.061} \quad (+6.2\sigma)$	σ_8	$0.846^{+0.064}_{-0.055} \quad (+4.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.014}_{-0.013} \quad (-0.7\sigma)$
A_{L}	$1.05^{+0.19}_{-0.19} \quad (-2.0\sigma)$	S_8	$0.853^{+0.074}_{-0.068} \quad (+2.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4528^{+0.0069}_{-0.0067} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.14^{+0.14}_{-0.12} \quad (+6.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.467^{+0.041}_{-0.037} \quad (+2.3\sigma)$	$H(0.15)$	$73.4^{+1.3}_{-1.2} \quad (-0.6\sigma)$
n_{s}	$0.970^{+0.010}_{-0.010} \quad (-0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.629^{+0.051}_{-0.045} \quad (+3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+0.6\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$1.025^{+0.081}_{-0.071} \quad (+3.3\sigma)$	$H(0.38)$	$83.37^{+0.92}_{-0.89} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$r_{\mathrm{drag}}h$	$100.4^{+2.5}_{-2.4} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1520^{+24}_{-24} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$5.7^{+3.7}_{-3.6} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.60^{+0.12}_{-0.12} \quad (-0.6\sigma)$	$H(0.51)$	$90.03^{+0.74}_{-0.70} \quad (-0.6\sigma)$
A_{100}^{PS}	$250^{+50}_{-50} \quad (+0.0\sigma)$	z_{re}	$< 17.3 \quad (+5.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+28}_{-29} \quad (+0.6\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.31^{+0.35}_{-0.28} \quad (+6.7\sigma)$	$H(0.61)$	$95.60^{+0.60}_{-0.56} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$41^{+20}_{-20} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.024}_{-0.025} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2293^{+31}_{-31} \quad (+0.6\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{40}	$1244^{+50}_{-44} \quad (+2.1\sigma)$	$H(2.33)$	$235.7^{+1.8}_{-1.8} \quad (+0.8\sigma)$
A^{kSZ}	$< 6.82 \quad (-0.0\sigma)$	D_{220}	$5737^{+77}_{-80} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5749^{+25}_{-26} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.7^{+3.6}_{-3.6} \quad (-0.1\sigma)$	D_{810}	$2531^{+27}_{-27} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.473^{+0.040}_{-0.037} \quad (+2.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.5^{+3.5}_{-3.5} \quad (+0.0\sigma)$	D_{1420}	$815.3^{+9.4}_{-9.5} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.783^{+0.059}_{-0.050} \quad (+5.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.1^{+6.4}_{-6.4} \quad (+0.1\sigma)$	D_{2000}	$232.1^{+3.2}_{-3.2} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.493^{+0.040}_{-0.036} \quad (+2.8\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.970^{+0.010}_{-0.010} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.695^{+0.052}_{-0.044} \quad (+5.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.074}_{-0.074}$	Y_{P}	$0.24547^{+0.00014}_{-0.00013} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.493^{+0.039}_{-0.035} \quad (+3.2\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.058}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24679^{+0.00014}_{-0.00013} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.650^{+0.049}_{-0.041} \quad (+5.8\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.552^{+0.064}_{-0.062} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.488^{+0.038}_{-0.034} \quad (+3.4\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.766^{+0.056}_{-0.058} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.619^{+0.046}_{-0.039} \quad (+5.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_*	$1089.55^{+0.65}_{-0.63} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.312^{+0.023}_{-0.019} \quad (+6.2\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.06^{+0.52}_{-0.52}$	r_*	$144.70^{+0.66}_{-0.66} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.322^{+0.024}_{-0.020} \quad (+6.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_*$	$1.04127^{+0.00063}_{-0.00062} \quad (-0.6\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.0\sigma)$
c_{217}	$0.9981^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.061}_{-0.061} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (+0.0\sigma)$
y_{cal}	$0.9999^{+0.0048}_{-0.0050} \quad (-0.0\sigma)$	z_{drag}	$1060.25^{+0.67}_{-0.67} \quad (+0.0\sigma)$	f_{2000}^{217}	$105.1^{+3.8}_{-3.8} \quad (+0.0\sigma)$
H_0	$68.1^{+1.4}_{-1.4} \quad (-0.6\sigma)$	r_{drag}	$147.31^{+0.63}_{-0.64} \quad (-0.8\sigma)$	χ_{plik}^2	$2354.1 \quad (\nu: 17.4) \quad (+285.8\sigma)$
Ω_{Λ}	$0.695^{+0.019}_{-0.019} \quad (-0.7\sigma)$	k_{D}	$0.14078^{+0.00065}_{-0.00065} \quad (+0.8\sigma)$	χ_{prior}^2	$11.3 \quad (\nu: 9.9) \quad (+1.2\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 2365.44$; $R - 1 = 0.00596$

3.69 base_Alens_plikHM_TTTEEE_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022624	$0.02260^{+0.00034}_{-0.00033} \quad (-0.0\sigma)$	Ω_m	0.3028	$0.303^{+0.019}_{-0.018} \quad (+0.5\sigma)$	$100\theta_D$	0.160509	$0.16055^{+0.00037}_{-0.00037} \quad (-0.3\sigma)$
$\Omega_c h^2$	0.11807	$0.1180^{+0.0030}_{-0.0030} \quad (+0.5\sigma)$	$\Omega_m h^2$	0.14134	$0.1412^{+0.0028}_{-0.0028} \quad (+0.6\sigma)$	z_{eq}	3362	$3359^{+68}_{-67} \quad (+0.6\sigma)$
$100\theta_{\text{MC}}$	1.04114	$1.04114^{+0.00064}_{-0.00064} \quad (-0.5\sigma)$	$\Omega_m h^3$	0.09656	$0.09649^{+0.00061}_{-0.00060} \quad (+0.2\sigma)$	k_{eq}	0.010261	$0.01025^{+0.00021}_{-0.00020} \quad (+0.6\sigma)$
τ	0.010	$< 0.115 \quad (+0.6\sigma)$	σ_8	0.7693	$0.804^{+0.053}_{-0.041} \quad (+0.8\sigma)$	$100\theta_{\text{eq}}$	0.8214	$0.822^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_L	1.289	$1.17^{+0.18}_{-0.19} \quad (-0.7\sigma)$	S_8	0.773	$0.807^{+0.061}_{-0.054} \quad (+0.7\sigma)$	$100\theta_{\text{s,eq}}$	0.4534	$0.4537^{+0.0067}_{-0.0066} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	2.951	$3.04^{+0.12}_{-0.095} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4233	$0.442^{+0.033}_{-0.030} \quad (+0.7\sigma)$	$H(0.15)$	73.52	$73.5^{+1.2}_{-1.2} \quad (-0.5\sigma)$
n_s	0.9718	$0.9713^{+0.0099}_{-0.0097} \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.5706	$0.596^{+0.041}_{-0.035} \quad (+0.7\sigma)$	$D_M(0.15)$	635.1	$635^{+12}_{-12} \quad (+0.5\sigma)$
y_{cal}	0.99982	$0.99999^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	0.931	$0.973^{+0.066}_{-0.054} \quad (+0.7\sigma)$	$H(0.38)$	83.49	$83.49^{+0.90}_{-0.87} \quad (-0.5\sigma)$
A_{217}^{CIB}	42.4	$45^{+10}_{-10} \quad (-0.1\sigma)$	$r_{\text{drag}} h$	100.65	$100.7^{+2.4}_{-2.4} \quad (-0.5\sigma)$	$D_M(0.38)$	1516.9	$1517^{+24}_{-24} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.998	—	$\langle d^2 \rangle^{1/2}$	2.612	$2.60^{+0.11}_{-0.12} \quad (-0.5\sigma)$	$H(0.51)$	90.13	$90.12^{+0.72}_{-0.69} \quad (-0.4\sigma)$
A_{143}^{tSZ}	6.87	$5.8^{+3.7}_{-3.6} \quad (+0.1\sigma)$	z_{re}	2.1	$7.3^{+5.9}_{-5.2} \quad (+0.2\sigma)$	$D_M(0.51)$	1966.4	$1966^{+28}_{-28} \quad (+0.5\sigma)$
A_{100}^{PS}	239	$249^{+50}_{-50} \quad (-0.0\sigma)$	$10^9 A_s$	1.913	$2.09^{+0.27}_{-0.20} \quad (+0.8\sigma)$	$H(0.61)$	95.68	$95.68^{+0.58}_{-0.55} \quad (-0.4\sigma)$
A_{143}^{PS}	49.5	$42^{+20}_{-20} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8749	$1.873^{+0.024}_{-0.024} \quad (+0.4\sigma)$	$D_M(0.61)$	2289.2	$2289^{+30}_{-30} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	57.5	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{40}	1208.3	$1220^{+33}_{-32} \quad (+0.6\sigma)$	$H(2.33)$	235.56	$235.5^{+1.8}_{-1.7} \quad (+0.6\sigma)$
A_{217}^{PS}	124.2	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	5739	$5737^{+77}_{-76} \quad (+0.0\sigma)$	$D_M(2.33)$	5745.3	$5746^{+25}_{-26} \quad (+0.3\sigma)$
A^{kSZ}	0.00	$< 6.60 \quad (-0.1\sigma)$	D_{810}	2532.6	$2531^{+27}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	0.4283	$0.448^{+0.033}_{-0.029} \quad (+0.7\sigma)$
A_{100}^{dustTT}	8.83	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	D_{1420}	816.5	$815.5^{+9.4}_{-9.3} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	0.7117	$0.744^{+0.048}_{-0.037} \quad (+0.8\sigma)$
A_{143}^{dustTT}	10.73	$10.6^{+3.5}_{-3.5} \quad (+0.0\sigma)$	D_{2000}	232.68	$232.3^{+3.2}_{-3.2} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4476	$0.468^{+0.033}_{-0.028} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.1^{+6.3}_{-6.4} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	0.9718	$0.9713^{+0.0099}_{-0.0097} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	0.6318	$0.660^{+0.043}_{-0.032} \quad (+0.8\sigma)$
A_{217}^{dustTT}	95.6	$94^{+10}_{-10} \quad (-0.0\sigma)$	Y_{P}	0.245488	$0.24548^{+0.00014}_{-0.00013} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	0.4472	$0.467^{+0.032}_{-0.027} \quad (+0.7\sigma)$
A_{100}^{dustTE}	0.113	$0.114^{+0.075}_{-0.075}$	$Y_{\text{P}}^{\text{BBN}}$	0.246815	$0.24681^{+0.00014}_{-0.00013} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	0.5916	$0.618^{+0.040}_{-0.030} \quad (+0.8\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.134^{+0.058}_{-0.058}$	10^5D/H	2.540	$2.545^{+0.061}_{-0.061} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4432	$0.463^{+0.031}_{-0.026} \quad (+0.8\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	Age/Gyr	13.757	$13.759^{+0.055}_{-0.056} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	0.5632	$0.589^{+0.038}_{-0.028} \quad (+0.8\sigma)$
A_{143}^{dustTE}	0.221	$0.22^{+0.10}_{-0.11}$	z_*	1089.44	$1089.46^{+0.62}_{-0.61} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	0.2843	$0.297^{+0.019}_{-0.014} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.657	$0.66^{+0.15}_{-0.16}$	r_*	144.74	$144.78^{+0.64}_{-0.64} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	0.2935	$0.307^{+0.020}_{-0.015} \quad (+0.6\sigma)$
A_{217}^{dustTE}	2.05	$2.05^{+0.52}_{-0.53}$	$100\theta_*$	1.04131	$1.04131^{+0.00063}_{-0.00063} \quad (-0.5\sigma)$	χ^2_{lowl}	21.43	$22.6 \quad (\nu: 1.0) \quad (+0.7\sigma)$
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	13.900	$13.904^{+0.060}_{-0.059} \quad (-0.6\sigma)$	χ^2_{plik}	2337.2	$2353.9 \quad (\nu: 16.8) \quad (+285.8\sigma)$
c_{217}	0.99815	$0.9981^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{drag}	1060.39	$1060.31^{+0.65}_{-0.65} \quad (+0.1\sigma)$	χ^2_{prior}	1.4	$11.2 \quad (\nu: 9.6) \quad (+1.2\sigma)$
H_0	68.32	$68.3^{+1.4}_{-1.4} \quad (-0.5\sigma)$	r_{drag}	147.32	$147.38^{+0.63}_{-0.62} \quad (-0.7\sigma)$	χ^2_{CMB}	2358.7	$2376.5 \quad (\nu: 17.5) \quad (+206.6\sigma)$
Ω_Λ	0.6972	$0.697^{+0.018}_{-0.019} \quad (-0.5\sigma)$	k_{D}	0.14081	$0.14074^{+0.00065}_{-0.00065} \quad (+0.7\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 2360.02$; $\Delta\chi^2_{\text{eff}} = -3.62$; $\bar{\chi}^2_{\text{eff}} = 2387.73$; $\Delta\bar{\chi}^2_{\text{eff}} = -2.81$; $R - 1 = 0.00854$

χ^2_{eff} : CMB - commander_dx12_v3.2.29: 21.43 (Δ -3.34) plik_rd12_HM_v22b.TTTEEE: 2337.22 (Δ -0.36)

3.70 base_Alens_plikHM_TTTEE_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02260^{+0.00034}_{-0.00034} \quad (-0.0\sigma)$	$\Omega_{\text{m}}h^2$	$0.1411^{+0.0028}_{-0.0028} \quad (+0.5\sigma)$	k_{eq}	$0.01025^{+0.00021}_{-0.00020} \quad (+0.5\sigma)$
$\Omega_{\text{c}}h^2$	$0.1179^{+0.0031}_{-0.0030} \quad (+0.5\sigma)$	$\Omega_{\text{m}}h^3$	$0.09649^{+0.00060}_{-0.00061} \quad (+0.2\sigma)$	$100\theta_{\text{eq}}$	$0.822^{+0.013}_{-0.013} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	$1.04115^{+0.00064}_{-0.00065} \quad (-0.5\sigma)$	σ_8	$0.822^{+0.043}_{-0.034} \quad (+2.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4539^{+0.0067}_{-0.0066} \quad (-0.5\sigma)$
τ	$0.077^{+0.048}_{-0.035} \quad (+3.1\sigma)$	S_8	$0.824^{+0.053}_{-0.049} \quad (+1.3\sigma)$	$H(0.15)$	$73.6^{+1.2}_{-1.2} \quad (-0.4\sigma)$
A_{L}	$1.12^{+0.15}_{-0.16} \quad (-1.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.452^{+0.029}_{-0.027} \quad (+1.3\sigma)$	$D_{\text{M}}(0.15)$	$635^{+12}_{-12} \quad (+0.4\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.084^{+0.098}_{-0.073} \quad (+3.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.609^{+0.035}_{-0.030} \quad (+1.6\sigma)$	$H(0.38)$	$83.51^{+0.90}_{-0.87} \quad (-0.4\sigma)$
n_{s}	$0.9719^{+0.0099}_{-0.0097} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.055}_{-0.046} \quad (+1.8\sigma)$	$D_{\text{M}}(0.38)$	$1516^{+24}_{-23} \quad (+0.4\sigma)$
y_{cal}	$0.99999^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$r_{\text{drag}}h$	$100.8^{+2.4}_{-2.4} \quad (-0.5\sigma)$	$H(0.51)$	$90.14^{+0.72}_{-0.69} \quad (-0.4\sigma)$
A_{217}^{CIB}	$44^{+10}_{-10} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.60^{+0.11}_{-0.12} \quad (-0.5\sigma)$	$D_{\text{M}}(0.51)$	$1966^{+28}_{-28} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 13.7 \quad (+2.8\sigma)$	$H(0.61)$	$95.69^{+0.59}_{-0.56} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.8^{+3.7}_{-3.6} \quad (+0.1\sigma)$	$10^9 A_{\text{s}}$	$2.19^{+0.22}_{-0.16} \quad (+3.3\sigma)$	$D_{\text{M}}(0.61)$	$2288^{+30}_{-30} \quad (+0.4\sigma)$
A_{100}^{PS}	$248^{+50}_{-50} \quad (-0.1\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.873^{+0.024}_{-0.023} \quad (+0.4\sigma)$	$H(2.33)$	$235.4^{+1.8}_{-1.7} \quad (+0.6\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.0\sigma)$	D_{40}	$1225^{+33}_{-32} \quad (+0.9\sigma)$	$D_{\text{M}}(2.33)$	$5746^{+25}_{-26} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	$5736^{+77}_{-75} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.029}_{-0.026} \quad (+1.3\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2530^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.760^{+0.039}_{-0.030} \quad (+2.6\sigma)$
A^{kSZ}	$< 6.55 \quad (-0.1\sigma)$	D_{1420}	$815.7^{+9.4}_{-9.3} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.028}_{-0.024} \quad (+1.5\sigma)$
A_{100}^{dustTT}	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	D_{2000}	$232.4^{+3.2}_{-3.2} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.675^{+0.035}_{-0.026} \quad (+2.9\sigma)$
A_{143}^{dustTT}	$10.5^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$n_{\text{s},0.002}$	$0.9719^{+0.0099}_{-0.0097} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.027}_{-0.023} \quad (+1.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.0^{+6.4}_{-6.5} \quad (+0.0\sigma)$	Y_{P}	$0.24548^{+0.00014}_{-0.00013} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.632^{+0.032}_{-0.024} \quad (+3.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24681^{+0.00014}_{-0.00013} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.026}_{-0.022} \quad (+1.8\sigma)$
A_{100}^{dustTE}	$0.113^{+0.074}_{-0.075}$	$10^5 \text{D}/\text{H}$	$2.544^{+0.062}_{-0.061} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.602^{+0.031}_{-0.023} \quad (+3.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.058}_{-0.057}$	Age/Gyr	$13.758^{+0.055}_{-0.056} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.304^{+0.015}_{-0.011} \quad (+3.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.45^{+0.63}_{-0.62} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.314^{+0.016}_{-0.012} \quad (+3.1\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_*	$144.81^{+0.64}_{-0.65} \quad (-0.6\sigma)$	f_{2000}^{143}	$26^{+6}_{-6} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	$100\theta_*$	$1.04132^{+0.00062}_{-0.00064} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.1\sigma)$
A_{217}^{dustTE}	$2.05^{+0.52}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.906^{+0.060}_{-0.059} \quad (-0.6\sigma)$	f_{2000}^{217}	$104.8^{+3.7}_{-3.7} \quad (-0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.31^{+0.65}_{-0.65} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.1) \quad (+1.3\sigma)$
c_{217}	$0.9981^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.40^{+0.62}_{-0.63} \quad (-0.6\sigma)$	χ_{plik}^2	$2353.8 \quad (\nu: 17.0) \quad (+285.8\sigma)$
H_0	$68.4^{+1.4}_{-1.4} \quad (-0.5\sigma)$	k_{D}	$0.14071^{+0.00064}_{-0.00065} \quad (+0.7\sigma)$	χ_{prior}^2	$11.2 \quad (\nu: 9.5) \quad (+1.2\sigma)$
Ω_{Λ}	$0.698^{+0.018}_{-0.019} \quad (-0.5\sigma)$	$100\theta_{\text{D}}$	$0.16055^{+0.00038}_{-0.00037} \quad (-0.3\sigma)$	χ_{CMB}^2	$2377.1 \quad (\nu: 17.8) \quad (+206.7\sigma)$
Ω_{m}	$0.302^{+0.019}_{-0.018} \quad (+0.5\sigma)$	z_{eq}	$3357^{+68}_{-66} \quad (+0.5\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 2388.28$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.20$; $R - 1 = 0.01143$

3.71 base_Alens_plikHM_TTTEE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022613	$0.02256^{+0.00034}_{-0.00034} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^2$	0.14147	$0.1418^{+0.0028}_{-0.0028} \quad (+0.8\sigma)$	k_{eq}	0.010271	$0.01029^{+0.00021}_{-0.00020} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11821	$0.1186^{+0.0031}_{-0.0030} \quad (+0.8\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.09656	$0.09650^{+0.00060}_{-0.00058} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	0.8208	$0.819^{+0.013}_{-0.013} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	1.04112	$1.04109^{+0.00065}_{-0.00065} \quad (-0.6\sigma)$	σ_8	0.8025	$0.802^{+0.017}_{-0.018} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4531	$0.4524^{+0.0067}_{-0.0066} \quad (-0.8\sigma)$
τ	0.0518	$0.049^{+0.016}_{-0.018} \quad (-0.1\sigma)$	S_8	0.8074	$0.810^{+0.038}_{-0.037} \quad (+0.7\sigma)$	$H(0.15)$	73.46	$73.3^{+1.2}_{-1.2} \quad (-0.7\sigma)$
A_{L}	1.183	$1.17^{+0.13}_{-0.13} \quad (-0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4422	$0.443^{+0.021}_{-0.020} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	635.7	$637^{+12}_{-12} \quad (+0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0349	$3.031^{+0.034}_{-0.038} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5957	$0.596^{+0.020}_{-0.020} \quad (+0.7\sigma)$	$H(0.38)$	83.45	$83.33^{+0.90}_{-0.88} \quad (-0.7\sigma)$
n_{s}	0.9714	$0.9687^{+0.0099}_{-0.0096} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	0.9714	$0.972^{+0.028}_{-0.029} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	1518.0	$1521^{+24}_{-24} \quad (+0.7\sigma)$
y_{cal}	0.99970	$1.0000^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$r_{\mathrm{drag}}h$	100.54	$100.2^{+2.4}_{-2.4} \quad (-0.8\sigma)$	$H(0.51)$	90.09	$90.00^{+0.72}_{-0.69} \quad (-0.6\sigma)$
A_{217}^{CIB}	42.4	$45^{+10}_{-10} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.612	$2.60^{+0.11}_{-0.12} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	1967.7	$1972^{+28}_{-28} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	1.00	—	z_{re}	7.35	$7.1^{+1.8}_{-1.8} \quad (-0.0\sigma)$	$H(0.61)$	95.66	$95.58^{+0.59}_{-0.56} \quad (-0.6\sigma)$
A_{143}^{tSZ}	6.81	$5.6^{+3.7}_{-3.6} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	2.080	$2.072^{+0.071}_{-0.077} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	2290.7	$2295^{+30}_{-30} \quad (+0.7\sigma)$
A_{100}^{PS}	240	$252^{+50}_{-50} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8752	$1.877^{+0.025}_{-0.024} \quad (+0.7\sigma)$	$H(2.33)$	235.64	$235.8^{+1.8}_{-1.8} \quad (+0.8\sigma)$
A_{143}^{PS}	49.6	$43^{+20}_{-20} \quad (+0.1\sigma)$	D_{40}	1216.0	$1222^{+28}_{-28} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	5746.4	$5750^{+25}_{-26} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	57.4	$42^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	5738	$5743^{+78}_{-75} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	0.4474	$0.448^{+0.020}_{-0.019} \quad (+0.7\sigma)$
A_{217}^{PS}	124.1	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	2532.4	$2532^{+28}_{-27} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	0.7423	$0.741^{+0.015}_{-0.016} \quad (+0.6\sigma)$
A^{kSZ}	0.00	$< 7.13 \quad (+0.0\sigma)$	D_{1420}	816.3	$815.1^{+9.5}_{-9.2} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	0.4673	$0.468^{+0.016}_{-0.016} \quad (+0.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.69	$8.8^{+3.6}_{-3.6} \quad (-0.1\sigma)$	D_{2000}	232.62	$231.9^{+3.3}_{-3.2} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	0.6589	$0.658^{+0.012}_{-0.013} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.73	$10.6^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	0.9714	$0.9687^{+0.0099}_{-0.0096} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	0.4668	$0.467^{+0.014}_{-0.015} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.7	$18.1^{+6.3}_{-6.4} \quad (+0.1\sigma)$	Y_{P}	0.245484	$0.24546^{+0.00014}_{-0.00013} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	0.6170	$0.616^{+0.011}_{-0.012} \quad (+0.4\sigma)$
$A_{217}^{\mathrm{dustTT}}$	95.4	$93^{+10}_{-10} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246811	$0.24679^{+0.00014}_{-0.00013} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	0.4625	$0.462^{+0.013}_{-0.013} \quad (+0.7\sigma)$
$A_{100}^{\mathrm{dustTE}}$	0.113	$0.114^{+0.076}_{-0.075}$	$10^5 \mathrm{D}/\mathrm{H}$	2.542	$2.552^{+0.063}_{-0.062} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	0.5873	$0.586^{+0.011}_{-0.012} \quad (+0.4\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.134^{+0.058}_{-0.057}$	Age/Gyr	13.759	$13.767^{+0.056}_{-0.057} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	0.2964	$0.2957^{+0.0052}_{-0.0057} \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.483	$0.48^{+0.16}_{-0.17}$	z_*	1089.46	$1089.57^{+0.65}_{-0.63} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	0.3059	$0.3051^{+0.0053}_{-0.0057} \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.11}_{-0.11}$	r_*	144.71	$144.66^{+0.64}_{-0.65} \quad (-0.9\sigma)$	f_{2000}^{143}	25.6	$27^{+6}_{-6} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.659	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	1.04128	$1.04126^{+0.00064}_{-0.00064} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	29.65	$30^{+4}_{-4} \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.06^{+0.53}_{-0.53}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.897	$13.893^{+0.059}_{-0.059} \quad (-0.9\sigma)$	f_{2000}^{217}	104.32	$105.4^{+3.8}_{-3.8} \quad (+0.2\sigma)$
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	1060.35	$1060.26^{+0.66}_{-0.64} \quad (+0.1\sigma)$	χ_{small}^2	395.71	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{217}	0.99810	$0.9981^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	147.30	$147.26^{+0.62}_{-0.62} \quad (-0.9\sigma)$	χ_{plik}^2	2337.0	$2353.9 \quad (\nu: 16.5) \quad (+285.8\sigma)$
H_0	68.25	$68.1^{+1.4}_{-1.4} \quad (-0.7\sigma)$	k_{D}	0.14083	$0.14083^{+0.00064}_{-0.00063} \quad (+0.9\sigma)$	χ_{prior}^2	1.3	$11.3 \quad (\nu: 9.7) \quad (+1.2\sigma)$
Ω_{Λ}	0.6963	$0.694^{+0.018}_{-0.019} \quad (-0.8\sigma)$	$100\theta_{\mathrm{D}}$	0.160516	$0.16058^{+0.00037}_{-0.00037} \quad (-0.2\sigma)$	χ_{CMB}^2	2732.7	$2750.8 \quad (\nu: 17.8) \quad (+271.6\sigma)$
Ω_{m}	0.3037	$0.306^{+0.019}_{-0.018} \quad (+0.8\sigma)$	z_{eq}	3365	$3373^{+68}_{-67} \quad (+0.8\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 2734.06$; $\Delta\chi_{\mathrm{eff}}^2 = -8.18$; $\bar{\chi}_{\mathrm{eff}}^2 = 2762.07$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -6.08$; $R - 1 = 0.00592$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.71 (Δ -0.35) plik_rd12_HM_v22b_TTTEE: 2337.00 (Δ -7.46)

3.72 base_Alens_CamSpecHM_TT

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02262	$0.02256^{+0.00062}_{-0.00059}$ (-0.2σ)	S_8	0.848	$0.834^{+0.10}_{-0.093}$ $(+1.6\sigma)$	$100\theta_{\mathrm{eq}}$	0.8273	$0.826^{+0.024}_{-0.024}$ (-0.2σ)
$\Omega_{\mathrm{c}}h^2$	0.1168	$0.1172^{+0.0055}_{-0.0054}$ $(+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.464	$0.457^{+0.055}_{-0.051}$ $(+1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4565	$0.456^{+0.012}_{-0.012}$ (-0.2σ)
$100\theta_{\mathrm{MC}}$	1.04141	$1.0414^{+0.0011}_{-0.0011}$ (-0.1σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.630	$0.618^{+0.065}_{-0.061}$ $(+2.2\sigma)$	$H(0.15)$	73.98	$73.8^{+2.3}_{-2.2}$ (-0.2σ)
τ	0.121	< 0.188 $(+5.4\sigma)$	$\sigma_8/h^{0.5}$	1.030	$1.01^{+0.10}_{-0.097}$ $(+2.6\sigma)$	$D_{\mathrm{M}}(0.15)$	630.6	633^{+22}_{-21} $(+0.2\sigma)$
A_{L}	1.080	$1.12^{+0.28}_{-0.26}$ (-1.3σ)	$r_{\mathrm{drag}}h$	101.71	$101.3^{+4.5}_{-4.4}$ (-0.2σ)	$H(0.38)$	83.81	$83.7^{+1.7}_{-1.6}$ (-0.2σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.169	$3.12^{+0.19}_{-0.17}$ $(+5.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.642	$2.63^{+0.15}_{-0.16}$ (-0.1σ)	$D_{\mathrm{M}}(0.38)$	1507.8	1512^{+44}_{-43} $(+0.2\sigma)$
n_{s}	0.9764	$0.974^{+0.017}_{-0.016}$ (-0.0σ)	z_{re}	13.4	$11.0^{+7.6}_{-8.4}$ $(+4.4\sigma)$	$H(0.51)$	90.37	$90.3^{+1.4}_{-1.3}$ (-0.2σ)
A_{100}^{PS}	220	230^{+50}_{-50} (-0.7σ)	$10^9 A_{\mathrm{s}}$	2.378	$2.28^{+0.45}_{-0.38}$ $(+5.8\sigma)$	$D_{\mathrm{M}}(0.51)$	1956	1961^{+51}_{-51} $(+0.2\sigma)$
A_{143}^{PS}	43.7	34^{+20}_{-20} (-0.9σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8663	$1.867^{+0.031}_{-0.031}$ (-0.0σ)	$H(0.61)$	95.86	$95.8^{+1.1}_{-1.0}$ (-0.2σ)
A_{217}^{PS}	108.4	104^{+30}_{-30} (-1.1σ)	D_{40}	1235	1233^{+60}_{-54} $(+1.4\sigma)$	$D_{\mathrm{M}}(0.61)$	2278	2283^{+55}_{-56} $(+0.2\sigma)$
A_{217}^{CIB}	37.8	37^{+10}_{-10} (-1.2σ)	D_{220}	5724	5723^{+83}_{-82} (-0.3σ)	$H(2.33)$	234.73	$235.0^{+3.2}_{-3.1}$ $(+0.2\sigma)$
A_{143}^{tSZ}	6.31	$4.2^{+3.6}_{-4.1}$ (-0.8σ)	D_{810}	2526.9	2525^{+28}_{-28} (-0.1σ)	$D_{\mathrm{M}}(2.33)$	5738.7	5743^{+46}_{-49} $(+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.764	$0.68^{+0.28}_{-0.26}$	D_{1420}	815.5	814^{+10}_{-10} (-0.1σ)	$f\sigma_8(0.15)$	0.470	$0.463^{+0.054}_{-0.050}$ $(+1.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.78	—	D_{2000}	232.91	$232.1^{+4.3}_{-4.3}$ (-0.1σ)	$\sigma_8(0.15)$	0.791	$0.774^{+0.076}_{-0.069}$ $(+4.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.89	—	$n_{\mathrm{s},0.002}$	0.9764	$0.974^{+0.017}_{-0.016}$ (-0.0σ)	$f\sigma_8(0.38)$	0.494	$0.484^{+0.053}_{-0.048}$ $(+2.1\sigma)$
A^{kSZ}	0.0	—	Y_{P}	0.245487	$0.24547^{+0.00027}_{-0.00024}$ (-0.2σ)	$\sigma_8(0.38)$	0.703	$0.688^{+0.067}_{-0.060}$ $(+4.6\sigma)$
A_{100}^{dust}	0.995	$1.00^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246814	$0.24679^{+0.00027}_{-0.00025}$ (-0.2σ)	$f\sigma_8(0.51)$	0.4942	$0.485^{+0.050}_{-0.047}$ $(+2.4\sigma)$
A_{143}^{dust}	0.965	$0.95^{+0.34}_{-0.35}$	$10^5 \mathrm{D}/\mathrm{H}$	2.541	$2.55^{+0.11}_{-0.11}$ $(+0.2\sigma)$	$\sigma_8(0.51)$	0.659	$0.644^{+0.063}_{-0.056}$ $(+4.9\sigma)$
A_{217}^{dust}	0.989	$0.98^{+0.20}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	13.744	$13.75^{+0.10}_{-0.11}$ $(+0.2\sigma)$	$f\sigma_8(0.61)$	0.4904	$0.481^{+0.049}_{-0.046}$ $(+2.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.007	$1.01^{+0.32}_{-0.32}$	z_*	1089.33	$1089.4^{+1.1}_{-1.1}$ $(+0.2\sigma)$	$\sigma_8(0.61)$	0.628	$0.614^{+0.060}_{-0.053}$ $(+5.0\sigma)$
y_{cal}	1.00007	$1.0000^{+0.0048}_{-0.0048}$ $(+0.0\sigma)$	r_*	145.08	$145.0^{+1.1}_{-1.1}$ (-0.2σ)	$f\sigma_8(2.33)$	0.3172	$0.310^{+0.030}_{-0.027}$ $(+5.3\sigma)$
c_{100}	0.99783	$0.9976^{+0.0021}_{-0.0021}$ (-3.3σ)	$100\theta_*$	1.04157	$1.0415^{+0.0011}_{-0.0010}$ (-0.1σ)	$\sigma_8(2.33)$	0.3278	$0.320^{+0.031}_{-0.028}$ $(+5.4\sigma)$
c_{217}	1.00083	$1.0008^{+0.0030}_{-0.0031}$ $(+4.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.929	$13.92^{+0.10}_{-0.10}$ (-0.2σ)	f_{2000}^{143}	25.8	26^{+7}_{-7} (-0.1σ)
H_0	68.87	$68.7^{+2.6}_{-2.6}$ (-0.2σ)	z_{drag}	1060.28	$1060.2^{+1.2}_{-1.1}$ (-0.1σ)	f_{2000}^{217}	103.72	$104.5^{+4.9}_{-4.8}$ (-0.2σ)
Ω_{Λ}	0.7048	$0.701^{+0.032}_{-0.034}$ (-0.2σ)	r_{drag}	147.67	$147.6^{+1.1}_{-1.1}$ (-0.2σ)	$f_{2000}^{143 \times 217}$	28.8	29^{+5}_{-5} (-0.2σ)
Ω_{m}	0.2952	$0.299^{+0.034}_{-0.032}$ $(+0.2\sigma)$	k_{D}	0.14044	$0.1404^{+0.0011}_{-0.0011}$ $(+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	7045.0	7059.9 (ν : 14.8)
$\Omega_{\mathrm{m}}h^2$	0.1400	$0.1404^{+0.0051}_{-0.0050}$ $(+0.2\sigma)$	$100\theta_{\mathrm{D}}$	0.16060	$0.16066^{+0.00063}_{-0.00062}$ $(+0.1\sigma)$	χ_{prior}^2	1.4	7.2 (ν : 5.4) $(+0.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09645	$0.0964^{+0.0010}_{-0.00099}$ $(+0.0\sigma)$	z_{eq}	3331	3341^{+120}_{-120} $(+0.2\sigma)$			
σ_8	0.855	$0.836^{+0.082}_{-0.075}$ $(+3.7\sigma)$	k_{eq}	0.010167	$0.01020^{+0.00037}_{-0.00036}$ $(+0.2\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 7046.45$; $\Delta\chi_{\mathrm{eff}}^2 = -0.25$; $\bar{\chi}_{\mathrm{eff}}^2 = 7067.10$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.23$; $R - 1 = 0.00805$
 χ_{eff}^2 : CMB - CamSpec like_10.7HM: 7045.02 (Δ -0.23)

3.73 base_Alens_CamSpecHM_TT_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02248^{+0.00044}_{-0.00044} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.461^{+0.047}_{-0.043} \quad (+1.8\sigma)$	$H(0.15)$	$73.4^{+1.1}_{-1.0} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0026}_{-0.0026} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.621^{+0.061}_{-0.055} \quad (+2.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$636^{+10}_{-10} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04123^{+0.00086}_{-0.00087} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$1.013^{+0.099}_{-0.089} \quad (+2.7\sigma)$	$H(0.38)$	$83.40^{+0.82}_{-0.78} \quad (-0.6\sigma)$
τ	$< 0.182 \quad (+5.1\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+2.0}_{-2.0} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1519^{+21}_{-21} \quad (+0.6\sigma)$
A_{L}	$1.11^{+0.25}_{-0.24} \quad (-1.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.62^{+0.15}_{-0.15} \quad (-0.2\sigma)$	$H(0.51)$	$90.04^{+0.68}_{-0.65} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.12^{+0.18}_{-0.17} \quad (+4.9\sigma)$	z_{re}	$10.8^{+7.6}_{-8.2} \quad (+4.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1969^{+24}_{-25} \quad (+0.6\sigma)$
n_{s}	$0.972^{+0.010}_{-0.0098} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.27^{+0.43}_{-0.37} \quad (+5.5\sigma)$	$H(0.61)$	$95.60^{+0.58}_{-0.55} \quad (-0.5\sigma)$
A_{100}^{PS}	$231^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2292^{+26}_{-27} \quad (+0.6\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	D_{40}	$1236^{+57}_{-46} \quad (+1.6\sigma)$	$H(2.33)$	$235.4^{+1.6}_{-1.6} \quad (+0.6\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.1\sigma)$	D_{220}	$5719^{+81}_{-82} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5750^{+27}_{-28} \quad (+0.5\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.1\sigma)$	D_{810}	$2526^{+27}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.466^{+0.047}_{-0.043} \quad (+1.9\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.1} \quad (-0.8\sigma)$	D_{1420}	$814^{+10}_{-9.9} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.774^{+0.074}_{-0.066} \quad (+4.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.26}$	D_{2000}	$231.7^{+3.9}_{-3.8} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.487^{+0.048}_{-0.043} \quad (+2.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.972^{+0.010}_{-0.0098} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.687^{+0.065}_{-0.058} \quad (+4.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24544^{+0.00018}_{-0.00018} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.487^{+0.048}_{-0.043} \quad (+2.6\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24676^{+0.00018}_{-0.00018} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.644^{+0.061}_{-0.054} \quad (+4.8\sigma)$
A_{100}^{dust}	$1.00^{+0.39}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.566^{+0.082}_{-0.079} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.482^{+0.047}_{-0.042} \quad (+2.8\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.768^{+0.063}_{-0.064} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.613^{+0.058}_{-0.051} \quad (+4.9\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.61^{+0.67}_{-0.66} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.309^{+0.029}_{-0.026} \quad (+5.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	r_*	$144.84^{+0.64}_{-0.63} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.319^{+0.030}_{-0.027} \quad (+5.0\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$100\theta_*$	$1.04141^{+0.00085}_{-0.00085} \quad (-0.3\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.908^{+0.062}_{-0.062} \quad (-0.5\sigma)$	f_{2000}^{217}	$104.9^{+4.4}_{-4.4} \quad (-0.1\sigma)$
c_{217}	$1.0008^{+0.0030}_{-0.0031} \quad (+4.3\sigma)$	z_{drag}	$1060.06^{+0.98}_{-0.96} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.1\sigma)$
H_0	$68.2^{+1.2}_{-1.2} \quad (-0.6\sigma)$	r_{drag}	$147.48^{+0.69}_{-0.68} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7059.1 \quad (\nu: 13.8)$
Ω_{Λ}	$0.697^{+0.015}_{-0.015} \quad (-0.6\sigma)$	k_{D}	$0.14055^{+0.00091}_{-0.00091} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
Ω_{m}	$0.303^{+0.015}_{-0.015} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16072^{+0.00055}_{-0.00054} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.86 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0024}_{-0.0024} \quad (+0.6\sigma)$	z_{eq}	$3359^{+58}_{-58} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.1 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}} h^3$	$0.09635^{+0.00099}_{-0.00096} \quad (-0.1\sigma)$	k_{eq}	$0.01025^{+0.00018}_{-0.00018} \quad (+0.6\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 5.4) \quad (+0.0\sigma)$
σ_8	$0.837^{+0.080}_{-0.071} \quad (+3.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.7)$
S_8	$0.842^{+0.086}_{-0.079} \quad (+1.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4537^{+0.0057}_{-0.0056} \quad (-0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7072.33$; $R - 1 = 0.01128$

3.74 base_Alens_CamSpecHM_TT_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02256^{+0.00062}_{-0.00060} \quad (-0.1\sigma)$	S_8	$0.847^{+0.092}_{-0.083} \quad (+2.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.024}_{-0.023} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1171^{+0.0054}_{-0.0054} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.464^{+0.050}_{-0.046} \quad (+2.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.012}_{-0.012} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0414^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.628^{+0.058}_{-0.054} \quad (+2.9\sigma)$	$H(0.15)$	$73.8^{+2.3}_{-2.2} \quad (-0.2\sigma)$
τ	$0.114^{+0.081}_{-0.071} \quad (+7.4\sigma)$	$\sigma_8/h^{0.5}$	$1.026^{+0.092}_{-0.083} \quad (+3.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$632^{+22}_{-21} \quad (+0.2\sigma)$
A_{L}	$1.08^{+0.25}_{-0.22} \quad (-1.6\sigma)$	$r_{\mathrm{drag}}h$	$101.4^{+4.5}_{-4.4} \quad (-0.2\sigma)$	$H(0.38)$	$83.7^{+1.7}_{-1.6} \quad (-0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.15^{+0.16}_{-0.14} \quad (+7.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.63^{+0.15}_{-0.15} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+44}_{-44} \quad (+0.2\sigma)$
n_{s}	$0.975^{+0.017}_{-0.016} \quad (+0.1\sigma)$	z_{re}	$< 18.4 \quad (+6.1\sigma)$	$H(0.51)$	$90.3^{+1.4}_{-1.3} \quad (-0.2\sigma)$
A_{100}^{PS}	$229^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.35^{+0.40}_{-0.33} \quad (+7.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1959^{+52}_{-52} \quad (+0.2\sigma)$
A_{143}^{PS}	$34^{+20}_{-20} \quad (-1.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.866^{+0.031}_{-0.030} \quad (-0.1\sigma)$	$H(0.61)$	$95.8^{+1.1}_{-1.0} \quad (-0.2\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.1\sigma)$	D_{40}	$1238^{+58}_{-53} \quad (+1.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2282^{+56}_{-56} \quad (+0.2\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5721^{+83}_{-82} \quad (-0.4\sigma)$	$H(2.33)$	$234.9^{+3.1}_{-3.1} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$4.2^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{810}	$2525^{+28}_{-28} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5742^{+46}_{-49} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.28}_{-0.26}$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.470^{+0.049}_{-0.045} \quad (+2.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$232.2^{+4.3}_{-4.4} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.787^{+0.066}_{-0.058} \quad (+5.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.975^{+0.017}_{-0.016} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.492^{+0.047}_{-0.041} \quad (+2.7\sigma)$
A^{kSZ}	—	Y_{P}	$0.24547^{+0.00027}_{-0.00025} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.699^{+0.059}_{-0.050} \quad (+6.2\sigma)$
A_{100}^{dust}	$1.00^{+0.39}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24680^{+0.00027}_{-0.00025} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.492^{+0.045}_{-0.041} \quad (+3.1\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.35}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.55^{+0.11}_{-0.11} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.655^{+0.055}_{-0.047} \quad (+6.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.75^{+0.10}_{-0.11} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.488^{+0.043}_{-0.039} \quad (+3.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.31}_{-0.32}$	z_*	$1089.4^{+1.1}_{-1.1} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.624^{+0.052}_{-0.045} \quad (+6.7\sigma)$
y_{cal}	$1.0000^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	r_*	$145.0^{+1.1}_{-1.1} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.315^{+0.026}_{-0.022} \quad (+7.2\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.0415^{+0.0011}_{-0.0010} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.326^{+0.027}_{-0.023} \quad (+7.3\sigma)$
c_{217}	$1.0008^{+0.0030}_{-0.0031} \quad (+4.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.93^{+0.10}_{-0.10} \quad (-0.2\sigma)$	f_{2000}^{143}	$26^{+7}_{-7} \quad (-0.1\sigma)$
H_0	$68.7^{+2.6}_{-2.6} \quad (-0.2\sigma)$	z_{drag}	$1060.2^{+1.2}_{-1.1} \quad (-0.1\sigma)$	f_{2000}^{217}	$104.4^{+4.9}_{-4.9} \quad (-0.3\sigma)$
Ω_{Λ}	$0.702^{+0.032}_{-0.034} \quad (-0.2\sigma)$	r_{drag}	$147.6^{+1.1}_{-1.1} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$29^{+5}_{-5} \quad (-0.3\sigma)$
Ω_{m}	$0.298^{+0.034}_{-0.032} \quad (+0.2\sigma)$	k_{D}	$0.1404^{+0.0011}_{-0.0010} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7059.9 \quad (\nu: 14.8)$
$\Omega_{\mathrm{m}}h^2$	$0.1403^{+0.0050}_{-0.0050} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16066^{+0.00063}_{-0.00062} \quad (+0.1\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 5.4) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0964^{+0.0010}_{-0.00098} \quad (-0.0\sigma)$	z_{eq}	$3338^{+120}_{-120} \quad (+0.2\sigma)$		
σ_8	$0.850^{+0.072}_{-0.063} \quad (+4.9\sigma)$	k_{eq}	$0.01019^{+0.00037}_{-0.00036} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7067.05; R - 1 = 0.01053$

3.75 base_Alens_CamSpecHM_TT_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02248^{+0.00044}_{-0.00044} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.469^{+0.042}_{-0.037} \quad (+2.3\sigma)$	$H(0.15)$	$73.4^{+1.1}_{-1.0} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0026}_{-0.0025} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.631^{+0.054}_{-0.047} \quad (+3.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$636^{+10}_{-10} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04123^{+0.00086}_{-0.00087} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$1.030^{+0.087}_{-0.075} \quad (+3.6\sigma)$	$H(0.38)$	$83.41^{+0.82}_{-0.79} \quad (-0.6\sigma)$
τ	$0.110^{+0.079}_{-0.068} \quad (+7.0\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+2.0}_{-2.0} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1519^{+21}_{-21} \quad (+0.6\sigma)$
A_{L}	$1.07^{+0.22}_{-0.21} \quad (-1.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.62^{+0.15}_{-0.15} \quad (-0.2\sigma)$	$H(0.51)$	$90.04^{+0.68}_{-0.65} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.15^{+0.16}_{-0.14} \quad (+6.8\sigma)$	z_{re}	$< 18.2 \quad (+5.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1969^{+24}_{-25} \quad (+0.6\sigma)$
n_{s}	$0.972^{+0.010}_{-0.0098} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.34^{+0.38}_{-0.31} \quad (+7.4\sigma)$	$H(0.61)$	$95.60^{+0.58}_{-0.55} \quad (-0.5\sigma)$
A_{100}^{PS}	$231^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2292^{+27}_{-27} \quad (+0.6\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	D_{40}	$1242^{+55}_{-46} \quad (+1.9\sigma)$	$H(2.33)$	$235.4^{+1.6}_{-1.6} \quad (+0.6\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.1\sigma)$	D_{220}	$5717^{+81}_{-82} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5750^{+27}_{-28} \quad (+0.5\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.1\sigma)$	D_{810}	$2526^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.042}_{-0.037} \quad (+2.5\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{1420}	$814^{+10}_{-9.9} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.787^{+0.065}_{-0.054} \quad (+5.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.26}$	D_{2000}	$231.8^{+3.9}_{-3.8} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.042}_{-0.037} \quad (+3.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.972^{+0.010}_{-0.0098} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.699^{+0.057}_{-0.048} \quad (+6.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24543^{+0.00018}_{-0.00018} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.495^{+0.042}_{-0.036} \quad (+3.3\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24676^{+0.00018}_{-0.00018} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.654^{+0.054}_{-0.045} \quad (+6.4\sigma)$
A_{100}^{dust}	$0.999^{+0.39}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.566^{+0.083}_{-0.080} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.490^{+0.041}_{-0.035} \quad (+3.6\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.769^{+0.062}_{-0.064} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.623^{+0.051}_{-0.043} \quad (+6.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.62^{+0.67}_{-0.65} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.314^{+0.026}_{-0.021} \quad (+6.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	r_*	$144.85^{+0.64}_{-0.62} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.324^{+0.027}_{-0.022} \quad (+6.9\sigma)$
y_{cal}	$0.99999^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$100\theta_*$	$1.04141^{+0.00085}_{-0.00085} \quad (-0.3\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.0\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.909^{+0.063}_{-0.062} \quad (-0.5\sigma)$	f_{2000}^{217}	$104.8^{+4.3}_{-4.3} \quad (-0.1\sigma)$
c_{217}	$1.0008^{+0.0030}_{-0.0031} \quad (+4.3\sigma)$	z_{drag}	$1060.05^{+0.95}_{-0.95} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.1\sigma)$
H_0	$68.2^{+1.2}_{-1.2} \quad (-0.6\sigma)$	r_{drag}	$147.49^{+0.69}_{-0.69} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7059.1 \quad (\nu: 13.9)$
Ω_{Λ}	$0.697^{+0.015}_{-0.015} \quad (-0.6\sigma)$	k_{D}	$0.14053^{+0.00092}_{-0.00091} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
Ω_{m}	$0.303^{+0.015}_{-0.015} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16072^{+0.00055}_{-0.00054} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.87 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0024}_{-0.0024} \quad (+0.6\sigma)$	z_{eq}	$3358^{+58}_{-58} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.1 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0963^{+0.0010}_{-0.00097} \quad (-0.1\sigma)$	k_{eq}	$0.01025^{+0.00018}_{-0.00018} \quad (+0.6\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 5.4) \quad (+0.0\sigma)$
σ_8	$0.851^{+0.070}_{-0.059} \quad (+5.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.7)$
S_8	$0.855^{+0.077}_{-0.068} \quad (+2.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4537^{+0.0057}_{-0.0056} \quad (-0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7072.34$; $R - 1 = 0.01270$

3.76 base_Alens_CamSpecHM_TT_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02267	$0.02266^{+0.00059}_{-0.00058}$ (+0.2 σ)	S_8	0.756	$0.793^{+0.077}_{-0.068}$ (+0.2 σ)	$100\theta_{\text{eq}}$	0.8283	$0.830^{+0.022}_{-0.022}$ (+0.2 σ)
$\Omega_c h^2$	0.11654	$0.1162^{+0.0050}_{-0.0050}$ (−0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4139	$0.434^{+0.042}_{-0.037}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.4570	$0.458^{+0.011}_{-0.011}$ (+0.2 σ)
$100\theta_{\text{MC}}$	1.04148	$1.0415^{+0.0011}_{-0.0010}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5623	$0.591^{+0.047}_{-0.043}$ (+0.4 σ)	$H(0.15)$	74.11	$74.2^{+2.1}_{-2.1}$ (+0.2 σ)
τ	0.010	< 0.131 (+1.5 σ)	$\sigma_8/h^{0.5}$	0.919	$0.967^{+0.075}_{-0.066}$ (+0.5 σ)	$D_{\text{M}}(0.15)$	629.4	628^{+20}_{-20} (−0.2 σ)
A_{L}	1.362	$1.22^{+0.24}_{-0.23}$ (−0.2 σ)	$r_{\text{drag}} h$	101.93	$102.2^{+4.2}_{-4.1}$ (+0.2 σ)	$H(0.38)$	83.92	$84.0^{+1.6}_{-1.5}$ (+0.2 σ)
$\ln(10^{10} A_{\text{s}})$	2.947	$3.05^{+0.14}_{-0.11}$ (+1.3 σ)	$\langle d^2 \rangle^{1/2}$	2.652	$2.64^{+0.15}_{-0.15}$ (−0.0 σ)	$D_{\text{M}}(0.38)$	1505.3	1503^{+41}_{-40} (−0.2 σ)
n_{s}	0.9760	$0.977^{+0.016}_{-0.015}$ (+0.4 σ)	z_{re}	2.1	$8.1^{+6.3}_{-5.9}$ (+1.1 σ)	$H(0.51)$	90.46	$90.5^{+1.3}_{-1.2}$ (+0.2 σ)
y_{cal}	1.00006	$1.0000^{+0.0048}_{-0.0048}$ (−0.0 σ)	$10^9 A_{\text{s}}$	1.905	$2.12^{+0.31}_{-0.23}$ (+1.5 σ)	$D_{\text{M}}(0.51)$	1952.8	1950^{+48}_{-48} (−0.2 σ)
A_{100}^{PS}	218	228^{+50}_{-50} (−0.8 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8667	$1.863^{+0.029}_{-0.029}$ (−0.3 σ)	$H(0.61)$	95.94	$96.0^{+1.1}_{-0.99}$ (+0.2 σ)
A_{143}^{PS}	45.1	33^{+20}_{-20} (−1.1 σ)	D_{40}	1197.5	1209^{+39}_{-37} (−0.0 σ)	$D_{\text{M}}(0.61)$	2275	2272^{+51}_{-52} (−0.2 σ)
A_{217}^{PS}	108.8	105^{+20}_{-30} (−1.0 σ)	D_{220}	5732	5726^{+83}_{-81} (−0.2 σ)	$H(2.33)$	234.64	$234.4^{+2.9}_{-2.8}$ (−0.2 σ)
A_{217}^{CIB}	37.6	36^{+10}_{-10} (−1.3 σ)	D_{810}	2527.5	2524^{+27}_{-28} (−0.2 σ)	$D_{\text{M}}(2.33)$	5735.1	5734^{+44}_{-46} (−0.2 σ)
A_{143}^{tSZ}	6.32	$4.2^{+3.6}_{-4.1}$ (−0.8 σ)	D_{1420}	815.5	815^{+10}_{-10} (+0.0 σ)	$f\sigma_8(0.15)$	0.4195	$0.440^{+0.041}_{-0.036}$ (+0.2 σ)
$r_{143 \times 217}^{\text{PS}}$	0.793	$0.68^{+0.28}_{-0.26}$	D_{2000}	232.95	$232.6^{+4.2}_{-4.2}$ (+0.2 σ)	$\sigma_8(0.15)$	0.7076	$0.745^{+0.054}_{-0.044}$ (+0.9 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.77	—	$n_{\text{s},0.002}$	0.9760	$0.977^{+0.016}_{-0.015}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.4406	$0.463^{+0.038}_{-0.035}$ (+0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.999	—	Y_{P}	0.245506	$0.24551^{+0.00026}_{-0.00023}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6291	$0.662^{+0.048}_{-0.038}$ (+1.1 σ)
A^{kSZ}	0.0	—	$Y_{\text{P}}^{\text{BBN}}$	0.246833	$0.24684^{+0.00026}_{-0.00023}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4413	$0.464^{+0.037}_{-0.033}$ (+0.4 σ)
A_{100}^{dust}	1.008	$1.01^{+0.38}_{-0.39}$	10^5D/H	2.532	$2.53^{+0.11}_{-0.10}$ (−0.2 σ)	$\sigma_8(0.51)$	0.5895	$0.621^{+0.045}_{-0.035}$ (+1.2 σ)
A_{143}^{dust}	0.962	$0.95^{+0.34}_{-0.34}$	Age/Gyr	13.735	$13.733^{+0.098}_{-0.10}$ (−0.2 σ)	$f\sigma_8(0.61)$	0.4380	$0.460^{+0.035}_{-0.031}$ (+0.5 σ)
A_{217}^{dust}	0.988	$0.98^{+0.20}_{-0.20}$	z_*	1089.24	$1089.2^{+1.1}_{-1.0}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5614	$0.591^{+0.042}_{-0.034}$ (+1.3 σ)
$A_{143 \times 217}^{\text{dust}}$	1.016	$1.01^{+0.31}_{-0.32}$	r_*	145.10	$145.2^{+1.1}_{-1.0}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2838	$0.299^{+0.021}_{-0.017}$ (+1.4 σ)
c_{100}	0.99790	$0.9976^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	1.04163	$1.0417^{+0.0010}_{-0.0010}$ (+0.2 σ)	$\sigma_8(2.33)$	0.2934	$0.309^{+0.022}_{-0.017}$ (+1.5 σ)
c_{217}	1.00088	$1.0007^{+0.0031}_{-0.0030}$ (+4.1 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.930	$13.940^{+0.096}_{-0.094}$ (+0.1 σ)	f_{2000}^{143}	25.7	26^{+7}_{-7} (−0.3 σ)
H_0	69.02	$69.2^{+2.5}_{-2.4}$ (+0.2 σ)	z_{drag}	1060.39	$1060.3^{+1.1}_{-1.1}$ (+0.2 σ)	f_{2000}^{217}	103.69	$104.0^{+4.8}_{-4.8}$ (−0.4 σ)
Ω_{Λ}	0.7064	$0.708^{+0.029}_{-0.031}$ (+0.2 σ)	r_{drag}	147.67	$147.8^{+1.0}_{-0.99}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	28.9	29^{+5}_{-5} (−0.5 σ)
Ω_{m}	0.2936	$0.292^{+0.031}_{-0.029}$ (−0.2 σ)	k_{D}	0.14048	$0.1403^{+0.0010}_{-0.0010}$ (−0.1 σ)	χ_{lowl}^2	20.86	$22.0 (\nu: 1.1)$ (+0.2 σ)
$\Omega_{\text{m}} h^2$	0.13986	$0.1395^{+0.0046}_{-0.0046}$ (−0.2 σ)	$100\theta_{\text{D}}$	0.16054	$0.16059^{+0.00061}_{-0.00059}$ (−0.1 σ)	χ_{CamSpec}^2	7046.1	$7060.0 (\nu: 14.2)$
$\Omega_{\text{m}} h^3$	0.09653	$0.0965^{+0.0010}_{-0.00099}$ (+0.1 σ)	z_{eq}	3327	3318^{+110}_{-110} (−0.2 σ)	χ_{prior}^2	1.4	$7.2 (\nu: 5.3)$ (+0.0 σ)
σ_8	0.764	$0.804^{+0.059}_{-0.049}$ (+0.8 σ)	k_{eq}	0.010154	$0.01013^{+0.00034}_{-0.00033}$ (−0.2 σ)	χ_{CMB}^2	7066.9	$7082.0 (\nu: 14.2)$ (+1023.4 σ)

Best-fit $\chi_{\text{eff}}^2 = 7068.30$; $\Delta\chi_{\text{eff}}^2 = -3.99$; $\bar{\chi}_{\text{eff}}^2 = 7089.14$; $\Delta\bar{\chi}_{\text{eff}}^2 = -3.10$; $R - 1 = 0.00730$
 χ_{eff}^2 : CMB - commander_dx12_v3_2_29: 20.86 (Δ -3.64) CamSpec like_10.7HM: 7046.06 (Δ -0.32)

3.77 base_Alens_CamSpecHM_TT_lowl_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02251^{+0.00044}_{-0.00044} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.597^{+0.042}_{-0.035} \quad (+0.8\sigma)$	$H(0.38)$	$83.49^{+0.80}_{-0.78} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1178^{+0.0026}_{-0.0025} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.974^{+0.068}_{-0.055} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1516^{+20}_{-20} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04128^{+0.00084}_{-0.00082} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$100.9^{+2.0}_{-2.0} \quad (-0.5\sigma)$	$H(0.51)$	$90.12^{+0.67}_{-0.65} \quad (-0.4\sigma)$
τ	$< 0.120 \quad (+0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.63^{+0.15}_{-0.15} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1966^{+24}_{-24} \quad (+0.4\sigma)$
A_{L}	$1.20^{+0.20}_{-0.21} \quad (-0.5\sigma)$	z_{re}	$7.6^{+6.1}_{-5.5} \quad (+0.6\sigma)$	$H(0.61)$	$95.66^{+0.58}_{-0.55} \quad (-0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.04^{+0.13}_{-0.10} \quad (+0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.10^{+0.28}_{-0.21} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2289^{+26}_{-26} \quad (+0.4\sigma)$
n_{s}	$0.9723^{+0.0094}_{-0.0093} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.022}_{-0.022} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.5} \quad (+0.5\sigma)$
y_{cal}	$1.0000^{+0.0047}_{-0.0047} \quad (-0.0\sigma)$	D_{40}	$1216^{+32}_{-31} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5747^{+27}_{-28} \quad (+0.4\sigma)$
A_{100}^{PS}	$230^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5718^{+80}_{-78} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.033}_{-0.028} \quad (+0.7\sigma)$
A_{143}^{PS}	$34^{+20}_{-20} \quad (-0.9\sigma)$	D_{810}	$2526^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.050}_{-0.039} \quad (+1.0\sigma)$
A_{217}^{PS}	$104^{+20}_{-30} \quad (-1.1\sigma)$	D_{1420}	$813.8^{+9.9}_{-10} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.033}_{-0.028} \quad (+0.8\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{2000}	$231.9^{+3.7}_{-3.8} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.044}_{-0.034} \quad (+1.1\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.9723^{+0.0094}_{-0.0093} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.033}_{-0.027} \quad (+0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.25}$	Y_{P}	$0.24545^{+0.00018}_{-0.00018} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.041}_{-0.031} \quad (+1.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00018}_{-0.00018} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.032}_{-0.026} \quad (+0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.560^{+0.082}_{-0.080} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.039}_{-0.030} \quad (+1.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.763^{+0.062}_{-0.063} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.298^{+0.020}_{-0.015} \quad (+1.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.55^{+0.66}_{-0.66} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.308^{+0.021}_{-0.016} \quad (+0.9\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.35}$	r_*	$144.89^{+0.62}_{-0.62} \quad (-0.5\sigma)$	f_{2000}^{143}	$27^{+7}_{-6} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04145^{+0.00083}_{-0.00081} \quad (-0.2\sigma)$	f_{2000}^{217}	$104.7^{+4.5}_{-4.3} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.31}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.912^{+0.061}_{-0.061} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1060.11^{+0.97}_{-0.98} \quad (-0.2\sigma)$	χ_{lowl}^2	$22.4 \quad (\nu: 1.0) \quad (+0.6\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0030} \quad (+4.3\sigma)$	r_{drag}	$147.51^{+0.69}_{-0.67} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7058.9 \quad (\nu: 13.0)$
H_0	$68.4^{+1.2}_{-1.2} \quad (-0.5\sigma)$	k_{D}	$0.14053^{+0.00089}_{-0.00092} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.049 \quad (\nu: 0.0)$
Ω_{Λ}	$0.698^{+0.015}_{-0.015} \quad (-0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16069^{+0.00056}_{-0.00054} \quad (+0.2\sigma)$	χ_{MGS}^2	$2.00 \quad (\nu: 0.2)$
Ω_{m}	$0.302^{+0.015}_{-0.015} \quad (+0.5\sigma)$	z_{eq}	$3353^{+57}_{-57} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.05 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^2$	$0.1410^{+0.0024}_{-0.0024} \quad (+0.5\sigma)$	k_{eq}	$0.01023^{+0.00018}_{-0.00017} \quad (+0.5\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 5.3) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09638^{+0.00099}_{-0.00096} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
σ_8	$0.806^{+0.055}_{-0.042} \quad (+1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4543^{+0.0057}_{-0.0056} \quad (-0.5\sigma)$	χ_{CMB}^2	$7081.3 \quad (\nu: 13.5) \quad (+1023.3\sigma)$
S_8	$0.808^{+0.061}_{-0.052} \quad (+0.7\sigma)$	$H(0.15)$	$73.6^{+1.0}_{-1.0} \quad (-0.5\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.033}_{-0.029} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+10}_{-10} \quad (+0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7094.64$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.98$; $R - 1 = 0.01645$

3.78 base_Alens_CamSpecHM_TT_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02268^{+0.00059}_{-0.00059} \quad (+0.3\sigma)$	S_8	$0.806^{+0.072}_{-0.065} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.832^{+0.022}_{-0.022} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1159^{+0.0050}_{-0.0049} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.040}_{-0.035} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.459^{+0.011}_{-0.011} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0415^{+0.0011}_{-0.0010} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.042}_{-0.039} \quad (+1.1\sigma)$	$H(0.15)$	$74.4^{+2.1}_{-2.1} \quad (+0.3\sigma)$
τ	$0.084^{+0.057}_{-0.042} \quad (+4.0\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.066}_{-0.059} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$627^{+20}_{-20} \quad (-0.3\sigma)$
A_{L}	$1.18^{+0.21}_{-0.21} \quad (-0.6\sigma)$	$r_{\mathrm{drag}} h$	$102.5^{+4.2}_{-4.1} \quad (+0.3\sigma)$	$H(0.38)$	$84.1^{+1.6}_{-1.5} \quad (+0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.09^{+0.11}_{-0.086} \quad (+3.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.64^{+0.15}_{-0.15} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1501^{+41}_{-40} \quad (-0.3\sigma)$
n_{s}	$0.978^{+0.015}_{-0.015} \quad (+0.6\sigma)$	z_{re}	$< 14.7 \quad (+3.4\sigma)$	$H(0.51)$	$90.6^{+1.3}_{-1.2} \quad (+0.3\sigma)$
y_{cal}	$1.0000^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.21^{+0.26}_{-0.19} \quad (+3.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1947^{+48}_{-47} \quad (-0.3\sigma)$
A_{100}^{PS}	$227^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.861^{+0.028}_{-0.029} \quad (-0.4\sigma)$	$H(0.61)$	$96.0^{+1.1}_{-1.0} \quad (+0.3\sigma)$
A_{143}^{PS}	$32^{+20}_{-20} \quad (-1.2\sigma)$	D_{40}	$1213^{+40}_{-37} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2269^{+52}_{-52} \quad (-0.3\sigma)$
A_{217}^{PS}	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{220}	$5725^{+84}_{-82} \quad (-0.3\sigma)$	$H(2.33)$	$234.2^{+2.9}_{-2.8} \quad (-0.3\sigma)$
A_{217}^{CIB}	$36^{+10}_{-10} \quad (-1.4\sigma)$	D_{810}	$2524^{+27}_{-27} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5731^{+45}_{-46} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$4.2^{+3.6}_{-4.1} \quad (-0.7\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.038}_{-0.034} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.69^{+0.28}_{-0.26}$	D_{2000}	$232.8^{+4.2}_{-4.2} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.760^{+0.045}_{-0.037} \quad (+2.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.978^{+0.015}_{-0.015} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.034}_{-0.032} \quad (+1.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24552^{+0.00026}_{-0.00024} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.676^{+0.040}_{-0.032} \quad (+3.0\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24684^{+0.00026}_{-0.00024} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.032}_{-0.030} \quad (+1.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.53^{+0.11}_{-0.10} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.634^{+0.037}_{-0.029} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.34}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.73^{+0.10}_{-0.10} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.031}_{-0.028} \quad (+1.4\sigma)$
A_{217}^{dust}	$0.99^{+0.20}_{-0.20}$	z_*	$1089.2^{+1.1}_{-1.0} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.603^{+0.035}_{-0.027} \quad (+3.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.31}_{-0.32}$	r_*	$145.3^{+1.0}_{-1.0} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.305^{+0.018}_{-0.013} \quad (+3.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.0417^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.316^{+0.019}_{-0.014} \quad (+3.8\sigma)$
c_{217}	$1.0007^{+0.0030}_{-0.0030} \quad (+4.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.946^{+0.094}_{-0.094} \quad (+0.3\sigma)$	f_{2000}^{143}	$25^{+7}_{-7} \quad (-0.4\sigma)$
H_0	$69.3^{+2.4}_{-2.4} \quad (+0.3\sigma)$	z_{drag}	$1060.4^{+1.1}_{-1.2} \quad (+0.2\sigma)$	f_{2000}^{217}	$103.8^{+4.8}_{-4.7} \quad (-0.5\sigma)$
Ω_{Λ}	$0.710^{+0.028}_{-0.031} \quad (+0.3\sigma)$	r_{drag}	$147.85^{+0.99}_{-0.98} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$29^{+5}_{-5} \quad (-0.6\sigma)$
Ω_{m}	$0.290^{+0.031}_{-0.028} \quad (-0.3\sigma)$	k_{D}	$0.1403^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	χ_{lowl}^2	$22.4 \quad (\nu: 1.3) \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1392^{+0.0047}_{-0.0045} \quad (-0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16057^{+0.00062}_{-0.00059} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7059.9 \quad (\nu: 14.4)$
$\Omega_{\mathrm{m}} h^3$	$0.09646^{+0.00099}_{-0.00099} \quad (+0.1\sigma)$	z_{eq}	$3311^{+110}_{-110} \quad (-0.3\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 5.4) \quad (+0.0\sigma)$
σ_8	$0.820^{+0.050}_{-0.042} \quad (+2.2\sigma)$	k_{eq}	$0.01011^{+0.00034}_{-0.00033} \quad (-0.3\sigma)$	χ_{CMB}^2	$7082.3 \quad (\nu: 14.4) \quad (+1023.4\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7089.50$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.64$; $R - 1 = 0.00995$

3.79 base_Alens_CamSpecHM_TT_lowl_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02252^{+0.00044}_{-0.00044} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.036}_{-0.029} \quad (+1.6\sigma)$	$H(0.38)$	$83.51^{+0.80}_{-0.77} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1177^{+0.0025}_{-0.0025} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.995^{+0.057}_{-0.046} \quad (+1.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1516^{+21}_{-20} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04128^{+0.00083}_{-0.00082} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$100.9^{+2.0}_{-2.0} \quad (-0.4\sigma)$	$H(0.51)$	$90.13^{+0.66}_{-0.63} \quad (-0.4\sigma)$
τ	$0.079^{+0.051}_{-0.037} \quad (+3.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.63^{+0.15}_{-0.15} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1965^{+24}_{-24} \quad (+0.4\sigma)$
A_{L}	$1.15^{+0.18}_{-0.18} \quad (-1.0\sigma)$	z_{re}	$< 14.1 \quad (+3.0\sigma)$	$H(0.61)$	$95.67^{+0.57}_{-0.55} \quad (-0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.09^{+0.10}_{-0.076} \quad (+3.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.19^{+0.23}_{-0.17} \quad (+3.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2288^{+26}_{-26} \quad (+0.4\sigma)$
n_{s}	$0.9730^{+0.0093}_{-0.0090} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.869^{+0.023}_{-0.023} \quad (+0.1\sigma)$	$H(2.33)$	$235.2^{+1.6}_{-1.5} \quad (+0.4\sigma)$
y_{cal}	$0.99998^{+0.0047}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1221^{+33}_{-32} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5747^{+27}_{-27} \quad (+0.4\sigma)$
A_{100}^{PS}	$229^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5715^{+81}_{-79} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.029}_{-0.025} \quad (+1.3\sigma)$
A_{143}^{PS}	$34^{+20}_{-20} \quad (-0.9\sigma)$	D_{810}	$2526^{+28}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.761^{+0.041}_{-0.031} \quad (+2.7\sigma)$
A_{217}^{PS}	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{1420}	$813.9^{+9.8}_{-10} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.028}_{-0.024} \quad (+1.6\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{2000}	$232.0^{+3.7}_{-3.8} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.676^{+0.036}_{-0.027} \quad (+3.0\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.1} \quad (-0.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.9730^{+0.0093}_{-0.0090} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.028}_{-0.023} \quad (+1.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.25}$	Y_{P}	$0.24545^{+0.00018}_{-0.00018} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.633^{+0.034}_{-0.025} \quad (+3.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00018}_{-0.00018} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.027}_{-0.022} \quad (+1.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.560^{+0.082}_{-0.079} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.603^{+0.032}_{-0.024} \quad (+3.2\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.762^{+0.061}_{-0.062} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.304^{+0.016}_{-0.012} \quad (+3.3\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	z_*	$1089.54^{+0.65}_{-0.64} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.314^{+0.017}_{-0.012} \quad (+3.3\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.35}$	r_*	$144.91^{+0.62}_{-0.63} \quad (-0.4\sigma)$	f_{2000}^{143}	$26^{+6}_{-6} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04145^{+0.00082}_{-0.00080} \quad (-0.2\sigma)$	f_{2000}^{217}	$104.6^{+4.4}_{-4.3} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.915^{+0.060}_{-0.061} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1060.10^{+0.97}_{-0.97} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 1.1) \quad (+1.1\sigma)$
c_{217}	$1.0008^{+0.0030}_{-0.0030} \quad (+4.3\sigma)$	r_{drag}	$147.54^{+0.68}_{-0.67} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7058.7 \quad (\nu: 13.3)$
H_0	$68.4^{+1.2}_{-1.2} \quad (-0.4\sigma)$	k_{D}	$0.14050^{+0.00089}_{-0.00092} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
Ω_{Λ}	$0.699^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16069^{+0.00057}_{-0.00054} \quad (+0.2\sigma)$	χ_{MGS}^2	$2.05 \quad (\nu: 0.2)$
Ω_{m}	$0.301^{+0.015}_{-0.015} \quad (+0.4\sigma)$	z_{eq}	$3351^{+57}_{-56} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.04 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^2$	$0.1409^{+0.0024}_{-0.0023} \quad (+0.4\sigma)$	k_{eq}	$0.01023^{+0.00017}_{-0.00017} \quad (+0.4\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 5.5) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09636^{+0.00095}_{-0.00095} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.011}_{-0.011} \quad (-0.4\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
σ_8	$0.823^{+0.045}_{-0.035} \quad (+2.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4545^{+0.0056}_{-0.0055} \quad (-0.4\sigma)$	χ_{CMB}^2	$7081.7 \quad (\nu: 13.8) \quad (+1023.3\sigma)$
S_8	$0.824^{+0.053}_{-0.046} \quad (+1.3\sigma)$	$H(0.15)$	$73.6^{+1.1}_{-1.0} \quad (-0.4\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.029}_{-0.025} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+10}_{-10} \quad (+0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7095.11$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.46$; $R - 1 = 0.02149$

3.80 base_Alens_CamSpecHM_TT_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02255	$0.02253^{+0.00061}_{-0.00059} \quad (-0.3\sigma)$	S_8	0.798	$0.800^{+0.064}_{-0.062} \quad (+0.4\sigma)$	$100\theta_{\text{eq}}$	0.8245	$0.823^{+0.023}_{-0.023} \quad (-0.4\sigma)$
$\Omega_c h^2$	0.1174	$0.1177^{+0.0054}_{-0.0052} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4370	$0.438^{+0.035}_{-0.034} \quad (+0.4\sigma)$	$100\theta_{\text{s,eq}}$	0.4551	$0.455^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$100\theta_{\text{MC}}$	1.04132	$1.0413^{+0.0011}_{-0.0011} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.5909	$0.592^{+0.031}_{-0.031} \quad (+0.4\sigma)$	$H(0.15)$	73.71	$73.6^{+2.2}_{-2.2} \quad (-0.4\sigma)$
τ	0.0509	$0.050^{+0.016}_{-0.017} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9649	$0.966^{+0.043}_{-0.043} \quad (+0.4\sigma)$	$D_{\text{M}}(0.15)$	633.3	$634^{+22}_{-21} \quad (+0.4\sigma)$
A_{L}	1.222	$1.21^{+0.20}_{-0.18} \quad (-0.3\sigma)$	$r_{\text{drag}} h$	101.16	$101.0^{+4.4}_{-4.3} \quad (-0.4\sigma)$	$H(0.38)$	83.61	$83.6^{+1.7}_{-1.6} \quad (-0.4\sigma)$
$\ln(10^{10} A_{\text{s}})$	3.0305	$3.030^{+0.034}_{-0.037} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.638	$2.63^{+0.15}_{-0.15} \quad (-0.1\sigma)$	$D_{\text{M}}(0.38)$	1513.2	$1515^{+43}_{-43} \quad (+0.4\sigma)$
n_{s}	0.9728	$0.971^{+0.016}_{-0.016} \quad (-0.4\sigma)$	z_{re}	7.25	$7.2^{+1.7}_{-1.8} \quad (+0.1\sigma)$	$H(0.51)$	90.20	$90.2^{+1.4}_{-1.3} \quad (-0.4\sigma)$
y_{cal}	0.99998	$1.0001^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\text{s}}$	2.071	$2.069^{+0.071}_{-0.075} \quad (+0.1\sigma)$	$D_{\text{M}}(0.51)$	1962	$1965^{+51}_{-50} \quad (+0.4\sigma)$
A_{100}^{PS}	221	$232^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8702	$1.870^{+0.030}_{-0.030} \quad (+0.2\sigma)$	$H(0.61)$	95.73	$95.7^{+1.1}_{-1.0} \quad (-0.3\sigma)$
A_{143}^{PS}	47.8	$35^{+20}_{-20} \quad (-0.8\sigma)$	D_{40}	1210.9	$1214^{+38}_{-37} \quad (+0.3\sigma)$	$D_{\text{M}}(0.61)$	2285	$2287^{+55}_{-55} \quad (+0.4\sigma)$
A_{217}^{PS}	107.6	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	5729	$5729^{+83}_{-83} \quad (-0.2\sigma)$	$H(2.33)$	235.09	$235.2^{+3.1}_{-3.0} \quad (+0.4\sigma)$
A_{217}^{CIB}	38.9	$38^{+10}_{-10} \quad (-1.1\sigma)$	D_{810}	2528.0	$2526^{+28}_{-28} \quad (-0.0\sigma)$	$D_{\text{M}}(2.33)$	5744.3	$5746^{+46}_{-48} \quad (+0.3\sigma)$
A_{143}^{tSZ}	6.40	$< 7.62 \quad (-0.8\sigma)$	D_{1420}	814.5	$813^{+10}_{-10} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4425	$0.444^{+0.033}_{-0.032} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.773	$0.67^{+0.27}_{-0.26}$	D_{2000}	232.22	$231.7^{+4.2}_{-4.4} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.7394	$0.739^{+0.018}_{-0.020} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.85	—	$n_{\text{s},0.002}$	0.9728	$0.971^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	0.4633	$0.464^{+0.026}_{-0.026} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	1.00	—	Y_{P}	0.245464	$0.24546^{+0.00026}_{-0.00024} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	0.6568	$0.656^{+0.014}_{-0.015} \quad (+0.3\sigma)$
A^{kSZ}	0.0	—	$Y_{\text{P}}^{\text{BBN}}$	0.246791	$0.24678^{+0.00026}_{-0.00025} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	0.4633	$0.464^{+0.022}_{-0.023} \quad (+0.4\sigma)$
A_{100}^{dust}	1.003	$1.01^{+0.38}_{-0.39}$	10^5D/H	2.552	$2.56^{+0.11}_{-0.11} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	0.6152	$0.615^{+0.012}_{-0.013} \quad (+0.3\sigma)$
A_{143}^{dust}	0.969	$0.96^{+0.34}_{-0.35}$	Age/Gyr	13.756	$13.76^{+0.10}_{-0.10} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	0.4594	$0.460^{+0.019}_{-0.020} \quad (+0.4\sigma)$
A_{217}^{dust}	0.985	$0.98^{+0.20}_{-0.20}$	z_*	1089.47	$1089.5^{+1.1}_{-1.1} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	0.5857	$0.585^{+0.011}_{-0.012} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.003	$1.02^{+0.32}_{-0.31}$	r_*	144.96	$144.9^{+1.1}_{-1.1} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	0.2958	$0.2955^{+0.0053}_{-0.0056} \quad (+0.2\sigma)$
c_{100}	0.99793	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	1.04149	$1.0415^{+0.0010}_{-0.0011} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	0.3055	$0.3052^{+0.0054}_{-0.0057} \quad (+0.1\sigma)$
c_{217}	1.00095	$1.0009^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.918	$13.914^{+0.098}_{-0.10} \quad (-0.4\sigma)$	f_{2000}^{143}	27.0	$27^{+7}_{-7} \quad (+0.1\sigma)$
H_0	68.55	$68.4^{+2.6}_{-2.5} \quad (-0.4\sigma)$	z_{drag}	1060.16	$1060.1^{+1.1}_{-1.1} \quad (-0.2\sigma)$	f_{2000}^{217}	104.33	$105.0^{+4.8}_{-4.8} \quad (-0.0\sigma)$
Ω_{Λ}	0.7007	$0.699^{+0.031}_{-0.034} \quad (-0.4\sigma)$	r_{drag}	147.57	$147.5^{+1.0}_{-1.1} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	29.7	$30^{+5}_{-5} \quad (+0.0\sigma)$
Ω_{m}	0.2993	$0.301^{+0.034}_{-0.031} \quad (+0.4\sigma)$	k_{D}	0.14050	$0.1405^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	χ_{simall}^2	395.67	$396.8 \quad (\nu: 1.2) \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^2$	0.14063	$0.1409^{+0.0050}_{-0.0048} \quad (+0.4\sigma)$	$100\theta_{\text{D}}$	0.16065	$0.16068^{+0.00062}_{-0.00061} \quad (+0.2\sigma)$	χ_{CamSpec}^2	7045.6	$7059.8 \quad (\nu: 14.2)$
$\Omega_{\text{m}} h^3$	0.09641	$0.09639^{+0.00099}_{-0.00098} \quad (+0.0\sigma)$	z_{eq}	3345	$3351^{+120}_{-120} \quad (+0.4\sigma)$	χ_{prior}^2	1.4	$7.2 \quad (\nu: 5.5) \quad (+0.0\sigma)$
σ_8	0.7989	$0.799^{+0.023}_{-0.024} \quad (+0.4\sigma)$	k_{eq}	0.010210	$0.01023^{+0.00036}_{-0.00035} \quad (+0.4\sigma)$	χ_{CMB}^2	7441.3	$7456.6 \quad (\nu: 15.5) \quad (+1088.4\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 7442.68$; $\Delta\chi_{\text{eff}}^2 = -5.15$; $\bar{\chi}_{\text{eff}}^2 = 7463.85$; $\Delta\bar{\chi}_{\text{eff}}^2 = -3.64$; $R - 1 = 0.00741$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.67 (Δ -0.16) CamSpec like_10.7HM: 7045.62 (Δ -4.09)

3.81 base_Alens_CamSpecHM_TTTEEE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022503	$0.02247^{+0.00039}_{-0.00038} \quad (-0.5\sigma)$	$\Omega_m h^3$	0.09631	$0.09626^{+0.00065}_{-0.00065} \quad (-0.2\sigma)$	z_{eq}	3361	$3362^{+72}_{-71} \quad (+0.6\sigma)$
$\Omega_c h^2$	0.11815	$0.1182^{+0.0033}_{-0.0032} \quad (+0.6\sigma)$	σ_8	0.843	$0.850^{+0.091}_{-0.080} \quad (+5.0\sigma)$	k_{eq}	0.010259	$0.01026^{+0.00022}_{-0.00022} \quad (+0.6\sigma)$
$100\theta_{\text{MC}}$	1.04105	$1.04105^{+0.00065}_{-0.00065} \quad (-0.7\sigma)$	S_8	0.849	$0.857^{+0.097}_{-0.088} \quad (+2.4\sigma)$	$100\theta_{\text{eq}}$	0.8212	$0.821^{+0.014}_{-0.014} \quad (-0.6\sigma)$
τ	0.101	$< 0.208 \quad (+6.8\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.465	$0.469^{+0.053}_{-0.048} \quad (+2.4\sigma)$	$100\theta_{\text{s,eq}}$	0.4534	$0.4534^{+0.0072}_{-0.0071} \quad (-0.6\sigma)$
A_L	1.035	$1.02^{+0.24}_{-0.23} \quad (-2.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.626	$0.632^{+0.069}_{-0.061} \quad (+3.2\sigma)$	$H(0.15)$	73.37	$73.3^{+1.3}_{-1.3} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	3.133	$3.15^{+0.21}_{-0.19} \quad (+6.6\sigma)$	$\sigma_8/h^{0.5}$	1.021	$1.03^{+0.11}_{-0.098} \quad (+3.6\sigma)$	$D_M(0.15)$	636.6	$637^{+13}_{-13} \quad (+0.7\sigma)$
n_s	0.9716	$0.971^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$r_{\text{drag}} h$	100.49	$100.5^{+2.6}_{-2.6} \quad (-0.7\sigma)$	$H(0.38)$	83.35	$83.33^{+0.97}_{-0.93} \quad (-0.7\sigma)$
A_{100}^{PS}	222.2	$232^{+50}_{-50} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	2.566	$2.55^{+0.13}_{-0.13} \quad (-1.1\sigma)$	$D_M(0.38)$	1519.9	$1521^{+25}_{-25} \quad (+0.7\sigma)$
A_{143}^{PS}	48.5	$35^{+20}_{-20} \quad (-0.7\sigma)$	z_{re}	11.9	$12.0^{+8.2}_{-8.9} \quad (+5.4\sigma)$	$H(0.51)$	90.00	$89.97^{+0.77}_{-0.74} \quad (-0.7\sigma)$
A_{217}^{PS}	108.5	$105^{+30}_{-30} \quad (-1.0\sigma)$	$10^9 A_s$	2.294	$2.34^{+0.51}_{-0.43} \quad (+7.5\sigma)$	$D_M(0.51)$	1970.1	$1971^{+30}_{-30} \quad (+0.7\sigma)$
A_{217}^{CIB}	38.8	$37^{+10}_{-10} \quad (-1.2\sigma)$	$10^9 A_s e^{-2\tau}$	1.8725	$1.871^{+0.025}_{-0.025} \quad (+0.3\sigma)$	$H(0.61)$	95.56	$95.54^{+0.63}_{-0.60} \quad (-0.7\sigma)$
A_{143}^{tSZ}	6.30	$< 7.50 \quad (-0.8\sigma)$	D_{40}	1234	$1247^{+68}_{-53} \quad (+2.2\sigma)$	$D_M(0.61)$	2293.4	$2294^{+32}_{-32} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.775	$0.68^{+0.27}_{-0.25}$	D_{220}	5724	$5720^{+79}_{-79} \quad (-0.4\sigma)$	$H(2.33)$	235.49	$235.5^{+1.9}_{-1.9} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.84	—	D_{810}	2530.6	$2529^{+28}_{-27} \quad (+0.1\sigma)$	$D_M(2.33)$	5751.8	$5753^{+27}_{-28} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.996	—	D_{1420}	815.7	$814.8^{+9.6}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	0.470	$0.475^{+0.053}_{-0.048} \quad (+2.5\sigma)$
A^{kSZ}	0.0	—	D_{2000}	231.94	$231.6^{+3.6}_{-3.6} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.780	$0.787^{+0.084}_{-0.073} \quad (+5.4\sigma)$
A_{100}^{dust}	1.003	$0.998^{+0.38}_{-0.38}$	$n_{\text{s},0.002}$	0.9716	$0.971^{+0.012}_{-0.011} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	0.491	$0.496^{+0.054}_{-0.048} \quad (+3.0\sigma)$
A_{143}^{dust}	0.960	$0.94^{+0.35}_{-0.34}$	Y_{P}	0.245446	$0.24543^{+0.00015}_{-0.00015} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	0.692	$0.698^{+0.075}_{-0.065} \quad (+6.1\sigma)$
A_{217}^{dust}	0.987	$0.98^{+0.20}_{-0.20}$	$Y_{\text{P}}^{\text{BBN}}$	0.246772	$0.24676^{+0.00015}_{-0.00015} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	0.491	$0.495^{+0.054}_{-0.047} \quad (+3.4\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.001	$1.02^{+0.32}_{-0.31}$	10^5D/H	2.561	$2.567^{+0.071}_{-0.069} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	0.648	$0.654^{+0.070}_{-0.061} \quad (+6.3\sigma)$
y_{cal}	1.00001	$1.0001^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	Age/Gyr	13.772	$13.775^{+0.060}_{-0.062} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	0.4860	$0.490^{+0.053}_{-0.047} \quad (+3.7\sigma)$
c_{100}	0.99791	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_*	1089.59	$1089.64^{+0.70}_{-0.69} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	0.617	$0.622^{+0.066}_{-0.058} \quad (+6.5\sigma)$
c_{217}	1.00098	$1.0009^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	r_*	144.81	$144.82^{+0.69}_{-0.69} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	0.3113	$0.314^{+0.034}_{-0.029} \quad (+6.8\sigma)$
c_{TE}	0.9919	$0.992^{+0.011}_{-0.011}$	$100\theta_*$	1.04123	$1.04122^{+0.00063}_{-0.00064} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	0.3213	$0.324^{+0.035}_{-0.030} \quad (+6.7\sigma)$
c_{EE}	0.9905	$0.990^{+0.010}_{-0.0099}$	$D_M(z_*)/\text{Gpc}$	13.908	$13.909^{+0.063}_{-0.064} \quad (-0.5\sigma)$	f_{2000}^{143}	27.2	$27^{+6}_{-6} \quad (+0.1\sigma)$
H_0	68.16	$68.1^{+1.5}_{-1.5} \quad (-0.7\sigma)$	z_{drag}	1060.12	$1060.04^{+0.77}_{-0.76} \quad (-0.3\sigma)$	f_{2000}^{217}	104.59	$105.1^{+4.3}_{-4.4} \quad (+0.0\sigma)$
Ω_Λ	0.6959	$0.695^{+0.019}_{-0.020} \quad (-0.7\sigma)$	r_{drag}	147.43	$147.46^{+0.66}_{-0.66} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	29.95	$30^{+5}_{-5} \quad (+0.0\sigma)$
Ω_m	0.3041	$0.305^{+0.020}_{-0.019} \quad (+0.7\sigma)$	k_{D}	0.14061	$0.14056^{+0.00069}_{-0.00069} \quad (+0.4\sigma)$	χ_{CamSpec}^2	11495.7	$11512.3 \quad (\nu: 16.2)$
$\Omega_m h^2$	0.14130	$0.1413^{+0.0030}_{-0.0030} \quad (+0.6\sigma)$	$100\theta_{\text{D}}$	0.160656	$0.16070^{+0.00044}_{-0.00042} \quad (+0.2\sigma)$	χ_{prior}^2	1.8	$7.8 \quad (\nu: 5.6) \quad (+0.2\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 11497.50$; $\Delta\chi_{\text{eff}}^2 = -0.14$; $\bar{\chi}_{\text{eff}}^2 = 11520.05$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.29$; $R - 1 = 0.00760$
 χ_{eff}^2 : CMB - CamSpec like_10.7HM_1400_unified: 11495.71 (Δ -0.08)

3.82 base_Alens_CamSpecHM_TTTEEE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02247^{+0.00032}_{-0.00032} \quad (-0.5\sigma)$	S_8	$0.857^{+0.096}_{-0.085} \quad (+2.4\sigma)$	$H(0.15)$	$73.33^{+0.87}_{-0.86} \quad (-0.7\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0022}_{-0.0022} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.469^{+0.052}_{-0.046} \quad (+2.4\sigma)$	$D_M(0.15)$	$636.9^{+8.5}_{-8.4} \quad (+0.7\sigma)$
$100\theta_{MC}$	$1.04105^{+0.00059}_{-0.00058} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.632^{+0.069}_{-0.060} \quad (+3.1\sigma)$	$H(0.38)$	$83.32^{+0.65}_{-0.64} \quad (-0.7\sigma)$
τ	$< 0.207 \quad (+6.7\sigma)$	$\sigma_8/h^{0.5}$	$1.03^{+0.11}_{-0.098} \quad (+3.6\sigma)$	$D_M(0.38)$	$1521^{+17}_{-17} \quad (+0.7\sigma)$
A_L	$1.02^{+0.24}_{-0.23} \quad (-2.3\sigma)$	$r_{drag} h$	$100.4^{+1.7}_{-1.7} \quad (-0.7\sigma)$	$H(0.51)$	$89.97^{+0.53}_{-0.52} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.15^{+0.21}_{-0.19} \quad (+6.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.55^{+0.12}_{-0.13} \quad (-1.1\sigma)$	$D_M(0.51)$	$1971^{+20}_{-20} \quad (+0.7\sigma)$
n_s	$0.971^{+0.010}_{-0.0093} \quad (-0.4\sigma)$	z_{re}	$12.0^{+8.2}_{-8.9} \quad (+5.4\sigma)$	$H(0.61)$	$95.54^{+0.45}_{-0.43} \quad (-0.7\sigma)$
A_{100}^{PS}	$232^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_s$	$2.34^{+0.51}_{-0.43} \quad (+7.4\sigma)$	$D_M(0.61)$	$2294^{+22}_{-22} \quad (+0.7\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.7\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.022}_{-0.023} \quad (+0.3\sigma)$	$H(2.33)$	$235.5^{+1.3}_{-1.3} \quad (+0.6\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	D_{40}	$1247^{+68}_{-52} \quad (+2.2\sigma)$	$D_M(2.33)$	$5753^{+20}_{-21} \quad (+0.6\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5721^{+79}_{-79} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.475^{+0.053}_{-0.047} \quad (+2.5\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.8\sigma)$	D_{810}	$2529^{+27}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.786^{+0.084}_{-0.073} \quad (+5.4\sigma)$
$r_{143 \times 217}^{PS}$	$0.68^{+0.27}_{-0.25}$	D_{1420}	$814.8^{+9.6}_{-9.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.495^{+0.054}_{-0.047} \quad (+3.0\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$231.5^{+3.4}_{-3.5} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.698^{+0.075}_{-0.065} \quad (+6.0\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.971^{+0.010}_{-0.0093} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.495^{+0.054}_{-0.047} \quad (+3.3\sigma)$
A^{kSZ}	—	Y_P	$0.24543^{+0.00012}_{-0.00013} \quad (-0.5\sigma)$	$\sigma_8(0.51)$	$0.653^{+0.070}_{-0.061} \quad (+6.3\sigma)$
A_{100}^{dust}	$0.998^{+0.38}_{-0.38}$	Y_P^{BBN}	$0.24676^{+0.00012}_{-0.00013} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.490^{+0.053}_{-0.046} \quad (+3.6\sigma)$
A_{143}^{dust}	$0.94^{+0.34}_{-0.35}$	$10^5 D/H$	$2.568^{+0.060}_{-0.058} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.622^{+0.067}_{-0.058} \quad (+6.4\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	Age/Gyr	$13.776^{+0.046}_{-0.047} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.314^{+0.034}_{-0.029} \quad (+6.7\sigma)$
$A_{143 \times 217}^{dust}$	$1.01^{+0.31}_{-0.31}$	z_*	$1089.64^{+0.52}_{-0.52} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.324^{+0.035}_{-0.030} \quad (+6.7\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	r_*	$144.82^{+0.50}_{-0.50} \quad (-0.6\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04122^{+0.00058}_{-0.00057} \quad (-0.6\sigma)$	f_{2000}^{217}	$105.1^{+4.2}_{-4.2} \quad (+0.0\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	$D_M(z_*)/Gpc$	$13.909^{+0.048}_{-0.047} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (+0.0\sigma)$
c_{TE}	$0.992^{+0.011}_{-0.011}$	z_{drag}	$1060.04^{+0.69}_{-0.68} \quad (-0.3\sigma)$	$\chi_{CamSpec}^2$	$11511.8 \quad (\nu: 15.5)$
c_{EE}	$0.990^{+0.010}_{-0.0099}$	r_{drag}	$147.46^{+0.52}_{-0.51} \quad (-0.5\sigma)$	χ_{6DF}^2	$0.032 \quad (\nu: 0.0)$
H_0	$68.1^{+1.0}_{-1.0} \quad (-0.7\sigma)$	k_D	$0.14056^{+0.00064}_{-0.00063} \quad (+0.4\sigma)$	χ_{MGS}^2	$1.74 \quad (\nu: 0.1)$
Ω_Λ	$0.695^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$100\theta_D$	$0.16070^{+0.00041}_{-0.00040} \quad (+0.2\sigma)$	$\chi_{DR12BAO}^2$	$4.02 \quad (\nu: 0.4)$
Ω_m	$0.305^{+0.013}_{-0.013} \quad (+0.7\sigma)$	z_{eq}	$3362^{+49}_{-48} \quad (+0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1413^{+0.0020}_{-0.0020} \quad (+0.6\sigma)$	k_{eq}	$0.01026^{+0.00015}_{-0.00015} \quad (+0.6\sigma)$	χ_{BAO}^2	$5.79 \quad (\nu: 0.3)$
$\Omega_m h^3$	$0.09626^{+0.00064}_{-0.00064} \quad (-0.2\sigma)$	$100\theta_{eq}$	$0.8210^{+0.0094}_{-0.0093} \quad (-0.6\sigma)$		
σ_8	$0.850^{+0.091}_{-0.080} \quad (+4.9\sigma)$	$100\theta_{s,eq}$	$0.4533^{+0.0048}_{-0.0048} \quad (-0.6\sigma)$		

$\bar{\chi}_{eff}^2 = 11525.37; R - 1 = 0.00886$

3.83 base_Alens_CamSpecHM_TTTEEE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02248^{+0.00039}_{-0.00038} \quad (-0.4\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09626^{+0.00064}_{-0.00065} \quad (-0.3\sigma)$	z_{eq}	$3360^{+72}_{-71} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1181^{+0.0033}_{-0.0032} \quad (+0.6\sigma)$	σ_8	$0.864^{+0.079}_{-0.069} \quad (+6.2\sigma)$	k_{eq}	$0.01025^{+0.00022}_{-0.00022} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04105^{+0.00065}_{-0.00066} \quad (-0.6\sigma)$	S_8	$0.870^{+0.086}_{-0.079} \quad (+2.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.014}_{-0.014} \quad (-0.6\sigma)$
τ	$0.126^{+0.088}_{-0.080} \quad (+8.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.477^{+0.047}_{-0.043} \quad (+2.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4535^{+0.0072}_{-0.0071} \quad (-0.6\sigma)$
A_{L}	$0.98^{+0.21}_{-0.19} \quad (-2.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.642^{+0.060}_{-0.054} \quad (+3.8\sigma)$	$H(0.15)$	$73.4^{+1.3}_{-1.3} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.18^{+0.18}_{-0.16} \quad (+8.5\sigma)$	$\sigma_8/h^{0.5}$	$1.047^{+0.097}_{-0.086} \quad (+4.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+13}_{-13} \quad (+0.6\sigma)$
n_{s}	$0.972^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$r_{\mathrm{drag}}h$	$100.5^{+2.6}_{-2.6} \quad (-0.6\sigma)$	$H(0.38)$	$83.35^{+0.97}_{-0.93} \quad (-0.6\sigma)$
A_{100}^{PS}	$231^{+50}_{-50} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.56^{+0.13}_{-0.13} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1520^{+25}_{-25} \quad (+0.6\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	z_{re}	$< 19.8 \quad (+7.1\sigma)$	$H(0.51)$	$89.99^{+0.78}_{-0.74} \quad (-0.6\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.42^{+0.44}_{-0.37} \quad (+9.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+30}_{-30} \quad (+0.6\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.870^{+0.025}_{-0.025} \quad (+0.2\sigma)$	$H(0.61)$	$95.55^{+0.63}_{-0.60} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.8\sigma)$	D_{40}	$1253^{+64}_{-53} \quad (+2.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2294^{+32}_{-32} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.25}$	D_{220}	$5718^{+79}_{-80} \quad (-0.4\sigma)$	$H(2.33)$	$235.4^{+1.9}_{-1.9} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{810}	$2528^{+28}_{-27} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+27}_{-28} \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$814.9^{+9.6}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.482^{+0.048}_{-0.042} \quad (+3.0\sigma)$
A^{kSZ}	—	D_{2000}	$231.7^{+3.6}_{-3.6} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.799^{+0.073}_{-0.063} \quad (+6.8\sigma)$
A_{100}^{dust}	$0.995^{+0.38}_{-0.38}$	$n_{\mathrm{s},0.002}$	$0.972^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.503^{+0.048}_{-0.042} \quad (+3.7\sigma)$
A_{143}^{dust}	$0.94^{+0.34}_{-0.34}$	Y_{P}	$0.24543^{+0.00015}_{-0.00015} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.709^{+0.064}_{-0.056} \quad (+7.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24676^{+0.00015}_{-0.00015} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.503^{+0.047}_{-0.041} \quad (+4.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.32}_{-0.31}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.566^{+0.071}_{-0.069} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.664^{+0.060}_{-0.052} \quad (+8.0\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.774^{+0.060}_{-0.061} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.498^{+0.046}_{-0.041} \quad (+4.5\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_*	$1089.62^{+0.70}_{-0.69} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.632^{+0.057}_{-0.050} \quad (+8.2\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	r_*	$144.84^{+0.69}_{-0.68} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.319^{+0.029}_{-0.025} \quad (+8.6\sigma)$
c_{TE}	$0.992^{+0.011}_{-0.011}$	$100\theta_*$	$1.04123^{+0.00063}_{-0.00064} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.329^{+0.030}_{-0.026} \quad (+8.6\sigma)$
c_{EE}	$0.990^{+0.010}_{-0.0098}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.063}_{-0.063} \quad (-0.5\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
H_0	$68.2^{+1.5}_{-1.5} \quad (-0.6\sigma)$	z_{drag}	$1060.05^{+0.76}_{-0.77} \quad (-0.3\sigma)$	f_{2000}^{217}	$104.9^{+4.3}_{-4.4} \quad (-0.0\sigma)$
Ω_{Λ}	$0.696^{+0.019}_{-0.020} \quad (-0.6\sigma)$	r_{drag}	$147.47^{+0.66}_{-0.66} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.0\sigma)$
Ω_{m}	$0.304^{+0.020}_{-0.019} \quad (+0.6\sigma)$	k_{D}	$0.14055^{+0.00069}_{-0.00069} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11512.2 \quad (\nu: 16.3)$
$\Omega_{\mathrm{m}}h^2$	$0.1412^{+0.0030}_{-0.0030} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16069^{+0.00044}_{-0.00042} \quad (+0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.6) \quad (+0.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11520.01; R - 1 = 0.00786$$

3.84 base_Alens_CamSpecHM_TTTEEE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02247^{+0.00032}_{-0.00032} \quad (-0.5\sigma)$	S_8	$0.870^{+0.084}_{-0.075} \quad (+2.8\sigma)$	$H(0.15)$	$73.34^{+0.87}_{-0.86} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0022}_{-0.0022} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.477^{+0.046}_{-0.041} \quad (+2.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.8^{+8.5}_{-8.4} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04105^{+0.00059}_{-0.00059} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.642^{+0.060}_{-0.052} \quad (+3.8\sigma)$	$H(0.38)$	$83.33^{+0.65}_{-0.64} \quad (-0.7\sigma)$
τ	$0.125^{+0.088}_{-0.080} \quad (+8.7\sigma)$	$\sigma_8/h^{0.5}$	$1.047^{+0.097}_{-0.085} \quad (+4.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1520^{+17}_{-17} \quad (+0.7\sigma)$
A_{L}	$0.98^{+0.21}_{-0.20} \quad (-2.7\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+1.7}_{-1.7} \quad (-0.7\sigma)$	$H(0.51)$	$89.98^{+0.53}_{-0.52} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.18^{+0.18}_{-0.16} \quad (+8.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.55^{+0.12}_{-0.13} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1971^{+20}_{-20} \quad (+0.7\sigma)$
n_{s}	$0.972^{+0.010}_{-0.0093} \quad (-0.3\sigma)$	z_{re}	$< 19.7 \quad (+7.1\sigma)$	$H(0.61)$	$95.54^{+0.44}_{-0.43} \quad (-0.7\sigma)$
A_{100}^{PS}	$232^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.41^{+0.44}_{-0.37} \quad (+9.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2294^{+22}_{-22} \quad (+0.7\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.022}_{-0.022} \quad (+0.2\sigma)$	$H(2.33)$	$235.5^{+1.3}_{-1.3} \quad (+0.6\sigma)$
A_{217}^{PS}	$105^{+30}_{-30} \quad (-1.0\sigma)$	D_{40}	$1253^{+65}_{-52} \quad (+2.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+20}_{-21} \quad (+0.6\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5719^{+77}_{-79} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.482^{+0.046}_{-0.041} \quad (+3.0\sigma)$
A_{143}^{tSZ}	$< 7.56 \quad (-0.8\sigma)$	D_{810}	$2528^{+27}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.799^{+0.073}_{-0.063} \quad (+6.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.27}_{-0.25}$	D_{1420}	$814.9^{+9.6}_{-9.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.503^{+0.047}_{-0.041} \quad (+3.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$231.6^{+3.4}_{-3.4} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.709^{+0.065}_{-0.056} \quad (+7.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.972^{+0.010}_{-0.0093} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.503^{+0.047}_{-0.041} \quad (+4.1\sigma)$
A^{kSZ}	—	Y_{P}	$0.24543^{+0.00012}_{-0.00013} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.664^{+0.061}_{-0.052} \quad (+7.9\sigma)$
A_{100}^{dust}	$0.995^{+0.39}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24676^{+0.00012}_{-0.00013} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.498^{+0.046}_{-0.040} \quad (+4.5\sigma)$
A_{143}^{dust}	$0.94^{+0.34}_{-0.35}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.567^{+0.061}_{-0.058} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.632^{+0.058}_{-0.050} \quad (+8.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.775^{+0.046}_{-0.046} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.319^{+0.029}_{-0.025} \quad (+8.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.31}_{-0.31}$	z_*	$1089.63^{+0.52}_{-0.52} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.329^{+0.030}_{-0.026} \quad (+8.6\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	r_*	$144.83^{+0.50}_{-0.50} \quad (-0.6\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04123^{+0.00058}_{-0.00058} \quad (-0.6\sigma)$	f_{2000}^{217}	$105.0^{+4.1}_{-4.2} \quad (-0.0\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0031} \quad (+4.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.909^{+0.048}_{-0.047} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.0\sigma)$
c_{TE}	$0.992^{+0.011}_{-0.011}$	z_{drag}	$1060.04^{+0.69}_{-0.68} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11511.7 \quad (\nu: 15.7)$
c_{EE}	$0.990^{+0.010}_{-0.0098}$	r_{drag}	$147.46^{+0.52}_{-0.51} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.032 \quad (\nu: 0.0)$
H_0	$68.1^{+1.0}_{-1.0} \quad (-0.7\sigma)$	k_{D}	$0.14055^{+0.00063}_{-0.00063} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.75 \quad (\nu: 0.1)$
Ω_{Λ}	$0.696^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16070^{+0.00041}_{-0.00039} \quad (+0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.00 \quad (\nu: 0.4)$
Ω_{m}	$0.304^{+0.013}_{-0.013} \quad (+0.6\sigma)$	z_{eq}	$3361^{+49}_{-48} \quad (+0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1413^{+0.0021}_{-0.0020} \quad (+0.6\sigma)$	k_{eq}	$0.01026^{+0.00015}_{-0.00015} \quad (+0.6\sigma)$	χ_{BAO}^2	$5.79 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.09626^{+0.00063}_{-0.00065} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8212^{+0.0094}_{-0.0093} \quad (-0.6\sigma)$		
σ_8	$0.864^{+0.079}_{-0.068} \quad (+6.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4534^{+0.0048}_{-0.0048} \quad (-0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11525.31; R - 1 = 0.00906$

3.85 base_Alens_CamSpecHM_TTTEEE_lowl

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022524	$0.02251^{+0.00037}_{-0.00037} \quad (-0.3\sigma)$	σ_8	0.7686	$0.805^{+0.054}_{-0.043} \quad (+0.9\sigma)$	$100\theta_{\text{eq}}$	0.8220	$0.823^{+0.014}_{-0.013} \quad (-0.5\sigma)$
$\Omega_c h^2$	0.11795	$0.1179^{+0.0032}_{-0.0031} \quad (+0.5\sigma)$	S_8	0.772	$0.808^{+0.063}_{-0.056} \quad (+0.7\sigma)$	$100\theta_{\text{s,eq}}$	0.4538	$0.4541^{+0.0069}_{-0.0069} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	1.04108	$1.04108^{+0.00065}_{-0.00066} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4230	$0.443^{+0.034}_{-0.031} \quad (+0.7\sigma)$	$H(0.15)$	73.45	$73.5^{+1.3}_{-1.2} \quad (-0.5\sigma)$
τ	0.010	$< 0.119 \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.5702	$0.597^{+0.042}_{-0.036} \quad (+0.8\sigma)$	$D_{\text{M}}(0.15)$	635.7	$636^{+12}_{-12} \quad (+0.5\sigma)$
A_{L}	1.248	$1.14^{+0.18}_{-0.19} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	0.930	$0.974^{+0.068}_{-0.057} \quad (+0.8\sigma)$	$H(0.38)$	83.42	$83.43^{+0.94}_{-0.92} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\text{s}})$	2.950	$3.04^{+0.13}_{-0.099} \quad (+0.8\sigma)$	$r_{\text{drag}} h$	100.66	$100.7^{+2.5}_{-2.5} \quad (-0.5\sigma)$	$D_{\text{M}}(0.38)$	1518.2	$1518^{+25}_{-25} \quad (+0.5\sigma)$
n_{s}	0.9717	$0.972^{+0.011}_{-0.010} \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.568	$2.56^{+0.13}_{-0.13} \quad (-1.0\sigma)$	$H(0.51)$	90.05	$90.06^{+0.76}_{-0.73} \quad (-0.5\sigma)$
y_{cal}	0.99998	$1.0001^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	z_{re}	2.1	$7.5^{+6.0}_{-5.4} \quad (+0.4\sigma)$	$D_{\text{M}}(0.51)$	1968.1	$1968^{+29}_{-29} \quad (+0.5\sigma)$
A_{100}^{PS}	222.3	$232^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\text{s}}$	1.910	$2.10^{+0.28}_{-0.21} \quad (+0.9\sigma)$	$H(0.61)$	95.60	$95.61^{+0.62}_{-0.59} \quad (-0.5\sigma)$
A_{143}^{PS}	48.5	$35^{+20}_{-20} \quad (-0.8\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8720	$1.870^{+0.024}_{-0.024} \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	2291.3	$2291^{+31}_{-31} \quad (+0.5\sigma)$
A_{217}^{PS}	108.5	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{40}	1206.1	$1217^{+34}_{-32} \quad (+0.5\sigma)$	$H(2.33)$	235.38	$235.3^{+1.8}_{-1.8} \quad (+0.5\sigma)$
A_{217}^{CIB}	38.7	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	5725	$5722^{+74}_{-78} \quad (-0.3\sigma)$	$D_{\text{M}}(2.33)$	5750.1	$5750^{+26}_{-27} \quad (+0.5\sigma)$
A_{143}^{tSZ}	6.30	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{810}	2530.4	$2528^{+27}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4280	$0.448^{+0.034}_{-0.030} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.779	$0.68^{+0.25}_{-0.26}$	D_{1420}	815.6	$814.8^{+9.3}_{-9.4} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7111	$0.744^{+0.050}_{-0.039} \quad (+0.9\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.83	—	D_{2000}	231.89	$231.6^{+3.4}_{-3.4} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	0.4472	$0.468^{+0.034}_{-0.029} \quad (+0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.998	—	$n_{\text{s},0.002}$	0.9717	$0.972^{+0.011}_{-0.010} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	0.6312	$0.661^{+0.044}_{-0.034} \quad (+0.9\sigma)$
A^{kSZ}	0.0	—	Y_{P}	0.245453	$0.24545^{+0.00015}_{-0.00014} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	0.4469	$0.468^{+0.033}_{-0.028} \quad (+0.8\sigma)$
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.246780	$0.24677^{+0.00015}_{-0.00015} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	0.5911	$0.619^{+0.041}_{-0.032} \quad (+0.9\sigma)$
A_{143}^{dust}	0.971	$0.95^{+0.34}_{-0.34}$	$10^5 \text{D}/\text{H}$	2.558	$2.561^{+0.068}_{-0.067} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	0.4428	$0.463^{+0.032}_{-0.027} \quad (+0.8\sigma)$
A_{217}^{dust}	0.993	$0.98^{+0.20}_{-0.20}$	Age/Gyr	13.768	$13.769^{+0.059}_{-0.060} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	0.5627	$0.589^{+0.039}_{-0.030} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.016	$1.01^{+0.32}_{-0.31}$	z_*	1089.55	$1089.56^{+0.67}_{-0.65} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	0.2840	$0.297^{+0.020}_{-0.015} \quad (+0.8\sigma)$
c_{100}	0.99788	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	r_*	144.85	$144.88^{+0.67}_{-0.67} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	0.2932	$0.307^{+0.021}_{-0.015} \quad (+0.7\sigma)$
c_{217}	1.00107	$1.0009^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	$100\theta_*$	1.04125	$1.04125^{+0.00063}_{-0.00064} \quad (-0.6\sigma)$	f_{2000}^{143}	27.2	$27^{+6}_{-6} \quad (+0.1\sigma)$
c_{TE}	0.9922	$0.992^{+0.011}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.911	$13.914^{+0.061}_{-0.062} \quad (-0.4\sigma)$	f_{2000}^{217}	104.66	$105.0^{+4.1}_{-4.2} \quad (+0.0\sigma)$
c_{EE}	0.9904	$0.9903^{+0.0098}_{-0.0098}$	z_{drag}	1060.16	$1060.10^{+0.74}_{-0.70} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	30.03	$30^{+4}_{-4} \quad (-0.0\sigma)$
H_0	68.26	$68.3^{+1.5}_{-1.5} \quad (-0.5\sigma)$	r_{drag}	147.46	$147.51^{+0.65}_{-0.65} \quad (-0.4\sigma)$	χ_{lowl}^2	21.34	$22.5 \quad (\nu: 1.0) \quad (+0.6\sigma)$
Ω_{Λ}	0.6971	$0.697^{+0.018}_{-0.019} \quad (-0.5\sigma)$	k_{D}	0.14059	$0.14053^{+0.00070}_{-0.00069} \quad (+0.3\sigma)$	χ_{CamSpec}^2	11496.5	$11512.4 \quad (\nu: 16.3)$
Ω_{m}	0.3029	$0.303^{+0.019}_{-0.018} \quad (+0.5\sigma)$	$100\theta_{\text{D}}$	0.160639	$0.16066^{+0.00042}_{-0.00041} \quad (+0.1\sigma)$	χ_{prior}^2	1.9	$7.7 \quad (\nu: 5.5) \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^2$	0.14112	$0.1410^{+0.0029}_{-0.0029} \quad (+0.5\sigma)$	z_{eq}	3357	$3354^{+70}_{-68} \quad (+0.5\sigma)$	χ_{CMB}^2	11517.8	$11534.9 \quad (\nu: 16.8) \quad (+1796.3\sigma)$
$\Omega_{\text{m}} h^3$	0.09633	$0.09628^{+0.00065}_{-0.00065} \quad (-0.2\sigma)$	k_{eq}	0.010245	$0.01024^{+0.00021}_{-0.00021} \quad (+0.5\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 11519.71$; $\Delta\chi_{\text{eff}}^2 = -2.34$; $\bar{\chi}_{\text{eff}}^2 = 11542.67$; $\Delta\bar{\chi}_{\text{eff}}^2 = -1.43$; $R - 1 = 0.01017$

χ_{eff}^2 : CMB - commander_dx12_v3_2_29: 21.34 (Δ -2.58) CamSpec like_10.7HM_1400_unified: 11496.50 (Δ 0.28)

3.86 base_Alens_CamSpecHM_TTTEEE_lowl_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02249^{+0.00033}_{-0.00031} \quad (-0.4\sigma)$	S_8	$0.809^{+0.058}_{-0.050} \quad (+0.7\sigma)$	$H(0.15)$	$73.40^{+0.86}_{-0.84} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1180^{+0.0022}_{-0.0021} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.443^{+0.032}_{-0.027} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.3^{+8.3}_{-8.3} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00059}_{-0.00060} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.597^{+0.041}_{-0.034} \quad (+0.8\sigma)$	$H(0.38)$	$83.37^{+0.65}_{-0.63} \quad (-0.6\sigma)$
τ	$< 0.115 \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.974^{+0.065}_{-0.053} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1519^{+17}_{-17} \quad (+0.6\sigma)$
A_{L}	$1.13^{+0.17}_{-0.19} \quad (-1.1\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+1.7}_{-1.7} \quad (-0.6\sigma)$	$H(0.51)$	$90.01^{+0.53}_{-0.51} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.04^{+0.12}_{-0.097} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.56^{+0.12}_{-0.13} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1969^{+20}_{-20} \quad (+0.6\sigma)$
n_{s}	$0.9711^{+0.0086}_{-0.0082} \quad (-0.4\sigma)$	z_{re}	$7.4^{+5.9}_{-5.3} \quad (+0.3\sigma)$	$H(0.61)$	$95.57^{+0.45}_{-0.42} \quad (-0.6\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.09^{+0.27}_{-0.20} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2293^{+21}_{-22} \quad (+0.6\sigma)$
A_{100}^{PS}	$232^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.022}_{-0.022} \quad (+0.2\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.3} \quad (+0.5\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	D_{40}	$1218^{+32}_{-30} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5752^{+20}_{-21} \quad (+0.6\sigma)$
A_{217}^{PS}	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{220}	$5721^{+75}_{-78} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.032}_{-0.027} \quad (+0.7\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2528^{+27}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.048}_{-0.037} \quad (+0.9\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{1420}	$814.7^{+9.3}_{-9.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.032}_{-0.027} \quad (+0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.68^{+0.25}_{-0.26}$	D_{2000}	$231.5^{+3.3}_{-3.3} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.042}_{-0.033} \quad (+0.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9711^{+0.0086}_{-0.0082} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.031}_{-0.026} \quad (+0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24544^{+0.00013}_{-0.00012} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.040}_{-0.030} \quad (+0.8\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00013}_{-0.00012} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.031}_{-0.025} \quad (+0.8\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.564^{+0.058}_{-0.059} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.038}_{-0.029} \quad (+0.8\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.773^{+0.046}_{-0.047} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.297^{+0.019}_{-0.015} \quad (+0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.60^{+0.51}_{-0.51} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.307^{+0.020}_{-0.015} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	r_*	$144.85^{+0.49}_{-0.49} \quad (-0.5\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.1\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04123^{+0.00057}_{-0.00059} \quad (-0.6\sigma)$	f_{2000}^{217}	$105.1^{+4.1}_{-4.0} \quad (+0.1\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.911^{+0.047}_{-0.047} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (+0.0\sigma)$
c_{TE}	$0.993^{+0.011}_{-0.010}$	z_{drag}	$1060.08^{+0.70}_{-0.68} \quad (-0.3\sigma)$	χ_{lowl}^2	$22.5 \quad (\nu: 0.9) \quad (+0.7\sigma)$
c_{EE}	$0.9903^{+0.0097}_{-0.0098}$	r_{drag}	$147.48^{+0.51}_{-0.51} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11511.8 \quad (\nu: 15.1)$
H_0	$68.20^{+0.99}_{-0.98} \quad (-0.6\sigma)$	k_{D}	$0.14055^{+0.00063}_{-0.00063} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.031 \quad (\nu: 0.0)$
Ω_{Λ}	$0.696^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00039}_{-0.00039} \quad (+0.2\sigma)$	χ_{MGS}^2	$1.82 \quad (\nu: 0.1)$
Ω_{m}	$0.304^{+0.013}_{-0.013} \quad (+0.6\sigma)$	z_{eq}	$3358^{+49}_{-47} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.94 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0020}_{-0.0020} \quad (+0.6\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00014} \quad (+0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.5) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09627^{+0.00065}_{-0.00065} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8217^{+0.0092}_{-0.0092} \quad (-0.6\sigma)$	χ_{BAO}^2	$5.78 \quad (\nu: 0.3)$
σ_8	$0.804^{+0.052}_{-0.041} \quad (+0.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4537^{+0.0047}_{-0.0047} \quad (-0.6\sigma)$	χ_{CMB}^2	$11534.3 \quad (\nu: 15.7) \quad (+1796.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11547.85; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.38; R - 1 = 0.01201$$

3.87 base_Alens_CamSpecHM_TTTEEE_lowl_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02252^{+0.00038}_{-0.00036} \quad (-0.3\sigma)$	σ_8	$0.823^{+0.046}_{-0.036} \quad (+2.5\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.014}_{-0.014} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.1177^{+0.0032}_{-0.0031} \quad (+0.4\sigma)$	S_8	$0.825^{+0.055}_{-0.051} \quad (+1.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4544^{+0.0070}_{-0.0070} \quad (-0.5\sigma)$
$100\theta_{\text{MC}}$	$1.04110^{+0.00065}_{-0.00065} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.452^{+0.030}_{-0.028} \quad (+1.3\sigma)$	$H(0.15)$	$73.5^{+1.3}_{-1.3} \quad (-0.5\sigma)$
τ	$0.079^{+0.054}_{-0.037} \quad (+3.4\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.610^{+0.036}_{-0.032} \quad (+1.6\sigma)$	$D_{\text{M}}(0.15)$	$635^{+12}_{-12} \quad (+0.5\sigma)$
A_{L}	$1.09^{+0.16}_{-0.16} \quad (-1.6\sigma)$	$\sigma_8/h^{0.5}$	$0.995^{+0.058}_{-0.049} \quad (+1.8\sigma)$	$H(0.38)$	$83.47^{+0.95}_{-0.92} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.09^{+0.11}_{-0.079} \quad (+3.3\sigma)$	$r_{\text{drag}} h$	$100.8^{+2.5}_{-2.5} \quad (-0.5\sigma)$	$D_{\text{M}}(0.38)$	$1517^{+25}_{-25} \quad (+0.5\sigma)$
n_{s}	$0.972^{+0.011}_{-0.010} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.56^{+0.13}_{-0.13} \quad (-1.0\sigma)$	$H(0.51)$	$90.09^{+0.77}_{-0.74} \quad (-0.5\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	z_{re}	$< 14.3 \quad (+3.0\sigma)$	$D_{\text{M}}(0.51)$	$1967^{+29}_{-29} \quad (+0.5\sigma)$
A_{100}^{PS}	$231^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_{\text{s}}$	$2.19^{+0.24}_{-0.17} \quad (+3.5\sigma)$	$H(0.61)$	$95.63^{+0.63}_{-0.59} \quad (-0.5\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.869^{+0.025}_{-0.024} \quad (+0.1\sigma)$	$D_{\text{M}}(0.61)$	$2290^{+31}_{-32} \quad (+0.5\sigma)$
A_{217}^{PS}	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{40}	$1222^{+34}_{-32} \quad (+0.8\sigma)$	$H(2.33)$	$235.2^{+1.9}_{-1.8} \quad (+0.4\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5720^{+73}_{-77} \quad (-0.4\sigma)$	$D_{\text{M}}(2.33)$	$5749^{+27}_{-27} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{810}	$2528^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.030}_{-0.027} \quad (+1.3\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.68^{+0.25}_{-0.26}$	D_{1420}	$815.1^{+9.7}_{-9.3} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.761^{+0.043}_{-0.032} \quad (+2.7\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	D_{2000}	$231.8^{+3.4}_{-3.4} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.029}_{-0.025} \quad (+1.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$n_{\text{s},0.002}$	$0.972^{+0.011}_{-0.010} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.676^{+0.038}_{-0.028} \quad (+3.0\sigma)$
A^{kSZ}	—	Y_{P}	$0.24545^{+0.00015}_{-0.00014} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.028}_{-0.024} \quad (+1.7\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24678^{+0.00015}_{-0.00014} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.633^{+0.035}_{-0.026} \quad (+3.1\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	$10^5 \text{D}/\text{H}$	$2.559^{+0.068}_{-0.067} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.027}_{-0.023} \quad (+1.9\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	Age/Gyr	$13.767^{+0.059}_{-0.060} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.603^{+0.034}_{-0.025} \quad (+3.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.31}_{-0.31}$	z_*	$1089.54^{+0.68}_{-0.65} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.304^{+0.017}_{-0.012} \quad (+3.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	r_*	$144.91^{+0.68}_{-0.68} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.314^{+0.018}_{-0.013} \quad (+3.2\sigma)$
c_{217}	$1.0008^{+0.0031}_{-0.0031} \quad (+4.3\sigma)$	$100\theta_*$	$1.04127^{+0.00063}_{-0.00064} \quad (-0.6\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (-0.0\sigma)$
c_{TE}	$0.992^{+0.011}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.916^{+0.062}_{-0.063} \quad (-0.4\sigma)$	f_{2000}^{217}	$104.8^{+4.1}_{-4.1} \quad (-0.1\sigma)$
c_{EE}	$0.9901^{+0.0096}_{-0.0096}$	z_{drag}	$1060.12^{+0.73}_{-0.72} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.1\sigma)$
H_0	$68.3^{+1.5}_{-1.5} \quad (-0.5\sigma)$	r_{drag}	$147.53^{+0.66}_{-0.66} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 1.2) \quad (+1.2\sigma)$
Ω_{Λ}	$0.698^{+0.018}_{-0.019} \quad (-0.5\sigma)$	k_{D}	$0.14052^{+0.00071}_{-0.00070} \quad (+0.3\sigma)$	χ_{CamSpec}^2	$11512.4 \quad (\nu: 16.5)$
Ω_{m}	$0.302^{+0.019}_{-0.018} \quad (+0.5\sigma)$	$100\theta_{\text{D}}$	$0.16066^{+0.00042}_{-0.00041} \quad (+0.1\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.6) \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^2$	$0.1409^{+0.0030}_{-0.0029} \quad (+0.4\sigma)$	z_{eq}	$3351^{+71}_{-69} \quad (+0.4\sigma)$	χ_{CMB}^2	$11535.5 \quad (\nu: 17.2) \quad (+1796.4\sigma)$
$\Omega_{\text{m}} h^3$	$0.09628^{+0.00065}_{-0.00065} \quad (-0.2\sigma)$	k_{eq}	$0.01023^{+0.00022}_{-0.00021} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11543.27; \Delta\bar{\chi}_{\text{eff}}^2 = -0.66; R - 1 = 0.01232$$

3.88 base_Alens_CamSpecHM_TTTEEE_lowl_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02250^{+0.00034}_{-0.00031} \quad (-0.4\sigma)$	S_8	$0.827^{+0.050}_{-0.044} \quad (+1.3\sigma)$	$H(0.15)$	$73.41^{+0.87}_{-0.85} \quad (-0.6\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0022}_{-0.0021} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.027}_{-0.024} \quad (+1.3\sigma)$	$D_M(0.15)$	$636.1^{+8.4}_{-8.4} \quad (+0.6\sigma)$
$100\theta_{MC}$	$1.04106^{+0.00059}_{-0.00057} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.611^{+0.034}_{-0.028} \quad (+1.7\sigma)$	$H(0.38)$	$83.38^{+0.66}_{-0.64} \quad (-0.6\sigma)$
τ	$0.078^{+0.050}_{-0.037} \quad (+3.2\sigma)$	$\sigma_8/h^{0.5}$	$0.996^{+0.055}_{-0.045} \quad (+1.9\sigma)$	$D_M(0.38)$	$1519^{+17}_{-17} \quad (+0.6\sigma)$
A_L	$1.08^{+0.15}_{-0.16} \quad (-1.7\sigma)$	$r_{\text{drag}} h$	$100.6^{+1.7}_{-1.7} \quad (-0.6\sigma)$	$H(0.51)$	$90.02^{+0.54}_{-0.52} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.08^{+0.10}_{-0.078} \quad (+3.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.56^{+0.13}_{-0.13} \quad (-1.0\sigma)$	$D_M(0.51)$	$1969^{+20}_{-20} \quad (+0.6\sigma)$
n_s	$0.9717^{+0.0086}_{-0.0083} \quad (-0.3\sigma)$	z_{re}	$< 13.9 \quad (+2.9\sigma)$	$H(0.61)$	$95.58^{+0.46}_{-0.43} \quad (-0.6\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s$	$2.19^{+0.23}_{-0.17} \quad (+3.4\sigma)$	$D_M(0.61)$	$2292^{+22}_{-22} \quad (+0.6\sigma)$
A_{100}^{PS}	$231^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_s e^{-2\tau}$	$1.870^{+0.022}_{-0.021} \quad (+0.2\sigma)$	$H(2.33)$	$235.4^{+1.3}_{-1.3} \quad (+0.5\sigma)$
A_{143}^{PS}	$35^{+20}_{-20} \quad (-0.8\sigma)$	D_{40}	$1223^{+32}_{-31} \quad (+0.8\sigma)$	$D_M(2.33)$	$5752^{+20}_{-22} \quad (+0.6\sigma)$
A_{217}^{PS}	$105^{+20}_{-30} \quad (-1.0\sigma)$	D_{220}	$5719^{+72}_{-78} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.027}_{-0.024} \quad (+1.4\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2528^{+28}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.761^{+0.041}_{-0.031} \quad (+2.7\sigma)$
A_{143}^{tSZ}	$4.1^{+3.7}_{-4.0} \quad (-0.8\sigma)$	D_{1420}	$814.9^{+9.7}_{-9.3} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.027}_{-0.023} \quad (+1.6\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.68^{+0.25}_{-0.26}$	D_{2000}	$231.6^{+3.3}_{-3.2} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.676^{+0.036}_{-0.027} \quad (+2.9\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$n_{s,0.002}$	$0.9717^{+0.0086}_{-0.0083} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.027}_{-0.022} \quad (+1.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P	$0.24544^{+0.00013}_{-0.00012} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.633^{+0.034}_{-0.025} \quad (+3.0\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24677^{+0.00013}_{-0.00012} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.026}_{-0.021} \quad (+1.9\sigma)$
A_{100}^{dust}	$1.01^{+0.40}_{-0.37}$	10^5D/H	$2.563^{+0.058}_{-0.060} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.602^{+0.032}_{-0.024} \quad (+3.1\sigma)$
A_{143}^{dust}	$0.94^{+0.34}_{-0.34}$	Age/Gyr	$13.772^{+0.046}_{-0.049} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.304^{+0.016}_{-0.012} \quad (+3.2\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.59^{+0.51}_{-0.52} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.314^{+0.017}_{-0.012} \quad (+3.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	r_*	$144.86^{+0.50}_{-0.50} \quad (-0.5\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04124^{+0.00058}_{-0.00057} \quad (-0.6\sigma)$	f_{2000}^{217}	$105.0^{+4.1}_{-4.0} \quad (-0.0\sigma)$
c_{217}	$1.0009^{+0.0031}_{-0.0032} \quad (+4.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.912^{+0.047}_{-0.048} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.0\sigma)$
c_{TE}	$0.992^{+0.011}_{-0.010}$	z_{drag}	$1060.08^{+0.73}_{-0.68} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.1) \quad (+1.2\sigma)$
c_{EE}	$0.9901^{+0.0095}_{-0.0095}$	r_{drag}	$147.48^{+0.52}_{-0.53} \quad (-0.5\sigma)$	χ_{CamSpec}^2	$11511.7 \quad (\nu: 15.4)$
H_0	$68.2^{+1.0}_{-0.98} \quad (-0.6\sigma)$	k_D	$0.14055^{+0.00064}_{-0.00064} \quad (+0.3\sigma)$	$\chi_{6\text{DF}}^2$	$0.032 \quad (\nu: 0.0)$
Ω_Λ	$0.697^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_D$	$0.16067^{+0.00039}_{-0.00040} \quad (+0.2\sigma)$	χ_{MGS}^2	$1.84 \quad (\nu: 0.1)$
Ω_m	$0.303^{+0.013}_{-0.013} \quad (+0.6\sigma)$	z_{eq}	$3357^{+49}_{-48} \quad (+0.5\sigma)$	χ_{DR12BAO}^2	$3.93 \quad (\nu: 0.3)$
$\Omega_m h^2$	$0.1411^{+0.0020}_{-0.0020} \quad (+0.5\sigma)$	k_{eq}	$0.01025^{+0.00015}_{-0.00015} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.5) \quad (+0.2\sigma)$
$\Omega_m h^3$	$0.09627^{+0.00066}_{-0.00065} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	$0.8219^{+0.0092}_{-0.0093} \quad (-0.6\sigma)$	χ_{BAO}^2	$5.80 \quad (\nu: 0.3)$
σ_8	$0.823^{+0.045}_{-0.034} \quad (+2.5\sigma)$	$100\theta_{s,\text{eq}}$	$0.4538^{+0.0047}_{-0.0048} \quad (-0.6\sigma)$	χ_{CMB}^2	$11534.9 \quad (\nu: 16.3) \quad (+1796.2\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 11548.48; \Delta\bar{\chi}_{\text{eff}}^2 = -0.61; R - 1 = 0.01389$$

3.89 base_Alens_CamSpecHM_TTTEEE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022483	$0.02246^{+0.00038}_{-0.00038} \quad (-0.5\sigma)$	σ_8	0.8015	$0.801^{+0.017}_{-0.018} \quad (+0.6\sigma)$	$100\theta_{\text{eq}}$	0.8203	$0.820^{+0.014}_{-0.014} \quad (-0.7\sigma)$
$\Omega_c h^2$	0.11835	$0.1185^{+0.0032}_{-0.0031} \quad (+0.7\sigma)$	S_8	0.8086	$0.810^{+0.040}_{-0.039} \quad (+0.7\sigma)$	$100\theta_{\text{s,eq}}$	0.4530	$0.4528^{+0.0070}_{-0.0070} \quad (-0.7\sigma)$
$100\theta_{\text{MC}}$	1.04101	$1.04102^{+0.00065}_{-0.00066} \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4429	$0.443^{+0.022}_{-0.021} \quad (+0.7\sigma)$	$H(0.15)$	73.28	$73.2^{+1.3}_{-1.3} \quad (-0.8\sigma)$
τ	0.0505	$0.050^{+0.016}_{-0.018} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5958	$0.596^{+0.020}_{-0.020} \quad (+0.7\sigma)$	$D_{\text{M}}(0.15)$	637.4	$638^{+13}_{-12} \quad (+0.8\sigma)$
A_{L}	1.137	$1.13^{+0.15}_{-0.14} \quad (-1.2\sigma)$	$\sigma_8/h^{0.5}$	0.9714	$0.972^{+0.029}_{-0.029} \quad (+0.7\sigma)$	$H(0.38)$	83.29	$83.26^{+0.94}_{-0.93} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\text{s}})$	3.0311	$3.030^{+0.033}_{-0.037} \quad (+0.2\sigma)$	$r_{\text{drag}} h$	100.33	$100.2^{+2.5}_{-2.5} \quad (-0.8\sigma)$	$D_{\text{M}}(0.38)$	1521.6	$1523^{+25}_{-25} \quad (+0.8\sigma)$
n_{s}	0.9699	$0.969^{+0.010}_{-0.010} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	2.562	$2.55^{+0.12}_{-0.13} \quad (-1.1\sigma)$	$H(0.51)$	89.95	$89.92^{+0.75}_{-0.74} \quad (-0.7\sigma)$
y_{cal}	0.99982	$1.0001^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	z_{re}	7.23	$7.2^{+1.7}_{-1.8} \quad (+0.1\sigma)$	$D_{\text{M}}(0.51)$	1972.0	$1973^{+30}_{-29} \quad (+0.8\sigma)$
A_{100}^{PS}	224.2	$234^{+50}_{-50} \quad (-0.6\sigma)$	$10^9 A_{\text{s}}$	2.072	$2.070^{+0.070}_{-0.076} \quad (+0.2\sigma)$	$H(0.61)$	95.52	$95.50^{+0.62}_{-0.60} \quad (-0.7\sigma)$
A_{143}^{PS}	49.0	$36^{+20}_{-20} \quad (-0.6\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8732	$1.874^{+0.025}_{-0.025} \quad (+0.4\sigma)$	$D_{\text{M}}(0.61)$	2295.5	$2297^{+32}_{-31} \quad (+0.8\sigma)$
A_{217}^{PS}	107.3	$104^{+20}_{-30} \quad (-1.1\sigma)$	D_{40}	1216.5	$1219^{+29}_{-29} \quad (+0.6\sigma)$	$H(2.33)$	235.59	$235.7^{+1.9}_{-1.8} \quad (+0.7\sigma)$
A_{217}^{CIB}	39.7	$38^{+10}_{-10} \quad (-1.0\sigma)$	D_{220}	5726	$5728^{+76}_{-78} \quad (-0.2\sigma)$	$D_{\text{M}}(2.33)$	5753.6	$5755^{+27}_{-27} \quad (+0.7\sigma)$
A_{143}^{tSZ}	6.41	$< 7.58 \quad (-0.8\sigma)$	D_{810}	2529.8	$2530^{+28}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	0.4479	$0.448^{+0.020}_{-0.020} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.758	$0.67^{+0.25}_{-0.26}$	D_{1420}	814.8	$814.3^{+9.6}_{-9.6} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	0.7412	$0.741^{+0.015}_{-0.016} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.87	—	D_{2000}	231.47	$231.1^{+3.4}_{-3.4} \quad (-0.5\sigma)$	$f\sigma_8(0.38)$	0.4674	$0.468^{+0.016}_{-0.017} \quad (+0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.95	—	$n_{\text{s},0.002}$	0.9699	$0.969^{+0.010}_{-0.010} \quad (-0.7\sigma)$	$\sigma_8(0.38)$	0.6577	$0.657^{+0.012}_{-0.013} \quad (+0.4\sigma)$
A^{kSZ}	0.0	—	Y_{P}	0.245438	$0.24543^{+0.00015}_{-0.00015} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	0.4667	$0.467^{+0.014}_{-0.015} \quad (+0.7\sigma)$
A_{100}^{dust}	1.003	$1.01^{+0.39}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.246765	$0.24675^{+0.00015}_{-0.00015} \quad (-0.5\sigma)$	$\sigma_8(0.51)$	0.6157	$0.615^{+0.011}_{-0.012} \quad (+0.4\sigma)$
A_{143}^{dust}	0.968	$0.95^{+0.34}_{-0.34}$	$10^5 \text{D}/\text{H}$	2.565	$2.570^{+0.071}_{-0.068} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	0.4623	$0.462^{+0.013}_{-0.014} \quad (+0.7\sigma)$
A_{217}^{dust}	0.986	$0.98^{+0.20}_{-0.20}$	Age/Gyr	13.776	$13.779^{+0.061}_{-0.060} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	0.5861	$0.586^{+0.010}_{-0.011} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{dust}}$	0.996	$1.02^{+0.32}_{-0.32}$	z_*	1089.63	$1089.68^{+0.71}_{-0.68} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	0.2957	$0.2955^{+0.0051}_{-0.0055} \quad (+0.2\sigma)$
c_{100}	0.99790	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	r_*	144.77	$144.76^{+0.66}_{-0.67} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	0.3052	$0.3049^{+0.0053}_{-0.0056} \quad (-0.0\sigma)$
c_{217}	1.00108	$1.0009^{+0.0031}_{-0.0031} \quad (+4.4\sigma)$	$100\theta_*$	1.04119	$1.04120^{+0.00064}_{-0.00064} \quad (-0.7\sigma)$	f_{2000}^{143}	27.9	$28^{+6}_{-6} \quad (+0.3\sigma)$
c_{TE}	0.9926	$0.993^{+0.010}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.905	$13.903^{+0.061}_{-0.062} \quad (-0.6\sigma)$	f_{2000}^{217}	104.96	$105.5^{+4.2}_{-4.2} \quad (+0.2\sigma)$
c_{EE}	0.9908	$0.9908^{+0.0098}_{-0.0097}$	z_{drag}	1060.09	$1060.03^{+0.74}_{-0.75} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	30.36	$31^{+4}_{-4} \quad (+0.3\sigma)$
H_0	68.06	$68.0^{+1.5}_{-1.5} \quad (-0.8\sigma)$	r_{drag}	147.40	$147.40^{+0.65}_{-0.65} \quad (-0.6\sigma)$	χ_{small}^2	395.68	$396.8 \quad (\nu: 1.3) \quad (-0.0\sigma)$
Ω_{Λ}	0.6946	$0.694^{+0.019}_{-0.020} \quad (-0.8\sigma)$	k_{D}	0.14062	$0.14061^{+0.00068}_{-0.00069} \quad (+0.5\sigma)$	χ_{CamSpec}^2	11496.2	$11512.2 \quad (\nu: 15.6)$
Ω_{m}	0.3054	$0.306^{+0.020}_{-0.019} \quad (+0.8\sigma)$	$100\theta_{\text{D}}$	0.160671	$0.16070^{+0.00043}_{-0.00042} \quad (+0.2\sigma)$	χ_{prior}^2	1.8	$7.8 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^2$	0.14148	$0.1416^{+0.0030}_{-0.0029} \quad (+0.7\sigma)$	z_{eq}	3365	$3368^{+71}_{-69} \quad (+0.7\sigma)$	χ_{CMB}^2	11891.9	$11909.0 \quad (\nu: 16.9) \quad (+1861.2\sigma)$
$\Omega_{\text{m}} h^3$	0.09629	$0.09627^{+0.00064}_{-0.00065} \quad (-0.2\sigma)$	k_{eq}	0.010272	$0.01028^{+0.00022}_{-0.00021} \quad (+0.7\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 11893.69$; $\Delta\chi_{\text{eff}}^2 = -3.79$; $\bar{\chi}_{\text{eff}}^2 = 11916.80$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.29$; $R - 1 = 0.00486$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.68 (Δ -0.18) CamSpec like_10.7HM_1400_unified: 11496.17 (Δ -3.31)

4 AphiPhi

4.1 base_AphiPhi_plikHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022161	$0.02214^{+0.00042}_{-0.00042}$	$\sigma_8 \Omega_m^{0.25}$	0.6089	$0.608^{+0.023}_{-0.022}$	$D_M(0.15)$	646.0	646^{+16}_{-15}
$\Omega_c h^2$	0.12020	$0.1201^{+0.0041}_{-0.0039}$	$\sigma_8/h^{0.5}$	0.9902	$0.989^{+0.031}_{-0.031}$	$H(0.38)$	82.63	$82.6^{+1.1}_{-1.1}$
$100\theta_{MC}$	1.04078	$1.04082^{+0.00094}_{-0.00093}$	$r_{drag}h$	98.77	$98.8^{+3.1}_{-3.1}$	$D_M(0.38)$	1539.0	1539^{+31}_{-30}
τ	0.0525	$0.052^{+0.016}_{-0.016}$	$\langle d^2 \rangle^{1/2}$	2.446	$2.445^{+0.074}_{-0.073}$	$H(0.51)$	89.40	$89.42^{+0.87}_{-0.84}$
$\ln(10^{10} A_s)$	3.0406	$3.039^{+0.032}_{-0.033}$	z_{re}	7.55	$7.5^{+1.5}_{-1.8}$	$D_M(0.51)$	1992.6	1992^{+36}_{-35}
n_s	0.9644	$0.963^{+0.011}_{-0.011}$	$10^9 A_s$	2.092	$2.088^{+0.067}_{-0.068}$	$H(0.61)$	95.07	$95.08^{+0.70}_{-0.67}$
$A_L^{\phi\phi}$	0.9996	$1.001^{+0.072}_{-0.069}$	$10^9 A_s e^{-2\tau}$	1.8831	$1.882^{+0.027}_{-0.026}$	$D_M(0.61)$	2317.9	2318^{+39}_{-38}
y_{cal}	1.00046	$1.0005^{+0.0050}_{-0.0049}$	D_{40}	1229.8	1232^{+31}_{-29}	$H(2.33)$	236.47	$236.4^{+2.5}_{-2.4}$
A_{217}^{CIB}	49.2	48^{+10}_{-10}	D_{220}	5714	5716^{+80}_{-81}	$D_M(2.33)$	5774.8	5775^{+31}_{-32}
$\xi^{tSZ \times CIB}$	0.28	—	D_{810}	2537.7	2536^{+27}_{-27}	$f\sigma_8(0.15)$	0.4613	$0.460^{+0.024}_{-0.023}$
A_{143}^{tSZ}	7.14	$5.1^{+3.8}_{-3.9}$	D_{1420}	815.6	815^{+10}_{-10}	$\sigma_8(0.15)$	0.7487	$0.748^{+0.015}_{-0.015}$
A_{100}^{PS}	255	264^{+60}_{-60}	D_{2000}	230.00	$229.6^{+3.6}_{-3.5}$	$f\sigma_8(0.38)$	0.4782	$0.477^{+0.018}_{-0.018}$
A_{143}^{PS}	48.7	49^{+20}_{-20}	$n_{s,0.002}$	0.9644	$0.963^{+0.011}_{-0.011}$	$\sigma_8(0.38)$	0.6630	$0.662^{+0.012}_{-0.012}$
$A_{143 \times 217}^{PS}$	45.8	43^{+20}_{-20}	Y_P	0.245310	$0.24530^{+0.00018}_{-0.00019}$	$f\sigma_8(0.51)$	0.4761	$0.475^{+0.016}_{-0.016}$
A_{217}^{PS}	118.5	115^{+20}_{-20}	Y_P^{BBN}	0.246636	$0.24662^{+0.00017}_{-0.00020}$	$\sigma_8(0.51)$	0.6201	$0.619^{+0.011}_{-0.011}$
A^{kSZ}	0.0	—	$10^5 D/H$	2.625	$2.630^{+0.082}_{-0.079}$	$f\sigma_8(0.61)$	0.4706	$0.470^{+0.014}_{-0.014}$
A_{100}^{dustTT}	8.85	$8.9^{+3.6}_{-3.6}$	Age/Gyr	13.823	$13.824^{+0.070}_{-0.070}$	$\sigma_8(0.61)$	0.5899	$0.589^{+0.010}_{-0.010}$
A_{143}^{dustTT}	10.80	$10.7^{+3.5}_{-3.5}$	z_*	1090.20	$1090.23^{+0.79}_{-0.75}$	$f\sigma_8(2.33)$	0.29718	$0.2968^{+0.0049}_{-0.0050}$
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.6}_{-6.5}$	r_*	144.54	$144.57^{+0.93}_{-0.93}$	$\sigma_8(2.33)$	0.3061	$0.3057^{+0.0052}_{-0.0053}$
A_{217}^{dustTT}	94.5	93^{+10}_{-10}	$100\theta_*$	1.04099	$1.04102^{+0.00092}_{-0.00092}$	f_{2000}^{143}	30.4	31^{+6}_{-6}
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.885	$13.887^{+0.086}_{-0.085}$	$f_{2000}^{143 \times 217}$	33.28	34^{+4}_{-4}
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$	z_{drag}	1059.47	$1059.41^{+0.86}_{-0.89}$	f_{2000}^{217}	107.69	$108.2^{+3.7}_{-3.7}$
H_0	67.06	$67.1^{+1.8}_{-1.8}$	r_{drag}	147.27	$147.31^{+0.94}_{-0.92}$	$\chi_{lensing}^2$	8.89	$9.9 (\nu: 1.0)$
Ω_Λ	0.6820	$0.682^{+0.024}_{-0.026}$	k_D	0.14052	$0.1405^{+0.0010}_{-0.0010}$	χ_{small}^2	395.87	$396.9 (\nu: 1.3)$
Ω_m	0.3180	$0.318^{+0.026}_{-0.024}$	$100\theta_D$	0.16102	$0.16106^{+0.00053}_{-0.00051}$	χ_{lowl}^2	23.41	$23.7 (\nu: 0.8)$
$\Omega_m h^2$	0.14301	$0.1429^{+0.0039}_{-0.0038}$	z_{eq}	3402	3400^{+94}_{-90}	χ_{plik}^2	758.9	$771.7 (\nu: 15.5)$
$\Omega_m h^3$	0.09591	$0.09587^{+0.00089}_{-0.00089}$	k_{eq}	0.010384	$0.01038^{+0.00029}_{-0.00028}$	χ_{prior}^2	1.4	$7.3 (\nu: 6.7)$
σ_8	0.8109	$0.810^{+0.017}_{-0.018}$	$100\theta_{eq}$	0.8126	$0.813^{+0.017}_{-0.017}$	χ_{CMB}^2	1187.1	$1202.1 (\nu: 16.2)$
S_8	0.8349	$0.833^{+0.047}_{-0.045}$	$100\theta_{s,eq}$	0.4492	$0.4494^{+0.0088}_{-0.0089}$			
$\sigma_8 \Omega_m^{0.5}$	0.4573	$0.456^{+0.026}_{-0.025}$	$H(0.15)$	72.41	$72.4^{+1.5}_{-1.5}$			

Best-fit $\chi_{eff}^2 = 1188.51$; $\Delta\chi_{eff}^2 = -0.05$; $\bar{\chi}_{eff}^2 = 1209.46$; $\Delta\bar{\chi}_{eff}^2 = 1.05$; $R - 1 = 0.00514$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.89 (Δ -0.01) small_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ 0.01) commander_dx12_v3_2_29: 23.41 (Δ 0.18) plik_rd12_HM_v22_TT: 758.90 (Δ -0.42)

4.2 base_Aphiphi_plikHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02215^{+0.00042}_{-0.00042}$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.608^{+0.023}_{-0.022}$	$D_{\text{M}}(0.15)$	646^{+16}_{-15}
$\Omega_{\text{c}}h^2$	$0.1201^{+0.0041}_{-0.0039}$	$\sigma_8/h^{0.5}$	$0.990^{+0.030}_{-0.030}$	$H(0.38)$	$82.7^{+1.1}_{-1.1}$
$100\theta_{\text{MC}}$	$1.04083^{+0.00094}_{-0.00092}$	$r_{\text{drag}}h$	$98.9^{+3.1}_{-3.1}$	$D_{\text{M}}(0.38)$	1538^{+31}_{-30}
τ	$0.054^{+0.013}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.073}_{-0.071}$	$H(0.51)$	$89.44^{+0.87}_{-0.84}$
$\ln(10^{10}A_{\text{s}})$	$3.042^{+0.027}_{-0.026}$	z_{re}	< 8.81	$D_{\text{M}}(0.51)$	1992^{+36}_{-35}
n_{s}	$0.964^{+0.011}_{-0.011}$	$10^9 A_{\text{s}}$	$2.095^{+0.057}_{-0.054}$	$H(0.61)$	$95.09^{+0.70}_{-0.67}$
$A_{\text{L}}^{\phi\phi}$	$0.999^{+0.071}_{-0.068}$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.882^{+0.027}_{-0.026}$	$D_{\text{M}}(0.61)$	2317^{+38}_{-38}
y_{cal}	$1.0005^{+0.0049}_{-0.0049}$	D_{40}	1232^{+31}_{-29}	$H(2.33)$	$236.4^{+2.5}_{-2.4}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{220}	5717^{+80}_{-81}	$D_{\text{M}}(2.33)$	5774^{+31}_{-31}
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	2536^{+27}_{-27}	$f\sigma_8(0.15)$	$0.461^{+0.024}_{-0.023}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$	D_{1420}	$815^{+10}_{-9.9}$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.013}$
A_{100}^{PS}	264^{+60}_{-60}	D_{2000}	$229.6^{+3.6}_{-3.5}$	$f\sigma_8(0.38)$	$0.478^{+0.018}_{-0.018}$
A_{143}^{PS}	49^{+20}_{-20}	$n_{\text{s},0.002}$	$0.964^{+0.011}_{-0.011}$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.010}$
$A_{143 \times 217}^{\text{PS}}$	43^{+20}_{-20}	Y_{P}	$0.24530^{+0.00018}_{-0.00019}$	$f\sigma_8(0.51)$	$0.476^{+0.015}_{-0.016}$
A_{217}^{PS}	115^{+20}_{-20}	$Y_{\text{P}}^{\text{BBN}}$	$0.24663^{+0.00018}_{-0.00019}$	$\sigma_8(0.51)$	$0.620^{+0.010}_{-0.0090}$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.628^{+0.082}_{-0.078}$	$f\sigma_8(0.61)$	$0.470^{+0.014}_{-0.014}$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5}$	Age/Gyr	$13.822^{+0.070}_{-0.070}$	$\sigma_8(0.61)$	$0.5900^{+0.0089}_{-0.0086}$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5}$	z_*	$1090.21^{+0.78}_{-0.75}$	$f\sigma_8(2.33)$	$0.2973^{+0.0043}_{-0.0040}$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.6}_{-6.5}$	r_*	$144.59^{+0.93}_{-0.92}$	$\sigma_8(2.33)$	$0.3063^{+0.0045}_{-0.0041}$
A_{217}^{dustTT}	93^{+10}_{-10}	$100\theta_*$	$1.04104^{+0.00092}_{-0.00091}$	f_{2000}^{143}	31^{+6}_{-6}
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.889^{+0.086}_{-0.085}$	$f_{2000}^{143 \times 217}$	34^{+4}_{-4}
c_{217}	$0.9983^{+0.0012}_{-0.0012}$	z_{drag}	$1059.43^{+0.89}_{-0.91}$	f_{2000}^{217}	$108.2^{+3.7}_{-3.7}$
H_0	$67.1^{+1.7}_{-1.8}$	r_{drag}	$147.32^{+0.94}_{-0.92}$	χ_{lensing}^2	$9.8 (\nu: 1.0)$
Ω_{Λ}	$0.683^{+0.024}_{-0.026}$	k_{D}	$0.1404^{+0.0010}_{-0.0010}$	χ_{simall}^2	$396.8 (\nu: 1.3)$
Ω_{m}	$0.317^{+0.026}_{-0.024}$	$100\theta_{\text{D}}$	$0.16105^{+0.00053}_{-0.00050}$	χ_{lowl}^2	$23.7 (\nu: 0.8)$
$\Omega_{\text{m}}h^2$	$0.1429^{+0.0039}_{-0.0038}$	z_{eq}	3398^{+92}_{-90}	χ_{plik}^2	$771.5 (\nu: 15.4)$
$\Omega_{\text{m}}h^3$	$0.09588^{+0.00089}_{-0.00088}$	k_{eq}	$0.01037^{+0.00028}_{-0.00027}$	χ_{prior}^2	$7.3 (\nu: 6.7)$
σ_8	$0.811^{+0.017}_{-0.016}$	$100\theta_{\text{eq}}$	$0.813^{+0.017}_{-0.017}$	χ_{CMB}^2	$1201.8 (\nu: 15.7)$
S_8	$0.834^{+0.047}_{-0.045}$	$100\theta_{\text{s,eq}}$	$0.4496^{+0.0088}_{-0.0087}$		
$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.457^{+0.026}_{-0.025}$	$H(0.15)$	$72.5^{+1.5}_{-1.5}$		

$$\bar{\chi}_{\text{eff}}^2 = 1209.13; \Delta\bar{\chi}_{\text{eff}}^2 = 0.97; R - 1 = 0.00594$$

4.3 base_Aphiphi_plikHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022385	$0.02237^{+0.00030}_{-0.00029}$	$\Omega_m h^3$	0.09636	$0.09633^{+0.00057}_{-0.00058}$	$100\theta_{s,eq}$	0.4492	$0.4493^{+0.0056}_{-0.0058}$
$\Omega_c h^2$	0.12005	$0.1201^{+0.0027}_{-0.0026}$	σ_8	0.8118	$0.811^{+0.014}_{-0.014}$	$H(0.15)$	72.67	$72.7^{+1.0}_{-1.0}$
$100\theta_{MC}$	1.04092	$1.04092^{+0.00060}_{-0.00061}$	S_8	0.8325	$0.832^{+0.031}_{-0.030}$	$D_M(0.15)$	643.4	$644^{+10}_{-9.9}$
τ	0.0543	$0.054^{+0.016}_{-0.015}$	$\sigma_8 \Omega_m^{0.5}$	0.4560	$0.456^{+0.017}_{-0.017}$	$H(0.38)$	82.86	$82.85^{+0.73}_{-0.73}$
$\ln(10^{10} A_s)$	3.0448	$3.044^{+0.032}_{-0.030}$	$\sigma_8 \Omega_m^{0.25}$	0.6084	$0.608^{+0.016}_{-0.016}$	$D_M(0.38)$	1533.6	1534^{+20}_{-20}
n_s	0.9660	$0.9650^{+0.0085}_{-0.0084}$	$\sigma_8/h^{0.5}$	0.9893	$0.989^{+0.023}_{-0.023}$	$H(0.51)$	89.63	$89.62^{+0.58}_{-0.57}$
$A_L^{\phi\phi}$	0.999	$0.998^{+0.063}_{-0.059}$	$r_{drag} h$	99.04	$99.0^{+2.0}_{-2.1}$	$D_M(0.51)$	1986.0	1986^{+24}_{-23}
y_{cal}	1.00060	$1.0006^{+0.0049}_{-0.0050}$	$\langle d^2 \rangle^{1/2}$	2.444	$2.446^{+0.054}_{-0.055}$	$H(0.61)$	95.281	$95.27^{+0.47}_{-0.45}$
A_{217}^{CIB}	46.9	47^{+10}_{-10}	z_{re}	7.68	$7.7^{+1.5}_{-1.6}$	$D_M(0.61)$	2310.5	2311^{+26}_{-25}
$\xi^{tSZ \times CIB}$	0.48	—	$10^9 A_s$	2.101	$2.100^{+0.069}_{-0.063}$	$H(2.33)$	236.61	$236.6^{+1.6}_{-1.6}$
A_{143}^{tSZ}	7.15	$5.4^{+3.6}_{-3.9}$	$10^9 A_s e^{-2\tau}$	1.8843	$1.884^{+0.022}_{-0.022}$	$D_M(2.33)$	5763.2	5764^{+21}_{-21}
A_{100}^{PS}	250	259^{+50}_{-50}	D_{40}	1229.2	1232^{+25}_{-24}	$f\sigma_8(0.15)$	0.4602	$0.460^{+0.016}_{-0.016}$
A_{143}^{PS}	48.2	46^{+20}_{-20}	D_{220}	5732	5734^{+75}_{-78}	$\sigma_8(0.15)$	0.7498	$0.749^{+0.013}_{-0.013}$
$A_{143 \times 217}^{PS}$	48.8	42^{+20}_{-20}	D_{810}	2541.4	2540^{+26}_{-27}	$f\sigma_8(0.38)$	0.4777	$0.478^{+0.013}_{-0.013}$
A_{217}^{PS}	120.3	115^{+20}_{-20}	D_{1420}	818.5	$817.4^{+9.3}_{-9.8}$	$\sigma_8(0.38)$	0.6642	$0.664^{+0.011}_{-0.010}$
A^{kSZ}	0.00	< 8.05	D_{2000}	231.33	$230.9^{+3.1}_{-3.2}$	$f\sigma_8(0.51)$	0.4759	$0.476^{+0.011}_{-0.011}$
A_{100}^{dustTT}	8.83	$8.9^{+3.7}_{-3.6}$	$n_{s,0.002}$	0.9660	$0.9650^{+0.0085}_{-0.0084}$	$\sigma_8(0.51)$	0.6214	$0.621^{+0.010}_{-0.0096}$
A_{143}^{dustTT}	11.04	$10.9^{+3.5}_{-3.5}$	Y_P	0.245402	$0.24539^{+0.00011}_{-0.00012}$	$f\sigma_8(0.61)$	0.4706	$0.470^{+0.010}_{-0.011}$
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.4}_{-6.4}$	Y_P^{BBN}	0.246728	$0.24672^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	0.5912	$0.5908^{+0.0098}_{-0.0090}$
A_{217}^{dustTT}	95.2	94^{+10}_{-10}	$10^5 D/H$	2.583	$2.587^{+0.055}_{-0.053}$	$f\sigma_8(2.33)$	0.29791	$0.2977^{+0.0050}_{-0.0045}$
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.074}$	Age/Gyr	13.7962	$13.798^{+0.047}_{-0.047}$	$\sigma_8(2.33)$	0.30696	$0.3068^{+0.0052}_{-0.0047}$
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.057}_{-0.057}$	z_*	1089.90	$1089.93^{+0.54}_{-0.53}$	f_{2000}^{143}	28.8	29^{+5}_{-5}
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.17}_{-0.17}$	r_*	144.41	$144.42^{+0.58}_{-0.58}$	$f_{2000}^{143 \times 217}$	31.97	32^{+4}_{-4}
A_{143}^{dustTE}	0.226	$0.23^{+0.10}_{-0.11}$	$100\theta_*$	1.04110	$1.04110^{+0.00059}_{-0.00060}$	f_{2000}^{217}	106.60	$107.0^{+3.5}_{-3.5}$
$A_{143 \times 217}^{dustTE}$	0.666	$0.67^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	13.871	$13.872^{+0.055}_{-0.055}$	$\chi^2_{lensing}$	8.83	$9.8 (\nu: 1.0)$
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.52}$	z_{drag}	1059.97	$1059.93^{+0.61}_{-0.57}$	χ^2_{small}	396.05	$397.1 (\nu: 1.7)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	147.06	$147.08^{+0.58}_{-0.58}$	χ^2_{lowl}	23.24	$23.52 (\nu: 0.5)$
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$	k_D	0.14091	$0.14088^{+0.00063}_{-0.00063}$	χ^2_{plik}	2344.7	$2359.7 (\nu: 16.9)$
H_0	67.35	$67.3^{+1.2}_{-1.2}$	$100\theta_D$	0.160735	$0.16076^{+0.00034}_{-0.00034}$	χ^2_{prior}	1.8	$11.6 (\nu: 10.1)$
Ω_Λ	0.6845	$0.684^{+0.016}_{-0.017}$	z_{eq}	3404	3404^{+60}_{-58}	χ^2_{CMB}	2772.8	$2790.1 (\nu: 18.0)$
Ω_m	0.3155	$0.316^{+0.017}_{-0.016}$	k_{eq}	0.010389	$0.01039^{+0.00018}_{-0.00018}$			
$\Omega_m h^2$	0.14308	$0.1431^{+0.0025}_{-0.0024}$	$100\theta_{eq}$	0.8130	$0.813^{+0.011}_{-0.011}$			

Best-fit $\chi^2_{eff} = 2774.59$; $\Delta\chi^2_{eff} = -0.04$; $\bar{\chi}^2_{eff} = 2801.64$; $\Delta\bar{\chi}^2_{eff} = 0.95$; $R - 1 = 0.01120$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.83 (Δ -0.04) small_100x143_offlike5_EE_Aplanck_B: 396.05 (Δ 0.00) commander_dx12_v3.2.29: 23.24 (Δ -0.01) plik_rd12_HM_v22b_TTTEEE: 2344.72 (Δ -0.21)

4.4 base_Aphiphi_plikHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00030}_{-0.00029}$	$\Omega_m h^3$	$0.09633^{+0.00057}_{-0.00058}$	$100\theta_{s,eq}$	$0.4493^{+0.0056}_{-0.0057}$
$\Omega_c h^2$	$0.1200^{+0.0027}_{-0.0026}$	σ_8	$0.812^{+0.014}_{-0.013}$	$H(0.15)$	$72.7^{+1.0}_{-1.0}$
$100\theta_{MC}$	$1.04092^{+0.00060}_{-0.00061}$	S_8	$0.833^{+0.031}_{-0.030}$	$D_M(0.15)$	$644^{+10}_{-9.9}$
τ	$0.055^{+0.013}_{-0.012}$	$\sigma_8 \Omega_m^{0.5}$	$0.456^{+0.017}_{-0.017}$	$H(0.38)$	$82.86^{+0.73}_{-0.72}$
$\ln(10^{10} A_s)$	$3.046^{+0.028}_{-0.026}$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.016}_{-0.015}$	$D_M(0.38)$	1534^{+20}_{-20}
n_s	$0.9651^{+0.0085}_{-0.0084}$	$\sigma_8/h^{0.5}$	$0.990^{+0.022}_{-0.022}$	$H(0.51)$	$89.62^{+0.59}_{-0.56}$
$A_L^{\phi\phi}$	$0.997^{+0.062}_{-0.058}$	$r_{drag} h$	$99.1^{+2.0}_{-2.1}$	$D_M(0.51)$	1986^{+24}_{-23}
y_{cal}	$1.0006^{+0.0048}_{-0.0050}$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.053}_{-0.052}$	$H(0.61)$	$95.27^{+0.47}_{-0.45}$
A_{217}^{CIB}	47^{+10}_{-10}	z_{re}	< 8.97	$D_M(0.61)$	2311^{+25}_{-25}
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.104^{+0.060}_{-0.055}$	$H(2.33)$	$236.6^{+1.6}_{-1.5}$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9}$	$10^9 A_s e^{-2\tau}$	$1.884^{+0.022}_{-0.022}$	$D_M(2.33)$	5764^{+21}_{-21}
A_{100}^{PS}	258^{+50}_{-50}	D_{40}	1232^{+25}_{-24}	$f\sigma_8(0.15)$	$0.460^{+0.016}_{-0.015}$
A_{143}^{PS}	46^{+20}_{-20}	D_{220}	5734^{+75}_{-79}	$\sigma_8(0.15)$	$0.750^{+0.012}_{-0.011}$
$A_{143 \times 217}^{PS}$	42^{+20}_{-20}	D_{810}	2540^{+26}_{-27}	$f\sigma_8(0.38)$	$0.478^{+0.013}_{-0.013}$
A_{217}^{PS}	115^{+20}_{-20}	D_{1420}	$817.3^{+9.3}_{-9.7}$	$\sigma_8(0.38)$	$0.664^{+0.010}_{-0.0095}$
A^{kSZ}	< 8.06	D_{2000}	$230.9^{+3.1}_{-3.2}$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011}$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6}$	$n_{s,0.002}$	$0.9651^{+0.0085}_{-0.0084}$	$\sigma_8(0.51)$	$0.6216^{+0.0092}_{-0.0087}$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5}$	Y_P	$0.24539^{+0.00011}_{-0.00012}$	$f\sigma_8(0.61)$	$0.471^{+0.010}_{-0.0099}$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.4}_{-6.4}$	Y_P^{BBN}	$0.24672^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	$0.5914^{+0.0087}_{-0.0081}$
A_{217}^{dustTT}	94^{+10}_{-10}	$10^5 D/H$	$2.586^{+0.054}_{-0.053}$	$f\sigma_8(2.33)$	$0.2980^{+0.0043}_{-0.0040}$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.074}$	Age/Gyr	$13.798^{+0.047}_{-0.047}$	$\sigma_8(2.33)$	$0.3071^{+0.0045}_{-0.0042}$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.057}$	z_*	$1089.92^{+0.54}_{-0.53}$	f_{2000}^{143}	29^{+5}_{-5}
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.42^{+0.58}_{-0.58}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
A_{143}^{dustTE}	$0.23^{+0.10}_{-0.11}$	$100\theta_*$	$1.04110^{+0.00059}_{-0.00060}$	f_{2000}^{217}	$107.0^{+3.5}_{-3.5}$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$13.872^{+0.055}_{-0.055}$	$\chi_{lensing}^2$	$9.8 (\nu: 1.0)$
A_{217}^{dustTE}	$2.08^{+0.52}_{-0.52}$	z_{drag}	$1059.94^{+0.60}_{-0.58}$	χ_{simall}^2	$397.1 (\nu: 1.7)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	$147.08^{+0.57}_{-0.57}$	χ_{lowl}^2	$23.53 (\nu: 0.5)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	k_D	$0.14088^{+0.00062}_{-0.00063}$	χ_{plik}^2	$2359.5 (\nu: 16.6)$
H_0	$67.3^{+1.2}_{-1.2}$	$100\theta_D$	$0.16076^{+0.00034}_{-0.00034}$	χ_{prior}^2	$11.6 (\nu: 10.1)$
Ω_Λ	$0.684^{+0.016}_{-0.017}$	z_{eq}	3403^{+60}_{-58}	χ_{CMB}^2	$2789.8 (\nu: 17.5)$
Ω_m	$0.316^{+0.017}_{-0.016}$	k_{eq}	$0.01039^{+0.00018}_{-0.00018}$		
$\Omega_m h^2$	$0.1431^{+0.0025}_{-0.0024}$	$100\theta_{eq}$	$0.813^{+0.011}_{-0.011}$		

$$\bar{\chi}_{\text{eff}}^2 = 2801.40; \Delta\bar{\chi}_{\text{eff}}^2 = 0.90; R - 1 = 0.01121$$

5 alpha1

5.1 base_alpha1_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022181	$0.02219^{+0.00045}_{-0.00045}$	$\sigma_8 \Omega_m^{0.5}$	0.4622	$0.464^{+0.027}_{-0.027}$	$100\theta_{s,eq}$	0.4471	$0.4464^{+0.0098}_{-0.0094}$
$\Omega_c h^2$	0.12112	$0.1214^{+0.0044}_{-0.0044}$	$\sigma_8 \Omega_m^{0.25}$	0.6128	$0.614^{+0.024}_{-0.024}$	$H(0.15)$	72.11	$72.0^{+1.6}_{-1.6}$
$100\theta_{MC}$	1.04062	$1.0405^{+0.0011}_{-0.0011}$	$\sigma_8/h^{0.5}$	0.9949	$0.996^{+0.032}_{-0.032}$	$D_M(0.15)$	649.0	650^{+17}_{-16}
τ	0.0526	$0.054^{+0.017}_{-0.016}$	$r_{drag}h$	98.06	$97.8^{+3.4}_{-3.3}$	$H(0.38)$	82.43	$82.4^{+1.2}_{-1.1}$
α_{-1}	-0.00030	$-0.0015^{+0.0028}_{-0.0042}$	$\langle d^2 \rangle^{1/2}$	2.458	$2.465^{+0.079}_{-0.078}$	$D_M(0.38)$	1545.0	1547^{+33}_{-33}
$\ln(10^{10} A_s)$	3.0442	$3.047^{+0.035}_{-0.036}$	z_{re}	7.57	$7.7^{+1.6}_{-1.7}$	$H(0.51)$	89.26	$89.22^{+0.91}_{-0.87}$
n_s	0.9607	$0.958^{+0.016}_{-0.014}$	$10^9 A_s$	2.099	$2.106^{+0.075}_{-0.074}$	$D_M(0.51)$	1999.5	2002^{+38}_{-38}
y_{cal}	1.0005	$1.0005^{+0.0050}_{-0.0050}$	$10^9 A_s e^{-2\tau}$	1.8895	$1.892^{+0.030}_{-0.030}$	$H(0.61)$	94.97	$94.94^{+0.73}_{-0.68}$
A_{217}^{CIB}	49.1	48^{+10}_{-10}	D_{40}	1222.0	1218^{+44}_{-38}	$D_M(0.61)$	2325.2	2328^{+41}_{-41}
$\xi^{tSZ \times CIB}$	0.28	—	D_{220}	5715	5719^{+83}_{-82}	$H(2.33)$	237.08	$237.3^{+2.7}_{-2.7}$
A_{143}^{tSZ}	7.02	$5.0^{+3.9}_{-3.9}$	D_{810}	2540.2	2539^{+28}_{-28}	$D_M(2.33)$	5778.1	5780^{+32}_{-33}
A_{100}^{PS}	255	265^{+60}_{-60}	D_{1420}	815.6	814^{+10}_{-10}	$f\sigma_8(0.15)$	0.4657	$0.467^{+0.025}_{-0.025}$
A_{143}^{PS}	49.1	49^{+20}_{-20}	D_{2000}	229.95	$229.4^{+3.6}_{-3.6}$	$\sigma_8(0.15)$	0.7497	$0.749^{+0.015}_{-0.015}$
$A_{143 \times 217}^{PS}$	46.1	43^{+20}_{-20}	$n_{s,0.002}$	0.9607	$0.958^{+0.016}_{-0.014}$	$f\sigma_8(0.38)$	0.4814	$0.482^{+0.019}_{-0.019}$
A_{217}^{PS}	118.8	115^{+20}_{-20}	Y_P	0.245318	$0.24532^{+0.00018}_{-0.00021}$	$\sigma_8(0.38)$	0.6632	$0.663^{+0.012}_{-0.012}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246644	$0.24664^{+0.00018}_{-0.00021}$	$f\sigma_8(0.51)$	0.4786	$0.479^{+0.016}_{-0.016}$
A_{100}^{dustTT}	8.90	$9.0^{+3.6}_{-3.6}$	$10^5 D/H$	2.622	$2.620^{+0.086}_{-0.083}$	$\sigma_8(0.51)$	0.6201	$0.620^{+0.011}_{-0.011}$
A_{143}^{dustTT}	10.83	$10.7^{+3.5}_{-3.5}$	Age/Gyr	13.830	$13.834^{+0.072}_{-0.073}$	$f\sigma_8(0.61)$	0.4727	$0.473^{+0.014}_{-0.015}$
$A_{143 \times 217}^{dustTT}$	19.3	$18.3^{+6.5}_{-6.5}$	z_*	1090.26	$1090.27^{+0.81}_{-0.81}$	$\sigma_8(0.61)$	0.5898	$0.589^{+0.010}_{-0.010}$
A_{217}^{dustTT}	94.4	93^{+10}_{-10}	r_*	144.29	$144.2^{+1.1}_{-1.0}$	$f\sigma_8(2.33)$	0.2969	$0.2965^{+0.0051}_{-0.0051}$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04082	$1.0407^{+0.0011}_{-0.0010}$	$\sigma_8(2.33)$	0.3056	$0.3051^{+0.0055}_{-0.0055}$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.863	$13.857^{+0.095}_{-0.093}$	f_{2000}^{143}	30.5	31^{+6}_{-6}
H_0	66.71	$66.6^{+1.9}_{-1.9}$	z_{drag}	1059.59	$1059.62^{+0.96}_{-0.99}$	$f_{2000}^{143 \times 217}$	33.36	34^{+4}_{-4}
Ω_Λ	0.6765	$0.674^{+0.027}_{-0.028}$	r_{drag}	147.01	$146.9^{+1.1}_{-1.1}$	f_{2000}^{217}	107.77	$108.3^{+3.6}_{-3.7}$
Ω_m	0.3235	$0.326^{+0.028}_{-0.027}$	k_D	0.14081	$0.1409^{+0.0012}_{-0.0013}$	χ_{small}^2	395.88	$397.1 (\nu: 1.5)$
$\Omega_m h^2$	0.14395	$0.1443^{+0.0042}_{-0.0042}$	$100\theta_D$	0.16094	$0.16090^{+0.00062}_{-0.00057}$	χ_{lowl}^2	22.18	$22.1 (\nu: 2.3)$
$\Omega_m h^3$	0.09602	$0.09602^{+0.00093}_{-0.00091}$	z_{eq}	3425	3432^{+100}_{-100}	χ_{plik}^2	759.7	$774.0 (\nu: 17.1)$
σ_8	0.8126	$0.812^{+0.018}_{-0.018}$	k_{eq}	0.010452	$0.01047^{+0.00031}_{-0.00031}$	χ_{prior}^2	1.4	$7.3 (\nu: 6.8)$
S_8	0.8438	$0.847^{+0.050}_{-0.048}$	$100\theta_{eq}$	0.8086	$0.807^{+0.019}_{-0.018}$	χ_{CMB}^2	1177.7	$1193.2 (\nu: 16.7)$

Best-fit $\chi_{eff}^2 = 1179.15$; $\Delta\chi_{eff}^2 = -0.43$; $\bar{\chi}_{eff}^2 = 1200.56$; $\Delta\bar{\chi}_{eff}^2 = 0.98$; $R - 1 = 0.00658$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 (Δ 0.01) commander_dx12_v3.2.29: 22.18 (Δ -1.42) plik_rd12_HM_v22_TT: 759.66 (Δ 0.91)

5.2 base_alpha1_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022252	$0.02228^{+0.00044}_{-0.00043}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9814	$0.981^{+0.022}_{-0.022}$ (−0.9 σ)	$D_M(0.38)$	1529.4	1530^{+18}_{-18} (−1.0 σ)
$\Omega_c h^2$	0.11894	$0.1191^{+0.0025}_{-0.0024}$ (−1.1 σ)	$r_{\text{drag}} h$	99.76	$99.7^{+1.8}_{-1.9}$ (+1.1 σ)	$H(0.51)$	89.67	$89.67^{+0.58}_{-0.56}$ (+1.0 σ)
$100\theta_{\text{MC}}$	1.04092	$1.04087^{+0.00092}_{-0.00093}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.427	$2.429^{+0.054}_{-0.053}$ (−0.9 σ)	$D_M(0.51)$	1981.4	1982^{+22}_{-21} (−1.0 σ)
τ	0.0547	$0.055^{+0.017}_{-0.016}$ (+0.2 σ)	z_{re}	7.73	$7.8^{+1.6}_{-1.7}$ (+0.1 σ)	$H(0.61)$	95.273	$95.28^{+0.49}_{-0.47}$ (+0.9 σ)
α_{-1}	−0.00005	$−0.0008^{+0.0029}_{-0.0038}$ (+0.4 σ)	$10^9 A_s$	2.095	$2.100^{+0.077}_{-0.074}$ (−0.2 σ)	$D_M(0.61)$	2305.8	2306^{+23}_{-23} (−1.0 σ)
$\ln(10^{10} A_s)$	3.0422	$3.044^{+0.036}_{-0.036}$ (−0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8781	$1.880^{+0.025}_{-0.024}$ (−0.8 σ)	$H(2.33)$	235.74	$235.9^{+1.6}_{-1.6}$ (−1.0 σ)
n_s	0.9664	$0.964^{+0.011}_{-0.011}$ (+0.9 σ)	D_{40}	1218.9	1215^{+47}_{-39} (−0.2 σ)	$D_M(2.33)$	5766.2	5766^{+24}_{-24} (−0.9 σ)
y_{cal}	1.00039	$1.0006^{+0.0049}_{-0.0050}$ (+0.0 σ)	D_{220}	5719	5725^{+82}_{-79} (+0.1 σ)	$f\sigma_8(0.15)$	0.4541	$0.454^{+0.015}_{-0.015}$ (−1.0 σ)
A_{217}^{CIB}	48.7	48^{+10}_{-10} (−0.0 σ)	D_{810}	2536.6	2537^{+28}_{-27} (−0.2 σ)	$\sigma_8(0.15)$	0.7460	$0.745^{+0.013}_{-0.013}$ (−0.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.34	—	D_{1420}	816.0	815^{+10}_{-10} (+0.2 σ)	$f\sigma_8(0.38)$	0.4727	$0.473^{+0.013}_{-0.012}$ (−1.0 σ)
A_{143}^{tSZ}	6.85	$5.0^{+3.9}_{-4.0}$ (+0.0 σ)	D_{2000}	230.14	$229.9^{+3.5}_{-3.5}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6614	$0.661^{+0.011}_{-0.012}$ (−0.3 σ)
A_{100}^{PS}	255	264^{+60}_{-60} (−0.0 σ)	$n_{s,0.002}$	0.9664	$0.964^{+0.011}_{-0.011}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4715	$0.471^{+0.011}_{-0.011}$ (−0.9 σ)
A_{143}^{PS}	49.9	48^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245347	$0.24536^{+0.00018}_{-0.00019}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6190	$0.618^{+0.010}_{-0.011}$ (−0.2 σ)
$A_{143 \times 217}^{\text{PS}}$	47.0	43^{+20}_{-20} (−0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246674	$0.24668^{+0.00018}_{-0.00019}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4666	$0.466^{+0.010}_{-0.010}$ (−0.9 σ)
A_{217}^{PS}	119.0	114^{+20}_{-20} (−0.0 σ)	$10^5 D/H$	2.608	$2.603^{+0.082}_{-0.080}$ (−0.4 σ)	$\sigma_8(0.61)$	0.5890	$0.5884^{+0.0099}_{-0.010}$ (−0.1 σ)
A^{kSZ}	0.2	—	Age/Gyr	13.805	$13.804^{+0.055}_{-0.055}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.2971	$0.2967^{+0.0051}_{-0.0052}$ (+0.1 σ)
A_{100}^{dustTT}	8.89	$9.0^{+3.5}_{-3.5}$ (+0.0 σ)	z_*	1089.98	$1089.95^{+0.63}_{-0.61}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3063	$0.3059^{+0.0053}_{-0.0054}$ (+0.3 σ)
A_{143}^{dustTT}	10.74	$10.8^{+3.3}_{-3.4}$ (+0.0 σ)	r_*	144.80	$144.74^{+0.66}_{-0.68}$ (+1.0 σ)	f_{2000}^{143}	30.4	31^{+6}_{-6} (−0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.3^{+6.7}_{-6.7}$ (+0.0 σ)	$100\theta_*$	1.04111	$1.04107^{+0.00093}_{-0.00093}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	33.18	33^{+4}_{-4} (−0.2 σ)
A_{217}^{dustTT}	94.5	94^{+10}_{-20} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.908	$13.903^{+0.064}_{-0.064}$ (+1.0 σ)	f_{2000}^{217}	107.58	$108.0^{+3.6}_{-3.7}$ (−0.1 σ)
c_{100}	0.99970	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.59	$1059.7^{+1.0}_{-1.0}$ (+0.1 σ)	χ_{small}^2	396.06	397.2 (ν : 1.7) (+0.0 σ)
c_{217}	0.99823	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.50	$147.44^{+0.77}_{-0.76}$ (+0.9 σ)	χ_{lowl}^2	22.26	22 (ν : 3.1) (+0.1 σ)
H_0	67.63	$67.6^{+1.0}_{-1.1}$ (+1.1 σ)	k_{D}	0.14034	$0.1404^{+0.0010}_{-0.0010}$ (−0.8 σ)	χ_{plik}^2	760.7	774.1 (ν : 17.0) (+0.0 σ)
Ω_Λ	0.6899	$0.689^{+0.014}_{-0.015}$ (+1.1 σ)	$100\theta_{\text{D}}$	0.16095	$0.16091^{+0.00065}_{-0.00060}$ (+0.0 σ)	$\chi_{6\text{DF}}^2$	0.022	0.067 (ν : 0.0)
Ω_{m}	0.3101	$0.311^{+0.015}_{-0.014}$ (−1.1 σ)	z_{eq}	3374	3378^{+58}_{-57} (−1.0 σ)	χ_{MGS}^2	1.28	1.30 (ν : 0.1)
$\Omega_{\text{m}} h^2$	0.14183	$0.1420^{+0.0024}_{-0.0024}$ (−1.0 σ)	k_{eq}	0.010298	$0.01031^{+0.00018}_{-0.00017}$ (−1.0 σ)	χ_{DR12BAO}^2	4.22	5.0 (ν : 1.7)
$\Omega_{\text{m}} h^3$	0.09592	$0.09598^{+0.00093}_{-0.00090}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8180	$0.817^{+0.011}_{-0.011}$ (+1.1 σ)	χ_{prior}^2	1.2	7.3 (ν : 6.9) (−0.0 σ)
σ_8	0.8071	$0.807^{+0.015}_{-0.015}$ (−0.7 σ)	$100\theta_{\text{s,eq}}$	0.4519	$0.4516^{+0.0055}_{-0.0055}$ (+1.1 σ)	χ_{BAO}^2	5.52	6.4 (ν : 1.2)
S_8	0.8206	$0.821^{+0.030}_{-0.028}$ (−1.0 σ)	$H(0.15)$	72.89	$72.87^{+0.91}_{-0.92}$ (+1.0 σ)	χ_{CMB}^2	1179.0	1193.6 (ν : 16.3) (+0.1 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4495	$0.450^{+0.016}_{-0.016}$ (−1.0 σ)	$D_M(0.15)$	641.1	$641.4^{+9.2}_{-8.8}$ (−1.0 σ)			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6023	$0.602^{+0.016}_{-0.015}$ (−0.9 σ)	$H(0.38)$	82.97	$82.96^{+0.69}_{-0.68}$ (+1.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1185.69$; $\Delta\chi_{\text{eff}}^2 = -0.06$; $\bar{\chi}_{\text{eff}}^2 = 1207.24$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.22$; $R - 1 = 0.02382$

χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.00) MGS: 1.28 (Δ 0.00) DR12BAO: 4.22 (Δ 0.03) CMB - small_100x143.offlike5_EE_Aplanck_B: 396.06 (Δ 0.17) commander_dx12_v3_2_29: 22.26 (Δ -0.57) plik_rd12_HM_v22_TT: 760.65 (Δ 0.55)

5.3 base_alpha1_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022207	$0.02223^{+0.00043}_{-0.00043} (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6095	$0.609^{+0.015}_{-0.015} (-0.4\sigma)$	$D_M(0.15)$	646.8	$647^{+13}_{-12} (-0.3\sigma)$
$\Omega_c h^2$	0.12051	$0.1207^{+0.0032}_{-0.0032} (-0.3\sigma)$	$\sigma_8/h^{0.5}$	0.9905	$0.990^{+0.020}_{-0.021} (-0.4\sigma)$	$H(0.38)$	82.58	$82.54^{+0.91}_{-0.87} (+0.3\sigma)$
$100\theta_{MC}$	1.04069	$1.0406^{+0.0010}_{-0.00099} (+0.2\sigma)$	$r_{drag}h$	98.53	$98.4^{+2.6}_{-2.5} (+0.3\sigma)$	$D_M(0.38)$	1540.7	$1542^{+25}_{-25} (-0.3\sigma)$
τ	0.0528	$0.054^{+0.016}_{-0.016} (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4491	$2.452^{+0.049}_{-0.050} (-0.3\sigma)$	$H(0.51)$	89.38	$89.35^{+0.74}_{-0.69} (+0.3\sigma)$
α_{-1}	-0.00018	$-0.0013^{+0.0028}_{-0.0041} (+0.1\sigma)$	z_{re}	7.58	$7.6^{+1.5}_{-1.7} (-0.0\sigma)$	$D_M(0.51)$	1994.5	$1996^{+29}_{-29} (-0.3\sigma)$
$\ln(10^{10} A_s)$	3.0425	$3.045^{+0.030}_{-0.031} (-0.1\sigma)$	$10^9 A_s$	2.096	$2.101^{+0.065}_{-0.064} (-0.1\sigma)$	$H(0.61)$	95.06	$95.04^{+0.61}_{-0.57} (+0.3\sigma)$
n_s	0.9621	$0.959^{+0.014}_{-0.012} (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	1.8855	$1.888^{+0.025}_{-0.025} (-0.3\sigma)$	$D_M(0.61)$	2319.8	$2321^{+31}_{-32} (-0.3\sigma)$
y_{cal}	1.00018	$1.0004^{+0.0049}_{-0.0050} (-0.0\sigma)$	D_{40}	1222.2	$1216^{+45}_{-37} (-0.1\sigma)$	$H(2.33)$	236.72	$236.8^{+2.0}_{-2.0} (-0.3\sigma)$
A_{217}^{CIB}	49.4	$48^{+10}_{-10} (+0.0\sigma)$	D_{220}	5716	$5721^{+82}_{-82} (+0.1\sigma)$	$D_M(2.33)$	5774.8	$5776^{+28}_{-29} (-0.3\sigma)$
$\xi^{tSZ \times CIB}$	0.26	—	D_{810}	2537.9	$2538^{+27}_{-27} (-0.1\sigma)$	$f\sigma_8(0.15)$	0.4622	$0.462^{+0.016}_{-0.016} (-0.4\sigma)$
A_{143}^{tSZ}	6.99	$5.0^{+3.9}_{-4.0} (-0.0\sigma)$	D_{1420}	815.2	$814.2^{+9.9}_{-10} (+0.0\sigma)$	$\sigma_8(0.15)$	0.7482	$0.747^{+0.011}_{-0.011} (-0.3\sigma)$
A_{100}^{PS}	257	$265^{+60}_{-60} (+0.0\sigma)$	D_{2000}	229.84	$229.4^{+3.6}_{-3.6} (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4787	$0.479^{+0.012}_{-0.013} (-0.4\sigma)$
A_{143}^{PS}	48.9	$49^{+20}_{-20} (-0.0\sigma)$	$n_{s,0.002}$	0.9621	$0.959^{+0.014}_{-0.012} (+0.2\sigma)$	$\sigma_8(0.38)$	0.6623	$0.6614^{+0.0096}_{-0.0098} (-0.2\sigma)$
$A_{143 \times 217}^{PS}$	45.3	$43^{+20}_{-20} (-0.0\sigma)$	Y_P	0.245329	$0.24533^{+0.00018}_{-0.00019} (+0.2\sigma)$	$f\sigma_8(0.51)$	0.4764	$0.476^{+0.010}_{-0.011} (-0.3\sigma)$
A_{217}^{PS}	118.1	$114^{+20}_{-20} (-0.0\sigma)$	Y_P^{BBN}	0.246655	$0.24666^{+0.00018}_{-0.00019} (+0.2\sigma)$	$\sigma_8(0.51)$	0.6195	$0.6185^{+0.0092}_{-0.0093} (-0.2\sigma)$
A^{kSZ}	0.0	—	$10^5 D/H$	2.617	$2.613^{+0.083}_{-0.080} (-0.2\sigma)$	$f\sigma_8(0.61)$	0.4707	$0.4704^{+0.0091}_{-0.0094} (-0.3\sigma)$
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.6} (-0.0\sigma)$	Age/Gyr	13.823	$13.825^{+0.063}_{-0.066} (-0.2\sigma)$	$\sigma_8(0.61)$	0.5892	$0.5883^{+0.0090}_{-0.0090} (-0.2\sigma)$
A_{143}^{dustTT}	10.80	$10.8^{+3.4}_{-3.4} (+0.0\sigma)$	z_*	1090.17	$1090.16^{+0.70}_{-0.71} (-0.3\sigma)$	$f\sigma_8(2.33)$	0.29676	$0.2963^{+0.0048}_{-0.0048} (-0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	19.3	$18.4^{+6.4}_{-6.7} (+0.0\sigma)$	r_*	144.42	$144.37^{+0.81}_{-0.78} (+0.3\sigma)$	$\sigma_8(2.33)$	0.3056	$0.3051^{+0.0053}_{-0.0053} (-0.0\sigma)$
A_{217}^{dustTT}	94.2	$93^{+10}_{-10} (+0.0\sigma)$	$100\theta_*$	1.04089	$1.0408^{+0.0010}_{-0.00098} (+0.2\sigma)$	f_{2000}^{143}	30.5	$31^{+6}_{-6} (-0.0\sigma)$
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012} (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.875	$13.872^{+0.074}_{-0.071} (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	33.29	$34^{+4}_{-4} (-0.0\sigma)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012} (+0.0\sigma)$	z_{drag}	1059.59	$1059.65^{+0.97}_{-0.98} (+0.1\sigma)$	f_{2000}^{217}	107.62	$108.2^{+3.7}_{-3.7} (-0.0\sigma)$
H_0	66.96	$66.9^{+1.5}_{-1.4} (+0.3\sigma)$	r_{drag}	147.14	$147.08^{+0.88}_{-0.82} (+0.3\sigma)$	$\chi_{lensing}^2$	8.93	$9.52 (\nu: 0.5)$
Ω_Λ	0.6803	$0.679^{+0.020}_{-0.021} (+0.3\sigma)$	k_D	0.14069	$0.1408^{+0.0010}_{-0.0011} (-0.2\sigma)$	χ_{small}^2	395.89	$397.0 (\nu: 1.1) (-0.1\sigma)$
Ω_m	0.3197	$0.321^{+0.021}_{-0.020} (-0.3\sigma)$	$100\theta_D$	0.16093	$0.16089^{+0.00062}_{-0.00057} (-0.0\sigma)$	χ_{lowl}^2	22.35	$22.1 (\nu: 2.4) (-0.0\sigma)$
$\Omega_m h^2$	0.14337	$0.1435^{+0.0031}_{-0.0032} (-0.3\sigma)$	z_{eq}	3411	$3415^{+75}_{-75} (-0.3\sigma)$	χ_{plik}^2	759.7	$773.7 (\nu: 16.1) (-0.1\sigma)$
$\Omega_m h^3$	0.09600	$0.09600^{+0.00091}_{-0.00088} (-0.0\sigma)$	k_{eq}	0.010409	$0.01042^{+0.00023}_{-0.00023} (-0.3\sigma)$	χ_{prior}^2	1.3	$7.3 (\nu: 6.7) (-0.0\sigma)$
σ_8	0.8106	$0.810^{+0.012}_{-0.013} (-0.3\sigma)$	$100\theta_{eq}$	0.8112	$0.810^{+0.014}_{-0.013} (+0.3\sigma)$	χ_{CMB}^2	1186.9	$1202.2 (\nu: 16.4) (+1.6\sigma)$
S_8	0.8368	$0.837^{+0.032}_{-0.033} (-0.4\sigma)$	$100\theta_{s,eq}$	0.4484	$0.4480^{+0.0074}_{-0.0070} (+0.3\sigma)$			
$\sigma_8 \Omega_m^{0.5}$	0.4583	$0.459^{+0.018}_{-0.018} (-0.4\sigma)$	$H(0.15)$	72.33	$72.3^{+1.2}_{-1.2} (+0.3\sigma)$			

Best-fit $\chi_{eff}^2 = 1188.17$; $\Delta\chi_{eff}^2 = -0.40$; $\bar{\chi}_{eff}^2 = 1209.53$; $\Delta\bar{\chi}_{eff}^2 = 1.12$; $R - 1 = 0.01166$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consect8: 8.93 (Δ 0.03) small_100x143_offlike5_EE_Aplanck_B: 395.89 (Δ 0.02) commander_dx12_v3.2_29: 22.35 (Δ -0.88) plik_rd12_HM_v22_TT: 759.73 (Δ 0.41)

5.4 base_alpha1_plikHM_TT_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022281	$0.02229^{+0.00043}_{-0.00043}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9842	$0.983^{+0.017}_{-0.017}$ (−0.8 σ)	$D_M(0.38)$	1529.9	1531^{+17}_{-17} (−1.0 σ)
$\Omega_c h^2$	0.11911	$0.1192^{+0.0022}_{-0.0022}$ (−1.0 σ)	$r_{\text{drag}} h$	99.65	$99.6^{+1.7}_{-1.7}$ (+1.0 σ)	$H(0.51)$	89.67	$89.65^{+0.55}_{-0.53}$ (+1.0 σ)
$100\theta_{\text{MC}}$	1.04092	$1.04085^{+0.00092}_{-0.00092}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4356	$2.436^{+0.042}_{-0.042}$ (−0.7 σ)	$D_M(0.51)$	1982.0	1983^{+20}_{-20} (−1.0 σ)
τ	0.0565	$0.057^{+0.016}_{-0.015}$ (+0.3 σ)	z_{re}	7.91	$7.9^{+1.5}_{-1.5}$ (+0.3 σ)	$H(0.61)$	95.281	$95.26^{+0.48}_{-0.45}$ (+0.9 σ)
α_{-1}	−0.00008	$−0.0009^{+0.0029}_{-0.0038}$ (+0.3 σ)	$10^9 A_s$	2.106	$2.107^{+0.068}_{-0.065}$ (+0.0 σ)	$D_M(0.61)$	2306.4	2307^{+22}_{-22} (−1.0 σ)
$\ln(10^{10} A_s)$	3.0472	$3.048^{+0.032}_{-0.031}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8806	$1.881^{+0.023}_{-0.023}$ (−0.7 σ)	$H(2.33)$	235.89	$235.9^{+1.4}_{-1.4}$ (−1.0 σ)
n_s	0.9654	$0.964^{+0.011}_{-0.010}$ (+0.8 σ)	D_{40}	1221.4	1216^{+47}_{-39} (−0.1 σ)	$D_M(2.33)$	5765.4	5766^{+23}_{-24} (−0.8 σ)
y_{cal}	1.00074	$1.0007^{+0.0049}_{-0.0049}$ (+0.1 σ)	D_{220}	5728	5728^{+81}_{-78} (+0.2 σ)	$f\sigma_8(0.15)$	0.4558	$0.456^{+0.012}_{-0.012}$ (−0.9 σ)
A_{217}^{CIB}	50.3	48^{+10}_{-10} (−0.1 σ)	D_{810}	2538.5	2538^{+27}_{-26} (−0.1 σ)	$\sigma_8(0.15)$	0.7478	$0.747^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.099	—	D_{1420}	816.4	$816^{+10}_{-9.9}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4743	$0.4740^{+0.0099}_{-0.0099}$ (−0.8 σ)
A_{143}^{tSZ}	7.14	$5.0^{+3.8}_{-4.1}$ (+0.0 σ)	D_{2000}	230.31	$230.0^{+3.4}_{-3.4}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6629	$0.6620^{+0.0097}_{-0.0098}$ (−0.1 σ)
A_{100}^{PS}	257	264^{+60}_{-60} (−0.0 σ)	$n_{s,0.002}$	0.9654	$0.964^{+0.011}_{-0.010}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4729	$0.4725^{+0.0088}_{-0.0088}$ (−0.8 σ)
A_{143}^{PS}	45.7	48^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245360	$0.24536^{+0.00018}_{-0.00018}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6204	$0.6195^{+0.0091}_{-0.0092}$ (−0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	40.6	43^{+20}_{-20} (−0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246686	$0.24668^{+0.00018}_{-0.00018}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4680	$0.4676^{+0.0081}_{-0.0081}$ (−0.7 σ)
A_{217}^{PS}	116.4	115^{+20}_{-20} (+0.0 σ)	10^5D/H	2.602	$2.602^{+0.081}_{-0.079}$ (−0.4 σ)	$\sigma_8(0.61)$	0.5903	$0.5895^{+0.0087}_{-0.0088}$ (+0.1 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.803	$13.804^{+0.054}_{-0.054}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.29768	$0.2972^{+0.0045}_{-0.0046}$ (+0.3 σ)
A_{100}^{dustTT}	8.89	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	z_*	1089.95	$1089.96^{+0.62}_{-0.59}$ (−0.8 σ)	$\sigma_8(2.33)$	0.30692	$0.3064^{+0.0048}_{-0.0049}$ (+0.5 σ)
A_{143}^{dustTT}	10.75	$10.7^{+3.3}_{-3.4}$ (−0.0 σ)	r_*	144.73	$144.70^{+0.61}_{-0.62}$ (+0.9 σ)	f_{2000}^{143}	30.4	31^{+6}_{-6} (−0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	18.9	$18.3^{+6.5}_{-6.7}$ (+0.0 σ)	$100\theta_*$	1.04112	$1.04104^{+0.00094}_{-0.00092}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	33.10	33^{+4}_{-4} (−0.2 σ)
A_{217}^{dustTT}	93.9	94^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.901	$13.899^{+0.059}_{-0.059}$ (+0.9 σ)	f_{2000}^{217}	107.70	$108.0^{+3.6}_{-3.7}$ (−0.2 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.67	$1059.69^{+0.97}_{-1.0}$ (+0.1 σ)	χ_{lensing}^2	8.78	9.25 (ν : 0.3)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.43	$147.39^{+0.70}_{-0.71}$ (+0.9 σ)	χ_{small}^2	396.43	397.3 (ν : 1.7) (+0.1 σ)
H_0	67.59	$67.54^{+0.99}_{-0.97}$ (+1.0 σ)	k_{D}	0.14045	$0.14048^{+0.00097}_{-0.00099}$ (−0.7 σ)	χ_{lowl}^2	22.31	22 (ν : 3.2) (+0.1 σ)
Ω_Λ	0.6891	$0.688^{+0.013}_{-0.013}$ (+1.0 σ)	$100\theta_{\text{D}}$	0.16091	$0.16089^{+0.00064}_{-0.00059}$ (−0.0 σ)	χ_{plik}^2	759.8	773.6 (ν : 16.1) (−0.1 σ)
Ω_{m}	0.3109	$0.312^{+0.013}_{-0.013}$ (−1.0 σ)	z_{eq}	3379	3381^{+52}_{-51} (−1.0 σ)	$\chi_{6\text{DF}}^2$	0.029	0.068 (ν : 0.0)
$\Omega_{\text{m}} h^2$	0.14204	$0.1421^{+0.0022}_{-0.0021}$ (−1.0 σ)	k_{eq}	0.010313	$0.01032^{+0.00016}_{-0.00016}$ (−1.0 σ)	χ_{MGS}^2	1.22	1.23 (ν : 0.1)
$\Omega_{\text{m}} h^3$	0.09601	$0.09600^{+0.00091}_{-0.00089}$ (−0.0 σ)	$100\theta_{\text{eq}}$	0.8172	$0.8168^{+0.0095}_{-0.0094}$ (+1.0 σ)	χ_{DR12BAO}^2	4.40	5.1 (ν : 1.5)
σ_8	0.8092	$0.808^{+0.012}_{-0.012}$ (−0.5 σ)	$100\theta_{\text{s,eq}}$	0.45150	$0.4513^{+0.0049}_{-0.0049}$ (+1.0 σ)	χ_{prior}^2	1.6	7.2 (ν : 6.8) (−0.0 σ)
S_8	0.8237	$0.824^{+0.024}_{-0.023}$ (−0.9 σ)	$H(0.15)$	72.86	$72.82^{+0.87}_{-0.84}$ (+1.0 σ)	χ_{CMB}^2	1187.3	1202.5 (ν : 16.1) (+1.6 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4512	$0.451^{+0.013}_{-0.013}$ (−0.9 σ)	$D_M(0.15)$	641.4	$641.9^{+8.4}_{-8.4}$ (−1.0 σ)	χ_{BAO}^2	5.64	6.4 (ν : 1.0)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6042	$0.604^{+0.012}_{-0.012}$ (−0.8 σ)	$H(0.38)$	82.96	$82.93^{+0.66}_{-0.63}$ (+1.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1194.56$; $\Delta\chi_{\text{eff}}^2 = -0.13$; $\bar{\chi}_{\text{eff}}^2 = 1216.09$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.36$; $R - 1 = 0.02745$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.40 (Δ 0.02) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.78 (Δ -0.09) small_100x143_offlike5_EE_Aplanck: 396.43 (Δ 0.34) commander_dx12_v3_2.29: 22.31 (Δ -0.65) plik_rd12_HM_v22.TT: 759.82 (Δ 0.02)

5.5 base_alpha1_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00045}_{-0.00045} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.464^{+0.027}_{-0.026} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4465^{+0.0097}_{-0.0094} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1214^{+0.0044}_{-0.0043} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.614^{+0.024}_{-0.023} \quad (+0.0\sigma)$	$H(0.15)$	$72.0^{+1.6}_{-1.6} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.0405^{+0.0011}_{-0.0010} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.997^{+0.032}_{-0.031} \quad (+0.1\sigma)$	$D_M(0.15)$	$650^{+17}_{-16} \quad (-0.0\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	$r_{drag} h$	$97.9^{+3.4}_{-3.3} \quad (+0.0\sigma)$	$H(0.38)$	$82.4^{+1.2}_{-1.1} \quad (+0.0\sigma)$
α_{-1}	$-0.0015^{+0.0028}_{-0.0043} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.468^{+0.078}_{-0.076} \quad (+0.1\sigma)$	$D_M(0.38)$	$1547^{+33}_{-32} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.031}_{-0.030} \quad (+0.2\sigma)$	z_{re}	$< 9.04 \quad (+0.2\sigma)$	$H(0.51)$	$89.23^{+0.90}_{-0.86} \quad (+0.0\sigma)$
n_s	$0.958^{+0.016}_{-0.014} \quad (+0.0\sigma)$	$10^9 A_s$	$2.112^{+0.066}_{-0.063} \quad (+0.2\sigma)$	$D_M(0.51)$	$2002^{+38}_{-38} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.892^{+0.030}_{-0.030} \quad (-0.0\sigma)$	$H(0.61)$	$94.95^{+0.72}_{-0.68} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1217^{+45}_{-38} \quad (-0.0\sigma)$	$D_M(0.61)$	$2328^{+41}_{-41} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5719^{+82}_{-82} \quad (+0.0\sigma)$	$H(2.33)$	$237.3^{+2.7}_{-2.7} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{810}	$2539^{+28}_{-28} \quad (-0.0\sigma)$	$D_M(2.33)$	$5779^{+32}_{-33} \quad (-0.0\sigma)$
A_{100}^{PS}	$264^{+60}_{-50} \quad (-0.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.467^{+0.025}_{-0.024} \quad (+0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.4^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.014}_{-0.014} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.958^{+0.016}_{-0.014} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.483^{+0.019}_{-0.019} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.24532^{+0.00018}_{-0.00021} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.011} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24665^{+0.00018}_{-0.00021} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$10^5 D/H$	$2.618^{+0.086}_{-0.082} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.010}_{-0.0094} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.833^{+0.072}_{-0.073} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.014}_{-0.014} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	z_*	$1090.26^{+0.80}_{-0.80} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5899^{+0.0097}_{-0.0087} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.2^{+1.1}_{-1.0} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0046}_{-0.0044} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.0407^{+0.0011}_{-0.0010} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3055^{+0.0050}_{-0.0047} \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.857^{+0.094}_{-0.093} \quad (+0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$66.6^{+1.9}_{-1.9} \quad (+0.0\sigma)$	z_{drag}	$1059.64^{+0.94}_{-0.97} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.0\sigma)$
Ω_Λ	$0.675^{+0.027}_{-0.028} \quad (+0.0\sigma)$	r_{drag}	$146.9^{+1.1}_{-1.1} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.2^{+3.7}_{-3.7} \quad (-0.0\sigma)$
Ω_m	$0.325^{+0.028}_{-0.027} \quad (-0.0\sigma)$	k_D	$0.1409^{+0.0012}_{-0.0013} \quad (+0.0\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (-0.0\sigma)$
$\Omega_m h^2$	$0.1442^{+0.0042}_{-0.0042} \quad (-0.0\sigma)$	$100\theta_D$	$0.16089^{+0.00061}_{-0.00057} \quad (-0.0\sigma)$	χ_{lowl}^2	$22.1 \quad (\nu: 2.2) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.09603^{+0.00093}_{-0.00090} \quad (+0.0\sigma)$	z_{eq}	$3431^{+100}_{-100} \quad (-0.0\sigma)$	χ_{plik}^2	$773.9 \quad (\nu: 16.9) \quad (-0.0\sigma)$
σ_8	$0.813^{+0.017}_{-0.017} \quad (+0.1\sigma)$	k_{eq}	$0.01047^{+0.00031}_{-0.00031} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
S_8	$0.847^{+0.050}_{-0.048} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.808^{+0.019}_{-0.018} \quad (+0.0\sigma)$	χ_{CMB}^2	$1193.0 \quad (\nu: 16.1) \quad (-0.0\sigma)$

$$\bar{\chi}_{eff}^2 = 1200.29; \Delta \bar{\chi}_{eff}^2 = 0.97; R - 1 = 0.00693$$

5.6 base_alpha1_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02229^{+0.00044}_{-0.00043} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.022}_{-0.021} \quad (-0.8\sigma)$	$D_M(0.38)$	$1530^{+18}_{-18} \quad (-1.1\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0025}_{-0.0024} \quad (-1.1\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.8}_{-1.9} \quad (+1.1\sigma)$	$H(0.51)$	$89.67^{+0.57}_{-0.56} \quad (+1.0\sigma)$
$100\theta_{\text{MC}}$	$1.04087^{+0.00092}_{-0.00093} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.052}_{-0.049} \quad (-0.8\sigma)$	$D_M(0.51)$	$1982^{+22}_{-21} \quad (-1.1\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.3\sigma)$	z_{re}	$< 9.11 \quad (+0.3\sigma)$	$H(0.61)$	$95.28^{+0.49}_{-0.47} \quad (+1.0\sigma)$
α_{-1}	$-0.0009^{+0.0029}_{-0.0038} \quad (+0.3\sigma)$	$10^9 A_s$	$2.104^{+0.068}_{-0.064} \quad (-0.1\sigma)$	$D_M(0.61)$	$2306^{+23}_{-23} \quad (-1.0\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.032}_{-0.031} \quad (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.025}_{-0.024} \quad (-0.8\sigma)$	$H(2.33)$	$235.9^{+1.6}_{-1.6} \quad (-1.0\sigma)$
n_s	$0.964^{+0.011}_{-0.011} \quad (+0.9\sigma)$	D_{40}	$1214^{+47}_{-39} \quad (-0.2\sigma)$	$D_M(2.33)$	$5766^{+24}_{-24} \quad (-0.9\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	D_{220}	$5725^{+80}_{-79} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.015}_{-0.014} \quad (-1.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2537^{+28}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.013}_{-0.012} \quad (-0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.012}_{-0.012} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$229.9^{+3.4}_{-3.5} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.964^{+0.011}_{-0.011} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.9\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24536^{+0.00018}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6190^{+0.0099}_{-0.0093} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24668^{+0.00018}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.0098} \quad (-0.8\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.602^{+0.083}_{-0.079} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5890^{+0.0094}_{-0.0088} \quad (-0.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.803^{+0.055}_{-0.055} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0048}_{-0.0044} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	z_*	$1089.94^{+0.63}_{-0.62} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0050}_{-0.0046} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$10.8^{+3.3}_{-3.4} \quad (+0.0\sigma)$	r_*	$144.74^{+0.67}_{-0.68} \quad (+1.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.7}_{-6.8} \quad (+0.0\sigma)$	$100\theta_*$	$1.04106^{+0.00093}_{-0.00093} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-20} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.903^{+0.064}_{-0.064} \quad (+1.0\sigma)$	f_{2000}^{217}	$107.9^{+3.6}_{-3.7} \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.68^{+0.98}_{-1.0} \quad (+0.1\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.43^{+0.76}_{-0.77} \quad (+0.9\sigma)$	χ_{lowl}^2	$22 \quad (\nu: 3.1) \quad (+0.1\sigma)$
H_0	$67.6^{+1.0}_{-1.1} \quad (+1.1\sigma)$	k_{D}	$0.1404^{+0.0010}_{-0.0010} \quad (-0.8\sigma)$	χ_{plik}^2	$774.0 \quad (\nu: 16.7) \quad (-0.0\sigma)$
Ω_{Λ}	$0.689^{+0.014}_{-0.015} \quad (+1.1\sigma)$	$100\theta_{\text{D}}$	$0.16090^{+0.00065}_{-0.00060} \quad (-0.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.066 \quad (\nu: 0.0)$
Ω_{m}	$0.311^{+0.015}_{-0.014} \quad (-1.1\sigma)$	z_{eq}	$3378^{+58}_{-56} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.30 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0024}_{-0.0024} \quad (-1.0\sigma)$	k_{eq}	$0.01031^{+0.00018}_{-0.00017} \quad (-1.0\sigma)$	χ_{DR12BAO}^2	$5.0 \quad (\nu: 1.7)$
$\Omega_{\text{m}} h^3$	$0.09599^{+0.00092}_{-0.00090} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.817^{+0.011}_{-0.011} \quad (+1.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (-0.0\sigma)$
σ_8	$0.807^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4516^{+0.0055}_{-0.0055} \quad (+1.1\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 1.2)$
S_8	$0.822^{+0.029}_{-0.027} \quad (-1.0\sigma)$	$H(0.15)$	$72.87^{+0.90}_{-0.91} \quad (+1.1\sigma)$	χ_{CMB}^2	$1193.4 \quad (\nu: 15.7) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.016}_{-0.015} \quad (-1.0\sigma)$	$D_M(0.15)$	$641.4^{+9.2}_{-8.8} \quad (-1.1\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.603^{+0.015}_{-0.015} \quad (-0.9\sigma)$	$H(0.38)$	$82.97^{+0.69}_{-0.68} \quad (+1.0\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1207.05$; $\Delta \bar{\chi}_{\text{eff}}^2 = 1.29$; $R - 1 = 0.02346$

5.7 base_alpha1_plikHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02224^{+0.00043}_{-0.00043} (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.015}_{-0.015} (-0.3\sigma)$	$D_M(0.15)$	$647^{+12}_{-12} (-0.4\sigma)$
$\Omega_c h^2$	$0.1205^{+0.0031}_{-0.0032} (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} (-0.3\sigma)$	$H(0.38)$	$82.57^{+0.91}_{-0.85} (+0.4\sigma)$
$100\theta_{MC}$	$1.0406^{+0.0010}_{-0.00098} (+0.2\sigma)$	$r_{drag} h$	$98.5^{+2.6}_{-2.4} (+0.4\sigma)$	$D_M(0.38)$	$1541^{+24}_{-25} (-0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.453^{+0.049}_{-0.050} (-0.3\sigma)$	$H(0.51)$	$89.37^{+0.72}_{-0.67} (+0.4\sigma)$
α_{-1}	$-0.0014^{+0.0028}_{-0.0042} (+0.1\sigma)$	z_{re}	$< 8.94 (+0.1\sigma)$	$D_M(0.51)$	$1995^{+28}_{-29} (-0.4\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.027}_{-0.026} (-0.0\sigma)$	$10^9 A_s$	$2.106^{+0.058}_{-0.055} (-0.0\sigma)$	$H(0.61)$	$95.06^{+0.61}_{-0.55} (+0.3\sigma)$
n_s	$0.959^{+0.013}_{-0.012} (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.887^{+0.024}_{-0.025} (-0.3\sigma)$	$D_M(0.61)$	$2320^{+30}_{-31} (-0.4\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0050} (-0.0\sigma)$	D_{40}	$1215^{+45}_{-36} (-0.1\sigma)$	$H(2.33)$	$236.8^{+1.9}_{-2.0} (-0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} (-0.0\sigma)$	D_{220}	$5721^{+81}_{-81} (+0.1\sigma)$	$D_M(2.33)$	$5775^{+27}_{-29} (-0.3\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{810}	$2538^{+27}_{-27} (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} (-0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} (-0.0\sigma)$	D_{1420}	$814.2^{+9.9}_{-10} (+0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.010} (-0.2\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} (+0.0\sigma)$	D_{2000}	$229.5^{+3.6}_{-3.6} (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.013} (-0.3\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} (-0.0\sigma)$	$n_{s,0.002}$	$0.959^{+0.013}_{-0.012} (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6620^{+0.0092}_{-0.0086} (-0.1\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} (-0.1\sigma)$	Y_P	$0.24534^{+0.00018}_{-0.00019} (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} (-0.3\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} (-0.0\sigma)$	Y_P^{BBN}	$0.24666^{+0.00018}_{-0.00019} (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6192^{+0.0088}_{-0.0080} (-0.1\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.611^{+0.082}_{-0.079} (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.4706^{+0.0090}_{-0.0094} (-0.3\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} (+0.0\sigma)$	Age/Gyr	$13.823^{+0.061}_{-0.065} (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5889^{+0.0085}_{-0.0077} (-0.0\sigma)$
A_{143}^{dustTT}	$10.8^{+3.4}_{-3.4} (+0.0\sigma)$	z_*	$1090.14^{+0.69}_{-0.69} (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2966^{+0.0045}_{-0.0040} (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.4^{+6.4}_{-6.6} (+0.0\sigma)$	r_*	$144.39^{+0.81}_{-0.77} (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3054^{+0.0050}_{-0.0045} (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} (+0.0\sigma)$	$100\theta_*$	$1.0408^{+0.0010}_{-0.00098} (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} (-0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.874^{+0.073}_{-0.071} (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} (+0.0\sigma)$	z_{drag}	$1059.67^{+0.95}_{-0.95} (+0.1\sigma)$	f_{2000}^{217}	$108.2^{+3.7}_{-3.7} (-0.1\sigma)$
H_0	$66.9^{+1.4}_{-1.4} (+0.4\sigma)$	r_{drag}	$147.10^{+0.87}_{-0.81} (+0.3\sigma)$	$\chi_{lensing}^2$	$9.50 (\nu: 0.5)$
Ω_Λ	$0.680^{+0.020}_{-0.020} (+0.4\sigma)$	k_D	$0.1408^{+0.0010}_{-0.0011} (-0.2\sigma)$	χ_{small}^2	$396.9 (\nu: 1.1) (-0.1\sigma)$
Ω_m	$0.320^{+0.020}_{-0.020} (-0.4\sigma)$	$100\theta_D$	$0.16088^{+0.00062}_{-0.00056} (-0.1\sigma)$	χ_{lowl}^2	$22.0 (\nu: 2.4) (-0.0\sigma)$
$\Omega_m h^2$	$0.1434^{+0.0030}_{-0.0031} (-0.4\sigma)$	z_{eq}	$3412^{+71}_{-74} (-0.4\sigma)$	χ_{plik}^2	$773.6 (\nu: 16.0) (-0.1\sigma)$
$\Omega_m h^3$	$0.09601^{+0.00091}_{-0.00088} (-0.0\sigma)$	k_{eq}	$0.01041^{+0.00022}_{-0.00023} (-0.4\sigma)$	χ_{prior}^2	$7.3 (\nu: 6.7) (-0.0\sigma)$
σ_8	$0.810^{+0.012}_{-0.012} (-0.2\sigma)$	$100\theta_{eq}$	$0.811^{+0.014}_{-0.013} (+0.4\sigma)$	χ_{CMB}^2	$1202.0 (\nu: 15.9) (+1.5\sigma)$
S_8	$0.837^{+0.032}_{-0.033} (-0.4\sigma)$	$100\theta_{s,eq}$	$0.4483^{+0.0072}_{-0.0067} (+0.4\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.458^{+0.017}_{-0.018} (-0.4\sigma)$	$H(0.15)$	$72.3^{+1.2}_{-1.2} (+0.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1209.29; \Delta\bar{\chi}_{\text{eff}}^2 = 1.13; R - 1 = 0.01342$$

5.8 base_alpha1_plikHM_TT_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02229^{+0.00043}_{-0.00042} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.017} \quad (-0.7\sigma)$	$D_M(0.38)$	$1531^{+17}_{-17} \quad (-1.0\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0022}_{-0.0022} \quad (-1.0\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.7}_{-1.7} \quad (+1.0\sigma)$	$H(0.51)$	$89.65^{+0.55}_{-0.52} \quad (+1.0\sigma)$
$100\theta_{\text{MC}}$	$1.04085^{+0.00092}_{-0.00092} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.042}_{-0.041} \quad (-0.7\sigma)$	$D_M(0.51)$	$1983^{+20}_{-20} \quad (-1.0\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	z_{re}	$8.0^{+1.2}_{-1.4} \quad (+0.4\sigma)$	$H(0.61)$	$95.27^{+0.48}_{-0.45} \quad (+0.9\sigma)$
α_{-1}	$-0.0009^{+0.0029}_{-0.0039} \quad (+0.3\sigma)$	$10^9 A_s$	$2.110^{+0.062}_{-0.061} \quad (+0.1\sigma)$	$D_M(0.61)$	$2307^{+22}_{-22} \quad (-1.0\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.029}_{-0.029} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.023}_{-0.022} \quad (-0.7\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-1.0\sigma)$
n_s	$0.964^{+0.011}_{-0.010} \quad (+0.8\sigma)$	D_{40}	$1216^{+47}_{-39} \quad (-0.1\sigma)$	$D_M(2.33)$	$5766^{+23}_{-24} \quad (-0.8\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5728^{+80}_{-77} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.9\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$816^{+10}_{-9.9} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4741^{+0.0098}_{-0.0098} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$230.0^{+3.5}_{-3.4} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6623^{+0.0094}_{-0.0091} \quad (-0.1\sigma)$
A_{100}^{PS}	$264^{+50}_{-60} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.964^{+0.011}_{-0.010} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4727^{+0.0087}_{-0.0087} \quad (-0.8\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24536^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6198^{+0.0088}_{-0.0085} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24669^{+0.00018}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4677^{+0.0080}_{-0.0080} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.601^{+0.080}_{-0.078} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5897^{+0.0085}_{-0.0082} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.804^{+0.054}_{-0.054} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0045}_{-0.0042} \quad (+0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	$1089.95^{+0.60}_{-0.59} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0047}_{-0.0044} \quad (+0.5\sigma)$
A_{143}^{dustTT}	$10.7^{+3.3}_{-3.4} \quad (+0.0\sigma)$	r_*	$144.70^{+0.61}_{-0.62} \quad (+0.9\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.5}_{-6.7} \quad (+0.0\sigma)$	$100\theta_*$	$1.04104^{+0.00094}_{-0.00092} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.900^{+0.059}_{-0.059} \quad (+0.9\sigma)$	f_{2000}^{217}	$107.9^{+3.6}_{-3.7} \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.70^{+0.96}_{-0.99} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.21 \quad (\nu: 0.2)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.39^{+0.70}_{-0.70} \quad (+0.9\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.7) \quad (+0.1\sigma)$
H_0	$67.56^{+0.98}_{-0.97} \quad (+1.0\sigma)$	k_{D}	$0.14049^{+0.00097}_{-0.00099} \quad (-0.7\sigma)$	χ_{lowl}^2	$22 \quad (\nu: 3.1) \quad (+0.1\sigma)$
Ω_Λ	$0.689^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$100\theta_{\text{D}}$	$0.16088^{+0.00063}_{-0.00059} \quad (-0.1\sigma)$	χ_{plik}^2	$773.6 \quad (\nu: 16.0) \quad (-0.1\sigma)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-1.0\sigma)$	z_{eq}	$3381^{+52}_{-51} \quad (-1.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.066 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1421^{+0.0022}_{-0.0021} \quad (-1.0\sigma)$	k_{eq}	$0.01032^{+0.00016}_{-0.00016} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^3$	$0.09601^{+0.00091}_{-0.00089} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	$0.8169^{+0.0094}_{-0.0093} \quad (+1.0\sigma)$	χ_{DR12BAO}^2	$5.0 \quad (\nu: 1.4)$
σ_8	$0.809^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4513^{+0.0049}_{-0.0049} \quad (+1.0\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.7) \quad (-0.0\sigma)$
S_8	$0.824^{+0.024}_{-0.023} \quad (-0.9\sigma)$	$H(0.15)$	$72.83^{+0.86}_{-0.84} \quad (+1.0\sigma)$	χ_{CMB}^2	$1202.4 \quad (\nu: 15.8) \quad (+1.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.9\sigma)$	$D_M(0.15)$	$641.8^{+8.4}_{-8.4} \quad (-1.0\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.0)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.94^{+0.65}_{-0.63} \quad (+1.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1215.96; \Delta \bar{\chi}_{\text{eff}}^2 = 1.39; R - 1 = 0.02803$$

5.9 base_alpha1_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022381	$0.02236^{+0.00030}_{-0.00030}$ (+0.7 σ)	$\Omega_m h^2$	0.14328	$0.1435^{+0.0034}_{-0.0035}$ (−0.4 σ)	k_{eq}	0.010403	$0.01042^{+0.00025}_{-0.00025}$ (−0.4 σ)
$\Omega_c h^2$	0.12025	$0.1205^{+0.0035}_{-0.0036}$ (−0.4 σ)	$\Omega_m h^3$	0.09637	$0.09634^{+0.00057}_{-0.00059}$ (+0.7 σ)	$100\theta_{\text{eq}}$	0.8122	$0.811^{+0.016}_{-0.015}$ (+0.4 σ)
$100\theta_{\text{MC}}$	1.04086	$1.04082^{+0.00093}_{-0.00086}$ (+0.6 σ)	σ_8	0.8123	$0.813^{+0.015}_{-0.015}$ (+0.0 σ)	$100\theta_{\text{s,eq}}$	0.4488	$0.4483^{+0.0082}_{-0.0078}$ (+0.4 σ)
τ	0.0543	$0.055^{+0.016}_{-0.015}$ (+0.1 σ)	S_8	0.8347	$0.837^{+0.040}_{-0.039}$ (−0.4 σ)	$H(0.15)$	72.60	$72.5^{+1.4}_{-1.3}$ (+0.6 σ)
α_{-1}	−0.00001	$−0.0001^{+0.0012}_{-0.0012}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4572	$0.459^{+0.022}_{-0.021}$ (−0.4 σ)	$D_{\text{M}}(0.15)$	644.2	645^{+13}_{-13} (−0.6 σ)
$\ln(10^{10} A_s)$	3.0459	$3.046^{+0.033}_{-0.032}$ (−0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6094	$0.610^{+0.019}_{-0.019}$ (−0.3 σ)	$H(0.38)$	82.81	$82.75^{+0.97}_{-0.92}$ (+0.7 σ)
n_s	0.9649	$0.964^{+0.013}_{-0.013}$ (+0.8 σ)	$\sigma_8/h^{0.5}$	0.9905	$0.992^{+0.026}_{-0.026}$ (−0.2 σ)	$D_{\text{M}}(0.38)$	1535.1	1537^{+27}_{-27} (−0.6 σ)
y_{cal}	1.00076	$1.0006^{+0.0049}_{-0.0047}$ (+0.0 σ)	$r_{\text{drag}} h$	98.88	$98.7^{+2.9}_{-2.7}$ (+0.5 σ)	$H(0.51)$	89.59	$89.54^{+0.75}_{-0.71}$ (+0.7 σ)
A_{217}^{CIB}	46.8	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.449	$2.454^{+0.066}_{-0.065}$ (−0.3 σ)	$D_{\text{M}}(0.51)$	1987.8	1990^{+31}_{-31} (−0.6 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.51	—	z_{re}	7.68	$7.7^{+1.5}_{-1.6}$ (+0.1 σ)	$H(0.61)$	95.25	$95.21^{+0.59}_{-0.55}$ (+0.8 σ)
A_{143}^{tSZ}	7.20	$5.4^{+3.8}_{-3.9}$ (+0.2 σ)	$10^9 A_s$	2.103	$2.104^{+0.069}_{-0.066}$ (−0.1 σ)	$D_{\text{M}}(0.61)$	2312.4	2315^{+33}_{-34} (−0.6 σ)
A_{100}^{PS}	250	259^{+60}_{-50} (−0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8866	$1.886^{+0.027}_{-0.027}$ (−0.4 σ)	$H(2.33)$	236.73	$236.9^{+2.2}_{-2.2}$ (−0.3 σ)
A_{143}^{PS}	49.1	46^{+10}_{-20} (−0.4 σ)	D_{40}	1230.5	1231^{+29}_{-27} (+0.6 σ)	$D_{\text{M}}(2.33)$	5764.4	5766^{+24}_{-26} (−0.8 σ)
$A_{143 \times 217}^{\text{PS}}$	50.0	42^{+20}_{-20} (−0.1 σ)	D_{220}	5737	5733^{+74}_{-75} (+0.3 σ)	$f\sigma_8(0.15)$	0.4613	$0.463^{+0.020}_{-0.020}$ (−0.4 σ)
A_{217}^{PS}	120.7	115^{+20}_{-20} (+0.1 σ)	D_{810}	2542.8	2540^{+27}_{-26} (+0.1 σ)	$\sigma_8(0.15)$	0.7501	$0.750^{+0.013}_{-0.013}$ (+0.1 σ)
A^{kSZ}	0.00	< 7.95 (−0.2 σ)	D_{1420}	818.5	$817.1^{+9.4}_{-9.4}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.4785	$0.479^{+0.016}_{-0.016}$ (−0.3 σ)
A_{100}^{dustTT}	8.78	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	D_{2000}	231.29	$230.8^{+3.1}_{-3.2}$ (+0.8 σ)	$\sigma_8(0.38)$	0.6644	$0.664^{+0.011}_{-0.011}$ (+0.3 σ)
A_{143}^{dustTT}	11.01	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9649	$0.964^{+0.013}_{-0.013}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4765	$0.477^{+0.013}_{-0.013}$ (−0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.0	$18.6^{+6.5}_{-6.5}$ (+0.1 σ)	Y_{P}	0.245400	$0.24539^{+0.00011}_{-0.00012}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6215	$0.621^{+0.010}_{-0.010}$ (+0.3 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246726	$0.24672^{+0.00011}_{-0.00012}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4711	$0.472^{+0.012}_{-0.012}$ (−0.2 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.076}_{-0.076}$	10^5D/H	2.583	$2.588^{+0.056}_{-0.053}$ (−0.7 σ)	$\sigma_8(0.61)$	0.5912	$0.5910^{+0.0096}_{-0.0097}$ (+0.4 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.135^{+0.059}_{-0.059}$	Age/Gyr	13.799	$13.803^{+0.054}_{-0.056}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.29789	$0.2977^{+0.0049}_{-0.0049}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.93	$1089.98^{+0.59}_{-0.57}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3069	$0.3067^{+0.0053}_{-0.0052}$ (+0.6 σ)
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	r_*	144.36	$144.32^{+0.87}_{-0.82}$ (+0.2 σ)	f_{2000}^{143}	28.9	30^{+5}_{-5} (−0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.67^{+0.15}_{-0.15}$	$100\theta_*$	1.04105	$1.04100^{+0.00093}_{-0.00086}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	32.11	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dustTE}	2.08	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.867	$13.863^{+0.076}_{-0.072}$ (+0.1 σ)	f_{2000}^{217}	106.71	$107.1^{+3.5}_{-3.5}$ (−0.6 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.97	$1059.95^{+0.63}_{-0.62}$ (+0.7 σ)	χ_{simall}^2	396.06	397.1 (ν : 1.8) (+0.0 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.01	$146.98^{+0.88}_{-0.82}$ (+0.1 σ)	χ_{lowl}^2	23.22	23.4 (ν : 1.3) (+0.6 σ)
H_0	67.26	$67.1^{+1.6}_{-1.5}$ (+0.6 σ)	k_{D}	0.14096	$0.14098^{+0.00089}_{-0.00094}$ (+0.1 σ)	χ_{plik}^2	2344.8	2361.5 (ν : 18.7) (+271.7 σ)
Ω_{Λ}	0.6833	$0.682^{+0.022}_{-0.023}$ (+0.5 σ)	$100\theta_{\text{D}}$	0.160726	$0.16074^{+0.00040}_{-0.00039}$ (−0.5 σ)	χ_{prior}^2	1.7	11.5 (ν : 10.3) (+1.1 σ)
Ω_{m}	0.3167	$0.318^{+0.023}_{-0.022}$ (−0.5 σ)	z_{eq}	3408	3414^{+82}_{-83} (−0.4 σ)	χ_{CMB}^2	2764.1	2782.1 (ν : 18.2) (+275.2 σ)

Best-fit $\chi_{\text{eff}}^2 = 2765.78$; $\Delta\chi_{\text{eff}}^2 = 0.01$; $\bar{\chi}_{\text{eff}}^2 = 2793.61$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.84$; $R - 1 = 0.01294$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ 0.01) commander_dx12_v3.2.29: 23.22 (Δ -0.04) plik_rd12_HM_v22b_TTTEEE: 2344.78 (Δ 0.14)

5.10 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022431	$0.02240^{+0.00028}_{-0.00028}$ (+0.9 σ)	σ_8	0.8109	$0.810^{+0.014}_{-0.014}$ (−0.3 σ)	$D_M(0.15)$	640.0	$640.0^{+8.6}_{-8.4}$ (−1.2 σ)
$\Omega_c h^2$	0.11917	$0.1191^{+0.0023}_{-0.0023}$ (−1.0 σ)	S_8	0.8242	$0.823^{+0.027}_{-0.027}$ (−0.9 σ)	$H(0.38)$	83.11	$83.10^{+0.64}_{-0.62}$ (+1.3 σ)
$100\theta_{MC}$	1.04107	$1.04109^{+0.00074}_{-0.00077}$ (+1.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4515	$0.451^{+0.015}_{-0.015}$ (−0.9 σ)	$D_M(0.38)$	1526.8	1527^{+17}_{-17} (−1.2 σ)
τ	0.0561	$0.055^{+0.016}_{-0.015}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6051	$0.604^{+0.014}_{-0.014}$ (−0.8 σ)	$H(0.51)$	89.813	$89.81^{+0.50}_{-0.48}$ (+1.3 σ)
α_{-1}	0.00002	$0.00015^{+0.0011}_{-0.00095}$ (+0.9 σ)	$\sigma_8/h^{0.5}$	0.9852	$0.984^{+0.021}_{-0.020}$ (−0.7 σ)	$D_M(0.51)$	1978.1	1978^{+20}_{-20} (−1.2 σ)
$\ln(10^{10} A_s)$	3.0466	$3.044^{+0.033}_{-0.031}$ (−0.2 σ)	$r_{drag} h$	99.75	$99.8^{+1.8}_{-1.8}$ (+1.1 σ)	$H(0.61)$	95.424	$95.41^{+0.42}_{-0.39}$ (+1.3 σ)
n_s	0.9693	$0.9681^{+0.0094}_{-0.010}$ (+1.4 σ)	$\langle d^2 \rangle^{1/2}$	2.433	$2.433^{+0.052}_{-0.050}$ (−0.8 σ)	$D_M(0.61)$	2302.0	2302^{+22}_{-22} (−1.2 σ)
y_{cal}	1.00082	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.83	$7.8^{+1.5}_{-1.5}$ (+0.1 σ)	$H(2.33)$	236.09	$236.0^{+1.4}_{-1.5}$ (−0.9 σ)
A_{217}^{CIB}	45.1	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.104	$2.100^{+0.071}_{-0.065}$ (−0.2 σ)	$D_M(2.33)$	5757.2	5758^{+18}_{-19} (−1.3 σ)
$\xi^{tSZ \times CIB}$	0.76	—	$10^9 A_s e^{-2\tau}$	1.8811	$1.879^{+0.024}_{-0.024}$ (−0.8 σ)	$f\sigma_8(0.15)$	0.4562	$0.455^{+0.014}_{-0.014}$ (−0.9 σ)
A_{143}^{tSZ}	7.05	$5.5^{+3.9}_{-3.9}$ (+0.3 σ)	D_{40}	1227.3	1230^{+29}_{-27} (+0.6 σ)	$\sigma_8(0.15)$	0.7495	$0.748^{+0.013}_{-0.012}$ (−0.1 σ)
A_{100}^{PS}	246	258^{+60}_{-60} (−0.2 σ)	D_{220}	5735	5734^{+73}_{-75} (+0.4 σ)	$f\sigma_8(0.38)$	0.4749	$0.474^{+0.012}_{-0.011}$ (−0.8 σ)
A_{143}^{PS}	51.3	45^{+10}_{-20} (−0.5 σ)	D_{810}	2542.5	2539^{+26}_{-26} (−0.0 σ)	$\sigma_8(0.38)$	0.6645	$0.664^{+0.011}_{-0.011}$ (+0.1 σ)
$A_{143 \times 217}^{PS}$	55.4	42^{+20}_{-20} (−0.1 σ)	D_{1420}	819.9	$818.0^{+9.1}_{-8.9}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4737	$0.473^{+0.010}_{-0.010}$ (−0.7 σ)
A_{217}^{PS}	122.9	115^{+20}_{-20} (+0.0 σ)	D_{2000}	231.90	$231.2^{+3.0}_{-3.0}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6220	$0.6210^{+0.0099}_{-0.010}$ (+0.3 σ)
A^{kSZ}	0.00	< 7.86 (−0.3 σ)	$n_{s,0.002}$	0.9693	$0.9681^{+0.0094}_{-0.010}$ (+1.4 σ)	$f\sigma_8(0.61)$	0.4688	$0.4680^{+0.0096}_{-0.0094}$ (−0.7 σ)
A_{100}^{dustTT}	8.87	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	Y_P	0.245419	$0.24541^{+0.00010}_{-0.00011}$ (+0.9 σ)	$\sigma_8(0.61)$	0.5919	$0.5910^{+0.0095}_{-0.0094}$ (+0.4 σ)
A_{143}^{dustTT}	11.03	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.246746	$0.24673^{+0.00011}_{-0.00011}$ (+0.9 σ)	$f\sigma_8(2.33)$	0.29849	$0.2980^{+0.0048}_{-0.0047}$ (+0.6 σ)
$A_{143 \times 217}^{dustTT}$	20.2	$18.7^{+6.5}_{-6.5}$ (+0.1 σ)	$10^5 D/H$	2.574	$2.580^{+0.052}_{-0.051}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3078	$0.3074^{+0.0051}_{-0.0049}$ (+0.8 σ)
A_{217}^{dustTT}	95.8	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.7834	$13.785^{+0.041}_{-0.042}$ (−1.3 σ)	f_{2000}^{143}	28.1	29^{+5}_{-5} (−0.8 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.075}_{-0.077}$	z_*	1089.771	$1089.80^{+0.44}_{-0.44}$ (−1.2 σ)	$f_{2000}^{143 \times 217}$	31.63	32^{+4}_{-4} (−0.9 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.136^{+0.057}_{-0.060}$	r_*	144.60	$144.64^{+0.58}_{-0.58}$ (+0.8 σ)	f_{2000}^{217}	106.17	$106.9^{+3.6}_{-3.4}$ (−0.7 σ)
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	1.04125	$1.04127^{+0.00075}_{-0.00077}$ (+1.1 σ)	χ_{small}^2	396.37	$397.2 (\nu: 2.1)$ (+0.1 σ)
A_{143}^{dustTE}	0.225	$0.23^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.887	$13.890^{+0.053}_{-0.051}$ (+0.7 σ)	χ_{lowl}^2	23.20	$23.8 (\nu: 1.4)$ (+0.8 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.15}$	z_{drag}	1060.01	$1059.95^{+0.63}_{-0.63}$ (+0.7 σ)	χ_{plik}^2	2345.2	$2360.9 (\nu: 17.8)$ (+271.6 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.53}$	r_{drag}	147.24	$147.29^{+0.62}_{-0.61}$ (+0.7 σ)	χ_{6DF}^2	0.023	$0.056 (\nu: 0.0)$
c_{100}	0.99974	$0.9996^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14075	$0.14068^{+0.00073}_{-0.00074}$ (−0.4 σ)	χ_{MGS}^2	1.28	$1.36 (\nu: 0.1)$
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160724	$0.16077^{+0.00041}_{-0.00040}$ (−0.4 σ)	$\chi_{DR12BAO}^2$	4.25	$4.8 (\nu: 1.3)$
H_0	67.75	$67.8^{+1.0}_{-1.0}$ (+1.2 σ)	z_{eq}	3384	3382^{+53}_{-54} (−1.0 σ)	χ_{prior}^2	1.6	$11.7 (\nu: 9.8)$ (+1.2 σ)
Ω_Λ	0.6901	$0.690^{+0.014}_{-0.014}$ (+1.1 σ)	k_{eq}	0.010328	$0.01032^{+0.00016}_{-0.00016}$ (−1.0 σ)	χ_{BAO}^2	5.55	$6.2 (\nu: 0.8)$
Ω_m	0.3099	$0.310^{+0.014}_{-0.014}$ (−1.1 σ)	$100\theta_{eq}$	0.8169	$0.817^{+0.010}_{-0.0099}$ (+1.0 σ)	χ_{CMB}^2	2764.7	$2781.9 (\nu: 17.5)$ (+275.2 σ)
$\Omega_m h^2$	0.14224	$0.1422^{+0.0022}_{-0.0022}$ (−1.0 σ)	$100\theta_{s,eq}$	0.4512	$0.4514^{+0.0052}_{-0.0051}$ (+1.0 σ)			
$\Omega_m h^3$	0.09637	$0.09631^{+0.00059}_{-0.00059}$ (+0.6 σ)	$H(0.15)$	73.01	$73.02^{+0.86}_{-0.86}$ (+1.2 σ)			

Best-fit $\chi_{eff}^2 = 2771.88$; $\Delta\chi_{eff}^2 = -0.04$; $\bar{\chi}_{eff}^2 = 2799.77$; $\Delta\bar{\chi}_{eff}^2 = 1.87$; $R - 1 = 0.02417$

χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.28 (Δ 0.06) DR12BAO: 4.25 (Δ -0.16) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.37 (Δ 0.17) commander_dx12_v3_2_29: 23.20 (Δ 0.32) plik_rd12_HM_v22b_TTTEEE: 2345.16 (Δ -0.35)

5.11 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022410	$0.02238^{+0.00029}_{-0.00029}$ (+0.8 σ)	$\Omega_m h^3$	0.09641	$0.09633^{+0.00057}_{-0.00058}$ (+0.7 σ)	$100\theta_{s,eq}$	0.4491	$0.4491^{+0.0068}_{-0.0064}$ (+0.6 σ)
$\Omega_c h^2$	0.12008	$0.1201^{+0.0029}_{-0.0030}$ (-0.6 σ)	σ_8	0.8115	$0.811^{+0.011}_{-0.012}$ (-0.1 σ)	$H(0.15)$	72.68	$72.6^{+1.1}_{-1.1}$ (+0.8 σ)
$100\theta_{MC}$	1.04090	$1.04087^{+0.00086}_{-0.00083}$ (+0.7 σ)	S_8	0.8322	$0.833^{+0.029}_{-0.030}$ (-0.5 σ)	$D_M(0.15)$	643.4	644^{+11}_{-11} (-0.8 σ)
τ	0.0543	$0.054^{+0.016}_{-0.014}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4558	$0.456^{+0.016}_{-0.016}$ (-0.5 σ)	$H(0.38)$	82.87	$82.84^{+0.82}_{-0.78}$ (+0.8 σ)
α_{-1}	0.00000	$-0.0001^{+0.0011}_{-0.0011}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6082	$0.608^{+0.013}_{-0.014}$ (-0.4 σ)	$D_M(0.38)$	1533.4	1534^{+22}_{-23} (-0.8 σ)
$\ln(10^{10} A_s)$	3.0446	$3.045^{+0.029}_{-0.027}$ (-0.1 σ)	$\sigma_8/h^{0.5}$	0.9888	$0.989^{+0.019}_{-0.019}$ (-0.4 σ)	$H(0.51)$	89.64	$89.60^{+0.65}_{-0.62}$ (+0.9 σ)
n_s	0.9657	$0.964^{+0.012}_{-0.011}$ (+0.9 σ)	$r_{drag} h$	99.03	$99.0^{+2.4}_{-2.3}$ (+0.7 σ)	$D_M(0.51)$	1985.8	1987^{+26}_{-27} (-0.8 σ)
y_{cal}	1.00022	$1.0006^{+0.0049}_{-0.0048}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4441	$2.447^{+0.047}_{-0.047}$ (-0.5 σ)	$H(0.61)$	95.29	$95.26^{+0.52}_{-0.49}$ (+0.9 σ)
A_{217}^{CIB}	46.1	47^{+10}_{-10} (-0.2 σ)	z_{re}	7.68	$7.7^{+1.5}_{-1.5}$ (+0.0 σ)	$D_M(0.61)$	2310.2	2312^{+28}_{-28} (-0.8 σ)
$\xi^{tSZ \times CIB}$	0.60	—	$10^9 A_s$	2.100	$2.101^{+0.062}_{-0.057}$ (-0.2 σ)	$H(2.33)$	236.65	$236.6^{+1.8}_{-1.8}$ (-0.5 σ)
A_{143}^{tSZ}	7.11	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8840	$1.884^{+0.023}_{-0.024}$ (-0.5 σ)	$D_M(2.33)$	5762.3	5764^{+22}_{-23} (-0.9 σ)
A_{100}^{PS}	248	259^{+60}_{-60} (-0.2 σ)	D_{40}	1228.1	1230^{+29}_{-26} (+0.6 σ)	$f\sigma_8(0.15)$	0.4601	$0.460^{+0.014}_{-0.015}$ (-0.5 σ)
A_{143}^{PS}	49.7	46^{+10}_{-20} (-0.4 σ)	D_{220}	5732	5734^{+73}_{-75} (+0.4 σ)	$\sigma_8(0.15)$	0.7495	$0.749^{+0.010}_{-0.010}$ (-0.0 σ)
$A_{143 \times 217}^{PS}$	51.7	42^{+20}_{-20} (-0.1 σ)	D_{810}	2540.6	2540^{+26}_{-26} (+0.0 σ)	$f\sigma_8(0.38)$	0.4776	$0.478^{+0.011}_{-0.011}$ (-0.5 σ)
A_{217}^{PS}	121.3	115^{+20}_{-20} (+0.0 σ)	D_{1420}	818.2	$817.2^{+9.4}_{-9.5}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6639	$0.6636^{+0.0094}_{-0.0093}$ (+0.1 σ)
A^{kSZ}	0.00	< 7.91 (-0.2 σ)	D_{2000}	231.28	$230.8^{+3.1}_{-3.2}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4757	$0.4757^{+0.0094}_{-0.0099}$ (-0.4 σ)
A_{100}^{dustTT}	8.79	$8.9^{+3.6}_{-3.5}$ (-0.0 σ)	$n_{s,0.002}$	0.9657	$0.964^{+0.012}_{-0.011}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6211	$0.6208^{+0.0090}_{-0.0090}$ (+0.2 σ)
A_{143}^{dustTT}	11.00	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	Y_P	0.245411	$0.24540^{+0.00011}_{-0.00012}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4704	$0.4703^{+0.0085}_{-0.0087}$ (-0.4 σ)
$A_{143 \times 217}^{dustTT}$	20.1	$18.7^{+6.5}_{-6.6}$ (+0.1 σ)	Y_P^{BBN}	0.246738	$0.24672^{+0.00011}_{-0.00012}$ (+0.8 σ)	$\sigma_8(0.61)$	0.5909	$0.5906^{+0.0088}_{-0.0086}$ (+0.3 σ)
A_{217}^{dustTT}	95.5	94^{+10}_{-10} (+0.1 σ)	$10^5 D/H$	2.578	$2.585^{+0.055}_{-0.052}$ (-0.8 σ)	$f\sigma_8(2.33)$	0.29778	$0.2976^{+0.0047}_{-0.0046}$ (+0.4 σ)
A_{100}^{dustTE}	0.114	$0.116^{+0.075}_{-0.076}$	Age/Gyr	13.794	$13.799^{+0.050}_{-0.051}$ (-1.0 σ)	$\sigma_8(2.33)$	0.3068	$0.3066^{+0.0052}_{-0.0052}$ (+0.5 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.136^{+0.060}_{-0.060}$	z_*	1089.88	$1089.92^{+0.52}_{-0.52}$ (-0.9 σ)	f_{2000}^{143}	28.6	30^{+6}_{-5} (-0.6 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	r_*	144.38	$144.40^{+0.71}_{-0.70}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	31.86	32^{+4}_{-4} (-0.7 σ)
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	1.04109	$1.04105^{+0.00086}_{-0.00083}$ (+0.7 σ)	f_{2000}^{217}	106.36	$107.0^{+3.5}_{-3.4}$ (-0.7 σ)
$A_{143 \times 217}^{dustTE}$	0.667	$0.67^{+0.16}_{-0.15}$	$D_M(z_*)/\text{Gpc}$	13.868	$13.870^{+0.063}_{-0.062}$ (+0.3 σ)	$\chi^2_{lensing}$	8.84	9.35 (ν : 0.3)
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.54}$	z_{drag}	1060.05	$1059.96^{+0.62}_{-0.64}$ (+0.7 σ)	χ^2_{small}	396.04	397.0 (ν : 1.6) (-0.0 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.03	$147.06^{+0.73}_{-0.71}$ (+0.2 σ)	χ^2_{lowl}	23.15	23.4 (ν : 1.4) (+0.6 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	k_D	0.14097	$0.14091^{+0.00080}_{-0.00083}$ (-0.0 σ)	χ^2_{plik}	2345.1	2361.2 (ν : 18.1) (+271.7 σ)
H_0	67.35	$67.3^{+1.3}_{-1.3}$ (+0.8 σ)	$100\theta_D$	0.160699	$0.16074^{+0.00041}_{-0.00040}$ (-0.5 σ)	χ^2_{prior}	1.6	11.6 (ν : 10.0) (+1.2 σ)
Ω_Λ	0.6845	$0.684^{+0.018}_{-0.018}$ (+0.7 σ)	z_{eq}	3405	3405^{+67}_{-69} (-0.5 σ)	χ^2_{CMB}	2773.1	2791.0 (ν : 18.5) (+276.8 σ)
Ω_m	0.3155	$0.316^{+0.018}_{-0.018}$ (-0.7 σ)	k_{eq}	0.010393	$0.01039^{+0.00020}_{-0.00021}$ (-0.5 σ)			
$\Omega_m h^2$	0.14314	$0.1431^{+0.0028}_{-0.0029}$ (-0.5 σ)	$100\theta_{eq}$	0.8129	$0.813^{+0.013}_{-0.012}$ (+0.6 σ)			

Best-fit $\chi^2_{eff} = 2774.65$; $\Delta\chi^2_{eff} = 0.02$; $\bar{\chi}^2_{eff} = 2802.58$; $\Delta\bar{\chi}^2_{eff} = 1.89$; $R - 1 = 0.01462$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.84 (Δ -0.03) small_100x143_offlike5_EE_Aplanck_B: 396.04 (Δ -0.01) commander_dx12_v3_2_29: 23.15 (Δ -0.10) plik_rd12_HM_v22b_TTTEEE: 2345.06 (Δ 0.13)

5.12 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022420	$0.02241^{+0.00028}_{-0.00028}$ (+0.9 σ)	σ_8	0.8109	$0.810^{+0.011}_{-0.011}$ (−0.2 σ)	$D_M(0.15)$	640.5	$640.2^{+7.8}_{-8.0}$ (−1.2 σ)
$\Omega_c h^2$	0.11927	$0.1192^{+0.0020}_{-0.0021}$ (−1.0 σ)	S_8	0.8252	$0.824^{+0.022}_{-0.022}$ (−0.9 σ)	$H(0.38)$	83.07	$83.09^{+0.59}_{-0.56}$ (+1.3 σ)
$100\theta_{MC}$	1.04102	$1.04107^{+0.00074}_{-0.00075}$ (+1.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4520	$0.451^{+0.012}_{-0.012}$ (−0.9 σ)	$D_M(0.38)$	1527.9	1527^{+16}_{-16} (−1.2 σ)
τ	0.0560	$0.056^{+0.015}_{-0.014}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6054	$0.605^{+0.011}_{-0.012}$ (−0.7 σ)	$H(0.51)$	89.781	$89.80^{+0.48}_{-0.45}$ (+1.3 σ)
α_{-1}	0.00001	$0.00013^{+0.0011}_{-0.00095}$ (+0.9 σ)	$\sigma_8/h^{0.5}$	0.9857	$0.985^{+0.016}_{-0.017}$ (−0.7 σ)	$D_M(0.51)$	1979.3	1979^{+18}_{-19} (−1.2 σ)
$\ln(10^{10} A_s)$	3.0467	$3.046^{+0.030}_{-0.027}$ (−0.1 σ)	$r_{drag} h$	99.66	$99.7^{+1.7}_{-1.6}$ (+1.1 σ)	$H(0.61)$	95.397	$95.41^{+0.40}_{-0.37}$ (+1.3 σ)
n_s	0.9684	$0.9678^{+0.0093}_{-0.0098}$ (+1.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4355	$2.436^{+0.041}_{-0.041}$ (−0.7 σ)	$D_M(0.61)$	2303.3	2303^{+20}_{-20} (−1.2 σ)
y_{cal}	1.00086	$1.0008^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.83	$7.8^{+1.4}_{-1.4}$ (+0.2 σ)	$H(2.33)$	236.14	$236.1^{+1.3}_{-1.3}$ (−0.9 σ)
A_{217}^{CIB}	46.4	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.104	$2.104^{+0.063}_{-0.056}$ (−0.1 σ)	$D_M(2.33)$	5758.5	5758^{+17}_{-18} (−1.3 σ)
$\xi^{tSZ \times CIB}$	0.54	—	$10^9 A_s e^{-2\tau}$	1.8815	$1.880^{+0.022}_{-0.022}$ (−0.8 σ)	$f\sigma_8(0.15)$	0.4567	$0.456^{+0.011}_{-0.011}$ (−0.9 σ)
A_{143}^{tSZ}	7.12	$5.5^{+3.9}_{-3.9}$ (+0.3 σ)	D_{40}	1228.3	1231^{+29}_{-28} (+0.6 σ)	$\sigma_8(0.15)$	0.7494	$0.749^{+0.010}_{-0.010}$ (−0.0 σ)
A_{100}^{PS}	249	258^{+50}_{-60} (−0.2 σ)	D_{220}	5736	5737^{+73}_{-74} (+0.4 σ)	$f\sigma_8(0.38)$	0.4752	$0.4747^{+0.0092}_{-0.0095}$ (−0.8 σ)
A_{143}^{PS}	48.6	45^{+10}_{-20} (−0.5 σ)	D_{810}	2542.0	2539^{+26}_{-26} (+0.0 σ)	$\sigma_8(0.38)$	0.6644	$0.6641^{+0.0093}_{-0.0092}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	49.9	42^{+20}_{-20} (−0.1 σ)	D_{1420}	819.4	$818.1^{+9.0}_{-9.0}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4739	$0.4734^{+0.0082}_{-0.0085}$ (−0.7 σ)
A_{217}^{PS}	120.7	115^{+20}_{-20} (+0.0 σ)	D_{2000}	231.68	$231.2^{+2.9}_{-3.0}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6218	$0.6216^{+0.0087}_{-0.0087}$ (+0.4 σ)
A^{kSZ}	0.00	< 7.81 (−0.3 σ)	$n_{s,0.002}$	0.9684	$0.9678^{+0.0093}_{-0.0098}$ (+1.4 σ)	$f\sigma_8(0.61)$	0.4690	$0.4686^{+0.0076}_{-0.0078}$ (−0.6 σ)
A_{100}^{dustTT}	8.92	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.245415	$0.24541^{+0.00010}_{-0.00011}$ (+0.9 σ)	$\sigma_8(0.61)$	0.5917	$0.5915^{+0.0084}_{-0.0083}$ (+0.4 σ)
A_{143}^{dustTT}	11.07	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.246742	$0.24673^{+0.00010}_{-0.00011}$ (+0.9 σ)	$f\sigma_8(2.33)$	0.29837	$0.2983^{+0.0044}_{-0.0043}$ (+0.7 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.7^{+6.5}_{-6.5}$ (+0.1 σ)	$10^5 D/H$	2.576	$2.579^{+0.053}_{-0.050}$ (−0.9 σ)	$\sigma_8(2.33)$	0.30764	$0.3076^{+0.0048}_{-0.0046}$ (+0.9 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.7862	$13.786^{+0.040}_{-0.041}$ (−1.3 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (−0.8 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.075}_{-0.077}$	z_*	1089.792	$1089.80^{+0.43}_{-0.43}$ (−1.2 σ)	$f_{2000}^{143 \times 217}$	31.78	32^{+4}_{-4} (−0.9 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.136^{+0.057}_{-0.060}$	r_*	144.58	$144.62^{+0.54}_{-0.52}$ (+0.8 σ)	f_{2000}^{217}	106.43	$106.9^{+3.6}_{-3.4}$ (−0.7 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04120	$1.04125^{+0.00074}_{-0.00076}$ (+1.0 σ)	$\chi^2_{lensing}$	8.74	9.14 (ν : 0.2)
A_{143}^{dustTE}	0.225	$0.23^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8861	$13.889^{+0.049}_{-0.047}$ (+0.7 σ)	χ^2_{small}	396.38	397.3 (ν : 2.0) (+0.1 σ)
$A_{143 \times 217}^{dustTE}$	0.667	$0.67^{+0.16}_{-0.15}$	z_{drag}	1060.01	$1059.96^{+0.62}_{-0.64}$ (+0.7 σ)	χ^2_{lowl}	23.24	23.8 (ν : 1.5) (+0.8 σ)
A_{217}^{dustTE}	2.09	$2.08^{+0.54}_{-0.54}$	r_{drag}	147.23	$147.27^{+0.58}_{-0.56}$ (+0.6 σ)	χ^2_{plik}	2344.9	2360.6 (ν : 17.6) (+271.6 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14076	$0.14071^{+0.00069}_{-0.00069}$ (−0.3 σ)	χ^2_{6DF}	0.029	0.053 (ν : 0.0)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160729	$0.16076^{+0.00041}_{-0.00041}$ (−0.5 σ)	χ^2_{MGS}	1.22	1.33 (ν : 0.1)
H_0	67.69	$67.73^{+0.95}_{-0.91}$ (+1.2 σ)	z_{eq}	3385.9	3383^{+47}_{-49} (−0.9 σ)	$\chi^2_{DR12BAO}$	4.41	4.7 (ν : 1.1)
Ω_Λ	0.6893	$0.690^{+0.013}_{-0.013}$ (+1.1 σ)	k_{eq}	0.010334	$0.01033^{+0.00014}_{-0.00015}$ (−0.9 σ)	χ^2_{prior}	1.7	11.6 (ν : 9.7) (+1.2 σ)
Ω_m	0.3107	$0.310^{+0.013}_{-0.013}$ (−1.1 σ)	$100\theta_{eq}$	0.8164	$0.8169^{+0.0093}_{-0.0088}$ (+1.0 σ)	χ^2_{CMB}	2773.3	2790.9 (ν : 17.9) (+276.8 σ)
$\Omega_m h^2$	0.14233	$0.1422^{+0.0020}_{-0.0021}$ (−0.9 σ)	$100\theta_{s,eq}$	0.45099	$0.4513^{+0.0048}_{-0.0046}$ (+1.0 σ)	χ^2_{BAO}	5.66	6.1 (ν : 0.7)
$\Omega_m h^3$	0.09634	$0.09632^{+0.00058}_{-0.00058}$ (+0.6 σ)	$H(0.15)$	72.96	$73.00^{+0.81}_{-0.78}$ (+1.2 σ)			

Best-fit $\chi^2_{eff} = 2780.63$; $\Delta\chi^2_{eff} = -0.07$; $\bar{\chi}^2_{eff} = 2808.59$; $\Delta\bar{\chi}^2_{eff} = 1.75$; $R - 1 = 0.02748$

χ^2_{eff} : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.41 (Δ -0.01) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.74 (Δ 0.01) small_100x143_offlike5_EE_Aplanck: 396.38 (Δ -0.14) commander_dx12_v3.2_29: 23.24 (Δ 0.34) plik_rd12_HM_v22b_TTTEEE: 2344.91 (Δ -0.41)

5.13 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022493	$0.02247^{+0.00027}_{-0.00029}$ (+1.2 σ)	$\Omega_m h^3$	0.09640	$0.09633^{+0.00057}_{-0.00058}$ (+0.7 σ)	$100\theta_{s,eq}$	0.4533	$0.4543^{+0.0066}_{-0.0073}$ (+1.6 σ)
$\Omega_c h^2$	0.11824	$0.1178^{+0.0032}_{-0.0029}$ (-1.6 σ)	σ_8	0.8078	$0.807^{+0.016}_{-0.015}$ (-0.6 σ)	$H(0.15)$	73.39	$73.5^{+1.1}_{-1.2}$ (+1.9 σ)
$100\theta_{MC}$	1.04124	$1.04134^{+0.00076}_{-0.00089}$ (+1.6 σ)	S_8	0.8133	$0.809^{+0.036}_{-0.033}$ (-1.5 σ)	$D_M(0.15)$	636.4	635^{+12}_{-11} (-1.8 σ)
τ	0.0564	$0.057^{+0.017}_{-0.016}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4455	$0.443^{+0.020}_{-0.018}$ (-1.5 σ)	$H(0.38)$	83.38	$83.48^{+0.81}_{-0.87}$ (+1.9 σ)
α_{-1}	0.00006	$0.0004^{+0.0015}_{-0.0010}$ (+1.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5999	$0.598^{+0.019}_{-0.017}$ (-1.3 σ)	$D_M(0.38)$	1519.5	1517^{+24}_{-21} (-1.8 σ)
$\ln(10^{10} A_s)$	3.0446	$3.043^{+0.034}_{-0.032}$ (-0.2 σ)	$\sigma_8/h^{0.5}$	0.9783	$0.976^{+0.026}_{-0.024}$ (-1.2 σ)	$H(0.51)$	90.02	$90.10^{+0.64}_{-0.68}$ (+2.0 σ)
n_s	0.9714	$0.972^{+0.011}_{-0.013}$ (+2.0 σ)	$r_{drag} h$	100.51	$100.9^{+2.3}_{-2.6}$ (+1.8 σ)	$D_M(0.51)$	1969.5	1966^{+28}_{-25} (-1.8 σ)
y_{cal}	1.00075	$1.0007^{+0.0049}_{-0.0046}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.418	$2.414^{+0.062}_{-0.060}$ (-1.3 σ)	$H(0.61)$	95.59	$95.64^{+0.51}_{-0.53}$ (+2.0 σ)
A_{217}^{CIB}	46.3	47^{+10}_{-10} (-0.2 σ)	z_{re}	7.83	$7.9^{+1.6}_{-1.5}$ (+0.2 σ)	$D_M(0.61)$	2292.7	2289^{+30}_{-27} (-1.9 σ)
$\xi^{tSZ \times CIB}$	0.59	—	$10^9 A_s$	2.100	$2.098^{+0.072}_{-0.067}$ (-0.2 σ)	$H(2.33)$	235.56	$235.3^{+2.0}_{-1.8}$ (-1.5 σ)
A_{143}^{tSZ}	7.14	$5.7^{+4.0}_{-3.8}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8763	$1.872^{+0.026}_{-0.025}$ (-1.3 σ)	$D_M(2.33)$	5750.1	5748^{+23}_{-23} (-1.9 σ)
A_{100}^{PS}	248	255^{+60}_{-50} (-0.3 σ)	D_{40}	1225.4	1229^{+28}_{-26} (+0.5 σ)	$f\sigma_8(0.15)$	0.4506	$0.449^{+0.018}_{-0.017}$ (-1.5 σ)
A_{143}^{PS}	48.5	44^{+20}_{-20} (-0.7 σ)	D_{220}	5740	5738^{+76}_{-74} (+0.5 σ)	$\sigma_8(0.15)$	0.7472	$0.746^{+0.013}_{-0.015}$ (-0.4 σ)
$A_{143 \times 217}^{PS}$	50.7	41^{+20}_{-20} (-0.2 σ)	D_{810}	2540.8	2537^{+26}_{-26} (-0.1 σ)	$f\sigma_8(0.38)$	0.4706	$0.469^{+0.015}_{-0.014}$ (-1.3 σ)
A_{217}^{PS}	120.6	115^{+20}_{-20} (+0.0 σ)	D_{1420}	820.0	$818.9^{+9.3}_{-9.0}$ (+0.9 σ)	$\sigma_8(0.38)$	0.6631	$0.663^{+0.011}_{-0.012}$ (+0.0 σ)
A^{kSZ}	0.00	< 7.71 (-0.3 σ)	D_{2000}	232.00	$231.6^{+3.1}_{-3.0}$ (+1.2 σ)	$f\sigma_8(0.51)$	0.4700	$0.469^{+0.013}_{-0.012}$ (-1.2 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (-0.0 σ)	$n_{s,0.002}$	0.9714	$0.972^{+0.011}_{-0.013}$ (+2.0 σ)	$\sigma_8(0.51)$	0.6209	$0.621^{+0.010}_{-0.010}$ (+0.2 σ)
A_{143}^{dustTT}	11.05	$11.1^{+3.6}_{-3.6}$ (+0.2 σ)	Y_P	0.245442	$0.245433^{+0.000099}_{-0.00011}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4657	$0.465^{+0.012}_{-0.011}$ (-1.1 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.8^{+6.6}_{-7.0}$ (+0.1 σ)	Y_P^{BBN}	0.246769	$0.246760^{+0.000099}_{-0.00011}$ (+1.2 σ)	$\sigma_8(0.61)$	0.5910	$0.5909^{+0.0097}_{-0.0097}$ (+0.3 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.1 σ)	$10^5 D/H$	2.563	$2.567^{+0.053}_{-0.048}$ (-1.2 σ)	$f\sigma_8(2.33)$	0.29829	$0.2983^{+0.0050}_{-0.0048}$ (+0.7 σ)
A_{100}^{dustTE}	0.113	$0.115^{+0.072}_{-0.071}$	Age/Gyr	13.7682	$13.765^{+0.051}_{-0.048}$ (-1.9 σ)	$\sigma_8(2.33)$	0.3078	$0.3080^{+0.0056}_{-0.0051}$ (+1.0 σ)
$A_{100 \times 143}^{dustTE}$	0.133	$0.134^{+0.056}_{-0.062}$	z_*	1089.61	$1089.60^{+0.51}_{-0.49}$ (-1.7 σ)	f_{2000}^{143}	28.1	29^{+5}_{-6} (-0.9 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.16}_{-0.17}$	r_*	144.79	$144.92^{+0.73}_{-0.76}$ (+1.3 σ)	$f_{2000}^{143 \times 217}$	31.51	32^{+4}_{-4} (-1.0 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04141	$1.04151^{+0.00080}_{-0.00087}$ (+1.5 σ)	f_{2000}^{217}	106.13	$106.6^{+3.6}_{-3.3}$ (-0.9 σ)
$A_{143 \times 217}^{dustTE}$	0.663	$0.67^{+0.16}_{-0.14}$	$D_M(z_*)/\text{Gpc}$	13.903	$13.914^{+0.062}_{-0.069}$ (+1.2 σ)	χ_{small}^2	396.35	$397.5 (\nu: 3.0)$ (+0.3 σ)
A_{217}^{dustTE}	2.07	$2.08^{+0.51}_{-0.51}$	z_{drag}	1060.09	$1060.02^{+0.60}_{-0.62}$ (+0.8 σ)	χ_{lowl}^2	23.14	$23.9 (\nu: 1.2)$ (+0.8 σ)
c_{100}	0.99972	$0.9996^{+0.0012}_{-0.0011}$ (+0.0 σ)	r_{drag}	147.42	$147.55^{+0.71}_{-0.80}$ (+1.2 σ)	χ_{plik}^2	2346.3	$2362.6 (\nu: 19.9)$ (+271.9 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (-0.2 σ)	k_D	0.14061	$0.14046^{+0.00085}_{-0.00080}$ (-0.7 σ)	$\chi_{H073p45}^2$	10.1	$9.6 (\nu: 3.5)$
H_0	68.18	$68.4^{+1.3}_{-1.4}$ (+1.8 σ)	$100\theta_D$	0.160695	$0.16075^{+0.00038}_{-0.00037}$ (-0.5 σ)	χ_{prior}^2	1.7	$11.7 (\nu: 9.6)$ (+1.2 σ)
Ω_Λ	0.6959	$0.698^{+0.018}_{-0.019}$ (+1.7 σ)	z_{eq}	3363	3353^{+75}_{-68} (-1.5 σ)	χ_{CMB}^2	2765.8	$2784.0 (\nu: 21.2)$ (+275.6 σ)
Ω_m	0.3041	$0.302^{+0.019}_{-0.018}$ (-1.7 σ)	k_{eq}	0.010265	$0.01023^{+0.00023}_{-0.00021}$ (-1.5 σ)			
$\Omega_m h^2$	0.14138	$0.1409^{+0.0031}_{-0.0028}$ (-1.5 σ)	$100\theta_{eq}$	0.8209	$0.823^{+0.013}_{-0.014}$ (+1.6 σ)			

Best-fit $\chi_{eff}^2 = 2777.60$; $\Delta\chi_{eff}^2 = -0.34$; $\bar{\chi}_{eff}^2 = 2805.32$; $\Delta\bar{\chi}_{eff}^2 = 1.15$; $R - 1 = 0.05553$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.36 (Δ -0.12) commander_dx12_v3.2.29: 23.14 (Δ 0.59) plik_rd12_HM_v22b_TTTEEE: 2346.34 (Δ -0.42) Hubble
- H073p45: 10.07 (Δ -0.51)

5.14 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02236^{+0.00029}_{-0.00030} \quad (+0.7\sigma)$	$\Omega_{\text{m}}h^2$	$0.1435^{+0.0034}_{-0.0035} \quad (-0.4\sigma)$	k_{eq}	$0.01042^{+0.00025}_{-0.00025} \quad (-0.4\sigma)$
$\Omega_{\text{c}}h^2$	$0.1205^{+0.0035}_{-0.0036} \quad (-0.4\sigma)$	$\Omega_{\text{m}}h^3$	$0.09634^{+0.00057}_{-0.00059} \quad (+0.7\sigma)$	$100\theta_{\text{eq}}$	$0.811^{+0.016}_{-0.015} \quad (+0.4\sigma)$
$100\theta_{\text{MC}}$	$1.04082^{+0.00092}_{-0.00086} \quad (+0.6\sigma)$	σ_8	$0.813^{+0.015}_{-0.014} \quad (+0.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.4484^{+0.0082}_{-0.0077} \quad (+0.4\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.2\sigma)$	S_8	$0.838^{+0.040}_{-0.039} \quad (-0.4\sigma)$	$H(0.15)$	$72.5^{+1.4}_{-1.3} \quad (+0.6\sigma)$
α_{-1}	$-0.0001^{+0.0012}_{-0.0012} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.459^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$D_{\text{M}}(0.15)$	$645^{+13}_{-13} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.048^{+0.030}_{-0.027} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.611^{+0.019}_{-0.019} \quad (-0.2\sigma)$	$H(0.38)$	$82.75^{+0.96}_{-0.92} \quad (+0.7\sigma)$
n_{s}	$0.964^{+0.013}_{-0.013} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.026}_{-0.025} \quad (-0.2\sigma)$	$D_{\text{M}}(0.38)$	$1537^{+26}_{-27} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0047} \quad (+0.0\sigma)$	$r_{\text{drag}}h$	$98.7^{+2.9}_{-2.7} \quad (+0.5\sigma)$	$H(0.51)$	$89.54^{+0.75}_{-0.71} \quad (+0.7\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.066}_{-0.063} \quad (-0.3\sigma)$	$D_{\text{M}}(0.51)$	$1990^{+31}_{-31} \quad (-0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 9.00 \quad (+0.2\sigma)$	$H(0.61)$	$95.22^{+0.59}_{-0.55} \quad (+0.8\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.9} \quad (+0.2\sigma)$	$10^9 A_{\text{s}}$	$2.108^{+0.063}_{-0.057} \quad (+0.0\sigma)$	$D_{\text{M}}(0.61)$	$2315^{+33}_{-34} \quad (-0.6\sigma)$
A_{100}^{PS}	$259^{+60}_{-50} \quad (-0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.886^{+0.027}_{-0.027} \quad (-0.4\sigma)$	$H(2.33)$	$236.8^{+2.2}_{-2.2} \quad (-0.3\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (-0.4\sigma)$	D_{40}	$1231^{+29}_{-27} \quad (+0.6\sigma)$	$D_{\text{M}}(2.33)$	$5766^{+24}_{-26} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5733^{+74}_{-74} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.020}_{-0.020} \quad (-0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2540^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.013}_{-0.011} \quad (+0.2\sigma)$
A^{kSZ}	$< 7.94 \quad (-0.2\sigma)$	D_{1420}	$817.1^{+9.4}_{-9.4} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.015}_{-0.015} \quad (-0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$230.8^{+3.1}_{-3.2} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.010}_{-0.0096} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.964^{+0.013}_{-0.013} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.24539^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6219^{+0.0092}_{-0.0087} \quad (+0.4\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24672^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.012}_{-0.012} \quad (-0.1\sigma)$
A_{100}^{dustTE}	$0.115^{+0.075}_{-0.076}$	$10^5 \text{D}/\text{H}$	$2.587^{+0.056}_{-0.053} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.5916^{+0.0087}_{-0.0082} \quad (+0.5\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.059}$	Age/Gyr	$13.803^{+0.054}_{-0.056} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0044}_{-0.0042} \quad (+0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.97^{+0.59}_{-0.57} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0048}_{-0.0046} \quad (+0.7\sigma)$
A_{143}^{dustTE}	$0.23^{+0.10}_{-0.11}$	r_*	$144.32^{+0.87}_{-0.82} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.15}_{-0.15}$	$100\theta_*$	$1.04101^{+0.00092}_{-0.00086} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
A_{217}^{dustTE}	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.864^{+0.076}_{-0.072} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.0^{+3.5}_{-3.5} \quad (-0.7\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.95^{+0.63}_{-0.63} \quad (+0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$146.98^{+0.88}_{-0.82} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 1.3) \quad (+0.6\sigma)$
H_0	$67.2^{+1.6}_{-1.5} \quad (+0.6\sigma)$	k_{D}	$0.14098^{+0.00089}_{-0.00094} \quad (+0.1\sigma)$	χ_{plik}^2	$2361.4 \quad (\nu: 18.5) \quad (+271.7\sigma)$
Ω_{Λ}	$0.682^{+0.022}_{-0.023} \quad (+0.5\sigma)$	$100\theta_{\text{D}}$	$0.16074^{+0.00040}_{-0.00039} \quad (-0.5\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
Ω_{m}	$0.318^{+0.023}_{-0.022} \quad (-0.5\sigma)$	z_{eq}	$3413^{+81}_{-83} \quad (-0.4\sigma)$	χ_{CMB}^2	$2781.9 \quad (\nu: 17.9) \quad (+275.2\sigma)$

$\bar{\chi}_{\text{eff}}^2 = 2793.42$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.88$; $R - 1 = 0.01296$

5.15 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00028}_{-0.00028} \quad (+0.9\sigma)$	σ_8	$0.810^{+0.013}_{-0.012} \quad (-0.2\sigma)$	$D_M(0.15)$	$640.0^{+8.6}_{-8.5} \quad (-1.2\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0023}_{-0.0023} \quad (-1.0\sigma)$	S_8	$0.823^{+0.027}_{-0.026} \quad (-0.9\sigma)$	$H(0.38)$	$83.11^{+0.64}_{-0.61} \quad (+1.3\sigma)$
$100\theta_{MC}$	$1.04109^{+0.00074}_{-0.00076} \quad (+1.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.015}_{-0.014} \quad (-0.9\sigma)$	$D_M(0.38)$	$1527^{+17}_{-17} \quad (-1.2\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$H(0.51)$	$89.81^{+0.50}_{-0.48} \quad (+1.3\sigma)$
α_{-1}	$0.00015^{+0.0011}_{-0.00095} \quad (+0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$D_M(0.51)$	$1978^{+20}_{-20} \quad (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.030}_{-0.027} \quad (-0.1\sigma)$	$r_{drag} h$	$99.8^{+1.8}_{-1.8} \quad (+1.1\sigma)$	$H(0.61)$	$95.42^{+0.41}_{-0.39} \quad (+1.3\sigma)$
n_s	$0.9682^{+0.0099}_{-0.010} \quad (+1.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.051}_{-0.047} \quad (-0.8\sigma)$	$D_M(0.61)$	$2302^{+21}_{-21} \quad (-1.2\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 9.09 \quad (+0.2\sigma)$	$H(2.33)$	$236.0^{+1.4}_{-1.5} \quad (-0.9\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.103^{+0.063}_{-0.057} \quad (-0.1\sigma)$	$D_M(2.33)$	$5758^{+18}_{-19} \quad (-1.3\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.879^{+0.024}_{-0.023} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.014}_{-0.013} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1230^{+29}_{-28} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.012}_{-0.011} \quad (-0.1\sigma)$
A_{100}^{PS}	$258^{+50}_{-60} \quad (-0.2\sigma)$	D_{220}	$5734^{+73}_{-75} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.8\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.010}_{-0.0096} \quad (+0.2\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$818.0^{+9.1}_{-9.0} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.010}_{-0.0098} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.2^{+3.0}_{-3.0} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0093}_{-0.0089} \quad (+0.4\sigma)$
A^{kSZ}	$< 7.88 \quad (-0.3\sigma)$	$n_{s,0.002}$	$0.9682^{+0.0099}_{-0.010} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.4684^{+0.0095}_{-0.0089} \quad (-0.6\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	Y_P	$0.24541^{+0.00010}_{-0.00011} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.5914^{+0.0088}_{-0.0085} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.24673^{+0.00010}_{-0.00011} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0045}_{-0.0043} \quad (+0.7\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$10^5 D/H$	$2.580^{+0.053}_{-0.050} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3076^{+0.0047}_{-0.0045} \quad (+0.9\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.785^{+0.041}_{-0.042} \quad (-1.3\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
A_{100}^{dustTE}	$0.115^{+0.074}_{-0.076}$	z_*	$1089.80^{+0.44}_{-0.44} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.136^{+0.057}_{-0.059}$	r_*	$144.64^{+0.58}_{-0.57} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.8^{+3.6}_{-3.4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04127^{+0.00075}_{-0.00077} \quad (+1.1\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.2) \quad (+0.1\sigma)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.890^{+0.053}_{-0.051} \quad (+0.7\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 1.4) \quad (+0.8\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.15}$	z_{drag}	$1059.95^{+0.63}_{-0.63} \quad (+0.7\sigma)$	χ_{plik}^2	$2360.8 \quad (\nu: 17.7) \quad (+271.6\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.53}$	r_{drag}	$147.29^{+0.61}_{-0.61} \quad (+0.7\sigma)$	χ_{6DF}^2	$0.056 \quad (\nu: 0.0)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14068^{+0.00072}_{-0.00074} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.36 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16077^{+0.00041}_{-0.00040} \quad (-0.4\sigma)$	$\chi_{DR12BAO}^2$	$4.8 \quad (\nu: 1.2)$
H_0	$67.8^{+1.0}_{-1.0} \quad (+1.2\sigma)$	z_{eq}	$3382^{+53}_{-53} \quad (-1.0\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 9.7) \quad (+1.2\sigma)$
Ω_Λ	$0.690^{+0.013}_{-0.014} \quad (+1.1\sigma)$	k_{eq}	$0.01032^{+0.00016}_{-0.00016} \quad (-1.0\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
Ω_m	$0.310^{+0.014}_{-0.013} \quad (-1.1\sigma)$	$100\theta_{eq}$	$0.817^{+0.010}_{-0.0099} \quad (+1.0\sigma)$	χ_{CMB}^2	$2781.8 \quad (\nu: 17.3) \quad (+275.2\sigma)$
$\Omega_m h^2$	$0.1422^{+0.0022}_{-0.0022} \quad (-1.0\sigma)$	$100\theta_{s,eq}$	$0.4514^{+0.0052}_{-0.0051} \quad (+1.0\sigma)$		
$\Omega_m h^3$	$0.09631^{+0.00058}_{-0.00059} \quad (+0.6\sigma)$	$H(0.15)$	$73.02^{+0.87}_{-0.86} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2799.63; \Delta\bar{\chi}_{\text{eff}}^2 = 1.91; R - 1 = 0.02644$$

5.16 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02238^{+0.00029}_{-0.00029} \quad (+0.8\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09633^{+0.00057}_{-0.00058} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4493^{+0.0067}_{-0.0062} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0028}_{-0.0029} \quad (-0.6\sigma)$	σ_8	$0.812^{+0.011}_{-0.011} \quad (-0.1\sigma)$	$H(0.15)$	$72.7^{+1.1}_{-1.1} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00086}_{-0.00084} \quad (+0.7\sigma)$	S_8	$0.833^{+0.028}_{-0.030} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+11}_{-11} \quad (-0.8\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.38)$	$82.86^{+0.82}_{-0.77} \quad (+0.9\sigma)$
α_{-1}	$-0.0001^{+0.0011}_{-0.0011} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.013}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+22}_{-22} \quad (-0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.026}_{-0.024} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.018}_{-0.019} \quad (-0.4\sigma)$	$H(0.51)$	$89.62^{+0.64}_{-0.60} \quad (+0.9\sigma)$
n_{s}	$0.965^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$r_{\mathrm{drag}}h$	$99.0^{+2.4}_{-2.2} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+25}_{-26} \quad (-0.8\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0047} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.046}_{-0.047} \quad (-0.4\sigma)$	$H(0.61)$	$95.27^{+0.52}_{-0.48} \quad (+0.9\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 8.91 \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+27}_{-28} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.104^{+0.055}_{-0.051} \quad (-0.1\sigma)$	$H(2.33)$	$236.6^{+1.7}_{-1.8} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.884^{+0.023}_{-0.024} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+22}_{-23} \quad (-1.0\sigma)$
A_{100}^{PS}	$259^{+50}_{-60} \quad (-0.2\sigma)$	D_{40}	$1230^{+29}_{-27} \quad (+0.6\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.014}_{-0.015} \quad (-0.5\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (-0.4\sigma)$	D_{220}	$5734^{+73}_{-74} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.7497^{+0.0099}_{-0.0093} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$817.2^{+9.3}_{-9.4} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6641^{+0.0087}_{-0.0083} \quad (+0.2\sigma)$
A^{kSZ}	$< 7.91 \quad (-0.2\sigma)$	D_{2000}	$230.9^{+3.1}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4758^{+0.0094}_{-0.0098} \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.6213^{+0.0082}_{-0.0078} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4705^{+0.0084}_{-0.0086} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.7^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0079}_{-0.0075} \quad (+0.4\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.584^{+0.055}_{-0.052} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0042}_{-0.0040} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.073}_{-0.076}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.798^{+0.049}_{-0.051} \quad (-1.0\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0047}_{-0.0045} \quad (+0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.059}_{-0.060}$	z_*	$1089.91^{+0.51}_{-0.51} \quad (-0.9\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-0.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.41^{+0.71}_{-0.68} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	$1.04106^{+0.00085}_{-0.00084} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.0^{+3.5}_{-3.4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.15}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.872^{+0.063}_{-0.060} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.34 \quad (\nu: 0.3)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.54}$	z_{drag}	$1059.96^{+0.62}_{-0.64} \quad (+0.7\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (-0.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.07^{+0.73}_{-0.70} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 1.4) \quad (+0.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14090^{+0.00078}_{-0.00082} \quad (-0.0\sigma)$	χ_{plik}^2	$2361.0 \quad (\nu: 17.7) \quad (+271.6\sigma)$
H_0	$67.3^{+1.3}_{-1.3} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00041}_{-0.00040} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 9.9) \quad (+1.2\sigma)$
Ω_{Λ}	$0.684^{+0.018}_{-0.018} \quad (+0.7\sigma)$	z_{eq}	$3403^{+65}_{-68} \quad (-0.6\sigma)$	χ_{CMB}^2	$2790.8 \quad (\nu: 18.0) \quad (+276.7\sigma)$
Ω_{m}	$0.316^{+0.018}_{-0.018} \quad (-0.7\sigma)$	k_{eq}	$0.01039^{+0.00020}_{-0.00021} \quad (-0.6\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1431^{+0.0027}_{-0.0028} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.013}_{-0.012} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2802.36$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.86$; $R - 1 = 0.01801$

5.17 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02241^{+0.00028}_{-0.00028} \quad (+0.9\sigma)$	σ_8	$0.811^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.2^{+7.7}_{-8.0} \quad (-1.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0020}_{-0.0021} \quad (-1.0\sigma)$	S_8	$0.824^{+0.022}_{-0.022} \quad (-0.9\sigma)$	$H(0.38)$	$83.10^{+0.59}_{-0.56} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00075}_{-0.00075} \quad (+1.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+15}_{-16} \quad (-1.2\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.51)$	$89.80^{+0.48}_{-0.45} \quad (+1.3\sigma)$
α_{-1}	$0.00013^{+0.0011}_{-0.00095} \quad (+0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+18}_{-19} \quad (-1.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.027}_{-0.025} \quad (-0.0\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.7}_{-1.6} \quad (+1.1\sigma)$	$H(0.61)$	$95.41^{+0.40}_{-0.37} \quad (+1.3\sigma)$
n_{s}	$0.9679^{+0.0093}_{-0.0099} \quad (+1.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.040}_{-0.039} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+19}_{-20} \quad (-1.2\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.3\sigma)$	$H(2.33)$	$236.1^{+1.3}_{-1.3} \quad (-0.9\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.057}_{-0.053} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+17}_{-18} \quad (-1.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.022}_{-0.022} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} \quad (+0.3\sigma)$	D_{40}	$1231^{+28}_{-27} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0095} \quad (+0.0\sigma)$
A_{100}^{PS}	$258^{+50}_{-60} \quad (-0.2\sigma)$	D_{220}	$5737^{+72}_{-74} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.4748^{+0.0091}_{-0.0092} \quad (-0.7\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.6644^{+0.0091}_{-0.0083} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$818.0^{+9.0}_{-9.0} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4736^{+0.0081}_{-0.0082} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.2^{+2.9}_{-3.0} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.6219^{+0.0086}_{-0.0078} \quad (+0.4\sigma)$
A^{kSZ}	$< 7.81 \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9679^{+0.0093}_{-0.0099} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.4687^{+0.0075}_{-0.0076} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.24541^{+0.00010}_{-0.00011} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.5918^{+0.0082}_{-0.0075} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0042}_{-0.0039} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.579^{+0.053}_{-0.050} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0045}_{-0.0044} \quad (+0.9\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.785^{+0.040}_{-0.041} \quad (-1.3\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.074}_{-0.077}$	z_*	$1089.80^{+0.43}_{-0.43} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.136^{+0.057}_{-0.060}$	r_*	$144.62^{+0.54}_{-0.52} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.9^{+3.6}_{-3.4} \quad (-0.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04125^{+0.00074}_{-0.00076} \quad (+1.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.12 \quad (\nu: 0.2)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.049}_{-0.047} \quad (+0.7\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.1) \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.15}$	z_{drag}	$1059.96^{+0.62}_{-0.64} \quad (+0.7\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 1.5) \quad (+0.8\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.54}$	r_{drag}	$147.27^{+0.58}_{-0.55} \quad (+0.6\sigma)$	χ_{plik}^2	$2360.6 \quad (\nu: 17.5) \quad (+271.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14070^{+0.00068}_{-0.00070} \quad (-0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.052 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00041}_{-0.00041} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
H_0	$67.74^{+0.94}_{-0.90} \quad (+1.2\sigma)$	z_{eq}	$3383^{+47}_{-49} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.0)$
Ω_{Λ}	$0.690^{+0.013}_{-0.012} \quad (+1.1\sigma)$	k_{eq}	$0.01032^{+0.00014}_{-0.00015} \quad (-0.9\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 9.7) \quad (+1.2\sigma)$
Ω_{m}	$0.310^{+0.012}_{-0.013} \quad (-1.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8170^{+0.0093}_{-0.0087} \quad (+1.0\sigma)$	χ_{CMB}^2	$2790.8 \quad (\nu: 17.9) \quad (+276.7\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0020}_{-0.0020} \quad (-0.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0048}_{-0.0045} \quad (+1.0\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}} h^3$	$0.09632^{+0.00058}_{-0.00058} \quad (+0.6\sigma)$	$H(0.15)$	$73.00^{+0.81}_{-0.77} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2808.47; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.75; R - 1 = 0.02935$$

5.18 base_alpha1_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02247^{+0.00027}_{-0.00029} \quad (+1.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09633^{+0.00056}_{-0.00058} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4543^{+0.0067}_{-0.0072} \quad (+1.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1178^{+0.0031}_{-0.0029} \quad (-1.6\sigma)$	σ_8	$0.807^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$H(0.15)$	$73.5^{+1.1}_{-1.2} \quad (+1.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04133^{+0.00079}_{-0.00087} \quad (+1.5\sigma)$	S_8	$0.810^{+0.036}_{-0.029} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+12}_{-11} \quad (-1.8\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.019}_{-0.016} \quad (-1.4\sigma)$	$H(0.38)$	$83.48^{+0.81}_{-0.87} \quad (+1.9\sigma)$
α_{-1}	$0.00040^{+0.0013}_{-0.00099} \quad (+1.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.598^{+0.017}_{-0.015} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1517^{+24}_{-21} \quad (-1.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.031}_{-0.029} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.977^{+0.024}_{-0.021} \quad (-1.2\sigma)$	$H(0.51)$	$90.10^{+0.64}_{-0.67} \quad (+2.0\sigma)$
n_{s}	$0.972^{+0.011}_{-0.012} \quad (+2.0\sigma)$	$r_{\mathrm{drag}}h$	$100.9^{+2.3}_{-2.6} \quad (+1.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1966^{+28}_{-25} \quad (-1.8\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0046} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.416^{+0.060}_{-0.051} \quad (-1.2\sigma)$	$H(0.61)$	$95.64^{+0.51}_{-0.53} \quad (+2.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2289^{+30}_{-27} \quad (-1.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.101^{+0.065}_{-0.061} \quad (-0.1\sigma)$	$H(2.33)$	$235.3^{+1.9}_{-1.8} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$5.7^{+4.1}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.872^{+0.026}_{-0.024} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5749^{+23}_{-21} \quad (-1.9\sigma)$
A_{100}^{PS}	$255^{+60}_{-50} \quad (-0.3\sigma)$	D_{40}	$1229^{+28}_{-27} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.018}_{-0.015} \quad (-1.4\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5738^{+76}_{-74} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$41^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.469^{+0.014}_{-0.012} \quad (-1.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$818.9^{+9.4}_{-9.0} \quad (+0.9\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.011} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.81 \quad (-0.3\sigma)$	D_{2000}	$231.6^{+3.1}_{-2.9} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.012}_{-0.011} \quad (-1.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.972^{+0.011}_{-0.012} \quad (+2.0\sigma)$	$\sigma_8(0.51)$	$0.6212^{+0.0099}_{-0.0096} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.1^{+3.5}_{-3.5} \quad (+0.2\sigma)$	Y_{P}	$0.245434^{+0.000098}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.011}_{-0.0095} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.8^{+6.6}_{-6.8} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246760^{+0.000099}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0093}_{-0.0088} \quad (+0.4\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.567^{+0.053}_{-0.047} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2986^{+0.0047}_{-0.0045} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.072}_{-0.071}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.765^{+0.050}_{-0.048} \quad (-1.9\sigma)$	$\sigma_8(2.33)$	$0.3082^{+0.0050}_{-0.0048} \quad (+1.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.055}_{-0.060}$	z_*	$1089.60^{+0.52}_{-0.48} \quad (-1.7\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.9\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	r_*	$144.91^{+0.71}_{-0.76} \quad (+1.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04151^{+0.00079}_{-0.00088} \quad (+1.5\sigma)$	f_{2000}^{217}	$106.6^{+3.6}_{-3.3} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.15}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.914^{+0.062}_{-0.067} \quad (+1.2\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 3.2) \quad (+0.3\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.51}_{-0.51}$	z_{drag}	$1060.02^{+0.60}_{-0.62} \quad (+0.8\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 1.2) \quad (+0.8\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0011} \quad (+0.0\sigma)$	r_{drag}	$147.55^{+0.72}_{-0.77} \quad (+1.2\sigma)$	χ_{plik}^2	$2362.3 \quad (\nu: 19.3) \quad (+271.9\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.2\sigma)$	k_{D}	$0.14046^{+0.00084}_{-0.00079} \quad (-0.7\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$9.6 \quad (\nu: 3.4)$
H_0	$68.3^{+1.3}_{-1.4} \quad (+1.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00038}_{-0.00037} \quad (-0.5\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 9.5) \quad (+1.2\sigma)$
Ω_{Λ}	$0.698^{+0.017}_{-0.019} \quad (+1.7\sigma)$	z_{eq}	$3353^{+72}_{-67} \quad (-1.5\sigma)$	χ_{CMB}^2	$2783.8 \quad (\nu: 20.7) \quad (+275.5\sigma)$
Ω_{m}	$0.302^{+0.019}_{-0.017} \quad (-1.7\sigma)$	k_{eq}	$0.01023^{+0.00022}_{-0.00020} \quad (-1.5\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1410^{+0.0030}_{-0.0028} \quad (-1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.013}_{-0.014} \quad (+1.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2805.11; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.22; R - 1 = 0.05749$$

5.19 base_alpha1_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022139	$0.02220^{+0.00045}_{-0.00046}$ (+0.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4615	$0.461^{+0.026}_{-0.026}$ (−0.2 σ)	$H(0.15)$	72.11	$72.2^{+1.6}_{-1.5}$ (+0.2 σ)
$\Omega_c h^2$	0.12106	$0.1210^{+0.0043}_{-0.0043}$ (−0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6120	$0.612^{+0.023}_{-0.023}$ (−0.2 σ)	$D_M(0.15)$	649.1	649^{+16}_{-16} (−0.2 σ)
$100\theta_{MC}$	1.04066	$1.0406^{+0.0011}_{-0.0011}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9938	$0.993^{+0.031}_{-0.031}$ (−0.2 σ)	$H(0.38)$	82.42	$82.5^{+1.2}_{-1.1}$ (+0.2 σ)
τ	0.0526	$0.054^{+0.017}_{-0.016}$ (−0.0 σ)	$r_{\text{drag}} h$	98.11	$98.2^{+3.4}_{-3.2}$ (+0.2 σ)	$D_M(0.38)$	1545.1	1544^{+32}_{-32} (−0.2 σ)
α_{-1}	−0.00022	$−0.0012^{+0.0030}_{-0.0040}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.456	$2.457^{+0.077}_{-0.077}$ (−0.2 σ)	$H(0.51)$	89.25	$89.29^{+0.91}_{-0.84}$ (+0.2 σ)
$\ln(10^{10} A_s)$	3.0417	$3.045^{+0.037}_{-0.036}$ (−0.1 σ)	z_{re}	7.57	$7.7^{+1.7}_{-1.7}$ (−0.0 σ)	$D_M(0.51)$	1999.7	1999^{+37}_{-38} (−0.2 σ)
n_s	0.9607	$0.960^{+0.016}_{-0.014}$ (+0.3 σ)	$10^9 A_s$	2.094	$2.101^{+0.078}_{-0.074}$ (−0.1 σ)	$H(0.61)$	94.96	$95.00^{+0.72}_{-0.66}$ (+0.2 σ)
y_{cal}	1.00035	$1.0005^{+0.0050}_{-0.0049}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8850	$1.887^{+0.030}_{-0.030}$ (−0.3 σ)	$D_M(0.61)$	2325.4	2324^{+39}_{-40} (−0.2 σ)
A_{100}^{PS}	240.1	244^{+50}_{-50} (−0.7 σ)	D_{40}	1221.5	1216^{+45}_{-40} (−0.1 σ)	$H(2.33)$	237.00	$237.0^{+2.7}_{-2.7}$ (−0.2 σ)
A_{143}^{PS}	39.3	41^{+20}_{-20} (−1.0 σ)	D_{220}	5701	5709^{+83}_{-81} (−0.2 σ)	$D_M(2.33)$	5779.3	5777^{+31}_{-32} (−0.1 σ)
A_{217}^{PS}	99.2	100^{+30}_{-30} (−1.4 σ)	D_{810}	2534.4	2536^{+28}_{-27} (−0.2 σ)	$f\sigma_8(0.15)$	0.4651	$0.465^{+0.024}_{-0.024}$ (−0.2 σ)
A_{217}^{CIB}	45.6	41^{+10}_{-10} (−1.0 σ)	D_{1420}	813.5	814^{+10}_{-10} (−0.1 σ)	$\sigma_8(0.15)$	0.7489	$0.748^{+0.015}_{-0.015}$ (−0.1 σ)
A_{143}^{tSZ}	5.89	< 7.32 (−0.6 σ)	D_{2000}	229.24	$229.4^{+3.7}_{-3.6}$ (−0.0 σ)	$f\sigma_8(0.38)$	0.4808	$0.480^{+0.019}_{-0.019}$ (−0.2 σ)
$r_{143 \times 217}^{\text{PS}}$	0.560	$0.64^{+0.25}_{-0.25}$	$n_{s,0.002}$	0.9607	$0.960^{+0.016}_{-0.014}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6626	$0.662^{+0.012}_{-0.012}$ (−0.1 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.76	—	Y_{P}	0.245301	$0.24532^{+0.00019}_{-0.00020}$ (+0.0 σ)	$f\sigma_8(0.51)$	0.4780	$0.478^{+0.016}_{-0.016}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.02	—	$Y_{\text{P}}^{\text{BBN}}$	0.246627	$0.24665^{+0.00019}_{-0.00021}$ (+0.0 σ)	$\sigma_8(0.51)$	0.6195	$0.619^{+0.011}_{-0.011}$ (−0.1 σ)
A^{kSZ}	1.5	—	$10^5 D/H$	2.630	$2.619^{+0.088}_{-0.083}$ (−0.0 σ)	$f\sigma_8(0.61)$	0.4721	$0.472^{+0.014}_{-0.014}$ (−0.2 σ)
A_{100}^{dust}	1.017	$1.02^{+0.38}_{-0.38}$	Age/Gyr	13.833	$13.829^{+0.071}_{-0.072}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5892	$0.589^{+0.010}_{-0.010}$ (−0.0 σ)
A_{143}^{dust}	0.993	$0.98^{+0.34}_{-0.34}$	z_*	1090.31	$1090.23^{+0.79}_{-0.79}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2966	$0.2965^{+0.0052}_{-0.0051}$ (−0.0 σ)
A_{217}^{dust}	0.962	$0.97^{+0.20}_{-0.20}$	r_*	144.34	$144.3^{+1.1}_{-1.0}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3053	$0.3052^{+0.0056}_{-0.0054}$ (+0.0 σ)
$A_{143 \times 217}^{\text{dust}}$	1.005	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04086	$1.0408^{+0.0011}_{-0.0011}$ (+0.2 σ)	f_{2000}^{143}	31.3	31^{+6}_{-6} (−0.1 σ)
c_{100}	0.99750	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$D_M(z_*)/\text{Gpc}$	13.867	$13.865^{+0.094}_{-0.092}$ (+0.2 σ)	f_{2000}^{217}	107.80	$107.7^{+4.1}_{-4.0}$ (−0.3 σ)
c_{217}	1.00144	$1.0012^{+0.0031}_{-0.0031}$ (+4.8 σ)	z_{drag}	1059.47	$1059.60^{+0.98}_{-1.0}$ (−0.0 σ)	$f_{2000}^{143 \times 217}$	33.15	33^{+4}_{-4} (−0.3 σ)
H_0	66.71	$66.8^{+1.9}_{-1.8}$ (+0.2 σ)	r_{drag}	147.07	$147.0^{+1.1}_{-1.0}$ (+0.2 σ)	χ_{simall}^2	395.89	$397.1 (\nu: 1.6)$ (−0.0 σ)
Ω_Λ	0.6767	$0.677^{+0.026}_{-0.027}$ (+0.2 σ)	k_D	0.14071	$0.1408^{+0.0012}_{-0.0013}$ (−0.2 σ)	χ_{lowl}^2	22.30	$22.2 (\nu: 2.8)$ (+0.1 σ)
Ω_m	0.3233	$0.323^{+0.027}_{-0.026}$ (−0.2 σ)	$100\theta_D$	0.16101	$0.16092^{+0.00065}_{-0.00059}$ (+0.1 σ)	χ_{CamSpec}^2	7050.8	$7065.8 (\nu: 17.1)$
$\Omega_m h^2$	0.14384	$0.1438^{+0.0041}_{-0.0041}$ (−0.2 σ)	z_{eq}	3422	3422^{+99}_{-99} (−0.2 σ)	χ_{prior}^2	2.4	$7.6 (\nu: 6.0)$ (+0.1 σ)
$\Omega_m h^3$	0.09595	$0.09601^{+0.00091}_{-0.00094}$ (−0.0 σ)	k_{eq}	0.010444	$0.01044^{+0.00030}_{-0.00030}$ (−0.2 σ)	χ_{CMB}^2	7469.0	$7485.1 (\nu: 16.9)$ (+1089.9 σ)
σ_8	0.8117	$0.811^{+0.017}_{-0.017}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8090	$0.809^{+0.019}_{-0.018}$ (+0.2 σ)			
S_8	0.8426	$0.842^{+0.048}_{-0.048}$ (−0.2 σ)	$100\theta_{s,\text{eq}}$	0.4473	$0.4473^{+0.0097}_{-0.0093}$ (+0.2 σ)			

Best-fit $\chi_{\text{eff}}^2 = 7471.39$; $\Delta\chi_{\text{eff}}^2 = -0.35$; $\bar{\chi}_{\text{eff}}^2 = 7492.71$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.18$; $R - 1 = 0.00444$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.89 (Δ 0.05) commander_dx12_v3.2.29: 22.30 (Δ -1.10) CamSpec like_10.7HM: 7050.85 (Δ 0.51)

5.20 base_alpha1_CamSpecHM_TT_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00043}_{-0.00046} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.016}_{-0.015} \quad (-1.0\sigma)$	$H(0.38)$	$82.99^{+0.70}_{-0.69} \quad (+1.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.023}_{-0.022} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+19}_{-18} \quad (-1.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00097}_{-0.00092} \quad (+0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.9}_{-1.9} \quad (+1.1\sigma)$	$H(0.51)$	$89.69^{+0.57}_{-0.57} \quad (+1.1\sigma)$
τ	$0.055^{+0.017}_{-0.016} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.055}_{-0.054} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+22}_{-22} \quad (-1.1\sigma)$
α_{-1}	$-0.0007^{+0.0031}_{-0.0037} \quad (+0.5\sigma)$	z_{re}	$7.7^{+1.7}_{-1.7} \quad (+0.1\sigma)$	$H(0.61)$	$95.30^{+0.48}_{-0.49} \quad (+1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.038}_{-0.035} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.081}_{-0.073} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+24}_{-24} \quad (-1.1\sigma)$
n_{s}	$0.966^{+0.012}_{-0.011} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.025}_{-0.024} \quad (-0.9\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.6} \quad (-1.1\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	D_{40}	$1214^{+47}_{-41} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+25}_{-23} \quad (-0.9\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5716^{+83}_{-83} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-1.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2535^{+28}_{-27} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.014}_{-0.014} \quad (-0.5\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.012} \quad (-1.0\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.9^{+3.6}_{-3.6} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.966^{+0.012}_{-0.011} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.011} \quad (-1.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	Y_{P}	$0.24535^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24668^{+0.00018}_{-0.00020} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.604^{+0.087}_{-0.078} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.010}_{-0.010} \quad (-0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.802^{+0.057}_{-0.053} \quad (-0.9\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0052}_{-0.0051} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.37}$	z_*	$1089.95^{+0.64}_{-0.61} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0054}_{-0.0052} \quad (+0.3\sigma)$
A_{143}^{dust}	$0.99^{+0.34}_{-0.35}$	r_*	$144.77^{+0.68}_{-0.66} \quad (+1.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04113^{+0.00098}_{-0.00092} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.4^{+4.0}_{-4.0} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.065}_{-0.062} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.64^{+0.98}_{-1.0} \quad (+0.0\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.0\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.47^{+0.77}_{-0.74} \quad (+1.0\sigma)$	χ_{lowl}^2	$22 \quad (\nu: 3.4) \quad (+0.2\sigma)$
H_0	$67.6^{+1.1}_{-1.1} \quad (+1.1\sigma)$	k_{D}	$0.14039^{+0.00099}_{-0.0011} \quad (-0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7065.8 \quad (\nu: 17.4)$
Ω_{Λ}	$0.690^{+0.014}_{-0.015} \quad (+1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16093^{+0.00067}_{-0.00061} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.061 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-1.1\sigma)$	z_{eq}	$3375^{+57}_{-57} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.35 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	$0.09598^{+0.00092}_{-0.00098} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.010} \quad (+1.1\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.806^{+0.016}_{-0.015} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0055}_{-0.0055} \quad (+1.1\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.0)$
S_8	$0.820^{+0.030}_{-0.029} \quad (-1.1\sigma)$	$H(0.15)$	$72.91^{+0.93}_{-0.92} \quad (+1.1\sigma)$	χ_{CMB}^2	$7485.4 \quad (\nu: 17.0) \quad (+1090.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.0^{+9.2}_{-9.0} \quad (-1.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7499.33; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.77; R - 1 = 0.01534$$

5.21 base_alpha1_CamSpecHM_TT_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02222^{+0.00044}_{-0.00045} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.458^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$H(0.15)$	$72.3^{+1.3}_{-1.2} \quad (+0.4\sigma)$
$\Omega_{\text{c}} h^2$	$0.1206^{+0.0032}_{-0.0032} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$D_{\text{M}}(0.15)$	$647^{+13}_{-13} \quad (-0.4\sigma)$
$100\theta_{\text{MC}}$	$1.0406^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} \quad (-0.4\sigma)$	$H(0.38)$	$82.57^{+0.93}_{-0.88} \quad (+0.4\sigma)$
τ	$0.054^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	$98.5^{+2.6}_{-2.5} \quad (+0.4\sigma)$	$D_{\text{M}}(0.38)$	$1541^{+25}_{-25} \quad (-0.4\sigma)$
α_{-1}	$-0.0012^{+0.0029}_{-0.0039} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.450^{+0.050}_{-0.050} \quad (-0.4\sigma)$	$H(0.51)$	$89.37^{+0.74}_{-0.71} \quad (+0.3\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.044^{+0.032}_{-0.031} \quad (-0.2\sigma)$	z_{re}	$7.7^{+1.5}_{-1.6} \quad (-0.0\sigma)$	$D_{\text{M}}(0.51)$	$1995^{+29}_{-30} \quad (-0.4\sigma)$
n_{s}	$0.960^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$10^9 A_{\text{s}}$	$2.100^{+0.069}_{-0.064} \quad (-0.2\sigma)$	$H(0.61)$	$95.05^{+0.60}_{-0.58} \quad (+0.3\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.885^{+0.025}_{-0.025} \quad (-0.4\sigma)$	$D_{\text{M}}(0.61)$	$2320^{+31}_{-32} \quad (-0.4\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1216^{+45}_{-39} \quad (-0.1\sigma)$	$H(2.33)$	$236.8^{+2.0}_{-2.0} \quad (-0.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5712^{+83}_{-81} \quad (-0.1\sigma)$	$D_{\text{M}}(2.33)$	$5775^{+29}_{-28} \quad (-0.3\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} \quad (-0.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.32 \quad (-0.7\sigma)$	D_{2000}	$229.4^{+3.7}_{-3.6} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.64^{+0.25}_{-0.25}$	$n_{\text{s},0.002}$	$0.960^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0097} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.24533^{+0.00018}_{-0.00020} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00018}_{-0.00020} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6189^{+0.0095}_{-0.0092} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.615^{+0.087}_{-0.081} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0091}_{-0.0095} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.37}$	Age/Gyr	$13.823^{+0.065}_{-0.064} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5886^{+0.0092}_{-0.0089} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	z_*	$1090.16^{+0.71}_{-0.70} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2965^{+0.0049}_{-0.0047} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.40^{+0.83}_{-0.79} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3053^{+0.0055}_{-0.0052} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0408^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.873^{+0.074}_{-0.072} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.7^{+4.0}_{-4.0} \quad (-0.3\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	z_{drag}	$1059.63^{+0.95}_{-1.0} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
H_0	$66.9^{+1.5}_{-1.4} \quad (+0.4\sigma)$	r_{drag}	$147.11^{+0.88}_{-0.84} \quad (+0.3\sigma)$	χ_{lensing}^2	$9.52 \quad (\nu: 0.4)$
Ω_{Λ}	$0.680^{+0.020}_{-0.021} \quad (+0.4\sigma)$	k_{D}	$0.1407^{+0.0010}_{-0.0011} \quad (-0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (-0.1\sigma)$
Ω_{m}	$0.320^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$100\theta_{\text{D}}$	$0.16091^{+0.00065}_{-0.00059} \quad (+0.0\sigma)$	χ_{lowl}^2	$22.2 \quad (\nu: 2.8) \quad (+0.0\sigma)$
$\Omega_{\text{m}} h^2$	$0.1434^{+0.0031}_{-0.0032} \quad (-0.4\sigma)$	z_{eq}	$3412^{+74}_{-75} \quad (-0.4\sigma)$	χ_{CamSpec}^2	$7065.3 \quad (\nu: 16.5)$
$\Omega_{\text{m}} h^3$	$0.09601^{+0.00091}_{-0.00094} \quad (-0.0\sigma)$	k_{eq}	$0.01042^{+0.00023}_{-0.00023} \quad (-0.4\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.810^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$100\theta_{\text{eq}}$	$0.811^{+0.014}_{-0.014} \quad (+0.4\sigma)$	χ_{CMB}^2	$7494.0 \quad (\nu: 17.3) \quad (+1091.5\sigma)$
S_8	$0.837^{+0.032}_{-0.033} \quad (-0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4482^{+0.0073}_{-0.0070} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 7501.64; \Delta \bar{\chi}_{\text{eff}}^2 = 1.40; R - 1 = 0.00636$$

5.22 base_alpha1_CamSpecHM_TT_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00043}_{-0.00045} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.95^{+0.66}_{-0.64} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0022}_{-0.0022} \quad (-1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.018}_{-0.018} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+17}_{-17} \quad (-1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00095}_{-0.00091} \quad (+0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.6^{+1.7}_{-1.7} \quad (+1.0\sigma)$	$H(0.51)$	$89.66^{+0.55}_{-0.54} \quad (+1.0\sigma)$
τ	$0.057^{+0.016}_{-0.015} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.042}_{-0.042} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1983^{+20}_{-20} \quad (-1.0\sigma)$
α_{-1}	$-0.0007^{+0.0030}_{-0.0038} \quad (+0.4\sigma)$	z_{re}	$7.9^{+1.6}_{-1.5} \quad (+0.3\sigma)$	$H(0.61)$	$95.28^{+0.47}_{-0.47} \quad (+0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.034}_{-0.031} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.074}_{-0.065} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+22}_{-22} \quad (-1.0\sigma)$
n_{s}	$0.965^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.5} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	D_{40}	$1216^{+47}_{-39} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+24}_{-23} \quad (-0.9\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5721^{+81}_{-81} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.9\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815^{+10}_{-9.9} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4741^{+0.0099}_{-0.010} \quad (-0.8\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.0^{+3.6}_{-3.5} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0098} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.44 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.4727^{+0.0089}_{-0.0090} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	Y_{P}	$0.24536^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6198^{+0.0094}_{-0.0091} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24668^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4677^{+0.0082}_{-0.0082} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.603^{+0.086}_{-0.078} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5897^{+0.0090}_{-0.0088} \quad (+0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.803^{+0.056}_{-0.053} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0046}_{-0.0045} \quad (+0.3\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.37}$	z_*	$1089.96^{+0.62}_{-0.61} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0049}_{-0.0049} \quad (+0.5\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	r_*	$144.71^{+0.63}_{-0.60} \quad (+0.9\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04110^{+0.00096}_{-0.00091} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.4^{+3.9}_{-3.9} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.899^{+0.059}_{-0.056} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.67^{+0.98}_{-1.1} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.35 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.40^{+0.74}_{-0.68} \quad (+0.9\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.0) \quad (+0.1\sigma)$
H_0	$67.6^{+1.0}_{-0.98} \quad (+1.0\sigma)$	k_{D}	$0.14047^{+0.00094}_{-0.0010} \quad (-0.7\sigma)$	χ_{lowl}^2	$23 \quad (\nu: 3.4) \quad (+0.2\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16091^{+0.00066}_{-0.00060} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7065.2 \quad (\nu: 16.4)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-1.0\sigma)$	z_{eq}	$3381^{+51}_{-53} \quad (-1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.065 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0021}_{-0.0022} \quad (-1.0\sigma)$	k_{eq}	$0.01032^{+0.00015}_{-0.00016} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.25 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09602^{+0.00089}_{-0.00095} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8169^{+0.0096}_{-0.0093} \quad (+1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.4)$
σ_8	$0.808^{+0.013}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0050}_{-0.0048} \quad (+1.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.824^{+0.023}_{-0.024} \quad (-0.9\sigma)$	$H(0.15)$	$72.84^{+0.86}_{-0.85} \quad (+1.0\sigma)$	χ_{CMB}^2	$7494.3 \quad (\nu: 17.2) \quad (+1091.5\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.7^{+8.5}_{-8.5} \quad (-1.0\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7508.28$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.80$; $R - 1 = 0.01595$

5.23 base_alpha1_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02221^{+0.00045}_{-0.00045} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.461^{+0.026}_{-0.026} \quad (-0.2\sigma)$	$H(0.15)$	$72.2^{+1.6}_{-1.5} \quad (+0.2\sigma)$
$\Omega_{\text{c}} h^2$	$0.1210^{+0.0043}_{-0.0043} \quad (-0.2\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.612^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\text{M}}(0.15)$	$648^{+16}_{-16} \quad (-0.2\sigma)$
$100\theta_{\text{MC}}$	$1.0406^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.030}_{-0.031} \quad (-0.1\sigma)$	$H(0.38)$	$82.5^{+1.2}_{-1.1} \quad (+0.2\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	$r_{\text{drag}} h$	$98.2^{+3.4}_{-3.2} \quad (+0.2\sigma)$	$D_{\text{M}}(0.38)$	$1544^{+31}_{-32} \quad (-0.2\sigma)$
α_{-1}	$-0.0013^{+0.0030}_{-0.0040} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.459^{+0.075}_{-0.076} \quad (-0.2\sigma)$	$H(0.51)$	$89.31^{+0.91}_{-0.84} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.048^{+0.032}_{-0.030} \quad (+0.0\sigma)$	z_{re}	$< 9.06 \quad (+0.2\sigma)$	$D_{\text{M}}(0.51)$	$1998^{+37}_{-38} \quad (-0.2\sigma)$
n_{s}	$0.960^{+0.016}_{-0.014} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.107^{+0.068}_{-0.063} \quad (+0.0\sigma)$	$H(0.61)$	$95.01^{+0.72}_{-0.66} \quad (+0.2\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.887^{+0.029}_{-0.030} \quad (-0.3\sigma)$	$D_{\text{M}}(0.61)$	$2324^{+39}_{-40} \quad (-0.2\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1216^{+44}_{-40} \quad (-0.1\sigma)$	$H(2.33)$	$237.0^{+2.6}_{-2.7} \quad (-0.2\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5710^{+83}_{-81} \quad (-0.2\sigma)$	$D_{\text{M}}(2.33)$	$5777^{+31}_{-32} \quad (-0.2\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2536^{+28}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.465^{+0.024}_{-0.024} \quad (-0.2\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.014} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.34 \quad (-0.6\sigma)$	D_{2000}	$229.4^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.018}_{-0.019} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.64^{+0.25}_{-0.25}$	$n_{\text{s},0.002}$	$0.960^{+0.016}_{-0.014} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.010} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.24532^{+0.00018}_{-0.00020} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.016}_{-0.016} \quad (-0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24665^{+0.00018}_{-0.00020} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.011}_{-0.0093} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.617^{+0.086}_{-0.082} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.014}_{-0.014} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.827^{+0.070}_{-0.072} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5896^{+0.0094}_{-0.0091} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.21^{+0.78}_{-0.78} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0047}_{-0.0045} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.3^{+1.1}_{-1.0} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3056^{+0.0050}_{-0.0048} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0408^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.865^{+0.095}_{-0.092} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.7^{+4.0}_{-3.9} \quad (-0.3\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	z_{drag}	$1059.62^{+0.96}_{-1.0} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
H_0	$66.8^{+1.9}_{-1.8} \quad (+0.2\sigma)$	r_{drag}	$147.0^{+1.1}_{-1.0} \quad (+0.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (-0.1\sigma)$
Ω_{Λ}	$0.677^{+0.026}_{-0.027} \quad (+0.2\sigma)$	k_{D}	$0.1408^{+0.0012}_{-0.0013} \quad (-0.2\sigma)$	χ_{lowl}^2	$22.2 \quad (\nu: 2.6) \quad (+0.0\sigma)$
Ω_{m}	$0.323^{+0.027}_{-0.026} \quad (-0.2\sigma)$	$100\theta_{\text{D}}$	$0.16091^{+0.00064}_{-0.00058} \quad (+0.0\sigma)$	χ_{CamSpec}^2	$7065.7 \quad (\nu: 17.0)$
$\Omega_{\text{m}} h^2$	$0.1438^{+0.0041}_{-0.0042} \quad (-0.2\sigma)$	z_{eq}	$3421^{+99}_{-99} \quad (-0.2\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\text{m}} h^3$	$0.09603^{+0.00091}_{-0.00093} \quad (+0.0\sigma)$	k_{eq}	$0.01044^{+0.00030}_{-0.00030} \quad (-0.2\sigma)$	χ_{CMB}^2	$7484.8 \quad (\nu: 16.4) \quad (+1089.9\sigma)$
σ_8	$0.812^{+0.017}_{-0.016} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	$0.809^{+0.019}_{-0.018} \quad (+0.2\sigma)$		
S_8	$0.842^{+0.048}_{-0.048} \quad (-0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.4474^{+0.0097}_{-0.0093} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 7492.46; \Delta \bar{\chi}_{\text{eff}}^2 = 1.20; R - 1 = 0.00453$$

5.24 base_alpha1_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00042}_{-0.00045} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.016}_{-0.015} \quad (-0.9\sigma)$	$H(0.38)$	$83.00^{+0.70}_{-0.68} \quad (+1.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.023}_{-0.021} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+18}_{-18} \quad (-1.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00097}_{-0.00092} \quad (+0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.9}_{-1.9} \quad (+1.1\sigma)$	$H(0.51)$	$89.70^{+0.57}_{-0.57} \quad (+1.1\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.054}_{-0.051} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+22}_{-22} \quad (-1.1\sigma)$
α_{-1}	$-0.0007^{+0.0030}_{-0.0037} \quad (+0.4\sigma)$	z_{re}	$< 9.11 \quad (+0.2\sigma)$	$H(0.61)$	$95.30^{+0.48}_{-0.49} \quad (+1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.033}_{-0.030} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.069}_{-0.063} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+23}_{-24} \quad (-1.1\sigma)$
n_{s}	$0.965^{+0.012}_{-0.011} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.025}_{-0.024} \quad (-0.9\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.6} \quad (-1.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	D_{40}	$1214^{+47}_{-41} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+25}_{-23} \quad (-0.9\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5716^{+82}_{-82} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-1.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2535^{+28}_{-27} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.012} \quad (-1.0\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.9^{+3.6}_{-3.6} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.49 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.011} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	Y_{P}	$0.24536^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.010}_{-0.0099} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24668^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.0099} \quad (-0.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.602^{+0.087}_{-0.077} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.0089} \quad (-0.0\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.801^{+0.057}_{-0.053} \quad (-0.9\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0049}_{-0.0045} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.38}$	z_*	$1089.94^{+0.64}_{-0.60} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0052}_{-0.0047} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.99^{+0.34}_{-0.35}$	r_*	$144.77^{+0.68}_{-0.66} \quad (+1.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04112^{+0.00097}_{-0.00092} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.4^{+4.0}_{-4.0} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.065}_{-0.062} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.66^{+0.96}_{-1.1} \quad (+0.1\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.0) \quad (-0.0\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.46^{+0.78}_{-0.73} \quad (+1.0\sigma)$	χ_{lowl}^2	$22 \quad (\nu: 3.3) \quad (+0.1\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+1.1\sigma)$	k_{D}	$0.14041^{+0.00099}_{-0.0011} \quad (-0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7065.7 \quad (\nu: 17.2)$
Ω_{Λ}	$0.690^{+0.014}_{-0.015} \quad (+1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16092^{+0.00066}_{-0.00060} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.060 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-1.1\sigma)$	z_{eq}	$3375^{+57}_{-57} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.35 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	k_{eq}	$0.01030^{+0.00018}_{-0.00017} \quad (-1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	$0.09599^{+0.00092}_{-0.00097} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+1.1\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.807^{+0.015}_{-0.014} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0055}_{-0.0055} \quad (+1.1\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.0)$
S_8	$0.820^{+0.029}_{-0.029} \quad (-1.0\sigma)$	$H(0.15)$	$72.92^{+0.93}_{-0.92} \quad (+1.1\sigma)$	χ_{CMB}^2	$7485.2 \quad (\nu: 16.5) \quad (+1089.9\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.9^{+9.2}_{-9.1} \quad (-1.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7499.10$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.79$; $R - 1 = 0.01710$

5.25 base_alpha1_CamSpecHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00044}_{-0.00045} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.458^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$H(0.15)$	$72.3^{+1.3}_{-1.2} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1205^{+0.0031}_{-0.0032} \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$D_M(0.15)$	$647^{+12}_{-12} \quad (-0.4\sigma)$
$100\theta_{MC}$	$1.0406^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} \quad (-0.3\sigma)$	$H(0.38)$	$82.60^{+0.92}_{-0.86} \quad (+0.4\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	$r_{\text{drag}} h$	$98.5^{+2.6}_{-2.4} \quad (+0.4\sigma)$	$D_M(0.38)$	$1540^{+24}_{-25} \quad (-0.4\sigma)$
α_{-1}	$-0.0012^{+0.0029}_{-0.0039} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.050}_{-0.050} \quad (-0.4\sigma)$	$H(0.51)$	$89.39^{+0.73}_{-0.69} \quad (+0.4\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.029}_{-0.027} \quad (-0.0\sigma)$	z_{re}	$< 8.99 \quad (+0.1\sigma)$	$D_M(0.51)$	$1994^{+28}_{-29} \quad (-0.4\sigma)$
n_s	$0.961^{+0.014}_{-0.012} \quad (+0.4\sigma)$	$10^9 A_s$	$2.104^{+0.060}_{-0.056} \quad (-0.1\sigma)$	$H(0.61)$	$95.07^{+0.60}_{-0.57} \quad (+0.4\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.024}_{-0.024} \quad (-0.4\sigma)$	$D_M(0.61)$	$2319^{+30}_{-31} \quad (-0.4\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1215^{+44}_{-38} \quad (-0.2\sigma)$	$H(2.33)$	$236.7^{+1.9}_{-2.0} \quad (-0.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5713^{+83}_{-81} \quad (-0.1\sigma)$	$D_M(2.33)$	$5774^{+28}_{-28} \quad (-0.3\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} \quad (-0.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.35 \quad (-0.7\sigma)$	D_{2000}	$229.4^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.013} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.64^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.961^{+0.014}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6623^{+0.0096}_{-0.0086} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.24533^{+0.00018}_{-0.00019} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.24666^{+0.00018}_{-0.00020} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6194^{+0.0087}_{-0.0084} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.613^{+0.086}_{-0.080} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.4706^{+0.0091}_{-0.0095} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.822^{+0.064}_{-0.063} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5892^{+0.0084}_{-0.0081} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.14^{+0.69}_{-0.69} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2967^{+0.0044}_{-0.0043} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.41^{+0.82}_{-0.77} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3056^{+0.0049}_{-0.0048} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0408^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.875^{+0.073}_{-0.071} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.6^{+4.0}_{-4.0} \quad (-0.3\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	z_{drag}	$1059.65^{+0.97}_{-1.0} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
H_0	$67.0^{+1.5}_{-1.4} \quad (+0.4\sigma)$	r_{drag}	$147.12^{+0.88}_{-0.82} \quad (+0.4\sigma)$	χ_{lensing}^2	$9.50 \quad (\nu: 0.4)$
Ω_Λ	$0.680^{+0.020}_{-0.020} \quad (+0.4\sigma)$	k_D	$0.1407^{+0.0010}_{-0.0011} \quad (-0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.1\sigma)$
Ω_m	$0.320^{+0.020}_{-0.020} \quad (-0.4\sigma)$	$100\theta_D$	$0.16090^{+0.00064}_{-0.00059} \quad (-0.0\sigma)$	χ_{lowl}^2	$22.1 \quad (\nu: 2.7) \quad (+0.0\sigma)$
$\Omega_m h^2$	$0.1434^{+0.0030}_{-0.0031} \quad (-0.4\sigma)$	z_{eq}	$3410^{+73}_{-75} \quad (-0.4\sigma)$	χ_{CamSpec}^2	$7065.2 \quad (\nu: 16.5)$
$\Omega_m h^3$	$0.09601^{+0.00090}_{-0.00093} \quad (-0.0\sigma)$	k_{eq}	$0.01041^{+0.00022}_{-0.00023} \quad (-0.4\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.810^{+0.012}_{-0.012} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	$0.811^{+0.014}_{-0.013} \quad (+0.4\sigma)$	χ_{CMB}^2	$7493.7 \quad (\nu: 16.8) \quad (+1091.4\sigma)$
S_8	$0.837^{+0.032}_{-0.032} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.4484^{+0.0072}_{-0.0069} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 7501.39; \Delta \bar{\chi}_{\text{eff}}^2 = 1.38; R - 1 = 0.00867$$

5.26 base_alpha1_CamSpecHM_TT_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02229^{+0.00043}_{-0.00045} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.95^{+0.66}_{-0.64} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0022}_{-0.0022} \quad (-1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.018} \quad (-0.7\sigma)$	$D_M(0.38)$	$1530^{+17}_{-17} \quad (-1.0\sigma)$
$100\theta_{MC}$	$1.04090^{+0.00094}_{-0.00091} \quad (+0.8\sigma)$	$r_{drag} h$	$99.6^{+1.7}_{-1.7} \quad (+1.0\sigma)$	$H(0.51)$	$89.67^{+0.55}_{-0.53} \quad (+1.0\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.042}_{-0.041} \quad (-0.8\sigma)$	$D_M(0.51)$	$1982^{+20}_{-20} \quad (-1.0\sigma)$
α_{-1}	$-0.0008^{+0.0030}_{-0.0038} \quad (+0.4\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$H(0.61)$	$95.28^{+0.47}_{-0.47} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.031}_{-0.029} \quad (+0.0\sigma)$	$10^9 A_s$	$2.108^{+0.065}_{-0.061} \quad (+0.0\sigma)$	$D_M(0.61)$	$2307^{+22}_{-22} \quad (-1.0\sigma)$
n_s	$0.965^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.5} \quad (-1.0\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	D_{40}	$1216^{+46}_{-39} \quad (-0.1\sigma)$	$D_M(2.33)$	$5765^{+24}_{-23} \quad (-0.9\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5721^{+81}_{-81} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.9\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-9.8} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.4742^{+0.0099}_{-0.010} \quad (-0.8\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.0^{+3.5}_{-3.5} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6626^{+0.0098}_{-0.0092} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.46 \quad (-0.6\sigma)$	$n_{s,0.002}$	$0.965^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.4728^{+0.0088}_{-0.0089} \quad (-0.7\sigma)$
$r_{143 \times 217}^{PS}$	$0.64^{+0.25}_{-0.25}$	Y_P	$0.24536^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6201^{+0.0093}_{-0.0086} \quad (+0.1\sigma)$
$r_{143 \times 217}^{CIB}$	—	Y_P^{BBN}	$0.24668^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4679^{+0.0081}_{-0.0081} \quad (-0.7\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^5 D/H$	$2.602^{+0.086}_{-0.078} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0089}_{-0.0083} \quad (+0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.803^{+0.055}_{-0.052} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0045}_{-0.0042} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.37}$	z_*	$1089.95^{+0.62}_{-0.61} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0048}_{-0.0045} \quad (+0.6\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	r_*	$144.71^{+0.63}_{-0.60} \quad (+0.9\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04110^{+0.00095}_{-0.00090} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.4^{+3.9}_{-3.9} \quad (-0.5\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.33}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	$13.900^{+0.060}_{-0.056} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.68^{+0.97}_{-1.0} \quad (+0.1\sigma)$	$\chi_{lensing}^2$	$9.32 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.40^{+0.74}_{-0.68} \quad (+0.9\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.0) \quad (+0.1\sigma)$
H_0	$67.6^{+1.0}_{-0.97} \quad (+1.0\sigma)$	k_D	$0.14047^{+0.00094}_{-0.0010} \quad (-0.7\sigma)$	χ_{lowl}^2	$22 \quad (\nu: 3.3) \quad (+0.2\sigma)$
Ω_Λ	$0.689^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$100\theta_D$	$0.16090^{+0.00065}_{-0.00060} \quad (-0.0\sigma)$	$\chi_{CamSpec}^2$	$7065.2 \quad (\nu: 16.4)$
Ω_m	$0.311^{+0.013}_{-0.013} \quad (-1.0\sigma)$	z_{eq}	$3380^{+51}_{-52} \quad (-1.0\sigma)$	χ_{6DF}^2	$0.063 \quad (\nu: 0.0)$
$\Omega_m h^2$	$0.1421^{+0.0021}_{-0.0022} \quad (-1.0\sigma)$	k_{eq}	$0.01032^{+0.00015}_{-0.00016} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.26 \quad (\nu: 0.1)$
$\Omega_m h^3$	$0.09602^{+0.00089}_{-0.00095} \quad (-0.0\sigma)$	$100\theta_{eq}$	$0.8170^{+0.0096}_{-0.0093} \quad (+1.0\sigma)$	$\chi_{DR12BAO}^2$	$5.0 \quad (\nu: 1.4)$
σ_8	$0.809^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{s,eq}$	$0.4514^{+0.0050}_{-0.0048} \quad (+1.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.824^{+0.023}_{-0.024} \quad (-0.9\sigma)$	$H(0.15)$	$72.85^{+0.86}_{-0.84} \quad (+1.0\sigma)$	χ_{CMB}^2	$7494.2 \quad (\nu: 16.9) \quad (+1091.5\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.9\sigma)$	$D_M(0.15)$	$641.6^{+8.4}_{-8.5} \quad (-1.0\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$

$\bar{\chi}_{eff}^2 = 7508.12$; $\Delta \bar{\chi}_{eff}^2 = 1.79$; $R - 1 = 0.01736$

6 mnu

6.1 base_mnu_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022161	$0.02205^{+0.00047}_{-0.00049}$	$\sigma_8 \Omega_m^{0.5}$	0.4615	$0.457^{+0.026}_{-0.027}$	$H(0.15)$	72.80	$71.2^{+3.0}_{-3.9}$
$\Omega_c h^2$	0.12044	$0.1210^{+0.0044}_{-0.0043}$	$\sigma_8 \Omega_m^{0.25}$	0.6170	$0.600^{+0.035}_{-0.042}$	$D_M(0.15)$	642.2	658^{+42}_{-31}
$100\theta_{MC}$	1.04081	$1.04064^{+0.00097}_{-0.0010}$	$\sigma_8/h^{0.5}$	1.004	$0.973^{+0.056}_{-0.074}$	$H(0.38)$	82.94	$81.7^{+2.2}_{-2.9}$
τ	0.0525	$0.052^{+0.016}_{-0.015}$	$r_{drag}h$	99.4	$96.7^{+5.6}_{-7.0}$	$D_M(0.38)$	1531	1564^{+84}_{-62}
Σm_ν [eV]	0.001	< 0.537	$\langle d^2 \rangle^{1/2}$	2.459	$2.448^{+0.073}_{-0.074}$	$H(0.51)$	89.68	$88.7^{+1.8}_{-2.4}$
$\ln(10^{10} A_s)$	3.0413	$3.040^{+0.032}_{-0.031}$	z_{re}	7.55	$7.5^{+1.6}_{-1.7}$	$D_M(0.51)$	1983	2022^{+99}_{-73}
n_s	0.9640	$0.961^{+0.012}_{-0.013}$	$10^9 A_s$	2.093	$2.091^{+0.068}_{-0.065}$	$H(0.61)$	95.31	$94.5^{+1.5}_{-2.0}$
y_{cal}	1.00038	$1.0005^{+0.0049}_{-0.0050}$	$10^9 A_s e^{-2\tau}$	1.8845	$1.886^{+0.027}_{-0.027}$	$D_M(0.61)$	2308	2350^{+110}_{-78}
A_{217}^{CIB}	48.6	48^{+10}_{-10}	D_{40}	1231.4	1234^{+30}_{-29}	$H(2.33)$	236.30	$237.6^{+3.9}_{-3.5}$
$\xi^{tSZ \times CIB}$	0.35	—	D_{220}	5713	5712^{+80}_{-80}	$D_M(2.33)$	5763	5806^{+110}_{-73}
A_{143}^{tSZ}	6.96	$5.0^{+3.9}_{-4.0}$	D_{810}	2537.6	2537^{+27}_{-27}	$f\sigma_8(0.15)$	0.4653	$0.460^{+0.025}_{-0.027}$
A_{100}^{PS}	254	265^{+60}_{-60}	D_{1420}	815.4	814^{+10}_{-10}	$\sigma_8(0.15)$	0.762	$0.727^{+0.047}_{-0.076}$
A_{143}^{PS}	49.8	50^{+20}_{-20}	D_{2000}	230.08	$229.2^{+3.6}_{-3.8}$	$f\sigma_8(0.38)$	0.4834	$0.473^{+0.026}_{-0.029}$
$A_{143 \times 217}^{PS}$	47.7	44^{+20}_{-20}	$n_{s,0.002}$	0.9640	$0.961^{+0.012}_{-0.013}$	$\sigma_8(0.38)$	0.675	$0.642^{+0.042}_{-0.071}$
A_{217}^{PS}	119.6	115^{+20}_{-20}	Y_P	0.245310	$0.24525^{+0.00021}_{-0.00022}$	$f\sigma_8(0.51)$	0.4817	$0.469^{+0.026}_{-0.033}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246636	$0.24658^{+0.00021}_{-0.00022}$	$\sigma_8(0.51)$	0.632	$0.600^{+0.040}_{-0.068}$
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.6}$	$10^5 D/H$	2.625	$2.648^{+0.092}_{-0.092}$	$f\sigma_8(0.61)$	0.4765	$0.463^{+0.026}_{-0.035}$
A_{143}^{dustTT}	10.82	$10.7^{+3.5}_{-3.6}$	Age/Gyr	13.795	$13.90^{+0.24}_{-0.17}$	$\sigma_8(0.61)$	0.601	$0.571^{+0.038}_{-0.066}$
$A_{143 \times 217}^{dustTT}$	19.5	$18.3^{+6.4}_{-6.6}$	z_*	1090.22	$1090.45^{+0.96}_{-0.95}$	$f\sigma_8(2.33)$	0.3019	$0.288^{+0.018}_{-0.031}$
A_{217}^{dustTT}	94.7	93^{+10}_{-10}	r_*	144.48	$144.38^{+0.98}_{-1.0}$	$\sigma_8(2.33)$	0.3116	$0.296^{+0.021}_{-0.036}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04099	$1.04091^{+0.00092}_{-0.00093}$	f_{2000}^{143}	30.2	32^{+6}_{-6}
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.879	$13.871^{+0.090}_{-0.094}$	$f_{2000}^{143 \times 217}$	33.18	34^{+4}_{-4}
H_0	67.50	$65.7^{+3.4}_{-4.5}$	z_{drag}	1059.47	$1059.28^{+0.92}_{-0.94}$	f_{2000}^{217}	107.60	$108.6^{+4.0}_{-3.9}$
Ω_Λ	0.687	$0.663^{+0.048}_{-0.065}$	r_{drag}	147.22	$147.15^{+0.95}_{-0.99}$	χ_{small}^2	395.87	$396.9 (\nu: 1.4)$
Ω_m	0.313	$0.337^{+0.065}_{-0.048}$	k_D	0.14057	$0.1406^{+0.0010}_{-0.00099}$	χ_{lowl}^2	23.66	$23.9 (\nu: 0.8)$
$\Omega_m h^2$	0.1426	$0.1450^{+0.0067}_{-0.0058}$	$100\theta_D$	0.16102	$0.16112^{+0.00053}_{-0.00052}$	χ_{plik}^2	758.1	$772.5 (\nu: 16.3)$
$\Omega_\nu h^2$	0.00001	< 0.00577	z_{eq}	3408	3419^{+99}_{-97}	χ_{prior}^2	1.3	$7.3 (\nu: 6.7)$
$\Omega_m h^3$	0.09626	$0.0952^{+0.0019}_{-0.0027}$	k_{eq}	0.010401	$0.01044^{+0.00030}_{-0.00030}$	χ_{CMB}^2	1177.6	$1193.4 (\nu: 16.9)$
σ_8	0.825	$0.789^{+0.050}_{-0.079}$	$100\theta_{eq}$	0.8116	$0.809^{+0.018}_{-0.018}$			
S_8	0.8426	$0.834^{+0.048}_{-0.050}$	$100\theta_{s,eq}$	0.4486	$0.4476^{+0.0094}_{-0.0091}$			

Best-fit $\chi_{eff}^2 = 1178.95$; $\Delta\chi_{eff}^2 = -0.62$; $\bar{\chi}_{eff}^2 = 1200.74$; $\Delta\bar{\chi}_{eff}^2 = 1.16$; $R - 1 = 0.00818$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ -0.00) commander_dx12_v3_2_29: 23.66 (Δ 0.06) plik_rd12_HM_v22_TT: 758.09 (Δ -0.66)

6.2 base_mnu_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02206^{+0.00046}_{-0.00049} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.457^{+0.026}_{-0.027} \quad (+0.0\sigma)$	$H(0.15)$	$71.3^{+3.0}_{-3.9} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1209^{+0.0044}_{-0.0043} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.601^{+0.035}_{-0.042} \quad (+0.0\sigma)$	$D_M(0.15)$	$658^{+42}_{-31} \quad (-0.0\sigma)$
$100\theta_{MC}$	$1.04065^{+0.00098}_{-0.0010} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.974^{+0.056}_{-0.074} \quad (+0.0\sigma)$	$H(0.38)$	$81.8^{+2.2}_{-2.9} \quad (+0.0\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{drag} h$	$96.8^{+5.5}_{-7.0} \quad (+0.0\sigma)$	$D_M(0.38)$	$1563^{+84}_{-62} \quad (-0.0\sigma)$
Σm_ν [eV]	$< 0.535 \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.072}_{-0.073} \quad (+0.1\sigma)$	$H(0.51)$	$88.7^{+1.8}_{-2.4} \quad (+0.0\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.028}_{-0.025} \quad (+0.2\sigma)$	z_{re}	$< 8.84 \quad (+0.2\sigma)$	$D_M(0.51)$	$2021^{+98}_{-72} \quad (-0.0\sigma)$
n_s	$0.962^{+0.012}_{-0.012} \quad (+0.0\sigma)$	$10^9 A_s$	$2.098^{+0.058}_{-0.053} \quad (+0.2\sigma)$	$H(0.61)$	$94.5^{+1.5}_{-2.0} \quad (+0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.027}_{-0.027} \quad (-0.0\sigma)$	$D_M(0.61)$	$2349^{+110}_{-78} \quad (-0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1234^{+30}_{-29} \quad (-0.0\sigma)$	$H(2.33)$	$237.5^{+3.9}_{-3.5} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5712^{+80}_{-80} \quad (+0.0\sigma)$	$D_M(2.33)$	$5805^{+110}_{-73} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{810}	$2537^{+27}_{-28} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.024}_{-0.026} \quad (+0.0\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.728^{+0.046}_{-0.076} \quad (+0.0\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.2^{+3.6}_{-3.8} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.026}_{-0.029} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.962^{+0.012}_{-0.012} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.643^{+0.042}_{-0.071} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.24526^{+0.00020}_{-0.00022} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.026}_{-0.033} \quad (+0.0\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24658^{+0.00020}_{-0.00022} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.601^{+0.039}_{-0.068} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$10^5 D/H$	$2.646^{+0.096}_{-0.088} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.025}_{-0.035} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (+0.0\sigma)$	Age/Gyr	$13.89^{+0.24}_{-0.17} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.571^{+0.038}_{-0.066} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.5} \quad (-0.0\sigma)$	z_*	$1090.43^{+0.96}_{-0.94} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.289^{+0.017}_{-0.031} \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.40^{+0.98}_{-1.0} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.296^{+0.020}_{-0.035} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.04092^{+0.00092}_{-0.00093} \quad (+0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.872^{+0.090}_{-0.093} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.0\sigma)$
H_0	$65.8^{+3.4}_{-4.5} \quad (+0.0\sigma)$	z_{drag}	$1059.29^{+0.91}_{-0.92} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.5^{+4.0}_{-3.9} \quad (-0.0\sigma)$
Ω_Λ	$0.663^{+0.048}_{-0.064} \quad (+0.0\sigma)$	r_{drag}	$147.17^{+0.95}_{-0.98} \quad (+0.0\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.1\sigma)$
Ω_m	$0.337^{+0.064}_{-0.048} \quad (-0.0\sigma)$	k_D	$0.1406^{+0.0010}_{-0.00099} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 0.8) \quad (-0.0\sigma)$
$\Omega_m h^2$	$0.1449^{+0.0067}_{-0.0058} \quad (-0.0\sigma)$	$100\theta_D$	$0.16112^{+0.00053}_{-0.00052} \quad (-0.0\sigma)$	χ_{plik}^2	$772.4 \quad (\nu: 16.2) \quad (-0.0\sigma)$
$\Omega_\nu h^2$	$< 0.00575 \quad (+0.0\sigma)$	z_{eq}	$3417^{+98}_{-97} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\Omega_m h^3$	$0.0952^{+0.0019}_{-0.0027} \quad (+0.0\sigma)$	k_{eq}	$0.01043^{+0.00030}_{-0.00030} \quad (-0.0\sigma)$	χ_{CMB}^2	$1193.1 \quad (\nu: 16.5) \quad (-0.0\sigma)$
σ_8	$0.790^{+0.049}_{-0.079} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.810^{+0.018}_{-0.018} \quad (+0.0\sigma)$		
S_8	$0.835^{+0.048}_{-0.050} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4478^{+0.0094}_{-0.0091} \quad (+0.0\sigma)$		

$$\bar{\chi}_{eff}^2 = 1200.49; \Delta \bar{\chi}_{eff}^2 = 1.17; R - 1 = 0.01089$$

6.3 base_mnu_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022395	$0.02235^{+0.00030}_{-0.00030}$ (+1.2 σ)	$\Omega_\nu h^2$	0.00001	< 0.00277 (−0.5 σ)	$100\theta_{\text{eq}}$	0.8131	$0.812^{+0.012}_{-0.012}$ (+0.3 σ)
$\Omega_c h^2$	0.12003	$0.1202^{+0.0028}_{-0.0027}$ (−0.4 σ)	$\Omega_m h^3$	0.09669	$0.0962^{+0.0010}_{-0.0013}$ (+0.8 σ)	$100\theta_{\text{s,eq}}$	0.4493	$0.4489^{+0.0059}_{-0.0060}$ (+0.3 σ)
$100\theta_{\text{MC}}$	1.04095	$1.04089^{+0.00063}_{-0.00063}$ (+0.5 σ)	σ_8	0.8258	$0.807^{+0.030}_{-0.040}$ (+0.5 σ)	$H(0.15)$	73.14	$72.4^{+1.6}_{-1.9}$ (+0.6 σ)
τ	0.0552	$0.055^{+0.016}_{-0.015}$ (+0.4 σ)	S_8	0.8383	$0.833^{+0.033}_{-0.033}$ (−0.1 σ)	$D_{\text{M}}(0.15)$	638.9	646^{+19}_{-16} (−0.6 σ)
Σm_ν [eV]	0.001	< 0.257 (−0.5 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4592	$0.456^{+0.018}_{-0.018}$ (−0.1 σ)	$H(0.38)$	83.23	$82.7^{+1.2}_{-1.5}$ (+0.7 σ)
$\ln(10^{10} A_{\text{s}})$	3.0469	$3.045^{+0.033}_{-0.031}$ (+0.3 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6158	$0.607^{+0.022}_{-0.024}$ (+0.3 σ)	$D_{\text{M}}(0.38)$	1524.2	1539^{+39}_{-33} (−0.6 σ)
n_{s}	0.9668	$0.9646^{+0.0085}_{-0.0089}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	1.0024	$0.986^{+0.034}_{-0.040}$ (+0.4 σ)	$H(0.51)$	89.94	$89.5^{+1.0}_{-1.2}$ (+0.7 σ)
y_{cal}	1.00064	$1.0006^{+0.0049}_{-0.0048}$ (+0.0 σ)	$r_{\text{drag}} h$	99.82	$98.6^{+3.1}_{-3.4}$ (+0.6 σ)	$D_{\text{M}}(0.51)$	1974.8	1993^{+46}_{-39} (−0.6 σ)
A_{217}^{CIB}	44.8	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.454	$2.446^{+0.055}_{-0.056}$ (−0.1 σ)	$H(0.61)$	95.55	$95.14^{+0.84}_{-1.0}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.79	—	z_{re}	7.76	$7.7^{+1.6}_{-1.6}$ (+0.3 σ)	$D_{\text{M}}(0.61)$	2298.3	2318^{+50}_{-42} (−0.6 σ)
A_{143}^{tSZ}	6.98	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	$10^9 A_{\text{s}}$	2.105	$2.102^{+0.070}_{-0.065}$ (+0.3 σ)	$H(2.33)$	236.28	$236.9^{+2.0}_{-2.0}$ (−0.4 σ)
A_{100}^{PS}	246	259^{+50}_{-50} (−0.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8851	$1.884^{+0.023}_{-0.023}$ (−0.1 σ)	$D_{\text{M}}(2.33)$	5749.9	5770^{+50}_{-40} (−0.7 σ)
A_{143}^{PS}	51.9	46^{+20}_{-20} (−0.5 σ)	D_{40}	1228.3	1232^{+25}_{-25} (−0.1 σ)	$f\sigma_8(0.15)$	0.4633	$0.460^{+0.017}_{-0.017}$ (−0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	56.3	43^{+20}_{-20} (−0.2 σ)	D_{220}	5730	5732^{+75}_{-76} (+0.5 σ)	$\sigma_8(0.15)$	0.7632	$0.745^{+0.028}_{-0.039}$ (+0.5 σ)
A_{217}^{PS}	123.6	115^{+20}_{-20} (−0.0 σ)	D_{810}	2542.2	2540^{+26}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4823	$0.477^{+0.016}_{-0.017}$ (+0.3 σ)
A^{kSZ}	0.01	< 8.08 (−0.2 σ)	D_{1420}	818.9	$817.4^{+9.2}_{-9.3}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6766	$0.660^{+0.026}_{-0.036}$ (+0.5 σ)
A_{100}^{dustTT}	8.82	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	231.68	$230.9^{+3.0}_{-3.1}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4811	$0.475^{+0.016}_{-0.017}$ (+0.3 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9668	$0.9646^{+0.0085}_{-0.0089}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6332	$0.617^{+0.024}_{-0.034}$ (+0.5 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.6^{+6.6}_{-6.6}$ (+0.1 σ)	Y_{P}	0.245405	$0.24539^{+0.00011}_{-0.00012}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4761	$0.469^{+0.015}_{-0.018}$ (+0.4 σ)
A_{217}^{dustTT}	95.7	94^{+10}_{-10} (+0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246732	$0.24671^{+0.00011}_{-0.00012}$ (+1.2 σ)	$\sigma_8(0.61)$	0.6025	$0.587^{+0.023}_{-0.033}$ (+0.5 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.073}$	10^5D/H	2.581	$2.590^{+0.057}_{-0.054}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.3029	$0.296^{+0.011}_{-0.015}$ (+0.5 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.057}$	Age/Gyr	13.766	$13.81^{+0.11}_{-0.090}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3128	$0.305^{+0.012}_{-0.018}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	z_*	1089.89	$1089.97^{+0.59}_{-0.55}$ (−1.0 σ)	f_{2000}^{143}	28.2	30^{+5}_{-5} (−0.7 σ)
A_{143}^{dustTE}	0.225	$0.23^{+0.10}_{-0.11}$	r_*	144.41	$144.38^{+0.60}_{-0.61}$ (−0.0 σ)	$f_{2000}^{143 \times 217}$	31.68	32^{+4}_{-4} (−0.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.67^{+0.15}_{-0.16}$	$100\theta_*$	1.04110	$1.04110^{+0.00060}_{-0.00060}$ (+0.4 σ)	f_{2000}^{217}	106.25	$107.1^{+3.5}_{-3.5}$ (−0.8 σ)
A_{217}^{dustTE}	2.08	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.871	$13.868^{+0.056}_{-0.057}$ (−0.1 σ)	χ_{simall}^2	396.20	397.2 (ν : 2.0) (+0.1 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.01	$1059.91^{+0.60}_{-0.59}$ (+1.3 σ)	χ_{lowl}^2	23.24	23.56 (ν : 0.5) (−0.3 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.06	$147.05^{+0.59}_{-0.61}$ (−0.2 σ)	χ_{plik}^2	2343.8	2360.2 (ν : 18.0) (+278.3 σ)
H_0	67.88	$67.0^{+1.9}_{-2.2}$ (+0.6 σ)	k_{D}	0.14091	$0.14090^{+0.00064}_{-0.00062}$ (+0.6 σ)	χ_{prior}^2	1.5	11.5 (ν : 10.2) (+1.1 σ)
Ω_Λ	0.6909	$0.680^{+0.025}_{-0.029}$ (+0.6 σ)	$100\theta_{\text{D}}$	0.160729	$0.16078^{+0.00034}_{-0.00034}$ (−1.3 σ)	χ_{CMB}^2	2763.2	2780.9 (ν : 18.3) (+273.2 σ)
Ω_{m}	0.3091	$0.320^{+0.029}_{-0.025}$ (−0.6 σ)	z_{eq}	3404	3408^{+63}_{-61} (−0.2 σ)			
$\Omega_{\text{m}} h^2$	0.14244	$0.1436^{+0.0034}_{-0.0033}$ (−0.4 σ)	k_{eq}	0.010388	$0.01040^{+0.00019}_{-0.00019}$ (−0.2 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2764.74$; $\Delta\chi_{\text{eff}}^2 = -1.03$; $\bar{\chi}_{\text{eff}}^2 = 2792.41$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.65$; $R - 1 = 0.01278$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.20 (Δ 0.15) commander_dx12_v3.2.29: 23.24 (Δ -0.01) plik_rd12_HM_v22b_TTTEEE: 2343.80 (Δ -0.85)

6.4 base_mnu_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022502	$0.02250^{+0.00027}_{-0.00028}$ (+1.8 σ)	$\Omega_\nu h^2$	0.00001	< 0.00104 (−0.8 σ)	$100\theta_{\text{eq}}$	0.8194	$0.8193^{+0.0099}_{-0.010}$ (+1.1 σ)
$\Omega_c h^2$	0.11856	$0.1186^{+0.0024}_{-0.0023}$ (−1.1 σ)	$\Omega_m h^3$	0.09671	$0.09662^{+0.00065}_{-0.00068}$ (+1.1 σ)	$100\theta_{\text{s,eq}}$	0.4525	$0.4524^{+0.0051}_{-0.0053}$ (+1.0 σ)
$100\theta_{\text{MC}}$	1.04112	$1.04114^{+0.00055}_{-0.00057}$ (+1.0 σ)	σ_8	0.8207	$0.815^{+0.019}_{-0.020}$ (+0.7 σ)	$H(0.15)$	73.72	$73.50^{+0.99}_{-1.1}$ (+1.2 σ)
τ	0.0561	$0.057^{+0.016}_{-0.015}$ (+0.7 σ)	S_8	0.8209	$0.820^{+0.029}_{-0.026}$ (−0.6 σ)	$D_{\text{M}}(0.15)$	633.2	$635^{+10}_{-9.6}$ (−1.2 σ)
Σm_ν [eV]	0.0009	< 0.0970 (−0.8 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4496	$0.449^{+0.016}_{-0.014}$ (−0.6 σ)	$H(0.38)$	83.65	$83.48^{+0.74}_{-0.79}$ (+1.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.0451	$3.047^{+0.035}_{-0.032}$ (+0.4 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6075	$0.605^{+0.016}_{-0.016}$ (+0.2 σ)	$D_{\text{M}}(0.38)$	1512.9	1517^{+21}_{-19} (−1.2 σ)
n_{s}	0.9695	$0.9686^{+0.0082}_{-0.0080}$ (+1.2 σ)	$\sigma_8/h^{0.5}$	0.9912	$0.987^{+0.024}_{-0.025}$ (+0.4 σ)	$H(0.51)$	90.26	$90.13^{+0.60}_{-0.64}$ (+1.3 σ)
y_{cal}	1.00057	$1.0006^{+0.0048}_{-0.0049}$ (+0.0 σ)	$r_{\text{drag}} h$	101.00	$100.6^{+1.9}_{-2.1}$ (+1.2 σ)	$D_{\text{M}}(0.51)$	1961.6	1967^{+25}_{-23} (−1.2 σ)
A_{217}^{CIB}	45.7	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.431	$2.431^{+0.053}_{-0.055}$ (−0.5 σ)	$H(0.61)$	95.80	$95.69^{+0.49}_{-0.57}$ (+1.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.65	—	z_{re}	7.80	$7.9^{+1.5}_{-1.6}$ (+0.5 σ)	$D_{\text{M}}(0.61)$	2284.0	2290^{+27}_{-25} (−1.2 σ)
A_{143}^{tSZ}	7.17	$5.5^{+3.8}_{-3.7}$ (+0.3 σ)	$10^9 A_{\text{s}}$	2.101	$2.105^{+0.074}_{-0.066}$ (+0.4 σ)	$H(2.33)$	235.43	$235.6^{+1.5}_{-1.4}$ (−1.0 σ)
A_{100}^{PS}	247	257^{+50}_{-60} (−0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8782	$1.878^{+0.022}_{-0.022}$ (−0.6 σ)	$D_{\text{M}}(2.33)$	5739.4	5745^{+25}_{-23} (−1.2 σ)
A_{143}^{PS}	49.5	45^{+20}_{-20} (−0.7 σ)	D_{40}	1222.5	1225^{+24}_{-24} (−0.6 σ)	$f\sigma_8(0.15)$	0.4544	$0.454^{+0.015}_{-0.014}$ (−0.5 σ)
$A_{143 \times 217}^{\text{PS}}$	52.6	42^{+20}_{-20} (−0.2 σ)	D_{220}	5740	5742^{+72}_{-78} (+0.7 σ)	$\sigma_8(0.15)$	0.7593	$0.754^{+0.018}_{-0.018}$ (+0.8 σ)
A_{217}^{PS}	121.7	115^{+20}_{-20} (−0.0 σ)	D_{810}	2540.1	2539^{+25}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.4754	$0.474^{+0.013}_{-0.012}$ (+0.1 σ)
A^{kSZ}	0.00	< 8.12 (−0.3 σ)	D_{1420}	819.1	$818.3^{+9.0}_{-9.6}$ (+0.8 σ)	$\sigma_8(0.38)$	0.6741	$0.669^{+0.015}_{-0.017}$ (+0.8 σ)
A_{100}^{dustTT}	8.84	$8.9^{+3.7}_{-3.6}$ (−0.0 σ)	D_{2000}	231.79	$231.5^{+3.0}_{-3.2}$ (+1.2 σ)	$f\sigma_8(0.51)$	0.4752	$0.474^{+0.012}_{-0.012}$ (+0.3 σ)
A_{143}^{dustTT}	11.08	$10.9^{+3.4}_{-3.3}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9695	$0.9686^{+0.0082}_{-0.0080}$ (+1.2 σ)	$\sigma_8(0.51)$	0.6313	$0.627^{+0.014}_{-0.016}$ (+0.8 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.4^{+6.6}_{-6.9}$ (+0.0 σ)	Y_{P}	0.245445	$0.245442^{+0.000099}_{-0.00011}$ (+1.7 σ)	$f\sigma_8(0.61)$	0.4711	$0.469^{+0.011}_{-0.011}$ (+0.4 σ)
A_{217}^{dustTT}	95.6	93^{+10}_{-10} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246772	$0.24677^{+0.00010}_{-0.00011}$ (+1.7 σ)	$\sigma_8(0.61)$	0.6010	$0.597^{+0.014}_{-0.015}$ (+0.8 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.073}_{-0.071}$	10^5D/H	2.562	$2.563^{+0.052}_{-0.048}$ (−1.8 σ)	$f\sigma_8(2.33)$	0.3025	$0.3008^{+0.0065}_{-0.0069}$ (+0.8 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.134^{+0.058}_{-0.058}$	Age/Gyr	13.743	$13.756^{+0.056}_{-0.052}$ (−1.2 σ)	$\sigma_8(2.33)$	0.3128	$0.3106^{+0.0072}_{-0.0079}$ (+0.9 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.484	$0.48^{+0.16}_{-0.17}$	z_*	1089.624	$1089.64^{+0.48}_{-0.46}$ (−1.7 σ)	f_{2000}^{143}	28.1	29^{+5}_{-5} (−1.0 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	r_*	144.71	$144.70^{+0.51}_{-0.56}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	31.58	$31.7^{+3.5}_{-3.3}$ (−1.1 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.67^{+0.15}_{-0.15}$	$100\theta_*$	1.04127	$1.04130^{+0.00054}_{-0.00057}$ (+0.8 σ)	f_{2000}^{217}	106.14	$106.6^{+3.5}_{-3.2}$ (−1.0 σ)
A_{217}^{dustTE}	2.07	$2.08^{+0.51}_{-0.50}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.897	$13.896^{+0.050}_{-0.052}$ (+0.6 σ)	χ_{small}^2	396.23	397.5 (ν : 2.4) (+0.3 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.12	$1060.12^{+0.57}_{-0.61}$ (+1.8 σ)	χ_{lowl}^2	22.73	22.98 (ν : 0.4) (−0.7 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.33	$147.33^{+0.56}_{-0.55}$ (+0.4 σ)	χ_{plik}^2	2345.3	2360.3 (ν : 17.5) (+278.3 σ)
H_0	68.55	$68.3^{+1.1}_{-1.2}$ (+1.2 σ)	k_{D}	0.14071	$0.14071^{+0.00061}_{-0.00066}$ (+0.3 σ)	χ_{H073p45}^2	8.71	9.8 (ν : 2.8)
Ω_Λ	0.6998	$0.697^{+0.015}_{-0.016}$ (+1.1 σ)	$100\theta_{\text{D}}$	0.160656	$0.16067^{+0.00034}_{-0.00033}$ (−1.7 σ)	χ_{prior}^2	1.7	11.3 (ν : 10.2) (+1.1 σ)
Ω_{m}	0.3002	$0.303^{+0.016}_{-0.015}$ (−1.1 σ)	z_{eq}	3371	3372^{+55}_{-52} (−1.0 σ)	χ_{CMB}^2	2764.2	2780.7 (ν : 17.6) (+273.2 σ)
$\Omega_{\text{m}} h^2$	0.14107	$0.1415^{+0.0025}_{-0.0022}$ (−1.1 σ)	k_{eq}	0.010288	$0.01029^{+0.00017}_{-0.00016}$ (−1.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2774.59$; $\Delta\chi_{\text{eff}}^2 = -3.35$; $\bar{\chi}_{\text{eff}}^2 = 2801.83$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.33$; $R - 1 = 0.06998$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.23 (Δ -0.24) commander_dx12.v3.2.29: 22.73 (Δ 0.19) plik_rd12_HM_v22b_TTTEEE: 2345.26 (Δ -1.50) Hubble
- H073p45: 8.71 (Δ -1.88)

6.5 base_mnu_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02235^{+0.00030}_{-0.00030} \quad (+1.3\sigma)$	$\Omega_\nu h^2$	$< 0.00276 \quad (-0.5\sigma)$	$100\theta_{\text{eq}}$	$0.812^{+0.012}_{-0.012} \quad (+0.3\sigma)$
$\Omega_c h^2$	$0.1202^{+0.0028}_{-0.0027} \quad (-0.4\sigma)$	$\Omega_m h^3$	$0.0962^{+0.0010}_{-0.0012} \quad (+0.8\sigma)$	$100\theta_{\text{s,eq}}$	$0.4490^{+0.0059}_{-0.0060} \quad (+0.3\sigma)$
$100\theta_{\text{MC}}$	$1.04090^{+0.00063}_{-0.00063} \quad (+0.5\sigma)$	σ_8	$0.808^{+0.030}_{-0.040} \quad (+0.5\sigma)$	$H(0.15)$	$72.4^{+1.6}_{-1.9} \quad (+0.6\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.5\sigma)$	S_8	$0.833^{+0.033}_{-0.032} \quad (-0.0\sigma)$	$D_{\text{M}}(0.15)$	$646^{+19}_{-16} \quad (-0.6\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.257 \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.456^{+0.018}_{-0.018} \quad (-0.0\sigma)$	$H(0.38)$	$82.7^{+1.2}_{-1.5} \quad (+0.7\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.047^{+0.029}_{-0.027} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.607^{+0.022}_{-0.024} \quad (+0.3\sigma)$	$D_{\text{M}}(0.38)$	$1539^{+39}_{-33} \quad (-0.6\sigma)$
n_{s}	$0.9647^{+0.0085}_{-0.0089} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.034}_{-0.040} \quad (+0.4\sigma)$	$H(0.51)$	$89.5^{+1.0}_{-1.2} \quad (+0.7\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	$98.6^{+3.1}_{-3.4} \quad (+0.6\sigma)$	$D_{\text{M}}(0.51)$	$1993^{+46}_{-39} \quad (-0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.054}_{-0.054} \quad (-0.0\sigma)$	$H(0.61)$	$95.15^{+0.84}_{-1.0} \quad (+0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 9.01 \quad (+0.4\sigma)$	$D_{\text{M}}(0.61)$	$2318^{+50}_{-42} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.106^{+0.061}_{-0.056} \quad (+0.4\sigma)$	$H(2.33)$	$236.8^{+2.0}_{-2.0} \quad (-0.4\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.884^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\text{M}}(2.33)$	$5770^{+50}_{-40} \quad (-0.7\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1232^{+25}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.017}_{-0.017} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5732^{+74}_{-76} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.028}_{-0.039} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2540^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.016}_{-0.017} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.07 \quad (-0.2\sigma)$	D_{1420}	$817.3^{+9.2}_{-9.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.025}_{-0.036} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$230.9^{+3.1}_{-3.1} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.015}_{-0.017} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.9647^{+0.0085}_{-0.0089} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.024}_{-0.034} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.6}_{-6.6} \quad (+0.1\sigma)$	Y_{P}	$0.24539^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.015}_{-0.018} \quad (+0.4\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.023}_{-0.033} \quad (+0.5\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.074}$	$10^5 \text{D}/\text{H}$	$2.589^{+0.057}_{-0.054} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.011}_{-0.015} \quad (+0.5\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.057}$	Age/Gyr	$13.81^{+0.11}_{-0.090} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.012}_{-0.017} \quad (+0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.96^{+0.58}_{-0.55} \quad (-1.0\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-0.7\sigma)$
A_{143}^{dustTE}	$0.23^{+0.10}_{-0.11}$	r_*	$144.39^{+0.60}_{-0.61} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.15}_{-0.16}$	$100\theta_*$	$1.04110^{+0.00060}_{-0.00060} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.1^{+3.5}_{-3.5} \quad (-0.8\sigma)$
A_{217}^{dustTE}	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.869^{+0.055}_{-0.057} \quad (-0.0\sigma)$	χ_{simall}^2	$397.2 \quad (\nu: 2.1) \quad (+0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.91^{+0.59}_{-0.59} \quad (+1.3\sigma)$	χ_{lowl}^2	$23.57 \quad (\nu: 0.5) \quad (-0.3\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.05^{+0.59}_{-0.61} \quad (-0.2\sigma)$	χ_{plik}^2	$2360.0 \quad (\nu: 17.8) \quad (+278.3\sigma)$
H_0	$67.0^{+1.9}_{-2.2} \quad (+0.6\sigma)$	k_{D}	$0.14090^{+0.00064}_{-0.00062} \quad (+0.6\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
Ω_Λ	$0.680^{+0.025}_{-0.029} \quad (+0.6\sigma)$	$100\theta_{\text{D}}$	$0.16077^{+0.00034}_{-0.00034} \quad (-1.3\sigma)$	χ_{CMB}^2	$2780.7 \quad (\nu: 18.0) \quad (+273.2\sigma)$
Ω_{m}	$0.320^{+0.029}_{-0.025} \quad (-0.6\sigma)$	z_{eq}	$3407^{+63}_{-61} \quad (-0.2\sigma)$		
$\Omega_{\text{m}} h^2$	$0.1435^{+0.0034}_{-0.0033} \quad (-0.4\sigma)$	k_{eq}	$0.01040^{+0.00019}_{-0.00019} \quad (-0.3\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2792.20; \Delta \bar{\chi}_{\text{eff}}^2 = 0.67; R - 1 = 0.01347$$

6.6 base_mnu_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02250^{+0.00026}_{-0.00028} \quad (+1.9\sigma)$	$\Omega_\nu h^2$	$< 0.00104 \quad (-0.8\sigma)$	$100\theta_{\text{eq}}$	$0.8194^{+0.0098}_{-0.010} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0024}_{-0.0023} \quad (-1.1\sigma)$	$\Omega_m h^3$	$0.09662^{+0.00065}_{-0.00068} \quad (+1.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.4525^{+0.0051}_{-0.0053} \quad (+1.0\sigma)$
$100\theta_{\text{MC}}$	$1.04114^{+0.00055}_{-0.00056} \quad (+1.0\sigma)$	σ_8	$0.816^{+0.019}_{-0.019} \quad (+0.7\sigma)$	$H(0.15)$	$73.51^{+0.99}_{-1.1} \quad (+1.2\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.8\sigma)$	S_8	$0.820^{+0.029}_{-0.026} \quad (-0.6\sigma)$	$D_{\text{M}}(0.15)$	$635^{+10}_{-9.6} \quad (-1.2\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.0970 \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.449^{+0.016}_{-0.014} \quad (-0.6\sigma)$	$H(0.38)$	$83.49^{+0.74}_{-0.79} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.048^{+0.031}_{-0.028} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.605^{+0.016}_{-0.016} \quad (+0.3\sigma)$	$D_{\text{M}}(0.38)$	$1517^{+21}_{-19} \quad (-1.2\sigma)$
n_{s}	$0.9687^{+0.0081}_{-0.0081} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.024}_{-0.024} \quad (+0.4\sigma)$	$H(0.51)$	$90.13^{+0.60}_{-0.64} \quad (+1.3\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0049} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	$100.7^{+1.9}_{-2.1} \quad (+1.2\sigma)$	$D_{\text{M}}(0.51)$	$1966^{+25}_{-23} \quad (-1.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.053}_{-0.053} \quad (-0.4\sigma)$	$H(0.61)$	$95.69^{+0.50}_{-0.53} \quad (+1.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.6\sigma)$	$D_{\text{M}}(0.61)$	$2289^{+27}_{-25} \quad (-1.2\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.9} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.108^{+0.066}_{-0.060} \quad (+0.5\sigma)$	$H(2.33)$	$235.6^{+1.5}_{-1.4} \quad (-1.0\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.878^{+0.022}_{-0.022} \quad (-0.6\sigma)$	$D_{\text{M}}(2.33)$	$5745^{+25}_{-23} \quad (-1.2\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.7\sigma)$	D_{40}	$1225^{+24}_{-24} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.014} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5742^{+73}_{-78} \quad (+0.7\sigma)$	$\sigma_8(0.15)$	$0.755^{+0.017}_{-0.018} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2539^{+26}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.012} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.10 \quad (-0.3\sigma)$	D_{1420}	$818.3^{+9.1}_{-9.7} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.670^{+0.015}_{-0.016} \quad (+0.8\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.0}_{-3.2} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.011} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.3} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.9687^{+0.0081}_{-0.0081} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.014}_{-0.015} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.6}_{-6.8} \quad (+0.0\sigma)$	Y_{P}	$0.245443^{+0.000098}_{-0.00011} \quad (+1.7\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.011}_{-0.011} \quad (+0.4\sigma)$
A_{217}^{dustTT}	$93^{+20}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.246770^{+0.000098}_{-0.00011} \quad (+1.7\sigma)$	$\sigma_8(0.61)$	$0.597^{+0.014}_{-0.014} \quad (+0.8\sigma)$
A_{100}^{dustTE}	$0.114^{+0.073}_{-0.071}$	$10^5 \text{D}/\text{H}$	$2.562^{+0.052}_{-0.047} \quad (-1.8\sigma)$	$f\sigma_8(2.33)$	$0.3009^{+0.0064}_{-0.0066} \quad (+0.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.059}_{-0.058}$	Age/Gyr	$13.756^{+0.056}_{-0.051} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3108^{+0.0071}_{-0.0076} \quad (+0.9\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.17}$	z_*	$1089.63^{+0.48}_{-0.46} \quad (-1.7\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-1.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_*	$144.71^{+0.51}_{-0.56} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$31.7^{+3.5}_{-3.2} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.15}_{-0.15}$	$100\theta_*$	$1.04130^{+0.00055}_{-0.00057} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.5}_{-3.2} \quad (-1.0\sigma)$
A_{217}^{dustTE}	$2.07^{+0.50}_{-0.50}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.897^{+0.050}_{-0.052} \quad (+0.6\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.5) \quad (+0.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.13^{+0.57}_{-0.58} \quad (+1.8\sigma)$	χ_{lowl}^2	$22.98 \quad (\nu: 0.4) \quad (-0.7\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.33^{+0.56}_{-0.55} \quad (+0.4\sigma)$	χ_{plik}^2	$2360.1 \quad (\nu: 17.2) \quad (+278.3\sigma)$
H_0	$68.3^{+1.1}_{-1.2} \quad (+1.2\sigma)$	k_{D}	$0.14071^{+0.00061}_{-0.00067} \quad (+0.3\sigma)$	χ_{H073p45}^2	$9.7 \quad (\nu: 2.7)$
Ω_Λ	$0.697^{+0.015}_{-0.016} \quad (+1.1\sigma)$	$100\theta_{\text{D}}$	$0.16067^{+0.00034}_{-0.00033} \quad (-1.7\sigma)$	χ_{prior}^2	$11.3 \quad (\nu: 10.2) \quad (+1.1\sigma)$
Ω_{m}	$0.303^{+0.016}_{-0.015} \quad (-1.1\sigma)$	z_{eq}	$3371^{+55}_{-52} \quad (-1.0\sigma)$	χ_{CMB}^2	$2780.6 \quad (\nu: 17.3) \quad (+273.2\sigma)$
$\Omega_{\text{m}} h^2$	$0.1414^{+0.0025}_{-0.0022} \quad (-1.1\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00016} \quad (-1.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2801.63; \Delta \bar{\chi}_{\text{eff}}^2 = -2.26; R - 1 = 0.07310$$

6.7 base_mnu_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022145	$0.02205^{+0.00048}_{-0.00051}$ (+0.0 σ)	S_8	0.841	$0.833^{+0.049}_{-0.051}$ (−0.1 σ)	$100\theta_{s,eq}$	0.4485	$0.4477^{+0.0093}_{-0.0093}$ (+0.0 σ)
$\Omega_c h^2$	0.12051	$0.1210^{+0.0045}_{-0.0043}$ (−0.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4607	$0.456^{+0.027}_{-0.028}$ (−0.1 σ)	$H(0.15)$	72.77	$71.2^{+2.9}_{-4.0}$ (−0.0 σ)
$100\theta_{MC}$	1.04085	$1.04070^{+0.00098}_{-0.0010}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6158	$0.599^{+0.036}_{-0.045}$ (−0.1 σ)	$D_M(0.15)$	642.4	659^{+44}_{-31} (+0.0 σ)
τ	0.0507	$0.052^{+0.017}_{-0.015}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	1.002	$0.971^{+0.058}_{-0.079}$ (−0.1 σ)	$H(0.38)$	82.92	$81.7^{+2.2}_{-3.0}$ (−0.0 σ)
Σm_ν [eV]	0.001	< 0.569 (+0.0 σ)	$r_{drag} h$	99.3	$96.7^{+5.5}_{-7.2}$ (−0.0 σ)	$D_M(0.38)$	1532	1564^{+87}_{-61} (+0.0 σ)
$\ln(10^{10} A_s)$	3.0361	$3.039^{+0.034}_{-0.031}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.454	$2.444^{+0.075}_{-0.074}$ (−0.1 σ)	$H(0.51)$	89.66	$88.7^{+1.8}_{-2.5}$ (−0.0 σ)
n_s	0.9637	$0.962^{+0.012}_{-0.012}$ (+0.1 σ)	z_{re}	7.36	$7.5^{+1.6}_{-1.7}$ (+0.0 σ)	$D_M(0.51)$	1984	2022^{+100}_{-72} (+0.0 σ)
y_{cal}	1.00034	$1.0005^{+0.0049}_{-0.0049}$ (−0.0 σ)	$10^9 A_s$	2.082	$2.088^{+0.071}_{-0.065}$ (−0.1 σ)	$H(0.61)$	95.30	$94.5^{+1.5}_{-2.1}$ (−0.0 σ)
A_{100}^{PS}	239.3	244^{+50}_{-50} (−0.7 σ)	$10^9 A_s e^{-2\tau}$	1.8816	$1.883^{+0.027}_{-0.027}$ (−0.2 σ)	$D_M(0.61)$	2308	2350^{+110}_{-78} (+0.0 σ)
A_{143}^{PS}	38.7	42^{+20}_{-20} (−1.0 σ)	D_{40}	1229.4	1230^{+30}_{-29} (−0.3 σ)	$H(2.33)$	236.34	$237.6^{+4.0}_{-3.5}$ (+0.0 σ)
A_{217}^{PS}	99.7	101^{+30}_{-30} (−1.4 σ)	D_{220}	5703	5701^{+81}_{-83} (−0.3 σ)	$D_M(2.33)$	5763	5806^{+110}_{-74} (+0.0 σ)
A_{217}^{CIB}	44.5	41^{+10}_{-10} (−1.0 σ)	D_{810}	2533.4	2535^{+28}_{-28} (−0.2 σ)	$f\sigma_8(0.15)$	0.4644	$0.460^{+0.025}_{-0.027}$ (−0.1 σ)
A_{143}^{tSZ}	5.47	< 7.25 (−0.7 σ)	D_{1420}	813.9	814^{+10}_{-10} (−0.1 σ)	$\sigma_8(0.15)$	0.760	$0.725^{+0.048}_{-0.082}$ (−0.0 σ)
$r_{143 \times 217}^{PS}$	0.578	$0.65^{+0.25}_{-0.25}$	D_{2000}	229.58	$229.1^{+3.8}_{-3.9}$ (−0.0 σ)	$f\sigma_8(0.38)$	0.4824	$0.472^{+0.027}_{-0.031}$ (−0.1 σ)
$r_{143 \times 217}^{CIB}$	0.71	—	$n_{s,0.002}$	0.9637	$0.962^{+0.012}_{-0.012}$ (+0.1 σ)	$\sigma_8(0.38)$	0.673	$0.641^{+0.044}_{-0.076}$ (−0.0 σ)
$\xi^{tSZ \times CIB}$	0.04	—	Y_P	0.245303	$0.24526^{+0.00020}_{-0.00024}$ (+0.0 σ)	$f\sigma_8(0.51)$	0.4807	$0.468^{+0.027}_{-0.035}$ (−0.1 σ)
A^{kSZ}	1.8	—	Y_P^{BBN}	0.246629	$0.24658^{+0.00020}_{-0.00024}$ (+0.0 σ)	$\sigma_8(0.51)$	0.630	$0.599^{+0.041}_{-0.073}$ (−0.0 σ)
A_{100}^{dust}	1.014	$1.01^{+0.38}_{-0.37}$	$10^5 D/H$	2.629	$2.65^{+0.10}_{-0.090}$ (−0.0 σ)	$f\sigma_8(0.61)$	0.4755	$0.462^{+0.027}_{-0.037}$ (−0.1 σ)
A_{143}^{dust}	0.980	$0.98^{+0.34}_{-0.35}$	Age/Gyr	13.796	$13.90^{+0.25}_{-0.17}$ (+0.0 σ)	$\sigma_8(0.61)$	0.599	$0.569^{+0.040}_{-0.070}$ (−0.0 σ)
A_{217}^{dust}	0.965	$0.97^{+0.20}_{-0.20}$	z_*	1090.25	$1090.44^{+0.99}_{-0.95}$ (−0.0 σ)	$f\sigma_8(2.33)$	0.3011	$0.288^{+0.018}_{-0.033}$ (−0.0 σ)
$A_{143 \times 217}^{dust}$	1.011	$1.03^{+0.32}_{-0.31}$	r_*	144.48	$144.39^{+0.97}_{-1.0}$ (+0.0 σ)	$\sigma_8(2.33)$	0.3108	$0.295^{+0.021}_{-0.038}$ (−0.0 σ)
c_{100}	0.99748	$0.9975^{+0.0020}_{-0.0021}$ (−3.5 σ)	$100\theta_*$	1.04102	$1.04097^{+0.00092}_{-0.00093}$ (+0.1 σ)	f_{2000}^{143}	30.8	31^{+6}_{-6} (−0.1 σ)
c_{217}	1.00139	$1.0013^{+0.0031}_{-0.0031}$ (+4.8 σ)	$D_M(z_*)/\text{Gpc}$	13.878	$13.871^{+0.090}_{-0.093}$ (−0.0 σ)	f_{2000}^{217}	107.44	$108.0^{+4.3}_{-4.2}$ (−0.3 σ)
H_0	67.47	$65.7^{+3.4}_{-4.7}$ (−0.0 σ)	z_{drag}	1059.44	$1059.29^{+0.95}_{-0.96}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	32.87	34^{+5}_{-4} (−0.3 σ)
Ω_Λ	0.687	$0.662^{+0.047}_{-0.067}$ (−0.0 σ)	r_{drag}	147.22	$147.15^{+0.96}_{-0.99}$ (+0.0 σ)	χ_{simall}^2	395.71	397.0 (ν : 1.6) (+0.0 σ)
Ω_m	0.313	$0.338^{+0.067}_{-0.047}$ (+0.0 σ)	k_D	0.14056	$0.1406^{+0.0010}_{-0.0010}$ (+0.0 σ)	χ_{lowl}^2	23.54	23.6 (ν : 0.8) (−0.2 σ)
$\Omega_m h^2$	0.1427	$0.1450^{+0.0069}_{-0.0057}$ (+0.0 σ)	$100\theta_D$	0.16105	$0.16112^{+0.00055}_{-0.00054}$ (−0.0 σ)	$\chi_{CamSpec}^2$	7049.7	7064.5 (ν : 16.3)
$\Omega_\nu h^2$	0.00001	< 0.00611 (+0.0 σ)	z_{eq}	3409	3418^{+100}_{-96} (−0.0 σ)	χ_{prior}^2	2.3	7.7 (ν : 6.1) (+0.1 σ)
$\Omega_m h^3$	0.09626	$0.0952^{+0.0019}_{-0.0028}$ (−0.0 σ)	k_{eq}	0.010405	$0.01043^{+0.00031}_{-0.00029}$ (−0.0 σ)	χ_{CMB}^2	7469.0	7485.1 (ν : 16.9) (+1082.8 σ)
σ_8	0.823	$0.787^{+0.051}_{-0.085}$ (−0.0 σ)	$100\theta_{eq}$	0.8113	$0.810^{+0.018}_{-0.018}$ (+0.0 σ)			

Best-fit $\chi_{eff}^2 = 7471.23$; $\Delta\chi_{eff}^2 = -0.51$; $\bar{\chi}_{eff}^2 = 7492.77$; $\Delta\bar{\chi}_{eff}^2 = 1.23$; $R - 1 = 0.00611$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.71 (Δ -0.12) commander_dx12_v3.2.29: 23.54 (Δ 0.14) CamSpec like_10.7HM: 7049.70 (Δ -0.64)

6.8 base_mnu_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02206^{+0.00048}_{-0.00052} \quad (+0.1\sigma)$	S_8	$0.833^{+0.049}_{-0.050} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	$0.4479^{+0.0093}_{-0.0092} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1209^{+0.0045}_{-0.0043} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.456^{+0.027}_{-0.027} \quad (-0.1\sigma)$	$H(0.15)$	$71.3^{+3.0}_{-4.0} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.04071^{+0.00098}_{-0.0010} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.599^{+0.036}_{-0.045} \quad (-0.0\sigma)$	$D_M(0.15)$	$658^{+44}_{-31} \quad (-0.0\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.972^{+0.058}_{-0.079} \quad (-0.0\sigma)$	$H(0.38)$	$81.8^{+2.2}_{-3.1} \quad (+0.0\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.572 \quad (+0.0\sigma)$	$r_{\text{drag}} h$	$96.7^{+5.5}_{-7.3} \quad (+0.0\sigma)$	$D_M(0.38)$	$1564^{+87}_{-61} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.029}_{-0.026} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.074}_{-0.074} \quad (-0.1\sigma)$	$H(0.51)$	$88.7^{+1.8}_{-2.5} \quad (+0.0\sigma)$
n_s	$0.962^{+0.012}_{-0.013} \quad (+0.2\sigma)$	z_{re}	$< 8.91 \quad (+0.2\sigma)$	$D_M(0.51)$	$2022^{+100}_{-72} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_s$	$2.095^{+0.061}_{-0.054} \quad (+0.1\sigma)$	$H(0.61)$	$94.5^{+1.5}_{-2.1} \quad (+0.0\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_s e^{-2\tau}$	$1.882^{+0.027}_{-0.027} \quad (-0.2\sigma)$	$D_M(0.61)$	$2349^{+110}_{-78} \quad (-0.0\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	$1230^{+30}_{-29} \quad (-0.3\sigma)$	$H(2.33)$	$237.5^{+4.0}_{-3.5} \quad (-0.0\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{220}	$5701^{+81}_{-83} \quad (-0.3\sigma)$	$D_M(2.33)$	$5806^{+110}_{-74} \quad (-0.0\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{810}	$2535^{+27}_{-28} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.025}_{-0.027} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.27 \quad (-0.6\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.726^{+0.048}_{-0.082} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	D_{2000}	$229.2^{+3.8}_{-3.8} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.027}_{-0.031} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$n_{s,0.002}$	$0.962^{+0.012}_{-0.013} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.642^{+0.043}_{-0.077} \quad (-0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P	$0.24526^{+0.00021}_{-0.00023} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.027}_{-0.035} \quad (-0.0\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24659^{+0.00021}_{-0.00023} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.600^{+0.041}_{-0.073} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.37}$	10^5D/H	$2.64^{+0.10}_{-0.090} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.027}_{-0.037} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	Age/Gyr	$13.90^{+0.25}_{-0.17} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.570^{+0.039}_{-0.071} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1090.42^{+0.99}_{-0.95} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.288^{+0.018}_{-0.033} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.31}$	r_*	$144.40^{+0.96}_{-1.0} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.021}_{-0.038} \quad (-0.0\sigma)$
c_{100}	$0.9974^{+0.0020}_{-0.0021} \quad (-3.5\sigma)$	$100\theta_*$	$1.04098^{+0.00092}_{-0.00093} \quad (+0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.872^{+0.090}_{-0.093} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.0^{+4.3}_{-4.2} \quad (-0.3\sigma)$
H_0	$65.7^{+3.4}_{-4.7} \quad (+0.0\sigma)$	z_{drag}	$1059.30^{+0.98}_{-0.97} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-4} \quad (-0.3\sigma)$
Ω_Λ	$0.663^{+0.047}_{-0.068} \quad (+0.0\sigma)$	r_{drag}	$147.17^{+0.96}_{-0.98} \quad (+0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (-0.0\sigma)$
Ω_m	$0.337^{+0.068}_{-0.047} \quad (-0.0\sigma)$	k_D	$0.1406^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 0.8) \quad (-0.2\sigma)$
$\Omega_m h^2$	$0.1449^{+0.0069}_{-0.0058} \quad (-0.0\sigma)$	$100\theta_D$	$0.16112^{+0.00055}_{-0.00054} \quad (-0.0\sigma)$	χ_{CamSpec}^2	$7064.4 \quad (\nu: 16.1)$
$\Omega_\nu h^2$	$< 0.00615 \quad (+0.0\sigma)$	z_{eq}	$3416^{+99}_{-95} \quad (-0.1\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_m h^3$	$0.0952^{+0.0019}_{-0.0029} \quad (-0.0\sigma)$	k_{eq}	$0.01043^{+0.00031}_{-0.00029} \quad (-0.1\sigma)$	χ_{CMB}^2	$7484.8 \quad (\nu: 16.4) \quad (+1082.8\sigma)$
σ_8	$0.788^{+0.051}_{-0.085} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	$0.810^{+0.018}_{-0.018} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 7492.51; \Delta \bar{\chi}_{\text{eff}}^2 = 1.25; R - 1 = 0.00841$$

6.9 base_mnu_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022312	$0.02227^{+0.00034}_{-0.00033}$ (+0.9 σ)	σ_8	0.8205	$0.795^{+0.039}_{-0.058}$ (+0.2 σ)	$100\theta_{s,eq}$	0.4505	$0.4502^{+0.0061}_{-0.0059}$ (+0.5 σ)
$\Omega_c h^2$	0.11951	$0.1197^{+0.0027}_{-0.0028}$ (−0.6 σ)	S_8	0.8298	$0.822^{+0.034}_{-0.036}$ (−0.5 σ)	$H(0.15)$	73.22	$72.2^{+2.0}_{-2.6}$ (+0.5 σ)
$100\theta_{MC}$	1.04093	$1.04082^{+0.00064}_{-0.00066}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4545	$0.450^{+0.019}_{-0.020}$ (−0.5 σ)	$D_M(0.15)$	638.0	649^{+27}_{-20} (−0.5 σ)
τ	0.0522	$0.053^{+0.016}_{-0.016}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6107	$0.598^{+0.026}_{-0.031}$ (−0.1 σ)	$H(0.38)$	83.26	$82.4^{+1.5}_{-2.0}$ (+0.5 σ)
Σm_ν [eV]	0.001	< 0.379 (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9951	$0.972^{+0.042}_{-0.055}$ (−0.0 σ)	$D_M(0.38)$	1522.7	1544^{+55}_{-41} (−0.5 σ)
$\ln(10^{10} A_s)$	3.0374	$3.039^{+0.032}_{-0.031}$ (−0.1 σ)	$r_{drag} h$	100.14	$98.4^{+3.7}_{-4.6}$ (+0.5 σ)	$H(0.51)$	89.94	$89.2^{+1.3}_{-1.7}$ (+0.5 σ)
n_s	0.9667	$0.9652^{+0.0091}_{-0.0091}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.439	$2.428^{+0.057}_{-0.057}$ (−0.5 σ)	$D_M(0.51)$	1973	1999^{+65}_{-48} (−0.5 σ)
y_{cal}	1.00034	$1.0006^{+0.0047}_{-0.0048}$ (+0.0 σ)	z_{re}	7.46	$7.5^{+1.5}_{-1.7}$ (+0.1 σ)	$H(0.61)$	95.53	$94.9^{+1.0}_{-1.4}$ (+0.5 σ)
A_{100}^{PS}	231.3	241^{+50}_{-50} (−0.8 σ)	$10^9 A_s$	2.085	$2.088^{+0.068}_{-0.065}$ (−0.1 σ)	$D_M(0.61)$	2297	2325^{+70}_{-52} (−0.5 σ)
A_{143}^{PS}	45.8	40^{+20}_{-20} (−1.2 σ)	$10^9 A_s e^{-2\tau}$	1.8786	$1.879^{+0.022}_{-0.022}$ (−0.5 σ)	$H(2.33)$	235.85	$236.6^{+2.4}_{-2.2}$ (−0.5 σ)
A_{217}^{PS}	103.5	102^{+30}_{-30} (−1.3 σ)	D_{40}	1224.5	1227^{+25}_{-26} (−0.5 σ)	$D_M(2.33)$	5753	5782^{+71}_{-51} (−0.5 σ)
A_{217}^{CIB}	43.3	40^{+10}_{-10} (−1.2 σ)	D_{220}	5717	5720^{+73}_{-75} (+0.2 σ)	$f\sigma_8(0.15)$	0.4587	$0.455^{+0.017}_{-0.019}$ (−0.4 σ)
A_{143}^{tSZ}	6.55	< 7.47 (−0.6 σ)	D_{810}	2535.3	2536^{+25}_{-26} (−0.1 σ)	$\sigma_8(0.15)$	0.7585	$0.733^{+0.037}_{-0.056}$ (+0.2 σ)
$r_{143 \times 217}^{PS}$	0.674	$0.65^{+0.25}_{-0.25}$	D_{1420}	816.0	$815.7^{+9.2}_{-9.5}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4782	$0.471^{+0.019}_{-0.021}$ (−0.2 σ)
$r_{143 \times 217}^{CIB}$	0.85	—	D_{2000}	230.50	$230.1^{+3.2}_{-3.3}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6727	$0.649^{+0.033}_{-0.052}$ (+0.2 σ)
$\xi^{tSZ \times CIB}$	0.49	—	$n_{s,0.002}$	0.9667	$0.9652^{+0.0091}_{-0.0091}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4772	$0.468^{+0.019}_{-0.023}$ (−0.1 σ)
A^{kSZ}	0.0	—	Y_P	0.245372	$0.24535^{+0.00013}_{-0.00015}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6296	$0.607^{+0.032}_{-0.050}$ (+0.2 σ)
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.38}$	Y_P^{BBN}	0.246698	$0.24668^{+0.00013}_{-0.00015}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4725	$0.463^{+0.019}_{-0.025}$ (+0.0 σ)
A_{143}^{dust}	0.981	$0.97^{+0.34}_{-0.35}$	$10^5 D/H$	2.597	$2.606^{+0.064}_{-0.062}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5991	$0.578^{+0.030}_{-0.048}$ (+0.2 σ)
A_{217}^{dust}	0.976	$0.97^{+0.20}_{-0.20}$	Age/Gyr	13.773	$13.84^{+0.16}_{-0.12}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.3013	$0.292^{+0.014}_{-0.022}$ (+0.2 σ)
$A_{143 \times 217}^{dust}$	1.005	$1.03^{+0.31}_{-0.31}$	z_*	1089.95	$1090.04^{+0.64}_{-0.59}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3113	$0.300^{+0.016}_{-0.026}$ (+0.3 σ)
c_{100}	0.99774	$0.9975^{+0.0021}_{-0.0020}$ (−3.4 σ)	r_*	144.61	$144.57^{+0.63}_{-0.62}$ (+0.4 σ)	f_{2000}^{143}	29.8	30^{+6}_{-6} (−0.5 σ)
c_{217}	1.00133	$1.0011^{+0.0030}_{-0.0031}$ (+4.6 σ)	$100\theta_*$	1.04108	$1.04105^{+0.00061}_{-0.00062}$ (+0.3 σ)	f_{2000}^{217}	106.52	$107.2^{+3.9}_{-3.9}$ (−0.7 σ)
c_{TE}	0.9964	$0.9971^{+0.0098}_{-0.0095}$	$D_M(z_*)/\text{Gpc}$	13.890	$13.887^{+0.059}_{-0.057}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	31.94	32^{+4}_{-4} (−0.8 σ)
c_{EE}	0.9923	$0.9924^{+0.0096}_{-0.0095}$	z_{drag}	1059.78	$1059.68^{+0.67}_{-0.66}$ (+0.8 σ)	χ_{small}^2	395.78	396.9 (ν : 1.5) (−0.0 σ)
H_0	67.99	$66.8^{+2.3}_{-3.0}$ (+0.5 σ)	r_{drag}	147.29	$147.27^{+0.62}_{-0.61}$ (+0.2 σ)	χ_{lowl}^2	23.03	23.13 (ν : 0.4) (−0.6 σ)
Ω_Λ	0.6931	$0.678^{+0.030}_{-0.040}$ (+0.5 σ)	k_D	0.14061	$0.14061^{+0.00069}_{-0.00068}$ (+0.1 σ)	$\chi_{CamSpec}^2$	11499.2	11515.5 (ν : 18.2)
Ω_m	0.3069	$0.322^{+0.040}_{-0.030}$ (−0.5 σ)	$100\theta_D$	0.160856	$0.16089^{+0.00038}_{-0.00039}$ (−0.9 σ)	χ_{prior}^2	2.1	7.8 (ν : 5.8) (+0.1 σ)
$\Omega_m h^2$	0.14183	$0.1434^{+0.0043}_{-0.0037}$ (−0.5 σ)	z_{eq}	3389	3393^{+62}_{-62} (−0.5 σ)	χ_{CMB}^2	11918.0	11935.6 (ν : 18.8) (+1848.8 σ)
$\Omega_\nu h^2$	0.00001	< 0.00407 (−0.3 σ)	k_{eq}	0.010344	$0.01036^{+0.00019}_{-0.00019}$ (−0.5 σ)			
$\Omega_m h^3$	0.09642	$0.0957^{+0.0013}_{-0.0018}$ (+0.4 σ)	$100\theta_{eq}$	0.8154	$0.815^{+0.012}_{-0.011}$ (+0.6 σ)			

Best-fit $\chi_{eff}^2 = 11920.07$; $\Delta\chi_{eff}^2 = -0.70$; $\bar{\chi}_{eff}^2 = 11943.39$; $\Delta\bar{\chi}_{eff}^2 = 0.93$; $R - 1 = 0.01661$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.78 (Δ -0.12) commander_dx12.v3.2.29: 23.03 (Δ 0.03) CamSpec like_10.7HM_1400_unified: 11499.19 (Δ -0.46)

6.10 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00033}_{-0.00030} \quad (+1.6\sigma)$	σ_8	$0.810^{+0.019}_{-0.023} \quad (+0.6\sigma)$	$100\theta_{s,eq}$	$0.4539^{+0.0052}_{-0.0057} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0026}_{-0.0023} \quad (-1.4\sigma)$	S_8	$0.811^{+0.031}_{-0.032} \quad (-0.9\sigma)$	$H(0.15)$	$73.6^{+1.1}_{-1.2} \quad (+1.3\sigma)$
$100\theta_{MC}$	$1.04110^{+0.00066}_{-0.00064} \quad (+0.9\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.017}_{-0.017} \quad (-0.9\sigma)$	$D_M(0.15)$	$634^{+12}_{-11} \quad (-1.2\sigma)$
τ	$0.055^{+0.015}_{-0.016} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.600^{+0.017}_{-0.018} \quad (-0.0\sigma)$	$H(0.38)$	$83.52^{+0.81}_{-0.89} \quad (+1.3\sigma)$
Σm_ν [eV]	$< 0.108 \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.025}_{-0.027} \quad (+0.2\sigma)$	$D_M(0.38)$	$1516^{+23}_{-22} \quad (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.033}_{-0.032} \quad (-0.0\sigma)$	$r_{drag} h$	$101.0^{+2.1}_{-2.2} \quad (+1.3\sigma)$	$H(0.51)$	$90.13^{+0.66}_{-0.73} \quad (+1.3\sigma)$
n_s	$0.9697^{+0.0083}_{-0.0088} \quad (+1.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.414^{+0.054}_{-0.051} \quad (-0.9\sigma)$	$D_M(0.51)$	$1965^{+28}_{-25} \quad (-1.2\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.2\sigma)$	$H(0.61)$	$95.67^{+0.58}_{-0.61} \quad (+1.3\sigma)$
A_{100}^{PS}	$239^{+40}_{-50} \quad (-0.9\sigma)$	$10^9 A_s$	$2.091^{+0.069}_{-0.066} \quad (-0.0\sigma)$	$D_M(0.61)$	$2288^{+30}_{-27} \quad (-1.2\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.873^{+0.022}_{-0.020} \quad (-0.9\sigma)$	$H(2.33)$	$235.2^{+1.6}_{-1.5} \quad (-1.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-20} \quad (-1.3\sigma)$	D_{40}	$1220^{+24}_{-24} \quad (-1.0\sigma)$	$D_M(2.33)$	$5747^{+29}_{-26} \quad (-1.2\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{220}	$5730^{+79}_{-77} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.016}_{-0.017} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.6\sigma)$	D_{810}	$2535^{+29}_{-25} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.018}_{-0.022} \quad (+0.6\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.26}_{-0.27}$	D_{1420}	$817.0^{+9.8}_{-9.6} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.9^{+3.5}_{-3.3} \quad (+0.9\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.016}_{-0.018} \quad (+0.7\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9697^{+0.0083}_{-0.0088} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.012}_{-0.012} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P	$0.24542^{+0.00012}_{-0.00012} \quad (+1.5\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.015}_{-0.017} \quad (+0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.36}_{-0.37}$	Y_P^{BBN}	$0.24674^{+0.00012}_{-0.00012} \quad (+1.5\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.012} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	$10^5 D/H$	$2.575^{+0.056}_{-0.060} \quad (-1.5\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.014}_{-0.016} \quad (+0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.19}$	Age/Gyr	$13.763^{+0.065}_{-0.057} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2993^{+0.0068}_{-0.0075} \quad (+0.7\sigma)$
$A_{143 \times 217}^{dust}$	$1.02^{+0.31}_{-0.29}$	z_*	$1089.67^{+0.52}_{-0.53} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.3092^{+0.0075}_{-0.0087} \quad (+0.8\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	r_*	$144.91^{+0.56}_{-0.57} \quad (+1.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.9\sigma)$
c_{217}	$1.0011^{+0.0029}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_*$	$1.04127^{+0.00071}_{-0.00061} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.9} \quad (-1.0\sigma)$
c_{TE}	$0.9966^{+0.0099}_{-0.0096}$	$D_M(z_*)/Gpc$	$13.917^{+0.052}_{-0.056} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.1\sigma)$
c_{EE}	$0.9923^{+0.0097}_{-0.0093}$	z_{drag}	$1059.93^{+0.65}_{-0.64} \quad (+1.4\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
H_0	$68.4^{+1.3}_{-1.4} \quad (+1.3\sigma)$	r_{drag}	$147.57^{+0.57}_{-0.59} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.56 \quad (\nu: 0.4) \quad (-1.0\sigma)$
Ω_Λ	$0.699^{+0.015}_{-0.017} \quad (+1.2\sigma)$	k_D	$0.14041^{+0.00068}_{-0.00066} \quad (-0.3\sigma)$	$\chi_{CamSpec}^2$	$11516.2 \quad (\nu: 17.8)$
Ω_m	$0.301^{+0.017}_{-0.015} \quad (-1.2\sigma)$	$100\theta_D$	$0.16077^{+0.00037}_{-0.00038} \quad (-1.3\sigma)$	$\chi_{H073p45}^2$	$9.3 \quad (\nu: 3.1)$
$\Omega_m h^2$	$0.1408^{+0.0026}_{-0.0024} \quad (-1.3\sigma)$	z_{eq}	$3355^{+58}_{-55} \quad (-1.3\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.3) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$< 0.00116 \quad (-0.8\sigma)$	k_{eq}	$0.01024^{+0.00018}_{-0.00017} \quad (-1.3\sigma)$	χ_{CMB}^2	$11935.8 \quad (\nu: 18.2) \quad (+1848.8\sigma)$
$\Omega_m h^3$	$0.09635^{+0.00073}_{-0.00077} \quad (+0.9\sigma)$	$100\theta_{eq}$	$0.822^{+0.010}_{-0.011} \quad (+1.4\sigma)$		

$$\bar{\chi}_{eff}^2 = 11952.66; \Delta\bar{\chi}_{eff}^2 = -1.61; R - 1 = 0.05737$$

6.11 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02227^{+0.00034}_{-0.00033} \quad (+0.9\sigma)$	σ_8	$0.795^{+0.038}_{-0.058} \quad (+0.2\sigma)$	$100\theta_{s,eq}$	$0.4503^{+0.0061}_{-0.0058} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1197^{+0.0027}_{-0.0028} \quad (-0.6\sigma)$	S_8	$0.823^{+0.034}_{-0.035} \quad (-0.5\sigma)$	$H(0.15)$	$72.2^{+2.0}_{-2.6} \quad (+0.5\sigma)$
$100\theta_{MC}$	$1.04083^{+0.00064}_{-0.00066} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.018}_{-0.019} \quad (-0.5\sigma)$	$D_M(0.15)$	$649^{+27}_{-20} \quad (-0.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.599^{+0.026}_{-0.031} \quad (-0.1\sigma)$	$H(0.38)$	$82.4^{+1.5}_{-2.0} \quad (+0.5\sigma)$
Σm_ν [eV]	$< 0.382 \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.973^{+0.042}_{-0.055} \quad (+0.0\sigma)$	$D_M(0.38)$	$1544^{+55}_{-41} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$r_{drag} h$	$98.4^{+3.7}_{-4.7} \quad (+0.5\sigma)$	$H(0.51)$	$89.3^{+1.3}_{-1.7} \quad (+0.5\sigma)$
n_s	$0.9654^{+0.0091}_{-0.0090} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.055}_{-0.055} \quad (-0.5\sigma)$	$D_M(0.51)$	$1999^{+65}_{-48} \quad (-0.5\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0048} \quad (+0.0\sigma)$	z_{re}	$< 8.87 \quad (+0.2\sigma)$	$H(0.61)$	$94.9^{+1.1}_{-1.4} \quad (+0.5\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s$	$2.094^{+0.058}_{-0.054} \quad (+0.1\sigma)$	$D_M(0.61)$	$2324^{+70}_{-52} \quad (-0.5\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$H(2.33)$	$236.6^{+2.4}_{-2.2} \quad (-0.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{40}	$1227^{+25}_{-26} \quad (-0.5\sigma)$	$D_M(2.33)$	$5782^{+71}_{-51} \quad (-0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5719^{+74}_{-75} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.017}_{-0.019} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.6\sigma)$	D_{810}	$2535^{+25}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.036}_{-0.056} \quad (+0.2\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$815.7^{+9.2}_{-9.5} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.019}_{-0.021} \quad (-0.1\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.1^{+3.2}_{-3.3} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.033}_{-0.053} \quad (+0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9654^{+0.0091}_{-0.0090} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.019}_{-0.023} \quad (-0.0\sigma)$
A^{kSZ}	—	Y_P	$0.24535^{+0.00013}_{-0.00014} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.031}_{-0.050} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Y_P^{BBN}	$0.24668^{+0.00013}_{-0.00015} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.019}_{-0.025} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	$10^5 D/H$	$2.605^{+0.064}_{-0.061} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.030}_{-0.048} \quad (+0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	Age/Gyr	$13.84^{+0.16}_{-0.12} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.014}_{-0.022} \quad (+0.3\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.31}_{-0.31}$	z_*	$1090.03^{+0.64}_{-0.59} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.016}_{-0.026} \quad (+0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	r_*	$144.58^{+0.63}_{-0.60} \quad (+0.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_*$	$1.04106^{+0.00061}_{-0.00062} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.1^{+3.8}_{-3.9} \quad (-0.7\sigma)$
c_{TE}	$0.9970^{+0.0098}_{-0.0095}$	$D_M(z_*)/Gpc$	$13.888^{+0.058}_{-0.056} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{EE}	$0.9923^{+0.0096}_{-0.0095}$	z_{drag}	$1059.69^{+0.67}_{-0.67} \quad (+0.9\sigma)$	χ_{small}^2	$396.9 (\nu: 1.5) \quad (-0.1\sigma)$
H_0	$66.8^{+2.3}_{-3.0} \quad (+0.5\sigma)$	r_{drag}	$147.28^{+0.62}_{-0.60} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.14 (\nu: 0.4) \quad (-0.6\sigma)$
Ω_Λ	$0.678^{+0.030}_{-0.040} \quad (+0.5\sigma)$	k_D	$0.14060^{+0.00068}_{-0.00068} \quad (+0.1\sigma)$	$\chi_{CamSpec}^2$	$11515.4 (\nu: 18.0)$
Ω_m	$0.322^{+0.040}_{-0.030} \quad (-0.5\sigma)$	$100\theta_D$	$0.16089^{+0.00038}_{-0.00039} \quad (-0.9\sigma)$	χ_{prior}^2	$7.8 (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1433^{+0.0043}_{-0.0037} \quad (-0.5\sigma)$	z_{eq}	$3392^{+61}_{-62} \quad (-0.5\sigma)$	χ_{CMB}^2	$11935.4 (\nu: 18.3) \quad (+1848.7\sigma)$
$\Omega_\nu h^2$	$< 0.00410 \quad (-0.3\sigma)$	k_{eq}	$0.01035^{+0.00019}_{-0.00019} \quad (-0.5\sigma)$		
$\Omega_m h^3$	$0.0957^{+0.0013}_{-0.0018} \quad (+0.4\sigma)$	$100\theta_{eq}$	$0.815^{+0.012}_{-0.011} \quad (+0.6\sigma)$		

$$\bar{\chi}_{eff}^2 = 11943.12; \Delta\bar{\chi}_{eff}^2 = 0.93; R - 1 = 0.01799$$

6.12 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00034}_{-0.00030} \quad (+1.6\sigma)$	σ_8	$0.811^{+0.019}_{-0.023} \quad (+0.6\sigma)$	$100\theta_{s,eq}$	$0.4540^{+0.0054}_{-0.0055} \quad (+1.3\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0026}_{-0.0024} \quad (-1.4\sigma)$	S_8	$0.812^{+0.030}_{-0.030} \quad (-0.9\sigma)$	$H(0.15)$	$73.6^{+1.1}_{-1.2} \quad (+1.3\sigma)$
$100\theta_{MC}$	$1.04111^{+0.00066}_{-0.00064} \quad (+0.9\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.017}_{-0.016} \quad (-0.9\sigma)$	$D_M(0.15)$	$634^{+12}_{-11} \quad (-1.2\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.600^{+0.017}_{-0.016} \quad (+0.0\sigma)$	$H(0.38)$	$83.53^{+0.87}_{-0.88} \quad (+1.3\sigma)$
Σm_ν [eV]	$< 0.108 \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.025}_{-0.025} \quad (+0.2\sigma)$	$D_M(0.38)$	$1515^{+23}_{-21} \quad (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.029}_{-0.027} \quad (+0.1\sigma)$	$r_{drag} h$	$101.0^{+2.2}_{-2.2} \quad (+1.3\sigma)$	$H(0.51)$	$90.14^{+0.70}_{-0.72} \quad (+1.3\sigma)$
n_s	$0.9698^{+0.0082}_{-0.0088} \quad (+1.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.416^{+0.052}_{-0.050} \quad (-0.9\sigma)$	$D_M(0.51)$	$1965^{+27}_{-26} \quad (-1.2\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$< 9.00 \quad (+0.4\sigma)$	$H(0.61)$	$95.68^{+0.58}_{-0.61} \quad (+1.3\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s$	$2.095^{+0.062}_{-0.057} \quad (+0.1\sigma)$	$D_M(0.61)$	$2288^{+30}_{-28} \quad (-1.2\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.873^{+0.022}_{-0.020} \quad (-1.0\sigma)$	$H(2.33)$	$235.2^{+1.6}_{-1.5} \quad (-1.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-20} \quad (-1.3\sigma)$	D_{40}	$1220^{+25}_{-24} \quad (-0.9\sigma)$	$D_M(2.33)$	$5747^{+29}_{-29} \quad (-1.2\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{220}	$5730^{+79}_{-77} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.016}_{-0.015} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.5\sigma)$	D_{810}	$2535^{+29}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.018}_{-0.021} \quad (+0.6\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.26}_{-0.26}$	D_{1420}	$816.9^{+9.9}_{-9.6} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.013}_{-0.014} \quad (-0.2\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.9^{+3.5}_{-3.3} \quad (+0.9\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.016}_{-0.017} \quad (+0.7\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9698^{+0.0082}_{-0.0088} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.012}_{-0.012} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P	$0.24542^{+0.00013}_{-0.00012} \quad (+1.5\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.015}_{-0.017} \quad (+0.7\sigma)$
A_{100}^{dust}	$1.02^{+0.35}_{-0.38}$	Y_P^{BBN}	$0.24674^{+0.00013}_{-0.00012} \quad (+1.5\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	$10^5 D/H$	$2.574^{+0.057}_{-0.062} \quad (-1.6\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.014}_{-0.016} \quad (+0.8\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.19}$	Age/Gyr	$13.762^{+0.066}_{-0.067} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2996^{+0.0060}_{-0.0078} \quad (+0.8\sigma)$
$A_{143 \times 217}^{dust}$	$1.02^{+0.31}_{-0.29}$	z_*	$1089.66^{+0.52}_{-0.52} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.3095^{+0.0072}_{-0.0085} \quad (+0.8\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	r_*	$144.92^{+0.56}_{-0.57} \quad (+1.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.9\sigma)$
c_{217}	$1.0011^{+0.0028}_{-0.0030} \quad (+4.6\sigma)$	$100\theta_*$	$1.04128^{+0.00072}_{-0.00061} \quad (+0.8\sigma)$	f_{2000}^{217}	$106.5^{+3.6}_{-3.8} \quad (-1.0\sigma)$
c_{TE}	$0.9966^{+0.010}_{-0.0096}$	$D_M(z_*)/Gpc$	$13.917^{+0.052}_{-0.055} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.1\sigma)$
c_{EE}	$0.9923^{+0.0098}_{-0.0094}$	z_{drag}	$1059.93^{+0.65}_{-0.65} \quad (+1.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (+0.0\sigma)$
H_0	$68.4^{+1.3}_{-1.4} \quad (+1.3\sigma)$	r_{drag}	$147.57^{+0.55}_{-0.60} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.57 \quad (\nu: 0.4) \quad (-1.0\sigma)$
Ω_Λ	$0.699^{+0.016}_{-0.017} \quad (+1.2\sigma)$	k_D	$0.14041^{+0.00068}_{-0.00066} \quad (-0.3\sigma)$	$\chi_{CamSpec}^2$	$11516.1 \quad (\nu: 17.9)$
Ω_m	$0.301^{+0.017}_{-0.016} \quad (-1.2\sigma)$	$100\theta_D$	$0.16077^{+0.00037}_{-0.00037} \quad (-1.3\sigma)$	$\chi_{H073p45}^2$	$9.3 \quad (\nu: 3.1)$
$\Omega_m h^2$	$0.1408^{+0.0025}_{-0.0023} \quad (-1.3\sigma)$	z_{eq}	$3355^{+58}_{-55} \quad (-1.3\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.2) \quad (+0.0\sigma)$
$\Omega_\nu h^2$	$< 0.00116 \quad (-0.8\sigma)$	k_{eq}	$0.01024^{+0.00018}_{-0.00017} \quad (-1.3\sigma)$	χ_{CMB}^2	$11935.7 \quad (\nu: 18.1) \quad (+1848.8\sigma)$
$\Omega_m h^3$	$0.09635^{+0.00072}_{-0.00076} \quad (+0.9\sigma)$	$100\theta_{eq}$	$0.822^{+0.010}_{-0.011} \quad (+1.4\sigma)$		

$$\bar{\chi}_{eff}^2 = 11952.44; \Delta\bar{\chi}_{eff}^2 = -1.57; R - 1 = 0.06967$$

6.13 base_mnu_plikHM_TE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02239	$0.02232^{+0.00055}_{-0.00056}$ (+1.1 σ)	$\sigma_8/h^{0.5}$	0.907	$0.86^{+0.12}_{-0.13}$ (−3.2 σ)	$100\theta_{\text{eq}}$	0.8228	$0.823^{+0.018}_{-0.018}$ (+1.5 σ)
$\Omega_c h^2$	0.11793	$0.1181^{+0.0041}_{-0.0039}$ (−1.3 σ)	$r_{\text{drag}} h$	97.4	$94.0^{+9.0}_{-10}$ (−0.8 σ)	$100\theta_{\text{s,eq}}$	0.4544	$0.4546^{+0.0090}_{-0.0090}$ (+1.5 σ)
$100\theta_{\text{MC}}$	1.04122	$1.0411^{+0.0010}_{-0.0010}$ (+1.0 σ)	$\langle d^2 \rangle^{1/2}$	2.362	$2.364^{+0.088}_{-0.088}$ (−2.2 σ)	$H(0.15)$	71.4	$69.5^{+5.1}_{-5.8}$ (−0.9 σ)
τ	0.0493	$0.048^{+0.016}_{-0.018}$ (−0.4 σ)	z_{re}	7.16	$7.1^{+1.8}_{-1.8}$ (−0.5 σ)	$D_{\text{M}}(0.15)$	656	678^{+67}_{-55} (+1.0 σ)
Σm_ν [eV]	0.31	< 1.33 (+2.2 σ)	$10^9 A_{\text{s}}$	2.037	$2.028^{+0.080}_{-0.084}$ (−1.9 σ)	$H(0.38)$	81.82	$80.4^{+3.9}_{-4.3}$ (−1.0 σ)
$\ln(10^{10} A_{\text{s}})$	3.0141	$3.009^{+0.039}_{-0.042}$ (−1.9 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8458	$1.841^{+0.038}_{-0.038}$ (−3.2 σ)	$D_{\text{M}}(0.38)$	1559	1603^{+130}_{-110} (+1.0 σ)
n_{s}	0.9623	$0.958^{+0.026}_{-0.027}$ (−0.5 σ)	D_{40}	1215	1210^{+52}_{-52} (−1.6 σ)	$H(0.51)$	88.69	$87.5^{+3.2}_{-3.5}$ (−1.0 σ)
A_{100}^{dustTE}	0.113	$0.113^{+0.076}_{-0.075}$	D_{220}	5694	5705^{+120}_{-110} (−0.2 σ)	$D_{\text{M}}(0.51)$	2017	2068^{+160}_{-130} (+1.0 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.057}$	D_{810}	2498	2494^{+51}_{-51} (−3.1 σ)	$H(0.61)$	94.42	$93.4^{+2.7}_{-2.9}$ (−1.1 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.477	$0.48^{+0.16}_{-0.17}$	D_{1420}	802.9	801^{+24}_{-24} (−2.6 σ)	$D_{\text{M}}(0.61)$	2344	2399^{+170}_{-140} (+1.0 σ)
A_{143}^{dustTE}	0.219	$0.22^{+0.11}_{-0.11}$	D_{2000}	225.5	$224.4^{+9.3}_{-9.2}$ (−2.5 σ)	$H(2.33)$	236.6	$238.3^{+5.6}_{-4.7}$ (+0.4 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.654	$0.66^{+0.16}_{-0.16}$	$n_{\text{s},0.002}$	0.9623	$0.958^{+0.026}_{-0.027}$ (−0.5 σ)	$D_{\text{M}}(2.33)$	5809	5864^{+160}_{-140} (+1.2 σ)
A_{217}^{dustTE}	2.02	$2.04^{+0.53}_{-0.53}$	Y_{P}	0.245402	$0.24537^{+0.00022}_{-0.00026}$ (+1.0 σ)	$f\sigma_8(0.15)$	0.4289	$0.416^{+0.040}_{-0.044}$ (−3.4 σ)
c_{100}	1.00018	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246729	$0.24670^{+0.00022}_{-0.00026}$ (+1.0 σ)	$\sigma_8(0.15)$	0.680	$0.63^{+0.12}_{-0.13}$ (−2.6 σ)
c_{217}	0.99800	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	10^5D/H	2.582	$2.60^{+0.11}_{-0.10}$ (−1.1 σ)	$f\sigma_8(0.38)$	0.442	$0.423^{+0.051}_{-0.059}$ (−3.5 σ)
y_{cal}	1.00001	$1.0000^{+0.0049}_{-0.0049}$ (−0.2 σ)	Age/Gyr	13.904	$14.03^{+0.39}_{-0.33}$ (+1.2 σ)	$\sigma_8(0.38)$	0.601	$0.56^{+0.11}_{-0.12}$ (−2.5 σ)
H_0	66.0	$63.8^{+5.9}_{-6.8}$ (−0.9 σ)	z_*	1089.76	$1090.0^{+1.2}_{-1.0}$ (−0.9 σ)	$f\sigma_8(0.51)$	0.440	$0.418^{+0.055}_{-0.065}$ (−3.3 σ)
Ω_Λ	0.670	$0.635^{+0.083}_{-0.11}$ (−0.9 σ)	r_*	144.90	$144.7^{+1.0}_{-1.1}$ (+0.6 σ)	$\sigma_8(0.51)$	0.562	$0.52^{+0.10}_{-0.12}$ (−2.4 σ)
Ω_{m}	0.330	$0.365^{+0.11}_{-0.083}$ (+0.9 σ)	$100\theta_*$	1.04153	$1.04152^{+0.00096}_{-0.00096}$ (+1.3 σ)	$f\sigma_8(0.61)$	0.434	$0.411^{+0.058}_{-0.068}$ (−3.2 σ)
$\Omega_{\text{m}} h^2$	0.1437	$0.1466^{+0.0097}_{-0.0082}$ (+0.5 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.912	$13.894^{+0.095}_{-0.10}$ (+0.5 σ)	$\sigma_8(0.61)$	0.535	$0.50^{+0.10}_{-0.11}$ (−2.4 σ)
$\Omega_\nu h^2$	0.0033	< 0.0143 (+2.2 σ)	z_{drag}	1059.86	$1059.8^{+1.1}_{-1.1}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.273	$0.253^{+0.048}_{-0.055}$ (−2.4 σ)
$\Omega_{\text{m}} h^3$	0.09481	$0.0934^{+0.0038}_{-0.0044}$ (−1.5 σ)	r_{drag}	147.57	$147.4^{+1.0}_{-1.1}$ (+0.5 σ)	$\sigma_8(2.33)$	0.278	$0.257^{+0.054}_{-0.060}$ (−2.3 σ)
σ_8	0.737	$0.69^{+0.12}_{-0.14}$ (−2.7 σ)	k_{D}	0.14041	$0.1407^{+0.0013}_{-0.0012}$ (+0.2 σ)	χ_{small}^2	395.65	396.9 (ν : 1.3) (−0.1 σ)
S_8	0.773	$0.753^{+0.069}_{-0.075}$ (−3.3 σ)	$100\theta_{\text{D}}$	0.16082	$0.16075^{+0.00064}_{-0.00065}$ (−1.4 σ)	χ_{plikTE}^2	852.6	860.3 (ν : 7.5)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4233	$0.412^{+0.038}_{-0.041}$ (−3.3 σ)	z_{eq}	3353	3356^{+92}_{-89} (−1.3 σ)	χ_{prior}^2	0.4	7.4 (ν : 6.7) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.558	$0.533^{+0.069}_{-0.077}$ (−3.3 σ)	k_{eq}	0.010236	$0.01025^{+0.00029}_{-0.00027}$ (−1.2 σ)	χ_{CMB}^2	1248.3	1257.2 (ν : 8.8) (+11.0 σ)

Best-fit $\chi_{\text{eff}}^2 = 1248.70$; $\Delta\chi_{\text{eff}}^2 = -0.28$; $\bar{\chi}_{\text{eff}}^2 = 1264.56$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.56$; $R - 1 = 0.00834$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.65 (Δ -0.04) plik_r12_HM_v22_TE: 852.62 (Δ -0.23)

6.14 base_mnu_plikHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02233^{+0.00056}_{-0.00056} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.87^{+0.12}_{-0.13} \quad (-3.1\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.017}_{-0.017} \quad (+1.5\sigma)$
$\Omega_{\text{c}} h^2$	$0.1180^{+0.0041}_{-0.0039} \quad (-1.4\sigma)$	$r_{\text{drag}} h$	$94.2^{+9.0}_{-10} \quad (-0.8\sigma)$	$100\theta_{\text{s,eq}}$	$0.4547^{+0.0090}_{-0.0090} \quad (+1.5\sigma)$
$100\theta_{\text{MC}}$	$1.0411^{+0.0010}_{-0.0010} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.370^{+0.085}_{-0.085} \quad (-2.1\sigma)$	$H(0.15)$	$69.6^{+5.1}_{-5.8} \quad (-0.9\sigma)$
τ	$0.0516^{+0.012}_{-0.0097} \quad (-0.0\sigma)$	z_{re}	$< 8.54 \quad (-0.1\sigma)$	$D_{\text{M}}(0.15)$	$677^{+67}_{-54} \quad (+0.9\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	$< 1.32 \quad (+2.2\sigma)$	$10^9 A_{\text{s}}$	$2.042^{+0.067}_{-0.064} \quad (-1.4\sigma)$	$H(0.38)$	$80.5^{+3.9}_{-4.3} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.016^{+0.033}_{-0.032} \quad (-1.5\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.842^{+0.038}_{-0.038} \quad (-3.2\sigma)$	$D_{\text{M}}(0.38)$	$1601^{+130}_{-110} \quad (+0.9\sigma)$
n_{s}	$0.959^{+0.026}_{-0.027} \quad (-0.4\sigma)$	D_{40}	$1210^{+52}_{-52} \quad (-1.6\sigma)$	$H(0.51)$	$87.6^{+3.2}_{-3.5} \quad (-1.0\sigma)$
A_{100}^{dustTE}	$0.113^{+0.076}_{-0.074}$	D_{220}	$5704^{+110}_{-110} \quad (-0.2\sigma)$	$D_{\text{M}}(0.51)$	$2065^{+150}_{-130} \quad (+0.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	D_{810}	$2496^{+50}_{-51} \quad (-3.0\sigma)$	$H(0.61)$	$93.5^{+2.7}_{-2.9} \quad (-1.0\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.17}$	D_{1420}	$802^{+24}_{-24} \quad (-2.5\sigma)$	$D_{\text{M}}(0.61)$	$2397^{+170}_{-140} \quad (+0.9\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	D_{2000}	$224.7^{+9.2}_{-9.2} \quad (-2.4\sigma)$	$H(2.33)$	$238.2^{+5.5}_{-4.7} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$n_{\text{s},0.002}$	$0.959^{+0.026}_{-0.027} \quad (-0.4\sigma)$	$D_{\text{M}}(2.33)$	$5861^{+160}_{-140} \quad (+1.1\sigma)$
A_{217}^{dustTE}	$2.04^{+0.52}_{-0.52}$	Y_{P}	$0.24537^{+0.00022}_{-0.00026} \quad (+1.1\sigma)$	$f\sigma_8(0.15)$	$0.417^{+0.039}_{-0.044} \quad (-3.3\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24670^{+0.00022}_{-0.00026} \quad (+1.1\sigma)$	$\sigma_8(0.15)$	$0.64^{+0.12}_{-0.13} \quad (-2.5\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	$10^5 \text{D}/\text{H}$	$2.59^{+0.11}_{-0.10} \quad (-1.1\sigma)$	$f\sigma_8(0.38)$	$0.425^{+0.050}_{-0.058} \quad (-3.3\sigma)$
y_{cal}	$1.0000^{+0.0048}_{-0.0048} \quad (-0.2\sigma)$	Age/Gyr	$14.03^{+0.38}_{-0.33} \quad (+1.2\sigma)$	$\sigma_8(0.38)$	$0.56^{+0.11}_{-0.12} \quad (-2.4\sigma)$
H_0	$63.9^{+5.8}_{-6.7} \quad (-0.9\sigma)$	z_*	$1090.0^{+1.2}_{-1.0} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.419^{+0.054}_{-0.064} \quad (-3.2\sigma)$
Ω_{Λ}	$0.637^{+0.082}_{-0.11} \quad (-0.8\sigma)$	r_*	$144.7^{+1.0}_{-1.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.52^{+0.10}_{-0.11} \quad (-2.3\sigma)$
Ω_{m}	$0.363^{+0.11}_{-0.082} \quad (+0.8\sigma)$	$100\theta_*$	$1.04153^{+0.00096}_{-0.00096} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.413^{+0.057}_{-0.067} \quad (-3.0\sigma)$
$\Omega_{\text{m}} h^2$	$0.1465^{+0.0096}_{-0.0082} \quad (+0.5\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.895^{+0.094}_{-0.10} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.498^{+0.099}_{-0.11} \quad (-2.3\sigma)$
$\Omega_{\nu} h^2$	$< 0.0142 \quad (+2.2\sigma)$	z_{drag}	$1059.8^{+1.1}_{-1.1} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.255^{+0.047}_{-0.055} \quad (-2.3\sigma)$
$\Omega_{\text{m}} h^3$	$0.0934^{+0.0038}_{-0.0044} \quad (-1.4\sigma)$	r_{drag}	$147.4^{+1.0}_{-1.1} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.259^{+0.053}_{-0.060} \quad (-2.2\sigma)$
σ_8	$0.69^{+0.12}_{-0.14} \quad (-2.6\sigma)$	k_{D}	$0.1407^{+0.0013}_{-0.0012} \quad (+0.2\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 0.8) \quad (-0.3\sigma)$
S_8	$0.755^{+0.068}_{-0.075} \quad (-3.2\sigma)$	$100\theta_{\text{D}}$	$0.16074^{+0.00064}_{-0.00065} \quad (-1.4\sigma)$	χ_{plikTE}^2	$860.3 \quad (\nu: 7.5)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.414^{+0.037}_{-0.041} \quad (-3.2\sigma)$	z_{eq}	$3354^{+92}_{-88} \quad (-1.3\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.535^{+0.069}_{-0.077} \quad (-3.2\sigma)$	k_{eq}	$0.01025^{+0.00028}_{-0.00027} \quad (-1.2\sigma)$	χ_{CMB}^2	$1256.8 \quad (\nu: 8.4) \quad (+10.9\sigma)$

$\bar{\chi}_{\text{eff}}^2 = 1264.17$; $\Delta \bar{\chi}_{\text{eff}}^2 = 0.52$; $R - 1 = 0.01053$

6.15 base_mnu_plikHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02046	$0.0218^{+0.0032}_{-0.0030}$ (-1.1σ)	D_{40}	1167	1186^{+76}_{-71} (-3.2σ)	$H(0.38)$	69.6	74^{+10}_{-6} (-5.9σ)
$\Omega_{\mathrm{c}} h^2$	0.1181	$0.119^{+0.012}_{-0.011}$ (-0.9σ)	D_{220}	5357	5638^{+570}_{-580} (-1.8σ)	$D_{\mathrm{M}}(0.38)$	2079	1889^{+300}_{-400} $(+8.2\sigma)$
$100\theta_{\mathrm{MC}}$	1.04062	$1.0401^{+0.0020}_{-0.0019}$ (-1.1σ)	D_{810}	2545	2569^{+85}_{-90} $(+2.3\sigma)$	$H(0.51)$	79.7	$82.6^{+8.0}_{-3.8}$ (-5.5σ)
τ	0.0411	$0.044^{+0.018}_{-0.016}$ (-0.9σ)	D_{1420}	820.4	832^{+41}_{-46} $(+3.5\sigma)$	$D_{\mathrm{M}}(0.51)$	2602	2390^{+300}_{-500} $(+7.9\sigma)$
Σm_{ν} [eV]	4.27	—	D_{2000}	226.3	232^{+18}_{-19} $(+1.7\sigma)$	$H(0.61)$	87.72	$89.8^{+6.3}_{-2.8}$ (-5.0σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0118	$3.027^{+0.049}_{-0.048}$ (-0.8σ)	$n_{\mathrm{s},0.002}$	0.9279	$0.947^{+0.043}_{-0.038}$ (-2.3σ)	$D_{\mathrm{M}}(0.61)$	2961	2739^{+300}_{-500} $(+7.7\sigma)$
n_{s}	0.9279	$0.947^{+0.043}_{-0.038}$ (-2.3σ)	Y_{P}	0.24454	$0.2451^{+0.0014}_{-0.0014}$ (-1.4σ)	$H(2.33)$	261.1	252^{+14}_{-18} $(+7.8\sigma)$
y_{cal}	1.00002	$1.0001^{+0.0049}_{-0.0048}$ (-0.2σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24586	$0.2464^{+0.0014}_{-0.0014}$ (-1.4σ)	$D_{\mathrm{M}}(2.33)$	6313	6134^{+260}_{-420} $(+6.7\sigma)$
H_0	42.9	51^{+20}_{-10} (-7.0σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.98	$2.73^{+0.64}_{-0.61}$ $(+1.7\sigma)$	$f\sigma_8(0.15)$	0.348	$0.374^{+0.078}_{-0.070}$ (-6.6σ)
Ω_{Λ}	-0.004	$0.27^{+0.47}_{-0.45}$ (-12.5σ)	Age/Gyr	15.18	$14.72^{+0.68}_{-1.0}$ $(+7.2\sigma)$	$\sigma_8(0.15)$	0.344	$0.45^{+0.30}_{-0.14}$ (-7.7σ)
Ω_{m}	1.004	$0.73^{+0.45}_{-0.47}$ $(+12.5\sigma)$	z_*	1095.4	$1092.5^{+6.3}_{-6.2}$ $(+4.2\sigma)$	$f\sigma_8(0.38)$	0.290	$0.340^{+0.12}_{-0.082}$ (-9.1σ)
$\Omega_{\mathrm{m}} h^2$	0.1845	$0.170^{+0.023}_{-0.031}$ $(+7.7\sigma)$	r_*	140.72	$141.9^{+2.9}_{-2.5}$ (-4.8σ)	$\sigma_8(0.38)$	0.287	$0.38^{+0.28}_{-0.13}$ (-7.7σ)
$\Omega_{\nu} h^2$	0.0459	< 0.0517 $(+14.1\sigma)$	$100\theta_*$	1.04154	$1.0408^{+0.0022}_{-0.0020}$ (-0.3σ)	$f\sigma_8(0.51)$	0.265	$0.322^{+0.13}_{-0.085}$ (-9.4σ)
$\Omega_{\mathrm{m}} h^3$	0.0791	$0.0853^{+0.013}_{-0.0094}$ (-7.9σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.511	$13.64^{+0.29}_{-0.25}$ (-5.0σ)	$\sigma_8(0.51)$	0.263	$0.35^{+0.27}_{-0.12}$ (-7.6σ)
σ_8	0.395	$0.50^{+0.30}_{-0.15}$ (-7.8σ)	z_{drag}	1057.6	$1059.8^{+6.0}_{-5.6}$ $(+1.1\sigma)$	$f\sigma_8(0.61)$	0.249	$0.309^{+0.14}_{-0.086}$ (-9.3σ)
S_8	0.723	$0.73^{+0.13}_{-0.12}$ (-4.1σ)	r_{drag}	143.89	$144.7^{+2.4}_{-2.0}$ (-4.9σ)	$\sigma_8(0.61)$	0.246	$0.33^{+0.26}_{-0.12}$ (-7.6σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.396	$0.401^{+0.073}_{-0.067}$ (-4.1σ)	k_{D}	0.14437	$0.1439^{+0.0029}_{-0.0030}$ $(+6.4\sigma)$	$f\sigma_8(2.33)$	0.122	$0.169^{+0.13}_{-0.061}$ (-8.2σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.396	$0.445^{+0.14}_{-0.097}$ (-7.7σ)	$100\theta_{\mathrm{D}}$	0.16105	$0.1601^{+0.0037}_{-0.0033}$ (-3.8σ)	$\sigma_8(2.33)$	0.120	$0.169^{+0.14}_{-0.063}$ (-7.6σ)
$\sigma_8/h^{0.5}$	0.604	$0.70^{+0.25}_{-0.16}$ (-8.0σ)	z_{eq}	3312	3366^{+240}_{-250} (-1.1σ)	χ_{small}^2	396.30	$397.2 (\nu: 1.3)$ $(+0.1\sigma)$
$r_{\mathrm{drag}} h$	61.7	74^{+30}_{-20} (-6.9σ)	k_{eq}	0.01044	$0.01046^{+0.00071}_{-0.00066}$ $(+0.1\sigma)$	χ_{plikEE}^2	738.0	$743.7 (\nu: 5.2)$
$\langle d^2 \rangle^{1/2}$	2.623	$2.51^{+0.23}_{-0.24}$ $(+1.6\sigma)$	$100\theta_{\mathrm{eq}}$	0.847	$0.831^{+0.058}_{-0.051}$ $(+2.4\sigma)$	χ_{prior}^2	0.00	$0.98 (\nu: 1.0)$ (-1.7σ)
z_{re}	7.16	$7.0^{+1.7}_{-1.9}$ (-0.6σ)	$100\theta_{\mathrm{s,eq}}$	0.4691	$0.460^{+0.031}_{-0.026}$ $(+2.5\sigma)$	χ_{CMB}^2	1134.3	$1140.9 (\nu: 6.4)$ (-9.0σ)
$10^9 A_{\mathrm{s}}$	2.032	$2.06^{+0.10}_{-0.096}$ (-0.8σ)	$H(0.15)$	52.9	59^{+20}_{-9} (-6.6σ)			
$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.872	$1.889^{+0.053}_{-0.053}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	944	836^{+200}_{-200} $(+8.9\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 1134.30$; $\Delta\chi_{\mathrm{eff}}^2 = -0.26$; $\bar{\chi}_{\mathrm{eff}}^2 = 1141.86$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.25$; $R - 1 = 0.00789$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.30 (Δ 0.71) plik_rd12_HM_v22_EE: 738.00 (Δ -0.96)

6.16 base_mnu_plikHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0218^{+0.0033}_{-0.0030} \quad (-1.1\sigma)$	D_{40}	$1186^{+75}_{-71} \quad (-3.2\sigma)$	$H(0.38)$	$74^{+10}_{-6} \quad (-5.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.119^{+0.012}_{-0.011} \quad (-0.8\sigma)$	D_{220}	$5634^{+570}_{-580} \quad (-1.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1886^{+300}_{-400} \quad (+8.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0401^{+0.0020}_{-0.0019} \quad (-1.1\sigma)$	D_{810}	$2568^{+86}_{-90} \quad (+2.2\sigma)$	$H(0.51)$	$82.6^{+8.1}_{-3.9} \quad (-5.4\sigma)$
τ	$0.048^{+0.015}_{-0.012} \quad (-0.5\sigma)$	D_{1420}	$832^{+42}_{-46} \quad (+3.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$2387^{+300}_{-500} \quad (+7.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{2000}	$232^{+18}_{-19} \quad (+1.7\sigma)$	$H(0.61)$	$89.9^{+6.8}_{-2.8} \quad (-4.9\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.033^{+0.046}_{-0.041} \quad (-0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.948^{+0.044}_{-0.039} \quad (-2.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2735^{+300}_{-500} \quad (+7.7\sigma)$
n_{s}	$0.948^{+0.044}_{-0.039} \quad (-2.2\sigma)$	Y_{P}	$0.2451^{+0.0014}_{-0.0014} \quad (-1.4\sigma)$	$H(2.33)$	$252^{+14}_{-18} \quad (+7.7\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0048} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2464^{+0.0014}_{-0.0014} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$6131^{+260}_{-430} \quad (+6.6\sigma)$
H_0	$51^{+20}_{-10} \quad (-6.9\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.73^{+0.66}_{-0.60} \quad (+1.8\sigma)$	$f\sigma_{\mathrm{s}}(0.15)$	$0.376^{+0.078}_{-0.070} \quad (-6.5\sigma)$
Ω_{Λ}	$0.27^{+0.47}_{-0.45} \quad (-12.4\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.71^{+0.69}_{-1.1} \quad (+7.1\sigma)$	$\sigma_{\mathrm{s}}(0.15)$	$0.45^{+0.30}_{-0.15} \quad (-7.6\sigma)$
Ω_{m}	$0.73^{+0.45}_{-0.47} \quad (+12.4\sigma)$	z_{*}	$1092.5^{+6.3}_{-6.3} \quad (+4.2\sigma)$	$f\sigma_{\mathrm{s}}(0.38)$	$0.343^{+0.12}_{-0.083} \quad (-9.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.170^{+0.023}_{-0.031} \quad (+7.6\sigma)$	r_{*}	$142.0^{+2.9}_{-2.5} \quad (-4.8\sigma)$	$\sigma_{\mathrm{s}}(0.38)$	$0.39^{+0.28}_{-0.13} \quad (-7.5\sigma)$
$\Omega_{\nu}h^2$	$< 0.0517 \quad (+13.9\sigma)$	$100\theta_{*}$	$1.0408^{+0.0022}_{-0.0020} \quad (-0.3\sigma)$	$f\sigma_{\mathrm{s}}(0.51)$	$0.325^{+0.13}_{-0.086} \quad (-9.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0853^{+0.013}_{-0.0094} \quad (-7.8\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.64^{+0.29}_{-0.25} \quad (-5.0\sigma)$	$\sigma_{\mathrm{s}}(0.51)$	$0.36^{+0.27}_{-0.12} \quad (-7.5\sigma)$
σ_{s}	$0.50^{+0.30}_{-0.15} \quad (-7.6\sigma)$	z_{drag}	$1059.8^{+6.1}_{-5.6} \quad (+1.0\sigma)$	$f\sigma_{\mathrm{s}}(0.61)$	$0.312^{+0.14}_{-0.088} \quad (-9.1\sigma)$
S_{s}	$0.74^{+0.13}_{-0.12} \quad (-4.0\sigma)$	r_{drag}	$144.8^{+2.4}_{-2.0} \quad (-4.9\sigma)$	$\sigma_{\mathrm{s}}(0.61)$	$0.34^{+0.26}_{-0.12} \quad (-7.5\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	$0.403^{+0.073}_{-0.067} \quad (-4.0\sigma)$	k_{D}	$0.1438^{+0.0029}_{-0.0030} \quad (+6.3\sigma)$	$f\sigma_{\mathrm{s}}(2.33)$	$0.171^{+0.13}_{-0.062} \quad (-8.1\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	$0.448^{+0.14}_{-0.097} \quad (-7.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1601^{+0.0037}_{-0.0033} \quad (-3.6\sigma)$	$\sigma_{\mathrm{s}}(2.33)$	$0.170^{+0.14}_{-0.064} \quad (-7.4\sigma)$
$\sigma_{\mathrm{s}}/h^{0.5}$	$0.70^{+0.25}_{-0.16} \quad (-7.8\sigma)$	z_{eq}	$3368^{+240}_{-250} \quad (-1.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.0) \quad (-0.0\sigma)$
$r_{\mathrm{drag}}h$	$74^{+30}_{-20} \quad (-6.9\sigma)$	k_{eq}	$0.01046^{+0.00072}_{-0.00066} \quad (+0.1\sigma)$	χ_{plikEE}^2	$743.6 \quad (\nu: 5.2)$
$\langle d^2 \rangle^{1/2}$	$2.52^{+0.23}_{-0.24} \quad (+1.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.831^{+0.057}_{-0.051} \quad (+2.3\sigma)$	χ_{prior}^2	$0.98 \quad (\nu: 0.9) \quad (-1.7\sigma)$
z_{re}	$< 8.57 \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.459^{+0.030}_{-0.026} \quad (+2.5\sigma)$	χ_{CMB}^2	$1140.5 \quad (\nu: 5.9) \quad (-9.1\sigma)$
10^9A_{s}	$2.077^{+0.093}_{-0.088} \quad (-0.4\sigma)$	$H(0.15)$	$59^{+20}_{-9} \quad (-6.5\sigma)$		
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.889^{+0.052}_{-0.052} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$834^{+200}_{-200} \quad (+8.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1141.50; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.19; R - 1 = 0.01065$$

6.17 base_mnu_plikHM_TE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022461	$0.02249^{+0.00046}_{-0.00045}$ (+1.8 σ)	$\langle d^2 \rangle^{1/2}$	2.378	$2.363^{+0.083}_{-0.085}$ (-2.3 σ)	$H(0.38)$	83.18	$83.07^{+0.94}_{-1.0}$ (+1.0 σ)
$\Omega_c h^2$	0.11756	$0.1171^{+0.0032}_{-0.0033}$ (-1.8 σ)	z_{re}	7.25	$7.1^{+1.7}_{-1.8}$ (-0.5 σ)	$D_{\text{M}}(0.38)$	1523.8	1527^{+26}_{-23} (-0.9 σ)
$100\theta_{\text{MC}}$	1.04133	$1.04142^{+0.00090}_{-0.00092}$ (+1.5 σ)	$10^9 A_{\text{s}}$	2.047	$2.038^{+0.082}_{-0.083}$ (-1.6 σ)	$H(0.51)$	89.84	$89.73^{+0.83}_{-0.92}$ (+0.9 σ)
τ	0.0506	$0.049^{+0.016}_{-0.017}$ (-0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8495	$1.846^{+0.037}_{-0.037}$ (-2.9 σ)	$D_{\text{M}}(0.51)$	1974.8	1978^{+31}_{-28} (-0.9 σ)
Σm_{ν} [eV]	0.120	< 0.335 (-0.1 σ)	D_{40}	1214.5	1211^{+50}_{-47} (-1.5 σ)	$H(0.61)$	95.42	$95.31^{+0.74}_{-0.85}$ (+0.9 σ)
$\ln(10^{10} A_{\text{s}})$	3.0188	$3.014^{+0.039}_{-0.041}$ (-1.6 σ)	D_{220}	5694	5695^{+110}_{-110} (-0.4 σ)	$D_{\text{M}}(0.61)$	2298.6	2302^{+34}_{-30} (-0.9 σ)
n_{s}	0.9659	$0.967^{+0.020}_{-0.020}$ (+0.9 σ)	D_{810}	2504	2502^{+50}_{-50} (-2.5 σ)	$H(2.33)$	235.41	$235.4^{+1.6}_{-1.6}$ (-1.1 σ)
y_{cal}	1.00003	$0.99999^{+0.0050}_{-0.0050}$ (-0.2 σ)	D_{1420}	805.7	806^{+23}_{-23} (-1.7 σ)	$D_{\text{M}}(2.33)$	5759.8	5766^{+45}_{-38} (-0.8 σ)
A_{100}^{dustTE}	0.112	$0.113^{+0.075}_{-0.075}$	D_{2000}	227.0	$226.9^{+8.3}_{-8.3}$ (-1.2 σ)	$f\sigma_8(0.15)$	0.4381	$0.433^{+0.025}_{-0.028}$ (-2.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.133	$0.136^{+0.059}_{-0.059}$	$n_{\text{s},0.002}$	0.9659	$0.967^{+0.020}_{-0.020}$ (+0.9 σ)	$\sigma_8(0.15)$	0.7229	$0.712^{+0.045}_{-0.051}$ (-0.4 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.477	$0.48^{+0.17}_{-0.17}$	Y_{P}	0.245430	$0.24544^{+0.00018}_{-0.00018}$ (+1.7 σ)	$f\sigma_8(0.38)$	0.4572	$0.451^{+0.026}_{-0.029}$ (-1.5 σ)
A_{143}^{dustTE}	0.216	$0.22^{+0.10}_{-0.11}$	$Y_{\text{P}}^{\text{BBN}}$	0.246757	$0.24677^{+0.00019}_{-0.00018}$ (+1.7 σ)	$\sigma_8(0.38)$	0.6416	$0.632^{+0.040}_{-0.046}$ (-0.3 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.658	$0.66^{+0.16}_{-0.16}$	10^5D/H	2.569	$2.565^{+0.085}_{-0.082}$ (-1.8 σ)	$f\sigma_8(0.51)$	0.4565	$0.450^{+0.026}_{-0.029}$ (-1.2 σ)
A_{217}^{dustTE}	2.05	$2.03^{+0.52}_{-0.54}$	Age/Gyr	13.791	$13.80^{+0.10}_{-0.092}$ (-0.8 σ)	$\sigma_8(0.51)$	0.6008	$0.592^{+0.038}_{-0.043}$ (-0.3 σ)
c_{100}	1.00017	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	z_*	1089.60	$1089.53^{+0.69}_{-0.69}$ (-1.9 σ)	$f\sigma_8(0.61)$	0.4522	$0.446^{+0.025}_{-0.029}$ (-1.0 σ)
c_{217}	0.99800	$0.9980^{+0.0012}_{-0.0013}$ (-0.4 σ)	r_*	144.99	$145.07^{+0.81}_{-0.79}$ (+1.4 σ)	$\sigma_8(0.61)$	0.5719	$0.563^{+0.036}_{-0.041}$ (-0.2 σ)
H_0	67.96	$67.8^{+1.3}_{-1.4}$ (+1.0 σ)	$100\theta_*$	1.04155	$1.04165^{+0.00091}_{-0.00094}$ (+1.6 σ)	$f\sigma_8(2.33)$	0.2896	$0.286^{+0.016}_{-0.019}$ (-0.2 σ)
Ω_{Λ}	0.6940	$0.693^{+0.015}_{-0.017}$ (+0.9 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.921	$13.927^{+0.078}_{-0.075}$ (+1.2 σ)	$\sigma_8(2.33)$	0.2982	$0.294^{+0.018}_{-0.021}$ (-0.1 σ)
Ω_{m}	0.3060	$0.307^{+0.017}_{-0.015}$ (-0.9 σ)	z_{drag}	1059.97	$1060.01^{+0.99}_{-1.0}$ (+1.5 σ)	χ_{small}^2	395.67	396.8 (ν : 1.2) (-0.1 σ)
$\Omega_{\text{m}} h^2$	0.14132	$0.1413^{+0.0024}_{-0.0024}$ (-1.1 σ)	r_{drag}	147.64	$147.71^{+0.87}_{-0.84}$ (+1.1 σ)	χ_{plikTE}^2	852.8	859.6 (ν : 6.5)
$\Omega_{\nu} h^2$	0.00129	< 0.00361 (-0.1 σ)	k_{D}	0.14036	$0.1403^{+0.0010}_{-0.0011}$ (-0.5 σ)	$\chi_{6\text{DF}}^2$	0.001	0.052 (ν : 0.0)
$\Omega_{\text{m}} h^3$	0.09603	$0.0958^{+0.0015}_{-0.0017}$ (+0.5 σ)	$100\theta_{\text{D}}$	0.16078	$0.16076^{+0.00061}_{-0.00058}$ (-1.3 σ)	χ_{MGS}^2	1.61	1.59 (ν : 0.2)
σ_8	0.782	$0.770^{+0.049}_{-0.055}$ (-0.5 σ)	z_{eq}	3346	3336^{+74}_{-77} (-1.7 σ)	χ_{DR12BAO}^2	3.54	4.4 (ν : 1.1)
S_8	0.789	$0.779^{+0.048}_{-0.054}$ (-2.2 σ)	k_{eq}	0.010213	$0.01018^{+0.00022}_{-0.00023}$ (-1.7 σ)	χ_{prior}^2	0.4	7.5 (ν : 6.9) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4324	$0.427^{+0.026}_{-0.030}$ (-2.2 σ)	$100\theta_{\text{eq}}$	0.8241	$0.826^{+0.015}_{-0.014}$ (+1.8 σ)	χ_{BAO}^2	5.15	6.1 (ν : 0.8)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5813	$0.573^{+0.036}_{-0.040}$ (-1.3 σ)	$100\theta_{\text{s,eq}}$	0.4550	$0.4560^{+0.0078}_{-0.0071}$ (+1.8 σ)	χ_{CMB}^2	1248.5	1256.4 (ν : 8.0) (+10.8 σ)
$\sigma_8/h^{0.5}$	0.948	$0.935^{+0.056}_{-0.063}$ (-1.1 σ)	$H(0.15)$	73.18	$73.0^{+1.2}_{-1.3}$ (+1.0 σ)			
$r_{\text{drag}} h$	100.33	$100.2^{+2.0}_{-2.1}$ (+1.0 σ)	$D_{\text{M}}(0.15)$	638.3	640^{+12}_{-11} (-0.9 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1254.08$; $\Delta\chi_{\text{eff}}^2 = -0.15$; $\bar{\chi}_{\text{eff}}^2 = 1269.93$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.51$; $R - 1 = 0.00751$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.61 (Δ -0.14) DR12BAO: 3.54 (Δ 0.10) CMB - small_100x143_offlike5_EE_Aplanck_B: 395.67 (Δ 0.00) plik_rd12_HM_v22_TE: 852.84 (Δ -0.10)

6.18 base_mnu_plikHM_TE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02250^{+0.00044}_{-0.00042} \quad (+1.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.420^{+0.056}_{-0.059} \quad (-0.8\sigma)$	$H(0.38)$	$83.30^{+0.77}_{-0.82} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0024}_{-0.0022} \quad (-1.0\sigma)$	z_{re}	$7.6^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$D_{\text{M}}(0.38)$	$1522^{+21}_{-19} \quad (-1.1\sigma)$
$100\theta_{\text{MC}}$	$1.04129^{+0.00089}_{-0.00095} \quad (+1.3\sigma)$	$10^9 A_{\text{s}}$	$2.085^{+0.062}_{-0.064} \quad (-0.2\sigma)$	$H(0.51)$	$89.99^{+0.65}_{-0.68} \quad (+1.2\sigma)$
τ	$0.054^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.871^{+0.028}_{-0.027} \quad (-1.1\sigma)$	$D_{\text{M}}(0.51)$	$1972^{+24}_{-23} \quad (-1.1\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	$< 0.152 \quad (-0.6\sigma)$	D_{40}	$1222^{+51}_{-49} \quad (-0.8\sigma)$	$H(0.61)$	$95.58^{+0.56}_{-0.60} \quad (+1.2\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.037^{+0.029}_{-0.031} \quad (-0.2\sigma)$	D_{220}	$5722^{+120}_{-120} \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	$2296^{+27}_{-25} \quad (-1.1\sigma)$
n_{s}	$0.967^{+0.022}_{-0.019} \quad (+1.0\sigma)$	D_{810}	$2529^{+44}_{-43} \quad (-0.6\sigma)$	$H(2.33)$	$236.0^{+1.4}_{-1.5} \quad (-0.8\sigma)$
y_{cal}	$1.0007^{+0.0052}_{-0.0054} \quad (+0.1\sigma)$	D_{1420}	$815^{+21}_{-21} \quad (+0.1\sigma)$	$D_{\text{M}}(2.33)$	$5749^{+30}_{-28} \quad (-1.2\sigma)$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.076}$	D_{2000}	$230.4^{+8.0}_{-7.3} \quad (+0.6\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.014}_{-0.013} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.136^{+0.060}_{-0.060}$	$n_{\text{s},0.002}$	$0.967^{+0.022}_{-0.019} \quad (+1.0\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.019}_{-0.023} \quad (+0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.47^{+0.17}_{-0.18}$	Y_{P}	$0.24544^{+0.00018}_{-0.00017} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.013} \quad (-0.1\sigma)$
A_{143}^{dustTE}	$0.220^{+0.099}_{-0.10}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24677^{+0.00018}_{-0.00017} \quad (+1.7\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.017}_{-0.020} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	10^5D/H	$2.563^{+0.078}_{-0.078} \quad (-1.8\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.011}_{-0.013} \quad (+0.1\sigma)$
A_{217}^{dustTE}	$2.05^{+0.53}_{-0.53}$	Age/Gyr	$13.766^{+0.070}_{-0.064} \quad (-1.1\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.016}_{-0.019} \quad (+0.6\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0013} \quad (+1.0\sigma)$	z_*	$1089.66^{+0.62}_{-0.66} \quad (-1.6\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.012} \quad (+0.2\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0012} \quad (-0.4\sigma)$	r_*	$144.62^{+0.57}_{-0.58} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.016}_{-0.018} \quad (+0.6\sigma)$
H_0	$68.0^{+1.1}_{-1.2} \quad (+1.1\sigma)$	$100\theta_*$	$1.04147^{+0.00087}_{-0.00093} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0072}_{-0.0082} \quad (+0.6\sigma)$
Ω_{Λ}	$0.693^{+0.014}_{-0.015} \quad (+1.0\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.886^{+0.057}_{-0.061} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0082}_{-0.0095} \quad (+0.7\sigma)$
Ω_{m}	$0.307^{+0.015}_{-0.014} \quad (-1.0\sigma)$	z_{drag}	$1060.15^{+0.92}_{-0.95} \quad (+1.8\sigma)$	χ^2_{lensing}	$10.6 \quad (\nu: 1.9)$
$\Omega_{\text{m}} h^2$	$0.1421^{+0.0022}_{-0.0023} \quad (-0.9\sigma)$	r_{drag}	$147.24^{+0.64}_{-0.61} \quad (+0.2\sigma)$	χ^2_{small}	$396.9 \quad (\nu: 1.3) \quad (-0.0\sigma)$
$\Omega_{\nu} h^2$	$< 0.00164 \quad (-0.6\sigma)$	k_{D}	$0.14080^{+0.00082}_{-0.00085} \quad (+0.4\sigma)$	χ^2_{plikTE}	$860.0 \quad (\nu: 6.4)$
$\Omega_{\text{m}} h^3$	$0.0966^{+0.0010}_{-0.0010} \quad (+1.1\sigma)$	$100\theta_{\text{D}}$	$0.16068^{+0.00057}_{-0.00055} \quad (-1.7\sigma)$	$\chi^2_{6\text{DF}}$	$0.045 \quad (\nu: 0.0)$
σ_8	$0.806^{+0.021}_{-0.024} \quad (+0.5\sigma)$	z_{eq}	$3379^{+55}_{-53} \quad (-0.8\sigma)$	χ^2_{MGS}	$1.56 \quad (\nu: 0.2)$
S_8	$0.816^{+0.027}_{-0.025} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00017}_{-0.00016} \quad (-0.8\sigma)$	χ^2_{DR12BAO}	$4.4 \quad (\nu: 0.9)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.447^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.8182^{+0.0097}_{-0.010} \quad (+0.9\sigma)$	χ^2_{prior}	$7.5 \quad (\nu: 7.9) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.600^{+0.016}_{-0.018} \quad (-0.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.4518^{+0.0049}_{-0.0052} \quad (+0.9\sigma)$	χ^2_{CMB}	$1267.5 \quad (\nu: 7.5) \quad (+12.8\sigma)$
$\sigma_8/h^{0.5}$	$0.978^{+0.025}_{-0.027} \quad (+0.1\sigma)$	$H(0.15)$	$73.25^{+0.97}_{-1.0} \quad (+1.1\sigma)$	χ^2_{BAO}	$6.0 \quad (\nu: 0.6)$
$r_{\text{drag}} h$	$100.1^{+1.9}_{-1.9} \quad (+1.0\sigma)$	$D_{\text{M}}(0.15)$	$638^{+10}_{-9.3} \quad (-1.0\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 1280.97; \Delta \bar{\chi}^2_{\text{eff}} = 0.28; R - 1 = 0.04268$$

6.19 base_mnu_plikHM_TE_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02250^{+0.00046}_{-0.00045} \quad (+1.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.367^{+0.082}_{-0.084} \quad (-2.1\sigma)$	$H(0.38)$	$83.07^{+0.96}_{-1.0} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1171^{+0.0032}_{-0.0033} \quad (-1.8\sigma)$	z_{re}	$< 8.53 \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+26}_{-24} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04143^{+0.00089}_{-0.00092} \quad (+1.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.051^{+0.067}_{-0.063} \quad (-1.2\sigma)$	$H(0.51)$	$89.73^{+0.84}_{-0.92} \quad (+0.9\sigma)$
τ	$0.0526^{+0.012}_{-0.0095} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.846^{+0.037}_{-0.037} \quad (-2.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+31}_{-28} \quad (-0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.341 \quad (-0.1\sigma)$	D_{40}	$1209^{+49}_{-47} \quad (-1.6\sigma)$	$H(0.61)$	$95.31^{+0.75}_{-0.85} \quad (+0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.021^{+0.033}_{-0.031} \quad (-1.2\sigma)$	D_{220}	$5693^{+110}_{-110} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+34}_{-31} \quad (-0.9\sigma)$
n_{s}	$0.968^{+0.020}_{-0.020} \quad (+1.0\sigma)$	D_{810}	$2504^{+51}_{-49} \quad (-2.5\sigma)$	$H(2.33)$	$235.4^{+1.6}_{-1.6} \quad (-1.2\sigma)$
y_{cal}	$0.9999^{+0.0050}_{-0.0049} \quad (-0.2\sigma)$	D_{1420}	$806^{+23}_{-22} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+43}_{-40} \quad (-0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.074}_{-0.075}$	D_{2000}	$227.3^{+8.3}_{-8.1} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.434^{+0.025}_{-0.029} \quad (-2.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.059}$	$n_{\mathrm{s},0.002}$	$0.968^{+0.020}_{-0.020} \quad (+1.0\sigma)$	$\sigma_8(0.15)$	$0.714^{+0.045}_{-0.052} \quad (-0.4\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	Y_{P}	$0.24544^{+0.00019}_{-0.00018} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.452^{+0.026}_{-0.029} \quad (-1.4\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00019}_{-0.00018} \quad (+1.7\sigma)$	$\sigma_8(0.38)$	$0.633^{+0.040}_{-0.046} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.65^{+0.16}_{-0.15}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.563^{+0.084}_{-0.082} \quad (-1.8\sigma)$	$f\sigma_8(0.51)$	$0.452^{+0.026}_{-0.029} \quad (-1.1\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.03^{+0.53}_{-0.53}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.80^{+0.10}_{-0.093} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.593^{+0.037}_{-0.043} \quad (-0.2\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.51^{+0.69}_{-0.69} \quad (-1.9\sigma)$	$f\sigma_8(0.61)$	$0.447^{+0.025}_{-0.029} \quad (-0.9\sigma)$
c_{217}	$0.9980^{+0.0012}_{-0.0012} \quad (-0.4\sigma)$	r_*	$145.08^{+0.81}_{-0.79} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.564^{+0.036}_{-0.041} \quad (-0.2\sigma)$
H_0	$67.8^{+1.3}_{-1.4} \quad (+1.0\sigma)$	$100\theta_*$	$1.04166^{+0.00090}_{-0.00092} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.286^{+0.016}_{-0.019} \quad (-0.1\sigma)$
Ω_{Λ}	$0.693^{+0.016}_{-0.017} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.928^{+0.077}_{-0.075} \quad (+1.2\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.018}_{-0.021} \quad (-0.1\sigma)$
Ω_{m}	$0.307^{+0.017}_{-0.016} \quad (-0.9\sigma)$	z_{drag}	$1060.03^{+0.97}_{-1.0} \quad (+1.6\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1413^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	r_{drag}	$147.72^{+0.87}_{-0.84} \quad (+1.1\sigma)$	χ_{plikTE}^2	$859.6 \quad (\nu: 6.4)$
$\Omega_{\nu} h^2$	$< 0.00367 \quad (-0.1\sigma)$	k_{D}	$0.1403^{+0.0010}_{-0.0011} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.052 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.0958^{+0.0015}_{-0.0017} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00060}_{-0.00059} \quad (-1.4\sigma)$	χ_{MGS}^2	$1.59 \quad (\nu: 0.2)$
σ_8	$0.772^{+0.049}_{-0.056} \quad (-0.5\sigma)$	z_{eq}	$3335^{+73}_{-76} \quad (-1.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 1.1)$
S_8	$0.781^{+0.048}_{-0.055} \quad (-2.1\sigma)$	k_{eq}	$0.01018^{+0.00022}_{-0.00023} \quad (-1.7\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 7.0) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.428^{+0.026}_{-0.030} \quad (-2.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.015}_{-0.014} \quad (+1.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.9)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.574^{+0.035}_{-0.040} \quad (-1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4562^{+0.0078}_{-0.0072} \quad (+1.8\sigma)$	χ_{CMB}^2	$1256.0 \quad (\nu: 7.2) \quad (+10.8\sigma)$
$\sigma_8/h^{0.5}$	$0.937^{+0.056}_{-0.064} \quad (-1.0\sigma)$	$H(0.15)$	$73.0^{+1.2}_{-1.3} \quad (+1.0\sigma)$		
$r_{\mathrm{drag}} h$	$100.2^{+2.1}_{-2.1} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+13}_{-11} \quad (-0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1269.50$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.51$; $R - 1 = 0.00760$

6.20 base_mnu_plikHM_TE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00043}_{-0.00043} \quad (+1.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.421^{+0.055}_{-0.059} \quad (-0.7\sigma)$	$H(0.38)$	$83.31^{+0.77}_{-0.82} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1188^{+0.0024}_{-0.0022} \quad (-1.0\sigma)$	z_{re}	$< 8.93 \quad (+0.3\sigma)$	$D_M(0.38)$	$1522^{+21}_{-19} \quad (-1.1\sigma)$
$100\theta_{\text{MC}}$	$1.04130^{+0.00089}_{-0.00095} \quad (+1.3\sigma)$	$10^9 A_s$	$2.090^{+0.058}_{-0.052} \quad (-0.0\sigma)$	$H(0.51)$	$89.99^{+0.65}_{-0.70} \quad (+1.2\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.028}_{-0.027} \quad (-1.1\sigma)$	$D_M(0.51)$	$1972^{+25}_{-23} \quad (-1.1\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.153 \quad (-0.6\sigma)$	D_{40}	$1222^{+52}_{-49} \quad (-0.8\sigma)$	$H(0.61)$	$95.58^{+0.57}_{-0.61} \quad (+1.2\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.028}_{-0.025} \quad (-0.0\sigma)$	D_{220}	$5721^{+130}_{-120} \quad (+0.2\sigma)$	$D_M(0.61)$	$2296^{+27}_{-26} \quad (-1.1\sigma)$
n_s	$0.968^{+0.020}_{-0.020} \quad (+1.0\sigma)$	D_{810}	$2529^{+44}_{-44} \quad (-0.6\sigma)$	$H(2.33)$	$236.0^{+1.4}_{-1.5} \quad (-0.8\sigma)$
y_{cal}	$1.0007^{+0.0053}_{-0.0051} \quad (+0.1\sigma)$	D_{1420}	$815^{+21}_{-21} \quad (+0.1\sigma)$	$D_M(2.33)$	$5749^{+31}_{-28} \quad (-1.2\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.075}$	D_{2000}	$230.4^{+7.9}_{-7.4} \quad (+0.7\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.014}_{-0.013} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.136^{+0.059}_{-0.060}$	$n_{s,0.002}$	$0.968^{+0.020}_{-0.020} \quad (+1.0\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.019}_{-0.023} \quad (+0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.47^{+0.17}_{-0.17}$	Y_P	$0.24545^{+0.00017}_{-0.00017} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.013} \quad (-0.1\sigma)$
A_{143}^{dustTE}	$0.220^{+0.099}_{-0.10}$	Y_P^{BBN}	$0.24677^{+0.00017}_{-0.00017} \quad (+1.7\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.017}_{-0.021} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	10^5D/H	$2.561^{+0.079}_{-0.077} \quad (-1.8\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.011}_{-0.012} \quad (+0.1\sigma)$
A_{217}^{dustTE}	$2.04^{+0.54}_{-0.52}$	Age/Gyr	$13.766^{+0.071}_{-0.065} \quad (-1.1\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.016}_{-0.019} \quad (+0.6\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0013} \quad (+1.0\sigma)$	z_*	$1089.65^{+0.62}_{-0.66} \quad (-1.6\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.012} \quad (+0.2\sigma)$
c_{217}	$0.9980^{+0.0012}_{-0.0012} \quad (-0.4\sigma)$	r_*	$144.63^{+0.57}_{-0.56} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.015}_{-0.019} \quad (+0.6\sigma)$
H_0	$68.0^{+1.1}_{-1.2} \quad (+1.1\sigma)$	$100\theta_*$	$1.04147^{+0.00087}_{-0.00093} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0072}_{-0.0082} \quad (+0.6\sigma)$
Ω_Λ	$0.693^{+0.014}_{-0.015} \quad (+1.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.887^{+0.057}_{-0.056} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0082}_{-0.0096} \quad (+0.7\sigma)$
Ω_m	$0.307^{+0.015}_{-0.014} \quad (-1.0\sigma)$	z_{drag}	$1060.16^{+0.91}_{-0.96} \quad (+1.9\sigma)$	χ^2_{lensing}	$10.5 \quad (\nu: 1.8)$
$\Omega_m h^2$	$0.1420^{+0.0022}_{-0.0023} \quad (-0.9\sigma)$	r_{drag}	$147.25^{+0.64}_{-0.61} \quad (+0.2\sigma)$	χ^2_{simall}	$396.9 \quad (\nu: 1.3) \quad (-0.0\sigma)$
$\Omega_\nu h^2$	$< 0.00165 \quad (-0.6\sigma)$	k_D	$0.14080^{+0.00082}_{-0.00086} \quad (+0.4\sigma)$	χ^2_{plikTE}	$860.0 \quad (\nu: 6.3)$
$\Omega_m h^3$	$0.0966^{+0.0011}_{-0.0011} \quad (+1.1\sigma)$	$100\theta_D$	$0.16067^{+0.00059}_{-0.00056} \quad (-1.7\sigma)$	$\chi^2_{6\text{DF}}$	$0.045 \quad (\nu: 0.0)$
σ_8	$0.807^{+0.020}_{-0.024} \quad (+0.5\sigma)$	z_{eq}	$3378^{+54}_{-53} \quad (-0.8\sigma)$	χ^2_{MGS}	$1.58 \quad (\nu: 0.2)$
S_8	$0.816^{+0.027}_{-0.025} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00016}_{-0.00016} \quad (-0.8\sigma)$	χ^2_{DR12BAO}	$4.4 \quad (\nu: 0.9)$
$\sigma_8 \Omega_m^{0.5}$	$0.447^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.8184^{+0.0095}_{-0.010} \quad (+1.0\sigma)$	χ^2_{prior}	$7.5 \quad (\nu: 7.7) \quad (+0.0\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.600^{+0.016}_{-0.018} \quad (+0.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.4519^{+0.0051}_{-0.0052} \quad (+0.9\sigma)$	χ^2_{CMB}	$1267.3 \quad (\nu: 7.1) \quad (+12.7\sigma)$
$\sigma_8/h^{0.5}$	$0.978^{+0.025}_{-0.027} \quad (+0.1\sigma)$	$H(0.15)$	$73.26^{+0.96}_{-1.1} \quad (+1.1\sigma)$	χ^2_{BAO}	$6.0 \quad (\nu: 0.6)$
$r_{\text{drag}} h$	$100.2^{+1.9}_{-1.9} \quad (+1.0\sigma)$	$D_M(0.15)$	$638^{+10}_{-10} \quad (-1.0\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 1280.75; \Delta \bar{\chi}^2_{\text{eff}} = 0.23; R - 1 = 0.05310$$

6.21 base_mnu_plikHM_EE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02346	$0.0241^{+0.0019}_{-0.0018}$ (+8.5 σ)	D_{220}	5888	5988^{+340}_{-330} (+6.7 σ)	$H(0.51)$	90.50	$90.4^{+1.2}_{-1.2}$ (+1.6 σ)
$\Omega_c h^2$	0.1176	$0.1150^{+0.0053}_{-0.0061}$ (−2.7 σ)	D_{810}	2579	2595^{+72}_{-71} (+4.2 σ)	$D_M(0.51)$	1956.4	1959^{+38}_{-36} (−1.4 σ)
$100\theta_{MC}$	1.03983	$1.0401^{+0.0016}_{-0.0016}$ (−1.1 σ)	D_{1420}	837.7	847^{+34}_{-32} (+6.4 σ)	$H(0.61)$	96.05	$96.0^{+1.1}_{-1.1}$ (+1.6 σ)
τ	0.0519	$0.053^{+0.016}_{-0.017}$ (+0.2 σ)	D_{2000}	238.8	242^{+12}_{-12} (+6.8 σ)	$D_M(0.61)$	2278.0	2281^{+42}_{-40} (−1.4 σ)
Σm_ν [eV]	0.069	< 0.595 (+0.4 σ)	$n_{s,0.002}$	0.9751	$0.981^{+0.023}_{-0.022}$ (+3.2 σ)	$H(2.33)$	236.00	$236.0^{+2.0}_{-2.0}$ (−0.8 σ)
$\ln(10^{10} A_s)$	3.0490	$3.051^{+0.042}_{-0.044}$ (+0.7 σ)	Y_P	0.24585	$0.24609^{+0.00075}_{-0.00067}$ (+7.6 σ)	$D_M(2.33)$	5725	5729^{+61}_{-59} (−1.6 σ)
n_s	0.9751	$0.981^{+0.023}_{-0.022}$ (+3.2 σ)	Y_P^{BBN}	0.24718	$0.24742^{+0.00075}_{-0.00067}$ (+7.6 σ)	$f\sigma_8(0.15)$	0.4452	$0.420^{+0.045}_{-0.054}$ (−3.1 σ)
y_{cal}	0.99986	$0.9999^{+0.0049}_{-0.0048}$ (−0.2 σ)	$10^5 D/H$	2.394	$2.30^{+0.28}_{-0.28}$ (−7.5 σ)	$\sigma_8(0.15)$	0.743	$0.697^{+0.072}_{-0.090}$ (−0.8 σ)
H_0	68.74	$68.6^{+1.7}_{-1.7}$ (+1.4 σ)	Age/Gyr	13.709	$13.72^{+0.14}_{-0.14}$ (−1.6 σ)	$f\sigma_8(0.38)$	0.4659	$0.440^{+0.044}_{-0.055}$ (−2.3 σ)
Ω_Λ	0.6999	$0.699^{+0.018}_{-0.019}$ (+1.1 σ)	z_*	1088.40	$1087.5^{+2.2}_{-2.3}$ (−6.0 σ)	$\sigma_8(0.38)$	0.660	$0.619^{+0.063}_{-0.079}$ (−0.7 σ)
Ω_m	0.3001	$0.301^{+0.019}_{-0.018}$ (−1.1 σ)	r_*	144.22	$144.3^{+1.1}_{-1.1}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4659	$0.440^{+0.043}_{-0.054}$ (−1.9 σ)
$\Omega_m h^2$	0.14180	$0.1418^{+0.0028}_{-0.0027}$ (−1.0 σ)	$100\theta_*$	1.03991	$1.0402^{+0.0016}_{-0.0016}$ (−1.6 σ)	$\sigma_8(0.51)$	0.618	$0.580^{+0.059}_{-0.074}$ (−0.6 σ)
$\Omega_\nu h^2$	0.00074	< 0.00639 (+0.4 σ)	$D_M(z_*)/\text{Gpc}$	13.869	$13.88^{+0.10}_{-0.11}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4619	$0.436^{+0.042}_{-0.053}$ (−1.6 σ)
$\Omega_m h^3$	0.09747	$0.0973^{+0.0025}_{-0.0025}$ (+1.7 σ)	z_{drag}	1062.26	$1063.5^{+4.0}_{-3.6}$ (+8.9 σ)	$\sigma_8(0.61)$	0.588	$0.552^{+0.056}_{-0.070}$ (−0.6 σ)
σ_8	0.802	$0.753^{+0.078}_{-0.098}$ (−1.0 σ)	r_{drag}	146.53	$146.5^{+1.4}_{-1.4}$ (−1.4 σ)	$f\sigma_8(2.33)$	0.2972	$0.281^{+0.025}_{-0.032}$ (−0.5 σ)
S_8	0.802	$0.754^{+0.086}_{-0.10}$ (−3.2 σ)	k_D	0.14225	$0.1428^{+0.0024}_{-0.0024}$ (+4.2 σ)	$\sigma_8(2.33)$	0.3068	$0.289^{+0.028}_{-0.035}$ (−0.4 σ)
$\sigma_8 \Omega_m^{0.5}$	0.440	$0.413^{+0.047}_{-0.056}$ (−3.2 σ)	$100\theta_D$	0.15924	$0.1586^{+0.0021}_{-0.0020}$ (−9.4 σ)	χ_{simall}^2	395.62	396.7 (ν : 1.1) (−0.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.594	$0.557^{+0.060}_{-0.074}$ (−2.1 σ)	z_{eq}	3371	3324^{+110}_{-120} (−1.9 σ)	χ_{plikEE}^2	739.0	744.0 (ν : 5.0)
$\sigma_8/h^{0.5}$	0.968	$0.908^{+0.096}_{-0.12}$ (−1.9 σ)	k_{eq}	0.010287	$0.01015^{+0.00032}_{-0.00035}$ (−1.9 σ)	χ_{6DF}^2	0.002	0.058 (ν : 0.0)
$r_{drag} h$	100.72	$100.5^{+2.3}_{-2.3}$ (+1.1 σ)	$100\theta_{eq}$	0.8212	$0.832^{+0.026}_{-0.023}$ (+2.5 σ)	χ_{MGS}^2	1.82	1.77 (ν : 0.3)
$\langle d^2 \rangle^{1/2}$	2.401	$2.34^{+0.12}_{-0.13}$ (−2.8 σ)	$100\theta_{s,eq}$	0.4526	$0.458^{+0.013}_{-0.011}$ (+2.2 σ)	$\chi_{DR12BAO}^2$	3.62	4.7 (ν : 1.2)
z_{re}	7.17	$7.1^{+1.5}_{-1.7}$ (−0.5 σ)	$H(0.15)$	73.92	$73.8^{+1.5}_{-1.6}$ (+1.4 σ)	χ_{prior}^2	0.00	0.99 (ν : 1.0) (−1.7 σ)
$10^9 A_s$	2.109	$2.115^{+0.090}_{-0.091}$ (+0.7 σ)	$D_M(0.15)$	631.5	633^{+15}_{-14} (−1.3 σ)	χ_{BAO}^2	5.44	6.5 (ν : 1.0)
$10^9 A_s e^{-2\tau}$	1.9015	$1.902^{+0.048}_{-0.049}$ (+1.2 σ)	$H(0.38)$	83.87	$83.8^{+1.3}_{-1.3}$ (+1.5 σ)	χ_{CMB}^2	1134.7	1140.7 (ν : 6.1) (−9.1 σ)
D_{40}	1232	1226^{+59}_{-62} (−0.5 σ)	$D_M(0.38)$	1508.8	1511^{+32}_{-30} (−1.3 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1140.11$; $\Delta\chi_{\text{eff}}^2 = -0.05$; $\bar{\chi}_{\text{eff}}^2 = 1148.18$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.82$; $R - 1 = 0.00933$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.82 (Δ -0.07) DR12BAO: 3.62 (Δ 0.02) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.62 (Δ 0.00) plik_rd12_HM_v22_EE: 739.05 (Δ 0.00)

6.22 base_mnu_plikHM_EE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0239^{+0.0015}_{-0.0014} \quad (+7.6\sigma)$	D_{220}	$5959^{+270}_{-270} \quad (+6.0\sigma)$	$H(0.51)$	$90.5^{+1.1}_{-1.1} \quad (+1.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1164^{+0.0033}_{-0.0035} \quad (-2.1\sigma)$	D_{810}	$2593^{+63}_{-60} \quad (+4.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1957^{+36}_{-34} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0400^{+0.0015}_{-0.0015} \quad (-1.4\sigma)$	D_{1420}	$845^{+29}_{-28} \quad (+5.9\sigma)$	$H(0.61)$	$96.1^{+1.0}_{-1.0} \quad (+1.7\sigma)$
τ	$0.053^{+0.015}_{-0.016} \quad (+0.2\sigma)$	D_{2000}	$241^{+10}_{-10} \quad (+6.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2278^{+40}_{-38} \quad (-1.4\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.340 \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.978^{+0.020}_{-0.021} \quad (+2.7\sigma)$	$H(2.33)$	$236.2^{+1.7}_{-1.7} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.054^{+0.036}_{-0.035} \quad (+0.9\sigma)$	Y_{P}	$0.24600^{+0.00061}_{-0.00055} \quad (+6.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5723^{+54}_{-53} \quad (-1.7\sigma)$
n_{s}	$0.978^{+0.020}_{-0.021} \quad (+2.7\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24733^{+0.00061}_{-0.00055} \quad (+6.8\sigma)$	$f\sigma_8(0.15)$	$0.433^{+0.024}_{-0.028} \quad (-2.1\sigma)$
y_{cal}	$0.99999^{+0.0048}_{-0.0049} \quad (-0.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.33^{+0.23}_{-0.23} \quad (-6.8\sigma)$	$\sigma_8(0.15)$	$0.720^{+0.038}_{-0.044} \quad (-0.2\sigma)$
H_0	$68.7^{+1.6}_{-1.7} \quad (+1.4\sigma)$	Age/Gyr	$13.70^{+0.12}_{-0.12} \quad (-1.7\sigma)$	$f\sigma_8(0.38)$	$0.454^{+0.024}_{-0.026} \quad (-1.3\sigma)$
Ω_{Λ}	$0.699^{+0.018}_{-0.019} \quad (+1.2\sigma)$	z_*	$1087.9^{+1.8}_{-1.8} \quad (-5.3\sigma)$	$\sigma_8(0.38)$	$0.640^{+0.034}_{-0.039} \quad (-0.1\sigma)$
Ω_{m}	$0.301^{+0.019}_{-0.018} \quad (-1.2\sigma)$	r_*	$144.18^{+0.78}_{-0.82} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.023}_{-0.026} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0026}_{-0.0025} \quad (-0.9\sigma)$	$100\theta_*$	$1.0400^{+0.0016}_{-0.0015} \quad (-1.9\sigma)$	$\sigma_8(0.51)$	$0.600^{+0.032}_{-0.036} \quad (-0.0\sigma)$
$\Omega_{\nu}h^2$	$< 0.00366 \quad (-0.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.863^{+0.081}_{-0.083} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.450^{+0.022}_{-0.025} \quad (-0.8\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0976^{+0.0021}_{-0.0020} \quad (+1.9\sigma)$	z_{drag}	$1063.1^{+3.2}_{-2.9} \quad (+8.1\sigma)$	$\sigma_8(0.61)$	$0.571^{+0.030}_{-0.034} \quad (+0.0\sigma)$
σ_8	$0.778^{+0.042}_{-0.047} \quad (-0.3\sigma)$	r_{drag}	$146.4^{+1.1}_{-1.2} \quad (-1.6\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.013}_{-0.015} \quad (+0.1\sigma)$
S_8	$0.779^{+0.048}_{-0.055} \quad (-2.2\sigma)$	k_{D}	$0.1427^{+0.0021}_{-0.0020} \quad (+4.1\sigma)$	$\sigma_8(2.33)$	$0.298^{+0.015}_{-0.017} \quad (+0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.427^{+0.026}_{-0.030} \quad (-2.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1588^{+0.0017}_{-0.0016} \quad (-8.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.2 \quad (\nu: 0.8)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.576^{+0.033}_{-0.036} \quad (-1.2\sigma)$	z_{eq}	$3353^{+60}_{-62} \quad (-1.3\sigma)$	χ^2_{simall}	$396.7 \quad (\nu: 1.0) \quad (-0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.939^{+0.053}_{-0.059} \quad (-1.0\sigma)$	k_{eq}	$0.01023^{+0.00018}_{-0.00019} \quad (-1.3\sigma)$	χ^2_{plikEE}	$742.9 \quad (\nu: 3.5)$
$r_{\mathrm{drag}}h$	$100.6^{+2.3}_{-2.3} \quad (+1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.014}_{-0.013} \quad (+1.8\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.059 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.375^{+0.071}_{-0.075} \quad (-1.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4548^{+0.0067}_{-0.0061} \quad (+1.5\sigma)$	χ^2_{MGS}	$1.80 \quad (\nu: 0.3)$
z_{re}	$7.2^{+1.5}_{-1.6} \quad (-0.4\sigma)$	$H(0.15)$	$73.9^{+1.5}_{-1.5} \quad (+1.5\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.7 \quad (\nu: 1.2)$
10^9A_{s}	$2.121^{+0.077}_{-0.074} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$632^{+14}_{-14} \quad (-1.3\sigma)$	χ^2_{prior}	$0.96 \quad (\nu: 0.9) \quad (-1.7\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.907^{+0.039}_{-0.037} \quad (+1.6\sigma)$	$H(0.38)$	$83.9^{+1.2}_{-1.3} \quad (+1.6\sigma)$	χ^2_{CMB}	$1148.8 \quad (\nu: 5.7) \quad (-7.7\sigma)$
D_{40}	$1233^{+53}_{-55} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1509^{+30}_{-29} \quad (-1.4\sigma)$	χ^2_{BAO}	$6.5 \quad (\nu: 1.1)$

$\bar{\chi}^2_{\mathrm{eff}} = 1156.24$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.55$; $R - 1 = 0.01129$

6.23 base_mnu_plikHM_EE_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0241^{+0.0019}_{-0.0018} \quad (+8.4\sigma)$	D_{220}	$5981^{+340}_{-330} \quad (+6.6\sigma)$	$H(0.51)$	$90.4^{+1.2}_{-1.2} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1150^{+0.0053}_{-0.0061} \quad (-2.7\sigma)$	D_{810}	$2594^{+72}_{-70} \quad (+4.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1960^{+38}_{-36} \quad (-1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0401^{+0.0016}_{-0.0016} \quad (-1.1\sigma)$	D_{1420}	$846^{+34}_{-32} \quad (+6.3\sigma)$	$H(0.61)$	$96.0^{+1.1}_{-1.1} \quad (+1.6\sigma)$
τ	$0.056^{+0.012}_{-0.011} \quad (+0.5\sigma)$	D_{2000}	$242^{+12}_{-12} \quad (+6.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2282^{+42}_{-40} \quad (-1.4\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.592 \quad (+0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.981^{+0.023}_{-0.022} \quad (+3.2\sigma)$	$H(2.33)$	$236.0^{+2.0}_{-2.0} \quad (-0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.057^{+0.038}_{-0.036} \quad (+1.1\sigma)$	Y_{P}	$0.24608^{+0.00074}_{-0.00067} \quad (+7.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5730^{+61}_{-60} \quad (-1.5\sigma)$
n_{s}	$0.981^{+0.023}_{-0.022} \quad (+3.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24740^{+0.00075}_{-0.00067} \quad (+7.4\sigma)$	$f\sigma_{\mathrm{s}}(0.15)$	$0.422^{+0.044}_{-0.053} \quad (-3.0\sigma)$
y_{cal}	$0.9999^{+0.0049}_{-0.0049} \quad (-0.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.30^{+0.28}_{-0.28} \quad (-7.4\sigma)$	$\sigma_{\mathrm{s}}(0.15)$	$0.699^{+0.071}_{-0.089} \quad (-0.8\sigma)$
H_0	$68.6^{+1.7}_{-1.7} \quad (+1.4\sigma)$	Age/Gyr	$13.72^{+0.14}_{-0.14} \quad (-1.5\sigma)$	$f\sigma_{\mathrm{s}}(0.38)$	$0.441^{+0.044}_{-0.054} \quad (-2.2\sigma)$
Ω_{Λ}	$0.699^{+0.018}_{-0.019} \quad (+1.1\sigma)$	z_{*}	$1087.6^{+2.1}_{-2.3} \quad (-5.9\sigma)$	$\sigma_{\mathrm{s}}(0.38)$	$0.621^{+0.062}_{-0.079} \quad (-0.6\sigma)$
Ω_{m}	$0.301^{+0.019}_{-0.018} \quad (-1.1\sigma)$	r_{*}	$144.4^{+1.1}_{-1.1} \quad (-0.1\sigma)$	$f\sigma_{\mathrm{s}}(0.51)$	$0.441^{+0.043}_{-0.054} \quad (-1.8\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1418^{+0.0028}_{-0.0028} \quad (-1.0\sigma)$	$100\theta_{*}$	$1.0402^{+0.0016}_{-0.0016} \quad (-1.6\sigma)$	$\sigma_{\mathrm{s}}(0.51)$	$0.582^{+0.058}_{-0.073} \quad (-0.6\sigma)$
$\Omega_{\nu}h^2$	$< 0.00637 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.88^{+0.10}_{-0.11} \quad (+0.2\sigma)$	$f\sigma_{\mathrm{s}}(0.61)$	$0.438^{+0.042}_{-0.053} \quad (-1.5\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0973^{+0.0025}_{-0.0025} \quad (+1.7\sigma)$	z_{drag}	$1063.5^{+4.0}_{-3.6} \quad (+8.8\sigma)$	$\sigma_{\mathrm{s}}(0.61)$	$0.554^{+0.055}_{-0.070} \quad (-0.5\sigma)$
σ_{s}	$0.755^{+0.077}_{-0.097} \quad (-0.9\sigma)$	r_{drag}	$146.5^{+1.4}_{-1.4} \quad (-1.4\sigma)$	$f\sigma_{\mathrm{s}}(2.33)$	$0.283^{+0.024}_{-0.032} \quad (-0.4\sigma)$
S_{s}	$0.757^{+0.085}_{-0.10} \quad (-3.1\sigma)$	k_{D}	$0.1427^{+0.0024}_{-0.0025} \quad (+4.1\sigma)$	$\sigma_{\mathrm{s}}(2.33)$	$0.290^{+0.027}_{-0.035} \quad (-0.3\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	$0.415^{+0.047}_{-0.056} \quad (-3.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1586^{+0.0021}_{-0.0020} \quad (-9.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.9) \quad (-0.3\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	$0.560^{+0.059}_{-0.073} \quad (-2.0\sigma)$	z_{eq}	$3324^{+110}_{-120} \quad (-1.9\sigma)$	χ_{plikEE}^2	$743.9 \quad (\nu: 5.0)$
$\sigma_{\mathrm{s}}/h^{0.5}$	$0.912^{+0.095}_{-0.12} \quad (-1.7\sigma)$	k_{eq}	$0.01015^{+0.00032}_{-0.00035} \quad (-1.9\sigma)$	χ_{6DF}^2	$0.057 \quad (\nu: 0.0)$
$r_{\mathrm{drag}}h$	$100.5^{+2.3}_{-2.3} \quad (+1.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.832^{+0.026}_{-0.023} \quad (+2.5\sigma)$	χ_{MGS}^2	$1.75 \quad (\nu: 0.2)$
$\langle d^2 \rangle^{1/2}$	$2.35^{+0.12}_{-0.13} \quad (-2.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.458^{+0.013}_{-0.011} \quad (+2.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.2)$
z_{re}	$< 8.47 \quad (-0.1\sigma)$	$H(0.15)$	$73.8^{+1.5}_{-1.6} \quad (+1.4\sigma)$	χ_{prior}^2	$0.99 \quad (\nu: 1.0) \quad (-1.7\sigma)$
10^9A_{s}	$2.127^{+0.083}_{-0.075} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$633^{+15}_{-14} \quad (-1.3\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.0)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.901^{+0.049}_{-0.048} \quad (+1.2\sigma)$	$H(0.38)$	$83.8^{+1.3}_{-1.3} \quad (+1.5\sigma)$	χ_{CMB}^2	$1140.3 \quad (\nu: 5.7) \quad (-9.1\sigma)$
D_{40}	$1226^{+60}_{-63} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+32}_{-30} \quad (-1.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1147.83$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.76$; $R - 1 = 0.01081$

6.24 base_mnu_plikHM_EE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.0239^{+0.0015}_{-0.0014} \quad (+7.5\sigma)$	D_{220}	$5954^{+270}_{-260} \quad (+5.9\sigma)$	$H(0.51)$	$90.5^{+1.1}_{-1.1} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1163^{+0.0033}_{-0.0035} \quad (-2.1\sigma)$	D_{810}	$2592^{+62}_{-59} \quad (+3.9\sigma)$	$D_M(0.51)$	$1958^{+36}_{-34} \quad (-1.4\sigma)$
$100\theta_{MC}$	$1.0400^{+0.0016}_{-0.0015} \quad (-1.3\sigma)$	D_{1420}	$844^{+29}_{-28} \quad (+5.8\sigma)$	$H(0.61)$	$96.0^{+1.0}_{-1.0} \quad (+1.7\sigma)$
τ	$0.056^{+0.012}_{-0.011} \quad (+0.5\sigma)$	D_{2000}	$241^{+11}_{-10} \quad (+6.3\sigma)$	$D_M(0.61)$	$2279^{+40}_{-38} \quad (-1.4\sigma)$
Σm_ν [eV]	$< 0.345 \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.978^{+0.021}_{-0.021} \quad (+2.8\sigma)$	$H(2.33)$	$236.1^{+1.7}_{-1.7} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.059^{+0.033}_{-0.030} \quad (+1.2\sigma)$	Y_P	$0.24599^{+0.00061}_{-0.00054} \quad (+6.7\sigma)$	$D_M(2.33)$	$5725^{+54}_{-52} \quad (-1.6\sigma)$
n_s	$0.978^{+0.021}_{-0.021} \quad (+2.8\sigma)$	Y_P^{BBN}	$0.24732^{+0.00061}_{-0.00054} \quad (+6.7\sigma)$	$f\sigma_8(0.15)$	$0.434^{+0.024}_{-0.028} \quad (-2.0\sigma)$
y_{cal}	$0.99999^{+0.0050}_{-0.0049} \quad (-0.2\sigma)$	$10^5 D/H$	$2.33^{+0.23}_{-0.23} \quad (-6.7\sigma)$	$\sigma_8(0.15)$	$0.721^{+0.039}_{-0.044} \quad (-0.2\sigma)$
H_0	$68.7^{+1.6}_{-1.7} \quad (+1.4\sigma)$	Age/Gyr	$13.71^{+0.13}_{-0.12} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.454^{+0.024}_{-0.027} \quad (-1.3\sigma)$
Ω_Λ	$0.699^{+0.018}_{-0.019} \quad (+1.1\sigma)$	z_*	$1087.9^{+1.7}_{-1.8} \quad (-5.3\sigma)$	$\sigma_8(0.38)$	$0.640^{+0.035}_{-0.039} \quad (-0.1\sigma)$
Ω_m	$0.301^{+0.019}_{-0.018} \quad (-1.1\sigma)$	r_*	$144.22^{+0.79}_{-0.79} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.023}_{-0.026} \quad (-1.0\sigma)$
$\Omega_m h^2$	$0.1420^{+0.0026}_{-0.0024} \quad (-0.9\sigma)$	$100\theta_*$	$1.0400^{+0.0016}_{-0.0015} \quad (-1.8\sigma)$	$\sigma_8(0.51)$	$0.600^{+0.032}_{-0.037} \quad (-0.0\sigma)$
$\Omega_\nu h^2$	$< 0.00371 \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.867^{+0.079}_{-0.080} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.450^{+0.023}_{-0.025} \quad (-0.8\sigma)$
$\Omega_m h^3$	$0.0975^{+0.0020}_{-0.0020} \quad (+1.8\sigma)$	z_{drag}	$1063.1^{+3.1}_{-2.8} \quad (+8.0\sigma)$	$\sigma_8(0.61)$	$0.571^{+0.031}_{-0.035} \quad (+0.0\sigma)$
σ_8	$0.779^{+0.043}_{-0.048} \quad (-0.3\sigma)$	r_{drag}	$146.4^{+1.1}_{-1.2} \quad (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.013}_{-0.015} \quad (+0.1\sigma)$
S_8	$0.780^{+0.050}_{-0.053} \quad (-2.2\sigma)$	k_D	$0.1426^{+0.0021}_{-0.0020} \quad (+4.0\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.015}_{-0.017} \quad (+0.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.427^{+0.027}_{-0.029} \quad (-2.2\sigma)$	$100\theta_D$	$0.1588^{+0.0017}_{-0.0017} \quad (-8.6\sigma)$	$\chi^2_{lensing}$	$9.2 \quad (\nu: 0.8)$
$\sigma_8 \Omega_m^{0.25}$	$0.577^{+0.033}_{-0.037} \quad (-1.2\sigma)$	z_{eq}	$3350^{+59}_{-61} \quad (-1.4\sigma)$	χ^2_{small}	$396.5 \quad (\nu: 0.9) \quad (-0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.940^{+0.054}_{-0.060} \quad (-1.0\sigma)$	k_{eq}	$0.01023^{+0.00018}_{-0.00019} \quad (-1.4\sigma)$	χ^2_{plikEE}	$742.8 \quad (\nu: 3.4)$
$r_{drag} h$	$100.5^{+2.3}_{-2.3} \quad (+1.2\sigma)$	$100\theta_{eq}$	$0.826^{+0.014}_{-0.013} \quad (+1.8\sigma)$	χ^2_{6DF}	$0.058 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.378^{+0.069}_{-0.074} \quad (-1.9\sigma)$	$100\theta_{s,eq}$	$0.4550^{+0.0066}_{-0.0061} \quad (+1.6\sigma)$	χ^2_{MGS}	$1.79 \quad (\nu: 0.3)$
z_{re}	$< 8.49 \quad (-0.0\sigma)$	$H(0.15)$	$73.9^{+1.4}_{-1.5} \quad (+1.4\sigma)$	$\chi^2_{DR12BAO}$	$4.7 \quad (\nu: 1.3)$
$10^9 A_s$	$2.131^{+0.068}_{-0.066} \quad (+1.2\sigma)$	$D_M(0.15)$	$632^{+14}_{-14} \quad (-1.3\sigma)$	χ^2_{prior}	$0.97 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_s e^{-2\tau}$	$1.905^{+0.038}_{-0.036} \quad (+1.4\sigma)$	$H(0.38)$	$83.8^{+1.2}_{-1.3} \quad (+1.5\sigma)$	χ^2_{CMB}	$1148.5 \quad (\nu: 5.5) \quad (-7.7\sigma)$
D_{40}	$1233^{+54}_{-56} \quad (-0.1\sigma)$	$D_M(0.38)$	$1510^{+31}_{-28} \quad (-1.4\sigma)$	χ^2_{BAO}	$6.5 \quad (\nu: 1.1)$

$\bar{\chi}^2_{eff} = 1155.99$; $\Delta\bar{\chi}^2_{eff} = 0.60$; $R - 1 = 0.01388$

6.25 base_mnu_plikHM_TT_lowl_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02229	$0.02218^{+0.00054}_{-0.00055}$ (+0.6 σ)	S_8	0.8262	$0.827^{+0.033}_{-0.033}$ (−0.3 σ)	$100\theta_{\text{eq}}$	0.8235	$0.820^{+0.021}_{-0.021}$ (+1.2 σ)
$\Omega_c h^2$	0.11779	$0.1186^{+0.0051}_{-0.0048}$ (−1.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4525	$0.453^{+0.018}_{-0.018}$ (−0.3 σ)	$100\theta_{\text{s,eq}}$	0.4548	$0.453^{+0.011}_{-0.011}$ (+1.2 σ)
$100\theta_{\text{MC}}$	1.04092	$1.0408^{+0.0011}_{-0.0011}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5933	$0.590^{+0.032}_{-0.035}$ (−0.5 σ)	$H(0.15)$	70.80	$70.3^{+4.3}_{-4.4}$ (−0.5 σ)
τ	0.114	$0.107^{+0.055}_{-0.057}$ (+7.0 σ)	$\sigma_8/h^{0.5}$	0.963	$0.956^{+0.058}_{-0.065}$ (−0.5 σ)	$D_{\text{M}}(0.15)$	662.2	669^{+49}_{-45} (+0.5 σ)
Σm_ν [eV]	0.378	< 0.849 (+1.3 σ)	$r_{\text{drag}} h$	96.4	$95.4^{+7.7}_{-8.0}$ (−0.4 σ)	$H(0.38)$	81.29	$80.9^{+3.2}_{-3.4}$ (−0.6 σ)
$\ln(10^{10} A_s)$	3.156	$3.14^{+0.10}_{-0.11}$ (+6.3 σ)	$\langle d^2 \rangle^{1/2}$	2.509	$2.515^{+0.092}_{-0.084}$ (+1.8 σ)	$D_{\text{M}}(0.38)$	1573	1585^{+97}_{-90} (+0.5 σ)
n_s	0.9724	$0.968^{+0.015}_{-0.015}$ (+1.1 σ)	z_{re}	13.08	$12.4^{+4.5}_{-4.8}$ (+6.0 σ)	$H(0.51)$	88.22	$88.0^{+2.6}_{-2.8}$ (−0.6 σ)
y_{cal}	1.00018	$1.0002^{+0.0048}_{-0.0049}$ (−0.1 σ)	$10^9 A_s$	2.348	$2.32^{+0.24}_{-0.24}$ (+6.8 σ)	$D_{\text{M}}(0.51)$	2033	2047^{+110}_{-110} (+0.5 σ)
A_{217}^{CIB}	44.9	47^{+10}_{-10} (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8687	$1.871^{+0.030}_{-0.030}$ (−1.1 σ)	$H(0.61)$	94.00	$93.8^{+2.2}_{-2.3}$ (−0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.83	—	D_{40}	1228.8	1233^{+25}_{-25} (−0.0 σ)	$D_{\text{M}}(0.61)$	2362	2378^{+120}_{-120} (+0.6 σ)
A_{143}^{tSZ}	6.94	$5.3^{+3.8}_{-4.0}$ (+0.1 σ)	D_{220}	5711	5714^{+81}_{-81} (+0.0 σ)	$H(2.33)$	236.81	$237.5^{+4.7}_{-4.1}$ (−0.0 σ)
A_{100}^{PS}	245	260^{+60}_{-60} (−0.2 σ)	D_{810}	2533.1	2531^{+28}_{-28} (−0.4 σ)	$D_{\text{M}}(2.33)$	5832	5844^{+120}_{-110} (+0.8 σ)
A_{143}^{PS}	53.4	47^{+20}_{-20} (−0.3 σ)	D_{1420}	816.9	$814.8^{+9.9}_{-10}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4584	$0.458^{+0.016}_{-0.017}$ (−0.2 σ)
$A_{143 \times 217}^{\text{PS}}$	58.1	43^{+20}_{-20} (−0.1 σ)	D_{2000}	231.16	$230.1^{+3.8}_{-3.9}$ (+0.5 σ)	$\sigma_8(0.15)$	0.717	$0.708^{+0.072}_{-0.078}$ (−0.5 σ)
A_{217}^{PS}	123.9	115^{+20}_{-20} (+0.0 σ)	$n_{\text{s},0.002}$	0.9724	$0.968^{+0.015}_{-0.015}$ (+1.1 σ)	$f\sigma_8(0.38)$	0.4710	$0.468^{+0.021}_{-0.024}$ (−0.4 σ)
A^{kSZ}	0.00	< 8.19 (−0.2 σ)	Y_{P}	0.245365	$0.24531^{+0.00021}_{-0.00026}$ (+0.5 σ)	$\sigma_8(0.38)$	0.634	$0.625^{+0.068}_{-0.074}$ (−0.5 σ)
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246692	$0.24664^{+0.00021}_{-0.00026}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4670	$0.463^{+0.025}_{-0.029}$ (−0.4 σ)
A_{143}^{dustTT}	10.85	$10.7^{+3.5}_{-3.5}$ (−0.0 σ)	10^5D/H	2.600	$2.62^{+0.11}_{-0.10}$ (−0.6 σ)	$\sigma_8(0.51)$	0.592	$0.584^{+0.066}_{-0.071}$ (−0.5 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.1	$18.2^{+6.5}_{-6.4}$ (−0.0 σ)	Age/Gyr	13.957	$13.99^{+0.28}_{-0.26}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4605	$0.456^{+0.028}_{-0.032}$ (−0.4 σ)
A_{217}^{dustTT}	95.9	93^{+10}_{-10} (+0.0 σ)	z_*	1089.88	$1090.1^{+1.2}_{-1.1}$ (−0.7 σ)	$\sigma_8(0.61)$	0.563	$0.555^{+0.064}_{-0.069}$ (−0.5 σ)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_*	144.98	$144.8^{+1.1}_{-1.1}$ (+0.8 σ)	$f\sigma_8(2.33)$	0.2876	$0.283^{+0.030}_{-0.034}$ (−0.4 σ)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_*$	1.04126	$1.04117^{+0.00097}_{-0.00097}$ (+0.6 σ)	$\sigma_8(2.33)$	0.2929	$0.288^{+0.036}_{-0.039}$ (−0.4 σ)
H_0	65.3	$64.7^{+4.9}_{-5.1}$ (−0.5 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.924	$13.91^{+0.10}_{-0.10}$ (+0.8 σ)	χ^2_{lensing}	8.04	9.1 (ν : 1.2)
Ω_Λ	0.662	$0.650^{+0.068}_{-0.078}$ (−0.4 σ)	z_{drag}	1059.67	$1059.47^{+0.99}_{-0.99}$ (+0.4 σ)	χ^2_{lowl}	23.65	24.4 (ν : 0.8) (+0.3 σ)
Ω_{m}	0.338	$0.350^{+0.078}_{-0.068}$ (+0.4 σ)	r_{drag}	147.68	$147.5^{+1.1}_{-1.1}$ (+0.8 σ)	χ^2_{plik}	757.8	770.2 (ν : 14.9) (−0.4 σ)
$\Omega_{\text{m}} h^2$	0.1441	$0.1452^{+0.0078}_{-0.0073}$ (+0.1 σ)	k_{D}	0.14024	$0.1403^{+0.0011}_{-0.0011}$ (−0.5 σ)	χ^2_{prior}	1.1	7.3 (ν : 6.7) (−0.0 σ)
$\Omega_\nu h^2$	0.00407	< 0.00913 (+1.3 σ)	$100\theta_{\text{D}}$	0.16088	$0.16097^{+0.00056}_{-0.00054}$ (−0.6 σ)	χ^2_{CMB}	789.5	803.7 (ν : 15.4) (−67.1 σ)
$\Omega_{\text{m}} h^3$	0.09409	$0.0938^{+0.0028}_{-0.0030}$ (−1.1 σ)	z_{eq}	3347	3365^{+110}_{-110} (−1.1 σ)			
σ_8	0.778	$0.769^{+0.072}_{-0.078}$ (−0.5 σ)	k_{eq}	0.010220	$0.01027^{+0.00035}_{-0.00033}$ (−1.1 σ)			

Best-fit $\chi^2_{\text{eff}} = 790.68$; $\Delta\chi^2_{\text{eff}} = -0.33$; $\bar{\chi}^2_{\text{eff}} = 811.02$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.03$; $R - 1 = 0.01418$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.04 (Δ -1.07) commander_dx12_v3_2_29: 23.65 (Δ 0.73) plik_rd12_HM_v22_TT: 757.84 (Δ 0.07)

6.26 base_mnu_plikHM_TT_lowl_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02237^{+0.00042}_{-0.00041} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.020}_{-0.022} \quad (+0.2\sigma)$	$H(0.38)$	$82.95^{+0.95}_{-1.0} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1169^{+0.0034}_{-0.0035} \quad (-1.9\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.032}_{-0.035} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+26}_{-24} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04116^{+0.00083}_{-0.00084} \quad (+1.0\sigma)$	$r_{\mathrm{drag}} h$	$100.1^{+2.1}_{-2.2} \quad (+1.0\sigma)$	$H(0.51)$	$89.61^{+0.80}_{-0.91} \quad (+0.8\sigma)$
τ	$0.097^{+0.053}_{-0.050} \quad (+5.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.479^{+0.062}_{-0.061} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+31}_{-28} \quad (-0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.349 \quad (-0.1\sigma)$	z_{re}	$11.5^{+4.2}_{-4.5} \quad (+4.9\sigma)$	$H(0.61)$	$95.18^{+0.71}_{-0.83} \quad (+0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.121^{+0.099}_{-0.091} \quad (+5.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.27^{+0.22}_{-0.21} \quad (+5.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2306^{+34}_{-31} \quad (-0.9\sigma)$
n_{s}	$0.973^{+0.012}_{-0.011} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.865^{+0.026}_{-0.026} \quad (-1.5\sigma)$	$H(2.33)$	$235.1^{+1.6}_{-1.6} \quad (-1.3\sigma)$
y_{cal}	$1.0001^{+0.0046}_{-0.0050} \quad (-0.2\sigma)$	D_{40}	$1228^{+23}_{-21} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5773^{+42}_{-38} \quad (-0.7\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	D_{220}	$5720^{+79}_{-76} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.014}_{-0.014} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2529^{+27}_{-27} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.028}_{-0.033} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.3^{+3.9}_{-4.2} \quad (+0.2\sigma)$	D_{1420}	$815^{+10}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.014}_{-0.015} \quad (+0.2\sigma)$
A_{100}^{PS}	$258^{+60}_{-60} \quad (-0.3\sigma)$	D_{2000}	$230.7^{+3.6}_{-3.5} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.026}_{-0.028} \quad (+0.7\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.973^{+0.012}_{-0.011} \quad (+1.8\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.014}_{-0.014} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.24539^{+0.00016}_{-0.00017} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.025}_{-0.027} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00016}_{-0.00017} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.014}_{-0.015} \quad (+0.5\sigma)$
A^{kSZ}	$< 8.18 \quad (-0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.586^{+0.078}_{-0.076} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.024}_{-0.026} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.8} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.824^{+0.098}_{-0.089} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.301^{+0.011}_{-0.011} \quad (+0.9\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.6^{+3.4}_{-3.4} \quad (-0.1\sigma)$	z_*	$1089.66^{+0.68}_{-0.68} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.012}_{-0.013} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.6}_{-6.5} \quad (-0.0\sigma)$	r_*	$145.23^{+0.82}_{-0.77} \quad (+1.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.8\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04140^{+0.00084}_{-0.00085} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9996^{+0.0013}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.945^{+0.076}_{-0.072} \quad (+1.6\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.9} \quad (-0.9\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{drag}	$1059.72^{+0.90}_{-0.90} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.3 \quad (\nu: 1.3)$
H_0	$67.7^{+1.4}_{-1.4} \quad (+0.9\sigma)$	r_{drag}	$147.91^{+0.81}_{-0.79} \quad (+1.5\sigma)$	χ_{lowl}^2	$23.54 \quad (\nu: 0.4) \quad (-0.3\sigma)$
Ω_{Λ}	$0.692^{+0.016}_{-0.017} \quad (+0.9\sigma)$	k_{D}	$0.14002^{+0.00094}_{-0.00090} \quad (-1.1\sigma)$	χ_{plik}^2	$770.4 \quad (\nu: 15.2) \quad (-0.4\sigma)$
Ω_{m}	$0.308^{+0.017}_{-0.016} \quad (-0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16089^{+0.00052}_{-0.00053} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1410^{+0.0024}_{-0.0024} \quad (-1.2\sigma)$	z_{eq}	$3328^{+76}_{-80} \quad (-1.8\sigma)$	χ_{MGS}^2	$1.58 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$< 0.00376 \quad (-0.1\sigma)$	k_{eq}	$0.01016^{+0.00023}_{-0.00024} \quad (-1.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0954^{+0.0014}_{-0.0015} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.827^{+0.016}_{-0.015} \quad (+1.9\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
σ_8	$0.812^{+0.030}_{-0.035} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4567^{+0.0082}_{-0.0076} \quad (+1.9\sigma)$	χ_{CMB}^2	$803.2 \quad (\nu: 14.6) \quad (-67.1\sigma)$
S_8	$0.822^{+0.027}_{-0.029} \quad (-0.5\sigma)$	$H(0.15)$	$72.9^{+1.2}_{-1.3} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.9)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.015}_{-0.016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+13}_{-11} \quad (-0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 816.62$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.30$; $R - 1 = 0.05945$

6.27 base_mnu_plikHM_TT_lowl_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00054}_{-0.00055} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.018}_{-0.018} \quad (-0.3\sigma)$	$H(0.15)$	$70.3^{+4.3}_{-4.4} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1186^{+0.0050}_{-0.0048} \quad (-1.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.590^{+0.032}_{-0.035} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$669^{+49}_{-45} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.956^{+0.059}_{-0.065} \quad (-0.5\sigma)$	$H(0.38)$	$80.9^{+3.2}_{-3.4} \quad (-0.6\sigma)$
τ	$0.108^{+0.054}_{-0.053} \quad (+7.1\sigma)$	$r_{\mathrm{drag}}h$	$95.4^{+7.7}_{-8.0} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1585^{+97}_{-91} \quad (+0.5\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.850 \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.516^{+0.091}_{-0.081} \quad (+1.8\sigma)$	$H(0.51)$	$87.9^{+2.6}_{-2.8} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.14^{+0.10}_{-0.098} \quad (+6.5\sigma)$	z_{re}	$12.5^{+4.2}_{-4.7} \quad (+6.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2048^{+110}_{-110} \quad (+0.6\sigma)$
n_{s}	$0.968^{+0.015}_{-0.015} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.32^{+0.23}_{-0.23} \quad (+6.9\sigma)$	$H(0.61)$	$93.8^{+2.2}_{-2.3} \quad (-0.7\sigma)$
y_{cal}	$1.0002^{+0.0048}_{-0.0049} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.871^{+0.029}_{-0.029} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2378^{+120}_{-120} \quad (+0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{40}	$1233^{+25}_{-25} \quad (-0.1\sigma)$	$H(2.33)$	$237.5^{+4.7}_{-4.1} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{220}	$5714^{+81}_{-81} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5845^{+120}_{-110} \quad (+0.8\sigma)$
A_{143}^{tSZ}	$5.3^{+3.8}_{-4.0} \quad (+0.2\sigma)$	D_{810}	$2531^{+27}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.016}_{-0.017} \quad (-0.2\sigma)$
A_{100}^{PS}	$260^{+60}_{-60} \quad (-0.2\sigma)$	D_{1420}	$814.8^{+9.9}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.708^{+0.072}_{-0.077} \quad (-0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.3\sigma)$	D_{2000}	$230.1^{+3.8}_{-3.9} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.021}_{-0.024} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.015}_{-0.015} \quad (+1.1\sigma)$	$\sigma_8(0.38)$	$0.625^{+0.069}_{-0.074} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.24531^{+0.00021}_{-0.00026} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.025}_{-0.029} \quad (-0.4\sigma)$
A^{kSZ}	$< 8.19 \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00021}_{-0.00026} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.584^{+0.066}_{-0.071} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.11}_{-0.099} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.028}_{-0.032} \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.99^{+0.28}_{-0.26} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.555^{+0.064}_{-0.069} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.5}_{-6.5} \quad (-0.0\sigma)$	z_*	$1090.1^{+1.2}_{-1.1} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.283^{+0.031}_{-0.034} \quad (-0.4\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.8^{+1.1}_{-1.1} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.288^{+0.036}_{-0.039} \quad (-0.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.04118^{+0.00097}_{-0.00097} \quad (+0.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.91^{+0.10}_{-0.10} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.6\sigma)$
H_0	$64.7^{+4.9}_{-5.1} \quad (-0.5\sigma)$	z_{drag}	$1059.48^{+0.99}_{-1.0} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.4^{+4.2}_{-4.2} \quad (-0.6\sigma)$
Ω_{Λ}	$0.650^{+0.068}_{-0.078} \quad (-0.4\sigma)$	r_{drag}	$147.5^{+1.1}_{-1.1} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.1 \quad (\nu: 1.2)$
Ω_{m}	$0.350^{+0.078}_{-0.068} \quad (+0.4\sigma)$	k_{D}	$0.1403^{+0.0011}_{-0.0011} \quad (-0.5\sigma)$	χ_{lowl}^2	$24.4 \quad (\nu: 0.8) \quad (+0.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1452^{+0.0078}_{-0.0073} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16096^{+0.00056}_{-0.00054} \quad (-0.6\sigma)$	χ_{plik}^2	$770.2 \quad (\nu: 14.8) \quad (-0.4\sigma)$
$\Omega_{\nu}h^2$	$< 0.00914 \quad (+1.3\sigma)$	z_{eq}	$3363^{+110}_{-110} \quad (-1.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0938^{+0.0028}_{-0.0030} \quad (-1.1\sigma)$	k_{eq}	$0.01027^{+0.00034}_{-0.00033} \quad (-1.1\sigma)$	χ_{CMB}^2	$803.7 \quad (\nu: 15.2) \quad (-67.1\sigma)$
σ_8	$0.769^{+0.073}_{-0.078} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.021}_{-0.021} \quad (+1.2\sigma)$		
S_8	$0.827^{+0.033}_{-0.033} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.453^{+0.011}_{-0.011} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 810.97; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.10; R - 1 = 0.01413$$

6.28 base_mnu_plikHM_TT_lowl_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02237^{+0.00042}_{-0.00041} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.020}_{-0.022} \quad (+0.2\sigma)$	$H(0.38)$	$82.95^{+0.95}_{-1.0} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1168^{+0.0033}_{-0.0035} \quad (-1.9\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.032}_{-0.036} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+26}_{-24} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04117^{+0.00082}_{-0.00084} \quad (+1.0\sigma)$	$r_{\mathrm{drag}} h$	$100.1^{+2.1}_{-2.2} \quad (+1.0\sigma)$	$H(0.51)$	$89.61^{+0.80}_{-0.91} \quad (+0.8\sigma)$
τ	$0.098^{+0.053}_{-0.047} \quad (+5.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.480^{+0.061}_{-0.058} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+31}_{-28} \quad (-0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.350 \quad (-0.1\sigma)$	z_{re}	$11.5^{+4.1}_{-4.1} \quad (+4.9\sigma)$	$H(0.61)$	$95.18^{+0.72}_{-0.83} \quad (+0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.122^{+0.098}_{-0.086} \quad (+5.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.27^{+0.22}_{-0.20} \quad (+5.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2306^{+34}_{-31} \quad (-0.9\sigma)$
n_{s}	$0.973^{+0.012}_{-0.011} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.865^{+0.026}_{-0.026} \quad (-1.5\sigma)$	$H(2.33)$	$235.1^{+1.6}_{-1.6} \quad (-1.3\sigma)$
y_{cal}	$1.0001^{+0.0046}_{-0.0050} \quad (-0.2\sigma)$	D_{40}	$1228^{+22}_{-21} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5774^{+42}_{-39} \quad (-0.7\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	D_{220}	$5720^{+78}_{-76} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.014}_{-0.014} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2529^{+27}_{-27} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.028}_{-0.033} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.3^{+4.0}_{-4.0} \quad (+0.2\sigma)$	D_{1420}	$815^{+10}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.014}_{-0.015} \quad (+0.2\sigma)$
A_{100}^{PS}	$258^{+60}_{-60} \quad (-0.3\sigma)$	D_{2000}	$230.7^{+3.6}_{-3.5} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.026}_{-0.028} \quad (+0.7\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.973^{+0.012}_{-0.011} \quad (+1.8\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.014}_{-0.015} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.24539^{+0.00016}_{-0.00017} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.025}_{-0.027} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00016}_{-0.00017} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.014}_{-0.015} \quad (+0.5\sigma)$
A^{kSZ}	$< 8.18 \quad (-0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.586^{+0.077}_{-0.075} \quad (-1.3\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.024}_{-0.026} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.8} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.824^{+0.098}_{-0.089} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.302^{+0.010}_{-0.011} \quad (+0.9\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.6^{+3.4}_{-3.3} \quad (-0.1\sigma)$	z_*	$1089.65^{+0.66}_{-0.67} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.012}_{-0.014} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.6}_{-6.5} \quad (-0.0\sigma)$	r_*	$145.23^{+0.81}_{-0.76} \quad (+1.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.8\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04141^{+0.00084}_{-0.00085} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
c_{100}	$0.9996^{+0.0013}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.946^{+0.075}_{-0.071} \quad (+1.6\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.9} \quad (-0.9\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{drag}	$1059.73^{+0.89}_{-0.90} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.3 \quad (\nu: 1.3)$
H_0	$67.7^{+1.4}_{-1.4} \quad (+0.9\sigma)$	r_{drag}	$147.91^{+0.80}_{-0.78} \quad (+1.5\sigma)$	χ_{lowl}^2	$23.54 \quad (\nu: 0.4) \quad (-0.3\sigma)$
Ω_{Λ}	$0.692^{+0.016}_{-0.017} \quad (+0.9\sigma)$	k_{D}	$0.14002^{+0.00093}_{-0.00090} \quad (-1.1\sigma)$	χ_{plik}^2	$770.3 \quad (\nu: 15.1) \quad (-0.4\sigma)$
Ω_{m}	$0.308^{+0.017}_{-0.016} \quad (-0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16089^{+0.00051}_{-0.00053} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1409^{+0.0024}_{-0.0024} \quad (-1.2\sigma)$	z_{eq}	$3327^{+76}_{-79} \quad (-1.9\sigma)$	χ_{MGS}^2	$1.58 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$< 0.00376 \quad (-0.1\sigma)$	k_{eq}	$0.01015^{+0.00023}_{-0.00024} \quad (-1.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0954^{+0.0014}_{-0.0015} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.827^{+0.016}_{-0.015} \quad (+1.9\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
σ_8	$0.812^{+0.031}_{-0.033} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4567^{+0.0082}_{-0.0075} \quad (+1.9\sigma)$	χ_{CMB}^2	$803.2 \quad (\nu: 14.5) \quad (-67.2\sigma)$
S_8	$0.822^{+0.027}_{-0.029} \quad (-0.5\sigma)$	$H(0.15)$	$72.9^{+1.2}_{-1.3} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.9)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.015}_{-0.016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+13}_{-12} \quad (-0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 816.56$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.33$; $R - 1 = 0.05884$

6.29 base_mnu_plikHM_TTTEEE_lowl_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022505	$0.02241^{+0.00034}_{-0.00035}$ (+1.5 σ)	$\Omega_m h^2$	0.1410	$0.1448^{+0.0058}_{-0.0052}$ (−0.0 σ)	z_{eq}	3369	3376^{+72}_{-71} (−0.9 σ)
$\Omega_c h^2$	0.11848	$0.1189^{+0.0032}_{-0.0032}$ (−1.0 σ)	$\Omega_\nu h^2$	0.00001	< 0.00771 (+0.9 σ)	k_{eq}	0.010282	$0.01031^{+0.00022}_{-0.00022}$ (−0.9 σ)
$100\theta_{\text{MC}}$	1.04112	$1.04091^{+0.00068}_{-0.00066}$ (+0.5 σ)	$\Omega_m h^3$	0.09670	$0.0948^{+0.0022}_{-0.0025}$ (−0.3 σ)	$100\theta_{\text{eq}}$	0.8197	$0.819^{+0.014}_{-0.013}$ (+1.0 σ)
τ	0.0725	$0.101^{+0.048}_{-0.046}$ (+6.2 σ)	σ_8	0.833	$0.783^{+0.059}_{-0.069}$ (−0.2 σ)	$100\theta_{\text{s,eq}}$	0.4526	$0.4522^{+0.0070}_{-0.0069}$ (+1.0 σ)
Σm_ν [eV]	0.001	< 0.717 (+0.9 σ)	S_8	0.8332	$0.831^{+0.026}_{-0.027}$ (−0.1 σ)	$H(0.15)$	73.75	$71.0^{+3.2}_{-3.6}$ (−0.1 σ)
$\ln(10^{10} A_s)$	3.076	$3.132^{+0.091}_{-0.088}$ (+5.7 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4564	$0.455^{+0.014}_{-0.015}$ (−0.1 σ)	$D_M(0.15)$	633.0	661^{+39}_{-33} (+0.1 σ)
n_s	0.9702	$0.969^{+0.011}_{-0.010}$ (+1.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6167	$0.597^{+0.028}_{-0.032}$ (−0.2 σ)	$H(0.38)$	83.67	$81.5^{+2.5}_{-2.7}$ (−0.1 σ)
y_{cal}	1.00015	$1.0002^{+0.0048}_{-0.0050}$ (−0.1 σ)	$\sigma_8/h^{0.5}$	1.006	$0.968^{+0.050}_{-0.058}$ (−0.2 σ)	$D_M(0.38)$	1512	1569^{+77}_{-67} (+0.1 σ)
A_{217}^{CIB}	46.8	46^{+10}_{-10} (−0.3 σ)	$r_{\text{drag}} h$	101.1	$96.4^{+5.7}_{-6.4}$ (−0.1 σ)	$H(0.51)$	90.28	$88.5^{+2.0}_{-2.3}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.40	—	$\langle d^2 \rangle^{1/2}$	2.467	$2.507^{+0.088}_{-0.075}$ (+1.5 σ)	$D_M(0.51)$	1961	2028^{+91}_{-79} (+0.1 σ)
A_{143}^{tSZ}	7.31	$5.6^{+3.8}_{-3.8}$ (+0.3 σ)	z_{re}	9.37	$11.9^{+3.9}_{-4.2}$ (+5.4 σ)	$H(0.61)$	95.81	$94.3^{+1.7}_{-1.9}$ (−0.2 σ)
A_{100}^{PS}	248	256^{+50}_{-50} (−0.3 σ)	$10^9 A_s$	2.168	$2.30^{+0.22}_{-0.20}$ (+6.0 σ)	$D_M(0.61)$	2283	2356^{+99}_{-86} (+0.1 σ)
A_{143}^{PS}	44.7	45^{+20}_{-20} (−0.7 σ)	$10^9 A_s e^{-2\tau}$	1.8753	$1.874^{+0.024}_{-0.024}$ (−0.8 σ)	$H(2.33)$	235.38	$237.4^{+3.3}_{-3.0}$ (−0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	45.3	42^{+20}_{-20} (−0.2 σ)	D_{40}	1225.2	1235^{+24}_{-24} (+0.0 σ)	$D_M(2.33)$	5739	5817^{+99}_{-87} (+0.2 σ)
A_{217}^{PS}	118.8	115^{+20}_{-20} (−0.0 σ)	D_{220}	5730	5731^{+75}_{-79} (+0.5 σ)	$f\sigma_8(0.15)$	0.4612	$0.460^{+0.014}_{-0.014}$ (−0.0 σ)
A^{kSZ}	0.00	< 7.69 (−0.3 σ)	D_{810}	2535.6	2534^{+26}_{-27} (−0.2 σ)	$\sigma_8(0.15)$	0.771	$0.722^{+0.058}_{-0.067}$ (−0.1 σ)
A_{100}^{dustTT}	8.81	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	D_{1420}	817.6	$816.9^{+9.3}_{-9.5}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4826	$0.472^{+0.018}_{-0.021}$ (−0.0 σ)
A_{143}^{dustTT}	10.96	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	D_{2000}	231.70	$231.2^{+3.2}_{-3.3}$ (+1.1 σ)	$\sigma_8(0.38)$	0.685	$0.638^{+0.055}_{-0.064}$ (−0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$18.5^{+6.4}_{-6.3}$ (+0.0 σ)	$n_{\text{s},0.002}$	0.9702	$0.969^{+0.011}_{-0.010}$ (+1.2 σ)	$f\sigma_8(0.51)$	0.4825	$0.468^{+0.021}_{-0.025}$ (−0.0 σ)
A_{217}^{dustTT}	94.8	94^{+10}_{-10} (+0.0 σ)	Y_{P}	0.245446	$0.24541^{+0.00013}_{-0.00014}$ (+1.4 σ)	$\sigma_8(0.51)$	0.641	$0.596^{+0.053}_{-0.061}$ (−0.1 σ)
A_{100}^{dustTE}	0.114	$0.113^{+0.074}_{-0.074}$	$Y_{\text{P}}^{\text{BBN}}$	0.246773	$0.24674^{+0.00013}_{-0.00014}$ (+1.4 σ)	$f\sigma_8(0.61)$	0.4783	$0.462^{+0.023}_{-0.028}$ (−0.0 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.134^{+0.057}_{-0.059}$	10^5D/H	2.561	$2.579^{+0.065}_{-0.061}$ (−1.5 σ)	$\sigma_8(0.61)$	0.610	$0.567^{+0.051}_{-0.059}$ (−0.1 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.483	$0.48^{+0.17}_{-0.17}$	Age/Gyr	13.743	$13.92^{+0.23}_{-0.20}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.3073	$0.288^{+0.024}_{-0.028}$ (+0.0 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.10}$	z_*	1089.61	$1089.83^{+0.73}_{-0.67}$ (−1.3 σ)	$\sigma_8(2.33)$	0.3178	$0.294^{+0.028}_{-0.033}$ (−0.1 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.661	$0.66^{+0.16}_{-0.16}$	r_*	144.73	$144.61^{+0.71}_{-0.71}$ (+0.5 σ)	χ^2_{lensing}	9.71	9.4 (ν : 1.4)
A_{217}^{dustTE}	2.07	$2.08^{+0.53}_{-0.53}$	$100\theta_*$	1.04126	$1.04121^{+0.00063}_{-0.00063}$ (+0.6 σ)	χ^2_{lowl}	23.17	24.2 (ν : 0.7) (+0.2 σ)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.899	$13.889^{+0.065}_{-0.066}$ (+0.4 σ)	χ^2_{plik}	2342.0	2358.3 (ν : 18.2) (+278.0 σ)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{drag}	1060.12	$1060.00^{+0.62}_{-0.64}$ (+1.5 σ)	χ^2_{prior}	1.8	11.5 (ν : 10.3) (+1.1 σ)
H_0	68.58	$65.5^{+3.7}_{-4.1}$ (−0.1 σ)	r_{drag}	147.35	$147.26^{+0.68}_{-0.67}$ (+0.2 σ)	χ^2_{CMB}	2374.8	2391.9 (ν : 17.5) (+206.3 σ)
Ω_Λ	0.700	$0.661^{+0.049}_{-0.059}$ (−0.1 σ)	k_{D}	0.14069	$0.14077^{+0.00070}_{-0.00070}$ (+0.4 σ)			
Ω_{m}	0.300	$0.339^{+0.059}_{-0.049}$ (+0.1 σ)	$100\theta_{\text{D}}$	0.160654	$0.16068^{+0.00036}_{-0.00036}$ (−1.6 σ)			

Best-fit $\chi^2_{\text{eff}} = 2376.63$; $\Delta\chi^2_{\text{eff}} = 0.28$; $\bar{\chi}^2_{\text{eff}} = 2403.40$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.91$; $R - 1 = 0.01886$

χ^2_{eff} : CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.71 (Δ 0.04) commander_dx12.v3.2.29: 23.17 (Δ 0.02) plik_rd12_HM.v22b.TTTEEE: 2341.97 (Δ -0.07)

6.30 base_mnu_plikHM_TTTEEE_lowl_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02251^{+0.00028}_{-0.00030}$ (+1.9 σ)	$\Omega_{\mathrm{m}}h^3$	$0.09610^{+0.00096}_{-0.0012}$ (+0.7 σ)	$H(0.15)$	$73.0^{+1.1}_{-1.2}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1180^{+0.0025}_{-0.0027}$ (−1.4 σ)	σ_8	$0.819^{+0.027}_{-0.029}$ (+0.8 σ)	$D_{\mathrm{M}}(0.15)$	640^{+11}_{-10} (−0.9 σ)
$100\theta_{\mathrm{MC}}$	$1.04110^{+0.00059}_{-0.00058}$ (+0.9 σ)	S_8	$0.830^{+0.023}_{-0.024}$ (−0.2 σ)	$H(0.38)$	$83.10^{+0.82}_{-0.93}$ (+1.0 σ)
τ	$0.088^{+0.043}_{-0.039}$ (+4.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.012}_{-0.013}$ (−0.2 σ)	$D_{\mathrm{M}}(0.38)$	1527^{+23}_{-21} (−0.9 σ)
Σm_{ν} [eV]	< 0.268 (−0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.017}_{-0.018}$ (+0.5 σ)	$H(0.51)$	$89.78^{+0.72}_{-0.77}$ (+1.0 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.105^{+0.080}_{-0.073}$ (+4.0 σ)	$\sigma_8/h^{0.5}$	$0.994^{+0.028}_{-0.030}$ (+0.6 σ)	$D_{\mathrm{M}}(0.51)$	1978^{+28}_{-25} (−0.9 σ)
n_{s}	$0.9710^{+0.0098}_{-0.0093}$ (+1.6 σ)	$r_{\mathrm{drag}}h$	$99.96^{+2.0}_{-2.0}$ (+1.0 σ)	$H(0.61)$	$95.38^{+0.62}_{-0.68}$ (+1.0 σ)
y_{cal}	$1.0002^{+0.0049}_{-0.0049}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	$2.478^{+0.060}_{-0.061}$ (+0.8 σ)	$D_{\mathrm{M}}(0.61)$	2302^{+31}_{-27} (−1.0 σ)
A_{217}^{CIB}	46^{+10}_{-10} (−0.3 σ)	z_{re}	$10.6^{+3.6}_{-3.4}$ (+3.8 σ)	$H(2.33)$	$235.7^{+1.2}_{-1.3}$ (−1.0 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.23^{+0.18}_{-0.16}$ (+4.2 σ)	$D_{\mathrm{M}}(2.33)$	5761^{+34}_{-31} (−0.9 σ)
A_{143}^{tSZ}	$5.7^{+3.7}_{-3.8}$ (+0.4 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.872^{+0.023}_{-0.024}$ (−1.0 σ)	$f\sigma_8(0.15)$	$0.460^{+0.012}_{-0.012}$ (+0.0 σ)
A_{100}^{PS}	255^{+50}_{-50} (−0.4 σ)	D_{40}	1230^{+21}_{-21} (−0.3 σ)	$\sigma_8(0.15)$	$0.757^{+0.025}_{-0.027}$ (+0.8 σ)
A_{143}^{PS}	44^{+20}_{-20} (−0.8 σ)	D_{220}	5731^{+76}_{-76} (+0.5 σ)	$f\sigma_8(0.38)$	$0.480^{+0.012}_{-0.013}$ (+0.5 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.2 σ)	D_{810}	2533^{+27}_{-28} (−0.3 σ)	$\sigma_8(0.38)$	$0.672^{+0.022}_{-0.026}$ (+0.9 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.1 σ)	D_{1420}	$817.0^{+9.5}_{-9.8}$ (+0.5 σ)	$f\sigma_8(0.51)$	$0.479^{+0.012}_{-0.013}$ (+0.6 σ)
A^{kSZ}	< 7.30 (−0.4 σ)	D_{2000}	$231.6^{+3.3}_{-3.4}$ (+1.3 σ)	$\sigma_8(0.51)$	$0.629^{+0.021}_{-0.025}$ (+0.9 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.4}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	$0.9710^{+0.0098}_{-0.0093}$ (+1.6 σ)	$f\sigma_8(0.61)$	$0.474^{+0.012}_{-0.014}$ (+0.7 σ)
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	Y_{P}	$0.24545^{+0.00011}_{-0.00012}$ (+1.8 σ)	$\sigma_8(0.61)$	$0.598^{+0.020}_{-0.024}$ (+0.9 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+6.0}_{-6.0}$ (+0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00011}_{-0.00012}$ (+1.8 σ)	$f\sigma_8(2.33)$	$0.3029^{+0.0095}_{-0.011}$ (+1.0 σ)
$A_{217}^{\mathrm{dustTT}}$	93^{+10}_{-10} (+0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	$2.560^{+0.055}_{-0.050}$ (−1.9 σ)	$\sigma_8(2.33)$	$0.312^{+0.011}_{-0.012}$ (+1.0 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.076}_{-0.071}$	Age/Gyr	$13.794^{+0.079}_{-0.070}$ (−0.9 σ)	f_{2000}^{143}	28^{+5}_{-5} (−1.2 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.056}_{-0.060}$	z_*	$1089.57^{+0.52}_{-0.50}$ (−1.8 σ)	$f_{2000}^{143 \times 217}$	31^{+4}_{-4} (−1.4 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.83^{+0.59}_{-0.55}$ (+0.9 σ)	f_{2000}^{217}	$105.9^{+4.0}_{-3.7}$ (−1.3 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.223^{+0.10}_{-0.099}$	$100\theta_*$	$1.04131^{+0.00060}_{-0.00059}$ (+0.8 σ)	$\chi_{\mathrm{lensing}}^2$	9.99 (ν : 1.8)
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.909^{+0.055}_{-0.052}$ (+0.8 σ)	χ_{lowl}^2	23.55 (ν : 0.4) (−0.3 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.51}_{-0.53}$	z_{drag}	$1060.13^{+0.57}_{-0.62}$ (+1.8 σ)	χ_{plik}^2	2357.9 (ν : 19.2) (+277.9 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	$147.46^{+0.60}_{-0.53}$ (+0.6 σ)	$\chi_{6\mathrm{DF}}^2$	0.053 (ν : 0.0)
c_{217}	$0.9982^{+0.0012}_{-0.0013}$ (−0.2 σ)	k_{D}	$0.14059^{+0.00059}_{-0.00064}$ (+0.0 σ)	χ_{MGS}^2	1.46 (ν : 0.2)
H_0	$67.8^{+1.2}_{-1.3}$ (+1.0 σ)	$100\theta_{\mathrm{D}}$	$0.16065^{+0.00036}_{-0.00035}$ (−1.8 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.6 (ν : 1.2)
Ω_{Λ}	$0.691^{+0.015}_{-0.016}$ (+0.9 σ)	z_{eq}	3358^{+57}_{-61} (−1.2 σ)	χ_{prior}^2	11.5 (ν : 9.7) (+1.1 σ)
Ω_{m}	$0.309^{+0.016}_{-0.015}$ (−0.9 σ)	k_{eq}	$0.01025^{+0.00017}_{-0.00019}$ (−1.2 σ)	χ_{CMB}^2	2391.4 (ν : 17.2) (+206.2 σ)
$\Omega_{\mathrm{m}}h^2$	$0.1418^{+0.0020}_{-0.0021}$ (−1.0 σ)	$100\theta_{\mathrm{eq}}$	$0.822^{+0.012}_{-0.011}$ (+1.4 σ)	χ_{BAO}^2	6.1 (ν : 0.8)
$\Omega_{\nu}h^2$	< 0.00288 (−0.3 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0061}_{-0.0057}$ (+1.3 σ)		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2409.01; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.36; R - 1 = 0.06296$$

6.31 base_mnu_plikHM_TTTEEE_lowl_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00034}_{-0.00035} \quad (+1.5\sigma)$	$\Omega_\nu h^2$	$< 0.00771 \quad (+0.9\sigma)$	$100\theta_{\text{eq}}$	$0.819^{+0.014}_{-0.013} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1188^{+0.0031}_{-0.0032} \quad (-1.0\sigma)$	$\Omega_m h^3$	$0.0948^{+0.0022}_{-0.0025} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4522^{+0.0070}_{-0.0068} \quad (+1.0\sigma)$
$100\theta_{\text{MC}}$	$1.04091^{+0.00068}_{-0.00066} \quad (+0.5\sigma)$	σ_8	$0.783^{+0.060}_{-0.069} \quad (-0.2\sigma)$	$H(0.15)$	$71.0^{+3.2}_{-3.6} \quad (-0.1\sigma)$
τ	$0.101^{+0.048}_{-0.045} \quad (+6.2\sigma)$	S_8	$0.831^{+0.026}_{-0.027} \quad (-0.1\sigma)$	$D_{\text{M}}(0.15)$	$661^{+39}_{-33} \quad (+0.1\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.717 \quad (+0.9\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.455^{+0.014}_{-0.015} \quad (-0.1\sigma)$	$H(0.38)$	$81.5^{+2.5}_{-2.7} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.133^{+0.090}_{-0.086} \quad (+5.7\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.597^{+0.028}_{-0.032} \quad (-0.2\sigma)$	$D_{\text{M}}(0.38)$	$1569^{+77}_{-67} \quad (+0.1\sigma)$
n_{s}	$0.969^{+0.011}_{-0.010} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.968^{+0.051}_{-0.058} \quad (-0.2\sigma)$	$H(0.51)$	$88.5^{+2.0}_{-2.3} \quad (-0.2\sigma)$
y_{cal}	$1.0002^{+0.0048}_{-0.0050} \quad (-0.1\sigma)$	$r_{\text{drag}} h$	$96.4^{+5.7}_{-6.4} \quad (-0.1\sigma)$	$D_{\text{M}}(0.51)$	$2028^{+91}_{-79} \quad (+0.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.507^{+0.087}_{-0.074} \quad (+1.6\sigma)$	$H(0.61)$	$94.3^{+1.7}_{-1.9} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$11.9^{+3.8}_{-4.0} \quad (+5.4\sigma)$	$D_{\text{M}}(0.61)$	$2357^{+99}_{-86} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.30^{+0.21}_{-0.20} \quad (+6.1\sigma)$	$H(2.33)$	$237.4^{+3.3}_{-3.0} \quad (-0.1\sigma)$
A_{100}^{PS}	$256^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.874^{+0.024}_{-0.024} \quad (-0.9\sigma)$	$D_{\text{M}}(2.33)$	$5817^{+99}_{-88} \quad (+0.2\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.7\sigma)$	D_{40}	$1235^{+24}_{-24} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.014}_{-0.014} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5731^{+75}_{-79} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.722^{+0.058}_{-0.067} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2534^{+26}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.018}_{-0.021} \quad (-0.0\sigma)$
A^{kSZ}	$< 7.69 \quad (-0.3\sigma)$	D_{1420}	$816.9^{+9.3}_{-9.4} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.638^{+0.055}_{-0.064} \quad (-0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	D_{2000}	$231.2^{+3.2}_{-3.3} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.021}_{-0.025} \quad (-0.0\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.969^{+0.011}_{-0.010} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.596^{+0.053}_{-0.061} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.4}_{-6.3} \quad (+0.0\sigma)$	Y_{P}	$0.24541^{+0.00013}_{-0.00014} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.023}_{-0.028} \quad (-0.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24674^{+0.00013}_{-0.00014} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.567^{+0.051}_{-0.059} \quad (-0.1\sigma)$
A_{100}^{dustTE}	$0.113^{+0.074}_{-0.074}$	$10^5 \text{D}/\text{H}$	$2.578^{+0.065}_{-0.061} \quad (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.288^{+0.024}_{-0.028} \quad (+0.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.059}$	Age/Gyr	$13.92^{+0.23}_{-0.20} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.294^{+0.028}_{-0.033} \quad (-0.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.83^{+0.73}_{-0.67} \quad (-1.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-1.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	r_*	$144.62^{+0.70}_{-0.71} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.2\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	$1.04121^{+0.00063}_{-0.00063} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.4^{+3.7}_{-3.7} \quad (-1.1\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.889^{+0.065}_{-0.065} \quad (+0.4\sigma)$	χ_{lensing}^2	$9.4 \quad (\nu: 1.4)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.00^{+0.62}_{-0.64} \quad (+1.5\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 0.7) \quad (+0.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.26^{+0.68}_{-0.67} \quad (+0.2\sigma)$	χ_{plik}^2	$2358.2 \quad (\nu: 18.2) \quad (+278.0\sigma)$
H_0	$65.5^{+3.7}_{-4.1} \quad (-0.1\sigma)$	k_{D}	$0.14077^{+0.00070}_{-0.00070} \quad (+0.4\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_Λ	$0.661^{+0.049}_{-0.059} \quad (-0.1\sigma)$	$100\theta_{\text{D}}$	$0.16068^{+0.00036}_{-0.00036} \quad (-1.6\sigma)$	χ_{CMB}^2	$2391.9 \quad (\nu: 17.5) \quad (+206.3\sigma)$
Ω_{m}	$0.339^{+0.059}_{-0.049} \quad (+0.1\sigma)$	z_{eq}	$3375^{+70}_{-71} \quad (-0.9\sigma)$		
$\Omega_{\text{m}} h^2$	$0.1448^{+0.0058}_{-0.0052} \quad (-0.0\sigma)$	k_{eq}	$0.01031^{+0.00022}_{-0.00022} \quad (-0.9\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2403.37; \Delta \bar{\chi}_{\text{eff}}^2 = 1.02; R - 1 = 0.01980$$

6.32 base_mnu_plikHM_TTTEEE_lowl_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02252^{+0.00028}_{-0.00029} \quad (+1.9\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09610^{+0.00096}_{-0.0012} \quad (+0.7\sigma)$	$H(0.15)$	$73.0^{+1.1}_{-1.2} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1180^{+0.0025}_{-0.0027} \quad (-1.4\sigma)$	σ_8	$0.819^{+0.027}_{-0.029} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+11}_{-10} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04110^{+0.00059}_{-0.00058} \quad (+0.9\sigma)$	S_8	$0.830^{+0.023}_{-0.024} \quad (-0.2\sigma)$	$H(0.38)$	$83.10^{+0.81}_{-0.93} \quad (+1.0\sigma)$
τ	$0.088^{+0.042}_{-0.038} \quad (+4.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.012}_{-0.013} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+23}_{-21} \quad (-0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.268 \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.017}_{-0.018} \quad (+0.5\sigma)$	$H(0.51)$	$89.78^{+0.72}_{-0.77} \quad (+1.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.105^{+0.079}_{-0.072} \quad (+4.0\sigma)$	$\sigma_8/h^{0.5}$	$0.995^{+0.028}_{-0.030} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+28}_{-25} \quad (-1.0\sigma)$
n_{s}	$0.9711^{+0.0097}_{-0.0092} \quad (+1.6\sigma)$	$r_{\mathrm{drag}}h$	$99.97^{+2.0}_{-2.0} \quad (+1.0\sigma)$	$H(0.61)$	$95.38^{+0.62}_{-0.68} \quad (+1.0\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0050} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.479^{+0.060}_{-0.059} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+31}_{-27} \quad (-1.0\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	z_{re}	$10.7^{+3.4}_{-3.5} \quad (+3.9\sigma)$	$H(2.33)$	$235.7^{+1.2}_{-1.3} \quad (-1.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.23^{+0.18}_{-0.16} \quad (+4.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+35}_{-31} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.7^{+3.7}_{-3.8} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.023}_{-0.024} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.012}_{-0.013} \quad (+0.0\sigma)$
A_{100}^{PS}	$255^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	$1230^{+21}_{-21} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.757^{+0.025}_{-0.028} \quad (+0.8\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.8\sigma)$	D_{220}	$5731^{+76}_{-76} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.012}_{-0.013} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2533^{+27}_{-28} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.672^{+0.022}_{-0.026} \quad (+0.9\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.0^{+9.5}_{-9.8} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.012}_{-0.013} \quad (+0.6\sigma)$
A^{kSZ}	$< 7.27 \quad (-0.4\sigma)$	D_{2000}	$231.6^{+3.3}_{-3.4} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.629^{+0.021}_{-0.025} \quad (+0.9\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.4} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9711^{+0.0097}_{-0.0092} \quad (+1.6\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.012}_{-0.014} \quad (+0.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.24545^{+0.00011}_{-0.00011} \quad (+1.8\sigma)$	$\sigma_8(0.61)$	$0.598^{+0.020}_{-0.024} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+5.9}_{-6.0} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00011}_{-0.00011} \quad (+1.8\sigma)$	$f\sigma_8(2.33)$	$0.3029^{+0.0095}_{-0.011} \quad (+1.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.560^{+0.054}_{-0.050} \quad (-1.9\sigma)$	$\sigma_8(2.33)$	$0.312^{+0.011}_{-0.012} \quad (+1.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.076}_{-0.072}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.794^{+0.079}_{-0.070} \quad (-0.9\sigma)$	f_{2000}^{143}	$28^{+5}_{-5} \quad (-1.2\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.056}_{-0.060}$	z_*	$1089.57^{+0.50}_{-0.50} \quad (-1.8\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-1.4\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.84^{+0.59}_{-0.55} \quad (+0.9\sigma)$	f_{2000}^{217}	$105.9^{+4.0}_{-3.7} \quad (-1.3\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	$1.04131^{+0.00060}_{-0.00058} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.99 \quad (\nu: 1.8)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.909^{+0.055}_{-0.052} \quad (+0.8\sigma)$	χ_{lowl}^2	$23.55 \quad (\nu: 0.4) \quad (-0.3\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.51}_{-0.53}$	z_{drag}	$1060.13^{+0.57}_{-0.62} \quad (+1.8\sigma)$	χ_{plik}^2	$2357.8 \quad (\nu: 19.2) \quad (+277.9\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.46^{+0.60}_{-0.53} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.2\sigma)$	k_{D}	$0.14059^{+0.00059}_{-0.00064} \quad (+0.0\sigma)$	χ_{MGS}^2	$1.47 \quad (\nu: 0.2)$
H_0	$67.8^{+1.2}_{-1.3} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16065^{+0.00036}_{-0.00034} \quad (-1.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.2)$
Ω_{Λ}	$0.691^{+0.015}_{-0.016} \quad (+0.9\sigma)$	z_{eq}	$3358^{+57}_{-60} \quad (-1.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.7) \quad (+1.1\sigma)$
Ω_{m}	$0.309^{+0.016}_{-0.015} \quad (-0.9\sigma)$	k_{eq}	$0.01025^{+0.00017}_{-0.00018} \quad (-1.2\sigma)$	χ_{CMB}^2	$2391.4 \quad (\nu: 17.2) \quad (+206.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1418^{+0.0020}_{-0.0021} \quad (-1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.012}_{-0.011} \quad (+1.4\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
$\Omega_{\nu}h^2$	$< 0.00288 \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0060}_{-0.0056} \quad (+1.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2408.99; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.41; R - 1 = 0.06301$$

6.33 base_mnu_plikHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022207	$0.02206^{+0.00045}_{-0.00050}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4564	$0.458^{+0.018}_{-0.017}$ (+0.1 σ)	$H(0.15)$	73.09	$71.4^{+2.7}_{-3.6}$ (+0.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.11967	$0.1210^{+0.0042}_{-0.0039}$ (−0.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6125	$0.603^{+0.021}_{-0.024}$ (+0.1 σ)	$D_{\mathrm{M}}(0.15)$	639.3	656^{+38}_{-28} (−0.1 σ)
$100\theta_{\mathrm{MC}}$	1.04091	$1.04066^{+0.00097}_{-0.0010}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9981	$0.978^{+0.036}_{-0.045}$ (+0.1 σ)	$H(0.38)$	83.15	$81.9^{+2.0}_{-2.7}$ (+0.1 σ)
τ	0.0529	$0.052^{+0.016}_{-0.015}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	99.98	$97.0^{+5.0}_{-6.5}$ (+0.1 σ)	$D_{\mathrm{M}}(0.38)$	1525	1560^{+76}_{-55} (−0.1 σ)
Σm_{ν} [eV]	0.000	< 0.436 (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.445	$2.451^{+0.055}_{-0.051}$ (+0.1 σ)	$H(0.51)$	89.84	$88.8^{+1.6}_{-2.2}$ (+0.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0395	$3.042^{+0.031}_{-0.029}$ (+0.1 σ)	z_{re}	7.56	$7.6^{+1.6}_{-1.6}$ (+0.1 σ)	$D_{\mathrm{M}}(0.51)$	1976	2017^{+89}_{-65} (−0.1 σ)
n_{s}	0.9657	$0.961^{+0.011}_{-0.012}$ (+0.0 σ)	$10^9 A_{\mathrm{s}}$	2.089	$2.095^{+0.065}_{-0.061}$ (+0.1 σ)	$H(0.61)$	95.43	$94.6^{+1.3}_{-1.8}$ (+0.1 σ)
y_{cal}	1.00016	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8797	$1.886^{+0.025}_{-0.024}$ (+0.0 σ)	$D_{\mathrm{M}}(0.61)$	2300	2345^{+96}_{-70} (−0.1 σ)
A_{217}^{CIB}	49.3	48^{+10}_{-10} (+0.0 σ)	D_{40}	1226.5	1235^{+27}_{-26} (+0.1 σ)	$H(2.33)$	235.85	$237.4^{+3.8}_{-3.1}$ (−0.1 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.22	—	D_{220}	5712	5714^{+81}_{-81} (+0.0 σ)	$D_{\mathrm{M}}(2.33)$	5757	5800^{+92}_{-67} (−0.1 σ)
A_{143}^{tSZ}	7.16	$5.0^{+3.8}_{-3.9}$ (+0.0 σ)	D_{810}	2535.2	2538^{+27}_{-27} (+0.0 σ)	$f\sigma_8(0.15)$	0.4606	$0.462^{+0.016}_{-0.016}$ (+0.1 σ)
A_{100}^{PS}	254	265^{+60}_{-50} (+0.0 σ)	D_{1420}	815.2	$814.5^{+9.9}_{-10}$ (+0.0 σ)	$\sigma_8(0.15)$	0.7598	$0.732^{+0.037}_{-0.057}$ (+0.1 σ)
A_{143}^{PS}	47.3	50^{+20}_{-20} (−0.0 σ)	D_{2000}	230.06	$229.3^{+3.6}_{-3.7}$ (+0.0 σ)	$f\sigma_8(0.38)$	0.4797	$0.475^{+0.015}_{-0.016}$ (+0.1 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	44.0	44^{+20}_{-20} (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9657	$0.961^{+0.011}_{-0.012}$ (+0.0 σ)	$\sigma_8(0.38)$	0.6736	$0.647^{+0.035}_{-0.054}$ (+0.1 σ)
A_{217}^{PS}	117.8	115^{+20}_{-20} (−0.0 σ)	Y_{P}	0.245329	$0.24526^{+0.00020}_{-0.00023}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4786	$0.471^{+0.016}_{-0.019}$ (+0.1 σ)
A^{kSZ}	0.0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246655	$0.24659^{+0.00020}_{-0.00023}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6305	$0.605^{+0.033}_{-0.052}$ (+0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.90	$8.9^{+3.6}_{-3.6}$ (+0.0 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.617	$2.645^{+0.093}_{-0.090}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4738	$0.465^{+0.017}_{-0.021}$ (+0.1 σ)
$A_{143}^{\mathrm{dustTT}}$	10.79	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	Age/Gyr	13.784	$13.88^{+0.21}_{-0.15}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5999	$0.575^{+0.032}_{-0.051}$ (+0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.2	$18.3^{+6.5}_{-6.4}$ (−0.0 σ)	z_*	1090.09	$1090.42^{+0.96}_{-0.87}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.3016	$0.290^{+0.015}_{-0.024}$ (+0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94.3	93^{+10}_{-10} (−0.0 σ)	r_*	144.65	$144.39^{+0.89}_{-0.93}$ (+0.0 σ)	$\sigma_8(2.33)$	0.3116	$0.298^{+0.018}_{-0.028}$ (+0.1 σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_*$	1.04109	$1.04092^{+0.00092}_{-0.00096}$ (+0.0 σ)	f_{2000}^{143}	30.2	32^{+6}_{-6} (−0.0 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.894	$13.871^{+0.082}_{-0.085}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	33.04	34^{+4}_{-4} (−0.0 σ)
H_0	67.84	$65.9^{+3.1}_{-4.1}$ (+0.1 σ)	z_{drag}	1059.51	$1059.30^{+0.90}_{-0.97}$ (+0.1 σ)	f_{2000}^{217}	107.50	$108.5^{+3.9}_{-3.9}$ (−0.0 σ)
Ω_{Λ}	0.692	$0.666^{+0.043}_{-0.060}$ (+0.1 σ)	r_{drag}	147.37	$147.15^{+0.84}_{-0.95}$ (+0.0 σ)	$\chi_{\mathrm{lensing}}^2$	9.04	9.43 (ν : 0.5)
Ω_{m}	0.308	$0.334^{+0.060}_{-0.043}$ (−0.1 σ)	k_{D}	0.14044	$0.14057^{+0.00097}_{-0.00096}$ (+0.0 σ)	χ_{small}^2	395.86	397.0 (ν : 1.5) (+0.0 σ)
$\Omega_{\mathrm{m}}h^2$	0.1419	$0.1447^{+0.0065}_{-0.0052}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16100	$0.16111^{+0.00056}_{-0.00052}$ (−0.0 σ)	χ_{lowl}^2	23.26	24.0 (ν : 0.7) (+0.1 σ)
$\Omega_{\nu}h^2$	0.00000	< 0.00469 (−0.1 σ)	z_{eq}	3390	3419^{+92}_{-87} (−0.0 σ)	χ_{plik}^2	758.5	771.9 (ν : 14.4) (−0.1 σ)
$\Omega_{\mathrm{m}}h^3$	0.09625	$0.0953^{+0.0017}_{-0.0022}$ (+0.1 σ)	k_{eq}	0.010348	$0.01044^{+0.00028}_{-0.00027}$ (−0.0 σ)	χ_{prior}^2	1.5	7.3 (ν : 6.8) (−0.0 σ)
σ_8	0.8221	$0.794^{+0.038}_{-0.057}$ (+0.1 σ)	$100\theta_{\mathrm{eq}}$	0.8149	$0.810^{+0.015}_{-0.018}$ (+0.0 σ)	χ_{CMB}^2	1186.6	1202.3 (ν : 16.6) (+1.5 σ)
S_8	0.8333	$0.836^{+0.032}_{-0.032}$ (+0.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.4503	$0.4476^{+0.0079}_{-0.0092}$ (+0.0 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1188.10$; $\Delta\chi_{\mathrm{eff}}^2 = -0.47$; $\bar{\chi}_{\mathrm{eff}}^2 = 1209.58$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.16$; $R - 1 = 0.00659$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.04 (Δ 0.14) small_100x143_offlike5_EE_Aplanck_B: 395.86 (Δ -0.00) commander_dx12.v3.2.29: 23.26 (Δ 0.03) plik_rd12_HM.v22.TT: 758.46 (Δ -0.86)

6.34 base_mnu_plikHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02207^{+0.00045}_{-0.00051} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.018}_{-0.018} \quad (+0.1\sigma)$	$H(0.15)$	$71.4^{+2.7}_{-3.6} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1209^{+0.0042}_{-0.0039} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.021}_{-0.024} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$656^{+39}_{-28} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04067^{+0.00097}_{-0.0010} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.978^{+0.036}_{-0.046} \quad (+0.1\sigma)$	$H(0.38)$	$81.9^{+2.0}_{-2.7} \quad (+0.1\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$97.1^{+5.0}_{-6.6} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1560^{+77}_{-56} \quad (-0.1\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.443 \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.452^{+0.055}_{-0.051} \quad (+0.1\sigma)$	$H(0.51)$	$88.8^{+1.6}_{-2.2} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.027}_{-0.025} \quad (+0.3\sigma)$	z_{re}	$< 8.89 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$2017^{+91}_{-65} \quad (-0.1\sigma)$
n_{s}	$0.962^{+0.011}_{-0.013} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.056}_{-0.052} \quad (+0.3\sigma)$	$H(0.61)$	$94.6^{+1.3}_{-1.8} \quad (+0.1\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.886^{+0.025}_{-0.024} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2344^{+98}_{-71} \quad (-0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1235^{+27}_{-26} \quad (+0.1\sigma)$	$H(2.33)$	$237.4^{+3.8}_{-3.1} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{220}	$5714^{+81}_{-81} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5800^{+94}_{-67} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (-0.0\sigma)$	D_{1420}	$814.5^{+9.9}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.037}_{-0.057} \quad (+0.1\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.3^{+3.6}_{-3.8} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.015}_{-0.016} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.962^{+0.011}_{-0.013} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.647^{+0.035}_{-0.055} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24526^{+0.00020}_{-0.00023} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.016}_{-0.019} \quad (+0.1\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24659^{+0.00020}_{-0.00023} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.605^{+0.033}_{-0.053} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.643^{+0.093}_{-0.090} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.017}_{-0.022} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.88^{+0.22}_{-0.15} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.575^{+0.032}_{-0.052} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.4} \quad (-0.0\sigma)$	z_*	$1090.40^{+0.97}_{-0.87} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.015}_{-0.024} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	r_*	$144.41^{+0.89}_{-0.93} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.298^{+0.018}_{-0.029} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.04093^{+0.00092}_{-0.00096} \quad (+0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.873^{+0.083}_{-0.085} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.1\sigma)$
H_0	$65.9^{+3.1}_{-4.2} \quad (+0.1\sigma)$	z_{drag}	$1059.31^{+0.93}_{-0.98} \quad (+0.1\sigma)$	f_{2000}^{217}	$108.5^{+3.9}_{-3.9} \quad (-0.0\sigma)$
Ω_{Λ}	$0.666^{+0.043}_{-0.060} \quad (+0.1\sigma)$	r_{drag}	$147.17^{+0.89}_{-0.90} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.40 \quad (\nu: 0.5)$
Ω_{m}	$0.334^{+0.060}_{-0.043} \quad (-0.1\sigma)$	k_{D}	$0.14056^{+0.00098}_{-0.00095} \quad (-0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1447^{+0.0066}_{-0.0052} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16111^{+0.00056}_{-0.00052} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 0.7) \quad (+0.0\sigma)$
$\Omega_{\nu} h^2$	$< 0.00477 \quad (-0.1\sigma)$	z_{eq}	$3417^{+92}_{-87} \quad (-0.0\sigma)$	χ_{plik}^2	$771.8 \quad (\nu: 14.5) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0953^{+0.0017}_{-0.0022} \quad (+0.1\sigma)$	k_{eq}	$0.01043^{+0.00028}_{-0.00027} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (-0.0\sigma)$
σ_8	$0.794^{+0.038}_{-0.058} \quad (+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.016}_{-0.017} \quad (+0.0\sigma)$	χ_{CMB}^2	$1202.1 \quad (\nu: 16.6) \quad (+1.5\sigma)$
S_8	$0.836^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4478^{+0.0083}_{-0.0087} \quad (+0.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1209.38; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.22; R - 1 = 0.00698$$

6.35 base_mnu_plikHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022421	$0.02236^{+0.00030}_{-0.00030}$ (+1.3 σ)	$\Omega_\nu h^2$	0.00000	< 0.00259 (−0.5 σ)	$100\theta_{\text{eq}}$	0.8145	$0.813^{+0.010}_{-0.011}$ (+0.4 σ)
$\Omega_c h^2$	0.11969	$0.1201^{+0.0026}_{-0.0024}$ (−0.4 σ)	$\Omega_m h^3$	0.09668	$0.09623^{+0.00094}_{-0.0012}$ (+0.8 σ)	$100\theta_{\text{s,eq}}$	0.4500	$0.4491^{+0.0052}_{-0.0054}$ (+0.3 σ)
$100\theta_{\text{MC}}$	1.04098	$1.04088^{+0.00061}_{-0.00063}$ (+0.5 σ)	σ_8	0.8224	$0.807^{+0.025}_{-0.033}$ (+0.5 σ)	$H(0.15)$	73.28	$72.4^{+1.6}_{-1.9}$ (+0.7 σ)
τ	0.0532	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	S_8	0.8320	$0.832^{+0.025}_{-0.025}$ (−0.1 σ)	$D_{\text{M}}(0.15)$	637.6	646^{+19}_{-16} (−0.6 σ)
Σm_ν [eV]	0.000	< 0.241 (−0.5 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4557	$0.456^{+0.013}_{-0.014}$ (−0.1 σ)	$H(0.38)$	83.33	$82.7^{+1.2}_{-1.4}$ (+0.7 σ)
$\ln(10^{10} A_{\text{s}})$	3.0417	$3.046^{+0.030}_{-0.028}$ (+0.3 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6122	$0.606^{+0.016}_{-0.017}$ (+0.3 σ)	$D_{\text{M}}(0.38)$	1521.6	1538^{+39}_{-32} (−0.6 σ)
n_{s}	0.9664	$0.9647^{+0.0081}_{-0.0084}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9970	$0.985^{+0.026}_{-0.030}$ (+0.3 σ)	$H(0.51)$	90.01	$89.48^{+0.98}_{-1.2}$ (+0.7 σ)
y_{cal}	1.00050	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	$r_{\text{drag}} h$	100.09	$98.7^{+2.9}_{-3.4}$ (+0.6 σ)	$D_{\text{M}}(0.51)$	1971.8	1992^{+46}_{-38} (−0.7 σ)
A_{217}^{CIB}	47.0	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4451	$2.445^{+0.042}_{-0.041}$ (−0.1 σ)	$H(0.61)$	95.61	$95.16^{+0.81}_{-1.0}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.48	—	z_{re}	7.54	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$D_{\text{M}}(0.61)$	2295.0	2317^{+50}_{-41} (−0.7 σ)
A_{143}^{tSZ}	7.15	$5.5^{+3.7}_{-4.0}$ (+0.2 σ)	$10^9 A_{\text{s}}$	2.094	$2.103^{+0.063}_{-0.058}$ (+0.3 σ)	$H(2.33)$	236.08	$236.8^{+2.0}_{-1.8}$ (−0.4 σ)
A_{100}^{PS}	250	259^{+60}_{-50} (−0.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8828	$1.884^{+0.022}_{-0.021}$ (−0.1 σ)	$D_{\text{M}}(2.33)$	5747.6	5769^{+49}_{-39} (−0.7 σ)
A_{143}^{PS}	48.2	46^{+20}_{-20} (−0.5 σ)	D_{40}	1228.6	1233^{+24}_{-23} (−0.1 σ)	$f\sigma_8(0.15)$	0.4599	$0.460^{+0.012}_{-0.013}$ (−0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	48.6	42^{+20}_{-20} (−0.2 σ)	D_{220}	5736	5736^{+76}_{-76} (+0.6 σ)	$\sigma_8(0.15)$	0.7602	$0.745^{+0.024}_{-0.033}$ (+0.5 σ)
A_{217}^{PS}	119.9	115^{+20}_{-20} (−0.0 σ)	D_{810}	2540.2	2540^{+26}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4794	$0.477^{+0.012}_{-0.012}$ (+0.2 σ)
A^{kSZ}	0.00	< 8.04 (−0.2 σ)	D_{1420}	818.1	$817.5^{+9.2}_{-9.2}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6741	$0.660^{+0.023}_{-0.031}$ (+0.5 σ)
A_{100}^{dustTT}	8.76	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	D_{2000}	231.33	$230.9^{+3.0}_{-3.1}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4784	$0.474^{+0.012}_{-0.012}$ (+0.3 σ)
A_{143}^{dustTT}	10.99	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9664	$0.9647^{+0.0081}_{-0.0084}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6310	$0.617^{+0.022}_{-0.030}$ (+0.5 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.9	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	Y_{P}	0.245415	$0.24539^{+0.00011}_{-0.00012}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4736	$0.469^{+0.012}_{-0.013}$ (+0.4 σ)
A_{217}^{dustTT}	95.2	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246742	$0.24672^{+0.00011}_{-0.00012}$ (+1.2 σ)	$\sigma_8(0.61)$	0.6004	$0.587^{+0.021}_{-0.029}$ (+0.5 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.073}$	10^5D/H	2.576	$2.587^{+0.057}_{-0.054}$ (−1.3 σ)	$f\sigma_8(2.33)$	0.3019	$0.2962^{+0.0098}_{-0.013}$ (+0.5 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	Age/Gyr	13.761	$13.81^{+0.11}_{-0.088}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3119	$0.305^{+0.011}_{-0.016}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.483	$0.48^{+0.17}_{-0.17}$	z_*	1089.82	$1089.94^{+0.57}_{-0.54}$ (−1.0 σ)	f_{2000}^{143}	28.7	30^{+5}_{-5} (−0.7 σ)
A_{143}^{dustTE}	0.225	$0.23^{+0.11}_{-0.10}$	r_*	144.48	$144.40^{+0.53}_{-0.56}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	31.89	32^{+4}_{-4} (−0.9 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.67^{+0.15}_{-0.16}$	$100\theta_*$	1.04112	$1.04108^{+0.00059}_{-0.00060}$ (+0.4 σ)	f_{2000}^{217}	106.51	$107.1^{+3.6}_{-3.5}$ (−0.7 σ)
A_{217}^{dustTE}	2.08	$2.09^{+0.53}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.877	$13.870^{+0.050}_{-0.052}$ (−0.0 σ)	χ_{lensing}^2	9.02	9.29 (ν : 0.3)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.01	$1059.93^{+0.61}_{-0.61}$ (+1.4 σ)	χ_{small}^2	395.85	397.1 (ν : 1.7) (+0.1 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.13	$147.06^{+0.52}_{-0.55}$ (−0.2 σ)	χ_{lowl}^2	23.26	23.55 (ν : 0.4) (−0.3 σ)
H_0	68.03	$67.1^{+1.8}_{-2.2}$ (+0.6 σ)	k_{D}	0.14087	$0.14089^{+0.00060}_{-0.00058}$ (+0.6 σ)	χ_{plik}^2	2344.0	2359.8 (ν : 17.3) (+278.3 σ)
Ω_Λ	0.6929	$0.681^{+0.024}_{-0.029}$ (+0.6 σ)	$100\theta_{\text{D}}$	0.160709	$0.16076^{+0.00035}_{-0.00035}$ (−1.4 σ)	χ_{prior}^2	1.7	11.5 (ν : 10.4) (+1.2 σ)
Ω_{m}	0.3071	$0.319^{+0.029}_{-0.024}$ (−0.6 σ)	z_{eq}	3396	3405^{+57}_{-54} (−0.3 σ)	χ_{CMB}^2	2772.2	2789.8 (ν : 18.5) (+274.7 σ)
$\Omega_{\text{m}} h^2$	0.14211	$0.1435^{+0.0034}_{-0.0031}$ (−0.5 σ)	k_{eq}	0.010365	$0.01039^{+0.00017}_{-0.00016}$ (−0.3 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2773.86$; $\Delta\chi_{\text{eff}}^2 = -0.78$; $\bar{\chi}_{\text{eff}}^2 = 2801.35$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.66$; $R - 1 = 0.01138$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.02 (Δ 0.15) simall_100x143_offlike5_EE_Aplanck.B: 395.85 (Δ -0.20) commander_dx12.v3.2.29: 23.26 (Δ 0.01) plik_rd12_HM.v22b_TTTEEE: 2344.04 (Δ -0.89)

6.36 base_mnu_plikHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02237^{+0.00030}_{-0.00030} \quad (+1.3\sigma)$	$\Omega_{\nu}h^2$	$< 0.00262 \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.010}_{-0.010} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1201^{+0.0025}_{-0.0024} \quad (-0.4\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09622^{+0.00095}_{-0.0012} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4492^{+0.0052}_{-0.0053} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00060}_{-0.00063} \quad (+0.5\sigma)$	σ_8	$0.807^{+0.025}_{-0.034} \quad (+0.5\sigma)$	$H(0.15)$	$72.5^{+1.6}_{-1.9} \quad (+0.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	S_8	$0.832^{+0.025}_{-0.025} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+19}_{-16} \quad (-0.6\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.244 \quad (-0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.013}_{-0.014} \quad (-0.1\sigma)$	$H(0.38)$	$82.7^{+1.2}_{-1.5} \quad (+0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.027}_{-0.025} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.016}_{-0.017} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1538^{+39}_{-32} \quad (-0.7\sigma)$
n_{s}	$0.9649^{+0.0081}_{-0.0083} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.026}_{-0.030} \quad (+0.4\sigma)$	$H(0.51)$	$89.49^{+0.98}_{-1.2} \quad (+0.7\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.7^{+2.9}_{-3.5} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1991^{+46}_{-38} \quad (-0.7\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.042}_{-0.041} \quad (-0.1\sigma)$	$H(0.61)$	$95.16^{+0.82}_{-1.0} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 8.97 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2316^{+50}_{-41} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-4.0} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.057}_{-0.052} \quad (+0.4\sigma)$	$H(2.33)$	$236.8^{+2.0}_{-1.8} \quad (-0.4\sigma)$
A_{100}^{PS}	$259^{+60}_{-50} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.022}_{-0.021} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5769^{+49}_{-39} \quad (-0.7\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1232^{+23}_{-23} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.012}_{-0.013} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5736^{+76}_{-76} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.024}_{-0.033} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2540^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.012}_{-0.012} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.01 \quad (-0.2\sigma)$	D_{1420}	$817.5^{+9.1}_{-9.1} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.023}_{-0.031} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$230.9^{+3.0}_{-3.1} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.013} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9649^{+0.0081}_{-0.0083} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.022}_{-0.030} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.24539^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.012}_{-0.013} \quad (+0.4\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.021}_{-0.029} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.074}_{-0.073}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.587^{+0.057}_{-0.054} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2963^{+0.0097}_{-0.013} \quad (+0.5\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.81^{+0.11}_{-0.088} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.011}_{-0.016} \quad (+0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.93^{+0.57}_{-0.53} \quad (-1.1\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.11}_{-0.10}$	r_*	$144.41^{+0.53}_{-0.55} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.15}_{-0.16}$	$100\theta_*$	$1.04109^{+0.00058}_{-0.00060} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.1^{+3.6}_{-3.5} \quad (-0.8\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.09^{+0.53}_{-0.53}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.871^{+0.049}_{-0.052} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.28 \quad (\nu: 0.3)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.93^{+0.61}_{-0.61} \quad (+1.4\sigma)$	χ_{simall}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.07^{+0.52}_{-0.54} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.54 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$67.1^{+1.8}_{-2.2} \quad (+0.7\sigma)$	k_{D}	$0.14088^{+0.00060}_{-0.00058} \quad (+0.6\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 17.3) \quad (+278.2\sigma)$
Ω_{Λ}	$0.681^{+0.024}_{-0.029} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00035}_{-0.00035} \quad (-1.4\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.4) \quad (+1.1\sigma)$
Ω_{m}	$0.319^{+0.029}_{-0.024} \quad (-0.6\sigma)$	z_{eq}	$3404^{+56}_{-53} \quad (-0.3\sigma)$	χ_{CMB}^2	$2789.7 \quad (\nu: 18.3) \quad (+274.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1434^{+0.0034}_{-0.0031} \quad (-0.5\sigma)$	k_{eq}	$0.01039^{+0.00017}_{-0.00016} \quad (-0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.19; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.68; R - 1 = 0.01124$$

6.37 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022343	$0.02227^{+0.00032}_{-0.00031}$ (+0.9 σ)	σ_8	0.8210	$0.802^{+0.028}_{-0.037}$ (+0.4 σ)	$100\theta_{s,eq}$	0.4508	$0.4499^{+0.0057}_{-0.0056}$ (+0.5 σ)
$\Omega_c h^2$	0.11938	$0.1199^{+0.0026}_{-0.0026}$ (−0.5 σ)	S_8	0.8292	$0.827^{+0.026}_{-0.025}$ (−0.3 σ)	$H(0.15)$	73.29	$72.3^{+1.7}_{-2.1}$ (+0.6 σ)
$100\theta_{MC}$	1.04091	$1.04083^{+0.00066}_{-0.00065}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4541	$0.453^{+0.014}_{-0.014}$ (−0.3 σ)	$D_M(0.15)$	637.4	647^{+21}_{-17} (−0.6 σ)
τ	0.0532	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6106	$0.603^{+0.017}_{-0.019}$ (+0.1 σ)	$H(0.38)$	83.31	$82.6^{+1.3}_{-1.6}$ (+0.6 σ)
Σm_ν [eV]	0.000	< 0.273 (−0.4 σ)	$\sigma_8/h^{0.5}$	0.9952	$0.980^{+0.028}_{-0.033}$ (+0.2 σ)	$D_M(0.38)$	1521.5	1541^{+43}_{-35} (−0.6 σ)
$\ln(10^{10} A_s)$	3.0396	$3.042^{+0.032}_{-0.030}$ (+0.1 σ)	$r_{drag} h$	100.24	$98.6^{+3.2}_{-3.8}$ (+0.6 σ)	$H(0.51)$	89.98	$89.4^{+1.1}_{-1.3}$ (+0.6 σ)
n_s	0.9673	$0.9650^{+0.0087}_{-0.0084}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.4383	$2.437^{+0.044}_{-0.043}$ (−0.3 σ)	$D_M(0.51)$	1971.8	1995^{+51}_{-41} (−0.6 σ)
y_{cal}	1.00052	$1.0006^{+0.0050}_{-0.0049}$ (+0.0 σ)	z_{re}	7.56	$7.7^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	95.56	$95.04^{+0.89}_{-1.1}$ (+0.6 σ)
A_{100}^{PS}	232.8	241^{+50}_{-50} (−0.8 σ)	$10^9 A_s$	2.090	$2.095^{+0.067}_{-0.062}$ (+0.1 σ)	$D_M(0.61)$	2295	2320^{+55}_{-45} (−0.6 σ)
A_{143}^{PS}	42.3	40^{+20}_{-20} (−1.3 σ)	$10^9 A_s e^{-2\tau}$	1.8786	$1.880^{+0.022}_{-0.021}$ (−0.4 σ)	$H(2.33)$	235.79	$236.6^{+2.2}_{-2.0}$ (−0.5 σ)
A_{217}^{PS}	103.7	103^{+30}_{-30} (−1.2 σ)	D_{40}	1223.7	1229^{+23}_{-24} (−0.3 σ)	$D_M(2.33)$	5751.0	5776^{+54}_{-43} (−0.6 σ)
A_{217}^{CIB}	42.7	40^{+10}_{-10} (−1.3 σ)	D_{220}	5719	5721^{+74}_{-75} (+0.2 σ)	$f\sigma_8(0.15)$	0.4585	$0.458^{+0.013}_{-0.013}$ (−0.2 σ)
A_{143}^{tSZ}	6.19	< 7.41 (−0.6 σ)	D_{810}	2536.0	2536^{+27}_{-26} (−0.1 σ)	$\sigma_8(0.15)$	0.7591	$0.740^{+0.027}_{-0.036}$ (+0.4 σ)
$r_{143 \times 217}^{PS}$	0.665	$0.66^{+0.25}_{-0.25}$	D_{1420}	816.6	$815.9^{+9.7}_{-9.4}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4781	$0.474^{+0.012}_{-0.013}$ (+0.1 σ)
$r_{143 \times 217}^{CIB}$	0.75	—	D_{2000}	230.77	$230.2^{+3.3}_{-3.2}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6733	$0.656^{+0.025}_{-0.034}$ (+0.4 σ)
$\xi^{tSZ \times CIB}$	0.36	—	$n_{s,0.002}$	0.9673	$0.9650^{+0.0087}_{-0.0084}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4773	$0.472^{+0.012}_{-0.014}$ (+0.2 σ)
A^{kSZ}	0.5	—	Y_P	0.245385	$0.24535^{+0.00012}_{-0.00013}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6302	$0.613^{+0.024}_{-0.033}$ (+0.4 σ)
A_{100}^{dust}	1.009	$1.01^{+0.38}_{-0.38}$	Y_P^{BBN}	0.246711	$0.24668^{+0.00012}_{-0.00013}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4726	$0.466^{+0.013}_{-0.015}$ (+0.2 σ)
A_{143}^{dust}	0.972	$0.96^{+0.34}_{-0.34}$	$10^5 D/H$	2.590	$2.604^{+0.060}_{-0.059}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5997	$0.583^{+0.023}_{-0.032}$ (+0.4 σ)
A_{217}^{dust}	0.973	$0.97^{+0.21}_{-0.20}$	Age/Gyr	13.769	$13.83^{+0.12}_{-0.097}$ (−0.6 σ)	$f\sigma_8(2.33)$	0.3016	$0.295^{+0.011}_{-0.015}$ (+0.4 σ)
$A_{143 \times 217}^{dust}$	1.018	$1.02^{+0.32}_{-0.32}$	z_*	1089.89	$1090.04^{+0.59}_{-0.56}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3117	$0.303^{+0.013}_{-0.017}$ (+0.4 σ)
c_{100}	0.99772	$0.9976^{+0.0021}_{-0.0020}$ (−3.3 σ)	r_*	144.62	$144.54^{+0.61}_{-0.61}$ (+0.3 σ)	f_{2000}^{143}	29.3	30^{+6}_{-6} (−0.6 σ)
c_{217}	1.00120	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	$100\theta_*$	1.04107	$1.04104^{+0.00063}_{-0.00060}$ (+0.3 σ)	f_{2000}^{217}	106.32	$107.0^{+3.8}_{-3.9}$ (−0.8 σ)
c_{TE}	0.9961	$0.9968^{+0.0097}_{-0.0095}$	$D_M(z_*)/\text{Gpc}$	13.891	$13.884^{+0.057}_{-0.056}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	31.71	32^{+4}_{-4} (−0.8 σ)
c_{EE}	0.9917	$0.9921^{+0.0097}_{-0.0097}$	z_{drag}	1059.82	$1059.70^{+0.65}_{-0.65}$ (+0.9 σ)	$\chi^2_{lensing}$	8.92	9.44 (ν : 0.4)
H_0	68.06	$67.0^{+2.0}_{-2.4}$ (+0.6 σ)	r_{drag}	147.29	$147.24^{+0.62}_{-0.60}$ (+0.2 σ)	χ^2_{small}	395.86	397.1 (ν : 1.8) (+0.1 σ)
Ω_Λ	0.6940	$0.680^{+0.026}_{-0.032}$ (+0.6 σ)	k_D	0.14063	$0.14064^{+0.00067}_{-0.00070}$ (+0.1 σ)	χ^2_{lowl}	22.92	23.30 (ν : 0.4) (−0.5 σ)
Ω_m	0.3060	$0.320^{+0.032}_{-0.026}$ (−0.6 σ)	$100\theta_D$	0.160816	$0.16089^{+0.00037}_{-0.00038}$ (−0.9 σ)	$\chi^2_{CamSpec}$	11499.3	11514.7 (ν : 15.9)
$\Omega_m h^2$	0.14172	$0.1432^{+0.0038}_{-0.0034}$ (−0.5 σ)	z_{eq}	3387	3396^{+59}_{-59} (−0.5 σ)	χ^2_{prior}	2.1	7.8 (ν : 6.0) (+0.1 σ)
$\Omega_\nu h^2$	0.00000	< 0.00294 (−0.4 σ)	k_{eq}	0.010336	$0.01037^{+0.00018}_{-0.00018}$ (−0.5 σ)	χ^2_{CMB}	11927.0	11944.5 (ν : 18.0) (+1850.3 σ)
$\Omega_m h^3$	0.09645	$0.0959^{+0.0011}_{-0.0013}$ (+0.6 σ)	$100\theta_{eq}$	0.8159	$0.814^{+0.011}_{-0.011}$ (+0.5 σ)			

Best-fit $\chi^2_{eff} = 11929.03$; $\Delta\chi^2_{eff} = -0.62$; $\bar{\chi}^2_{eff} = 11952.30$; $\Delta\bar{\chi}^2_{eff} = 0.86$; $R - 1 = 0.01307$

χ^2_{eff} : CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.92 (Δ 0.09) small_100x143_offlike5.EE_Aplanck.B: 395.86 (Δ -0.01) commander_dx12.v3.2.29: 22.93 (Δ -0.29) CamSpec like_10.7HM_1400_unified: 11499.28 (Δ -0.37)

6.38 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02228^{+0.00032}_{-0.00031} \quad (+0.9\sigma)$	σ_8	$0.802^{+0.028}_{-0.038} \quad (+0.4\sigma)$	$100\theta_{s,eq}$	$0.4500^{+0.0057}_{-0.0056} \quad (+0.5\sigma)$
$\Omega_c h^2$	$0.1198^{+0.0026}_{-0.0026} \quad (-0.6\sigma)$	S_8	$0.827^{+0.026}_{-0.025} \quad (-0.3\sigma)$	$H(0.15)$	$72.3^{+1.8}_{-2.2} \quad (+0.6\sigma)$
$100\theta_{MC}$	$1.04083^{+0.00066}_{-0.00064} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$D_M(0.15)$	$647^{+22}_{-18} \quad (-0.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.017}_{-0.019} \quad (+0.1\sigma)$	$H(0.38)$	$82.6^{+1.3}_{-1.6} \quad (+0.6\sigma)$
Σm_ν [eV]	$< 0.278 \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.028}_{-0.034} \quad (+0.2\sigma)$	$D_M(0.38)$	$1541^{+44}_{-35} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.028}_{-0.026} \quad (+0.3\sigma)$	$r_{drag} h$	$98.6^{+3.3}_{-3.9} \quad (+0.6\sigma)$	$H(0.51)$	$89.4^{+1.1}_{-1.3} \quad (+0.6\sigma)$
n_s	$0.9652^{+0.0086}_{-0.0084} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.043}_{-0.042} \quad (-0.3\sigma)$	$D_M(0.51)$	$1995^{+52}_{-42} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	z_{re}	$< 8.99 \quad (+0.4\sigma)$	$H(0.61)$	$95.04^{+0.90}_{-1.1} \quad (+0.6\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s$	$2.100^{+0.058}_{-0.053} \quad (+0.3\sigma)$	$D_M(0.61)$	$2320^{+57}_{-45} \quad (-0.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$H(2.33)$	$236.6^{+2.3}_{-2.0} \quad (-0.5\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1229^{+23}_{-24} \quad (-0.4\sigma)$	$D_M(2.33)$	$5776^{+55}_{-43} \quad (-0.6\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{220}	$5721^{+74}_{-75} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.6\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.027}_{-0.037} \quad (+0.4\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$815.9^{+9.7}_{-9.5} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.012}_{-0.013} \quad (+0.1\sigma)$
$r_{143 \times 217}^{CIB}$	—	D_{2000}	$230.2^{+3.3}_{-3.2} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.025}_{-0.035} \quad (+0.4\sigma)$
$\xi^{tSZ \times CIB}$	—	$n_{s,0.002}$	$0.9652^{+0.0086}_{-0.0084} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.012}_{-0.014} \quad (+0.2\sigma)$
A^{kSZ}	—	Y_P	$0.24536^{+0.00012}_{-0.00013} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.024}_{-0.034} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Y_P^{BBN}	$0.24668^{+0.00012}_{-0.00013} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.013}_{-0.015} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$10^5 D/H$	$2.604^{+0.060}_{-0.059} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.023}_{-0.032} \quad (+0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	Age/Gyr	$13.83^{+0.13}_{-0.098} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.011}_{-0.015} \quad (+0.4\sigma)$
$A_{143 \times 217}^{dust}$	$1.02^{+0.32}_{-0.31}$	z_*	$1090.03^{+0.58}_{-0.55} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.012}_{-0.018} \quad (+0.4\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	r_*	$144.55^{+0.61}_{-0.61} \quad (+0.3\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_*$	$1.04105^{+0.00063}_{-0.00060} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.0^{+3.8}_{-3.9} \quad (-0.8\sigma)$
c_{TE}	$0.9968^{+0.0097}_{-0.0095}$	$D_M(z_*)/Gpc$	$13.885^{+0.057}_{-0.057} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{EE}	$0.9921^{+0.0096}_{-0.0097}$	z_{drag}	$1059.71^{+0.68}_{-0.65} \quad (+0.9\sigma)$	$\chi_{lensing}^2$	$9.39 \quad (\nu: 0.3)$
H_0	$67.0^{+2.0}_{-2.5} \quad (+0.6\sigma)$	r_{drag}	$147.25^{+0.62}_{-0.61} \quad (+0.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.8) \quad (+0.1\sigma)$
Ω_Λ	$0.680^{+0.026}_{-0.033} \quad (+0.6\sigma)$	k_D	$0.14063^{+0.00067}_{-0.00069} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.29 \quad (\nu: 0.4) \quad (-0.5\sigma)$
Ω_m	$0.320^{+0.033}_{-0.026} \quad (-0.6\sigma)$	$100\theta_D$	$0.16088^{+0.00037}_{-0.00038} \quad (-0.9\sigma)$	$\chi_{CamSpec}^2$	$11514.6 \quad (\nu: 15.7)$
$\Omega_m h^2$	$0.1432^{+0.0039}_{-0.0034} \quad (-0.5\sigma)$	z_{eq}	$3395^{+59}_{-59} \quad (-0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$< 0.00298 \quad (-0.4\sigma)$	k_{eq}	$0.01036^{+0.00018}_{-0.00018} \quad (-0.5\sigma)$	χ_{CMB}^2	$11944.4 \quad (\nu: 17.7) \quad (+1850.3\sigma)$
$\Omega_m h^3$	$0.0959^{+0.0011}_{-0.0013} \quad (+0.6\sigma)$	$100\theta_{eq}$	$0.814^{+0.011}_{-0.011} \quad (+0.5\sigma)$		

$$\bar{\chi}_{eff}^2 = 11952.13; \Delta\bar{\chi}_{eff}^2 = 0.88; R - 1 = 0.01210$$

6.39 base_mnu_plikHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022202	$0.02222^{+0.00037}_{-0.00037}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6127	$0.603^{+0.021}_{-0.022}$ (+0.2 σ)	$H(0.38)$	83.15	$83.00^{+0.75}_{-0.80}$ (+0.9 σ)
$\Omega_c h^2$	0.11966	$0.1190^{+0.0025}_{-0.0025}$ (−0.9 σ)	$\sigma_8/h^{0.5}$	0.9983	$0.983^{+0.031}_{-0.035}$ (+0.3 σ)	$D_M(0.38)$	1525.2	1529^{+21}_{-19} (−0.9 σ)
$100\theta_{MC}$	1.04094	$1.04100^{+0.00081}_{-0.00084}$ (+0.7 σ)	$r_{drag}h$	99.99	$99.8^{+1.9}_{-1.9}$ (+0.9 σ)	$H(0.51)$	89.84	$89.70^{+0.62}_{-0.68}$ (+0.9 σ)
τ	0.0529	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.446	$2.428^{+0.058}_{-0.060}$ (−0.5 σ)	$D_M(0.51)$	1976.3	1981^{+25}_{-23} (−0.9 σ)
Σm_ν [eV]	0.003	< 0.156 (−0.6 σ)	z_{re}	7.56	$7.6^{+1.6}_{-1.6}$ (+0.1 σ)	$H(0.61)$	95.44	$95.30^{+0.54}_{-0.60}$ (+0.9 σ)
$\ln(10^{10} A_s)$	3.0404	$3.039^{+0.034}_{-0.032}$ (−0.0 σ)	$10^9 A_s$	2.091	$2.090^{+0.072}_{-0.067}$ (−0.0 σ)	$D_M(0.61)$	2300.1	2305^{+27}_{-25} (−0.9 σ)
n_s	0.9659	$0.9665^{+0.0084}_{-0.0081}$ (+0.8 σ)	$10^9 A_s e^{-2\tau}$	1.8812	$1.878^{+0.023}_{-0.023}$ (−0.6 σ)	$H(2.33)$	235.84	$235.8^{+1.5}_{-1.5}$ (−0.9 σ)
y_{cal}	1.0005	$1.0005^{+0.0050}_{-0.0050}$ (−0.0 σ)	D_{40}	1227.2	1226^{+25}_{-25} (−0.5 σ)	$D_M(2.33)$	5757.3	5765^{+25}_{-28} (−0.8 σ)
A_{217}^{CIB}	48.7	48^{+10}_{-10} (−0.1 σ)	D_{220}	5716	5720^{+79}_{-80} (+0.2 σ)	$f\sigma_8(0.15)$	0.4607	$0.455^{+0.017}_{-0.018}$ (−0.4 σ)
$\xi^{tSZ \times CIB}$	0.30	—	D_{810}	2537.4	2536^{+27}_{-28} (−0.1 σ)	$\sigma_8(0.15)$	0.7601	$0.748^{+0.022}_{-0.027}$ (+0.6 σ)
A_{143}^{tSZ}	7.02	$5.1^{+3.8}_{-3.9}$ (+0.1 σ)	D_{1420}	815.9	815^{+10}_{-10} (+0.2 σ)	$f\sigma_8(0.38)$	0.4799	$0.474^{+0.016}_{-0.016}$ (+0.0 σ)
A_{100}^{PS}	254	262^{+50}_{-50} (−0.1 σ)	D_{2000}	230.27	$230.0^{+3.6}_{-3.4}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6739	$0.663^{+0.020}_{-0.024}$ (+0.6 σ)
A_{143}^{PS}	48.7	48^{+20}_{-20} (−0.2 σ)	$n_{s,0.002}$	0.9659	$0.9665^{+0.0084}_{-0.0081}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4788	$0.472^{+0.015}_{-0.016}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	46.0	43^{+20}_{-20} (−0.1 σ)	Y_P	0.245327	$0.24533^{+0.00015}_{-0.00016}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6307	$0.620^{+0.018}_{-0.023}$ (+0.6 σ)
A_{217}^{PS}	118.9	115^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.246653	$0.24666^{+0.00015}_{-0.00016}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4739	$0.468^{+0.014}_{-0.016}$ (+0.3 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.618	$2.614^{+0.071}_{-0.069}$ (−0.7 σ)	$\sigma_8(0.61)$	0.6002	$0.590^{+0.017}_{-0.022}$ (+0.6 σ)
A_{100}^{dustTT}	8.85	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	Age/Gyr	13.784	$13.802^{+0.066}_{-0.065}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.3018	$0.2977^{+0.0080}_{-0.0096}$ (+0.6 σ)
A_{143}^{dustTT}	10.83	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	z_*	1090.10	$1090.02^{+0.56}_{-0.56}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3117	$0.3070^{+0.0089}_{-0.011}$ (+0.7 σ)
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.4}_{-6.4}$ (−0.0 σ)	r_*	144.66	$144.80^{+0.64}_{-0.63}$ (+0.8 σ)	f_{2000}^{143}	30.1	31^{+6}_{-6} (−0.3 σ)
A_{217}^{dustTT}	94.6	93^{+10}_{-10} (+0.0 σ)	$100\theta_*$	1.04112	$1.04120^{+0.00081}_{-0.00084}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	33.01	33^{+4}_{-4} (−0.4 σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.894	$13.907^{+0.063}_{-0.061}$ (+0.8 σ)	f_{2000}^{217}	107.49	$107.8^{+3.8}_{-3.7}$ (−0.4 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.51	$1059.52^{+0.84}_{-0.84}$ (+0.5 σ)	χ_{simall}^2	395.87	397.0 (ν : 1.7) (+0.0 σ)
H_0	67.85	$67.7^{+1.1}_{-1.2}$ (+0.9 σ)	r_{drag}	147.38	$147.52^{+0.70}_{-0.68}$ (+0.8 σ)	χ_{lowl}^2	23.25	23.11 (ν : 0.4) (−0.6 σ)
Ω_Λ	0.6918	$0.690^{+0.014}_{-0.015}$ (+0.9 σ)	k_D	0.14043	$0.14030^{+0.00086}_{-0.00089}$ (−0.5 σ)	χ_{plik}^2	758.6	772.0 (ν : 15.4) (−0.1 σ)
Ω_m	0.3082	$0.310^{+0.015}_{-0.014}$ (−0.9 σ)	$100\theta_D$	0.161010	$0.16101^{+0.00050}_{-0.00049}$ (−0.4 σ)	χ_{6DF}^2	0.010	0.059 (ν : 0.0)
$\Omega_m h^2$	0.14189	$0.1419^{+0.0024}_{-0.0023}$ (−0.9 σ)	z_{eq}	3390	3375^{+59}_{-58} (−0.9 σ)	χ_{MGS}^2	1.41	1.39 (ν : 0.1)
$\Omega_\nu h^2$	0.00003	< 0.00168 (−0.6 σ)	k_{eq}	0.010346	$0.01030^{+0.00018}_{-0.00018}$ (−0.9 σ)	$\chi_{DR12BAO}^2$	3.90	4.7 (ν : 1.4)
$\Omega_m h^3$	0.09627	$0.0960^{+0.0010}_{-0.0010}$ (+0.6 σ)	$100\theta_{eq}$	0.8150	$0.818^{+0.011}_{-0.011}$ (+0.9 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.9) (−0.0 σ)
σ_8	0.8223	$0.809^{+0.024}_{-0.030}$ (+0.5 σ)	$100\theta_{s,eq}$	0.4504	$0.4519^{+0.0057}_{-0.0056}$ (+0.9 σ)	χ_{BAO}^2	5.32	6.2 (ν : 1.0)
S_8	0.8335	$0.822^{+0.033}_{-0.035}$ (−0.5 σ)	$H(0.15)$	73.10	$72.92^{+0.98}_{-1.0}$ (+0.9 σ)	χ_{CMB}^2	1177.7	1192.1 (ν : 15.4) (−0.2 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4565	$0.450^{+0.018}_{-0.019}$ (−0.5 σ)	$D_M(0.15)$	639.2	$641^{+10}_{-9.6}$ (−0.9 σ)			

Best-fit $\chi_{eff}^2 = 1184.39$; $\Delta\chi_{eff}^2 = -1.36$; $\bar{\chi}_{eff}^2 = 1205.62$; $\Delta\bar{\chi}_{eff}^2 = -0.41$; $R - 1 = 0.00712$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.01) MGS: 1.41 (Δ 0.13) DR12BAO: 3.90 (Δ -0.28) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ -0.02) commander_dx12_v3_2_29: 23.25 (Δ 0.43) plik_rd12_HM_v22.TT: 758.61 (Δ -1.49)

6.40 base_mnu_plikHM_TT_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022194	$0.02223^{+0.00037}_{-0.00037}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6118	$0.603^{+0.020}_{-0.022}$ (+0.1 σ)	$H(0.38)$	83.18	$83.06^{+0.71}_{-0.75}$ (+1.0 σ)
$\Omega_c h^2$	0.11950	$0.1189^{+0.0025}_{-0.0025}$ (−1.0 σ)	$\sigma_8/h^{0.5}$	0.9971	$0.983^{+0.031}_{-0.034}$ (+0.3 σ)	$D_M(0.38)$	1524.4	1527^{+20}_{-18} (−0.9 σ)
$100\theta_{MC}$	1.04096	$1.04102^{+0.00080}_{-0.00085}$ (+0.7 σ)	$r_{drag}h$	100.11	$99.98^{+1.8}_{-1.8}$ (+1.0 σ)	$H(0.51)$	89.86	$89.75^{+0.60}_{-0.64}$ (+0.9 σ)
τ	0.0529	$0.054^{+0.016}_{-0.015}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.443	$2.426^{+0.057}_{-0.061}$ (−0.6 σ)	$D_M(0.51)$	1975.3	1979^{+23}_{-22} (−0.9 σ)
Σm_ν [eV]	0.001	< 0.150 (−0.7 σ)	z_{re}	7.56	$7.6^{+1.6}_{-1.6}$ (+0.1 σ)	$H(0.61)$	95.45	$95.34^{+0.53}_{-0.55}$ (+0.9 σ)
$\ln(10^{10} A_s)$	3.0395	$3.039^{+0.034}_{-0.032}$ (−0.0 σ)	$10^9 A_s$	2.090	$2.090^{+0.072}_{-0.066}$ (−0.0 σ)	$D_M(0.61)$	2299.1	2303^{+25}_{-24} (−0.9 σ)
n_s	0.9660	$0.9668^{+0.0083}_{-0.0080}$ (+0.9 σ)	$10^9 A_s e^{-2\tau}$	1.8797	$1.877^{+0.023}_{-0.023}$ (−0.6 σ)	$H(2.33)$	235.73	$235.7^{+1.5}_{-1.4}$ (−1.0 σ)
y_{cal}	1.0003	$1.0005^{+0.0050}_{-0.0051}$ (−0.0 σ)	D_{40}	1226.2	1225^{+25}_{-25} (−0.6 σ)	$D_M(2.33)$	5757.1	5763^{+29}_{-26} (−0.9 σ)
A_{217}^{CIB}	49.0	48^{+10}_{-10} (−0.1 σ)	D_{220}	5713	5720^{+79}_{-80} (+0.2 σ)	$f\sigma_8(0.15)$	0.4597	$0.454^{+0.016}_{-0.018}$ (−0.5 σ)
$\xi^{tSZ \times CIB}$	0.28	—	D_{810}	2535.9	2535^{+28}_{-28} (−0.1 σ)	$\sigma_8(0.15)$	0.7595	$0.748^{+0.022}_{-0.027}$ (+0.6 σ)
A_{143}^{tSZ}	7.02	$5.1^{+3.8}_{-3.9}$ (+0.1 σ)	D_{1420}	815.4	$816^{+10}_{-9.9}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4791	$0.473^{+0.015}_{-0.016}$ (+0.0 σ)
A_{100}^{PS}	256	262^{+50}_{-60} (−0.1 σ)	D_{2000}	230.08	$230.0^{+3.5}_{-3.4}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6735	$0.663^{+0.019}_{-0.024}$ (+0.6 σ)
A_{143}^{PS}	48.6	48^{+20}_{-20} (−0.2 σ)	$n_{s,0.002}$	0.9660	$0.9668^{+0.0083}_{-0.0080}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4781	$0.472^{+0.014}_{-0.016}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	45.5	43^{+20}_{-20} (−0.1 σ)	Y_P	0.245323	$0.24534^{+0.00015}_{-0.00016}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6304	$0.621^{+0.018}_{-0.022}$ (+0.6 σ)
A_{217}^{PS}	118.5	115^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.246650	$0.24666^{+0.00015}_{-0.00016}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4733	$0.467^{+0.014}_{-0.015}$ (+0.3 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.619	$2.612^{+0.070}_{-0.068}$ (−0.8 σ)	$\sigma_8(0.61)$	0.5999	$0.591^{+0.017}_{-0.021}$ (+0.6 σ)
A_{100}^{dustTT}	8.87	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	Age/Gyr	13.784	$13.798^{+0.066}_{-0.060}$ (−0.9 σ)	$f\sigma_8(2.33)$	0.3017	$0.2980^{+0.0079}_{-0.0093}$ (+0.7 σ)
A_{143}^{dustTT}	10.81	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	z_*	1090.09	$1089.99^{+0.55}_{-0.55}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3116	$0.3073^{+0.0088}_{-0.010}$ (+0.7 σ)
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.4}_{-6.4}$ (+0.0 σ)	r_*	144.70	$144.84^{+0.62}_{-0.61}$ (+0.9 σ)	f_{2000}^{143}	30.3	31^{+6}_{-6} (−0.3 σ)
A_{217}^{dustTT}	94.5	94^{+10}_{-10} (+0.0 σ)	$100\theta_*$	1.04113	$1.04122^{+0.00080}_{-0.00084}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	33.13	33^{+4}_{-4} (−0.4 σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.898	$13.910^{+0.061}_{-0.060}$ (+0.8 σ)	f_{2000}^{217}	107.54	$107.8^{+3.8}_{-3.7}$ (−0.4 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.47	$1059.53^{+0.82}_{-0.86}$ (+0.5 σ)	χ_{simall}^2	395.88	397.0 (ν : 1.7) (+0.0 σ)
H_0	67.90	$67.8^{+1.1}_{-1.1}$ (+1.0 σ)	r_{drag}	147.43	$147.55^{+0.69}_{-0.67}$ (+0.8 σ)	χ_{lowl}^2	23.21	23.05 (ν : 0.4) (−0.7 σ)
Ω_Λ	0.6927	$0.691^{+0.014}_{-0.015}$ (+0.9 σ)	k_D	0.14037	$0.14027^{+0.00086}_{-0.00089}$ (−0.6 σ)	χ_{plik}^2	758.7	772.1 (ν : 15.4) (−0.1 σ)
Ω_m	0.3073	$0.309^{+0.015}_{-0.014}$ (−0.9 σ)	$100\theta_D$	0.161026	$0.16101^{+0.00050}_{-0.00049}$ (−0.4 σ)	χ_{JLA}^2	1034.88	1035.03 (ν : 0.1)
$\Omega_m h^2$	0.14171	$0.1417^{+0.0022}_{-0.0022}$ (−1.0 σ)	z_{eq}	3386	3372^{+57}_{-57} (−1.0 σ)	χ_{6DF}^2	0.006	0.047 (ν : 0.0)
$\Omega_\nu h^2$	0.00001	< 0.00161 (−0.7 σ)	k_{eq}	0.010335	$0.01029^{+0.00017}_{-0.00017}$ (−1.0 σ)	χ_{MGS}^2	1.47	1.47 (ν : 0.1)
$\Omega_m h^3$	0.09623	$0.09601^{+0.00095}_{-0.0011}$ (+0.6 σ)	$100\theta_{eq}$	0.8157	$0.818^{+0.011}_{-0.011}$ (+1.0 σ)	$\chi_{DR12BAO}^2$	3.77	4.5 (ν : 1.0)
σ_8	0.8217	$0.809^{+0.024}_{-0.029}$ (+0.5 σ)	$100\theta_{s,eq}$	0.4507	$0.4522^{+0.0056}_{-0.0054}$ (+1.0 σ)	χ_{prior}^2	1.4	7.4 (ν : 7.0) (+0.0 σ)
S_8	0.8317	$0.821^{+0.032}_{-0.034}$ (−0.5 σ)	$H(0.15)$	73.14	$73.00^{+0.93}_{-0.97}$ (+1.0 σ)	χ_{BAO}^2	5.25	6.0 (ν : 0.6)
$\sigma_8 \Omega_m^{0.5}$	0.4555	$0.449^{+0.017}_{-0.019}$ (−0.5 σ)	$D_M(0.15)$	638.8	$640.1^{+9.7}_{-9.1}$ (−0.9 σ)	χ_{CMB}^2	1177.8	1192.2 (ν : 15.3) (−0.2 σ)

Best-fit $\chi_{eff}^2 = 2219.29$; $\bar{\chi}_{eff}^2 = 2240.54$; $R - 1 = 0.00739$

χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.77 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 commander_dx12_v3.2.29: 23.21 plik_rd12_HM_v22_TT: 758.69 SN - JLA Pantheon18: 1034.88

6.41 base_mnu_plikHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00038}_{-0.00037} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.020}_{-0.022} \quad (+0.2\sigma)$	$H(0.38)$	$83.01^{+0.75}_{-0.79} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0025}_{-0.0025} \quad (-0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.031}_{-0.035} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+21}_{-19} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00081}_{-0.00084} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.9}_{-1.9} \quad (+0.9\sigma)$	$H(0.51)$	$89.70^{+0.62}_{-0.68} \quad (+0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.057}_{-0.059} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+25}_{-23} \quad (-0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.157 \quad (-0.6\sigma)$	z_{re}	$< 8.93 \quad (+0.3\sigma)$	$H(0.61)$	$95.30^{+0.54}_{-0.59} \quad (+0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.029}_{-0.027} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.061}_{-0.056} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+27}_{-25} \quad (-0.9\sigma)$
n_{s}	$0.9666^{+0.0084}_{-0.0081} \quad (+0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.6\sigma)$	$H(2.33)$	$235.8^{+1.5}_{-1.5} \quad (-0.9\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0050} \quad (-0.0\sigma)$	D_{40}	$1226^{+25}_{-25} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+30}_{-27} \quad (-0.8\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5719^{+79}_{-79} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.017}_{-0.018} \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2535^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.022}_{-0.028} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{1420}	$815^{+10}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.015}_{-0.016} \quad (+0.1\sigma)$
A_{100}^{PS}	$262^{+50}_{-50} \quad (-0.1\sigma)$	D_{2000}	$230.0^{+3.6}_{-3.4} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.019}_{-0.025} \quad (+0.6\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9666^{+0.0084}_{-0.0081} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.014}_{-0.016} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24533^{+0.00015}_{-0.00016} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.018}_{-0.023} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00015}_{-0.00016} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.014}_{-0.016} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.48 \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.614^{+0.071}_{-0.069} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.017}_{-0.022} \quad (+0.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.802^{+0.070}_{-0.062} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0078}_{-0.0097} \quad (+0.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	z_*	$1090.02^{+0.56}_{-0.56} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0087}_{-0.011} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.3}_{-6.5} \quad (-0.0\sigma)$	r_*	$144.81^{+0.64}_{-0.63} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04120^{+0.00081}_{-0.00084} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.908^{+0.063}_{-0.061} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.8^{+3.8}_{-3.7} \quad (-0.4\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.52^{+0.83}_{-0.85} \quad (+0.5\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.7) \quad (-0.0\sigma)$
H_0	$67.7^{+1.1}_{-1.2} \quad (+0.9\sigma)$	r_{drag}	$147.53^{+0.70}_{-0.68} \quad (+0.8\sigma)$	χ_{lowl}^2	$23.13 \quad (\nu: 0.4) \quad (-0.6\sigma)$
Ω_{Λ}	$0.690^{+0.014}_{-0.015} \quad (+0.9\sigma)$	k_{D}	$0.14029^{+0.00085}_{-0.00090} \quad (-0.5\sigma)$	χ_{plik}^2	$771.8 \quad (\nu: 15.1) \quad (-0.1\sigma)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00050}_{-0.00049} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0024}_{-0.0023} \quad (-1.0\sigma)$	z_{eq}	$3375^{+59}_{-58} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$< 0.00169 \quad (-0.6\sigma)$	k_{eq}	$0.01030^{+0.00018}_{-0.00018} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.4)$
$\Omega_{\mathrm{m}} h^3$	$0.09599^{+0.00099}_{-0.0010} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+0.9\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (-0.0\sigma)$
σ_8	$0.810^{+0.024}_{-0.030} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0057}_{-0.0056} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
S_8	$0.823^{+0.033}_{-0.035} \quad (-0.5\sigma)$	$H(0.15)$	$72.93^{+0.98}_{-1.0} \quad (+0.9\sigma)$	χ_{CMB}^2	$1191.9 \quad (\nu: 15.0) \quad (-0.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.018}_{-0.019} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+10}_{-9.5} \quad (-0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1205.36$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -0.40$; $R - 1 = 0.00940$

6.42 base_mnu_plikHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02223^{+0.00037}_{-0.00036}$ (+0.8 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.604^{+0.020}_{-0.022}$ (+0.2 σ)	$H(0.38)$	$83.06^{+0.71}_{-0.75}$ (+1.0 σ)
$\Omega_{\text{c}} h^2$	$0.1188^{+0.0025}_{-0.0025}$ (−1.0 σ)	$\sigma_8/h^{0.5}$	$0.984^{+0.030}_{-0.035}$ (+0.3 σ)	$D_{\text{M}}(0.38)$	1527^{+20}_{-18} (−0.9 σ)
$100\theta_{\text{MC}}$	$1.04102^{+0.00081}_{-0.00085}$ (+0.7 σ)	$r_{\text{drag}} h$	$99.99^{+1.8}_{-1.8}$ (+1.0 σ)	$H(0.51)$	$89.75^{+0.60}_{-0.63}$ (+1.0 σ)
τ	$0.055^{+0.013}_{-0.012}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.056}_{-0.059}$ (−0.5 σ)	$D_{\text{M}}(0.51)$	1979^{+23}_{-22} (−0.9 σ)
Σm_{ν} [eV]	< 0.151 (−0.7 σ)	z_{re}	< 8.94 (+0.3 σ)	$H(0.61)$	$95.34^{+0.53}_{-0.55}$ (+0.9 σ)
$\ln(10^{10} A_{\text{s}})$	$3.042^{+0.029}_{-0.027}$ (+0.1 σ)	$10^9 A_{\text{s}}$	$2.095^{+0.061}_{-0.057}$ (+0.1 σ)	$D_{\text{M}}(0.61)$	2303^{+25}_{-24} (−0.9 σ)
n_{s}	$0.9669^{+0.0082}_{-0.0080}$ (+0.9 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.023}$ (−0.7 σ)	$H(2.33)$	$235.6^{+1.5}_{-1.4}$ (−1.0 σ)
y_{cal}	$1.0005^{+0.0050}_{-0.0051}$ (−0.0 σ)	D_{40}	1225^{+25}_{-25} (−0.6 σ)	$D_{\text{M}}(2.33)$	5763^{+29}_{-26} (−0.9 σ)
A_{217}^{CIB}	48^{+10}_{-10} (−0.1 σ)	D_{220}	5720^{+80}_{-79} (+0.2 σ)	$f\sigma_8(0.15)$	$0.455^{+0.016}_{-0.018}$ (−0.4 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	2535^{+28}_{-27} (−0.2 σ)	$\sigma_8(0.15)$	$0.749^{+0.021}_{-0.027}$ (+0.6 σ)
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$ (+0.1 σ)	D_{1420}	$815^{+10}_{-9.8}$ (+0.2 σ)	$f\sigma_8(0.38)$	$0.474^{+0.015}_{-0.016}$ (+0.0 σ)
A_{100}^{PS}	262^{+50}_{-60} (−0.1 σ)	D_{2000}	$230.0^{+3.5}_{-3.4}$ (+0.4 σ)	$\sigma_8(0.38)$	$0.664^{+0.019}_{-0.024}$ (+0.6 σ)
A_{143}^{PS}	48^{+20}_{-20} (−0.2 σ)	$n_{\text{s},0.002}$	$0.9669^{+0.0082}_{-0.0080}$ (+0.9 σ)	$f\sigma_8(0.51)$	$0.473^{+0.014}_{-0.016}$ (+0.2 σ)
$A_{143 \times 217}^{\text{PS}}$	43^{+20}_{-20} (−0.1 σ)	Y_{P}	$0.24534^{+0.00015}_{-0.00016}$ (+0.8 σ)	$\sigma_8(0.51)$	$0.621^{+0.018}_{-0.022}$ (+0.7 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00015}_{-0.00016}$ (+0.8 σ)	$f\sigma_8(0.61)$	$0.468^{+0.014}_{-0.015}$ (+0.3 σ)
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.612^{+0.070}_{-0.069}$ (−0.8 σ)	$\sigma_8(0.61)$	$0.591^{+0.017}_{-0.021}$ (+0.7 σ)
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	Age/Gyr	$13.798^{+0.066}_{-0.061}$ (−0.9 σ)	$f\sigma_8(2.33)$	$0.2983^{+0.0077}_{-0.0094}$ (+0.7 σ)
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	z_*	$1089.99^{+0.56}_{-0.55}$ (−0.9 σ)	$\sigma_8(2.33)$	$0.3076^{+0.0086}_{-0.011}$ (+0.7 σ)
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.4}_{-6.4}$ (+0.0 σ)	r_*	$144.84^{+0.63}_{-0.61}$ (+0.9 σ)	f_{2000}^{143}	31^{+6}_{-6} (−0.4 σ)
A_{217}^{dustTT}	94^{+10}_{-10} (+0.0 σ)	$100\theta_*$	$1.04122^{+0.00080}_{-0.00084}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	33^{+4}_{-4} (−0.4 σ)
c_{100}	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.911^{+0.061}_{-0.060}$ (+0.9 σ)	f_{2000}^{217}	$107.8^{+3.8}_{-3.7}$ (−0.4 σ)
c_{217}	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	$1059.53^{+0.82}_{-0.82}$ (+0.5 σ)	χ_{small}^2	396.9 (ν : 1.7) (−0.0 σ)
H_0	$67.8^{+1.1}_{-1.1}$ (+1.0 σ)	r_{drag}	$147.56^{+0.69}_{-0.67}$ (+0.8 σ)	χ_{lowl}^2	23.06 (ν : 0.4) (−0.6 σ)
Ω_{Λ}	$0.691^{+0.014}_{-0.015}$ (+0.9 σ)	k_{D}	$0.14027^{+0.00084}_{-0.00089}$ (−0.6 σ)	χ_{plik}^2	771.9 (ν : 15.1) (−0.1 σ)
Ω_{m}	$0.309^{+0.015}_{-0.014}$ (−0.9 σ)	$100\theta_{\text{D}}$	$0.16101^{+0.00049}_{-0.00049}$ (−0.4 σ)	χ_{JLA}^2	1035.03 (ν : 0.1)
$\Omega_{\text{m}} h^2$	$0.1417^{+0.0023}_{-0.0022}$ (−1.0 σ)	z_{eq}	3371^{+57}_{-56} (−1.0 σ)	$\chi_{6\text{DF}}^2$	0.046 (ν : 0.0)
$\Omega_{\nu} h^2$	< 0.00163 (−0.7 σ)	k_{eq}	$0.01029^{+0.00017}_{-0.00017}$ (−1.0 σ)	χ_{MGS}^2	1.48 (ν : 0.1)
$\Omega_{\text{m}} h^3$	$0.09601^{+0.00095}_{-0.0010}$ (+0.6 σ)	$100\theta_{\text{eq}}$	$0.819^{+0.011}_{-0.011}$ (+1.0 σ)	χ_{DR12BAO}^2	4.4 (ν : 1.0)
σ_8	$0.810^{+0.024}_{-0.030}$ (+0.6 σ)	$100\theta_{\text{s,eq}}$	$0.4523^{+0.0056}_{-0.0054}$ (+1.0 σ)	χ_{prior}^2	7.3 (ν : 7.0) (+0.0 σ)
S_8	$0.821^{+0.032}_{-0.034}$ (−0.5 σ)	$H(0.15)$	$73.01^{+0.93}_{-0.97}$ (+1.0 σ)	χ_{BAO}^2	6.0 (ν : 0.6)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.017}_{-0.019}$ (−0.5 σ)	$D_{\text{M}}(0.15)$	$640.0^{+9.7}_{-9.0}$ (−0.9 σ)	χ_{CMB}^2	1191.9 (ν : 14.9) (−0.3 σ)

$\bar{\chi}_{\text{eff}}^2 = 2240.29$; $R - 1 = 0.00886$

6.43 base_mnu_plikHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022420	$0.02241^{+0.00026}_{-0.00026}$ (+1.5 σ)	$\Omega_m h^3$	0.09670	$0.09648^{+0.00070}_{-0.00072}$ (+1.0 σ)	$H(0.15)$	73.29	$73.04^{+0.83}_{-0.90}$ (+1.0 σ)
$\Omega_c h^2$	0.11968	$0.1195^{+0.0020}_{-0.0020}$ (−0.7 σ)	σ_8	0.8236	$0.814^{+0.021}_{-0.024}$ (+0.7 σ)	$D_M(0.15)$	637.4	$639.9^{+8.9}_{-8.1}$ (−0.9 σ)
$100\theta_{MC}$	1.04100	$1.04100^{+0.00058}_{-0.00057}$ (+0.7 σ)	S_8	0.8331	$0.828^{+0.026}_{-0.027}$ (−0.3 σ)	$H(0.38)$	83.34	$83.13^{+0.63}_{-0.69}$ (+1.0 σ)
τ	0.0546	$0.055^{+0.016}_{-0.015}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4563	$0.453^{+0.014}_{-0.015}$ (−0.3 σ)	$D_M(0.38)$	1521.4	1526^{+18}_{-16} (−0.9 σ)
Σm_ν [eV]	0.001	< 0.126 (−0.7 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6130	$0.607^{+0.017}_{-0.017}$ (+0.4 σ)	$H(0.51)$	90.02	$89.84^{+0.52}_{-0.58}$ (+1.0 σ)
$\ln(10^{10} A_s)$	3.0444	$3.045^{+0.032}_{-0.031}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9985	$0.989^{+0.026}_{-0.027}$ (+0.5 σ)	$D_M(0.51)$	1971.5	1978^{+21}_{-19} (−1.0 σ)
n_s	0.9669	$0.9666^{+0.0073}_{-0.0074}$ (+0.9 σ)	$r_{drag} h$	100.11	$99.7^{+1.6}_{-1.7}$ (+0.9 σ)	$H(0.61)$	95.614	$95.46^{+0.43}_{-0.49}$ (+1.1 σ)
y_{cal}	1.00044	$1.0008^{+0.0048}_{-0.0049}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.447	$2.439^{+0.051}_{-0.051}$ (−0.2 σ)	$D_M(0.61)$	2294.7	2301^{+23}_{-21} (−1.0 σ)
A_{217}^{CIB}	46.5	47^{+10}_{-10} (−0.2 σ)	z_{re}	7.69	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$H(2.33)$	236.08	$236.2^{+1.2}_{-1.2}$ (−0.7 σ)
$\xi^{tSZ \times CIB}$	0.57	—	$10^9 A_s$	2.100	$2.101^{+0.069}_{-0.064}$ (+0.3 σ)	$D_M(2.33)$	5747.2	5755^{+24}_{-21} (−1.0 σ)
A_{143}^{tSZ}	7.12	$5.5^{+3.7}_{-3.7}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8826	$1.882^{+0.022}_{-0.022}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4605	$0.458^{+0.013}_{-0.014}$ (−0.2 σ)
A_{100}^{PS}	248	258^{+50}_{-50} (−0.3 σ)	D_{40}	1227.6	1229^{+23}_{-23} (−0.3 σ)	$\sigma_8(0.15)$	0.7614	$0.752^{+0.019}_{-0.022}$ (+0.7 σ)
A_{143}^{PS}	49.1	46^{+20}_{-20} (−0.6 σ)	D_{220}	5732	5737^{+72}_{-75} (+0.6 σ)	$f\sigma_8(0.38)$	0.4800	$0.477^{+0.012}_{-0.013}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	50.7	42^{+20}_{-20} (−0.2 σ)	D_{810}	2540.2	2540^{+26}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6752	$0.667^{+0.017}_{-0.020}$ (+0.7 σ)
A_{217}^{PS}	120.9	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.2	$817.9^{+9.2}_{-9.4}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4791	$0.475^{+0.012}_{-0.012}$ (+0.4 σ)
A^{kSZ}	0.00	< 7.85 (−0.3 σ)	D_{2000}	231.43	$231.2^{+3.0}_{-3.1}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6320	$0.624^{+0.016}_{-0.018}$ (+0.7 σ)
A_{100}^{dustTT}	8.78	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$n_{s,0.002}$	0.9669	$0.9666^{+0.0073}_{-0.0074}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4743	$0.470^{+0.012}_{-0.012}$ (+0.5 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P	0.245415	$0.245409^{+0.000097}_{-0.00011}$ (+1.4 σ)	$\sigma_8(0.61)$	0.6014	$0.594^{+0.015}_{-0.018}$ (+0.8 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	Y_P^{BBN}	0.246742	$0.246736^{+0.000097}_{-0.00011}$ (+1.4 σ)	$f\sigma_8(2.33)$	0.3024	$0.2994^{+0.0071}_{-0.0078}$ (+0.8 σ)
A_{217}^{dustTT}	95.1	94^{+10}_{-10} (+0.1 σ)	$10^5 D/H$	2.5763	$2.579^{+0.050}_{-0.047}$ (−1.5 σ)	$\sigma_8(2.33)$	0.3124	$0.3088^{+0.0078}_{-0.0089}$ (+0.8 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.074}$	Age/Gyr	13.760	$13.779^{+0.056}_{-0.047}$ (−1.0 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (−0.8 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.057}_{-0.058}$	z_*	1089.824	$1089.82^{+0.43}_{-0.44}$ (−1.3 σ)	$f_{2000}^{143 \times 217}$	31.83	32^{+4}_{-4} (−1.0 σ)
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.16}_{-0.17}$	r_*	144.483	$144.55^{+0.47}_{-0.46}$ (+0.3 σ)	f_{2000}^{217}	106.42	$106.9^{+3.4}_{-3.5}$ (−0.9 σ)
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04116	$1.04118^{+0.00057}_{-0.00057}$ (+0.6 σ)	χ_{small}^2	396.08	397.1 (ν : 1.8) (+0.1 σ)
$A_{143 \times 217}^{dustTE}$	0.667	$0.66^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	13.8771	$13.883^{+0.045}_{-0.045}$ (+0.3 σ)	χ_{lowl}^2	23.21	23.25 (ν : 0.4) (−0.5 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.52}$	z_{drag}	1060.01	$1059.99^{+0.56}_{-0.59}$ (+1.5 σ)	χ_{plik}^2	2343.8	2359.3 (ν : 17.4) (+278.2 σ)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.129	$147.20^{+0.49}_{-0.48}$ (+0.1 σ)	χ_{6DF}^2	0.006	0.051 (ν : 0.0)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_D	0.14086	$0.14078^{+0.00057}_{-0.00059}$ (+0.4 σ)	χ_{MGS}^2	1.47	1.33 (ν : 0.1)
H_0	68.04	$67.76^{+0.96}_{-1.0}$ (+1.0 σ)	$100\theta_D$	0.160716	$0.16074^{+0.00034}_{-0.00033}$ (−1.4 σ)	$\chi_{DR12BAO}^2$	3.82	4.7 (ν : 1.1)
Ω_Λ	0.6931	$0.690^{+0.012}_{-0.013}$ (+0.9 σ)	z_{eq}	3395.8	3390^{+45}_{-46} (−0.6 σ)	χ_{prior}^2	1.7	11.6 (ν : 10.4) (+1.2 σ)
Ω_m	0.3069	$0.310^{+0.013}_{-0.012}$ (−0.9 σ)	k_{eq}	0.010364	$0.01035^{+0.00014}_{-0.00014}$ (−0.6 σ)	χ_{BAO}^2	5.30	6.1 (ν : 0.7)
$\Omega_m h^2$	0.14211	$0.1424^{+0.0019}_{-0.0019}$ (−0.8 σ)	$100\theta_{eq}$	0.8146	$0.8156^{+0.0086}_{-0.0084}$ (+0.7 σ)	χ_{CMB}^2	2763.1	2779.7 (ν : 17.0) (+273.0 σ)
$\Omega_\nu h^2$	0.00001	< 0.00135 (−0.7 σ)	$100\theta_{s,eq}$	0.45003	$0.4506^{+0.0044}_{-0.0043}$ (+0.6 σ)			

Best-fit $\chi_{eff}^2 = 2770.08$; $\Delta\chi_{eff}^2 = -1.83$; $\bar{\chi}_{eff}^2 = 2797.32$; $\Delta\bar{\chi}_{eff}^2 = -0.59$; $R - 1 = 0.00869$

χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.02) MGS: 1.47 (Δ 0.26) DR12BAO: 3.82 (Δ -0.60) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.08 (Δ -0.12) commander_dx12_v3_2_29: 23.21 (Δ 0.34) plik_rd12_HM_v22b_TTTEEE: 2343.84 (Δ -1.67)

6.44 base_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022432	$0.02242^{+0.00026}_{-0.00026}$ (+1.5 σ)	$\Omega_m h^3$	0.09670	$0.09649^{+0.00069}_{-0.00071}$ (+1.0 σ)	$H(0.15)$	73.34	$73.10^{+0.79}_{-0.84}$ (+1.0 σ)
$\Omega_c h^2$	0.11954	$0.1193^{+0.0019}_{-0.0020}$ (−0.8 σ)	σ_8	0.8238	$0.814^{+0.020}_{-0.023}$ (+0.7 σ)	$D_M(0.15)$	636.9	$639.3^{+8.3}_{-7.7}$ (−1.0 σ)
$100\theta_{MC}$	1.04101	$1.04102^{+0.00057}_{-0.00057}$ (+0.7 σ)	S_8	0.8321	$0.827^{+0.026}_{-0.026}$ (−0.3 σ)	$H(0.38)$	83.38	$83.18^{+0.61}_{-0.65}$ (+1.0 σ)
τ	0.0554	$0.055^{+0.016}_{-0.015}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4558	$0.453^{+0.014}_{-0.014}$ (−0.3 σ)	$D_M(0.38)$	1520.3	1525^{+17}_{-16} (−1.0 σ)
Σm_ν [eV]	0.001	< 0.120 (−0.7 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6128	$0.607^{+0.016}_{-0.018}$ (+0.3 σ)	$H(0.51)$	90.05	$89.88^{+0.50}_{-0.54}$ (+1.1 σ)
$\ln(10^{10} A_s)$	3.0457	$3.045^{+0.032}_{-0.031}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9982	$0.989^{+0.025}_{-0.026}$ (+0.5 σ)	$D_M(0.51)$	1970.3	1976^{+20}_{-19} (−1.0 σ)
n_s	0.9676	$0.9668^{+0.0073}_{-0.0073}$ (+0.9 σ)	$r_{drag} h$	100.22	$99.9^{+1.5}_{-1.6}$ (+1.0 σ)	$H(0.61)$	95.638	$95.49^{+0.42}_{-0.46}$ (+1.1 σ)
y_{cal}	1.00044	$1.0008^{+0.0049}_{-0.0049}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.446	$2.438^{+0.050}_{-0.049}$ (−0.3 σ)	$D_M(0.61)$	2293.4	2300^{+22}_{-20} (−1.0 σ)
A_{217}^{CIB}	45.6	47^{+10}_{-10} (−0.2 σ)	z_{re}	7.76	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$H(2.33)$	236.00	$236.1^{+1.2}_{-1.1}$ (−0.8 σ)
$\xi^{tSZ \times CIB}$	0.66	—	$10^9 A_s$	2.102	$2.101^{+0.068}_{-0.064}$ (+0.3 σ)	$D_M(2.33)$	5746.3	5754^{+23}_{-20} (−1.1 σ)
A_{143}^{tSZ}	7.09	$5.5^{+3.8}_{-3.7}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8819	$1.881^{+0.021}_{-0.022}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4601	$0.457^{+0.013}_{-0.013}$ (−0.2 σ)
A_{100}^{PS}	247	257^{+50}_{-50} (−0.3 σ)	D_{40}	1226.1	1228^{+23}_{-22} (−0.4 σ)	$\sigma_8(0.15)$	0.7616	$0.753^{+0.019}_{-0.021}$ (+0.7 σ)
A_{143}^{PS}	50.1	45^{+10}_{-20} (−0.6 σ)	D_{220}	5731	5737^{+72}_{-76} (+0.6 σ)	$f\sigma_8(0.38)$	0.4798	$0.476^{+0.012}_{-0.013}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	52.8	42^{+20}_{-20} (−0.2 σ)	D_{810}	2540.3	2540^{+26}_{-27} (+0.2 σ)	$\sigma_8(0.38)$	0.6755	$0.667^{+0.017}_{-0.019}$ (+0.7 σ)
A_{217}^{PS}	122.0	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.6	$817.9^{+9.3}_{-9.5}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4789	$0.475^{+0.011}_{-0.013}$ (+0.4 σ)
A^{kSZ}	0.01	< 7.90 (−0.3 σ)	D_{2000}	231.58	$231.2^{+3.0}_{-3.1}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6323	$0.625^{+0.016}_{-0.017}$ (+0.8 σ)
A_{100}^{dustTT}	8.81	$8.9^{+3.6}_{-3.7}$ (−0.0 σ)	$n_{s,0.002}$	0.9676	$0.9668^{+0.0073}_{-0.0073}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4743	$0.470^{+0.011}_{-0.012}$ (+0.5 σ)
A_{143}^{dustTT}	11.05	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P	0.245420	$0.245412^{+0.000096}_{-0.00010}$ (+1.4 σ)	$\sigma_8(0.61)$	0.6017	$0.594^{+0.015}_{-0.017}$ (+0.8 σ)
$A_{143 \times 217}^{dustTT}$	20.2	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	Y_P^{BBN}	0.246746	$0.246739^{+0.000096}_{-0.00011}$ (+1.4 σ)	$f\sigma_8(2.33)$	0.3026	$0.2996^{+0.0069}_{-0.0075}$ (+0.8 σ)
A_{217}^{dustTT}	95.5	94^{+10}_{-10} (+0.1 σ)	$10^5 D/H$	2.5740	$2.577^{+0.049}_{-0.046}$ (−1.5 σ)	$\sigma_8(2.33)$	0.3127	$0.3091^{+0.0076}_{-0.0085}$ (+0.8 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.074}_{-0.074}$	Age/Gyr	13.7580	$13.776^{+0.053}_{-0.045}$ (−1.0 σ)	f_{2000}^{143}	28.3	29^{+5}_{-5} (−0.8 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.057}_{-0.058}$	z_*	1089.795	$1089.80^{+0.42}_{-0.43}$ (−1.3 σ)	$f_{2000}^{143 \times 217}$	31.63	32^{+4}_{-4} (−1.0 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.16}$	r_*	144.510	$144.57^{+0.46}_{-0.45}$ (+0.4 σ)	f_{2000}^{217}	106.22	$106.8^{+3.4}_{-3.5}$ (−0.9 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	1.04116	$1.04119^{+0.00057}_{-0.00056}$ (+0.6 σ)	χ_{small}^2	396.22	397.2 (ν : 1.9) (+0.1 σ)
$A_{143 \times 217}^{dustTE}$	0.665	$0.66^{+0.15}_{-0.15}$	$D_M(z_*)/\text{Gpc}$	13.8797	$13.885^{+0.044}_{-0.044}$ (+0.3 σ)	χ_{lowl}^2	23.08	23.20 (ν : 0.3) (−0.5 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.53}$	z_{drag}	1060.05	$1060.00^{+0.55}_{-0.60}$ (+1.5 σ)	χ_{plik}^2	2344.0	2359.3 (ν : 17.4) (+278.2 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.151	$147.22^{+0.49}_{-0.47}$ (+0.1 σ)	χ_{JLA}^2	1034.839	1035.02 (ν : 0.0)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_D	0.14085	$0.14077^{+0.00057}_{-0.00058}$ (+0.4 σ)	χ_{6DF}^2	0.003	0.042 (ν : 0.0)
H_0	68.11	$67.83^{+0.91}_{-0.97}$ (+1.0 σ)	$100\theta_D$	0.160704	$0.16073^{+0.00034}_{-0.00033}$ (−1.5 σ)	χ_{MGS}^2	1.54	1.39 (ν : 0.1)
Ω_Λ	0.6939	$0.691^{+0.012}_{-0.013}$ (+0.9 σ)	z_{eq}	3392.6	3388^{+44}_{-44} (−0.6 σ)	$\chi_{DR12BAO}^2$	3.71	4.5 (ν : 0.8)
Ω_m	0.3061	$0.309^{+0.013}_{-0.012}$ (−0.9 σ)	k_{eq}	0.010354	$0.01034^{+0.00013}_{-0.00014}$ (−0.6 σ)	χ_{prior}^2	1.6	11.5 (ν : 10.6) (+1.1 σ)
$\Omega_m h^2$	0.14198	$0.1423^{+0.0018}_{-0.0018}$ (−0.8 σ)	$100\theta_{eq}$	0.8152	$0.8161^{+0.0085}_{-0.0081}$ (+0.7 σ)	χ_{BAO}^2	5.25	5.93 (ν : 0.5)
$\Omega_\nu h^2$	0.00001	< 0.00129 (−0.7 σ)	$100\theta_{s,eq}$	0.45033	$0.4508^{+0.0043}_{-0.0042}$ (+0.7 σ)	χ_{CMB}^2	2763.3	2779.7 (ν : 17.0) (+273.0 σ)

Best-fit $\chi_{eff}^2 = 3804.95$; $\bar{\chi}_{eff}^2 = 3832.15$; $R - 1 = 0.01154$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 3.71 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.22 commander_dx12_v3_2_29: 23.08 plik_rd12_HM_v22b_TTTEEE: 2343.99 SN - JLA Pantheon18: 1034.84

6.45 base_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02241^{+0.00026}_{-0.00026} \quad (+1.5\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09648^{+0.00070}_{-0.00072} \quad (+1.0\sigma)$	$H(0.15)$	$73.04^{+0.83}_{-0.90} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1194^{+0.0020}_{-0.0020} \quad (-0.7\sigma)$	σ_8	$0.815^{+0.021}_{-0.024} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.8^{+8.9}_{-8.1} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04101^{+0.00058}_{-0.00057} \quad (+0.7\sigma)$	S_8	$0.828^{+0.026}_{-0.027} \quad (-0.2\sigma)$	$H(0.38)$	$83.14^{+0.64}_{-0.69} \quad (+1.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.015} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+18}_{-16} \quad (-1.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.127 \quad (-0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.017}_{-0.017} \quad (+0.4\sigma)$	$H(0.51)$	$89.85^{+0.52}_{-0.57} \quad (+1.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.029}_{-0.027} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.026}_{-0.027} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1977^{+21}_{-19} \quad (-1.0\sigma)$
n_{s}	$0.9667^{+0.0073}_{-0.0074} \quad (+0.9\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.6}_{-1.7} \quad (+0.9\sigma)$	$H(0.61)$	$95.46^{+0.44}_{-0.49} \quad (+1.1\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.050}_{-0.049} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+23}_{-21} \quad (-1.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 9.01 \quad (+0.4\sigma)$	$H(2.33)$	$236.2^{+1.2}_{-1.2} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.104^{+0.061}_{-0.057} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+24}_{-21} \quad (-1.0\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.7} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.014} \quad (-0.2\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.3\sigma)$	D_{40}	$1229^{+23}_{-23} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.019}_{-0.022} \quad (+0.7\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.6\sigma)$	D_{220}	$5737^{+72}_{-75} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.012}_{-0.013} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.017}_{-0.020} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.9^{+9.2}_{-9.4} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.012}_{-0.012} \quad (+0.4\sigma)$
A^{kSZ}	$< 7.82 \quad (-0.3\sigma)$	D_{2000}	$231.2^{+3.0}_{-3.1} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.016}_{-0.018} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9667^{+0.0073}_{-0.0074} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.012}_{-0.012} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.245410^{+0.000097}_{-0.00011} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.015}_{-0.017} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246737^{+0.000097}_{-0.00011} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.2997^{+0.0069}_{-0.0077} \quad (+0.8\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.578^{+0.049}_{-0.047} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.3091^{+0.0076}_{-0.0089} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.074}_{-0.074}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.779^{+0.056}_{-0.047} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.058}$	z_*	$1089.82^{+0.43}_{-0.44} \quad (-1.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	r_*	$144.55^{+0.47}_{-0.46} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.5} \quad (-0.9\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04118^{+0.00057}_{-0.00057} \quad (+0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.883^{+0.045}_{-0.045} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.25 \quad (\nu: 0.4) \quad (-0.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.52}$	z_{drag}	$1059.99^{+0.55}_{-0.59} \quad (+1.5\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 17.3) \quad (+278.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.20^{+0.49}_{-0.48} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14078^{+0.00057}_{-0.00059} \quad (+0.4\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
H_0	$67.77^{+0.96}_{-1.0} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00034}_{-0.00033} \quad (-1.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3390^{+45}_{-45} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
Ω_{m}	$0.310^{+0.013}_{-0.012} \quad (-0.9\sigma)$	k_{eq}	$0.01035^{+0.00014}_{-0.00014} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}}h^2$	$0.1424^{+0.0019}_{-0.0019} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8157^{+0.0086}_{-0.0084} \quad (+0.7\sigma)$	χ_{CMB}^2	$2779.5 \quad (\nu: 16.8) \quad (+273.0\sigma)$
$\Omega_{\nu}h^2$	$< 0.00136 \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0044}_{-0.0043} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2797.12$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.59$; $R - 1 = 0.00800$

6.46 base_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00026}_{-0.00026} \quad (+1.5\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.09649^{+0.00068}_{-0.00071} \quad (+1.0\sigma)$	$H(0.15)$	$73.10^{+0.79}_{-0.85} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0019}_{-0.0020} \quad (-0.8\sigma)$	σ_8	$0.815^{+0.020}_{-0.022} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.2^{+8.3}_{-7.7} \quad (-1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04102^{+0.00057}_{-0.00057} \quad (+0.7\sigma)$	S_8	$0.827^{+0.025}_{-0.026} \quad (-0.3\sigma)$	$H(0.38)$	$83.18^{+0.61}_{-0.65} \quad (+1.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+17}_{-16} \quad (-1.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.120 \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.016}_{-0.017} \quad (+0.4\sigma)$	$H(0.51)$	$89.88^{+0.50}_{-0.54} \quad (+1.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.029}_{-0.027} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.025}_{-0.026} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+20}_{-19} \quad (-1.0\sigma)$
n_{s}	$0.9669^{+0.0073}_{-0.0073} \quad (+0.9\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.5}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.49^{+0.42}_{-0.46} \quad (+1.1\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.049}_{-0.048} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2300^{+22}_{-20} \quad (-1.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 9.02 \quad (+0.4\sigma)$	$H(2.33)$	$236.1^{+1.2}_{-1.2} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.105^{+0.061}_{-0.057} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5754^{+23}_{-20} \quad (-1.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.7} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.021}_{-0.022} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	D_{40}	$1228^{+23}_{-23} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.018}_{-0.021} \quad (+0.7\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.6\sigma)$	D_{220}	$5737^{+72}_{-77} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.012}_{-0.013} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.016}_{-0.019} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.9^{+9.3}_{-9.5} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.013} \quad (+0.4\sigma)$
A^{kSZ}	$< 7.87 \quad (-0.3\sigma)$	D_{2000}	$231.2^{+3.0}_{-3.1} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.015}_{-0.017} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.7} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9669^{+0.0073}_{-0.0073} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.011}_{-0.012} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.245413^{+0.000095}_{-0.00010} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.014}_{-0.017} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246740^{+0.000095}_{-0.00011} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.2999^{+0.0067}_{-0.0073} \quad (+0.8\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.577^{+0.049}_{-0.046} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.3093^{+0.0074}_{-0.0084} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.074}_{-0.074}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.776^{+0.053}_{-0.045} \quad (-1.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.9\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.057}_{-0.057}$	z_*	$1089.80^{+0.41}_{-0.42} \quad (-1.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.16}$	r_*	$144.57^{+0.45}_{-0.45} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.5} \quad (-0.9\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	$1.04119^{+0.00057}_{-0.00057} \quad (+0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.15}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.885^{+0.044}_{-0.044} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.22 \quad (\nu: 0.4) \quad (-0.5\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.52}_{-0.52}$	z_{drag}	$1060.00^{+0.54}_{-0.56} \quad (+1.5\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 17.4) \quad (+278.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.22^{+0.48}_{-0.47} \quad (+0.1\sigma)$	χ_{JLA}^2	$1035.02 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14077^{+0.00056}_{-0.00058} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.041 \quad (\nu: 0.0)$
H_0	$67.84^{+0.91}_{-0.97} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00034}_{-0.00032} \quad (-1.5\sigma)$	χ_{MGS}^2	$1.40 \quad (\nu: 0.1)$
Ω_{Λ}	$0.691^{+0.012}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3387^{+44}_{-44} \quad (-0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.8)$
Ω_{m}	$0.309^{+0.013}_{-0.012} \quad (-0.9\sigma)$	k_{eq}	$0.01034^{+0.00013}_{-0.00014} \quad (-0.6\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.6) \quad (+1.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0018}_{-0.0018} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8162^{+0.0084}_{-0.0081} \quad (+0.7\sigma)$	χ_{BAO}^2	$5.92 \quad (\nu: 0.5)$
$\Omega_{\nu} h^2$	$< 0.00129 \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0043}_{-0.0042} \quad (+0.7\sigma)$	χ_{CMB}^2	$2779.5 \quad (\nu: 16.9) \quad (+273.0\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 3831.97; R - 1 = 0.01168$$

6.47 base_mnu_CamSpecHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022216	$0.02222^{+0.00038}_{-0.00038}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4545	$0.450^{+0.019}_{-0.019}$ (−0.5 σ)	$D_M(0.15)$	638.1	$641^{+10}_{-9.7}$ (−0.9 σ)
$\Omega_c h^2$	0.11938	$0.1189^{+0.0025}_{-0.0027}$ (−0.9 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6109	$0.603^{+0.021}_{-0.024}$ (+0.1 σ)	$H(0.38)$	83.23	$83.02^{+0.76}_{-0.78}$ (+0.9 σ)
$100\theta_{MC}$	1.04101	$1.04105^{+0.00082}_{-0.00082}$ (+0.8 σ)	$\sigma_8/h^{0.5}$	0.9958	$0.982^{+0.032}_{-0.037}$ (+0.3 σ)	$D_M(0.38)$	1523.1	1528^{+20}_{-20} (−0.9 σ)
τ	0.0531	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	$r_{drag}h$	100.22	$99.9^{+1.9}_{-1.9}$ (+1.0 σ)	$H(0.51)$	89.90	$89.71^{+0.64}_{-0.67}$ (+0.9 σ)
Σm_ν [eV]	0.003	< 0.159 (−0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.439	$2.424^{+0.059}_{-0.063}$ (−0.6 σ)	$D_M(0.51)$	1973.8	1980^{+24}_{-23} (−0.9 σ)
$\ln(10^{10} A_s)$	3.0387	$3.038^{+0.033}_{-0.032}$ (−0.1 σ)	z_{re}	7.57	$7.6^{+1.6}_{-1.6}$ (+0.1 σ)	$H(0.61)$	95.49	$95.31^{+0.56}_{-0.60}$ (+0.9 σ)
n_s	0.9670	$0.9674^{+0.0087}_{-0.0087}$ (+1.0 σ)	$10^9 A_s$	2.088	$2.088^{+0.070}_{-0.066}$ (−0.1 σ)	$D_M(0.61)$	2297.4	2304^{+26}_{-25} (−0.9 σ)
y_{cal}	1.00052	$1.0005^{+0.0050}_{-0.0049}$ (−0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8776	$1.875^{+0.024}_{-0.024}$ (−0.8 σ)	$H(2.33)$	235.69	$235.7^{+1.5}_{-1.5}$ (−1.0 σ)
A_{100}^{PS}	234.1	242^{+50}_{-50} (−0.8 σ)	D_{40}	1223.0	1222^{+26}_{-25} (−0.8 σ)	$D_M(2.33)$	5755.3	5764^{+31}_{-28} (−0.8 σ)
A_{143}^{PS}	43.5	40^{+20}_{-20} (−1.2 σ)	D_{220}	5707	5709^{+80}_{-77} (−0.1 σ)	$f\sigma_8(0.15)$	0.4588	$0.454^{+0.017}_{-0.018}$ (−0.5 σ)
A_{217}^{PS}	101.9	101^{+30}_{-30} (−1.4 σ)	D_{810}	2534.3	2533^{+27}_{-27} (−0.3 σ)	$\sigma_8(0.15)$	0.7590	$0.747^{+0.023}_{-0.028}$ (+0.6 σ)
A_{217}^{CIB}	44.6	41^{+10}_{-10} (−1.1 σ)	D_{1420}	815.3	815^{+10}_{-10} (+0.1 σ)	$f\sigma_8(0.38)$	0.4784	$0.473^{+0.016}_{-0.017}$ (−0.0 σ)
A_{143}^{tSZ}	6.47	< 7.41 (−0.6 σ)	D_{2000}	230.14	$229.9^{+3.6}_{-3.5}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6731	$0.662^{+0.020}_{-0.025}$ (+0.6 σ)
$r_{143 \times 217}^{PS}$	0.626	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	0.9670	$0.9674^{+0.0087}_{-0.0087}$ (+1.0 σ)	$f\sigma_8(0.51)$	0.4775	$0.472^{+0.015}_{-0.017}$ (+0.2 σ)
$r_{143 \times 217}^{CIB}$	0.84	—	Y_P	0.245333	$0.24533^{+0.00016}_{-0.00016}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6301	$0.620^{+0.019}_{-0.024}$ (+0.6 σ)
$\xi^{tSZ \times CIB}$	0.29	—	Y_P^{BBN}	0.246659	$0.24666^{+0.00016}_{-0.00017}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4728	$0.467^{+0.014}_{-0.016}$ (+0.3 σ)
A^{kSZ}	0.3	—	$10^5 D/H$	2.615	$2.615^{+0.073}_{-0.070}$ (−0.7 σ)	$\sigma_8(0.61)$	0.5996	$0.590^{+0.018}_{-0.022}$ (+0.6 σ)
A_{100}^{dust}	1.013	$1.01^{+0.38}_{-0.38}$	Age/Gyr	13.779	$13.801^{+0.071}_{-0.064}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.3016	$0.2976^{+0.0083}_{-0.0099}$ (+0.6 σ)
A_{143}^{dust}	0.992	$0.98^{+0.34}_{-0.34}$	z_*	1090.06	$1090.02^{+0.58}_{-0.58}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3116	$0.3068^{+0.0091}_{-0.011}$ (+0.7 σ)
A_{217}^{dust}	0.969	$0.97^{+0.20}_{-0.20}$	r_*	144.71	$144.83^{+0.67}_{-0.64}$ (+0.9 σ)	f_{2000}^{143}	30.5	30^{+6}_{-6} (−0.4 σ)
$A_{143 \times 217}^{dust}$	0.996	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04118	$1.04125^{+0.00082}_{-0.00082}$ (+0.7 σ)	f_{2000}^{217}	107.13	$107.4^{+3.9}_{-3.9}$ (−0.6 σ)
c_{100}	0.99764	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$D_M(z_*)/\text{Gpc}$	13.899	$13.909^{+0.064}_{-0.063}$ (+0.8 σ)	$f_{2000}^{143 \times 217}$	32.49	33^{+4}_{-4} (−0.6 σ)
c_{217}	1.00136	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	z_{drag}	1059.51	$1059.51^{+0.85}_{-0.87}$ (+0.5 σ)	χ_{small}^2	395.87	397.0 (ν : 1.6) (+0.0 σ)
H_0	67.98	$67.7^{+1.1}_{-1.2}$ (+0.9 σ)	r_{drag}	147.43	$147.55^{+0.71}_{-0.70}$ (+0.8 σ)	χ_{lowl}^2	22.93	22.85 (ν : 0.4) (−0.8 σ)
Ω_Λ	0.6935	$0.690^{+0.015}_{-0.015}$ (+0.9 σ)	k_D	0.14038	$0.14027^{+0.00089}_{-0.00088}$ (−0.6 σ)	$\chi_{CamSpec}^2$	7050.5	7063.9 (ν : 15.9)
Ω_m	0.3065	$0.310^{+0.015}_{-0.015}$ (−0.9 σ)	$100\theta_D$	0.16101	$0.16103^{+0.00051}_{-0.00049}$ (−0.4 σ)	χ_{6DF}^2	0.003	0.054 (ν : 0.0)
$\Omega_m h^2$	0.14164	$0.1418^{+0.0023}_{-0.0023}$ (−1.0 σ)	z_{eq}	3384	3373^{+59}_{-62} (−0.9 σ)	χ_{MGS}^2	1.54	1.42 (ν : 0.1)
$\Omega_\nu h^2$	0.00004	< 0.00170 (−0.6 σ)	k_{eq}	0.010327	$0.01029^{+0.00018}_{-0.00019}$ (−0.9 σ)	$\chi_{DR12BAO}^2$	3.66	4.6 (ν : 1.2)
$\Omega_m h^3$	0.09628	$0.0960^{+0.0010}_{-0.0011}$ (+0.6 σ)	$100\theta_{eq}$	0.8162	$0.818^{+0.012}_{-0.011}$ (+1.0 σ)	χ_{prior}^2	2.1	7.6 (ν : 6.0) (+0.1 σ)
σ_8	0.8210	$0.808^{+0.025}_{-0.031}$ (+0.5 σ)	$100\theta_{s,eq}$	0.4510	$0.4521^{+0.0061}_{-0.0056}$ (+0.9 σ)	χ_{BAO}^2	5.21	6.1 (ν : 0.8)
S_8	0.8299	$0.821^{+0.034}_{-0.035}$ (−0.5 σ)	$H(0.15)$	73.21	$73.0^{+1.0}_{-1.0}$ (+0.9 σ)	χ_{CMB}^2	7469.3	7483.8 (ν : 15.6) (+1082.6 σ)

Best-fit $\chi_{eff}^2 = 7476.59$; $\bar{\chi}_{eff}^2 = 7497.48$; $\Delta\bar{\chi}_{eff}^2 = -0.07$; $R - 1 = 0.00749$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 3.66 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3.2_29: 22.93 CamSpec like_10.7HM: 7050.52

6.48 base_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022200	$0.02223^{+0.00038}_{-0.00038}$ (+0.7 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6099	$0.602^{+0.021}_{-0.023}$ (+0.1 σ)	$D_{\mathrm{M}}(0.38)$	1523.3	1527^{+19}_{-19} (−0.9 σ)
$\Omega_{\mathrm{c}} h^2$	0.11938	$0.1188^{+0.0024}_{-0.0026}$ (−1.0 σ)	$\sigma_8/h^{0.5}$	0.9942	$0.982^{+0.032}_{-0.036}$ (+0.2 σ)	$H(0.51)$	89.89	$89.75^{+0.62}_{-0.64}$ (+1.0 σ)
$100\theta_{\mathrm{MC}}$	1.04100	$1.04107^{+0.00083}_{-0.00082}$ (+0.8 σ)	$r_{\mathrm{drag}} h$	100.22	$100.0^{+1.8}_{-1.8}$ (+1.0 σ)	$D_{\mathrm{M}}(0.51)$	1974.1	1978^{+23}_{-22} (−0.9 σ)
τ	0.0517	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.436	$2.422^{+0.058}_{-0.063}$ (−0.7 σ)	$H(0.61)$	95.47	$95.35^{+0.54}_{-0.58}$ (+0.9 σ)
Σm_{ν} [eV]	0.001	< 0.151 (−0.6 σ)	z_{re}	7.43	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2297.7	2303^{+25}_{-24} (−0.9 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0354	$3.038^{+0.034}_{-0.032}$ (−0.1 σ)	$10^9 A_{\mathrm{s}}$	2.081	$2.088^{+0.071}_{-0.067}$ (−0.1 σ)	$H(2.33)$	235.66	$235.6^{+1.5}_{-1.5}$ (−1.0 σ)
n_{s}	0.9662	$0.9677^{+0.0086}_{-0.0085}$ (+1.0 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8765	$1.874^{+0.023}_{-0.023}$ (−0.8 σ)	$D_{\mathrm{M}}(2.33)$	5756.0	5763^{+30}_{-27} (−0.9 σ)
y_{cal}	1.00035	$1.0005^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{40}	1223.7	1222^{+26}_{-25} (−0.8 σ)	$f\sigma_8(0.15)$	0.4581	$0.454^{+0.017}_{-0.018}$ (−0.5 σ)
A_{100}^{PS}	236.9	243^{+50}_{-50} (−0.8 σ)	D_{220}	5706	5710^{+79}_{-77} (−0.1 σ)	$\sigma_8(0.15)$	0.7578	$0.747^{+0.023}_{-0.028}$ (+0.6 σ)
A_{143}^{PS}	39.2	40^{+20}_{-20} (−1.2 σ)	D_{810}	2532.5	2533^{+27}_{-27} (−0.3 σ)	$f\sigma_8(0.38)$	0.4775	$0.473^{+0.016}_{-0.017}$ (−0.0 σ)
A_{217}^{PS}	99.97	101^{+30}_{-30} (−1.4 σ)	D_{1420}	814.4	815^{+10}_{-10} (+0.1 σ)	$\sigma_8(0.38)$	0.6720	$0.663^{+0.020}_{-0.025}$ (+0.6 σ)
A_{217}^{CIB}	46.1	41^{+10}_{-10} (−1.1 σ)	D_{2000}	229.76	$229.9^{+3.6}_{-3.5}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4766	$0.472^{+0.015}_{-0.016}$ (+0.2 σ)
A_{143}^{tSZ}	6.64	< 7.40 (−0.6 σ)	$n_{\mathrm{s},0.002}$	0.9662	$0.9677^{+0.0086}_{-0.0085}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6290	$0.620^{+0.019}_{-0.023}$ (+0.6 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.559	$0.65^{+0.25}_{-0.25}$	Y_{P}	0.245326	$0.24534^{+0.00016}_{-0.00016}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4720	$0.467^{+0.014}_{-0.016}$ (+0.3 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.81	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246652	$0.24666^{+0.00016}_{-0.00016}$ (+0.7 σ)	$\sigma_8(0.61)$	0.5986	$0.590^{+0.018}_{-0.022}$ (+0.6 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.00	—	$10^5 \mathrm{D}/\mathrm{H}$	2.618	$2.613^{+0.073}_{-0.069}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.3010	$0.2977^{+0.0082}_{-0.0097}$ (+0.6 σ)
A^{kSZ}	0.2	—	Age/Gyr	13.781	$13.798^{+0.069}_{-0.062}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3110	$0.3070^{+0.0090}_{-0.011}$ (+0.7 σ)
A_{100}^{dust}	1.008	$1.01^{+0.39}_{-0.38}$	z_*	1090.08	$1089.99^{+0.57}_{-0.57}$ (−0.9 σ)	f_{2000}^{143}	30.9	30^{+6}_{-6} (−0.4 σ)
A_{143}^{dust}	0.988	$0.98^{+0.34}_{-0.34}$	r_*	144.73	$144.86^{+0.65}_{-0.63}$ (+0.9 σ)	f_{2000}^{217}	107.38	$107.3^{+3.9}_{-3.9}$ (−0.6 σ)
A_{217}^{dust}	0.963	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	1.04117	$1.04127^{+0.00083}_{-0.00082}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	32.74	33^{+4}_{-4} (−0.6 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	0.996	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.900	$13.911^{+0.063}_{-0.061}$ (+0.9 σ)	χ_{small}^2	395.76	397.0 (ν : 1.7) (+0.0 σ)
c_{100}	0.99759	$0.9975^{+0.0020}_{-0.0020}$ (−3.4 σ)	z_{drag}	1059.47	$1059.52^{+0.87}_{-0.85}$ (+0.5 σ)	χ_{lowl}^2	23.01	22.80 (ν : 0.4) (−0.8 σ)
c_{217}	1.00140	$1.0012^{+0.0030}_{-0.0030}$ (+4.7 σ)	r_{drag}	147.45	$147.57^{+0.70}_{-0.69}$ (+0.9 σ)	$\chi_{\mathrm{CamSpec}}^2$	7050.4	7064.0 (ν : 16.1)
H_0	67.97	$67.8^{+1.1}_{-1.1}$ (+1.0 σ)	k_{D}	0.14035	$0.14025^{+0.00088}_{-0.00088}$ (−0.6 σ)	χ_{JLA}^2	1034.85	1035.02 (ν : 0.0)
Ω_{Λ}	0.6935	$0.692^{+0.014}_{-0.014}$ (+0.9 σ)	$100\theta_{\mathrm{D}}$	0.16103	$0.16102^{+0.00052}_{-0.00048}$ (−0.4 σ)	$\chi_{6\mathrm{DF}}^2$	0.003	0.044 (ν : 0.0)
Ω_{m}	0.3065	$0.308^{+0.014}_{-0.014}$ (−0.9 σ)	z_{eq}	3383	3370^{+56}_{-60} (−1.0 σ)	χ_{MGS}^2	1.54	1.49 (ν : 0.1)
$\Omega_{\mathrm{m}} h^2$	0.14159	$0.1417^{+0.0022}_{-0.0022}$ (−1.0 σ)	k_{eq}	0.010326	$0.01029^{+0.00017}_{-0.00018}$ (−1.0 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.66	4.4 (ν : 0.8)
$\Omega_{\nu} h^2$	0.00001	< 0.00163 (−0.6 σ)	$100\theta_{\mathrm{eq}}$	0.8162	$0.819^{+0.011}_{-0.010}$ (+1.0 σ)	χ_{prior}^2	2.2	7.6 (ν : 5.9) (+0.1 σ)
$\Omega_{\mathrm{m}} h^3$	0.09623	$0.09601^{+0.00099}_{-0.0011}$ (+0.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.4510	$0.4524^{+0.0058}_{-0.0054}$ (+1.0 σ)	χ_{BAO}^2	5.21	5.9 (ν : 0.5)
σ_8	0.8197	$0.808^{+0.025}_{-0.030}$ (+0.5 σ)	$H(0.15)$	73.20	$73.02^{+0.95}_{-0.95}$ (+1.0 σ)	χ_{CMB}^2	7469.2	7483.8 (ν : 15.7) (+1082.6 σ)
S_8	0.8285	$0.819^{+0.033}_{-0.035}$ (−0.6 σ)	$D_{\mathrm{M}}(0.15)$	638.2	$639.9^{+9.4}_{-9.2}$ (−0.9 σ)			
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4538	$0.449^{+0.018}_{-0.019}$ (−0.6 σ)	$H(0.38)$	83.22	$83.07^{+0.73}_{-0.75}$ (+1.0 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 8511.39$; $\bar{\chi}_{\mathrm{eff}}^2 = 8532.36$; $R - 1 = 0.00853$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 3.66 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.76 commander_dx12_v3.2_29: 23.01 CamSpec like_10.7HM: 7050.38
SN - JLA Pantheon18: 1034.85

6.49 base_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00038}_{-0.00038} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.018}_{-0.019} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+10}_{-9.7} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0025}_{-0.0027} \quad (-1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.021}_{-0.023} \quad (+0.1\sigma)$	$H(0.38)$	$83.03^{+0.76}_{-0.79} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04105^{+0.00082}_{-0.00082} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.032}_{-0.036} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+21}_{-20} \quad (-0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.9} \quad (+1.0\sigma)$	$H(0.51)$	$89.72^{+0.64}_{-0.68} \quad (+0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.159 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.058}_{-0.062} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+24}_{-23} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.029}_{-0.027} \quad (+0.1\sigma)$	z_{re}	$< 8.96 \quad (+0.3\sigma)$	$H(0.61)$	$95.32^{+0.56}_{-0.60} \quad (+0.9\sigma)$
n_{s}	$0.9675^{+0.0086}_{-0.0087} \quad (+1.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.060}_{-0.056} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+27}_{-25} \quad (-0.9\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.024}_{-0.024} \quad (-0.8\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (-1.0\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1222^{+26}_{-25} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+31}_{-28} \quad (-0.9\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5709^{+80}_{-77} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.017}_{-0.018} \quad (-0.4\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.023}_{-0.028} \quad (+0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.016}_{-0.017} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.6\sigma)$	D_{2000}	$229.9^{+3.6}_{-3.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.020}_{-0.025} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9675^{+0.0086}_{-0.0087} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.015}_{-0.016} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.019}_{-0.023} \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.014}_{-0.016} \quad (+0.3\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.614^{+0.073}_{-0.069} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.018}_{-0.022} \quad (+0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.801^{+0.071}_{-0.064} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0080}_{-0.0097} \quad (+0.7\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.01^{+0.58}_{-0.58} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0089}_{-0.011} \quad (+0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.83^{+0.67}_{-0.64} \quad (+0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04126^{+0.00082}_{-0.00082} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.3^{+3.9}_{-3.9} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.909^{+0.064}_{-0.063} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.7\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1059.51^{+0.84}_{-0.88} \quad (+0.5\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.7) \quad (-0.0\sigma)$
H_0	$67.7^{+1.1}_{-1.2} \quad (+0.9\sigma)$	r_{drag}	$147.55^{+0.71}_{-0.70} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.86 \quad (\nu: 0.4) \quad (-0.8\sigma)$
Ω_{Λ}	$0.691^{+0.015}_{-0.015} \quad (+0.9\sigma)$	k_{D}	$0.14027^{+0.00089}_{-0.00088} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.8 \quad (\nu: 15.8)$
Ω_{m}	$0.309^{+0.015}_{-0.015} \quad (-0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00051}_{-0.00048} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0023}_{-0.0023} \quad (-1.0\sigma)$	z_{eq}	$3372^{+59}_{-62} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.43 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$< 0.00171 \quad (-0.6\sigma)$	k_{eq}	$0.01029^{+0.00018}_{-0.00019} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0960^{+0.0010}_{-0.0011} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.012}_{-0.011} \quad (+1.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.1) \quad (+0.1\sigma)$
σ_8	$0.809^{+0.025}_{-0.030} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4522^{+0.0061}_{-0.0056} \quad (+1.0\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
S_8	$0.821^{+0.034}_{-0.035} \quad (-0.5\sigma)$	$H(0.15)$	$73.0^{+1.0}_{-1.0} \quad (+0.9\sigma)$	χ_{CMB}^2	$7483.6 \quad (\nu: 15.3) \quad (+1082.6\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7497.29$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -0.02$; $R - 1 = 0.00759$

6.50 base_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00037}_{-0.00038} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.020}_{-0.023} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+19}_{-19} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1188^{+0.0024}_{-0.0026} \quad (-1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.031}_{-0.035} \quad (+0.3\sigma)$	$H(0.51)$	$89.76^{+0.62}_{-0.65} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00083}_{-0.00082} \quad (+0.8\sigma)$	$r_{\mathrm{drag}} h$	$100.0^{+1.8}_{-1.8} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+23}_{-22} \quad (-0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.056}_{-0.061} \quad (-0.6\sigma)$	$H(0.61)$	$95.35^{+0.54}_{-0.58} \quad (+0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.151 \quad (-0.6\sigma)$	z_{re}	$< 8.98 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+25}_{-24} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.029}_{-0.027} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.061}_{-0.056} \quad (+0.0\sigma)$	$H(2.33)$	$235.6^{+1.5}_{-1.4} \quad (-1.0\sigma)$
n_{s}	$0.9678^{+0.0086}_{-0.0085} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+30}_{-27} \quad (-0.9\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	D_{40}	$1222^{+26}_{-25} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.017}_{-0.017} \quad (-0.5\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5710^{+80}_{-77} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.023}_{-0.027} \quad (+0.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.2\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.015}_{-0.017} \quad (-0.0\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-9.0} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.020}_{-0.024} \quad (+0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.0^{+3.6}_{-3.5} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.015}_{-0.016} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.9678^{+0.0086}_{-0.0085} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.018}_{-0.022} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	Y_{P}	$0.24534^{+0.00016}_{-0.00016} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.014}_{-0.016} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00016} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.018}_{-0.021} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.612^{+0.073}_{-0.069} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0080}_{-0.0094} \quad (+0.7\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.797^{+0.069}_{-0.062} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0088}_{-0.011} \quad (+0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1089.98^{+0.57}_{-0.57} \quad (-1.0\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	r_*	$144.86^{+0.65}_{-0.63} \quad (+0.9\sigma)$	f_{2000}^{217}	$107.3^{+3.9}_{-3.9} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04127^{+0.00083}_{-0.00082} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.912^{+0.063}_{-0.061} \quad (+0.9\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.7) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1059.53^{+0.86}_{-0.85} \quad (+0.5\sigma)$	χ_{lowl}^2	$22.81 \quad (\nu: 0.4) \quad (-0.8\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0030} \quad (+4.7\sigma)$	r_{drag}	$147.57^{+0.70}_{-0.69} \quad (+0.9\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.9 \quad (\nu: 16.0)$
H_0	$67.8^{+1.1}_{-1.1} \quad (+1.0\sigma)$	k_{D}	$0.14025^{+0.00088}_{-0.00088} \quad (-0.6\sigma)$	χ_{JLA}^2	$1035.02 \quad (\nu: 0.0)$
Ω_{Λ}	$0.692^{+0.014}_{-0.014} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00052}_{-0.00048} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
Ω_{m}	$0.308^{+0.014}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3369^{+56}_{-61} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.50 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1416^{+0.0022}_{-0.0022} \quad (-1.0\sigma)$	k_{eq}	$0.01028^{+0.00017}_{-0.00018} \quad (-1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.8)$
$\Omega_{\nu} h^2$	$< 0.00163 \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.011}_{-0.010} \quad (+1.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09601^{+0.00099}_{-0.0011} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4524^{+0.0059}_{-0.0054} \quad (+1.0\sigma)$	χ_{BAO}^2	$5.9 \quad (\nu: 0.5)$
σ_8	$0.809^{+0.025}_{-0.029} \quad (+0.5\sigma)$	$H(0.15)$	$73.03^{+0.94}_{-0.95} \quad (+1.0\sigma)$	χ_{CMB}^2	$7483.6 \quad (\nu: 15.5) \quad (+1082.6\sigma)$
S_8	$0.820^{+0.033}_{-0.034} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.8^{+9.4}_{-9.2} \quad (-0.9\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.018}_{-0.019} \quad (-0.6\sigma)$	$H(0.38)$	$83.08^{+0.73}_{-0.75} \quad (+1.0\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 8532.17$; $R - 1 = 0.00943$

6.51 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022331	$0.02234^{+0.00029}_{-0.00029}$ (+1.2 σ)	S_8	0.8271	$0.820^{+0.028}_{-0.030}$ (−0.6 σ)	$D_M(0.15)$	637.1	$640.1^{+9.5}_{-9.2}$ (−0.9 σ)
$\Omega_c h^2$	0.11924	$0.1189^{+0.0021}_{-0.0021}$ (−0.9 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4530	$0.449^{+0.015}_{-0.016}$ (−0.6 σ)	$H(0.38)$	83.33	$83.08^{+0.72}_{-0.75}$ (+1.0 σ)
$100\theta_{MC}$	1.04096	$1.04095^{+0.00058}_{-0.00059}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6094	$0.602^{+0.019}_{-0.020}$ (+0.1 σ)	$D_M(0.38)$	1520.8	1527^{+19}_{-19} (−0.9 σ)
τ	0.0530	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9933	$0.981^{+0.029}_{-0.032}$ (+0.2 σ)	$H(0.51)$	89.99	$89.77^{+0.60}_{-0.63}$ (+1.0 σ)
Σm_ν [eV]	0.005	< 0.159 (−0.6 σ)	$r_{drag} h$	100.34	$99.9^{+1.7}_{-1.8}$ (+1.0 σ)	$D_M(0.51)$	1971.1	1979^{+23}_{-22} (−0.9 σ)
$\ln(10^{10} A_s)$	3.0382	$3.038^{+0.033}_{-0.031}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.435	$2.423^{+0.053}_{-0.055}$ (−0.7 σ)	$H(0.61)$	95.57	$95.38^{+0.51}_{-0.55}$ (+1.0 σ)
n_s	0.9673	$0.9675^{+0.0078}_{-0.0075}$ (+1.0 σ)	z_{re}	7.54	$7.6^{+1.6}_{-1.6}$ (+0.1 σ)	$D_M(0.61)$	2294.4	2303^{+25}_{-24} (−0.9 σ)
y_{cal}	1.00028	$1.0005^{+0.0049}_{-0.0049}$ (−0.0 σ)	$10^9 A_s$	2.087	$2.087^{+0.070}_{-0.065}$ (−0.1 σ)	$H(2.33)$	235.71	$235.8^{+1.3}_{-1.3}$ (−0.9 σ)
A_{100}^{PS}	232.4	239^{+50}_{-50} (−0.9 σ)	$10^9 A_s e^{-2\tau}$	1.8768	$1.876^{+0.022}_{-0.022}$ (−0.7 σ)	$D_M(2.33)$	5750.8	5761^{+28}_{-25} (−0.9 σ)
A_{143}^{PS}	41.7	39^{+20}_{-20} (−1.4 σ)	D_{40}	1222.9	1223^{+23}_{-24} (−0.7 σ)	$f\sigma_8(0.15)$	0.4574	$0.454^{+0.014}_{-0.015}$ (−0.5 σ)
A_{217}^{PS}	102.5	103^{+30}_{-30} (−1.3 σ)	D_{220}	5716	5720^{+76}_{-76} (+0.2 σ)	$\sigma_8(0.15)$	0.7579	$0.746^{+0.022}_{-0.027}$ (+0.5 σ)
A_{217}^{CIB}	43.9	39^{+10}_{-10} (−1.3 σ)	D_{810}	2534.1	2534^{+27}_{-26} (−0.2 σ)	$f\sigma_8(0.38)$	0.4771	$0.473^{+0.014}_{-0.015}$ (−0.0 σ)
A_{143}^{tSZ}	6.59	< 7.50 (−0.5 σ)	D_{1420}	815.9	$816.1^{+9.6}_{-9.5}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6723	$0.662^{+0.020}_{-0.024}$ (+0.6 σ)
$r_{143 \times 217}^{PS}$	0.630	$0.66^{+0.25}_{-0.25}$	D_{2000}	230.49	$230.4^{+3.2}_{-3.1}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4764	$0.471^{+0.014}_{-0.014}$ (+0.1 σ)
$r_{143 \times 217}^{CIB}$	0.80	—	$n_{s,0.002}$	0.9673	$0.9675^{+0.0078}_{-0.0075}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6294	$0.619^{+0.018}_{-0.023}$ (+0.6 σ)
$\xi^{tSZ \times CIB}$	0.26	—	Y_P	0.245380	$0.24538^{+0.00011}_{-0.00012}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4718	$0.467^{+0.013}_{-0.014}$ (+0.2 σ)
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246706	$0.24671^{+0.00011}_{-0.00012}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5990	$0.589^{+0.017}_{-0.022}$ (+0.6 σ)
A_{100}^{dust}	1.011	$1.01^{+0.37}_{-0.38}$	$10^5 D/H$	2.593	$2.592^{+0.055}_{-0.053}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.3013	$0.2974^{+0.0080}_{-0.0096}$ (+0.6 σ)
A_{143}^{dust}	0.975	$0.96^{+0.35}_{-0.35}$	Age/Gyr	13.769	$13.792^{+0.063}_{-0.057}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3114	$0.3066^{+0.0089}_{-0.011}$ (+0.7 σ)
A_{217}^{dust}	0.973	$0.98^{+0.20}_{-0.20}$	z_*	1089.897	$1089.87^{+0.47}_{-0.46}$ (−1.2 σ)	f_{2000}^{143}	29.7	30^{+6}_{-5} (−0.7 σ)
$A_{143 \times 217}^{dust}$	1.006	$1.03^{+0.32}_{-0.32}$	r_*	144.66	$144.74^{+0.52}_{-0.49}$ (+0.7 σ)	f_{2000}^{217}	106.53	$106.8^{+3.7}_{-3.7}$ (−0.9 σ)
c_{100}	0.99768	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	1.04112	$1.04114^{+0.00058}_{-0.00059}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	31.88	32^{+4}_{-4} (−1.0 σ)
c_{217}	1.00130	$1.0011^{+0.0030}_{-0.0030}$ (+4.5 σ)	$D_M(z_*)/\text{Gpc}$	13.8951	$13.902^{+0.050}_{-0.047}$ (+0.7 σ)	χ_{simall}^2	395.85	$396.9 (\nu: 1.5)$ (−0.0 σ)
c_{TE}	0.9964	$0.9968^{+0.0097}_{-0.0097}$	z_{drag}	1059.78	$1059.78^{+0.65}_{-0.65}$ (+1.1 σ)	χ_{lowl}^2	22.91	$22.85 (\nu: 0.3)$ (−0.8 σ)
c_{EE}	0.9921	$0.9923^{+0.0096}_{-0.0095}$	r_{drag}	147.34	$147.41^{+0.55}_{-0.52}$ (+0.5 σ)	$\chi_{CamSpec}^2$	11499.2	$11514.8 (\nu: 16.6)$
H_0	68.10	$67.8^{+1.0}_{-1.2}$ (+1.0 σ)	k_D	0.14057	$0.14050^{+0.00065}_{-0.00066}$ (−0.1 σ)	χ_{6DF}^2	0.001	$0.049 (\nu: 0.0)$
Ω_Λ	0.6946	$0.691^{+0.013}_{-0.015}$ (+0.9 σ)	$100\theta_D$	0.160845	$0.16085^{+0.00038}_{-0.00037}$ (−1.0 σ)	χ_{MGS}^2	1.61	$1.41 (\nu: 0.1)$
Ω_m	0.3054	$0.309^{+0.015}_{-0.013}$ (−0.9 σ)	z_{eq}	3383.1	3376^{+48}_{-49} (−0.9 σ)	$\chi_{DR12BAO}^2$	3.59	$4.6 (\nu: 1.1)$
$\Omega_m h^2$	0.14162	$0.1419^{+0.0020}_{-0.0020}$ (−0.9 σ)	k_{eq}	0.010325	$0.01030^{+0.00015}_{-0.00015}$ (−0.9 σ)	χ_{prior}^2	2.1	$7.8 (\nu: 5.9)$ (+0.1 σ)
$\Omega_\nu h^2$	0.00005	< 0.00171 (−0.6 σ)	$100\theta_{eq}$	0.8166	$0.8180^{+0.0093}_{-0.0089}$ (+0.9 σ)	χ_{BAO}^2	5.20	$6.0 (\nu: 0.7)$
$\Omega_m h^3$	0.09644	$0.09616^{+0.00082}_{-0.00089}$ (+0.8 σ)	$100\theta_{s,eq}$	0.45112	$0.4518^{+0.0048}_{-0.0046}$ (+0.9 σ)	χ_{CMB}^2	11917.9	$11934.6 (\nu: 16.8)$ (+1848.6 σ)
σ_8	0.8197	$0.807^{+0.024}_{-0.029}$ (+0.5 σ)	$H(0.15)$	73.32	$73.01^{+0.90}_{-1.0}$ (+1.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 11925.28$; $\bar{\chi}_{\text{eff}}^2 = 11948.38$; $\Delta\chi_{\text{eff}}^2 = 0.10$; $R - 1 = 0.01113$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 3.59 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3_2_29: 22.91 CamSpec like_10.7HM_1400_unified: 11499.17

6.52 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022328	$0.02234^{+0.00029}_{-0.00029}$ $(+1.2\sigma)$	S_8	0.8278	$0.819^{+0.028}_{-0.029}$ (-0.6σ)	$D_M(0.15)$	637.1	$639.4^{+9.4}_{-8.3}$ (-1.0σ)
$\Omega_c h^2$	0.11927	$0.1188^{+0.0020}_{-0.0021}$ (-1.0σ)	$\sigma_8 \Omega_m^{0.5}$	0.4534	$0.449^{+0.015}_{-0.016}$ (-0.6σ)	$H(0.38)$	83.33	$83.13^{+0.65}_{-0.74}$ $(+1.0\sigma)$
$100\theta_{MC}$	1.04097	$1.04096^{+0.00058}_{-0.00059}$ $(+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6099	$0.602^{+0.018}_{-0.020}$ $(+0.1\sigma)$	$D_M(0.38)$	1520.8	1526^{+19}_{-17} (-1.0σ)
τ	0.0533	$0.053^{+0.016}_{-0.015}$ $(+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9943	$0.981^{+0.029}_{-0.031}$ $(+0.2\sigma)$	$H(0.51)$	89.99	$89.81^{+0.57}_{-0.60}$ $(+1.0\sigma)$
Σm_ν [eV]	0.001	< 0.151 (-0.7σ)	$r_{drag} h$	100.33	$100.0^{+1.7}_{-1.7}$ $(+1.0\sigma)$	$D_M(0.51)$	1971.0	1977^{+23}_{-20} (-1.0σ)
$\ln(10^{10} A_s)$	3.0390	$3.038^{+0.033}_{-0.032}$ (-0.1σ)	$\langle d^2 \rangle^{1/2}$	2.437	$2.422^{+0.054}_{-0.054}$ (-0.7σ)	$H(0.61)$	95.57	$95.41^{+0.49}_{-0.52}$ $(+1.0\sigma)$
n_s	0.9673	$0.9677^{+0.0078}_{-0.0074}$ $(+1.0\sigma)$	z_{re}	7.56	$7.6^{+1.6}_{-1.6}$ $(+0.1\sigma)$	$D_M(0.61)$	2294.4	2301^{+25}_{-21} (-1.0σ)
y_{cal}	1.00032	$1.0005^{+0.0049}_{-0.0049}$ (-0.0σ)	$10^9 A_s$	2.088	$2.087^{+0.070}_{-0.065}$ (-0.1σ)	$H(2.33)$	235.71	$235.8^{+1.2}_{-1.2}$ (-0.9σ)
A_{100}^{PS}	231.5	239^{+50}_{-50} (-0.9σ)	$10^9 A_s e^{-2\tau}$	1.8775	$1.875^{+0.022}_{-0.022}$ (-0.8σ)	$D_M(2.33)$	5750.8	5759^{+26}_{-24} (-1.0σ)
A_{143}^{PS}	46.2	39^{+20}_{-20} (-1.4σ)	D_{40}	1223.3	1223^{+23}_{-23} (-0.8σ)	$f\sigma_8(0.15)$	0.4578	$0.453^{+0.014}_{-0.015}$ (-0.5σ)
A_{217}^{PS}	103.8	103^{+30}_{-30} (-1.2σ)	D_{220}	5717	5721^{+76}_{-77} $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7587	$0.747^{+0.022}_{-0.026}$ $(+0.6\sigma)$
A_{217}^{CIB}	43.2	39^{+10}_{-10} (-1.3σ)	D_{810}	2534.9	2534^{+26}_{-26} (-0.2σ)	$f\sigma_8(0.38)$	0.4775	$0.472^{+0.014}_{-0.014}$ (-0.1σ)
A_{143}^{tSZ}	6.53	< 7.53 (-0.5σ)	D_{1420}	816.1	$816.1^{+9.6}_{-9.4}$ $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6730	$0.662^{+0.019}_{-0.023}$ $(+0.6\sigma)$
$r_{143 \times 217}^{PS}$	0.679	$0.66^{+0.25}_{-0.25}$	D_{2000}	230.57	$230.4^{+3.2}_{-3.1}$ $(+0.7\sigma)$	$f\sigma_8(0.51)$	0.4768	$0.471^{+0.013}_{-0.014}$ $(+0.1\sigma)$
$r_{143 \times 217}^{CIB}$	0.85	—	$n_{s,0.002}$	0.9673	$0.9677^{+0.0078}_{-0.0074}$ $(+1.0\sigma)$	$\sigma_8(0.51)$	0.6300	$0.620^{+0.018}_{-0.021}$ $(+0.6\sigma)$
$\xi^{tSZ \times CIB}$	0.52	—	Y_P	0.245379	$0.24538^{+0.00011}_{-0.00012}$ $(+1.2\sigma)$	$f\sigma_8(0.61)$	0.4722	$0.467^{+0.013}_{-0.014}$ $(+0.2\sigma)$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246705	$0.24671^{+0.00011}_{-0.00012}$ $(+1.2\sigma)$	$\sigma_8(0.61)$	0.5995	$0.590^{+0.017}_{-0.020}$ $(+0.6\sigma)$
A_{100}^{dust}	1.008	$1.01^{+0.37}_{-0.38}$	$10^5 D/H$	2.593	$2.591^{+0.054}_{-0.053}$ (-1.2σ)	$f\sigma_8(2.33)$	0.3016	$0.2977^{+0.0078}_{-0.0091}$ $(+0.6\sigma)$
A_{143}^{dust}	0.983	$0.96^{+0.35}_{-0.36}$	Age/Gyr	13.769	$13.789^{+0.060}_{-0.055}$ (-0.9σ)	$\sigma_8(2.33)$	0.3116	$0.3070^{+0.0087}_{-0.010}$ $(+0.7\sigma)$
A_{217}^{dust}	0.978	$0.98^{+0.20}_{-0.20}$	z_*	1089.903	$1089.85^{+0.46}_{-0.45}$ (-1.2σ)	f_{2000}^{143}	29.8	29^{+6}_{-5} (-0.8σ)
$A_{143 \times 217}^{dust}$	1.004	$1.03^{+0.32}_{-0.32}$	r_*	144.66	$144.76^{+0.52}_{-0.48}$ $(+0.7\sigma)$	f_{2000}^{217}	106.51	$106.7^{+3.7}_{-3.7}$ (-0.9σ)
c_{100}	0.99774	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	$100\theta_*$	1.04112	$1.04115^{+0.00058}_{-0.00059}$ $(+0.5\sigma)$	$f_{2000}^{143 \times 217}$	31.92	32^{+4}_{-4} (-1.0σ)
c_{217}	1.00133	$1.0011^{+0.0030}_{-0.0030}$ $(+4.5\sigma)$	$D_M(z_*)/\text{Gpc}$	13.8946	$13.903^{+0.050}_{-0.046}$ $(+0.7\sigma)$	χ_{small}^2	395.86	$397.0 (\nu: 1.5)$ $(+0.0\sigma)$
c_{TE}	0.9964	$0.9968^{+0.0097}_{-0.0095}$	z_{drag}	1059.78	$1059.79^{+0.64}_{-0.62}$ $(+1.1\sigma)$	χ_{lowl}^2	22.93	$22.82 (\nu: 0.3)$ (-0.8σ)
c_{EE}	0.9924	$0.9924^{+0.0095}_{-0.0095}$	r_{drag}	147.34	$147.43^{+0.53}_{-0.52}$ $(+0.6\sigma)$	χ_{CamSpec}^2	11499.3	$11514.7 (\nu: 17.0)$
H_0	68.10	$67.83^{+0.98}_{-1.1}$ $(+1.0\sigma)$	k_D	0.14057	$0.14049^{+0.00065}_{-0.00065}$ (-0.2σ)	χ_{JLA}^2	1034.819	$1035.00 (\nu: 0.0)$
Ω_Λ	0.6946	$0.692^{+0.013}_{-0.014}$ $(+0.9\sigma)$	$100\theta_D$	0.160847	$0.16084^{+0.00038}_{-0.00037}$ (-1.1σ)	χ_{6DF}^2	0.001	$0.040 (\nu: 0.0)$
Ω_m	0.3054	$0.308^{+0.014}_{-0.013}$ (-0.9σ)	z_{eq}	3383.8	3374^{+47}_{-48} (-0.9σ)	χ_{MGS}^2	1.61	$1.47 (\nu: 0.1)$
$\Omega_m h^2$	0.14160	$0.1418^{+0.0019}_{-0.0019}$ (-1.0σ)	k_{eq}	0.010327	$0.01030^{+0.00014}_{-0.00015}$ (-0.9σ)	χ_{DR12BAO}^2	3.60	$4.4 (\nu: 0.8)$
$\Omega_\nu h^2$	0.00001	< 0.00162 (-0.7σ)	$100\theta_{eq}$	0.8165	$0.8184^{+0.0090}_{-0.0087}$ $(+1.0\sigma)$	χ_{prior}^2	2.0	$7.8 (\nu: 5.9)$ $(+0.1\sigma)$
$\Omega_m h^3$	0.09643	$0.09618^{+0.00080}_{-0.00086}$ $(+0.8\sigma)$	$100\theta_{s,eq}$	0.45106	$0.4521^{+0.0046}_{-0.0045}$ $(+0.9\sigma)$	χ_{BAO}^2	5.21	$5.89 (\nu: 0.5)$
σ_8	0.8205	$0.808^{+0.023}_{-0.028}$ $(+0.5\sigma)$	$H(0.15)$	73.32	$73.07^{+0.85}_{-0.94}$ $(+1.0\sigma)$	χ_{CMB}^2	11918.0	$11934.5 (\nu: 17.2)$ $(+1848.6\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 12960.09$; $\bar{\chi}_{\text{eff}}^2 = 12983.16$; $R - 1 = 0.01385$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 3.60 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3.2.29: 22.93 CamSpec like_10.7HM_1400_unified: 11499.25 SN - JLA Pantheon18: 1034.82

6.53 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00029}_{-0.00029} \quad (+1.2\sigma)$	S_8	$0.820^{+0.028}_{-0.030} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+10}_{-8.8} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0021}_{-0.0021} \quad (-1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.015}_{-0.016} \quad (-0.6\sigma)$	$H(0.38)$	$83.08^{+0.69}_{-0.79} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00058}_{-0.00059} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.019}_{-0.020} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+19}_{-19} \quad (-0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.029}_{-0.032} \quad (+0.3\sigma)$	$H(0.51)$	$89.78^{+0.60}_{-0.63} \quad (+1.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.160 \quad (-0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.7}_{-1.8} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+23}_{-22} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.029}_{-0.026} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.052}_{-0.052} \quad (-0.6\sigma)$	$H(0.61)$	$95.38^{+0.51}_{-0.55} \quad (+1.0\sigma)$
n_{s}	$0.9677^{+0.0078}_{-0.0074} \quad (+1.0\sigma)$	z_{re}	$< 8.92 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+25}_{-24} \quad (-0.9\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.060}_{-0.054} \quad (+0.1\sigma)$	$H(2.33)$	$235.8^{+1.3}_{-1.3} \quad (-0.9\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+28}_{-25} \quad (-0.9\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.4\sigma)$	D_{40}	$1223^{+23}_{-24} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.014}_{-0.015} \quad (-0.5\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	$5720^{+76}_{-76} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.022}_{-0.027} \quad (+0.6\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.014}_{-0.015} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.49 \quad (-0.5\sigma)$	D_{1420}	$816.1^{+9.6}_{-9.5} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.019}_{-0.024} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{2000}	$230.4^{+3.2}_{-3.1} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.014} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9677^{+0.0078}_{-0.0074} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.018}_{-0.023} \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.013}_{-0.014} \quad (+0.3\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.017}_{-0.022} \quad (+0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.055}_{-0.053} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0078}_{-0.0096} \quad (+0.6\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.792^{+0.063}_{-0.057} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0087}_{-0.011} \quad (+0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.86^{+0.47}_{-0.46} \quad (-1.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.74^{+0.52}_{-0.50} \quad (+0.7\sigma)$	f_{2000}^{217}	$106.7^{+3.7}_{-3.7} \quad (-0.9\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04115^{+0.00058}_{-0.00059} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.902^{+0.050}_{-0.047} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (-0.0\sigma)$
c_{TE}	$0.9968^{+0.0097}_{-0.0096}$	z_{drag}	$1059.79^{+0.64}_{-0.65} \quad (+1.1\sigma)$	χ_{lowl}^2	$22.86 \quad (\nu: 0.3) \quad (-0.8\sigma)$
c_{EE}	$0.9923^{+0.0096}_{-0.0095}$	r_{drag}	$147.42^{+0.55}_{-0.52} \quad (+0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.6 \quad (\nu: 16.6)$
H_0	$67.8^{+1.0}_{-1.2} \quad (+1.0\sigma)$	k_{D}	$0.14050^{+0.00065}_{-0.00066} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.013}_{-0.014} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00038}_{-0.00037} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.42 \quad (\nu: 0.1)$
Ω_{m}	$0.309^{+0.014}_{-0.013} \quad (-0.9\sigma)$	z_{eq}	$3375^{+48}_{-49} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0020}_{-0.0020} \quad (-0.9\sigma)$	k_{eq}	$0.01030^{+0.00015}_{-0.00015} \quad (-0.9\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\nu} h^2$	$< 0.00173 \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8181^{+0.0092}_{-0.0089} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.09616^{+0.00082}_{-0.00088} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0047}_{-0.0046} \quad (+0.9\sigma)$	χ_{CMB}^2	$11934.4 \quad (\nu: 16.7) \quad (+1848.6\sigma)$
σ_8	$0.808^{+0.024}_{-0.029} \quad (+0.5\sigma)$	$H(0.15)$	$73.01^{+0.90}_{-1.0} \quad (+1.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11948.19; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.20; R - 1 = 0.01072$$

6.54 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02235^{+0.00029}_{-0.00029} \quad (+1.2\sigma)$	S_8	$0.820^{+0.028}_{-0.029} \quad (-0.6\sigma)$	$D_M(0.15)$	$639.4^{+9.3}_{-8.3} \quad (-1.0\sigma)$
$\Omega_c h^2$	$0.1188^{+0.0020}_{-0.0021} \quad (-1.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.015}_{-0.016} \quad (-0.6\sigma)$	$H(0.38)$	$83.13^{+0.65}_{-0.74} \quad (+1.0\sigma)$
$100\theta_{MC}$	$1.04097^{+0.00058}_{-0.00059} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.018}_{-0.020} \quad (+0.1\sigma)$	$D_M(0.38)$	$1526^{+19}_{-17} \quad (-1.0\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.028}_{-0.031} \quad (+0.3\sigma)$	$H(0.51)$	$89.82^{+0.57}_{-0.60} \quad (+1.0\sigma)$
Σm_ν [eV]	$< 0.152 \quad (-0.6\sigma)$	$r_{drag} h$	$100.0^{+1.7}_{-1.7} \quad (+1.0\sigma)$	$D_M(0.51)$	$1977^{+23}_{-20} \quad (-1.0\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.029}_{-0.026} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.052}_{-0.052} \quad (-0.6\sigma)$	$H(0.61)$	$95.41^{+0.49}_{-0.52} \quad (+1.0\sigma)$
n_s	$0.9679^{+0.0079}_{-0.0074} \quad (+1.1\sigma)$	z_{re}	$< 8.93 \quad (+0.3\sigma)$	$D_M(0.61)$	$2301^{+25}_{-22} \quad (-1.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_s$	$2.093^{+0.061}_{-0.054} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+1.2}_{-1.2} \quad (-0.9\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s e^{-2\tau}$	$1.875^{+0.022}_{-0.022} \quad (-0.8\sigma)$	$D_M(2.33)$	$5759^{+26}_{-24} \quad (-1.0\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.4\sigma)$	D_{40}	$1223^{+23}_{-24} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.014}_{-0.015} \quad (-0.5\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5721^{+76}_{-77} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.021}_{-0.026} \quad (+0.6\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2534^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.014}_{-0.014} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.5\sigma)$	D_{1420}	$816.1^{+9.7}_{-9.3} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.019}_{-0.023} \quad (+0.6\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.25}_{-0.25}$	D_{2000}	$230.5^{+3.2}_{-3.1} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.014} \quad (+0.2\sigma)$
$r_{143 \times 217}^{CIB}$	—	$n_{s,0.002}$	$0.9679^{+0.0079}_{-0.0074} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.017}_{-0.022} \quad (+0.6\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P	$0.24538^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.013}_{-0.014} \quad (+0.3\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24671^{+0.00011}_{-0.00012} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.016}_{-0.021} \quad (+0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.38}$	$10^5 D/H$	$2.590^{+0.054}_{-0.053} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0076}_{-0.0091} \quad (+0.7\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.36}$	Age/Gyr	$13.789^{+0.060}_{-0.055} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0084}_{-0.010} \quad (+0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.84^{+0.46}_{-0.45} \quad (-1.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.8\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.76^{+0.52}_{-0.49} \quad (+0.7\sigma)$	f_{2000}^{217}	$106.7^{+3.7}_{-3.8} \quad (-0.9\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04116^{+0.00058}_{-0.00059} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.5\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.904^{+0.050}_{-0.046} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 (\nu: 1.6) \quad (-0.0\sigma)$
c_{TE}	$0.9968^{+0.0097}_{-0.0095}$	z_{drag}	$1059.80^{+0.63}_{-0.63} \quad (+1.1\sigma)$	χ_{lowl}^2	$22.83 (\nu: 0.3) \quad (-0.8\sigma)$
c_{EE}	$0.9923^{+0.0095}_{-0.0095}$	r_{drag}	$147.44^{+0.53}_{-0.52} \quad (+0.6\sigma)$	$\chi_{CamSpec}^2$	$11514.6 (\nu: 16.8)$
H_0	$67.83^{+0.98}_{-1.1} \quad (+1.0\sigma)$	k_D	$0.14048^{+0.00065}_{-0.00066} \quad (-0.2\sigma)$	χ_{JLA}^2	$1035.00 (\nu: 0.0)$
Ω_Λ	$0.692^{+0.013}_{-0.014} \quad (+0.9\sigma)$	$100\theta_D$	$0.16084^{+0.00038}_{-0.00037} \quad (-1.1\sigma)$	χ_{6DF}^2	$0.040 (\nu: 0.0)$
Ω_m	$0.308^{+0.014}_{-0.013} \quad (-0.9\sigma)$	z_{eq}	$3373^{+47}_{-47} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.48 (\nu: 0.1)$
$\Omega_m h^2$	$0.1418^{+0.0019}_{-0.0020} \quad (-1.0\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00014} \quad (-0.9\sigma)$	$\chi_{DR12BAO}^2$	$4.4 (\nu: 0.8)$
$\Omega_\nu h^2$	$< 0.00163 \quad (-0.6\sigma)$	$100\theta_{eq}$	$0.8185^{+0.0089}_{-0.0087} \quad (+1.0\sigma)$	χ_{prior}^2	$7.8 (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_m h^3$	$0.09618^{+0.00080}_{-0.00086} \quad (+0.8\sigma)$	$100\theta_{s,eq}$	$0.4521^{+0.0046}_{-0.0045} \quad (+0.9\sigma)$	χ_{BAO}^2	$5.88 (\nu: 0.5)$
σ_8	$0.809^{+0.023}_{-0.028} \quad (+0.5\sigma)$	$H(0.15)$	$73.08^{+0.85}_{-0.95} \quad (+1.0\sigma)$	χ_{CMB}^2	$11934.3 (\nu: 17.0) \quad (+1848.6\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 12982.95; R - 1 = 0.01405$$

6.55 base_mnu_plikHM_TT_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022232	$0.02222^{+0.00039}_{-0.00038}$ (+0.7 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6115	$0.606^{+0.015}_{-0.015}$ (+0.3 σ)	$H(0.38)$	83.24	$83.01^{+0.73}_{-0.77}$ (+0.9 σ)
$\Omega_{\mathrm{c}} h^2$	0.11936	$0.1192^{+0.0021}_{-0.0022}$ (−0.8 σ)	$\sigma_8/h^{0.5}$	0.9967	$0.987^{+0.023}_{-0.024}$ (+0.4 σ)	$D_{\mathrm{M}}(0.38)$	1523.0	1529^{+20}_{-19} (−0.9 σ)
$100\theta_{\mathrm{MC}}$	1.04096	$1.04097^{+0.00083}_{-0.00081}$ (+0.6 σ)	$r_{\mathrm{drag}} h$	100.22	$99.8^{+1.8}_{-1.8}$ (+0.9 σ)	$H(0.51)$	89.90	$89.71^{+0.61}_{-0.65}$ (+0.9 σ)
τ	0.0542	$0.054^{+0.015}_{-0.014}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.4437	$2.435^{+0.043}_{-0.044}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1973.7	1980^{+24}_{-22} (−0.9 σ)
Σm_{ν} [eV]	0.004	< 0.131 (−0.7 σ)	z_{re}	7.68	$7.7^{+1.4}_{-1.5}$ (+0.2 σ)	$H(0.61)$	95.49	$95.32^{+0.53}_{-0.57}$ (+0.9 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0419	$3.042^{+0.029}_{-0.028}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}$	2.094	$2.095^{+0.062}_{-0.059}$ (+0.1 σ)	$D_{\mathrm{M}}(0.61)$	2297.3	2305^{+26}_{-24} (−0.9 σ)
n_{s}	0.9662	$0.9659^{+0.0081}_{-0.0077}$ (+0.7 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8794	$1.879^{+0.021}_{-0.022}$ (−0.5 σ)	$H(2.33)$	235.68	$235.8^{+1.4}_{-1.4}$ (−0.9 σ)
y_{cal}	1.00022	$1.0006^{+0.0048}_{-0.0050}$ (+0.0 σ)	D_{40}	1226.6	1228^{+23}_{-23} (−0.4 σ)	$D_{\mathrm{M}}(2.33)$	5755.2	5764^{+29}_{-27} (−0.9 σ)
A_{217}^{CIB}	48.3	48^{+10}_{-10} (−0.1 σ)	D_{220}	5718	5723^{+78}_{-79} (+0.3 σ)	$f\sigma_8(0.15)$	0.4593	$0.457^{+0.012}_{-0.013}$ (−0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.36	—	D_{810}	2536.1	2536^{+27}_{-27} (−0.1 σ)	$\sigma_8(0.15)$	0.7598	$0.750^{+0.017}_{-0.020}$ (+0.6 σ)
A_{143}^{tSZ}	7.04	$5.1^{+3.8}_{-3.9}$ (+0.1 σ)	D_{1420}	815.6	$815.5^{+9.9}_{-9.9}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4788	$0.475^{+0.011}_{-0.012}$ (+0.2 σ)
A_{100}^{PS}	253	263^{+60}_{-50} (−0.1 σ)	D_{2000}	230.22	$230.0^{+3.4}_{-3.4}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6738	$0.665^{+0.015}_{-0.018}$ (+0.7 σ)
A_{143}^{PS}	49.3	48^{+20}_{-20} (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9662	$0.9659^{+0.0081}_{-0.0077}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4779	$0.474^{+0.011}_{-0.011}$ (+0.3 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	47.5	43^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245339	$0.24533^{+0.00016}_{-0.00016}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6307	$0.623^{+0.015}_{-0.017}$ (+0.7 σ)
A_{217}^{PS}	119.5	115^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246666	$0.24666^{+0.00016}_{-0.00016}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4732	$0.469^{+0.010}_{-0.011}$ (+0.4 σ)
A^{kSZ}	0.00	< 8.43 (−0.1 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.612	$2.615^{+0.073}_{-0.071}$ (−0.7 σ)	$\sigma_8(0.61)$	0.6002	$0.592^{+0.014}_{-0.016}$ (+0.7 σ)
$A_{100}^{\mathrm{dustTT}}$	8.88	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Age/Gyr	13.779	$13.800^{+0.067}_{-0.061}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.3019	$0.2987^{+0.0065}_{-0.0072}$ (+0.7 σ)
$A_{143}^{\mathrm{dustTT}}$	10.78	$10.7^{+3.5}_{-3.5}$ (−0.0 σ)	z_{*}	1090.04	$1090.04^{+0.56}_{-0.57}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3119	$0.3080^{+0.0073}_{-0.0084}$ (+0.7 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.3^{+6.6}_{-6.5}$ (−0.0 σ)	r_{*}	144.71	$144.77^{+0.57}_{-0.55}$ (+0.8 σ)	f_{2000}^{143}	30.0	31^{+6}_{-6} (−0.3 σ)
$A_{217}^{\mathrm{dustTT}}$	94.7	93^{+10}_{-10} (+0.0 σ)	$100\theta_{*}$	1.04113	$1.04116^{+0.00081}_{-0.00080}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	32.96	33^{+4}_{-4} (−0.4 σ)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.899	$13.905^{+0.056}_{-0.054}$ (+0.7 σ)	f_{2000}^{217}	107.38	$107.9^{+3.7}_{-3.7}$ (−0.4 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.55	$1059.52^{+0.87}_{-0.88}$ (+0.5 σ)	$\chi_{\mathrm{lensing}}^2$	8.96	9.41 (ν : 0.3)
H_0	67.98	$67.7^{+1.1}_{-1.2}$ (+0.9 σ)	r_{drag}	147.42	$147.49^{+0.63}_{-0.61}$ (+0.7 σ)	χ_{small}^2	396.04	397.0 (ν : 1.4) (+0.0 σ)
Ω_{Λ}	0.6935	$0.690^{+0.014}_{-0.015}$ (+0.9 σ)	k_{D}	0.14041	$0.14033^{+0.00081}_{-0.00083}$ (−0.5 σ)	χ_{lowl}^2	23.24	23.28 (ν : 0.4) (−0.5 σ)
Ω_{m}	0.3065	$0.310^{+0.015}_{-0.014}$ (−0.9 σ)	$100\theta_{\mathrm{D}}$	0.16098	$0.16101^{+0.00051}_{-0.00050}$ (−0.4 σ)	χ_{plik}^2	758.7	771.4 (ν : 14.1) (−0.2 σ)
$\Omega_{\mathrm{m}} h^2$	0.14163	$0.1419^{+0.0021}_{-0.0021}$ (−0.9 σ)	z_{eq}	3384	3379^{+50}_{-50} (−0.8 σ)	$\chi_{6\mathrm{DF}}^2$	0.003	0.055 (ν : 0.0)
$\Omega_{\nu} h^2$	0.00004	< 0.00141 (−0.7 σ)	k_{eq}	0.010327	$0.01031^{+0.00015}_{-0.00015}$ (−0.8 σ)	χ_{MGS}^2	1.54	1.37 (ν : 0.1)
$\Omega_{\mathrm{m}} h^3$	0.09628	$0.09604^{+0.00094}_{-0.0010}$ (+0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8162	$0.8172^{+0.0094}_{-0.0091}$ (+0.8 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.67	4.7 (ν : 1.2)
σ_8	0.8218	$0.812^{+0.019}_{-0.021}$ (+0.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.45102	$0.4515^{+0.0048}_{-0.0047}$ (+0.8 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.8) (−0.0 σ)
S_8	0.8306	$0.825^{+0.024}_{-0.025}$ (−0.4 σ)	$H(0.15)$	73.21	$72.93^{+0.95}_{-1.0}$ (+0.9 σ)	χ_{CMB}^2	1186.9	1201.0 (ν : 15.2) (+1.3 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4550	$0.452^{+0.013}_{-0.014}$ (−0.4 σ)	$D_{\mathrm{M}}(0.15)$	638.1	$641^{+10}_{-9.2}$ (−0.9 σ)	χ_{BAO}^2	5.21	6.1 (ν : 0.8)

Best-fit $\chi_{\mathrm{eff}}^2 = 1193.44$; $\Delta\chi_{\mathrm{eff}}^2 = -1.25$; $\bar{\chi}_{\mathrm{eff}}^2 = 1214.40$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.33$; $R - 1 = 0.00805$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.54 (Δ 0.32) DR12BAO: 3.67 (Δ -0.70) CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 8.96 (Δ 0.09) small_100x143_offlike5.EE.Aplanck
396.04 (Δ -0.05) commander_dx12_v3.2.29: 23.24 (Δ 0.28) plik_rd12_HM.v22.TT: 758.68 (Δ -1.12)

6.56 base_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022235	$0.02223^{+0.00039}_{-0.00038}$ (+0.7 σ)	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6103	$0.606^{+0.014}_{-0.015}$ (+0.3 σ)	$H(0.38)$	83.27	$83.07^{+0.70}_{-0.73}$ (+1.0 σ)
$\Omega_{\text{c}}h^2$	0.11922	$0.1190^{+0.0021}_{-0.0021}$ (−0.9 σ)	$\sigma_8/h^{0.5}$	0.9952	$0.987^{+0.022}_{-0.024}$ (+0.4 σ)	$D_{\text{M}}(0.38)$	1522.0	1527^{+19}_{-18} (−0.9 σ)
$100\theta_{\text{MC}}$	1.04097	$1.04098^{+0.00082}_{-0.00080}$ (+0.7 σ)	$r_{\text{drag}}h$	100.33	$99.9^{+1.7}_{-1.7}$ (+1.0 σ)	$H(0.51)$	89.93	$89.75^{+0.59}_{-0.62}$ (+1.0 σ)
τ	0.0531	$0.054^{+0.015}_{-0.014}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4387	$2.434^{+0.043}_{-0.044}$ (−0.4 σ)	$D_{\text{M}}(0.51)$	1972.5	1979^{+23}_{-21} (−0.9 σ)
Σm_{ν} [eV]	0.000	< 0.125 (−0.7 σ)	z_{re}	7.57	$7.7^{+1.4}_{-1.5}$ (+0.2 σ)	$H(0.61)$	95.51	$95.35^{+0.52}_{-0.54}$ (+0.9 σ)
$\ln(10^{10}A_{\text{s}})$	3.0397	$3.042^{+0.029}_{-0.028}$ (+0.1 σ)	$10^9 A_{\text{s}}$	2.090	$2.095^{+0.062}_{-0.059}$ (+0.1 σ)	$D_{\text{M}}(0.61)$	2296.1	2303^{+25}_{-23} (−0.9 σ)
n_{s}	0.9668	$0.9662^{+0.0080}_{-0.0077}$ (+0.8 σ)	$10^9 A_{\text{s}}e^{-2\tau}$	1.8792	$1.879^{+0.021}_{-0.022}$ (−0.5 σ)	$H(2.33)$	235.59	$235.7^{+1.3}_{-1.3}$ (−1.0 σ)
y_{cal}	1.00041	$1.0007^{+0.0049}_{-0.0049}$ (+0.1 σ)	D_{40}	1225.3	1228^{+23}_{-23} (−0.4 σ)	$D_{\text{M}}(2.33)$	5754.5	5762^{+28}_{-26} (−0.9 σ)
A_{217}^{CIB}	48.7	48^{+10}_{-10} (−0.1 σ)	D_{220}	5718	5724^{+77}_{-80} (+0.3 σ)	$f\sigma_8(0.15)$	0.4581	$0.456^{+0.012}_{-0.012}$ (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.29	—	D_{810}	2536.8	2537^{+27}_{-27} (−0.1 σ)	$\sigma_8(0.15)$	0.7590	$0.751^{+0.017}_{-0.019}$ (+0.7 σ)
A_{143}^{tSZ}	7.04	$5.1^{+3.7}_{-3.9}$ (+0.1 σ)	D_{1420}	816.0	$816^{+10}_{-9.9}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4778	$0.475^{+0.010}_{-0.012}$ (+0.1 σ)
A_{100}^{PS}	254	262^{+50}_{-50} (−0.1 σ)	D_{2000}	230.33	$230.1^{+3.4}_{-3.4}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6732	$0.666^{+0.015}_{-0.017}$ (+0.7 σ)
A_{143}^{PS}	48.2	48^{+20}_{-20} (−0.2 σ)	$n_{\text{s},0.002}$	0.9668	$0.9662^{+0.0080}_{-0.0077}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4770	$0.474^{+0.010}_{-0.011}$ (+0.3 σ)
$A_{143 \times 217}^{\text{PS}}$	45.7	43^{+20}_{-20} (−0.1 σ)	Y_{P}	0.245340	$0.24533^{+0.00016}_{-0.00016}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6302	$0.623^{+0.014}_{-0.016}$ (+0.7 σ)
A_{217}^{PS}	118.8	115^{+20}_{-20} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246667	$0.24666^{+0.00016}_{-0.00016}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4724	$0.4692^{+0.0099}_{-0.010}$ (+0.4 σ)
A^{kSZ}	0.01	< 8.47 (−0.1 σ)	$10^5 \text{D}/\text{H}$	2.611	$2.613^{+0.073}_{-0.071}$ (−0.7 σ)	$\sigma_8(0.61)$	0.5997	$0.593^{+0.014}_{-0.016}$ (+0.7 σ)
A_{100}^{dustTT}	8.91	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Age/Gyr	13.778	$13.796^{+0.064}_{-0.059}$ (−0.9 σ)	$f\sigma_8(2.33)$	0.3017	$0.2990^{+0.0063}_{-0.0070}$ (+0.7 σ)
A_{143}^{dustTT}	10.76	$10.7^{+3.5}_{-3.5}$ (−0.0 σ)	z_*	1090.02	$1090.02^{+0.55}_{-0.56}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3117	$0.3084^{+0.0071}_{-0.0081}$ (+0.8 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.2	$18.2^{+6.5}_{-6.4}$ (−0.0 σ)	r_*	144.74	$144.80^{+0.55}_{-0.54}$ (+0.8 σ)	χ^2_{lensing}	8.91	9.40 (ν : 0.3)
A_{217}^{dustTT}	94.4	93^{+10}_{-10} (+0.0 σ)	$100\theta_*$	1.04113	$1.04118^{+0.00081}_{-0.00080}$ (+0.6 σ)	χ^2_{simall}	395.89	397.0 (ν : 1.4) (+0.0 σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.902	$13.907^{+0.055}_{-0.054}$ (+0.8 σ)	χ^2_{lowl}	23.08	23.23 (ν : 0.4) (−0.5 σ)
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.55	$1059.53^{+0.86}_{-0.86}$ (+0.5 σ)	χ^2_{plik}	758.9	771.4 (ν : 14.2) (−0.2 σ)
H_0	68.04	$67.8^{+1.0}_{-1.1}$ (+1.0 σ)	r_{drag}	147.46	$147.51^{+0.62}_{-0.61}$ (+0.7 σ)	χ^2_{JLA}	1034.82	1035.03 (ν : 0.0)
Ω_{Λ}	0.6945	$0.691^{+0.013}_{-0.014}$ (+0.9 σ)	k_{D}	0.14037	$0.14031^{+0.00081}_{-0.00083}$ (−0.5 σ)	$\chi^2_{6\text{DF}}$	0.001	0.044 (ν : 0.0)
Ω_{m}	0.3055	$0.309^{+0.014}_{-0.013}$ (−0.9 σ)	$100\theta_{\text{D}}$	0.16098	$0.16100^{+0.00051}_{-0.00050}$ (−0.5 σ)	χ^2_{MGS}	1.61	1.45 (ν : 0.1)
$\Omega_{\text{m}}h^2$	0.14146	$0.1418^{+0.0021}_{-0.0020}$ (−1.0 σ)	z_{eq}	3380.3	3376^{+49}_{-48} (−0.9 σ)	χ^2_{DR12BAO}	3.58	4.4 (ν : 0.9)
$\Omega_{\nu}h^2$	0.00000	< 0.00134 (−0.7 σ)	k_{eq}	0.010317	$0.01030^{+0.00015}_{-0.00015}$ (−0.9 σ)	χ^2_{prior}	1.4	7.3 (ν : 6.9) (−0.0 σ)
$\Omega_{\text{m}}h^3$	0.09625	$0.09606^{+0.00094}_{-0.00098}$ (+0.7 σ)	$100\theta_{\text{eq}}$	0.8168	$0.8177^{+0.0091}_{-0.0090}$ (+0.9 σ)	χ^2_{CMB}	1186.8	1201.1 (ν : 15.2) (+1.3 σ)
σ_8	0.8209	$0.812^{+0.018}_{-0.020}$ (+0.6 σ)	$100\theta_{\text{s,eq}}$	0.45133	$0.4518^{+0.0047}_{-0.0046}$ (+0.9 σ)	χ^2_{BAO}	5.19	5.9 (ν : 0.5)
S_8	0.8284	$0.824^{+0.024}_{-0.025}$ (−0.4 σ)	$H(0.15)$	73.26	$73.00^{+0.90}_{-0.95}$ (+1.0 σ)			
$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4538	$0.451^{+0.013}_{-0.013}$ (−0.4 σ)	$D_{\text{M}}(0.15)$	637.6	$640.1^{+9.4}_{-8.7}$ (−0.9 σ)			

Best-fit $\chi^2_{\text{eff}} = 2228.19$; $\Delta\chi^2_{\text{eff}} = -1.52$; $\bar{\chi}^2_{\text{eff}} = 2249.31$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.46$; $R - 1 = 0.00867$

χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.61 (Δ 0.27) DR12BAO: 3.58 (Δ -0.45) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.91 (Δ 0.03) simall_100x143_offlike5_EE_Aplanck 395.89 (Δ -0.48) commander_dx12_v3.2_29: 23.08 (Δ 0.27) plik_rd12_HM_v22.TT: 758.94 (Δ -0.85) SN - JLA Pantheon18: 1034.82 (Δ -0.13)

6.57 base_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00039}_{-0.00038} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.015}_{-0.016} \quad (+0.3\sigma)$	$H(0.38)$	$83.02^{+0.73}_{-0.78} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0021}_{-0.0021} \quad (-0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.022}_{-0.024} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+21}_{-19} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04097^{+0.00083}_{-0.00081} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.8}_{-1.9} \quad (+0.9\sigma)$	$H(0.51)$	$89.72^{+0.61}_{-0.66} \quad (+0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.043}_{-0.043} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+24}_{-22} \quad (-0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.132 \quad (-0.7\sigma)$	z_{re}	$< 8.89 \quad (+0.3\sigma)$	$H(0.61)$	$95.32^{+0.53}_{-0.57} \quad (+0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.025} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.055}_{-0.052} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+26}_{-24} \quad (-0.9\sigma)$
n_{s}	$0.9660^{+0.0081}_{-0.0077} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.021}_{-0.022} \quad (-0.5\sigma)$	$H(2.33)$	$235.8^{+1.4}_{-1.4} \quad (-0.9\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0050} \quad (+0.0\sigma)$	D_{40}	$1228^{+23}_{-23} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+29}_{-27} \quad (-0.9\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5723^{+78}_{-79} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.012}_{-0.013} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2536^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.017}_{-0.020} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{1420}	$815.4^{+9.9}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.011}_{-0.012} \quad (+0.2\sigma)$
A_{100}^{PS}	$263^{+60}_{-50} \quad (-0.1\sigma)$	D_{2000}	$230.0^{+3.4}_{-3.4} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.015}_{-0.018} \quad (+0.7\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0081}_{-0.0077} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.011} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00016} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.014}_{-0.017} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00016} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.010}_{-0.011} \quad (+0.4\sigma)$
A^{kSZ}	$< 8.44 \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.614^{+0.073}_{-0.071} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.014}_{-0.016} \quad (+0.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.800^{+0.068}_{-0.061} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2989^{+0.0064}_{-0.0072} \quad (+0.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	z_*	$1090.03^{+0.55}_{-0.57} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3082^{+0.0072}_{-0.0084} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (-0.0\sigma)$	r_*	$144.78^{+0.56}_{-0.55} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04117^{+0.00082}_{-0.00080} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.056}_{-0.054} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.8^{+3.8}_{-3.7} \quad (-0.4\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.52^{+0.87}_{-0.85} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.38 \quad (\nu: 0.3)$
H_0	$67.7^{+1.1}_{-1.2} \quad (+0.9\sigma)$	r_{drag}	$147.50^{+0.63}_{-0.61} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
Ω_{Λ}	$0.690^{+0.014}_{-0.015} \quad (+0.9\sigma)$	k_{D}	$0.14032^{+0.00081}_{-0.00083} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.27 \quad (\nu: 0.4) \quad (-0.5\sigma)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00051}_{-0.00050} \quad (-0.4\sigma)$	χ_{plik}^2	$771.3 \quad (\nu: 14.2) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0021}_{-0.0021} \quad (-0.9\sigma)$	z_{eq}	$3378^{+49}_{-50} \quad (-0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
$\Omega_{\nu} h^2$	$< 0.00142 \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09604^{+0.00094}_{-0.0010} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8173^{+0.0093}_{-0.0091} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.2)$
σ_8	$0.812^{+0.018}_{-0.021} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0048}_{-0.0047} \quad (+0.8\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (-0.0\sigma)$
S_8	$0.825^{+0.024}_{-0.025} \quad (-0.4\sigma)$	$H(0.15)$	$72.94^{+0.95}_{-1.0} \quad (+0.9\sigma)$	χ_{CMB}^2	$1200.9 \quad (\nu: 15.0) \quad (+1.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+10}_{-9.2} \quad (-0.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$

$\bar{\chi}_{\mathrm{eff}}^2 = 1214.24$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -0.34$; $R - 1 = 0.00889$

6.58 base_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00039}_{-0.00038} \quad (+0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.022}_{-0.024} \quad (+0.4\sigma)$	$H(0.51)$	$89.76^{+0.59}_{-0.62} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1190^{+0.0021}_{-0.0021} \quad (-0.9\sigma)$	$r_{\text{drag}} h$	$99.97^{+1.7}_{-1.8} \quad (+1.0\sigma)$	$D_M(0.51)$	$1979^{+23}_{-21} \quad (-0.9\sigma)$
$100\theta_{\text{MC}}$	$1.04099^{+0.00082}_{-0.00080} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.042}_{-0.042} \quad (-0.3\sigma)$	$H(0.61)$	$95.35^{+0.52}_{-0.55} \quad (+0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	z_{re}	$< 8.90 \quad (+0.4\sigma)$	$D_M(0.61)$	$2303^{+25}_{-23} \quad (-0.9\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.125 \quad (-0.7\sigma)$	$10^9 A_s$	$2.098^{+0.056}_{-0.052} \quad (+0.2\sigma)$	$H(2.33)$	$235.7^{+1.3}_{-1.3} \quad (-1.0\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.026}_{-0.025} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.5\sigma)$	$D_M(2.33)$	$5762^{+28}_{-26} \quad (-0.9\sigma)$
n_s	$0.9663^{+0.0080}_{-0.0077} \quad (+0.8\sigma)$	D_{40}	$1227^{+23}_{-23} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.013} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5724^{+77}_{-79} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.017}_{-0.019} \quad (+0.7\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.010}_{-0.012} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$816^{+10}_{-9.9} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.015}_{-0.017} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.7}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$230.1^{+3.4}_{-3.4} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.011} \quad (+0.3\sigma)$
A_{100}^{PS}	$262^{+50}_{-50} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9663^{+0.0080}_{-0.0077} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.014}_{-0.016} \quad (+0.7\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.24534^{+0.00016}_{-0.00016} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4694^{+0.0098}_{-0.010} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00016}_{-0.00016} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.013}_{-0.016} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.613^{+0.072}_{-0.071} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2991^{+0.0062}_{-0.0069} \quad (+0.7\sigma)$
A^{kSZ}	$< 8.50 \quad (-0.1\sigma)$	Age/Gyr	$13.796^{+0.065}_{-0.059} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3086^{+0.0070}_{-0.0080} \quad (+0.8\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.01^{+0.55}_{-0.56} \quad (-0.9\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.4\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.4} \quad (-0.0\sigma)$	r_*	$144.80^{+0.55}_{-0.54} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.2^{+6.5}_{-6.4} \quad (-0.0\sigma)$	$100\theta_*$	$1.04118^{+0.00081}_{-0.00080} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.9} \quad (-0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.907^{+0.055}_{-0.054} \quad (+0.8\sigma)$	χ_{lensing}^2	$9.37 \quad (\nu: 0.3)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.53^{+0.86}_{-0.86} \quad (+0.5\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0013}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.52^{+0.62}_{-0.61} \quad (+0.7\sigma)$	χ_{lowl}^2	$23.22 \quad (\nu: 0.4) \quad (-0.5\sigma)$
H_0	$67.8^{+1.0}_{-1.1} \quad (+1.0\sigma)$	k_{D}	$0.14031^{+0.00082}_{-0.00083} \quad (-0.5\sigma)$	χ_{plik}^2	$771.4 \quad (\nu: 14.2) \quad (-0.2\sigma)$
Ω_Λ	$0.691^{+0.013}_{-0.014} \quad (+0.9\sigma)$	$100\theta_{\text{D}}$	$0.16100^{+0.00051}_{-0.00050} \quad (-0.5\sigma)$	χ_{JLA}^2	$1035.02 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.014}_{-0.013} \quad (-0.9\sigma)$	z_{eq}	$3375^{+49}_{-48} \quad (-0.9\sigma)$	$\chi_{6\text{DF}}^2$	$0.043 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1418^{+0.0021}_{-0.0020} \quad (-1.0\sigma)$	k_{eq}	$0.01030^{+0.00015}_{-0.00015} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.46 \quad (\nu: 0.1)$
$\Omega_\nu h^2$	$< 0.00135 \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.8179^{+0.0090}_{-0.0088} \quad (+0.9\sigma)$	χ_{DR12BAO}^2	$4.4 \quad (\nu: 0.9)$
$\Omega_{\text{m}} h^3$	$0.09606^{+0.00094}_{-0.00099} \quad (+0.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4519^{+0.0046}_{-0.0046} \quad (+0.9\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (-0.0\sigma)$
σ_8	$0.813^{+0.018}_{-0.021} \quad (+0.6\sigma)$	$H(0.15)$	$73.01^{+0.91}_{-0.96} \quad (+1.0\sigma)$	χ_{CMB}^2	$1200.9 \quad (\nu: 15.0) \quad (+1.3\sigma)$
S_8	$0.824^{+0.023}_{-0.025} \quad (-0.4\sigma)$	$D_M(0.15)$	$640.0^{+9.5}_{-8.7} \quad (-0.9\sigma)$	χ_{BAO}^2	$5.9 \quad (\nu: 0.5)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.452^{+0.013}_{-0.014} \quad (-0.4\sigma)$	$H(0.38)$	$83.07^{+0.70}_{-0.74} \quad (+1.0\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.606^{+0.014}_{-0.015} \quad (+0.3\sigma)$	$D_M(0.38)$	$1527^{+19}_{-18} \quad (-0.9\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2249.16; \Delta \bar{\chi}_{\text{eff}}^2 = -0.47; R - 1 = 0.00928$$

6.59 base_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022417	$0.02242^{+0.00026}_{-0.00026}$ (+1.5 σ)	$\Omega_{\mathrm{m}}h^3$	0.09666	$0.09649^{+0.00065}_{-0.00075}$ (+1.0 σ)	$H(0.15)$	73.33	$73.09^{+0.83}_{-0.92}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.11952	$0.1193^{+0.0018}_{-0.0018}$ (−0.8 σ)	σ_8	0.8220	$0.814^{+0.017}_{-0.020}$ (+0.7 σ)	$D_{\mathrm{M}}(0.15)$	637.0	$639.4^{+9.0}_{-8.0}$ (−1.0 σ)
$100\theta_{\mathrm{MC}}$	1.04100	$1.04100^{+0.00057}_{-0.00057}$ (+0.7 σ)	S_8	0.8303	$0.826^{+0.021}_{-0.021}$ (−0.3 σ)	$H(0.38)$	83.36	$83.17^{+0.63}_{-0.70}$ (+1.0 σ)
τ	0.0533	$0.055^{+0.015}_{-0.014}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4548	$0.453^{+0.012}_{-0.012}$ (−0.3 σ)	$D_{\mathrm{M}}(0.38)$	1520.5	1525^{+18}_{-16} (−1.0 σ)
Σm_{ν} [eV]	0.001	< 0.120 (−0.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6114	$0.607^{+0.013}_{-0.014}$ (+0.3 σ)	$H(0.51)$	90.04	$89.87^{+0.52}_{-0.58}$ (+1.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0415	$3.045^{+0.030}_{-0.028}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9961	$0.988^{+0.021}_{-0.022}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1970.6	1976^{+22}_{-19} (−1.0 σ)
n_{s}	0.9672	$0.9666^{+0.0072}_{-0.0075}$ (+0.9 σ)	$r_{\mathrm{drag}}h$	100.22	$99.9^{+1.6}_{-1.7}$ (+0.9 σ)	$H(0.61)$	95.625	$95.48^{+0.44}_{-0.50}$ (+1.1 σ)
y_{cal}	1.00055	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4415	$2.438^{+0.041}_{-0.040}$ (−0.3 σ)	$D_{\mathrm{M}}(0.61)$	2293.7	2300^{+24}_{-21} (−1.0 σ)
A_{217}^{CIB}	46.5	47^{+10}_{-10} (−0.2 σ)	z_{re}	7.55	$7.7^{+1.4}_{-1.5}$ (+0.3 σ)	$H(2.33)$	235.97	$236.1^{+1.2}_{-1.1}$ (−0.8 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.50	—	$10^9 A_{\mathrm{s}}$	2.094	$2.101^{+0.063}_{-0.058}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5747.0	5754^{+25}_{-21} (−1.1 σ)
A_{143}^{tSZ}	7.23	$5.5^{+3.7}_{-3.9}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8820	$1.881^{+0.020}_{-0.020}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4591	$0.457^{+0.011}_{-0.011}$ (−0.2 σ)
A_{100}^{PS}	249	258^{+60}_{-50} (−0.2 σ)	D_{40}	1226.5	1229^{+23}_{-22} (−0.4 σ)	$\sigma_8(0.15)$	0.7599	$0.752^{+0.016}_{-0.018}$ (+0.7 σ)
A_{143}^{PS}	48.1	45^{+20}_{-20} (−0.6 σ)	D_{220}	5733	5738^{+75}_{-74} (+0.6 σ)	$f\sigma_8(0.38)$	0.4787	$0.4762^{+0.0098}_{-0.010}$ (+0.2 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	49.2	42^{+20}_{-20} (−0.2 σ)	D_{810}	2540.3	2539^{+26}_{-26} (+0.1 σ)	$\sigma_8(0.38)$	0.6740	$0.667^{+0.014}_{-0.017}$ (+0.7 σ)
A_{217}^{PS}	120.4	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.3	$817.6^{+9.3}_{-9.2}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4779	$0.4751^{+0.0093}_{-0.010}$ (+0.4 σ)
A^{kSZ}	0.00	< 7.95 (−0.3 σ)	D_{2000}	231.42	$231.1^{+3.1}_{-3.0}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6309	$0.624^{+0.014}_{-0.016}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.86	$8.9^{+3.6}_{-3.7}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9672	$0.9666^{+0.0072}_{-0.0075}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4732	$0.4702^{+0.0088}_{-0.010}$ (+0.5 σ)
$A_{143}^{\mathrm{dustTT}}$	11.04	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_{P}	0.245414	$0.245414^{+0.000096}_{-0.00011}$ (+1.4 σ)	$\sigma_8(0.61)$	0.6004	$0.594^{+0.013}_{-0.015}$ (+0.8 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.0	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246741	$0.246740^{+0.000097}_{-0.00011}$ (+1.4 σ)	$f\sigma_8(2.33)$	0.3020	$0.2995^{+0.0061}_{-0.0069}$ (+0.8 σ)
$A_{217}^{\mathrm{dustTT}}$	95.5	94^{+10}_{-10} (+0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.5767	$2.576^{+0.049}_{-0.047}$ (−1.5 σ)	$\sigma_8(2.33)$	0.3120	$0.3090^{+0.0069}_{-0.0080}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.076}_{-0.075}$	Age/Gyr	13.760	$13.777^{+0.056}_{-0.048}$ (−1.0 σ)	f_{2000}^{143}	28.6	29^{+5}_{-5} (−0.8 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.057}_{-0.059}$	z_*	1089.812	$1089.79^{+0.42}_{-0.42}$ (−1.3 σ)	$f_{2000}^{143 \times 217}$	31.85	32^{+4}_{-4} (−1.0 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	r_*	144.527	$144.57^{+0.43}_{-0.43}$ (+0.4 σ)	f_{2000}^{217}	106.44	$106.8^{+3.5}_{-3.5}$ (−0.9 σ)
$A_{143}^{\mathrm{dustTE}}$	0.225	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	1.04115	$1.04117^{+0.00056}_{-0.00057}$ (+0.6 σ)	$\chi_{\mathrm{lensing}}^2$	8.97	9.24 (ν : 0.2)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8815	$13.885^{+0.042}_{-0.041}$ (+0.3 σ)	χ_{small}^2	395.88	397.1 (ν : 1.7) (+0.1 σ)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.53}_{-0.53}$	z_{drag}	1060.01	$1060.00^{+0.58}_{-0.57}$ (+1.5 σ)	χ_{lowl}^2	23.09	23.25 (ν : 0.3) (−0.5 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.173	$147.22^{+0.45}_{-0.45}$ (+0.1 σ)	χ_{plik}^2	2344.2	2359.3 (ν : 16.7) (+278.2 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.14081	$0.14077^{+0.00055}_{-0.00056}$ (+0.4 σ)	$\chi_{6\mathrm{DF}}^2$	0.003	0.046 (ν : 0.0)
H_0	68.10	$67.83^{+0.95}_{-1.1}$ (+1.0 σ)	$100\theta_{\mathrm{D}}$	0.160723	$0.16073^{+0.00033}_{-0.00033}$ (−1.5 σ)	χ_{MGS}^2	1.54	1.39 (ν : 0.1)
Ω_{Λ}	0.6939	$0.691^{+0.013}_{-0.013}$ (+0.9 σ)	z_{eq}	3391.8	3388^{+41}_{-41} (−0.6 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.71	4.6 (ν : 1.0)
Ω_{m}	0.3061	$0.309^{+0.013}_{-0.013}$ (−0.9 σ)	k_{eq}	0.010352	$0.01034^{+0.00013}_{-0.00013}$ (−0.6 σ)	χ_{prior}^2	1.7	11.6 (ν : 10.3) (+1.2 σ)
$\Omega_{\mathrm{m}}h^2$	0.14194	$0.1423^{+0.0019}_{-0.0018}$ (−0.8 σ)	$100\theta_{\mathrm{eq}}$	0.8153	$0.8161^{+0.0078}_{-0.0077}$ (+0.7 σ)	χ_{CMB}^2	2772.2	2788.9 (ν : 17.5) (+274.6 σ)
$\Omega_{\nu}h^2$	0.00001	< 0.00130 (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.45039	$0.4508^{+0.0040}_{-0.0040}$ (+0.7 σ)	χ_{BAO}^2	5.25	6.0 (ν : 0.6)

Best-fit $\chi_{\mathrm{eff}}^2 = 2779.13$; $\Delta\chi_{\mathrm{eff}}^2 = -1.56$; $\bar{\chi}_{\mathrm{eff}}^2 = 2806.44$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.40$; $R - 1 = 0.01008$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.54 (Δ 0.32) DR12BAO: 3.71 (Δ -0.71) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.97 (Δ 0.24) simall_100x143_offlike5_EE_Aplanck
395.88 (Δ -0.64) commander_dx12_v3.2_29: 23.09 (Δ 0.19) plik_rd12_HM_v22b_TTTEEE: 2344.24 (Δ -1.08)

6.60 base_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022419	$0.02243^{+0.00026}_{-0.00026}$ (+1.6 σ)	σ_8	0.8217	$0.814^{+0.017}_{-0.019}$ (+0.7 σ)	$H(0.38)$	83.36	$83.22^{+0.60}_{-0.66}$ (+1.1 σ)
$\Omega_c h^2$	0.11950	$0.1192^{+0.0018}_{-0.0018}$ (−0.8 σ)	S_8	0.8300	$0.826^{+0.021}_{-0.021}$ (−0.3 σ)	$D_M(0.38)$	1520.5	1524^{+17}_{-15} (−1.0 σ)
$100\theta_{MC}$	1.04100	$1.04101^{+0.00058}_{-0.00058}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4546	$0.452^{+0.012}_{-0.011}$ (−0.3 σ)	$H(0.51)$	90.04	$89.91^{+0.50}_{-0.55}$ (+1.1 σ)
τ	0.0533	$0.055^{+0.015}_{-0.014}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6112	$0.607^{+0.013}_{-0.014}$ (+0.3 σ)	$D_M(0.51)$	1970.6	1975^{+21}_{-18} (−1.0 σ)
Σm_ν [eV]	0.004	< 0.114 (−0.7 σ)	$\sigma_8/h^{0.5}$	0.9957	$0.988^{+0.019}_{-0.022}$ (+0.4 σ)	$H(0.61)$	95.624	$95.51^{+0.42}_{-0.47}$ (+1.1 σ)
$\ln(10^{10} A_s)$	3.0414	$3.045^{+0.029}_{-0.028}$ (+0.3 σ)	$r_{drag} h$	100.22	$99.96^{+1.5}_{-1.6}$ (+1.0 σ)	$D_M(0.61)$	2293.7	2299^{+22}_{-20} (−1.0 σ)
n_s	0.9674	$0.9668^{+0.0071}_{-0.0074}$ (+0.9 σ)	$\langle d^2 \rangle^{1/2}$	2.4408	$2.438^{+0.040}_{-0.039}$ (−0.3 σ)	$H(2.33)$	235.96	$236.0^{+1.1}_{-1.1}$ (−0.8 σ)
y_{cal}	1.00052	$1.0007^{+0.0049}_{-0.0049}$ (+0.1 σ)	z_{re}	7.55	$7.8^{+1.4}_{-1.5}$ (+0.3 σ)	$D_M(2.33)$	5747.1	5753^{+23}_{-20} (−1.1 σ)
A_{217}^{CIB}	46.4	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.093	$2.101^{+0.062}_{-0.058}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4590	$0.457^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{tSZ \times CIB}$	0.55	—	$10^9 A_s e^{-2\tau}$	1.8820	$1.880^{+0.020}_{-0.020}$ (−0.4 σ)	$\sigma_8(0.15)$	0.7597	$0.753^{+0.016}_{-0.018}$ (+0.7 σ)
A_{143}^{tSZ}	7.12	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	D_{40}	1226.1	1228^{+22}_{-21} (−0.4 σ)	$f\sigma_8(0.38)$	0.4786	$0.4761^{+0.0097}_{-0.010}$ (+0.2 σ)
A_{100}^{PS}	248	258^{+50}_{-50} (−0.3 σ)	D_{220}	5732	5738^{+74}_{-74} (+0.6 σ)	$\sigma_8(0.38)$	0.6738	$0.668^{+0.014}_{-0.016}$ (+0.8 σ)
A_{143}^{PS}	48.8	45^{+10}_{-20} (−0.6 σ)	D_{810}	2540.4	2539^{+26}_{-25} (+0.1 σ)	$f\sigma_8(0.51)$	0.4777	$0.4750^{+0.0091}_{-0.0099}$ (+0.4 σ)
$A_{143 \times 217}^{PS}$	50.3	42^{+20}_{-20} (−0.2 σ)	D_{1420}	818.4	$817.7^{+9.3}_{-9.1}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6307	$0.625^{+0.013}_{-0.015}$ (+0.8 σ)
A_{217}^{PS}	120.8	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.46	$231.1^{+3.1}_{-3.0}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4731	$0.4703^{+0.0088}_{-0.0098}$ (+0.5 σ)
A^{kSZ}	0.00	< 7.93 (−0.3 σ)	$n_{s,0.002}$	0.9674	$0.9668^{+0.0071}_{-0.0074}$ (+0.9 σ)	$\sigma_8(0.61)$	0.6002	$0.595^{+0.013}_{-0.014}$ (+0.8 σ)
A_{100}^{dustTT}	8.91	$8.9^{+3.5}_{-3.7}$ (−0.0 σ)	Y_P	0.245415	$0.245417^{+0.000096}_{-0.00010}$ (+1.5 σ)	$f\sigma_8(2.33)$	0.3019	$0.2998^{+0.0059}_{-0.0064}$ (+0.8 σ)
A_{143}^{dustTT}	11.04	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246741	$0.246743^{+0.000096}_{-0.00010}$ (+1.5 σ)	$\sigma_8(2.33)$	0.3119	$0.3093^{+0.0067}_{-0.0075}$ (+0.8 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.6^{+6.4}_{-6.6}$ (+0.1 σ)	$10^5 D/H$	2.5765	$2.575^{+0.049}_{-0.047}$ (−1.5 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (−0.8 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7600	$13.774^{+0.053}_{-0.046}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	31.79	32^{+4}_{-4} (−1.0 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.076}_{-0.076}$	z_*	1089.809	$1089.78^{+0.41}_{-0.41}$ (−1.4 σ)	f_{2000}^{217}	106.39	$106.8^{+3.6}_{-3.4}$ (−0.9 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	144.531	$144.59^{+0.42}_{-0.42}$ (+0.4 σ)	$\chi^2_{lensing}$	8.96	9.22 (ν : 0.2)
$A_{100 \times 217}^{dustTE}$	0.483	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04115	$1.04118^{+0.00056}_{-0.00058}$ (+0.6 σ)	χ^2_{small}	395.88	397.1 (ν : 1.7) (+0.1 σ)
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8819	$13.887^{+0.041}_{-0.041}$ (+0.3 σ)	χ^2_{lowl}	23.05	23.22 (ν : 0.3) (−0.5 σ)
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.01	$1060.02^{+0.57}_{-0.58}$ (+1.6 σ)	χ^2_{plik}	2344.3	2359.2 (ν : 16.8) (+278.1 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.50}_{-0.53}$	r_{drag}	147.177	$147.23^{+0.45}_{-0.43}$ (+0.2 σ)	χ^2_{JLA}	1034.840	1034.99 (ν : 0.0)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14081	$0.14076^{+0.00054}_{-0.00056}$ (+0.4 σ)	χ^2_{6DF}	0.003	0.037 (ν : 0.0)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160721	$0.16072^{+0.00033}_{-0.00033}$ (−1.5 σ)	χ^2_{MGS}	1.54	1.45 (ν : 0.1)
H_0	68.10	$67.89^{+0.89}_{-0.99}$ (+1.0 σ)	z_{eq}	3391.4	3386^{+41}_{-40} (−0.7 σ)	$\chi^2_{DR12BAO}$	3.71	4.4 (ν : 0.7)
Ω_Λ	0.6939	$0.692^{+0.012}_{-0.012}$ (+0.9 σ)	k_{eq}	0.010351	$0.01033^{+0.00012}_{-0.00012}$ (−0.7 σ)	χ^2_{prior}	1.7	11.6 (ν : 10.8) (+1.2 σ)
Ω_m	0.3061	$0.308^{+0.012}_{-0.012}$ (−0.9 σ)	$100\theta_{eq}$	0.8154	$0.8165^{+0.0076}_{-0.0075}$ (+0.8 σ)	χ^2_{CMB}	2772.2	2788.7 (ν : 17.5) (+274.6 σ)
$\Omega_m h^2$	0.14196	$0.1421^{+0.0018}_{-0.0017}$ (−0.9 σ)	$100\theta_{s,eq}$	0.45043	$0.4510^{+0.0039}_{-0.0039}$ (+0.7 σ)	χ^2_{BAO}	5.25	5.86 (ν : 0.4)
$\Omega_\nu h^2$	0.00004	< 0.00122 (−0.7 σ)	$H(0.15)$	73.33	$73.15^{+0.78}_{-0.87}$ (+1.0 σ)			
$\Omega_m h^3$	0.09667	$0.09650^{+0.00063}_{-0.00071}$ (+1.0 σ)	$D_M(0.15)$	637.0	$638.8^{+8.1}_{-7.9}$ (−1.0 σ)			

Best-fit $\chi^2_{eff} = 3813.97$; $\Delta\chi^2_{eff} = -1.70$; $\bar{\chi}^2_{eff} = 3841.20$; $\Delta\bar{\chi}^2_{eff} = -0.65$; $R - 1 = 0.01317$
 χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.02) MGS: 1.54 (Δ 0.26) DR12BAO: 3.71 (Δ -0.54) CMB - smicadx12.Dec5.ftl_mv2.ndclpp_p.teb.consext8: 8.96 (Δ 0.24) simall_100x143_offlike5.EE.Aplanck
395.88 (Δ -0.64) commander_dx12_v3.2.29: 23.05 (Δ 0.17) plik_rd12_HM.v22b.TTTEEE: 2344.32 (Δ -0.95) SN - JLA Pantheon18: 1034.84 (Δ -0.13)

6.61 base_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02242^{+0.00026}_{-0.00026} \quad (+1.5\sigma)$	$\Omega_{\text{m}}h^3$	$0.09648^{+0.00065}_{-0.00075} \quad (+1.0\sigma)$	$H(0.15)$	$73.09^{+0.82}_{-0.91} \quad (+1.0\sigma)$
$\Omega_{\text{c}}h^2$	$0.1193^{+0.0018}_{-0.0018} \quad (-0.8\sigma)$	σ_8	$0.814^{+0.017}_{-0.020} \quad (+0.7\sigma)$	$D_{\text{M}}(0.15)$	$639.3^{+9.0}_{-8.0} \quad (-1.0\sigma)$
$100\theta_{\text{MC}}$	$1.04100^{+0.00057}_{-0.00058} \quad (+0.7\sigma)$	S_8	$0.827^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$H(0.38)$	$83.18^{+0.63}_{-0.70} \quad (+1.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.453^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$D_{\text{M}}(0.38)$	$1525^{+18}_{-16} \quad (-1.0\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	$< 0.121 \quad (-0.7\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.607^{+0.013}_{-0.014} \quad (+0.3\sigma)$	$H(0.51)$	$89.88^{+0.52}_{-0.58} \quad (+1.1\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.046^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.019}_{-0.023} \quad (+0.5\sigma)$	$D_{\text{M}}(0.51)$	$1976^{+22}_{-19} \quad (-1.0\sigma)$
n_{s}	$0.9667^{+0.0072}_{-0.0075} \quad (+0.9\sigma)$	$r_{\text{drag}}h$	$99.9^{+1.5}_{-1.7} \quad (+1.0\sigma)$	$H(0.61)$	$95.48^{+0.44}_{-0.50} \quad (+1.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.040}_{-0.039} \quad (-0.2\sigma)$	$D_{\text{M}}(0.61)$	$2300^{+24}_{-21} \quad (-1.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$H(2.33)$	$236.1^{+1.2}_{-1.1} \quad (-0.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}$	$2.104^{+0.056}_{-0.053} \quad (+0.4\sigma)$	$D_{\text{M}}(2.33)$	$5754^{+25}_{-21} \quad (-1.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.9} \quad (+0.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.881^{+0.020}_{-0.020} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{100}^{PS}	$258^{+60}_{-50} \quad (-0.2\sigma)$	D_{40}	$1229^{+22}_{-22} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.016}_{-0.018} \quad (+0.7\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.6\sigma)$	D_{220}	$5737^{+74}_{-73} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.4764^{+0.0097}_{-0.010} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.014}_{-0.017} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.6^{+9.3}_{-9.2} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4753^{+0.0091}_{-0.010} \quad (+0.4\sigma)$
A^{kSZ}	$< 7.93 \quad (-0.3\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.0} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.013}_{-0.016} \quad (+0.8\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.7} \quad (-0.0\sigma)$	$n_{\text{s},0.002}$	$0.9667^{+0.0072}_{-0.0075} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0087}_{-0.0099} \quad (+0.5\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.245414^{+0.000096}_{-0.00010} \quad (+1.5\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.013}_{-0.015} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.4}_{-6.4} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.246741^{+0.000096}_{-0.00010} \quad (+1.5\sigma)$	$f\sigma_8(2.33)$	$0.2997^{+0.0060}_{-0.0068} \quad (+0.8\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.576^{+0.049}_{-0.047} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.3091^{+0.0068}_{-0.0079} \quad (+0.8\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.075}$	Age/Gyr	$13.777^{+0.056}_{-0.048} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.059}$	z_*	$1089.79^{+0.41}_{-0.41} \quad (-1.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.57^{+0.43}_{-0.42} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+3.5}_{-3.5} \quad (-0.9\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	$1.04118^{+0.00056}_{-0.00057} \quad (+0.6\sigma)$	χ_{lensing}^2	$9.22 \quad (\nu: 0.2)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.886^{+0.042}_{-0.041} \quad (+0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.53}$	z_{drag}	$1060.01^{+0.57}_{-0.57} \quad (+1.5\sigma)$	χ_{lowl}^2	$23.25 \quad (\nu: 0.3) \quad (-0.5\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.22^{+0.45}_{-0.44} \quad (+0.1\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 16.5) \quad (+278.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14077^{+0.00055}_{-0.00056} \quad (+0.4\sigma)$	$\chi_{6\text{DF}}^2$	$0.045 \quad (\nu: 0.0)$
H_0	$67.83^{+0.94}_{-1.0} \quad (+1.0\sigma)$	$100\theta_{\text{D}}$	$0.16072^{+0.00033}_{-0.00033} \quad (-1.5\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.1)$
Ω_{Λ}	$0.691^{+0.013}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3387^{+41}_{-41} \quad (-0.6\sigma)$	χ_{DR12BAO}^2	$4.5 \quad (\nu: 1.0)$
Ω_{m}	$0.309^{+0.013}_{-0.013} \quad (-0.9\sigma)$	k_{eq}	$0.01034^{+0.00012}_{-0.00012} \quad (-0.7\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.2\sigma)$
$\Omega_{\text{m}}h^2$	$0.1422^{+0.0019}_{-0.0018} \quad (-0.8\sigma)$	$100\theta_{\text{eq}}$	$0.8162^{+0.0077}_{-0.0075} \quad (+0.7\sigma)$	χ_{CMB}^2	$2788.7 \quad (\nu: 17.2) \quad (+274.6\sigma)$
$\Omega_{\nu}h^2$	$< 0.00130 \quad (-0.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4509^{+0.0040}_{-0.0039} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$

$$\bar{\chi}_{\text{eff}}^2 = 2806.28; \Delta\bar{\chi}_{\text{eff}}^2 = -0.44; R - 1 = 0.01177$$

6.62 base_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00026}_{-0.00026} \quad (+1.6\sigma)$	σ_8	$0.815^{+0.017}_{-0.019} \quad (+0.7\sigma)$	$H(0.38)$	$83.22^{+0.60}_{-0.66} \quad (+1.1\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0017}_{-0.0017} \quad (-0.8\sigma)$	S_8	$0.826^{+0.021}_{-0.020} \quad (-0.3\sigma)$	$D_M(0.38)$	$1524^{+17}_{-15} \quad (-1.0\sigma)$
$100\theta_{MC}$	$1.04102^{+0.00058}_{-0.00058} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.011}_{-0.011} \quad (-0.3\sigma)$	$H(0.51)$	$89.91^{+0.49}_{-0.55} \quad (+1.1\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.013}_{-0.014} \quad (+0.3\sigma)$	$D_M(0.51)$	$1975^{+21}_{-18} \quad (-1.0\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.114 \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.019}_{-0.022} \quad (+0.5\sigma)$	$H(0.61)$	$95.51^{+0.42}_{-0.47} \quad (+1.1\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$r_{\text{drag}} h$	$99.97^{+1.5}_{-1.6} \quad (+1.0\sigma)$	$D_M(0.61)$	$2298^{+22}_{-20} \quad (-1.0\sigma)$
n_s	$0.9669^{+0.0071}_{-0.0073} \quad (+0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.040}_{-0.038} \quad (-0.3\sigma)$	$H(2.33)$	$236.0^{+1.1}_{-1.1} \quad (-0.8\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$D_M(2.33)$	$5753^{+23}_{-20} \quad (-1.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.104^{+0.056}_{-0.053} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.010} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.880^{+0.020}_{-0.020} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.015}_{-0.018} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1228^{+22}_{-21} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	$0.4762^{+0.0096}_{-0.0098} \quad (+0.2\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5738^{+74}_{-74} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.014}_{-0.016} \quad (+0.8\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.6\sigma)$	D_{810}	$2539^{+26}_{-25} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.4752^{+0.0090}_{-0.0097} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.7^{+9.3}_{-9.1} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.013}_{-0.015} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.0} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0087}_{-0.0096} \quad (+0.5\sigma)$
A^{kSZ}	$< 7.94 \quad (-0.3\sigma)$	$n_{s,0.002}$	$0.9669^{+0.0071}_{-0.0073} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.012}_{-0.014} \quad (+0.8\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.7} \quad (-0.0\sigma)$	Y_P	$0.245417^{+0.000095}_{-0.00010} \quad (+1.5\sigma)$	$f\sigma_8(2.33)$	$0.2999^{+0.0058}_{-0.0064} \quad (+0.8\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.246744^{+0.000096}_{-0.00010} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3094^{+0.0066}_{-0.0075} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.4}_{-6.6} \quad (+0.1\sigma)$	$10^5 D/H$	$2.575^{+0.048}_{-0.046} \quad (-1.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.9\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.774^{+0.053}_{-0.046} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
A_{100}^{dustTE}	$0.115^{+0.076}_{-0.076}$	z_*	$1089.77^{+0.40}_{-0.40} \quad (-1.4\sigma)$	f_{2000}^{217}	$106.8^{+3.6}_{-3.4} \quad (-0.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$144.59^{+0.42}_{-0.42} \quad (+0.4\sigma)$	χ^2_{lensing}	$9.20 \quad (\nu: 0.2)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04119^{+0.00056}_{-0.00058} \quad (+0.6\sigma)$	χ^2_{small}	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.887^{+0.041}_{-0.040} \quad (+0.4\sigma)$	χ^2_{lowl}	$23.22 \quad (\nu: 0.3) \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.02^{+0.56}_{-0.58} \quad (+1.6\sigma)$	χ^2_{plik}	$2359.0 \quad (\nu: 16.6) \quad (+278.1\sigma)$
A_{217}^{dustTE}	$2.08^{+0.50}_{-0.53}$	r_{drag}	$147.24^{+0.45}_{-0.43} \quad (+0.2\sigma)$	χ^2_{JLA}	$1034.99 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14076^{+0.00054}_{-0.00056} \quad (+0.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.037 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16072^{+0.00032}_{-0.00033} \quad (-1.5\sigma)$	χ^2_{MGS}	$1.45 \quad (\nu: 0.1)$
H_0	$67.90^{+0.89}_{-0.99} \quad (+1.0\sigma)$	z_{eq}	$3385^{+40}_{-39} \quad (-0.7\sigma)$	χ^2_{DR12BAO}	$4.4 \quad (\nu: 0.7)$
Ω_Λ	$0.692^{+0.012}_{-0.012} \quad (+0.9\sigma)$	k_{eq}	$0.01033^{+0.00012}_{-0.00012} \quad (-0.7\sigma)$	χ^2_{prior}	$11.6 \quad (\nu: 10.7) \quad (+1.2\sigma)$
Ω_m	$0.308^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.8166^{+0.0075}_{-0.0073} \quad (+0.8\sigma)$	χ^2_{CMB}	$2788.6 \quad (\nu: 17.2) \quad (+274.5\sigma)$
$\Omega_m h^2$	$0.1421^{+0.0018}_{-0.0017} \quad (-0.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.4511^{+0.0039}_{-0.0038} \quad (+0.7\sigma)$	χ^2_{BAO}	$5.84 \quad (\nu: 0.4)$
$\Omega_\nu h^2$	$< 0.00123 \quad (-0.7\sigma)$	$H(0.15)$	$73.15^{+0.78}_{-0.87} \quad (+1.0\sigma)$		
$\Omega_m h^3$	$0.09650^{+0.00064}_{-0.00072} \quad (+1.0\sigma)$	$D_M(0.15)$	$638.7^{+8.1}_{-7.9} \quad (-1.0\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 3841.03$; $\Delta \bar{\chi}^2_{\text{eff}} = -0.71$; $R - 1 = 0.01560$

6.63 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022335	$0.02233^{+0.00028}_{-0.00028}$ $(+1.2\sigma)$	S_8	0.8275	$0.824^{+0.022}_{-0.022}$ (-0.4σ)	$D_M(0.15)$	637.1	$639.9^{+9.2}_{-8.5}$ (-0.9σ)
$\Omega_c h^2$	0.11925	$0.1191^{+0.0018}_{-0.0018}$ (-0.9σ)	$\sigma_8 \Omega_m^{0.5}$	0.4532	$0.451^{+0.012}_{-0.012}$ (-0.4σ)	$H(0.38)$	83.33	$83.10^{+0.63}_{-0.75}$ $(+1.0\sigma)$
$100\theta_{MC}$	1.04093	$1.04094^{+0.00059}_{-0.00060}$ $(+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6097	$0.605^{+0.013}_{-0.014}$ $(+0.2\sigma)$	$D_M(0.38)$	1520.8	1527^{+19}_{-17} (-0.9σ)
τ	0.0533	$0.054^{+0.014}_{-0.015}$ $(+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9938	$0.985^{+0.021}_{-0.023}$ $(+0.4\sigma)$	$H(0.51)$	89.99	$89.80^{+0.53}_{-0.63}$ $(+1.0\sigma)$
Σm_ν [eV]	0.004	< 0.131 (-0.7σ)	$r_{drag} h$	100.33	$99.9^{+1.6}_{-1.8}$ $(+1.0\sigma)$	$D_M(0.51)$	1971.1	1978^{+22}_{-20} (-0.9σ)
$\ln(10^{10} A_s)$	3.0391	$3.041^{+0.029}_{-0.028}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4368	$2.431^{+0.040}_{-0.041}$ (-0.5σ)	$H(0.61)$	95.569	$95.40^{+0.47}_{-0.51}$ $(+1.0\sigma)$
n_s	0.9671	$0.9670^{+0.0075}_{-0.0074}$ $(+0.9\sigma)$	z_{re}	7.56	$7.7^{+1.4}_{-1.5}$ $(+0.2\sigma)$	$D_M(0.61)$	2294.4	2302^{+24}_{-22} (-0.9σ)
y_{cal}	1.00049	$1.0006^{+0.0049}_{-0.0049}$ $(+0.0\sigma)$	$10^9 A_s$	2.089	$2.094^{+0.061}_{-0.058}$ $(+0.1\sigma)$	$H(2.33)$	235.71	$235.9^{+1.2}_{-1.2}$ (-0.9σ)
A_{100}^{PS}	234.6	239^{+50}_{-50} (-0.9σ)	$10^9 A_s e^{-2\tau}$	1.8776	$1.877^{+0.021}_{-0.020}$ (-0.6σ)	$D_M(2.33)$	5750.8	5759^{+25}_{-23} (-0.9σ)
A_{143}^{PS}	41.4	39^{+20}_{-20} (-1.3σ)	D_{40}	1224.1	1225^{+22}_{-22} (-0.6σ)	$f\sigma_8(0.15)$	0.4576	$0.456^{+0.011}_{-0.011}$ (-0.4σ)
A_{217}^{PS}	103.7	103^{+30}_{-30} (-1.2σ)	D_{220}	5720	5724^{+76}_{-75} $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7583	$0.750^{+0.017}_{-0.020}$ $(+0.6\sigma)$
A_{217}^{CIB}	42.1	39^{+10}_{-10} (-1.3σ)	D_{810}	2535.1	2535^{+26}_{-26} (-0.1σ)	$f\sigma_8(0.38)$	0.4774	$0.4746^{+0.0098}_{-0.011}$ $(+0.1\sigma)$
A_{143}^{tSZ}	5.60	< 7.52 (-0.5σ)	D_{1420}	816.1	$816.2^{+9.4}_{-9.4}$ $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6727	$0.665^{+0.015}_{-0.018}$ $(+0.7\sigma)$
$r_{143 \times 217}^{PS}$	0.641	$0.66^{+0.25}_{-0.26}$	D_{2000}	230.55	$230.5^{+3.1}_{-3.1}$ $(+0.7\sigma)$	$f\sigma_8(0.51)$	0.4766	$0.4735^{+0.0093}_{-0.011}$ $(+0.3\sigma)$
$r_{143 \times 217}^{CIB}$	0.74	—	$n_{s,0.002}$	0.9671	$0.9670^{+0.0075}_{-0.0074}$ $(+0.9\sigma)$	$\sigma_8(0.51)$	0.6297	$0.622^{+0.014}_{-0.017}$ $(+0.7\sigma)$
$\xi^{tSZ \times CIB}$	0.33	—	Y_P	0.245382	$0.24538^{+0.00011}_{-0.00011}$ $(+1.1\sigma)$	$f\sigma_8(0.61)$	0.4720	$0.4687^{+0.0094}_{-0.010}$ $(+0.4\sigma)$
A^{kSZ}	1.5	—	Y_P^{BBN}	0.246708	$0.24671^{+0.00011}_{-0.00012}$ $(+1.1\sigma)$	$\sigma_8(0.61)$	0.5993	$0.592^{+0.014}_{-0.016}$ $(+0.7\sigma)$
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	$10^5 D/H$	2.592	$2.593^{+0.053}_{-0.051}$ (-1.2σ)	$f\sigma_8(2.33)$	0.3015	$0.2986^{+0.0063}_{-0.0073}$ $(+0.7\sigma)$
A_{143}^{dust}	0.987	$0.96^{+0.34}_{-0.34}$	Age/Gyr	13.769	$13.789^{+0.058}_{-0.053}$ (-0.9σ)	$\sigma_8(2.33)$	0.3115	$0.3080^{+0.0072}_{-0.0085}$ $(+0.7\sigma)$
A_{217}^{dust}	0.968	$0.98^{+0.20}_{-0.20}$	z_*	1089.892	$1089.89^{+0.43}_{-0.43}$ (-1.2σ)	f_{2000}^{143}	29.6	30^{+5}_{-6} (-0.8σ)
$A_{143 \times 217}^{dust}$	0.995	$1.03^{+0.32}_{-0.32}$	r_*	144.659	$144.70^{+0.45}_{-0.45}$ $(+0.6\sigma)$	f_{2000}^{217}	106.61	$106.7^{+3.8}_{-3.7}$ (-0.9σ)
c_{100}	0.99756	$0.9976^{+0.0021}_{-0.0021}$ (-3.3σ)	$100\theta_*$	1.04110	$1.04112^{+0.00058}_{-0.00059}$ $(+0.4\sigma)$	$f_{2000}^{143 \times 217}$	31.88	32^{+4}_{-4} (-1.0σ)
c_{217}	1.00108	$1.0011^{+0.0031}_{-0.0030}$ $(+4.6\sigma)$	$D_M(z_*)/\text{Gpc}$	13.8949	$13.898^{+0.044}_{-0.043}$ $(+0.6\sigma)$	$\chi^2_{lensing}$	8.89	9.39 ($\nu: 0.3$)
c_{TE}	0.9965	$0.9966^{+0.0098}_{-0.0096}$	z_{drag}	1059.78	$1059.78^{+0.61}_{-0.61}$ $(+1.1\sigma)$	χ^2_{small}	395.87	397.0 ($\nu: 1.4$) $(+0.0\sigma)$
c_{EE}	0.9921	$0.9924^{+0.0096}_{-0.0098}$	r_{drag}	147.338	$147.37^{+0.48}_{-0.47}$ $(+0.5\sigma)$	χ^2_{lowl}	22.96	23.02 ($\nu: 0.3$) (-0.7σ)
H_0	68.10	$67.77^{+0.95}_{-1.1}$ $(+1.0\sigma)$	k_D	0.14058	$0.14054^{+0.00060}_{-0.00060}$ (-0.1σ)	$\chi^2_{CamSpec}$	11499.2	11514.0 ($\nu: 15.2$)
Ω_Λ	0.6946	$0.691^{+0.012}_{-0.014}$ $(+0.9\sigma)$	$100\theta_D$	0.160835	$0.16085^{+0.00037}_{-0.00036}$ (-1.0σ)	χ^2_{6DF}	0.001	0.045 ($\nu: 0.0$)
Ω_m	0.3054	$0.309^{+0.014}_{-0.012}$ (-0.9σ)	z_{eq}	3383.4	3380^{+42}_{-42} (-0.8σ)	χ^2_{MGS}	1.61	1.40 ($\nu: 0.1$)
$\Omega_m h^2$	0.14162	$0.1420^{+0.0019}_{-0.0018}$ (-0.9σ)	k_{eq}	0.010326	$0.01032^{+0.00013}_{-0.00013}$ (-0.8σ)	$\chi^2_{DR12BAO}$	3.60	4.5 ($\nu: 1.0$)
$\Omega_\nu h^2$	0.00004	< 0.00141 (-0.7σ)	$100\theta_{eq}$	0.8165	$0.8172^{+0.0077}_{-0.0078}$ $(+0.8\sigma)$	χ^2_{prior}	2.1	7.7 ($\nu: 5.9$) $(+0.1\sigma)$
$\Omega_m h^3$	0.09644	$0.09623^{+0.00075}_{-0.00078}$ $(+0.8\sigma)$	$100\theta_{s,eq}$	0.45110	$0.4514^{+0.0040}_{-0.0040}$ $(+0.8\sigma)$	χ^2_{CMB}	11926.9	11943.4 ($\nu: 16.6$) $(+1850.1\sigma)$
σ_8	0.8201	$0.811^{+0.018}_{-0.021}$ $(+0.6\sigma)$	$H(0.15)$	73.32	$73.03^{+0.83}_{-0.98}$ $(+1.0\sigma)$	χ^2_{BAO}	5.21	6.0 ($\nu: 0.6$)

Best-fit $\chi^2_{eff} = 11934.26$; $\bar{\chi}^2_{eff} = 11957.14$; $\Delta\chi^2_{eff} = -0.26$; $R - 1 = 0.00745$
 χ^2_{eff} : BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 3.60 CMB - smicadx12-Dec5.ftl_mv2_ndclpp_p.teb_consext8: 8.89 small_100x143_offlike5_EE_Aplanck_B: 395.87 comman-
der_dx12_v3_2_29: 22.96 CamSpec like_10.7HM_1400_unified: 11499.19

6.64 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022346	$0.02234^{+0.00028}_{-0.00028}$ $(+1.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4525	$0.451^{+0.012}_{-0.012}$ (-0.5σ)	$D_{\mathrm{M}}(0.38)$	1519.6	1525^{+17}_{-16} (-1.0σ)
$\Omega_{\mathrm{c}} h^2$	0.11912	$0.1190^{+0.0018}_{-0.0018}$ (-0.9σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6091	$0.605^{+0.013}_{-0.014}$ $(+0.2\sigma)$	$H(0.51)$	90.03	$89.83^{+0.53}_{-0.56}$ $(+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	1.04097	$1.04095^{+0.00059}_{-0.00059}$ $(+0.6\sigma)$	$\sigma_8/h^{0.5}$	0.9932	$0.986^{+0.021}_{-0.022}$ $(+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	1969.7	1977^{+21}_{-18} (-1.0σ)
τ	0.0533	$0.055^{+0.014}_{-0.015}$ $(+0.4\sigma)$	$r_{\mathrm{drag}} h$	100.45	$99.99^{+1.5}_{-1.6}$ $(+1.0\sigma)$	$H(0.61)$	95.597	$95.43^{+0.45}_{-0.48}$ $(+1.0\sigma)$
Σm_{ν} [eV]	0.001	< 0.125 (-0.7σ)	$\langle d^2 \rangle^{1/2}$	2.4348	$2.430^{+0.040}_{-0.041}$ (-0.5σ)	$D_{\mathrm{M}}(0.61)$	2292.9	2300^{+23}_{-20} (-1.0σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0391	$3.042^{+0.029}_{-0.028}$ $(+0.1\sigma)$	z_{re}	7.56	$7.7^{+1.4}_{-1.5}$ $(+0.2\sigma)$	$H(2.33)$	235.63	$235.8^{+1.1}_{-1.1}$ (-0.9σ)
n_{s}	0.9675	$0.9672^{+0.0075}_{-0.0074}$ $(+1.0\sigma)$	$10^9 A_{\mathrm{s}}$	2.089	$2.094^{+0.061}_{-0.058}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5749.6	5758^{+24}_{-22} (-1.0σ)
y_{cal}	1.00045	$1.0006^{+0.0048}_{-0.0048}$ $(+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8774	$1.877^{+0.021}_{-0.020}$ (-0.6σ)	$f\sigma_8(0.15)$	0.4569	$0.455^{+0.011}_{-0.011}$ (-0.4σ)
A_{100}^{PS}	231.8	239^{+50}_{-50} (-0.9σ)	D_{40}	1223.3	1225^{+22}_{-22} (-0.6σ)	$\sigma_8(0.15)$	0.7583	$0.750^{+0.016}_{-0.019}$ $(+0.6\sigma)$
A_{143}^{PS}	44.3	39^{+20}_{-20} (-1.4σ)	D_{220}	5721	5724^{+76}_{-76} $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4769	$0.4745^{+0.0096}_{-0.011}$ $(+0.1\sigma)$
A_{217}^{PS}	103.3	103^{+30}_{-30} (-1.2σ)	D_{810}	2535.5	2536^{+26}_{-26} (-0.1σ)	$\sigma_8(0.38)$	0.6728	$0.665^{+0.014}_{-0.017}$ $(+0.7\sigma)$
A_{217}^{CIB}	43.3	39^{+10}_{-10} (-1.3σ)	D_{1420}	816.4	$816.3^{+9.3}_{-9.4}$ $(+0.4\sigma)$	$f\sigma_8(0.51)$	0.4762	$0.4735^{+0.0095}_{-0.010}$ $(+0.3\sigma)$
A_{143}^{tSZ}	6.49	< 7.55 (-0.5σ)	D_{2000}	230.66	$230.5^{+3.1}_{-3.1}$ $(+0.7\sigma)$	$\sigma_8(0.51)$	0.6298	$0.623^{+0.014}_{-0.016}$ $(+0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.662	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	0.9675	$0.9672^{+0.0075}_{-0.0074}$ $(+1.0\sigma)$	$f\sigma_8(0.61)$	0.4717	$0.4687^{+0.0092}_{-0.0098}$ $(+0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.83	—	Y_{P}	0.245386	$0.24538^{+0.00011}_{-0.00011}$ $(+1.2\sigma)$	$\sigma_8(0.61)$	0.5994	$0.593^{+0.013}_{-0.016}$ $(+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.42	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246712	$0.24671^{+0.00011}_{-0.00011}$ $(+1.2\sigma)$	$f\sigma_8(2.33)$	0.3015	$0.2989^{+0.0061}_{-0.0070}$ $(+0.7\sigma)$
A^{kSZ}	0.1	—	$10^5 \mathrm{D}/\mathrm{H}$	2.590	$2.592^{+0.053}_{-0.051}$ (-1.2σ)	$\sigma_8(2.33)$	0.3116	$0.3083^{+0.0069}_{-0.0081}$ $(+0.8\sigma)$
A_{100}^{dust}	1.014	$1.01^{+0.37}_{-0.38}$	Age/Gyr	13.766	$13.786^{+0.055}_{-0.051}$ (-1.0σ)	f_{2000}^{143}	29.6	29^{+5}_{-6} (-0.8σ)
A_{143}^{dust}	0.977	$0.96^{+0.35}_{-0.34}$	z_*	1089.868	$1089.87^{+0.43}_{-0.42}$ (-1.2σ)	f_{2000}^{217}	106.43	$106.7^{+3.8}_{-3.7}$ (-0.9σ)
A_{217}^{dust}	0.975	$0.98^{+0.20}_{-0.20}$	r_*	144.683	$144.71^{+0.45}_{-0.44}$ $(+0.7\sigma)$	$f_{2000}^{143 \times 217}$	31.82	32^{+4}_{-4} (-1.0σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.004	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04112	$1.04113^{+0.00058}_{-0.00058}$ $(+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.88	9.38 (ν : 0.3)
c_{100}	0.99773	$0.9976^{+0.0021}_{-0.0021}$ (-3.3σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8969	$13.899^{+0.043}_{-0.042}$ $(+0.6\sigma)$	χ_{small}^2	395.86	397.0 (ν : 1.4) $(+0.0\sigma)$
c_{217}	1.00128	$1.0011^{+0.0031}_{-0.0030}$ $(+4.6\sigma)$	z_{drag}	1059.82	$1059.79^{+0.60}_{-0.62}$ $(+1.1\sigma)$	χ_{lowl}^2	22.90	22.99 (ν : 0.3) (-0.7σ)
c_{TE}	0.9964	$0.9965^{+0.0098}_{-0.0096}$	r_{drag}	147.357	$147.39^{+0.47}_{-0.47}$ $(+0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	11499.3	11514.0 (ν : 15.0)
c_{EE}	0.9922	$0.9925^{+0.0096}_{-0.0098}$	k_{D}	0.14056	$0.14053^{+0.00059}_{-0.00061}$ (-0.1σ)	χ_{JLA}^2	1034.797	1034.99 (ν : 0.0)
H_0	68.17	$67.84^{+0.90}_{-1.0}$ $(+1.0\sigma)$	$100\theta_{\mathrm{D}}$	0.160829	$0.16084^{+0.00037}_{-0.00036}$ (-1.1σ)	$\chi_{6\mathrm{DF}}^2$	0.000	0.037 (ν : 0.0)
Ω_{Λ}	0.6955	$0.692^{+0.011}_{-0.013}$ $(+0.9\sigma)$	z_{eq}	3380.7	3378^{+41}_{-41} (-0.8σ)	χ_{MGS}^2	1.68	1.46 (ν : 0.1)
Ω_{m}	0.3045	$0.308^{+0.013}_{-0.011}$ (-0.9σ)	k_{eq}	0.010318	$0.01031^{+0.00013}_{-0.00013}$ (-0.8σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.52	4.3 (ν : 0.7)
$\Omega_{\mathrm{m}} h^2$	0.14148	$0.1419^{+0.0018}_{-0.0017}$ (-0.9σ)	$100\theta_{\mathrm{eq}}$	0.8171	$0.8176^{+0.0076}_{-0.0076}$ $(+0.9\sigma)$	χ_{prior}^2	2.1	7.7 (ν : 5.8) $(+0.1\sigma)$
$\Omega_{\nu} h^2$	0.00001	< 0.00134 (-0.7σ)	$100\theta_{\mathrm{s,eq}}$	0.45137	$0.4516^{+0.0039}_{-0.0039}$ $(+0.8\sigma)$	χ_{CMB}^2	11926.9	11943.4 (ν : 16.3) $(+1850.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.09644	$0.09625^{+0.00070}_{-0.00079}$ $(+0.8\sigma)$	$H(0.15)$	73.38	$73.09^{+0.78}_{-0.90}$ $(+1.0\sigma)$	χ_{BAO}^2	5.20	5.84 (ν : 0.4)
σ_8	0.8200	$0.812^{+0.017}_{-0.020}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	636.5	$639.3^{+8.8}_{-7.6}$ (-1.0σ)			
S_8	0.8261	$0.823^{+0.021}_{-0.021}$ (-0.5σ)	$H(0.38)$	83.38	$83.15^{+0.60}_{-0.69}$ $(+1.0\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 12968.97$; $\Delta\chi_{\mathrm{eff}}^2 = -1.51$; $\bar{\chi}_{\mathrm{eff}}^2 = 12991.94$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.45$; $R - 1 = 0.00817$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.02) MGS: 1.68 (Δ 0.40) DR12BAO: 3.52 (Δ -0.71) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consect8: 8.88 (Δ -0.08) small_100x143_offlike5_EE_Aplanc
395.86 (Δ -0.19) commander_dx12_v3.2_29: 22.90 (Δ 0.13) CamSpec like_10.7HM_1400_unified: 11499.28 (Δ -0.89) SN - JLA Pantheon18: 1034.80 (Δ -0.18)

6.65 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02234^{+0.00028}_{-0.00028} \quad (+1.2\sigma)$	S_8	$0.824^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.8^{+9.2}_{-8.5} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0018}_{-0.0018} \quad (-0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$H(0.38)$	$83.11^{+0.63}_{-0.75} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00059}_{-0.00060} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.013}_{-0.014} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+19}_{-17} \quad (-0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.021}_{-0.022} \quad (+0.4\sigma)$	$H(0.51)$	$89.80^{+0.55}_{-0.60} \quad (+1.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.132 \quad (-0.7\sigma)$	$r_{\mathrm{drag}}h$	$99.9^{+1.6}_{-1.8} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+22}_{-20} \quad (-1.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.024} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.039}_{-0.039} \quad (-0.4\sigma)$	$H(0.61)$	$95.40^{+0.47}_{-0.51} \quad (+1.0\sigma)$
n_{s}	$0.9671^{+0.0075}_{-0.0073} \quad (+0.9\sigma)$	z_{re}	$7.8^{+1.1}_{-1.3} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+24}_{-22} \quad (-1.0\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.055}_{-0.051} \quad (+0.2\sigma)$	$H(2.33)$	$235.9^{+1.2}_{-1.2} \quad (-0.9\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5759^{+25}_{-23} \quad (-1.0\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.4\sigma)$	D_{40}	$1225^{+22}_{-22} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5723^{+76}_{-75} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.016}_{-0.020} \quad (+0.6\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4749^{+0.0098}_{-0.011} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.5\sigma)$	D_{1420}	$816.1^{+9.4}_{-9.4} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.015}_{-0.018} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{2000}	$230.5^{+3.1}_{-3.1} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.4737^{+0.0096}_{-0.0099} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9671^{+0.0075}_{-0.0073} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.014}_{-0.017} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0093}_{-0.0098} \quad (+0.4\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.013}_{-0.016} \quad (+0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.053}_{-0.051} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2988^{+0.0062}_{-0.0072} \quad (+0.7\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.789^{+0.058}_{-0.053} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3082^{+0.0071}_{-0.0085} \quad (+0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.88^{+0.43}_{-0.43} \quad (-1.2\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.70^{+0.45}_{-0.44} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.7} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04113^{+0.00058}_{-0.00059} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.044}_{-0.043} \quad (+0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.34 \quad (\nu: 0.3)$
c_{TE}	$0.9965^{+0.0098}_{-0.0095}$	z_{drag}	$1059.79^{+0.60}_{-0.62} \quad (+1.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
c_{EE}	$0.9924^{+0.0096}_{-0.0098}$	r_{drag}	$147.38^{+0.48}_{-0.48} \quad (+0.5\sigma)$	χ_{lowl}^2	$23.02 \quad (\nu: 0.3) \quad (-0.7\sigma)$
H_0	$67.78^{+0.95}_{-1.1} \quad (+1.0\sigma)$	k_{D}	$0.14053^{+0.00060}_{-0.00061} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.9 \quad (\nu: 15.1)$
Ω_{Λ}	$0.691^{+0.012}_{-0.014} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00036} \quad (-1.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.014}_{-0.012} \quad (-0.9\sigma)$	z_{eq}	$3379^{+41}_{-42} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.41 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0019}_{-0.0018} \quad (-0.9\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 1.0)$
$\Omega_{\nu}h^2$	$< 0.00142 \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8173^{+0.0077}_{-0.0077} \quad (+0.9\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09623^{+0.00075}_{-0.00078} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0040}_{-0.0039} \quad (+0.8\sigma)$	χ_{CMB}^2	$11943.2 \quad (\nu: 16.3) \quad (+1850.1\sigma)$
σ_8	$0.812^{+0.018}_{-0.021} \quad (+0.6\sigma)$	$H(0.15)$	$73.03^{+0.83}_{-0.98} \quad (+1.0\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11956.94; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.31; R - 1 = 0.00819$$

6.66 base_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00028}_{-0.00028} \quad (+1.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.012} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+17}_{-16} \quad (-1.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0018}_{-0.0018} \quad (-0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.013}_{-0.014} \quad (+0.2\sigma)$	$H(0.51)$	$89.84^{+0.53}_{-0.56} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00059}_{-0.00059} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.020}_{-0.022} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+21}_{-19} \quad (-1.0\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$100.0^{+1.5}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.43^{+0.46}_{-0.48} \quad (+1.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.126 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.039}_{-0.039} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2300^{+23}_{-20} \quad (-1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.024} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.1} \quad (-0.9\sigma)$
n_{s}	$0.9673^{+0.0075}_{-0.0073} \quad (+1.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.055}_{-0.051} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+24}_{-22} \quad (-1.0\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.020}_{-0.020} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+22}_{-22} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.016}_{-0.019} \quad (+0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5724^{+76}_{-76} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4747^{+0.0095}_{-0.010} \quad (+0.1\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.014}_{-0.017} \quad (+0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.2^{+9.3}_{-9.4} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4737^{+0.0094}_{-0.0097} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.5\sigma)$	D_{2000}	$230.5^{+3.1}_{-3.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.014}_{-0.016} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9673^{+0.0075}_{-0.0073} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4690^{+0.0091}_{-0.0096} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.013}_{-0.016} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2991^{+0.0060}_{-0.0069} \quad (+0.7\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.591^{+0.053}_{-0.051} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3085^{+0.0068}_{-0.0081} \quad (+0.8\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.786^{+0.055}_{-0.051} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.33}$	z_*	$1089.86^{+0.42}_{-0.43} \quad (-1.2\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.7} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.72^{+0.45}_{-0.44} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04114^{+0.00058}_{-0.00058} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.33 \quad (\nu: 0.3)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.043}_{-0.042} \quad (+0.6\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.80^{+0.63}_{-0.63} \quad (+1.1\sigma)$	χ_{lowl}^2	$22.99 \quad (\nu: 0.3) \quad (-0.7\sigma)$
c_{TE}	$0.9965^{+0.0098}_{-0.0096}$	r_{drag}	$147.39^{+0.47}_{-0.47} \quad (+0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.0 \quad (\nu: 15.0)$
c_{EE}	$0.9925^{+0.0096}_{-0.0098}$	k_{D}	$0.14052^{+0.00059}_{-0.00061} \quad (-0.1\sigma)$	χ_{JLA}^2	$1034.99 \quad (\nu: 0.0)$
H_0	$67.85^{+0.90}_{-1.0} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00036} \quad (-1.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.036 \quad (\nu: 0.0)$
Ω_{Λ}	$0.692^{+0.012}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3378^{+40}_{-41} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.47 \quad (\nu: 0.1)$
Ω_{m}	$0.308^{+0.013}_{-0.012} \quad (-0.9\sigma)$	k_{eq}	$0.01031^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.3 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0018}_{-0.0017} \quad (-1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8177^{+0.0076}_{-0.0075} \quad (+0.9\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\nu} h^2$	$< 0.00135 \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0039}_{-0.0039} \quad (+0.9\sigma)$	χ_{CMB}^2	$11943.2 \quad (\nu: 16.0) \quad (+1850.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09625^{+0.00070}_{-0.00080} \quad (+0.8\sigma)$	$H(0.15)$	$73.09^{+0.78}_{-0.90} \quad (+1.0\sigma)$	χ_{BAO}^2	$5.83 \quad (\nu: 0.4)$
σ_8	$0.812^{+0.017}_{-0.020} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.2^{+8.8}_{-7.6} \quad (-1.0\sigma)$		
S_8	$0.823^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$H(0.38)$	$83.15^{+0.60}_{-0.70} \quad (+1.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12991.75; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.50; R - 1 = 0.00951$$

6.67 base_mnu_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022129	$0.02203^{+0.00047}_{-0.00051} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6140	$0.598^{+0.036}_{-0.047} \quad (-0.1\sigma)$	$H(0.15)$	72.88	$71.2^{+3.0}_{-4.1} \quad (-0.0\sigma)$
$\Omega_c h^2$	0.12011	$0.1209^{+0.0044}_{-0.0042} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9998	$0.969^{+0.059}_{-0.081} \quad (-0.1\sigma)$	$D_M(0.15)$	641.3	$658^{+45}_{-32} \quad (+0.0\sigma)$
$100\theta_{MC}$	1.04085	$1.0406^{+0.0010}_{-0.0010} \quad (+0.0\sigma)$	$r_{drag} h$	99.6	$96.8^{+5.7}_{-7.4} \quad (+0.0\sigma)$	$H(0.38)$	82.99	$81.7^{+2.3}_{-3.1} \quad (-0.0\sigma)$
τ	0.0518	$0.051^{+0.016}_{-0.016} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.453	$2.444^{+0.075}_{-0.075} \quad (-0.1\sigma)$	$D_M(0.38)$	1530	$1564^{+89}_{-63} \quad (+0.0\sigma)$
Σm_ν [eV]	0.000	$< 0.578 \quad (+0.0\sigma)$	z_{re}	7.47	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.51)$	89.70	$88.7^{+1.8}_{-2.6} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	3.0372	$3.037^{+0.032}_{-0.033} \quad (-0.2\sigma)$	$10^9 A_s$	2.085	$2.085^{+0.068}_{-0.068} \quad (-0.2\sigma)$	$D_M(0.51)$	1981	$2022^{+110}_{-74} \quad (+0.0\sigma)$
n_s	0.9630	$0.961^{+0.012}_{-0.013} \quad (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8794	$1.881^{+0.027}_{-0.027} \quad (-0.3\sigma)$	$H(0.61)$	95.32	$94.5^{+1.5}_{-2.2} \quad (-0.0\sigma)$
y_{cal}	1.00036	$1.0004^{+0.0049}_{-0.0050} \quad (-0.0\sigma)$	D_{40}	1231.1	$1233^{+31}_{-29} \quad (-0.1\sigma)$	$D_M(0.61)$	2306	$2350^{+110}_{-80} \quad (+0.0\sigma)$
A_{100}^{PS}	255	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	5708	$5706^{+81}_{-82} \quad (-0.1\sigma)$	$H(2.33)$	236.05	$237.5^{+4.0}_{-3.5} \quad (-0.1\sigma)$
A_{143}^{tSZ}	4.81	$< 7.35 \quad (-0.7\sigma)$	D_{810}	2531.2	$2532^{+27}_{-28} \quad (-0.4\sigma)$	$D_M(2.33)$	5763	$5807^{+110}_{-75} \quad (+0.0\sigma)$
A^{kSZ}	2.7	—	D_{1420}	812.6	$812^{+10}_{-10} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	0.4625	$0.458^{+0.025}_{-0.027} \quad (-0.2\sigma)$
A_{100}^{dust}	0.995	$1.00^{+0.39}_{-0.38}$	D_{2000}	229.07	$228.5^{+3.8}_{-4.0} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	0.759	$0.724^{+0.049}_{-0.084} \quad (-0.1\sigma)$
A_{143}^{power}	11.42	$10.9^{+4.9}_{-4.7}$	$n_{s,0.002}$	0.9630	$0.961^{+0.012}_{-0.013} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4809	$0.471^{+0.027}_{-0.033} \quad (-0.1\sigma)$
A_{217}^{power}	9.65	$8.5^{+5.3}_{-4.6}$	Y_P	0.245296	$0.24525^{+0.00021}_{-0.00023} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.673	$0.640^{+0.045}_{-0.078} \quad (-0.1\sigma)$
$A_{143 \times 217}^{power}$	5.97	$4.7^{+4.7}_{-4.6}$	Y_P^{BBN}	0.246622	$0.24657^{+0.00021}_{-0.00023} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4795	$0.467^{+0.027}_{-0.036} \quad (-0.1\sigma)$
γ_{143}^{power}	1.29	$1.33^{+0.96}_{-0.80}$	$10^5 D/H$	2.632	$2.650^{+0.095}_{-0.093} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	0.630	$0.598^{+0.042}_{-0.074} \quad (-0.1\sigma)$
γ_{217}^{power}	1.41	—	Age/Gyr	13.796	$13.90^{+0.26}_{-0.17} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4744	$0.461^{+0.027}_{-0.038} \quad (-0.1\sigma)$
$\gamma_{143 \times 217}^{power}$	1.32	$1.30^{+1.2}_{-0.97}$	z_*	1090.23	$1090.45^{+0.99}_{-0.94} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	0.599	$0.569^{+0.040}_{-0.072} \quad (-0.1\sigma)$
c_{100}	0.99792	$0.9978^{+0.0021}_{-0.0021} \quad (-3.0\sigma)$	r_*	144.60	$144.44^{+0.96}_{-1.0} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.3011	$0.287^{+0.019}_{-0.034} \quad (-0.1\sigma)$
c_{217}	0.99896	$0.9994^{+0.0032}_{-0.0028} \quad (+1.9\sigma)$	$100\theta_*$	1.04102	$1.04092^{+0.00095}_{-0.00096} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	0.3109	$0.295^{+0.022}_{-0.039} \quad (-0.1\sigma)$
H_0	67.60	$65.7^{+3.5}_{-4.8} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.890	$13.876^{+0.088}_{-0.093} \quad (+0.1\sigma)$	f_{2000}^{143}	23.3	$24^{+7}_{-6} \quad (-2.5\sigma)$
Ω_Λ	0.689	$0.663^{+0.049}_{-0.069} \quad (+0.0\sigma)$	z_{drag}	1059.36	$1059.23^{+0.93}_{-0.98} \quad (-0.1\sigma)$	f_{2000}^{217}	16.97	$17.4^{+4.3}_{-4.1} \quad (-45.5\sigma)$
Ω_m	0.311	$0.337^{+0.069}_{-0.049} \quad (-0.0\sigma)$	r_{drag}	147.34	$147.21^{+0.94}_{-0.98} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	11.23	$11.7^{+4.8}_{-4.4} \quad (-10.5\sigma)$
$\Omega_m h^2$	0.1422	$0.1448^{+0.0069}_{-0.0059} \quad (-0.0\sigma)$	k_D	0.14041	$0.1405^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	χ_{simall}^2	395.81	$396.9 \quad (\nu: 1.3) \quad (-0.0\sigma)$
$\Omega_\nu h^2$	0.00000	$< 0.00621 \quad (+0.0\sigma)$	$100\theta_D$	0.16108	$0.16115^{+0.00054}_{-0.00051} \quad (+0.1\sigma)$	χ_{lowl}^2	23.69	$23.9 \quad (\nu: 0.9) \quad (-0.0\sigma)$
$\Omega_m h^3$	0.09615	$0.0951^{+0.0019}_{-0.0029} \quad (-0.1\sigma)$	z_{eq}	3399	$3415^{+99}_{-95} \quad (-0.1\sigma)$	$\chi_{CamSpec}^2$	6703.6	$6717.4 \quad (\nu: 14.8)$
σ_8	0.822	$0.786^{+0.053}_{-0.087} \quad (-0.1\sigma)$	k_{eq}	0.010374	$0.01042^{+0.00030}_{-0.00029} \quad (-0.1\sigma)$	χ_{prior}^2	1.5	$5.3 \quad (\nu: 4.2) \quad (-0.6\sigma)$
S_8	0.837	$0.831^{+0.049}_{-0.050} \quad (-0.1\sigma)$	$100\theta_{eq}$	0.8131	$0.810^{+0.018}_{-0.018} \quad (+0.1\sigma)$	χ_{CMB}^2	7123.1	$7138.2 \quad (\nu: 15.1) \quad (+1023.1\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4586	$0.455^{+0.027}_{-0.028} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	0.4495	$0.4480^{+0.0093}_{-0.0092} \quad (+0.1\sigma)$			

Best-fit $\chi_{eff}^2 = 7124.58$; $\Delta\chi_{eff}^2 = -0.53$; $\bar{\chi}_{eff}^2 = 7143.49$; $\Delta\bar{\chi}_{eff}^2 = 1.29$; $R - 1 = 0.00791$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.81 (Δ 0.03) commander_dx12_v3.2.29: 23.69 (Δ -0.02) CamSpec like_10.7cleaned: 6703.61 (Δ -0.82)

6.68 base_mnu_lensing_lenspriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02221	$0.02220^{+0.00099}_{-0.00099}$ (+0.6 σ)	D_{40}	1540	1082^{+500}_{-400} (−10.1 σ)	$H(0.15)$	92.1	77^{+30}_{-20} (+3.0 σ)
$\Omega_c h^2$	0.127	$0.168^{+0.065}_{-0.064}$ (+21.0 σ)	D_{220}	6680	4588^{+3000}_{-2000} (−27.5 σ)	$D_M(0.15)$	501	655^{+300}_{-200} (−0.2 σ)
$100\theta_{MC}$	1.118	$1.11^{+0.12}_{-0.12}$ (+139.1 σ)	D_{810}	2684	1908^{+1000}_{-1000} (−45.6 σ)	$H(0.38)$	101.0	91^{+30}_{-20} (+6.7 σ)
Σm_ν [eV]	0.55	—	D_{1420}	733	564^{+400}_{-300} (−49.1 σ)	$D_M(0.38)$	1217	1509^{+600}_{-500} (−1.4 σ)
$\ln(10^{10} A_s)$	3.238	$2.96^{+0.36}_{-0.36}$ (−5.0 σ)	D_{2000}	210	167^{+100}_{-100} (−33.0 σ)	$H(0.51)$	107.1	100^{+30}_{-30} (+10.2 σ)
n_s	0.9607	$0.960^{+0.039}_{-0.040}$ (−0.3 σ)	$n_{s,0.002}$	0.9607	$0.960^{+0.039}_{-0.040}$ (−0.3 σ)	$D_M(0.51)$	1592	1927^{+700}_{-600} (−2.1 σ)
H_0	87.6	—	Y_P	0.245330	$0.24531^{+0.00043}_{-0.00043}$ (+0.5 σ)	$H(0.61)$	112.3	108^{+30}_{-30} (+14.1 σ)
Ω_Λ	0.80	$0.45^{+0.41}_{-0.68}$ (−6.7 σ)	Y_P^{BBN}	0.246656	$0.24664^{+0.00043}_{-0.00043}$ (+0.5 σ)	$D_M(0.61)$	1866	2221^{+700}_{-600} (−2.6 σ)
Ω_m	0.20	$0.55^{+0.67}_{-0.41}$ (+6.7 σ)	$10^5 D/H$	2.616	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$H(2.33)$	252	284^{+60}_{-60} (+24.1 σ)
$\Omega_m h^2$	0.155	$0.213^{+0.088}_{-0.085}$ (+20.8 σ)	Age/Gyr	11.97	$12.5^{+3.3}_{-2.8}$ (−12.3 σ)	$D_M(2.33)$	4976	5207^{+1000}_{-1000} (−12.2 σ)
$\Omega_\nu h^2$	0.0059	< 0.0487 (+10.8 σ)	z_*	1090.9	$1094.9^{+6.2}_{-6.3}$ (+9.1 σ)	$f\sigma_8(0.15)$	0.406	$0.457^{+0.058}_{-0.071}$ (−0.3 σ)
$\Omega_m h^3$	0.136	$0.147^{+0.11}_{-0.087}$ (+40.8 σ)	r_*	142.6	133^{+20}_{-10} (−22.5 σ)	$\sigma_8(0.15)$	0.816	$0.63^{+0.21}_{-0.20}$ (−2.6 σ)
σ_8	0.868	$0.70^{+0.20}_{-0.19}$ (−2.5 σ)	$100\theta_*$	1.118	$1.11^{+0.12}_{-0.13}$ (+150.1 σ)	$f\sigma_8(0.38)$	0.451	$0.440^{+0.048}_{-0.058}$ (−2.3 σ)
S_8	0.713	$0.87^{+0.22}_{-0.20}$ (+1.3 σ)	$D_M(z_*)/\text{Gpc}$	12.75	$12.0^{+2.7}_{-2.3}$ (−39.5 σ)	$\sigma_8(0.38)$	0.739	$0.55^{+0.21}_{-0.20}$ (−2.7 σ)
$\sigma_8 \Omega_m^{0.5}$	0.390	$0.47^{+0.12}_{-0.11}$ (+1.3 σ)	z_{drag}	1060.2	$1063.4^{+5.6}_{-5.6}$ (+8.7 σ)	$f\sigma_8(0.51)$	0.465	$0.427^{+0.061}_{-0.082}$ (−2.7 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5820	$0.569^{+0.045}_{-0.043}$ (−1.6 σ)	r_{drag}	145.3	135^{+20}_{-10} (−23.7 σ)	$\sigma_8(0.51)$	0.699	$0.51^{+0.21}_{-0.20}$ (−2.7 σ)
$\sigma_8/h^{0.5}$	0.927	$0.85^{+0.13}_{-0.11}$ (−3.7 σ)	k_D	0.1428	$0.155^{+0.019}_{-0.019}$ (+27.9 σ)	$f\sigma_8(0.61)$	0.470	$0.416^{+0.073}_{-0.095}$ (−2.8 σ)
$r_{\text{drag}} h$	127.2	93^{+40}_{-40} (−1.1 σ)	$100\theta_D$	0.1726	$0.170^{+0.017}_{-0.018}$ (+33.6 σ)	$\sigma_8(0.61)$	0.670	$0.49^{+0.20}_{-0.19}$ (−2.7 σ)
$\langle d^2 \rangle^{1/2}$	2.516	$2.50^{+0.12}_{-0.11}$ (+1.2 σ)	z_{eq}	3569	4534^{+2000}_{-2000} (+22.4 σ)	$f\sigma_8(2.33)$	0.351	$0.25^{+0.11}_{-0.10}$ (−2.6 σ)
z_{re}	8.12	$8.9^{+1.3}_{-1.4}$ (+1.7 σ)	k_{eq}	0.01090	$0.0139^{+0.0049}_{-0.0048}$ (+22.8 σ)	$\sigma_8(2.33)$	0.366	$0.25^{+0.13}_{-0.11}$ (−2.6 σ)
$10^9 A_s$	2.55	$1.96^{+0.74}_{-0.66}$ (−3.8 σ)	$100\theta_{\text{eq}}$	0.843	$0.72^{+0.15}_{-0.13}$ (−9.3 σ)	χ^2_{lensing}	7.40	10.3 (ν : 2.4)
$10^9 A_s e^{-2\tau}$	2.28	$1.76^{+0.66}_{-0.59}$ (−9.2 σ)	$100\theta_{s,\text{eq}}$	0.467	$0.403^{+0.080}_{-0.069}$ (−9.3 σ)	χ^2_{prior}	0.00	2.0 (ν : 2.1) (−1.5 σ)

Best-fit $\chi^2_{\text{eff}} = 7.40$; $\Delta\chi^2_{\text{eff}} = -0.09$; $\bar{\chi}^2_{\text{eff}} = 12.38$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.81$; $R - 1 = 0.00245$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.40 (Δ -0.09)

6.69 base_mnu_lensing_lenspriors_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02225	$0.0222^{+0.0010}_{-0.0010}$ (+0.7 σ)	D_{220}	6603	4854^{+2000}_{-2000} (−21.0 σ)	$H(0.38)$	84.0	102^{+20}_{-20} (+14.9 σ)
$\Omega_c h^2$	0.116	$0.168^{+0.061}_{-0.062}$ (+21.4 σ)	D_{810}	2872	1826^{+1000}_{-1000} (−51.6 σ)	$D_M(0.38)$	1506	1255^{+300}_{-200} (−7.8 σ)
$100\theta_{MC}$	1.048	$1.155^{+0.096}_{-0.12}$ (+225.2 σ)	D_{1420}	916	527^{+500}_{-300} (−56.3 σ)	$H(0.51)$	90.6	110^{+20}_{-20} (+19.2 σ)
Σm_ν [eV]	0.31	—	D_{2000}	258	152^{+100}_{-80} (−40.8 σ)	$D_M(0.51)$	1952	1627^{+400}_{-300} (−8.5 σ)
$\ln(10^{10} A_s)$	3.166	$3.05^{+0.24}_{-0.22}$ (+0.4 σ)	$n_{s,0.002}$	0.9593	$0.960^{+0.040}_{-0.040}$ (−0.1 σ)	$H(0.61)$	96.2	117^{+20}_{-20} (+24.1 σ)
n_s	0.9593	$0.960^{+0.040}_{-0.040}$ (−0.1 σ)	Y_P	0.245348	$0.24532^{+0.00043}_{-0.00044}$ (+0.6 σ)	$D_M(0.61)$	2274	1895^{+400}_{-300} (−9.1 σ)
H_0	68.9	> 67.5 (+8.5 σ)	Y_P^{BBN}	0.246675	$0.24664^{+0.00044}_{-0.00044}$ (+0.6 σ)	$H(2.33)$	236	287^{+50}_{-60} (+25.9 σ)
Ω_Λ	0.7016	$0.700^{+0.041}_{-0.043}$ (+1.2 σ)	$10^5 D/H$	2.607	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$D_M(2.33)$	5719	4765^{+1000}_{-800} (−21.2 σ)
Ω_m	0.2984	$0.300^{+0.043}_{-0.041}$ (−1.2 σ)	Age/Gyr	13.69	$11.4^{+2.6}_{-2.0}$ (−21.8 σ)	$f\sigma_8(0.15)$	0.4427	$0.433^{+0.036}_{-0.039}$ (−2.1 σ)
$\Omega_m h^2$	0.142	$0.212^{+0.082}_{-0.081}$ (+20.7 σ)	z_*	1089.8	$1094.9^{+5.9}_{-6.1}$ (+9.1 σ)	$\sigma_8(0.15)$	0.736	$0.717^{+0.068}_{-0.066}$ (−0.3 σ)
$\Omega_\nu h^2$	0.0033	< 0.0457 (+10.3 σ)	r_*	145.5	133^{+10}_{-10} (−22.7 σ)	$f\sigma_8(0.38)$	0.4643	$0.455^{+0.035}_{-0.039}$ (−1.3 σ)
$\Omega_m h^3$	0.098	$0.182^{+0.10}_{-0.098}$ (+69.1 σ)	$100\theta_*$	1.049	$1.156^{+0.096}_{-0.12}$ (+242.6 σ)	$\sigma_8(0.38)$	0.655	$0.638^{+0.063}_{-0.061}$ (−0.1 σ)
σ_8	0.795	$0.774^{+0.071}_{-0.070}$ (−0.4 σ)	$D_M(z_*)/\text{Gpc}$	13.87	$11.6^{+2.6}_{-2.0}$ (−49.5 σ)	$f\sigma_8(0.51)$	0.4647	$0.456^{+0.036}_{-0.039}$ (−0.9 σ)
S_8	0.793	$0.772^{+0.067}_{-0.071}$ (−2.5 σ)	z_{drag}	1059.4	$1063.4^{+5.1}_{-5.6}$ (+8.7 σ)	$\sigma_8(0.51)$	0.614	$0.598^{+0.060}_{-0.058}$ (−0.1 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4341	$0.423^{+0.037}_{-0.039}$ (−2.5 σ)	r_{drag}	148.2	135^{+20}_{-10} (−24.0 σ)	$f\sigma_8(0.61)$	0.4611	$0.452^{+0.036}_{-0.039}$ (−0.6 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5874	$0.572^{+0.046}_{-0.050}$ (−1.4 σ)	k_D	0.1397	$0.155^{+0.017}_{-0.018}$ (+28.0 σ)	$\sigma_8(0.61)$	0.585	$0.570^{+0.058}_{-0.056}$ (−0.0 σ)
$\sigma_8/h^{0.5}$	0.957	$0.85^{+0.13}_{-0.12}$ (−3.5 σ)	$100\theta_D$	0.1622	$0.177^{+0.013}_{-0.017}$ (+58.6 σ)	$f\sigma_8(2.33)$	0.2992	$0.296^{+0.030}_{-0.029}$ (+0.5 σ)
$r_{\text{drag}} h$	102.1	113^{+12}_{-14} (+4.8 σ)	z_{eq}	3307	4555^{+1000}_{-1000} (+22.8 σ)	$\sigma_8(2.33)$	0.3069	$0.301^{+0.033}_{-0.031}$ (+0.3 σ)
$\langle d^2 \rangle^{1/2}$	2.517	$2.49^{+0.11}_{-0.11}$ (+1.0 σ)	k_{eq}	0.01010	$0.0140^{+0.0045}_{-0.0046}$ (+23.2 σ)	χ^2_{lensing}	7.49	10.2 (ν : 2.2)
z_{re}	7.77	$8.9^{+1.2}_{-1.4}$ (+1.8 σ)	$100\theta_{\text{eq}}$	0.837	$0.747^{+0.12}_{-0.098}$ (−6.8 σ)	χ^2_{JLA}	1034.73	1035.7 (ν : 0.9)
$10^9 A_s$	2.370	$2.12^{+0.51}_{-0.46}$ (+0.8 σ)	$100\theta_{s,\text{eq}}$	0.462	$0.416^{+0.060}_{-0.051}$ (−6.6 σ)	χ^2_{prior}	0.01	2.0 (ν : 2.1) (−1.5 σ)
$10^9 A_s e^{-2\tau}$	2.123	$1.90^{+0.46}_{-0.41}$ (+0.9 σ)	$H(0.15)$	74.1	90^{+20}_{-20} (+10.3 σ)			
D_{40}	1421	1182^{+400}_{-300} (−3.4 σ)	$D_M(0.15)$	630	525^{+100}_{-90} (−6.7 σ)			

Best-fit $\chi^2_{\text{eff}} = 1042.24$; $\Delta\chi^2_{\text{eff}} = -0.09$; $\bar{\chi}^2_{\text{eff}} = 1047.91$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.62$; $R - 1 = 0.00847$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.49 (Δ -0.10) SN - JLA Pantheon18: 1034.73 (Δ 0.00)

6.70 base_mnu_lensing_lenspriors_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.0010} \quad (+0.6\sigma)$	D_{40}	$1101^{+600}_{-500} \quad (-8.8\sigma)$	$H(0.15)$	$77^{+30}_{-20} \quad (+3.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.166^{+0.064}_{-0.065} \quad (+20.2\sigma)$	D_{220}	$4687^{+3000}_{-2000} \quad (-25.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$653^{+300}_{-200} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12} \quad (+141.0\sigma)$	D_{810}	$1939^{+1000}_{-1000} \quad (-43.3\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$572^{+400}_{-300} \quad (-47.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1505^{+600}_{-500} \quad (-1.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.97^{+0.37}_{-0.36} \quad (-4.2\sigma)$	D_{2000}	$169^{+100}_{-100} \quad (-31.8\sigma)$	$H(0.51)$	$100^{+30}_{-30} \quad (+10.3\sigma)$
n_{s}	$0.959^{+0.040}_{-0.041} \quad (-0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.040}_{-0.041} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1921^{+700}_{-600} \quad (-2.2\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$H(0.61)$	$108^{+30}_{-30} \quad (+14.1\sigma)$
Ω_{Λ}	$0.46^{+0.42}_{-0.69} \quad (-6.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2215^{+700}_{-600} \quad (-2.7\sigma)$
Ω_{m}	$0.54^{+0.69}_{-0.42} \quad (+6.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$283^{+60}_{-60} \quad (+23.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.212^{+0.088}_{-0.087} \quad (+20.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+3.2}_{-2.8} \quad (-12.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5203^{+1000}_{-1000} \quad (-12.3\sigma)$
$\Omega_{\nu}h^2$	$< 0.0489 \quad (+11.4\sigma)$	z_{*}	$1094.8^{+6.2}_{-6.4} \quad (+9.0\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.053}_{-0.069} \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.146^{+0.11}_{-0.087} \quad (+40.7\sigma)$	r_{*}	$133^{+20}_{-10} \quad (-22.0\sigma)$	$\sigma_8(0.15)$	$0.62^{+0.20}_{-0.20} \quad (-2.9\sigma)$
σ_8	$0.69^{+0.19}_{-0.19} \quad (-2.8\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.12} \quad (+152.1\sigma)$	$f\sigma_8(0.38)$	$0.433^{+0.041}_{-0.054} \quad (-2.8\sigma)$
S_8	$0.85^{+0.22}_{-0.19} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.0^{+2.7}_{-2.3} \quad (-39.3\sigma)$	$\sigma_8(0.38)$	$0.55^{+0.21}_{-0.20} \quad (-2.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.47^{+0.12}_{-0.11} \quad (+0.6\sigma)$	z_{drag}	$1063.3^{+5.6}_{-5.8} \quad (+8.6\sigma)$	$f\sigma_8(0.51)$	$0.420^{+0.054}_{-0.078} \quad (-3.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.559^{+0.035}_{-0.034} \quad (-2.0\sigma)$	r_{drag}	$136^{+20}_{-10} \quad (-23.2\sigma)$	$\sigma_8(0.51)$	$0.51^{+0.21}_{-0.19} \quad (-2.9\sigma)$
$\sigma_8/h^{0.5}$	$0.83^{+0.12}_{-0.10} \quad (-4.0\sigma)$	k_{D}	$0.155^{+0.019}_{-0.019} \quad (+27.4\sigma)$	$f\sigma_8(0.61)$	$0.410^{+0.066}_{-0.091} \quad (-3.2\sigma)$
$r_{\mathrm{drag}}h$	$93^{+40}_{-40} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+34.0\sigma)$	$\sigma_8(0.61)$	$0.48^{+0.20}_{-0.19} \quad (-2.9\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.12}_{-0.11} \quad (+1.3\sigma)$	z_{eq}	$4494^{+2000}_{-2000} \quad (+21.6\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.8\sigma)$
z_{re}	$8.9^{+1.3}_{-1.4} \quad (+1.7\sigma)$	k_{eq}	$0.0138^{+0.0048}_{-0.0048} \quad (+22.1\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.7\sigma)$
10^9A_{s}	$1.99^{+0.77}_{-0.68} \quad (-3.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.73^{+0.16}_{-0.13} \quad (-8.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.6 \quad (\nu: 2.3)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.78^{+0.69}_{-0.61} \quad (-7.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.407^{+0.083}_{-0.070} \quad (-8.6\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.2) \quad (-1.4\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 14.65; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.76; R - 1 = 0.00247$$

6.71 base_mnu_lensing_lenspriors_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.00099}$ (+0.6 σ)	D_{40}	1089^{+600}_{-500} (−9.6 σ)	$H(0.15)$	77^{+30}_{-30} (+3.0 σ)
$\Omega_{\mathrm{c}}h^2$	$0.168^{+0.072}_{-0.068}$ (+21.2 σ)	D_{220}	4631^{+3000}_{-2000} (−26.4 σ)	$D_{\mathrm{M}}(0.15)$	655^{+300}_{-200} (−0.2 σ)
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.13}$ (+138.8 σ)	D_{810}	1919^{+1000}_{-1000} (−44.8 σ)	$H(0.38)$	91^{+30}_{-30} (+6.8 σ)
Σm_{ν} [eV]	—	D_{1420}	568^{+400}_{-300} (−48.3 σ)	$D_{\mathrm{M}}(0.38)$	1509^{+600}_{-500} (−1.4 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$2.96^{+0.40}_{-0.39}$ (−4.9 σ)	D_{2000}	169^{+100}_{-100} (−32.1 σ)	$H(0.51)$	100^{+30}_{-30} (+10.3 σ)
n_{s}	$0.959^{+0.040}_{-0.040}$ (−0.3 σ)	$n_{\mathrm{s},0.002}$	$0.959^{+0.040}_{-0.040}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1926^{+700}_{-600} (−2.1 σ)
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043}$ (+0.5 σ)	$H(0.61)$	108^{+30}_{-30} (+14.1 σ)
Ω_{Λ}	$0.45^{+0.42}_{-0.69}$ (−6.7 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00043}$ (+0.5 σ)	$D_{\mathrm{M}}(0.61)$	2220^{+800}_{-600} (−2.6 σ)
Ω_{m}	$0.55^{+0.69}_{-0.42}$ (+6.7 σ)	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$H(2.33)$	284^{+60}_{-60} (+24.2 σ)
$\Omega_{\mathrm{m}}h^2$	$0.213^{+0.095}_{-0.089}$ (+20.9 σ)	Age/Gyr	$12.5^{+3.4}_{-2.9}$ (−12.3 σ)	$D_{\mathrm{M}}(2.33)$	5208^{+1000}_{-1000} (−12.2 σ)
$\Omega_{\nu}h^2$	< 0.0489 (+10.8 σ)	z_{*}	$1094.9^{+6.7}_{-6.5}$ (+9.2 σ)	$f\sigma_8(0.15)$	$0.457^{+0.060}_{-0.074}$ (−0.3 σ)
$\Omega_{\mathrm{m}}h^3$	$0.147^{+0.11}_{-0.090}$ (+41.3 σ)	r_{*}	133^{+20}_{-20} (−22.5 σ)	$\sigma_8(0.15)$	$0.63^{+0.21}_{-0.20}$ (−2.6 σ)
σ_8	$0.70^{+0.20}_{-0.19}$ (−2.5 σ)	$100\theta_{*}$	$1.11^{+0.12}_{-0.13}$ (+149.8 σ)	$f\sigma_8(0.38)$	$0.440^{+0.050}_{-0.059}$ (−2.3 σ)
S_8	$0.87^{+0.23}_{-0.20}$ (+1.3 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.0^{+2.8}_{-2.4}$ (−39.4 σ)	$\sigma_8(0.38)$	$0.55^{+0.21}_{-0.20}$ (−2.7 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.47^{+0.13}_{-0.11}$ (+1.3 σ)	z_{drag}	$1063.4^{+5.9}_{-5.8}$ (+8.7 σ)	$f\sigma_8(0.51)$	$0.427^{+0.063}_{-0.083}$ (−2.7 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.569^{+0.047}_{-0.045}$ (−1.6 σ)	r_{drag}	135^{+20}_{-20} (−23.7 σ)	$\sigma_8(0.51)$	$0.51^{+0.21}_{-0.20}$ (−2.7 σ)
$\sigma_8/h^{0.5}$	$0.85^{+0.13}_{-0.11}$ (−3.7 σ)	k_{D}	$0.155^{+0.020}_{-0.020}$ (+28.0 σ)	$f\sigma_8(0.61)$	$0.416^{+0.074}_{-0.096}$ (−2.8 σ)
$r_{\mathrm{drag}}h$	93^{+40}_{-40} (−1.1 σ)	$100\theta_{\mathrm{D}}$	$0.170^{+0.018}_{-0.018}$ (+33.6 σ)	$\sigma_8(0.61)$	$0.49^{+0.20}_{-0.19}$ (−2.6 σ)
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.15}_{-0.14}$ (+1.3 σ)	z_{eq}	4547^{+2000}_{-2000} (+22.6 σ)	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10}$ (−2.6 σ)
z_{re}	$8.9^{+1.4}_{-1.4}$ (+1.7 σ)	k_{eq}	$0.0140^{+0.0054}_{-0.0051}$ (+23.1 σ)	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11}$ (−2.6 σ)
10^9A_{s}	$1.97^{+0.82}_{-0.73}$ (−3.5 σ)	$100\theta_{\mathrm{eq}}$	$0.72^{+0.16}_{-0.14}$ (−9.2 σ)	$\chi^2_{\mathrm{lensing}}$	10.3 (ν : 2.3)
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.77^{+0.73}_{-0.65}$ (−8.6 σ)	$100\theta_{\mathrm{s,eq}}$	$0.404^{+0.085}_{-0.075}$ (−9.3 σ)	χ^2_{prior}	2.0 (ν : 2.1) (−1.5 σ)

$\bar{\chi}^2_{\mathrm{eff}} = 12.33$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.78$; $R - 1 = 0.00626$

6.72 base_mnu_lensing_lenspriors_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.00099} \quad (+0.6\sigma)$	D_{40}	$1090^{+500}_{-400} \quad (-9.5\sigma)$	$H(0.15)$	$76^{+30}_{-20} \quad (+2.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.166^{+0.067}_{-0.062} \quad (+20.1\sigma)$	D_{220}	$4639^{+3000}_{-2000} \quad (-26.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$658^{+300}_{-200} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12} \quad (+131.5\sigma)$	D_{810}	$1937^{+1000}_{-1000} \quad (-43.5\sigma)$	$H(0.38)$	$90^{+30}_{-20} \quad (+6.4\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$573^{+400}_{-300} \quad (-47.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1517^{+600}_{-500} \quad (-1.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.96^{+0.35}_{-0.36} \quad (-4.8\sigma)$	D_{2000}	$170^{+100}_{-100} \quad (-31.5\sigma)$	$H(0.51)$	$100^{+30}_{-20} \quad (+9.7\sigma)$
n_{s}	$0.959^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1937^{+700}_{-600} \quad (-1.8\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$H(0.61)$	$107^{+30}_{-30} \quad (+13.3\sigma)$
Ω_{Λ}	$0.46^{+0.41}_{-0.67} \quad (-6.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2233^{+700}_{-600} \quad (-2.3\sigma)$
Ω_{m}	$0.54^{+0.67}_{-0.41} \quad (+6.5\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$281^{+60}_{-60} \quad (+22.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.209^{+0.091}_{-0.081} \quad (+19.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.6^{+3.3}_{-2.8} \quad (-11.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5241^{+1000}_{-1000} \quad (-11.5\sigma)$
$\Omega_{\nu}h^2$	$< 0.0472 \quad (+9.9\sigma)$	z_{*}	$1094.6^{+6.4}_{-6.0} \quad (+8.6\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.059}_{-0.071} \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.143^{+0.11}_{-0.085} \quad (+38.3\sigma)$	r_{*}	$134^{+15}_{-14} \quad (-21.4\sigma)$	$\sigma_8(0.15)$	$0.64^{+0.22}_{-0.20} \quad (-2.4\sigma)$
σ_8	$0.70^{+0.20}_{-0.19} \quad (-2.3\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.12} \quad (+141.8\sigma)$	$f\sigma_8(0.38)$	$0.443^{+0.048}_{-0.058} \quad (-2.0\sigma)$
S_8	$0.87^{+0.23}_{-0.20} \quad (+1.4\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.1^{+2.6}_{-2.4} \quad (-37.6\sigma)$	$\sigma_8(0.38)$	$0.56^{+0.21}_{-0.20} \quad (-2.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.48^{+0.12}_{-0.11} \quad (+1.4\sigma)$	z_{drag}	$1063.2^{+5.7}_{-5.4} \quad (+8.2\sigma)$	$f\sigma_8(0.51)$	$0.431^{+0.061}_{-0.082} \quad (-2.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.573^{+0.044}_{-0.043} \quad (-1.4\sigma)$	r_{drag}	$136^{+20}_{-10} \quad (-22.6\sigma)$	$\sigma_8(0.51)$	$0.52^{+0.21}_{-0.20} \quad (-2.5\sigma)$
$\sigma_8/h^{0.5}$	$0.85^{+0.12}_{-0.12} \quad (-3.4\sigma)$	k_{D}	$0.154^{+0.019}_{-0.018} \quad (+26.4\sigma)$	$f\sigma_8(0.61)$	$0.420^{+0.073}_{-0.095} \quad (-2.6\sigma)$
$r_{\mathrm{drag}}h$	$93^{+40}_{-40} \quad (-1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+31.8\sigma)$	$\sigma_8(0.61)$	$0.49^{+0.21}_{-0.19} \quad (-2.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.49^{+0.12}_{-0.12} \quad (+1.2\sigma)$	z_{eq}	$4487^{+2000}_{-1000} \quad (+21.4\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.5\sigma)$
z_{re}	$8.8^{+1.4}_{-1.3} \quad (+1.6\sigma)$	k_{eq}	$0.0138^{+0.0050}_{-0.0046} \quad (+21.8\sigma)$	$\sigma_8(2.33)$	$0.26^{+0.13}_{-0.11} \quad (-2.4\sigma)$
10^9A_{s}	$1.97^{+0.73}_{-0.67} \quad (-3.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.73^{+0.15}_{-0.13} \quad (-9.1\sigma)$	$\chi^2_{\mathrm{lensing}}$	$8.2 \quad (\nu: 2.6)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.77^{+0.65}_{-0.60} \quad (-8.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.404^{+0.079}_{-0.071} \quad (-9.1\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.1) \quad (-1.5\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 10.23$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.76$; $R - 1 = 0.00322$

6.73 base_mnu_lensing_lenspriors_post_ptt

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02219^{+0.00098}_{-0.00096} \quad (+0.6\sigma)$	D_{40}	$1245^{+600}_{-500} \quad (+0.7\sigma)$	$H(0.15)$	$76^{+30}_{-30} \quad (+2.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.153^{+0.065}_{-0.063} \quad (+14.4\sigma)$	D_{220}	$5459^{+4000}_{-3000} \quad (-6.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$660^{+300}_{-200} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.10^{+0.13}_{-0.14} \quad (+119.9\sigma)$	D_{810}	$2219^{+1000}_{-1000} \quad (-23.1\sigma)$	$H(0.38)$	$90^{+30}_{-30} \quad (+5.7\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$659^{+400}_{-400} \quad (-30.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+600}_{-500} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.08^{+0.36}_{-0.37} \quad (+2.5\sigma)$	D_{2000}	$200^{+200}_{-100} \quad (-15.5\sigma)$	$H(0.51)$	$98^{+30}_{-30} \quad (+8.5\sigma)$
n_{s}	$0.959^{+0.038}_{-0.042} \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.038}_{-0.042} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1954^{+700}_{-600} \quad (-1.5\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00042}_{-0.00042} \quad (+0.5\sigma)$	$H(0.61)$	$105^{+30}_{-30} \quad (+11.6\sigma)$
Ω_{Λ}	$0.49^{+0.39}_{-0.63} \quad (-5.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00042} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2255^{+800}_{-700} \quad (-1.9\sigma)$
Ω_{m}	$0.51^{+0.63}_{-0.39} \quad (+5.5\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$274^{+60}_{-60} \quad (+19.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.198^{+0.090}_{-0.085} \quad (+16.3\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.8^{+3.8}_{-3.0} \quad (-9.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5336^{+2000}_{-1000} \quad (-9.6\sigma)$
$\Omega_{\nu} h^2$	$< 0.0481 \quad (+10.8\sigma)$	z_{*}	$1093.8^{+6.4}_{-6.4} \quad (+6.8\sigma)$	$f\sigma_8(0.15)$	$0.441^{+0.065}_{-0.076} \quad (-1.5\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.137^{+0.11}_{-0.089} \quad (+32.9\sigma)$	r_{*}	$136^{+20}_{-20} \quad (-16.7\sigma)$	$\sigma_8(0.15)$	$0.63^{+0.21}_{-0.20} \quad (-2.8\sigma)$
σ_8	$0.69^{+0.20}_{-0.19} \quad (-2.7\sigma)$	$100\theta_{*}$	$1.10^{+0.13}_{-0.14} \quad (+129.5\sigma)$	$f\sigma_8(0.38)$	$0.429^{+0.046}_{-0.052} \quad (-3.0\sigma)$
S_8	$0.83^{+0.22}_{-0.21} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.4^{+3.1}_{-2.6} \quad (-31.2\sigma)$	$\sigma_8(0.38)$	$0.55^{+0.21}_{-0.20} \quad (-2.8\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.45^{+0.12}_{-0.11} \quad (-0.2\sigma)$	z_{drag}	$1062.5^{+5.5}_{-5.9} \quad (+6.8\sigma)$	$f\sigma_8(0.51)$	$0.419^{+0.058}_{-0.075} \quad (-3.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.553^{+0.047}_{-0.044} \quad (-2.3\sigma)$	r_{drag}	$138^{+20}_{-20} \quad (-17.6\sigma)$	$\sigma_8(0.51)$	$0.51^{+0.21}_{-0.20} \quad (-2.7\sigma)$
$\sigma_8/h^{0.5}$	$0.84^{+0.13}_{-0.12} \quad (-3.9\sigma)$	k_{D}	$0.152^{+0.019}_{-0.020} \quad (+21.2\sigma)$	$f\sigma_8(0.61)$	$0.409^{+0.069}_{-0.088} \quad (-3.3\sigma)$
$r_{\mathrm{drag}} h$	$95^{+40}_{-40} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.169^{+0.018}_{-0.020} \quad (+28.7\sigma)$	$\sigma_8(0.61)$	$0.49^{+0.20}_{-0.19} \quad (-2.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.57^{+0.14}_{-0.14} \quad (+3.2\sigma)$	z_{eq}	$4185^{+2000}_{-2000} \quad (+15.4\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.11} \quad (-2.6\sigma)$
z_{re}	$8.7^{+1.4}_{-1.5} \quad (+1.4\sigma)$	k_{eq}	$0.0129^{+0.0049}_{-0.0047} \quad (+15.9\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.5\sigma)$
$10^9 A_{\mathrm{s}}$	$2.22^{+0.89}_{-0.75} \quad (+3.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.76^{+0.17}_{-0.14} \quad (-5.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$11.5 \quad (\nu: 2.0)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.99^{+0.79}_{-0.67} \quad (+7.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.423^{+0.085}_{-0.073} \quad (-5.2\sigma)$	χ_{prior}^2	$2.0 \quad (\nu: 2.1) \quad (-1.5\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 13.44$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.40$; $R - 1 = 0.08205$

6.74 base_mnu_lensing_lenspriors_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.00099} \quad (+0.6\sigma)$	D_{40}	$1055^{+500}_{-400} \quad (-11.8\sigma)$	$H(0.15)$	$77^{+30}_{-20} \quad (+3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.169^{+0.067}_{-0.065} \quad (+21.4\sigma)$	D_{220}	$4463^{+3000}_{-2000} \quad (-30.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$654^{+300}_{-200} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12} \quad (+140.0\sigma)$	D_{810}	$1859^{+1000}_{-1000} \quad (-49.1\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$549^{+400}_{-300} \quad (-52.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1507^{+600}_{-500} \quad (-1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.94^{+0.35}_{-0.36} \quad (-6.5\sigma)$	D_{2000}	$163^{+100}_{-90} \quad (-35.4\sigma)$	$H(0.51)$	$100^{+30}_{-20} \quad (+10.3\sigma)$
n_{s}	$0.959^{+0.040}_{-0.041} \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.040}_{-0.041} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1924^{+700}_{-600} \quad (-2.1\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$H(0.61)$	$108^{+30}_{-30} \quad (+14.2\sigma)$
Ω_{Λ}	$0.45^{+0.42}_{-0.69} \quad (-6.7\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2218^{+700}_{-600} \quad (-2.6\sigma)$
Ω_{m}	$0.55^{+0.69}_{-0.42} \quad (+6.7\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$284^{+60}_{-60} \quad (+24.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.213^{+0.090}_{-0.085} \quad (+21.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+3.3}_{-2.8} \quad (-12.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5199^{+1000}_{-1000} \quad (-12.4\sigma)$
$\Omega_{\nu}h^2$	$< 0.0487 \quad (+10.7\sigma)$	z_{*}	$1094.9^{+6.3}_{-6.3} \quad (+9.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.058}_{-0.070} \quad (-0.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.147^{+0.11}_{-0.088} \quad (+41.3\sigma)$	r_{*}	$133^{+20}_{-10} \quad (-22.8\sigma)$	$\sigma_8(0.15)$	$0.63^{+0.21}_{-0.20} \quad (-2.7\sigma)$
σ_8	$0.69^{+0.20}_{-0.19} \quad (-2.6\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.12} \quad (+151.0\sigma)$	$f\sigma_8(0.38)$	$0.438^{+0.048}_{-0.059} \quad (-2.4\sigma)$
S_8	$0.86^{+0.22}_{-0.20} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.0^{+2.7}_{-2.3} \quad (-40.0\sigma)$	$\sigma_8(0.38)$	$0.55^{+0.21}_{-0.20} \quad (-2.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.47^{+0.12}_{-0.11} \quad (+1.1\sigma)$	z_{drag}	$1063.5^{+5.6}_{-5.7} \quad (+8.8\sigma)$	$f\sigma_8(0.51)$	$0.425^{+0.061}_{-0.082} \quad (-2.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.566^{+0.045}_{-0.044} \quad (-1.7\sigma)$	r_{drag}	$135^{+20}_{-10} \quad (-24.1\sigma)$	$\sigma_8(0.51)$	$0.51^{+0.21}_{-0.20} \quad (-2.8\sigma)$
$\sigma_8/h^{0.5}$	$0.84^{+0.13}_{-0.11} \quad (-3.8\sigma)$	k_{D}	$0.155^{+0.019}_{-0.019} \quad (+28.3\sigma)$	$f\sigma_8(0.61)$	$0.414^{+0.073}_{-0.095} \quad (-3.0\sigma)$
$r_{\mathrm{drag}}h$	$93^{+40}_{-40} \quad (-1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+33.8\sigma)$	$\sigma_8(0.61)$	$0.49^{+0.20}_{-0.19} \quad (-2.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.47^{+0.11}_{-0.11} \quad (+0.6\sigma)$	z_{eq}	$4559^{+2000}_{-2000} \quad (+22.9\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.8\sigma)$
z_{re}	$8.9^{+1.3}_{-1.4} \quad (+1.7\sigma)$	k_{eq}	$0.0140^{+0.0050}_{-0.0048} \quad (+23.3\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.7\sigma)$
10^9A_{s}	$1.92^{+0.71}_{-0.64} \quad (-5.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.72^{+0.15}_{-0.13} \quad (-9.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$10.5 \quad (\nu: 2.4)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.72^{+0.64}_{-0.57} \quad (-12.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.402^{+0.080}_{-0.070} \quad (-9.6\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.1) \quad (-1.4\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 12.60$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.84$; $R - 1 = 0.00308$

6.75 base_mnu_lensing_lenspriors_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.00099} \quad (+0.6\sigma)$	D_{40}	$1077^{+500}_{-400} \quad (-10.4\sigma)$	$H(0.15)$	$77^{+30}_{-20} \quad (+3.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.166^{+0.066}_{-0.065} \quad (+20.4\sigma)$	D_{220}	$4579^{+3000}_{-2000} \quad (-27.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$652^{+300}_{-200} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.13} \quad (+140.0\sigma)$	D_{810}	$1896^{+1000}_{-1000} \quad (-46.4\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$559^{+400}_{-300} \quad (-50.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1505^{+600}_{-500} \quad (-1.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.95^{+0.36}_{-0.36} \quad (-5.6\sigma)$	D_{2000}	$166^{+100}_{-100} \quad (-33.8\sigma)$	$H(0.51)$	$100^{+30}_{-30} \quad (+10.3\sigma)$
n_{s}	$0.959^{+0.040}_{-0.041} \quad (-0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.040}_{-0.041} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1921^{+700}_{-600} \quad (-2.2\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$H(0.61)$	$108^{+30}_{-30} \quad (+14.1\sigma)$
Ω_{Λ}	$0.46^{+0.42}_{-0.69} \quad (-6.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2215^{+700}_{-600} \quad (-2.7\sigma)$
Ω_{m}	$0.54^{+0.69}_{-0.42} \quad (+6.5\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$283^{+60}_{-60} \quad (+23.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.212^{+0.090}_{-0.086} \quad (+20.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+3.3}_{-2.8} \quad (-12.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5205^{+1000}_{-1000} \quad (-12.3\sigma)$
$\Omega_{\nu}h^2$	$< 0.0488 \quad (+11.1\sigma)$	z_{*}	$1094.8^{+6.3}_{-6.4} \quad (+9.0\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.053}_{-0.068} \quad (-1.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.146^{+0.11}_{-0.088} \quad (+40.7\sigma)$	r_{*}	$133^{+20}_{-10} \quad (-22.0\sigma)$	$\sigma_8(0.15)$	$0.62^{+0.20}_{-0.20} \quad (-2.9\sigma)$
σ_8	$0.68^{+0.19}_{-0.19} \quad (-2.8\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.13} \quad (+151.0\sigma)$	$f\sigma_8(0.38)$	$0.431^{+0.040}_{-0.053} \quad (-2.9\sigma)$
S_8	$0.85^{+0.22}_{-0.19} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.1^{+2.8}_{-2.4} \quad (-39.2\sigma)$	$\sigma_8(0.38)$	$0.54^{+0.21}_{-0.20} \quad (-2.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.46^{+0.12}_{-0.11} \quad (+0.5\sigma)$	z_{drag}	$1063.3^{+5.6}_{-5.8} \quad (+8.6\sigma)$	$f\sigma_8(0.51)$	$0.419^{+0.054}_{-0.078} \quad (-3.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.557^{+0.035}_{-0.035} \quad (-2.1\sigma)$	r_{drag}	$136^{+20}_{-10} \quad (-23.2\sigma)$	$\sigma_8(0.51)$	$0.51^{+0.20}_{-0.19} \quad (-2.9\sigma)$
$\sigma_8/h^{0.5}$	$0.83^{+0.12}_{-0.10} \quad (-4.1\sigma)$	k_{D}	$0.155^{+0.019}_{-0.019} \quad (+27.4\sigma)$	$f\sigma_8(0.61)$	$0.408^{+0.066}_{-0.091} \quad (-3.3\sigma)$
$r_{\mathrm{drag}}h$	$93^{+40}_{-40} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+33.8\sigma)$	$\sigma_8(0.61)$	$0.48^{+0.20}_{-0.19} \quad (-2.9\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.47^{+0.11}_{-0.11} \quad (+0.6\sigma)$	z_{eq}	$4504^{+2000}_{-2000} \quad (+21.8\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.9\sigma)$
z_{re}	$8.9^{+1.3}_{-1.4} \quad (+1.7\sigma)$	k_{eq}	$0.0138^{+0.0050}_{-0.0048} \quad (+22.3\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.8\sigma)$
10^9A_{s}	$1.95^{+0.74}_{-0.66} \quad (-4.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.73^{+0.16}_{-0.13} \quad (-8.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.8 \quad (\nu: 2.3)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.74^{+0.66}_{-0.59} \quad (-10.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.406^{+0.083}_{-0.071} \quad (-8.8\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.2) \quad (-1.4\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 14.86; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.79; R - 1 = 0.00267$$

6.76 base_mnu_lensing_lenspriors_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00099}_{-0.00099} \quad (+0.6\sigma)$	D_{40}	$1050^{+500}_{-400} \quad (-12.1\sigma)$	$H(0.15)$	$77^{+30}_{-20} \quad (+2.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.172^{+0.067}_{-0.066} \quad (+23.1\sigma)$	D_{220}	$4412^{+3000}_{-2000} \quad (-31.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$657^{+300}_{-200} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12} \quad (+142.3\sigma)$	D_{810}	$1847^{+1000}_{-1000} \quad (-50.0\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$545^{+400}_{-300} \quad (-52.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1510^{+600}_{-500} \quad (-1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.94^{+0.36}_{-0.36} \quad (-6.5\sigma)$	D_{2000}	$161^{+100}_{-90} \quad (-36.1\sigma)$	$H(0.51)$	$100^{+30}_{-30} \quad (+10.5\sigma)$
n_{s}	$0.959^{+0.040}_{-0.039} \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.040}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1926^{+700}_{-600} \quad (-2.1\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$H(0.61)$	$108^{+30}_{-30} \quad (+14.6\sigma)$
Ω_{Λ}	$0.43^{+0.43}_{-0.70} \quad (-7.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2219^{+700}_{-600} \quad (-2.6\sigma)$
Ω_{m}	$0.57^{+0.70}_{-0.43} \quad (+7.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$286^{+60}_{-60} \quad (+25.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.217^{+0.090}_{-0.087} \quad (+22.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+3.2}_{-2.8} \quad (-12.9\sigma)$	$D_{\mathrm{M}}(2.33)$	$5182^{+1000}_{-1000} \quad (-12.7\sigma)$
$\Omega_{\nu}h^2$	$< 0.0487 \quad (+10.7\sigma)$	z_{*}	$1095.2^{+6.3}_{-6.3} \quad (+9.8\sigma)$	$f\sigma_8(0.15)$	$0.466^{+0.060}_{-0.073} \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.149^{+0.11}_{-0.088} \quad (+42.7\sigma)$	r_{*}	$132^{+20}_{-10} \quad (-24.2\sigma)$	$\sigma_8(0.15)$	$0.64^{+0.21}_{-0.21} \quad (-2.5\sigma)$
σ_8	$0.70^{+0.20}_{-0.19} \quad (-2.4\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.12} \quad (+153.5\sigma)$	$f\sigma_8(0.38)$	$0.447^{+0.051}_{-0.061} \quad (-1.8\sigma)$
S_8	$0.89^{+0.23}_{-0.21} \quad (+2.1\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$11.9^{+2.7}_{-2.3} \quad (-41.7\sigma)$	$\sigma_8(0.38)$	$0.56^{+0.21}_{-0.20} \quad (-2.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.49^{+0.13}_{-0.11} \quad (+2.1\sigma)$	z_{drag}	$1063.7^{+5.5}_{-5.6} \quad (+9.2\sigma)$	$f\sigma_8(0.51)$	$0.432^{+0.064}_{-0.085} \quad (-2.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.578^{+0.048}_{-0.046} \quad (-1.1\sigma)$	r_{drag}	$135^{+20}_{-10} \quad (-25.5\sigma)$	$\sigma_8(0.51)$	$0.52^{+0.21}_{-0.20} \quad (-2.6\sigma)$
$\sigma_8/h^{0.5}$	$0.85^{+0.13}_{-0.12} \quad (-3.4\sigma)$	k_{D}	$0.156^{+0.019}_{-0.019} \quad (+29.9\sigma)$	$f\sigma_8(0.61)$	$0.420^{+0.075}_{-0.098} \quad (-2.6\sigma)$
$r_{\mathrm{drag}}h$	$92^{+40}_{-40} \quad (-1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+34.4\sigma)$	$\sigma_8(0.61)$	$0.49^{+0.21}_{-0.19} \quad (-2.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.49^{+0.12}_{-0.11} \quad (+1.0\sigma)$	z_{eq}	$4647^{+2000}_{-2000} \quad (+24.6\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.6\sigma)$
z_{re}	$8.9^{+1.3}_{-1.4} \quad (+1.8\sigma)$	k_{eq}	$0.0143^{+0.0050}_{-0.0049} \quad (+25.1\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.6\sigma)$
10^9A_{s}	$1.92^{+0.72}_{-0.64} \quad (-5.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.71^{+0.15}_{-0.13} \quad (-10.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$10.8 \quad (\nu: 2.4)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.72^{+0.65}_{-0.58} \quad (-12.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.397^{+0.080}_{-0.070} \quad (-10.6\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.1) \quad (-1.5\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 12.85; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.82; R - 1 = 0.00368$$

6.77 base_mnu_lensing_lenspriors_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.0010} \quad (+0.6\sigma)$	D_{40}	$1084^{+500}_{-400} \quad (-9.9\sigma)$	$H(0.15)$	$77^{+30}_{-20} \quad (+3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.167^{+0.065}_{-0.064} \quad (+20.8\sigma)$	D_{220}	$4594^{+3000}_{-2000} \quad (-27.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$655^{+300}_{-200} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12} \quad (+138.7\sigma)$	D_{810}	$1913^{+1000}_{-1000} \quad (-45.2\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.7\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$565^{+400}_{-300} \quad (-48.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1509^{+600}_{-500} \quad (-1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.96^{+0.36}_{-0.35} \quad (-4.9\sigma)$	D_{2000}	$168^{+100}_{-100} \quad (-32.7\sigma)$	$H(0.51)$	$100^{+30}_{-30} \quad (+10.2\sigma)$
n_{s}	$0.959^{+0.039}_{-0.040} \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.040} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1927^{+700}_{-600} \quad (-2.1\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$H(0.61)$	$108^{+30}_{-30} \quad (+14.0\sigma)$
Ω_{Λ}	$0.45^{+0.41}_{-0.68} \quad (-6.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2221^{+700}_{-600} \quad (-2.6\sigma)$
Ω_{m}	$0.55^{+0.68}_{-0.41} \quad (+6.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$283^{+60}_{-60} \quad (+23.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.212^{+0.088}_{-0.085} \quad (+20.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+3.3}_{-2.8} \quad (-12.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5209^{+1000}_{-1000} \quad (-12.2\sigma)$
$\Omega_{\nu}h^2$	$< 0.0484 \quad (+10.7\sigma)$	z_{*}	$1094.8^{+6.3}_{-6.3} \quad (+9.0\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.058}_{-0.070} \quad (-0.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.146^{+0.11}_{-0.087} \quad (+40.6\sigma)$	r_{*}	$133^{+20}_{-10} \quad (-22.4\sigma)$	$\sigma_8(0.15)$	$0.63^{+0.22}_{-0.20} \quad (-2.6\sigma)$
σ_8	$0.70^{+0.21}_{-0.19} \quad (-2.5\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.12} \quad (+149.6\sigma)$	$f\sigma_8(0.38)$	$0.440^{+0.048}_{-0.058} \quad (-2.3\sigma)$
S_8	$0.86^{+0.22}_{-0.20} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.0^{+2.7}_{-2.3} \quad (-39.4\sigma)$	$\sigma_8(0.38)$	$0.55^{+0.21}_{-0.20} \quad (-2.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.47^{+0.12}_{-0.11} \quad (+1.2\sigma)$	z_{drag}	$1063.4^{+5.5}_{-5.6} \quad (+8.6\sigma)$	$f\sigma_8(0.51)$	$0.427^{+0.061}_{-0.082} \quad (-2.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.568^{+0.044}_{-0.043} \quad (-1.6\sigma)$	r_{drag}	$136^{+20}_{-10} \quad (-23.6\sigma)$	$\sigma_8(0.51)$	$0.51^{+0.21}_{-0.20} \quad (-2.7\sigma)$
$\sigma_8/h^{0.5}$	$0.85^{+0.13}_{-0.11} \quad (-3.7\sigma)$	k_{D}	$0.155^{+0.019}_{-0.019} \quad (+27.7\sigma)$	$f\sigma_8(0.61)$	$0.416^{+0.073}_{-0.095} \quad (-2.8\sigma)$
$r_{\mathrm{drag}}h$	$93^{+40}_{-40} \quad (-1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+33.5\sigma)$	$\sigma_8(0.61)$	$0.49^{+0.20}_{-0.19} \quad (-2.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.12}_{-0.11} \quad (+1.3\sigma)$	z_{eq}	$4526^{+2000}_{-2000} \quad (+22.2\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.6\sigma)$
z_{re}	$8.9^{+1.3}_{-1.4} \quad (+1.7\sigma)$	k_{eq}	$0.0139^{+0.0049}_{-0.0048} \quad (+22.7\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.6\sigma)$
10^9A_{s}	$1.97^{+0.73}_{-0.66} \quad (-3.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.72^{+0.15}_{-0.13} \quad (-9.2\sigma)$	$\chi^2_{\mathrm{lensing}}$	$10.3 \quad (\nu: 2.3)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.76^{+0.66}_{-0.59} \quad (-9.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.404^{+0.080}_{-0.069} \quad (-9.3\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.1) \quad (-1.5\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 12.32; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.74; R - 1 = 0.00185$$

6.78 base_mnu_lensing_lenspriors_post_agr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.0010} \quad (+0.6\sigma)$	D_{40}	$1101^{+600}_{-500} \quad (-8.8\sigma)$	$H(0.15)$	$77^{+30}_{-20} \quad (+3.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.166^{+0.064}_{-0.065} \quad (+20.2\sigma)$	D_{220}	$4682^{+3000}_{-2000} \quad (-25.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$652^{+300}_{-200} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12} \quad (+142.0\sigma)$	D_{810}	$1938^{+1000}_{-1000} \quad (-43.4\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$570^{+400}_{-300} \quad (-47.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1504^{+600}_{-500} \quad (-1.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.97^{+0.37}_{-0.36} \quad (-4.2\sigma)$	D_{2000}	$169^{+100}_{-100} \quad (-31.9\sigma)$	$H(0.51)$	$100^{+30}_{-30} \quad (+10.4\sigma)$
n_{s}	$0.959^{+0.039}_{-0.040} \quad (-0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.040} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1920^{+700}_{-600} \quad (-2.2\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$H(0.61)$	$108^{+30}_{-30} \quad (+14.2\sigma)$
Ω_{Λ}	$0.46^{+0.42}_{-0.69} \quad (-6.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2214^{+700}_{-600} \quad (-2.7\sigma)$
Ω_{m}	$0.54^{+0.69}_{-0.42} \quad (+6.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$283^{+60}_{-60} \quad (+24.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.212^{+0.087}_{-0.087} \quad (+20.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+3.2}_{-2.8} \quad (-12.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5199^{+1000}_{-1000} \quad (-12.4\sigma)$
$\Omega_{\nu}h^2$	$< 0.0489 \quad (+11.5\sigma)$	z_{*}	$1094.8^{+6.3}_{-6.4} \quad (+9.0\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.053}_{-0.068} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.147^{+0.11}_{-0.087} \quad (+40.9\sigma)$	r_{*}	$133^{+20}_{-10} \quad (-22.1\sigma)$	$\sigma_8(0.15)$	$0.62^{+0.20}_{-0.20} \quad (-2.9\sigma)$
σ_8	$0.68^{+0.19}_{-0.19} \quad (-2.8\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.12} \quad (+153.2\sigma)$	$f\sigma_8(0.38)$	$0.432^{+0.040}_{-0.053} \quad (-2.9\sigma)$
S_8	$0.85^{+0.23}_{-0.19} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.0^{+2.8}_{-2.3} \quad (-39.5\sigma)$	$\sigma_8(0.38)$	$0.54^{+0.21}_{-0.20} \quad (-2.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.46^{+0.12}_{-0.11} \quad (+0.5\sigma)$	z_{drag}	$1063.4^{+5.5}_{-5.8} \quad (+8.6\sigma)$	$f\sigma_8(0.51)$	$0.419^{+0.054}_{-0.078} \quad (-3.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.558^{+0.035}_{-0.033} \quad (-2.1\sigma)$	r_{drag}	$136^{+20}_{-10} \quad (-23.3\sigma)$	$\sigma_8(0.51)$	$0.51^{+0.21}_{-0.19} \quad (-2.9\sigma)$
$\sigma_8/h^{0.5}$	$0.830^{+0.12}_{-0.099} \quad (-4.1\sigma)$	k_{D}	$0.155^{+0.019}_{-0.020} \quad (+27.6\sigma)$	$f\sigma_8(0.61)$	$0.409^{+0.066}_{-0.091} \quad (-3.3\sigma)$
$r_{\mathrm{drag}}h$	$94^{+40}_{-40} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+34.2\sigma)$	$\sigma_8(0.61)$	$0.48^{+0.20}_{-0.19} \quad (-2.9\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.12}_{-0.11} \quad (+1.3\sigma)$	z_{eq}	$4496^{+2000}_{-2000} \quad (+21.6\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.9\sigma)$
z_{re}	$8.9^{+1.3}_{-1.4} \quad (+1.7\sigma)$	k_{eq}	$0.0138^{+0.0048}_{-0.0049} \quad (+22.1\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.8\sigma)$
10^9A_{s}	$1.99^{+0.77}_{-0.68} \quad (-3.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.73^{+0.16}_{-0.13} \quad (-8.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.6 \quad (\nu: 2.2)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.78^{+0.69}_{-0.61} \quad (-7.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.407^{+0.084}_{-0.070} \quad (-8.6\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.2) \quad (-1.4\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 14.67$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.70$; $R - 1 = 0.00159$

6.79 base_mnu_lensing_lenspriors_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0222^{+0.0010}_{-0.00099}$ (+0.6 σ)	D_{40}	1095^{+500}_{-400} (−9.2 σ)	$H(0.15)$	77^{+30}_{-20} (+2.9 σ)
$\Omega_{\mathrm{c}}h^2$	$0.164^{+0.061}_{-0.061}$ (+19.3 σ)	D_{220}	4668^{+3000}_{-2000} (−25.5 σ)	$D_{\mathrm{M}}(0.15)$	655^{+300}_{-200} (−0.2 σ)
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12}$ (+136.5 σ)	D_{810}	1939^{+1000}_{-1000} (−43.4 σ)	$H(0.38)$	91^{+30}_{-20} (+6.6 σ)
Σm_{ν} [eV]	—	D_{1420}	572^{+400}_{-300} (−47.3 σ)	$D_{\mathrm{M}}(0.38)$	1510^{+600}_{-500} (−1.4 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$2.97^{+0.36}_{-0.35}$ (−4.4 σ)	D_{2000}	170^{+100}_{-100} (−31.6 σ)	$H(0.51)$	100^{+30}_{-20} (+9.9 σ)
n_{s}	$0.959^{+0.039}_{-0.041}$ (−0.3 σ)	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.041}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1929^{+700}_{-600} (−2.0 σ)
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043}$ (+0.5 σ)	$H(0.61)$	107^{+30}_{-30} (+13.6 σ)
Ω_{Λ}	$0.46^{+0.40}_{-0.65}$ (−6.3 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00044}$ (+0.5 σ)	$D_{\mathrm{M}}(0.61)$	2225^{+800}_{-600} (−2.5 σ)
Ω_{m}	$0.54^{+0.65}_{-0.40}$ (+6.3 σ)	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$H(2.33)$	281^{+50}_{-60} (+23.0 σ)
$\Omega_{\mathrm{m}}h^2$	$0.209^{+0.084}_{-0.082}$ (+19.7 σ)	Age/Gyr	$12.5^{+3.3}_{-2.8}$ (−11.9 σ)	$D_{\mathrm{M}}(2.33)$	5228^{+1000}_{-1000} (−11.8 σ)
$\Omega_{\nu}h^2$	< 0.0488 (+10.9 σ)	z_{*}	$1094.6^{+6.0}_{-6.1}$ (+8.6 σ)	$f\sigma_8(0.15)$	$0.449^{+0.060}_{-0.070}$ (−0.9 σ)
$\Omega_{\mathrm{m}}h^3$	$0.144^{+0.10}_{-0.085}$ (+39.1 σ)	r_{*}	134^{+15}_{-14} (−21.3 σ)	$\sigma_8(0.15)$	$0.63^{+0.21}_{-0.20}$ (−2.8 σ)
σ_8	$0.69^{+0.20}_{-0.19}$ (−2.7 σ)	$100\theta_{*}$	$1.11^{+0.12}_{-0.12}$ (+147.3 σ)	$f\sigma_8(0.38)$	$0.434^{+0.050}_{-0.059}$ (−2.7 σ)
S_8	$0.85^{+0.21}_{-0.19}$ (+0.6 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.1^{+2.7}_{-2.3}$ (−38.1 σ)	$\sigma_8(0.38)$	$0.55^{+0.21}_{-0.20}$ (−2.8 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.46^{+0.12}_{-0.10}$ (+0.6 σ)	z_{drag}	$1063.2^{+5.3}_{-5.5}$ (+8.2 σ)	$f\sigma_8(0.51)$	$0.422^{+0.063}_{-0.082}$ (−3.0 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.560^{+0.050}_{-0.047}$ (−2.0 σ)	r_{drag}	136^{+20}_{-10} (−22.4 σ)	$\sigma_8(0.51)$	$0.51^{+0.21}_{-0.20}$ (−2.8 σ)
$\sigma_8/h^{0.5}$	$0.84^{+0.13}_{-0.12}$ (−3.9 σ)	k_{D}	$0.154^{+0.018}_{-0.018}$ (+26.4 σ)	$f\sigma_8(0.61)$	$0.411^{+0.074}_{-0.095}$ (−3.1 σ)
$r_{\mathrm{drag}}h$	93^{+40}_{-40} (−1.0 σ)	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018}$ (+32.9 σ)	$\sigma_8(0.61)$	$0.48^{+0.21}_{-0.19}$ (−2.8 σ)
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.12}_{-0.11}$ (+1.3 σ)	z_{eq}	4448^{+1000}_{-1000} (+20.7 σ)	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10}$ (−2.8 σ)
z_{re}	$8.8^{+1.3}_{-1.3}$ (+1.6 σ)	k_{eq}	$0.0137^{+0.0046}_{-0.0046}$ (+21.1 σ)	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11}$ (−2.7 σ)
10^9A_{s}	$1.98^{+0.73}_{-0.65}$ (−3.3 σ)	$100\theta_{\mathrm{eq}}$	$0.73^{+0.15}_{-0.12}$ (−8.4 σ)	$\chi^2_{\mathrm{lensing}}$	10.1 (ν : 2.2)
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.77^{+0.66}_{-0.58}$ (−8.1 σ)	$100\theta_{\mathrm{s,eq}}$	$0.408^{+0.078}_{-0.066}$ (−8.4 σ)	χ^2_{prior}	2.1 (ν : 2.1) (−1.4 σ)

$$\bar{\chi}^2_{\mathrm{eff}} = 12.19; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.67; R - 1 = 0.00405$$

6.80 base_mnu_lensing_lenspriors_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0222^{+0.0010}_{-0.00099} \quad (+0.6\sigma)$	D_{40}	$1124^{+600}_{-500} \quad (-7.3\sigma)$	$H(0.15)$	$77^{+30}_{-30} \quad (+3.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.161^{+0.060}_{-0.061} \quad (+18.1\sigma)$	D_{220}	$4816^{+3000}_{-2000} \quad (-21.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$649^{+300}_{-200} \quad (-0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.13} \quad (+139.6\sigma)$	D_{810}	$1982^{+1000}_{-1000} \quad (-40.2\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$583^{+400}_{-300} \quad (-45.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1499^{+600}_{-400} \quad (-1.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.99^{+0.37}_{-0.35} \quad (-3.2\sigma)$	D_{2000}	$173^{+100}_{-100} \quad (-30.0\sigma)$	$H(0.51)$	$100^{+20}_{-30} \quad (+10.1\sigma)$
n_{s}	$0.959^{+0.039}_{-0.041} \quad (-0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.041} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1917^{+700}_{-500} \quad (-2.3\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$H(0.61)$	$107^{+30}_{-30} \quad (+13.8\sigma)$
Ω_{Λ}	$0.48^{+0.40}_{-0.64} \quad (-5.9\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00044}_{-0.00044} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2211^{+800}_{-600} \quad (-2.8\sigma)$
Ω_{m}	$0.52^{+0.64}_{-0.40} \quad (+5.9\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$281^{+50}_{-60} \quad (+22.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.207^{+0.083}_{-0.083} \quad (+19.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+3.3}_{-2.8} \quad (-12.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5219^{+1000}_{-1000} \quad (-12.0\sigma)$
$\Omega_{\nu}h^2$	$< 0.0491 \quad (+11.4\sigma)$	z_{*}	$1094.5^{+6.0}_{-6.1} \quad (+8.3\sigma)$	$f\sigma_8(0.15)$	$0.438^{+0.055}_{-0.066} \quad (-1.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.145^{+0.10}_{-0.085} \quad (+39.2\sigma)$	r_{*}	$134^{+20}_{-10} \quad (-20.4\sigma)$	$\sigma_8(0.15)$	$0.62^{+0.21}_{-0.20} \quad (-3.0\sigma)$
σ_8	$0.68^{+0.20}_{-0.19} \quad (-3.0\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.13} \quad (+150.7\sigma)$	$f\sigma_8(0.38)$	$0.425^{+0.042}_{-0.053} \quad (-3.3\sigma)$
S_8	$0.82^{+0.20}_{-0.18} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.1^{+2.7}_{-2.3} \quad (-37.5\sigma)$	$\sigma_8(0.38)$	$0.54^{+0.21}_{-0.20} \quad (-3.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.45^{+0.11}_{-0.10} \quad (-0.4\sigma)$	z_{drag}	$1063.1^{+5.3}_{-5.6} \quad (+8.0\sigma)$	$f\sigma_8(0.51)$	$0.414^{+0.056}_{-0.077} \quad (-3.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.548^{+0.039}_{-0.038} \quad (-2.6\sigma)$	r_{drag}	$137^{+20}_{-10} \quad (-21.5\sigma)$	$\sigma_8(0.51)$	$0.50^{+0.21}_{-0.19} \quad (-3.0\sigma)$
$\sigma_8/h^{0.5}$	$0.82^{+0.13}_{-0.11} \quad (-4.4\sigma)$	k_{D}	$0.154^{+0.018}_{-0.019} \quad (+25.4\sigma)$	$f\sigma_8(0.61)$	$0.404^{+0.067}_{-0.090} \quad (-3.5\sigma)$
$r_{\mathrm{drag}}h$	$95^{+40}_{-40} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+33.7\sigma)$	$\sigma_8(0.61)$	$0.48^{+0.20}_{-0.19} \quad (-2.9\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.11}_{-0.11} \quad (+1.4\sigma)$	z_{eq}	$4381^{+1000}_{-1000} \quad (+19.3\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.9\sigma)$
z_{re}	$8.8^{+1.2}_{-1.4} \quad (+1.6\sigma)$	k_{eq}	$0.0135^{+0.0045}_{-0.0046} \quad (+19.9\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.8\sigma)$
10^9A_{s}	$2.02^{+0.77}_{-0.67} \quad (-2.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.74^{+0.15}_{-0.12} \quad (-7.3\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.5 \quad (\nu: 2.1)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.81^{+0.69}_{-0.60} \quad (-5.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.413^{+0.080}_{-0.066} \quad (-7.3\sigma)$	χ^2_{prior}	$2.1 \quad (\nu: 2.2) \quad (-1.4\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 14.57; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.65; R - 1 = 0.00607$$

6.81 base_mnu_lensing_lenspriors_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00099}_{-0.00099} \quad (+0.6\sigma)$	D_{40}	$1076^{+500}_{-400} \quad (-10.4\sigma)$	$H(0.15)$	$76^{+30}_{-20} \quad (+2.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.167^{+0.067}_{-0.063} \quad (+20.5\sigma)$	D_{220}	$4571^{+3000}_{-2000} \quad (-27.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$658^{+300}_{-200} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.11^{+0.12}_{-0.12} \quad (+132.9\sigma)$	D_{810}	$1910^{+1000}_{-1000} \quad (-45.4\sigma)$	$H(0.38)$	$91^{+30}_{-20} \quad (+6.4\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	—	D_{1420}	$565^{+400}_{-300} \quad (-48.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1516^{+600}_{-500} \quad (-1.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$2.95^{+0.35}_{-0.36} \quad (-5.4\sigma)$	D_{2000}	$168^{+100}_{-100} \quad (-32.8\sigma)$	$H(0.51)$	$100^{+30}_{-20} \quad (+9.8\sigma)$
n_{s}	$0.959^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1935^{+700}_{-600} \quad (-1.9\sigma)$
H_0	—	Y_{P}	$0.24531^{+0.00043}_{-0.00043} \quad (+0.5\sigma)$	$H(0.61)$	$107^{+30}_{-30} \quad (+13.5\sigma)$
Ω_{Λ}	$0.45^{+0.41}_{-0.68} \quad (-6.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00044} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2231^{+700}_{-600} \quad (-2.4\sigma)$
Ω_{m}	$0.55^{+0.68}_{-0.41} \quad (+6.6\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$282^{+60}_{-60} \quad (+23.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.210^{+0.091}_{-0.082} \quad (+20.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.6^{+3.2}_{-2.8} \quad (-11.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5233^{+1000}_{-1000} \quad (-11.7\sigma)$
$\Omega_{\nu} h^2$	$< 0.0474 \quad (+10.0\sigma)$	z_{*}	$1094.7^{+6.4}_{-6.1} \quad (+8.8\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.058}_{-0.071} \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.144^{+0.11}_{-0.086} \quad (+39.0\sigma)$	r_{*}	$133^{+10}_{-10} \quad (-21.9\sigma)$	$\sigma_8(0.15)$	$0.64^{+0.22}_{-0.20} \quad (-2.5\sigma)$
σ_8	$0.70^{+0.20}_{-0.19} \quad (-2.4\sigma)$	$100\theta_{*}$	$1.11^{+0.12}_{-0.12} \quad (+143.4\sigma)$	$f\sigma_8(0.38)$	$0.443^{+0.048}_{-0.059} \quad (-2.1\sigma)$
S_8	$0.87^{+0.23}_{-0.20} \quad (+1.5\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$12.1^{+2.6}_{-2.4} \quad (-38.2\sigma)$	$\sigma_8(0.38)$	$0.56^{+0.21}_{-0.20} \quad (-2.5\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.48^{+0.12}_{-0.11} \quad (+1.5\sigma)$	z_{drag}	$1063.3^{+5.7}_{-5.5} \quad (+8.4\sigma)$	$f\sigma_8(0.51)$	$0.430^{+0.061}_{-0.083} \quad (-2.5\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.572^{+0.045}_{-0.044} \quad (-1.4\sigma)$	r_{drag}	$136^{+20}_{-10} \quad (-23.0\sigma)$	$\sigma_8(0.51)$	$0.52^{+0.21}_{-0.20} \quad (-2.5\sigma)$
$\sigma_8/h^{0.5}$	$0.85^{+0.12}_{-0.12} \quad (-3.4\sigma)$	k_{D}	$0.155^{+0.019}_{-0.018} \quad (+27.0\sigma)$	$f\sigma_8(0.61)$	$0.419^{+0.073}_{-0.096} \quad (-2.7\sigma)$
$r_{\mathrm{drag}} h$	$93^{+40}_{-40} \quad (-1.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.170^{+0.017}_{-0.018} \quad (+32.1\sigma)$	$\sigma_8(0.61)$	$0.49^{+0.20}_{-0.19} \quad (-2.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.49^{+0.11}_{-0.11} \quad (+1.0\sigma)$	z_{eq}	$4512^{+2000}_{-2000} \quad (+21.9\sigma)$	$f\sigma_8(2.33)$	$0.25^{+0.11}_{-0.10} \quad (-2.5\sigma)$
z_{re}	$8.8^{+1.4}_{-1.3} \quad (+1.6\sigma)$	k_{eq}	$0.0139^{+0.0050}_{-0.0047} \quad (+22.3\sigma)$	$\sigma_8(2.33)$	$0.25^{+0.13}_{-0.11} \quad (-2.5\sigma)$
$10^9 A_{\mathrm{s}}$	$1.95^{+0.72}_{-0.65} \quad (-4.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.72^{+0.15}_{-0.13} \quad (-9.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.2 \quad (\nu: 2.6)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.75^{+0.64}_{-0.59} \quad (-10.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.403^{+0.079}_{-0.071} \quad (-9.4\sigma)$	χ_{prior}^2	$2.0 \quad (\nu: 2.1) \quad (-1.5\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 11.22$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.82$; $R - 1 = 0.00322$

6.82 base_mnu_lensing_lenspriors_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02221	$0.02221^{+0.00099}_{-0.00096}$ (+0.7 σ)	D_{40}	1365	1107^{+500}_{-400} (−8.4 σ)	$H(0.15)$	69.8	62^{+10}_{-9} (−5.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.1191	$0.142^{+0.037}_{-0.039}$ (+9.7 σ)	D_{220}	6388	5103^{+2000}_{-2000} (−14.9 σ)	$D_{\mathrm{M}}(0.15)$	673	798^{+200}_{-200} (+7.0 σ)
$100\theta_{\mathrm{MC}}$	1.04089	$1.0409^{+0.0012}_{-0.0012}$ (+0.5 σ)	D_{810}	2807	2374^{+900}_{-700} (−11.9 σ)	$H(0.38)$	80.5	$76.4^{+8.0}_{-4.6}$ (−3.9 σ)
Σm_{ν} [eV]	0.46	< 2.52 (+6.0 σ)	D_{1420}	900	775^{+300}_{-200} (−7.7 σ)	$D_{\mathrm{M}}(0.38)$	1595	1807^{+300}_{-300} (+6.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.145	$2.98^{+0.32}_{-0.30}$ (−3.8 σ)	D_{2000}	254	220^{+80}_{-60} (−4.8 σ)	$H(0.51)$	87.63	$85.4^{+5.2}_{-2.9}$ (−2.9 σ)
n_{s}	0.9603	$0.961^{+0.039}_{-0.039}$ (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9603	$0.961^{+0.039}_{-0.039}$ (−0.1 σ)	$D_{\mathrm{M}}(0.51)$	2059	2291^{+300}_{-400} (+5.8 σ)
H_0	64.1	< 70.1 (−5.8 σ)	Y_{P}	0.245331	$0.24532^{+0.00043}_{-0.00042}$ (+0.6 σ)	$H(0.61)$	93.53	$92.8^{+3.2}_{-2.3}$ (−1.8 σ)
Ω_{Λ}	0.64	$0.29^{+0.48}_{-0.62}$ (−11.9 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246658	$0.24664^{+0.00043}_{-0.00042}$ (+0.6 σ)	$D_{\mathrm{M}}(0.61)$	2390	2628^{+300}_{-400} (+5.5 σ)
Ω_{m}	0.36	$0.71^{+0.62}_{-0.48}$ (+11.9 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.615	$2.62^{+0.19}_{-0.18}$ (−0.6 σ)	$H(2.33)$	238.1	258^{+30}_{-30} (+10.9 σ)
$\Omega_{\mathrm{m}}h^2$	0.1462	$0.178^{+0.048}_{-0.049}$ (+10.2 σ)	Age/Gyr	14.010	$14.25^{+0.36}_{-0.48}$ (+3.1 σ)	$D_{\mathrm{M}}(2.33)$	5855	5940^{+140}_{-190} (+2.7 σ)
$\Omega_{\nu}h^2$	0.0049	< 0.0271 (+6.0 σ)	z_{*}	1090.12	$1092.5^{+3.7}_{-4.0}$ (+4.2 σ)	$f\sigma_{\mathrm{s}}(0.15)$	0.457	$0.477^{+0.045}_{-0.058}$ (+1.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.09369	$0.0928^{+0.0043}_{-0.0041}$ (−1.9 σ)	r_{*}	144.7	$138.7^{+9.9}_{-8.9}$ (−11.4 σ)	$\sigma_{\mathrm{s}}(0.15)$	0.696	$0.58^{+0.18}_{-0.15}$ (−4.1 σ)
σ_{s}	0.757	$0.65^{+0.17}_{-0.15}$ (−3.8 σ)	$100\theta_{*}$	1.04127	$1.0414^{+0.0012}_{-0.0012}$ (+1.0 σ)	$f\sigma_{\mathrm{s}}(0.38)$	0.465	$0.435^{+0.048}_{-0.059}$ (−2.6 σ)
S_{s}	0.825	$0.93^{+0.18}_{-0.19}$ (+4.0 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.89	$13.31^{+0.95}_{-0.86}$ (−12.0 σ)	$\sigma_{\mathrm{s}}(0.38)$	0.614	$0.50^{+0.18}_{-0.15}$ (−4.3 σ)
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	0.452	$0.512^{+0.096}_{-0.11}$ (+4.0 σ)	z_{drag}	1059.59	$1061.5^{+3.9}_{-4.1}$ (+4.6 σ)	$f\sigma_{\mathrm{s}}(0.51)$	0.460	$0.413^{+0.063}_{-0.074}$ (−3.6 σ)
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	0.5849	$0.570^{+0.043}_{-0.040}$ (−1.5 σ)	r_{drag}	147.4	$141^{+10}_{-9.2}$ (−12.0 σ)	$\sigma_{\mathrm{s}}(0.51)$	0.573	$0.46^{+0.18}_{-0.14}$ (−4.3 σ)
$\sigma_{\mathrm{s}}/h^{0.5}$	0.946	$0.882^{+0.11}_{-0.098}$ (−2.6 σ)	k_{D}	0.1405	$0.148^{+0.011}_{-0.012}$ (+13.8 σ)	$f\sigma_{\mathrm{s}}(0.61)$	0.452	$0.397^{+0.073}_{-0.082}$ (−4.0 σ)
$r_{\mathrm{drag}}h$	94.4	76^{+30}_{-20} (−6.2 σ)	$100\theta_{\mathrm{D}}$	0.16092	$0.1600^{+0.0022}_{-0.0021}$ (−4.2 σ)	$\sigma_{\mathrm{s}}(0.61)$	0.545	$0.43^{+0.17}_{-0.14}$ (−4.4 σ)
$\langle d^2 \rangle^{1/2}$	2.529	$2.53^{+0.10}_{-0.099}$ (+2.0 σ)	z_{eq}	3376	3935^{+900}_{-900} (+10.4 σ)	$f\sigma_{\mathrm{s}}(2.33)$	0.278	$0.219^{+0.091}_{-0.074}$ (−4.7 σ)
z_{re}	7.83	$8.30^{+0.73}_{-0.77}$ (+1.0 σ)	k_{eq}	0.01031	$0.0120^{+0.0027}_{-0.0029}$ (+10.5 σ)	$\sigma_{\mathrm{s}}(2.33)$	0.282	$0.220^{+0.10}_{-0.078}$ (−4.5 σ)
10^9A_{s}	2.32	$1.99^{+0.67}_{-0.56}$ (−2.9 σ)	$100\theta_{\mathrm{eq}}$	0.818	$0.74^{+0.14}_{-0.11}$ (−7.3 σ)	$\chi^2_{\mathrm{lensing}}$	7.47	9.8 (ν : 1.9)
$10^9A_{\mathrm{s}}e^{-2\tau}$	2.08	$1.79^{+0.60}_{-0.50}$ (−7.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.452	$0.412^{+0.073}_{-0.060}$ (−7.5 σ)	χ^2_{prior}	0.00	3.0 (ν : 2.9) (−1.2 σ)

Best-fit $\chi^2_{\mathrm{eff}} = 7.48$; $\Delta\chi^2_{\mathrm{eff}} = -0.10$; $\bar{\chi}^2_{\mathrm{eff}} = 12.80$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.19$; $R - 1 = 0.00091$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.47 (Δ -0.10)

6.83 base_mnu_lensing_lenspriors_theta_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02220	$0.02220^{+0.00098}_{-0.00094}$ (+0.6 σ)	D_{220}	6761	6806^{+1000}_{-1000} (+26.7 σ)	$H(0.38)$	82.84	$82.7^{+2.0}_{-2.0}$ (+0.7 σ)
$\Omega_c h^2$	0.1130	$0.1130^{+0.0084}_{-0.0084}$ (-3.6 σ)	D_{810}	2916	2940^{+600}_{-500} (+29.2 σ)	$D_M(0.38)$	1527	1530^{+54}_{-53} (-0.9 σ)
$100\theta_{MC}$	1.04090	$1.0409^{+0.0012}_{-0.0012}$ (+0.5 σ)	D_{1420}	930	939^{+200}_{-200} (+24.4 σ)	$H(0.51)$	89.37	$89.3^{+1.7}_{-1.7}$ (+0.5 σ)
Σm_ν [eV]	0.261	< 0.583 (+0.6 σ)	D_{2000}	261	264^{+50}_{-50} (+18.5 σ)	$D_M(0.51)$	1980	1984^{+64}_{-62} (-0.8 σ)
$\ln(10^{10} A_s)$	3.178	$3.18^{+0.17}_{-0.16}$ (+8.7 σ)	$n_{s,0.002}$	0.9609	$0.963^{+0.039}_{-0.038}$ (+0.2 σ)	$H(0.61)$	94.85	$94.8^{+1.5}_{-1.6}$ (+0.3 σ)
n_s	0.9609	$0.963^{+0.039}_{-0.038}$ (+0.2 σ)	Y_P	0.245327	$0.24531^{+0.00042}_{-0.00041}$ (+0.5 σ)	$D_M(0.61)$	2306	2310^{+70}_{-68} (-0.8 σ)
H_0	67.93	$67.8^{+3.2}_{-3.0}$ (+1.0 σ)	Y_P^{BBN}	0.246654	$0.24664^{+0.00043}_{-0.00041}$ (+0.5 σ)	$H(2.33)$	232.9	$233.0^{+5.1}_{-5.2}$ (-2.4 σ)
Ω_Λ	0.7009	$0.699^{+0.041}_{-0.042}$ (+1.1 σ)	$10^5 D/H$	2.617	$2.62^{+0.18}_{-0.18}$ (-0.6 σ)	$D_M(2.33)$	5798	5802^{+85}_{-74} (-0.1 σ)
Ω_m	0.2991	$0.301^{+0.042}_{-0.041}$ (-1.1 σ)	Age/Gyr	13.885	$13.89^{+0.20}_{-0.17}$ (-0.0 σ)	$f\sigma_8(0.15)$	0.4418	$0.441^{+0.027}_{-0.030}$ (-1.5 σ)
$\Omega_m h^2$	0.1380	$0.1382^{+0.0075}_{-0.0076}$ (-2.1 σ)	z_*	1089.54	$1089.6^{+1.3}_{-1.3}$ (-1.8 σ)	$\sigma_8(0.15)$	0.735	$0.731^{+0.047}_{-0.053}$ (+0.1 σ)
$\Omega_\nu h^2$	0.00281	< 0.00627 (+0.6 σ)	r_*	146.37	$146.4^{+2.5}_{-2.4}$ (+3.9 σ)	$f\sigma_8(0.38)$	0.4631	$0.461^{+0.024}_{-0.027}$ (-0.8 σ)
$\Omega_m h^3$	0.09375	$0.0936^{+0.0035}_{-0.0034}$ (-1.2 σ)	$100\theta_*$	1.04123	$1.0412^{+0.0012}_{-0.0012}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6531	$0.650^{+0.044}_{-0.049}$ (+0.2 σ)
σ_8	0.793	$0.790^{+0.049}_{-0.056}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	14.057	$14.06^{+0.23}_{-0.23}$ (+4.0 σ)	$f\sigma_8(0.51)$	0.4634	$0.462^{+0.023}_{-0.026}$ (-0.5 σ)
S_8	0.792	$0.791^{+0.056}_{-0.059}$ (-1.7 σ)	z_{drag}	1059.06	$1059.1^{+2.4}_{-2.4}$ (-0.5 σ)	$\sigma_8(0.51)$	0.6121	$0.609^{+0.042}_{-0.047}$ (+0.3 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4337	$0.433^{+0.030}_{-0.032}$ (-1.7 σ)	r_{drag}	149.13	$149.1^{+2.7}_{-2.6}$ (+4.0 σ)	$f\sigma_8(0.61)$	0.4597	$0.458^{+0.024}_{-0.025}$ (-0.3 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5865	$0.585^{+0.033}_{-0.038}$ (-0.8 σ)	k_D	0.13863	$0.1386^{+0.0032}_{-0.0033}$ (-3.7 σ)	$\sigma_8(0.61)$	0.5830	$0.580^{+0.041}_{-0.045}$ (+0.3 σ)
$\sigma_8/h^{0.5}$	0.962	$0.959^{+0.053}_{-0.056}$ (-0.4 σ)	$100\theta_D$	0.16120	$0.1612^{+0.0014}_{-0.0014}$ (+0.3 σ)	$f\sigma_8(2.33)$	0.2978	$0.296^{+0.019}_{-0.020}$ (+0.5 σ)
$r_{\text{drag}} h$	101.3	$101.1^{+5.9}_{-5.3}$ (+1.3 σ)	z_{eq}	3231	3230^{+200}_{-200} (-3.8 σ)	$\sigma_8(2.33)$	0.3057	$0.304^{+0.023}_{-0.024}$ (+0.5 σ)
$\langle d^2 \rangle^{1/2}$	2.522	$2.52^{+0.10}_{-0.094}$ (+2.0 σ)	k_{eq}	0.00986	$0.00986^{+0.00062}_{-0.00061}$ (-3.8 σ)	χ^2_{lensing}	7.50	9.2 (ν : 1.5)
z_{re}	7.704	$7.71^{+0.24}_{-0.22}$ (+0.3 σ)	$100\theta_{\text{eq}}$	0.8451	$0.846^{+0.041}_{-0.038}$ (+3.9 σ)	χ^2_{JLA}	1034.73	1035.6 (ν : 0.9)
$10^9 A_s$	2.399	$2.42^{+0.42}_{-0.38}$ (+9.6 σ)	$100\theta_{s,\text{eq}}$	0.4661	$0.467^{+0.022}_{-0.020}$ (+4.0 σ)	χ^2_{prior}	0.00	3.0 (ν : 2.8) (-1.2 σ)
$10^9 A_s e^{-2\tau}$	2.149	$2.16^{+0.38}_{-0.34}$ (+20.3 σ)	$H(0.15)$	73.04	$72.9^{+2.7}_{-2.6}$ (+0.9 σ)			
D_{40}	1440	1441^{+200}_{-200} (+13.7 σ)	$D_M(0.15)$	639.1	641^{+27}_{-26} (-0.9 σ)			

Best-fit $\chi^2_{\text{eff}} = 1042.24$; $\Delta\chi^2_{\text{eff}} = -0.47$; $\bar{\chi}^2_{\text{eff}} = 1047.78$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.00$; $R - 1 = 0.00923$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.50 (Δ -0.38) SN - JLA Pantheon18: 1034.73 (Δ -0.06)

6.84 base_mnu_lensing_lenspriors_theta_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0222^{+0.0010}_{-0.00096} \quad (+0.6\sigma)$	D_{40}	$1140^{+500}_{-400} \quad (-6.3\sigma)$	$H(0.15)$	$62^{+10}_{-10} \quad (-5.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.140^{+0.036}_{-0.038} \quad (+8.4\sigma)$	D_{220}	$5286^{+3000}_{-2000} \quad (-10.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$796^{+200}_{-200} \quad (+6.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2438^{+900}_{-800} \quad (-7.2\sigma)$	$H(0.38)$	$76^{+9}_{-5} \quad (-3.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.61 \quad (+6.6\sigma)$	D_{1420}	$795^{+300}_{-200} \quad (-3.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1805^{+300}_{-300} \quad (+6.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.00^{+0.32}_{-0.30} \quad (-2.4\sigma)$	D_{2000}	$225^{+80}_{-70} \quad (-2.0\sigma)$	$H(0.51)$	$85.4^{+5.8}_{-2.9} \quad (-2.9\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2288^{+300}_{-400} \quad (+5.7\sigma)$
H_0	$< 71.4 \quad (-5.6\sigma)$	Y_{P}	$0.24532^{+0.00044}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.7^{+3.6}_{-2.4} \quad (-1.9\sigma)$
Ω_{Λ}	$0.29^{+0.49}_{-0.62} \quad (-11.7\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00044}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2625^{+300}_{-400} \quad (+5.5\sigma)$
Ω_{m}	$0.71^{+0.62}_{-0.49} \quad (+11.7\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$257^{+30}_{-30} \quad (+10.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.176^{+0.048}_{-0.050} \quad (+9.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.28^{+0.36}_{-0.52} \quad (+3.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5949^{+140}_{-210} \quad (+2.9\sigma)$
$\Omega_{\nu}h^2$	$< 0.0281 \quad (+6.6\sigma)$	z_{*}	$1092.3^{+3.8}_{-4.0} \quad (+3.8\sigma)$	$f\sigma_8(0.15)$	$0.466^{+0.039}_{-0.057} \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0920^{+0.0039}_{-0.0036} \quad (-2.5\sigma)$	r_{*}	$139^{+10}_{-9.1} \quad (-10.2\sigma)$	$\sigma_8(0.15)$	$0.57^{+0.19}_{-0.15} \quad (-4.3\sigma)$
σ_8	$0.64^{+0.18}_{-0.14} \quad (-4.1\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.427^{+0.044}_{-0.054} \quad (-3.2\sigma)$
S_8	$0.91^{+0.17}_{-0.19} \quad (+3.1\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.37^{+0.97}_{-0.88} \quad (-10.8\sigma)$	$\sigma_8(0.38)$	$0.49^{+0.19}_{-0.15} \quad (-4.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.500^{+0.095}_{-0.10} \quad (+3.1\sigma)$	z_{drag}	$1061.3^{+4.0}_{-4.2} \quad (+4.3\sigma)$	$f\sigma_8(0.51)$	$0.406^{+0.061}_{-0.070} \quad (-4.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.559^{+0.035}_{-0.033} \quad (-2.0\sigma)$	r_{drag}	$142^{+10}_{-9.4} \quad (-10.9\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.18}_{-0.14} \quad (-4.5\sigma)$
$\sigma_8/h^{0.5}$	$0.867^{+0.10}_{-0.092} \quad (-3.0\sigma)$	k_{D}	$0.147^{+0.011}_{-0.012} \quad (+12.7\sigma)$	$f\sigma_8(0.61)$	$0.390^{+0.073}_{-0.078} \quad (-4.4\sigma)$
$r_{\mathrm{drag}}h$	$77^{+30}_{-20} \quad (-6.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0023}_{-0.0022} \quad (-4.1\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.18}_{-0.14} \quad (-4.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.531^{+0.095}_{-0.097} \quad (+2.2\sigma)$	z_{eq}	$3867^{+900}_{-900} \quad (+9.0\sigma)$	$f\sigma_8(2.33)$	$0.217^{+0.095}_{-0.074} \quad (-4.9\sigma)$
z_{re}	$8.27^{+0.73}_{-0.80} \quad (+1.0\sigma)$	k_{eq}	$0.0118^{+0.0027}_{-0.0028} \quad (+9.2\sigma)$	$\sigma_8(2.33)$	$0.218^{+0.11}_{-0.078} \quad (-4.6\sigma)$
10^9A_{s}	$2.04^{+0.69}_{-0.58} \quad (-1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.75^{+0.14}_{-0.11} \quad (-6.2\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.1 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.83^{+0.62}_{-0.52} \quad (-4.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.418^{+0.074}_{-0.061} \quad (-6.4\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 15.15$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.28$; $R - 1 = 0.00151$

6.85 base_mnu_lensing_lenspriors_theta_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02221^{+0.00099}_{-0.00095} \quad (+0.6\sigma)$	D_{40}	$1131^{+500}_{-400} \quad (-6.8\sigma)$	$H(0.15)$	$62^{+10}_{-10} \quad (-5.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.141^{+0.039}_{-0.040} \quad (+9.1\sigma)$	D_{220}	$5233^{+3000}_{-2000} \quad (-11.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$794^{+200}_{-200} \quad (+6.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2421^{+1000}_{-800} \quad (-8.4\sigma)$	$H(0.38)$	$76.5^{+8.1}_{-4.7} \quad (-3.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.53 \quad (+6.1\sigma)$	D_{1420}	$790^{+300}_{-300} \quad (-4.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1801^{+300}_{-300} \quad (+6.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.00^{+0.35}_{-0.32} \quad (-2.8\sigma)$	D_{2000}	$224^{+80}_{-70} \quad (-2.6\sigma)$	$H(0.51)$	$85.5^{+5.3}_{-3.0} \quad (-2.9\sigma)$
n_{s}	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2284^{+300}_{-400} \quad (+5.6\sigma)$
H_0	$< 70.6 \quad (-5.6\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.7^{+3.3}_{-2.5} \quad (-1.9\sigma)$
Ω_{Λ}	$0.30^{+0.48}_{-0.63} \quad (-11.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2621^{+300}_{-400} \quad (+5.4\sigma)$
Ω_{m}	$0.70^{+0.63}_{-0.48} \quad (+11.6\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$257^{+30}_{-30} \quad (+10.4\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.177^{+0.049}_{-0.050} \quad (+9.8\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.25^{+0.37}_{-0.49} \quad (+3.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5940^{+140}_{-200} \quad (+2.7\sigma)$
$\Omega_{\nu} h^2$	$< 0.0272 \quad (+6.1\sigma)$	z_{*}	$1092.4^{+3.8}_{-4.0} \quad (+4.0\sigma)$	$f\sigma_8(0.15)$	$0.474^{+0.048}_{-0.061} \quad (+1.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0926^{+0.0045}_{-0.0041} \quad (-2.1\sigma)$	r_{*}	$139^{+10}_{-9.4} \quad (-10.7\sigma)$	$\sigma_8(0.15)$	$0.58^{+0.18}_{-0.16} \quad (-4.1\sigma)$
σ_8	$0.65^{+0.17}_{-0.15} \quad (-3.8\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.435^{+0.049}_{-0.058} \quad (-2.6\sigma)$
S_8	$0.93^{+0.18}_{-0.20} \quad (+3.7\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.34^{+0.98}_{-0.90} \quad (-11.3\sigma)$	$\sigma_8(0.38)$	$0.50^{+0.18}_{-0.15} \quad (-4.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.51^{+0.10}_{-0.11} \quad (+3.7\sigma)$	z_{drag}	$1061.4^{+3.9}_{-4.2} \quad (+4.4\sigma)$	$f\sigma_8(0.51)$	$0.413^{+0.063}_{-0.074} \quad (-3.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.569^{+0.044}_{-0.042} \quad (-1.6\sigma)$	r_{drag}	$142^{+10}_{-9.7} \quad (-11.4\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.18}_{-0.15} \quad (-4.3\sigma)$
$\sigma_8/h^{0.5}$	$0.881^{+0.11}_{-0.099} \quad (-2.6\sigma)$	k_{D}	$0.147^{+0.012}_{-0.012} \quad (+13.1\sigma)$	$f\sigma_8(0.61)$	$0.397^{+0.072}_{-0.082} \quad (-4.0\sigma)$
$r_{\mathrm{drag}} h$	$77^{+30}_{-20} \quad (-6.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0022}_{-0.0021} \quad (-4.0\sigma)$	$\sigma_8(0.61)$	$0.44^{+0.17}_{-0.14} \quad (-4.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.53^{+0.12}_{-0.12} \quad (+2.3\sigma)$	z_{eq}	$3903^{+900}_{-1000} \quad (+9.7\sigma)$	$f\sigma_8(2.33)$	$0.221^{+0.092}_{-0.076} \quad (-4.7\sigma)$
z_{re}	$8.28^{+0.75}_{-0.78} \quad (+1.0\sigma)$	k_{eq}	$0.0120^{+0.0029}_{-0.0030} \quad (+9.9\sigma)$	$\sigma_8(2.33)$	$0.221^{+0.10}_{-0.080} \quad (-4.4\sigma)$
$10^9 A_{\mathrm{s}}$	$2.03^{+0.74}_{-0.62} \quad (-1.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.75^{+0.14}_{-0.12} \quad (-6.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.7 \quad (\nu: 1.8)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.82^{+0.66}_{-0.56} \quad (-4.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.415^{+0.076}_{-0.064} \quad (-7.0\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.9) \quad (-1.2\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 12.69$; $\Delta \bar{\chi}^2_{\mathrm{eff}} = 0.12$; $R - 1 = 0.00184$

6.86 base_mnu_lensing_lenspriors_theta_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00099}_{-0.00095} \quad (+0.6\sigma)$	D_{40}	$1098^{+500}_{-400} \quad (-9.0\sigma)$	$H(0.15)$	$62^{+10}_{-9} \quad (-5.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.143^{+0.037}_{-0.038} \quad (+10.0\sigma)$	D_{220}	$5051^{+2000}_{-2000} \quad (-16.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$798^{+200}_{-200} \quad (+7.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2353^{+900}_{-700} \quad (-13.3\sigma)$	$H(0.38)$	$76.4^{+7.6}_{-4.5} \quad (-3.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.46 \quad (+5.9\sigma)$	D_{1420}	$769^{+300}_{-200} \quad (-8.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1808^{+300}_{-300} \quad (+6.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.97^{+0.31}_{-0.30} \quad (-4.2\sigma)$	D_{2000}	$218^{+70}_{-60} \quad (-5.7\sigma)$	$H(0.51)$	$85.4^{+4.9}_{-2.8} \quad (-2.9\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2291^{+300}_{-400} \quad (+5.8\sigma)$
H_0	$< 69.5 \quad (-5.8\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.8^{+3.0}_{-2.2} \quad (-1.8\sigma)$
Ω_{Λ}	$0.29^{+0.48}_{-0.62} \quad (-11.9\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2628^{+300}_{-400} \quad (+5.5\sigma)$
Ω_{m}	$0.71^{+0.62}_{-0.48} \quad (+11.9\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$259^{+30}_{-30} \quad (+11.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.179^{+0.048}_{-0.048} \quad (+10.3\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.25^{+0.35}_{-0.47} \quad (+3.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5937^{+130}_{-180} \quad (+2.7\sigma)$
$\Omega_{\nu}h^2$	$< 0.0264 \quad (+5.9\sigma)$	z_{*}	$1092.5^{+3.7}_{-3.9} \quad (+4.3\sigma)$	$f\sigma_8(0.15)$	$0.479^{+0.044}_{-0.056} \quad (+1.5\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0930^{+0.0042}_{-0.0040} \quad (-1.8\sigma)$	r_{*}	$138.5^{+9.7}_{-8.9} \quad (-11.6\sigma)$	$\sigma_8(0.15)$	$0.58^{+0.18}_{-0.15} \quad (-4.1\sigma)$
σ_8	$0.65^{+0.17}_{-0.15} \quad (-3.8\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+0.9\sigma)$	$f\sigma_8(0.38)$	$0.438^{+0.047}_{-0.059} \quad (-2.4\sigma)$
S_8	$0.94^{+0.18}_{-0.19} \quad (+4.2\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.30^{+0.93}_{-0.86} \quad (-12.3\sigma)$	$\sigma_8(0.38)$	$0.50^{+0.18}_{-0.15} \quad (-4.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.514^{+0.096}_{-0.10} \quad (+4.2\sigma)$	z_{drag}	$1061.5^{+3.9}_{-4.0} \quad (+4.7\sigma)$	$f\sigma_8(0.51)$	$0.415^{+0.062}_{-0.074} \quad (-3.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.573^{+0.042}_{-0.040} \quad (-1.3\sigma)$	r_{drag}	$141^{+10}_{-9.2} \quad (-12.3\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.17}_{-0.14} \quad (-4.3\sigma)$
$\sigma_8/h^{0.5}$	$0.885^{+0.10}_{-0.098} \quad (-2.5\sigma)$	k_{D}	$0.148^{+0.011}_{-0.012} \quad (+14.1\sigma)$	$f\sigma_8(0.61)$	$0.399^{+0.072}_{-0.082} \quad (-3.9\sigma)$
$r_{\mathrm{drag}}h$	$76^{+30}_{-20} \quad (-6.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0021}_{-0.0021} \quad (-4.1\sigma)$	$\sigma_8(0.61)$	$0.44^{+0.17}_{-0.14} \quad (-4.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.52^{+0.10}_{-0.10} \quad (+1.9\sigma)$	z_{eq}	$3952^{+900}_{-900} \quad (+10.7\sigma)$	$f\sigma_8(2.33)$	$0.220^{+0.089}_{-0.074} \quad (-4.7\sigma)$
z_{re}	$8.31^{+0.73}_{-0.76} \quad (+1.0\sigma)$	k_{eq}	$0.0121^{+0.0027}_{-0.0028} \quad (+10.9\sigma)$	$\sigma_8(2.33)$	$0.220^{+0.098}_{-0.077} \quad (-4.5\sigma)$
10^9A_{s}	$1.98^{+0.65}_{-0.56} \quad (-3.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.74^{+0.13}_{-0.11} \quad (-7.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$7.6 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.77^{+0.59}_{-0.50} \quad (-8.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.411^{+0.071}_{-0.060} \quad (-7.8\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.9) \quad (-1.2\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 10.54$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.01$; $R - 1 = 0.00109$

6.87 base_mnu_lensing_lenspriors_theta_post_ptt

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00097}_{-0.00092} \quad (+0.6\sigma)$	D_{40}	$1264^{+600}_{-500} \quad (+2.0\sigma)$	$H(0.15)$	$63^{+20}_{-10} \quad (-4.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.134^{+0.037}_{-0.040} \quad (+5.7\sigma)$	D_{220}	$5943^{+3000}_{-3000} \quad (+5.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$784^{+200}_{-200} \quad (+6.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0011}_{-0.0011} \quad (+0.5\sigma)$	D_{810}	$2695^{+1000}_{-900} \quad (+11.4\sigma)$	$H(0.38)$	$77^{+10}_{-6} \quad (-3.6\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.83 \quad (+7.0\sigma)$	D_{1420}	$875^{+300}_{-300} \quad (+11.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1786^{+300}_{-400} \quad (+5.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.09^{+0.36}_{-0.33} \quad (+3.2\sigma)$	D_{2000}	$248^{+100}_{-80} \quad (+10.0\sigma)$	$H(0.51)$	$85.5^{+7.9}_{-3.5} \quad (-2.9\sigma)$
n_{s}	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2268^{+300}_{-400} \quad (+5.3\sigma)$
H_0	$< 74.2 \quad (-5.1\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00041} \quad (+0.5\sigma)$	$H(0.61)$	$92.5^{+5.4}_{-2.8} \quad (-2.1\sigma)$
Ω_{Λ}	$0.33^{+0.49}_{-0.64} \quad (-10.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00041} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2605^{+300}_{-400} \quad (+5.1\sigma)$
Ω_{m}	$0.67^{+0.64}_{-0.49} \quad (+10.5\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.18}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$254^{+30}_{-30} \quad (+8.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.171^{+0.051}_{-0.053} \quad (+8.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.30^{+0.42}_{-0.58} \quad (+3.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5958^{+160}_{-250} \quad (+3.1\sigma)$
$\Omega_{\nu} h^2$	$< 0.0305 \quad (+7.0\sigma)$	z_{*}	$1091.9^{+3.9}_{-4.2} \quad (+3.0\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.053}_{-0.071} \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0911^{+0.0042}_{-0.0040} \quad (-3.3\sigma)$	r_{*}	$140^{+11}_{-9.9} \quad (-7.7\sigma)$	$\sigma_8(0.15)$	$0.58^{+0.20}_{-0.17} \quad (-4.1\sigma)$
σ_8	$0.64^{+0.19}_{-0.16} \quad (-3.9\sigma)$	$100\theta_{*}$	$1.0414^{+0.0011}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.426^{+0.050}_{-0.058} \quad (-3.3\sigma)$
S_8	$0.89^{+0.20}_{-0.21} \quad (+2.3\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.5^{+1.1}_{-0.95} \quad (-8.2\sigma)$	$\sigma_8(0.38)$	$0.50^{+0.20}_{-0.16} \quad (-4.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.49^{+0.11}_{-0.12} \quad (+2.3\sigma)$	z_{drag}	$1061.0^{+4.0}_{-4.2} \quad (+3.6\sigma)$	$f\sigma_8(0.51)$	$0.407^{+0.064}_{-0.075} \quad (-4.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.555^{+0.045}_{-0.045} \quad (-2.2\sigma)$	r_{drag}	$143^{+11}_{-10} \quad (-8.2\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.20}_{-0.16} \quad (-4.2\sigma)$
$\sigma_8/h^{0.5}$	$0.87^{+0.11}_{-0.11} \quad (-3.0\sigma)$	k_{D}	$0.146^{+0.012}_{-0.013} \quad (+10.0\sigma)$	$f\sigma_8(0.61)$	$0.392^{+0.075}_{-0.084} \quad (-4.3\sigma)$
$r_{\mathrm{drag}} h$	$79^{+40}_{-30} \quad (-5.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1601^{+0.0024}_{-0.0022} \quad (-3.8\sigma)$	$\sigma_8(0.61)$	$0.44^{+0.19}_{-0.15} \quad (-4.2\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.60^{+0.11}_{-0.12} \quad (+3.9\sigma)$	z_{eq}	$3727^{+900}_{-1000} \quad (+6.2\sigma)$	$f\sigma_8(2.33)$	$0.223^{+0.10}_{-0.083} \quad (-4.5\sigma)$
z_{re}	$8.20^{+0.79}_{-0.83} \quad (+0.9\sigma)$	k_{eq}	$0.0114^{+0.0028}_{-0.0030} \quad (+6.5\sigma)$	$\sigma_8(2.33)$	$0.224^{+0.12}_{-0.088} \quad (-4.3\sigma)$
$10^9 A_{\mathrm{s}}$	$2.24^{+0.87}_{-0.70} \quad (+4.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.77^{+0.16}_{-0.13} \quad (-3.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$11.1 \quad (\nu: 1.7)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$2.01^{+0.78}_{-0.63} \quad (+8.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.429^{+0.085}_{-0.068} \quad (-3.9\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.9) \quad (-1.2\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 13.98$; $\Delta \bar{\chi}^2_{\mathrm{eff}} = 0.12$; $R - 1 = 0.03431$

6.88 base_mnu_lensing_lenspriors_theta_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.0222^{+0.0010}_{-0.00095} \quad (+0.7\sigma)$	D_{40}	$1078^{+400}_{-400} \quad (-10.3\sigma)$	$H(0.15)$	$62^{+10}_{-9} \quad (-5.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.143^{+0.037}_{-0.038} \quad (+10.0\sigma)$	D_{220}	$4963^{+2000}_{-2000} \quad (-18.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$798^{+200}_{-200} \quad (+7.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2314^{+900}_{-700} \quad (-16.2\sigma)$	$H(0.38)$	$76.4^{+7.7}_{-4.5} \quad (-3.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.48 \quad (+5.9\sigma)$	D_{1420}	$756^{+300}_{-200} \quad (-11.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1808^{+300}_{-300} \quad (+6.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$2.95^{+0.31}_{-0.30} \quad (-5.3\sigma)$	D_{2000}	$215^{+70}_{-60} \quad (-7.7\sigma)$	$H(0.51)$	$85.4^{+5.0}_{-2.8} \quad (-2.9\sigma)$
n_{s}	$0.961^{+0.039}_{-0.038} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.039}_{-0.038} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2292^{+300}_{-400} \quad (+5.8\sigma)$
H_0	$< 69.5 \quad (-5.8\sigma)$	Y_{P}	$0.24532^{+0.00044}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.8^{+3.0}_{-2.3} \quad (-1.8\sigma)$
Ω_{Λ}	$0.28^{+0.48}_{-0.62} \quad (-12.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00044}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2629^{+300}_{-400} \quad (+5.5\sigma)$
Ω_{m}	$0.72^{+0.62}_{-0.48} \quad (+12.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$259^{+30}_{-30} \quad (+11.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.179^{+0.048}_{-0.048} \quad (+10.4\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.25^{+0.35}_{-0.47} \quad (+3.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5938^{+130}_{-190} \quad (+2.7\sigma)$
$\Omega_{\nu} h^2$	$< 0.0267 \quad (+5.9\sigma)$	z_{*}	$1092.5^{+3.8}_{-3.8} \quad (+4.3\sigma)$	$f\sigma_8(0.15)$	$0.475^{+0.044}_{-0.055} \quad (+1.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0929^{+0.0042}_{-0.0040} \quad (-1.8\sigma)$	r_{*}	$138.5^{+9.7}_{-9.0} \quad (-11.6\sigma)$	$\sigma_8(0.15)$	$0.57^{+0.18}_{-0.15} \quad (-4.2\sigma)$
σ_8	$0.64^{+0.17}_{-0.15} \quad (-4.0\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.433^{+0.048}_{-0.058} \quad (-2.8\sigma)$
S_8	$0.93^{+0.17}_{-0.19} \quad (+3.9\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.30^{+0.93}_{-0.86} \quad (-12.3\sigma)$	$\sigma_8(0.38)$	$0.49^{+0.18}_{-0.15} \quad (-4.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.510^{+0.096}_{-0.10} \quad (+3.9\sigma)$	z_{drag}	$1061.5^{+3.9}_{-4.0} \quad (+4.7\sigma)$	$f\sigma_8(0.51)$	$0.411^{+0.062}_{-0.073} \quad (-3.7\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.567^{+0.042}_{-0.040} \quad (-1.6\sigma)$	r_{drag}	$141^{+10}_{-9.2} \quad (-12.3\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.17}_{-0.14} \quad (-4.5\sigma)$
$\sigma_8/h^{0.5}$	$0.877^{+0.10}_{-0.098} \quad (-2.8\sigma)$	k_{D}	$0.148^{+0.011}_{-0.012} \quad (+14.1\sigma)$	$f\sigma_8(0.61)$	$0.394^{+0.072}_{-0.080} \quad (-4.1\sigma)$
$r_{\mathrm{drag}} h$	$76^{+30}_{-20} \quad (-6.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0021}_{-0.0021} \quad (-4.2\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.17}_{-0.14} \quad (-4.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.499^{+0.094}_{-0.092} \quad (+1.3\sigma)$	z_{eq}	$3952^{+900}_{-900} \quad (+10.7\sigma)$	$f\sigma_8(2.33)$	$0.217^{+0.089}_{-0.073} \quad (-4.9\sigma)$
z_{re}	$8.31^{+0.73}_{-0.76} \quad (+1.0\sigma)$	k_{eq}	$0.0121^{+0.0027}_{-0.0028} \quad (+10.9\sigma)$	$\sigma_8(2.33)$	$0.218^{+0.098}_{-0.077} \quad (-4.6\sigma)$
$10^9 A_{\mathrm{s}}$	$1.94^{+0.63}_{-0.55} \quad (-4.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.74^{+0.13}_{-0.11} \quad (-7.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.96 \quad (\nu: 1.9)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.74^{+0.57}_{-0.49} \quad (-10.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.411^{+0.071}_{-0.060} \quad (-7.8\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 12.95$; $\Delta \bar{\chi}^2_{\mathrm{eff}} = 0.10$; $R - 1 = 0.00197$

6.89 base_mnu_lensing_lenspriors_theta_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0222^{+0.0010}_{-0.00095} \quad (+0.6\sigma)$	D_{40}	$1111^{+500}_{-400} \quad (-8.1\sigma)$	$H(0.15)$	$62^{+10}_{-10} \quad (-5.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.140^{+0.037}_{-0.037} \quad (+8.6\sigma)$	D_{220}	$5147^{+2000}_{-2000} \quad (-13.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$795^{+200}_{-200} \quad (+6.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2378^{+900}_{-800} \quad (-11.5\sigma)$	$H(0.38)$	$76.4^{+8.3}_{-4.6} \quad (-3.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.56 \quad (+6.4\sigma)$	D_{1420}	$775^{+300}_{-200} \quad (-7.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1804^{+300}_{-300} \quad (+6.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.98^{+0.31}_{-0.30} \quad (-3.9\sigma)$	D_{2000}	$220^{+70}_{-60} \quad (-5.0\sigma)$	$H(0.51)$	$85.4^{+5.5}_{-2.8} \quad (-2.9\sigma)$
n_{s}	$0.960^{+0.038}_{-0.038} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.038}_{-0.038} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2287^{+300}_{-400} \quad (+5.7\sigma)$
H_0	$< 70.9 \quad (-5.6\sigma)$	Y_{P}	$0.24532^{+0.00044}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.7^{+3.4}_{-2.3} \quad (-1.9\sigma)$
Ω_{Λ}	$0.29^{+0.48}_{-0.63} \quad (-11.7\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00045}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2624^{+300}_{-400} \quad (+5.5\sigma)$
Ω_{m}	$0.71^{+0.63}_{-0.48} \quad (+11.7\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.19} \quad (-0.6\sigma)$	$H(2.33)$	$257^{+30}_{-30} \quad (+10.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.177^{+0.048}_{-0.049} \quad (+9.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.27^{+0.35}_{-0.50} \quad (+3.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5946^{+130}_{-200} \quad (+2.9\sigma)$
$\Omega_{\nu}h^2$	$< 0.0275 \quad (+6.4\sigma)$	z_{*}	$1092.3^{+3.8}_{-4.0} \quad (+3.9\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.039}_{-0.055} \quad (+0.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0922^{+0.0039}_{-0.0036} \quad (-2.4\sigma)$	r_{*}	$139.1^{+9.9}_{-9.1} \quad (-10.4\sigma)$	$\sigma_8(0.15)$	$0.57^{+0.18}_{-0.15} \quad (-4.4\sigma)$
σ_8	$0.63^{+0.17}_{-0.14} \quad (-4.2\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.425^{+0.043}_{-0.054} \quad (-3.3\sigma)$
S_8	$0.91^{+0.17}_{-0.19} \quad (+3.0\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.36^{+0.95}_{-0.88} \quad (-11.0\sigma)$	$\sigma_8(0.38)$	$0.49^{+0.18}_{-0.15} \quad (-4.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.497^{+0.095}_{-0.10} \quad (+3.0\sigma)$	z_{drag}	$1061.4^{+4.1}_{-4.1} \quad (+4.4\sigma)$	$f\sigma_8(0.51)$	$0.404^{+0.060}_{-0.071} \quad (-4.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.557^{+0.035}_{-0.033} \quad (-2.1\sigma)$	r_{drag}	$142^{+10}_{-9.4} \quad (-11.0\sigma)$	$\sigma_8(0.51)$	$0.45^{+0.18}_{-0.14} \quad (-4.6\sigma)$
$\sigma_8/h^{0.5}$	$0.863^{+0.10}_{-0.092} \quad (-3.2\sigma)$	k_{D}	$0.147^{+0.012}_{-0.012} \quad (+12.8\sigma)$	$f\sigma_8(0.61)$	$0.389^{+0.071}_{-0.078} \quad (-4.5\sigma)$
$r_{\mathrm{drag}}h$	$77^{+30}_{-20} \quad (-6.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0022}_{-0.0022} \quad (-4.1\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.17}_{-0.14} \quad (-4.6\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.505^{+0.091}_{-0.089} \quad (+1.5\sigma)$	z_{eq}	$3880^{+900}_{-900} \quad (+9.3\sigma)$	$f\sigma_8(2.33)$	$0.216^{+0.092}_{-0.074} \quad (-4.9\sigma)$
z_{re}	$8.28^{+0.75}_{-0.79} \quad (+1.0\sigma)$	k_{eq}	$0.0119^{+0.0027}_{-0.0028} \quad (+9.5\sigma)$	$\sigma_8(2.33)$	$0.217^{+0.10}_{-0.077} \quad (-4.7\sigma)$
10^9A_{s}	$1.99^{+0.66}_{-0.57} \quad (-2.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.75^{+0.14}_{-0.12} \quad (-6.4\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.3 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.78^{+0.59}_{-0.51} \quad (-7.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.416^{+0.072}_{-0.061} \quad (-6.6\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 15.30; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.18; R - 1 = 0.00207$$

6.90 base_mnu_lensing_lenspriors_theta_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00098}_{-0.00095} \quad (+0.6\sigma)$	D_{40}	$1075^{+400}_{-300} \quad (-10.5\sigma)$	$H(0.15)$	$61^{+10}_{-9} \quad (-5.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.146^{+0.037}_{-0.040} \quad (+11.2\sigma)$	D_{220}	$4920^{+2000}_{-2000} \quad (-19.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$805^{+200}_{-200} \quad (+7.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2311^{+900}_{-700} \quad (-16.4\sigma)$	$H(0.38)$	$76.2^{+7.5}_{-4.3} \quad (-4.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.43 \quad (+5.8\sigma)$	D_{1420}	$756^{+300}_{-200} \quad (-11.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1819^{+300}_{-300} \quad (+6.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$2.96^{+0.31}_{-0.29} \quad (-5.2\sigma)$	D_{2000}	$215^{+70}_{-60} \quad (-7.7\sigma)$	$H(0.51)$	$85.4^{+4.8}_{-2.7} \quad (-2.9\sigma)$
n_{s}	$0.961^{+0.040}_{-0.038} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.040}_{-0.038} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2302^{+300}_{-400} \quad (+6.0\sigma)$
H_0	$< 68.9 \quad (-6.1\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00042} \quad (+0.5\sigma)$	$H(0.61)$	$92.9^{+2.8}_{-2.2} \quad (-1.7\sigma)$
Ω_{Λ}	$0.26^{+0.49}_{-0.62} \quad (-12.7\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00042} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2639^{+290}_{-370} \quad (+5.8\sigma)$
Ω_{m}	$0.74^{+0.61}_{-0.49} \quad (+12.7\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$260^{+30}_{-30} \quad (+11.9\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.181^{+0.047}_{-0.049} \quad (+11.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.24^{+0.34}_{-0.46} \quad (+3.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5934^{+130}_{-180} \quad (+2.6\sigma)$
$\Omega_{\nu} h^2$	$< 0.0262 \quad (+5.8\sigma)$	z_{*}	$1092.7^{+3.7}_{-3.9} \quad (+4.7\sigma)$	$f\sigma_8(0.15)$	$0.487^{+0.045}_{-0.056} \quad (+2.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0933^{+0.0043}_{-0.0041} \quad (-1.5\sigma)$	r_{*}	$137.9^{+9.8}_{-8.7} \quad (-12.8\sigma)$	$\sigma_8(0.15)$	$0.58^{+0.18}_{-0.15} \quad (-4.1\sigma)$
σ_8	$0.65^{+0.17}_{-0.14} \quad (-3.7\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+0.9\sigma)$	$f\sigma_8(0.38)$	$0.441^{+0.049}_{-0.059} \quad (-2.2\sigma)$
S_8	$0.96^{+0.18}_{-0.20} \quad (+5.0\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.25^{+0.94}_{-0.84} \quad (-13.5\sigma)$	$\sigma_8(0.38)$	$0.50^{+0.18}_{-0.15} \quad (-4.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.525^{+0.097}_{-0.11} \quad (+5.0\sigma)$	z_{drag}	$1061.7^{+3.8}_{-4.1} \quad (+5.0\sigma)$	$f\sigma_8(0.51)$	$0.417^{+0.064}_{-0.074} \quad (-3.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.580^{+0.043}_{-0.042} \quad (-1.0\sigma)$	r_{drag}	$140^{+10}_{-9.0} \quad (-13.5\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.17}_{-0.14} \quad (-4.4\sigma)$
$\sigma_8/h^{0.5}$	$0.892^{+0.11}_{-0.099} \quad (-2.3\sigma)$	k_{D}	$0.149^{+0.011}_{-0.012} \quad (+15.3\sigma)$	$f\sigma_8(0.61)$	$0.400^{+0.075}_{-0.081} \quad (-3.8\sigma)$
$r_{\mathrm{drag}} h$	$75^{+30}_{-20} \quad (-6.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0021}_{-0.0020} \quad (-4.3\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.17}_{-0.14} \quad (-4.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.52^{+0.10}_{-0.099} \quad (+1.8\sigma)$	z_{eq}	$4017^{+900}_{-900} \quad (+12.0\sigma)$	$f\sigma_8(2.33)$	$0.219^{+0.089}_{-0.072} \quad (-4.8\sigma)$
z_{re}	$8.35^{+0.72}_{-0.77} \quad (+1.1\sigma)$	k_{eq}	$0.0123^{+0.0027}_{-0.0029} \quad (+12.2\sigma)$	$\sigma_8(2.33)$	$0.219^{+0.099}_{-0.075} \quad (-4.6\sigma)$
$10^9 A_{\mathrm{s}}$	$1.95^{+0.64}_{-0.53} \quad (-4.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.73^{+0.13}_{-0.11} \quad (-8.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.2 \quad (\nu: 1.9)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.75^{+0.57}_{-0.48} \quad (-10.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.406^{+0.071}_{-0.058} \quad (-8.8\sigma)$	χ_{prior}^2	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 13.20$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.11$; $R - 1 = 0.00228$

6.91 base_mnu_lensing_lenspriors_theta_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00099}_{-0.00095} \quad (+0.7\sigma)$	D_{40}	$1110^{+500}_{-400} \quad (-8.2\sigma)$	$H(0.15)$	$62^{+10}_{-9} \quad (-5.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.142^{+0.037}_{-0.039} \quad (+9.5\sigma)$	D_{220}	$5116^{+2000}_{-2000} \quad (-14.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$797^{+200}_{-200} \quad (+6.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2381^{+900}_{-800} \quad (-11.3\sigma)$	$H(0.38)$	$76.4^{+8.0}_{-4.6} \quad (-3.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.51 \quad (+6.1\sigma)$	D_{1420}	$777^{+300}_{-200} \quad (-7.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1806^{+300}_{-300} \quad (+6.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$2.98^{+0.32}_{-0.30} \quad (-3.7\sigma)$	D_{2000}	$221^{+80}_{-70} \quad (-4.3\sigma)$	$H(0.51)$	$85.4^{+5.2}_{-2.9} \quad (-2.9\sigma)$
n_{s}	$0.961^{+0.040}_{-0.039} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.040}_{-0.039} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$2289^{+300}_{-400} \quad (+5.7\sigma)$
H_0	$< 70.0 \quad (-5.7\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.7^{+3.2}_{-2.3} \quad (-1.8\sigma)$
Ω_{Λ}	$0.29^{+0.48}_{-0.62} \quad (-11.8\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2626^{+300}_{-400} \quad (+5.5\sigma)$
Ω_{m}	$0.71^{+0.62}_{-0.48} \quad (+11.8\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$258^{+30}_{-30} \quad (+10.8\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.178^{+0.048}_{-0.049} \quad (+10.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.25^{+0.36}_{-0.48} \quad (+3.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5940^{+140}_{-190} \quad (+2.7\sigma)$
$\Omega_{\nu} h^2$	$< 0.0270 \quad (+6.1\sigma)$	z_{*}	$1092.5^{+3.7}_{-3.9} \quad (+4.1\sigma)$	$f\sigma_8(0.15)$	$0.476^{+0.045}_{-0.057} \quad (+1.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0927^{+0.0043}_{-0.0040} \quad (-2.0\sigma)$	r_{*}	$138.7^{+9.8}_{-9.0} \quad (-11.2\sigma)$	$\sigma_8(0.15)$	$0.58^{+0.18}_{-0.15} \quad (-4.1\sigma)$
σ_8	$0.65^{+0.17}_{-0.15} \quad (-3.8\sigma)$	$100\theta_{*}$	$1.0413^{+0.0012}_{-0.0012} \quad (+0.9\sigma)$	$f\sigma_8(0.38)$	$0.435^{+0.048}_{-0.058} \quad (-2.6\sigma)$
S_8	$0.93^{+0.18}_{-0.19} \quad (+3.9\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.32^{+0.95}_{-0.87} \quad (-11.9\sigma)$	$\sigma_8(0.38)$	$0.50^{+0.18}_{-0.15} \quad (-4.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.511^{+0.097}_{-0.11} \quad (+3.9\sigma)$	z_{drag}	$1061.5^{+3.8}_{-4.0} \quad (+4.6\sigma)$	$f\sigma_8(0.51)$	$0.413^{+0.063}_{-0.074} \quad (-3.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.570^{+0.043}_{-0.040} \quad (-1.5\sigma)$	r_{drag}	$141^{+10}_{-9.3} \quad (-11.9\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.18}_{-0.14} \quad (-4.3\sigma)$
$\sigma_8/h^{0.5}$	$0.881^{+0.11}_{-0.098} \quad (-2.6\sigma)$	k_{D}	$0.148^{+0.011}_{-0.012} \quad (+13.7\sigma)$	$f\sigma_8(0.61)$	$0.397^{+0.073}_{-0.081} \quad (-4.0\sigma)$
$r_{\mathrm{drag}} h$	$76^{+30}_{-20} \quad (-6.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0021}_{-0.0021} \quad (-4.2\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.17}_{-0.14} \quad (-4.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.53^{+0.10}_{-0.099} \quad (+2.1\sigma)$	z_{eq}	$3928^{+900}_{-900} \quad (+10.2\sigma)$	$f\sigma_8(2.33)$	$0.219^{+0.091}_{-0.074} \quad (-4.7\sigma)$
z_{re}	$8.30^{+0.73}_{-0.77} \quad (+1.0\sigma)$	k_{eq}	$0.0120^{+0.0027}_{-0.0029} \quad (+10.4\sigma)$	$\sigma_8(2.33)$	$0.220^{+0.10}_{-0.078} \quad (-4.5\sigma)$
$10^9 A_{\mathrm{s}}$	$2.00^{+0.67}_{-0.57} \quad (-2.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.74^{+0.14}_{-0.11} \quad (-7.2\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.8 \quad (\nu: 2.0)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.79^{+0.60}_{-0.51} \quad (-6.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.412^{+0.072}_{-0.061} \quad (-7.4\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.9) \quad (-1.2\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 12.75; \Delta \bar{\chi}^2_{\mathrm{eff}} = 0.16; R - 1 = 0.00245$$

6.92 base_mnu_lensing_lenspriors_theta_post_accr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00099}_{-0.00095} \quad (+0.7\sigma)$	D_{40}	$1149^{+500}_{-400} \quad (-5.6\sigma)$	$H(0.15)$	$62^{+10}_{-10} \quad (-4.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.139^{+0.037}_{-0.038} \quad (+8.0\sigma)$	D_{220}	$5334^{+3000}_{-2000} \quad (-9.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$793^{+200}_{-200} \quad (+6.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2458^{+900}_{-800} \quad (-5.7\sigma)$	$H(0.38)$	$77^{+9}_{-5} \quad (-3.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.61 \quad (+6.5\sigma)$	D_{1420}	$801^{+300}_{-200} \quad (-2.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1800^{+300}_{-300} \quad (+6.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.01^{+0.32}_{-0.30} \quad (-2.0\sigma)$	D_{2000}	$227^{+80}_{-70} \quad (-1.0\sigma)$	$H(0.51)$	$85.4^{+5.8}_{-2.9} \quad (-2.9\sigma)$
n_{s}	$0.960^{+0.039}_{-0.040} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.040} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2283^{+300}_{-400} \quad (+5.6\sigma)$
H_0	$< 71.6 \quad (-5.5\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.6^{+3.7}_{-2.4} \quad (-2.0\sigma)$
Ω_{Λ}	$0.30^{+0.49}_{-0.62} \quad (-11.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2621^{+300}_{-400} \quad (+5.4\sigma)$
Ω_{m}	$0.70^{+0.62}_{-0.49} \quad (+11.5\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$256^{+30}_{-30} \quad (+9.9\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.176^{+0.048}_{-0.050} \quad (+9.4\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.28^{+0.36}_{-0.52} \quad (+3.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5949^{+140}_{-210} \quad (+2.9\sigma)$
$\Omega_{\nu} h^2$	$< 0.0280 \quad (+6.5\sigma)$	z_{*}	$1092.2^{+3.8}_{-4.0} \quad (+3.7\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.040}_{-0.058} \quad (+0.3\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0920^{+0.0039}_{-0.0036} \quad (-2.6\sigma)$	r_{*}	$139^{+10}_{-9.2} \quad (-9.9\sigma)$	$\sigma_8(0.15)$	$0.57^{+0.19}_{-0.15} \quad (-4.3\sigma)$
σ_8	$0.64^{+0.18}_{-0.14} \quad (-4.1\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.426^{+0.043}_{-0.053} \quad (-3.2\sigma)$
S_8	$0.91^{+0.17}_{-0.19} \quad (+2.9\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.39^{+0.98}_{-0.88} \quad (-10.5\sigma)$	$\sigma_8(0.38)$	$0.49^{+0.19}_{-0.15} \quad (-4.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.497^{+0.096}_{-0.10} \quad (+2.9\sigma)$	z_{drag}	$1061.3^{+4.0}_{-4.1} \quad (+4.3\sigma)$	$f\sigma_8(0.51)$	$0.406^{+0.060}_{-0.070} \quad (-4.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.558^{+0.035}_{-0.033} \quad (-2.1\sigma)$	r_{drag}	$142^{+10}_{-9.5} \quad (-10.5\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.18}_{-0.14} \quad (-4.5\sigma)$
$\sigma_8/h^{0.5}$	$0.866^{+0.10}_{-0.092} \quad (-3.1\sigma)$	k_{D}	$0.147^{+0.012}_{-0.012} \quad (+12.3\sigma)$	$f\sigma_8(0.61)$	$0.390^{+0.071}_{-0.078} \quad (-4.4\sigma)$
$r_{\mathrm{drag}} h$	$77^{+30}_{-20} \quad (-5.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0023}_{-0.0021} \quad (-4.1\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.18}_{-0.14} \quad (-4.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.533^{+0.097}_{-0.098} \quad (+2.2\sigma)$	z_{eq}	$3847^{+900}_{-900} \quad (+8.6\sigma)$	$f\sigma_8(2.33)$	$0.218^{+0.095}_{-0.075} \quad (-4.8\sigma)$
z_{re}	$8.26^{+0.74}_{-0.79} \quad (+0.9\sigma)$	k_{eq}	$0.0118^{+0.0027}_{-0.0028} \quad (+8.8\sigma)$	$\sigma_8(2.33)$	$0.219^{+0.11}_{-0.079} \quad (-4.6\sigma)$
$10^9 A_{\mathrm{s}}$	$2.06^{+0.70}_{-0.59} \quad (-1.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.76^{+0.14}_{-0.12} \quad (-5.9\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.2 \quad (\nu: 2.0)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.84^{+0.63}_{-0.53} \quad (-3.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.419^{+0.075}_{-0.061} \quad (-6.0\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.9) \quad (-1.2\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 15.21; \Delta \bar{\chi}^2_{\mathrm{eff}} = 0.29; R - 1 = 0.00402$$

6.93 base_mnu_lensing_lenspriors_theta_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0222^{+0.0010}_{-0.00095} \quad (+0.7\sigma)$	D_{40}	$1113^{+500}_{-400} \quad (-8.0\sigma)$	$H(0.15)$	$62^{+10}_{-10} \quad (-5.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.141^{+0.036}_{-0.038} \quad (+9.1\sigma)$	D_{220}	$5145^{+2000}_{-2000} \quad (-13.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$797^{+200}_{-200} \quad (+7.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2387^{+900}_{-800} \quad (-10.9\sigma)$	$H(0.38)$	$76.3^{+8.1}_{-4.7} \quad (-3.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.61 \quad (+6.3\sigma)$	D_{1420}	$779^{+300}_{-200} \quad (-6.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1808^{+300}_{-300} \quad (+6.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.98^{+0.32}_{-0.30} \quad (-3.5\sigma)$	D_{2000}	$221^{+80}_{-70} \quad (-4.1\sigma)$	$H(0.51)$	$85.4^{+5.3}_{-2.9} \quad (-3.0\sigma)$
n_{s}	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2291^{+300}_{-400} \quad (+5.8\sigma)$
H_0	$< 70.2 \quad (-5.8\sigma)$	Y_{P}	$0.24532^{+0.00044}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.7^{+3.3}_{-2.3} \quad (-1.9\sigma)$
Ω_{Λ}	$0.29^{+0.48}_{-0.62} \quad (-11.8\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00044}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2629^{+300}_{-400} \quad (+5.5\sigma)$
Ω_{m}	$0.71^{+0.61}_{-0.48} \quad (+11.8\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$258^{+30}_{-30} \quad (+10.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.178^{+0.047}_{-0.049} \quad (+10.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.27^{+0.37}_{-0.50} \quad (+3.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5945^{+140}_{-200} \quad (+2.8\sigma)$
$\Omega_{\nu}h^2$	$< 0.0281 \quad (+6.3\sigma)$	z_{*}	$1092.4^{+3.7}_{-4.0} \quad (+4.1\sigma)$	$f\sigma_8(0.15)$	$0.472^{+0.046}_{-0.056} \quad (+0.9\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0925^{+0.0043}_{-0.0042} \quad (-2.2\sigma)$	r_{*}	$138.9^{+9.8}_{-8.9} \quad (-11.0\sigma)$	$\sigma_8(0.15)$	$0.57^{+0.19}_{-0.16} \quad (-4.2\sigma)$
σ_8	$0.64^{+0.18}_{-0.15} \quad (-4.0\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.432^{+0.051}_{-0.062} \quad (-2.9\sigma)$
S_8	$0.92^{+0.17}_{-0.19} \quad (+3.6\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.33^{+0.95}_{-0.86} \quad (-11.6\sigma)$	$\sigma_8(0.38)$	$0.49^{+0.18}_{-0.15} \quad (-4.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.506^{+0.093}_{-0.10} \quad (+3.6\sigma)$	z_{drag}	$1061.4^{+3.9}_{-4.1} \quad (+4.5\sigma)$	$f\sigma_8(0.51)$	$0.410^{+0.065}_{-0.077} \quad (-3.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.565^{+0.046}_{-0.045} \quad (-1.7\sigma)$	r_{drag}	$141^{+10}_{-9.2} \quad (-11.6\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.18}_{-0.15} \quad (-4.4\sigma)$
$\sigma_8/h^{0.5}$	$0.87^{+0.11}_{-0.10} \quad (-2.8\sigma)$	k_{D}	$0.148^{+0.011}_{-0.012} \quad (+13.4\sigma)$	$f\sigma_8(0.61)$	$0.394^{+0.076}_{-0.084} \quad (-4.2\sigma)$
$r_{\mathrm{drag}}h$	$76^{+30}_{-20} \quad (-6.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0022}_{-0.0021} \quad (-4.2\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.18}_{-0.14} \quad (-4.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.527^{+0.099}_{-0.099} \quad (+2.1\sigma)$	z_{eq}	$3907^{+900}_{-900} \quad (+9.8\sigma)$	$f\sigma_8(2.33)$	$0.218^{+0.093}_{-0.075} \quad (-4.8\sigma)$
z_{re}	$8.29^{+0.73}_{-0.77} \quad (+1.0\sigma)$	k_{eq}	$0.0120^{+0.0026}_{-0.0028} \quad (+10.0\sigma)$	$\sigma_8(2.33)$	$0.218^{+0.10}_{-0.079} \quad (-4.6\sigma)$
10^9A_{s}	$2.00^{+0.67}_{-0.57} \quad (-2.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.75^{+0.14}_{-0.11} \quad (-6.9\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.7 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.79^{+0.60}_{-0.51} \quad (-6.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.414^{+0.072}_{-0.060} \quad (-7.1\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.9) \quad (-1.2\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 12.69$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.14$; $R - 1 = 0.00149$

6.94 base_mnu_lensing_lenspriors_theta_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0222^{+0.0010}_{-0.00095} \quad (+0.6\sigma)$	D_{40}	$1160^{+500}_{-400} \quad (-4.9\sigma)$	$H(0.15)$	$62^{+10}_{-10} \quad (-4.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.137^{+0.035}_{-0.038} \quad (+7.3\sigma)$	D_{220}	$5400^{+3000}_{-2000} \quad (-7.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$791^{+200}_{-200} \quad (+6.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0011} \quad (+0.5\sigma)$	D_{810}	$2476^{+900}_{-800} \quad (-4.5\sigma)$	$H(0.38)$	$77^{+9}_{-5} \quad (-3.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.73 \quad (+6.7\sigma)$	D_{1420}	$806^{+300}_{-200} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1797^{+300}_{-300} \quad (+5.9\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.01^{+0.32}_{-0.30} \quad (-1.6\sigma)$	D_{2000}	$228^{+80}_{-70} \quad (-0.4\sigma)$	$H(0.51)$	$85.4^{+6.0}_{-3.1} \quad (-2.9\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2280^{+300}_{-400} \quad (+5.5\sigma)$
H_0	$< 72.0 \quad (-5.4\sigma)$	Y_{P}	$0.24531^{+0.00044}_{-0.00042} \quad (+0.5\sigma)$	$H(0.61)$	$92.6^{+3.9}_{-2.5} \quad (-2.0\sigma)$
Ω_{Λ}	$0.31^{+0.48}_{-0.62} \quad (-11.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00044}_{-0.00042} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2617^{+300}_{-400} \quad (+5.3\sigma)$
Ω_{m}	$0.69^{+0.62}_{-0.48} \quad (+11.1\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.19} \quad (-0.6\sigma)$	$H(2.33)$	$256^{+30}_{-30} \quad (+9.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.174^{+0.048}_{-0.050} \quad (+9.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.28^{+0.38}_{-0.54} \quad (+3.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5953^{+140}_{-220} \quad (+3.0\sigma)$
$\Omega_{\nu}h^2$	$< 0.0293 \quad (+6.7\sigma)$	z_{*}	$1092.1^{+3.9}_{-4.0} \quad (+3.5\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.040}_{-0.056} \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0917^{+0.0039}_{-0.0038} \quad (-2.8\sigma)$	r_{*}	$140^{+10}_{-9.2} \quad (-9.2\sigma)$	$\sigma_8(0.15)$	$0.57^{+0.19}_{-0.16} \quad (-4.3\sigma)$
σ_8	$0.63^{+0.18}_{-0.15} \quad (-4.2\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.423^{+0.046}_{-0.058} \quad (-3.5\sigma)$
S_8	$0.89^{+0.17}_{-0.18} \quad (+2.4\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.42^{+0.97}_{-0.88} \quad (-9.8\sigma)$	$\sigma_8(0.38)$	$0.49^{+0.19}_{-0.15} \quad (-4.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.490^{+0.092}_{-0.10} \quad (+2.4\sigma)$	z_{drag}	$1061.2^{+4.1}_{-4.1} \quad (+4.0\sigma)$	$f\sigma_8(0.51)$	$0.403^{+0.062}_{-0.074} \quad (-4.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.553^{+0.040}_{-0.038} \quad (-2.4\sigma)$	r_{drag}	$142^{+10}_{-9.5} \quad (-9.8\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.19}_{-0.15} \quad (-4.5\sigma)$
$\sigma_8/h^{0.5}$	$0.86^{+0.11}_{-0.10} \quad (-3.2\sigma)$	k_{D}	$0.147^{+0.011}_{-0.012} \quad (+11.6\sigma)$	$f\sigma_8(0.61)$	$0.388^{+0.073}_{-0.082} \quad (-4.5\sigma)$
$r_{\mathrm{drag}}h$	$78^{+30}_{-20} \quad (-5.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1601^{+0.0023}_{-0.0022} \quad (-4.0\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.18}_{-0.14} \quad (-4.5\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.534^{+0.096}_{-0.097} \quad (+2.3\sigma)$	z_{eq}	$3809^{+800}_{-900} \quad (+7.8\sigma)$	$f\sigma_8(2.33)$	$0.218^{+0.096}_{-0.077} \quad (-4.8\sigma)$
z_{re}	$8.24^{+0.75}_{-0.79} \quad (+0.9\sigma)$	k_{eq}	$0.0117^{+0.0026}_{-0.0028} \quad (+8.1\sigma)$	$\sigma_8(2.33)$	$0.218^{+0.11}_{-0.081} \quad (-4.6\sigma)$
10^9A_{s}	$2.07^{+0.70}_{-0.60} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.76^{+0.14}_{-0.12} \quad (-5.3\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.2 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.85^{+0.63}_{-0.54} \quad (-2.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.422^{+0.074}_{-0.061} \quad (-5.4\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$

$$\bar{\chi}^2_{\mathrm{eff}} = 15.21; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.33; R - 1 = 0.00352$$

6.95 base_mnu_lensing_lenspriors_theta_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0222^{+0.0010}_{-0.00095} \quad (+0.7\sigma)$	D_{40}	$1087^{+400}_{-400} \quad (-9.7\sigma)$	$H(0.15)$	$62^{+10}_{-9} \quad (-5.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.144^{+0.037}_{-0.038} \quad (+10.2\sigma)$	D_{220}	$4995^{+2000}_{-2000} \quad (-17.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$798^{+200}_{-200} \quad (+7.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{810}	$2331^{+900}_{-700} \quad (-15.0\sigma)$	$H(0.38)$	$76.4^{+7.5}_{-4.4} \quad (-3.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 2.45 \quad (+5.8\sigma)$	D_{1420}	$761^{+300}_{-200} \quad (-10.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1808^{+300}_{-300} \quad (+6.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$2.96^{+0.31}_{-0.30} \quad (-4.8\sigma)$	D_{2000}	$216^{+70}_{-60} \quad (-6.8\sigma)$	$H(0.51)$	$85.4^{+4.9}_{-2.7} \quad (-2.9\sigma)$
n_{s}	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.039}_{-0.039} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2291^{+300}_{-400} \quad (+5.8\sigma)$
H_0	$< 69.3 \quad (-5.8\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$H(0.61)$	$92.8^{+2.9}_{-2.2} \quad (-1.8\sigma)$
Ω_{Λ}	$0.29^{+0.48}_{-0.62} \quad (-12.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2628^{+300}_{-400} \quad (+5.5\sigma)$
Ω_{m}	$0.71^{+0.62}_{-0.48} \quad (+12.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$H(2.33)$	$259^{+30}_{-30} \quad (+11.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.179^{+0.047}_{-0.048} \quad (+10.4\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.24^{+0.35}_{-0.46} \quad (+3.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5936^{+130}_{-180} \quad (+2.7\sigma)$
$\Omega_{\nu}h^2$	$< 0.0264 \quad (+5.8\sigma)$	z_{*}	$1092.6^{+3.7}_{-3.8} \quad (+4.3\sigma)$	$f\sigma_8(0.15)$	$0.479^{+0.044}_{-0.055} \quad (+1.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0931^{+0.0043}_{-0.0041} \quad (-1.7\sigma)$	r_{*}	$138.4^{+9.6}_{-8.9} \quad (-11.8\sigma)$	$\sigma_8(0.15)$	$0.58^{+0.18}_{-0.15} \quad (-4.1\sigma)$
σ_8	$0.65^{+0.17}_{-0.15} \quad (-3.8\sigma)$	$100\theta_{*}$	$1.0414^{+0.0012}_{-0.0012} \quad (+0.9\sigma)$	$f\sigma_8(0.38)$	$0.437^{+0.047}_{-0.059} \quad (-2.5\sigma)$
S_8	$0.94^{+0.17}_{-0.19} \quad (+4.2\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.29^{+0.92}_{-0.86} \quad (-12.4\sigma)$	$\sigma_8(0.38)$	$0.50^{+0.18}_{-0.15} \quad (-4.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.515^{+0.096}_{-0.10} \quad (+4.2\sigma)$	z_{drag}	$1061.5^{+3.9}_{-4.0} \quad (+4.7\sigma)$	$f\sigma_8(0.51)$	$0.415^{+0.062}_{-0.074} \quad (-3.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.573^{+0.042}_{-0.041} \quad (-1.4\sigma)$	r_{drag}	$141.0^{+9.9}_{-9.2} \quad (-12.5\sigma)$	$\sigma_8(0.51)$	$0.46^{+0.17}_{-0.14} \quad (-4.3\sigma)$
$\sigma_8/h^{0.5}$	$0.885^{+0.10}_{-0.099} \quad (-2.5\sigma)$	k_{D}	$0.148^{+0.011}_{-0.012} \quad (+14.2\sigma)$	$f\sigma_8(0.61)$	$0.398^{+0.072}_{-0.082} \quad (-3.9\sigma)$
$r_{\mathrm{drag}}h$	$76^{+30}_{-20} \quad (-6.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0021}_{-0.0021} \quad (-4.2\sigma)$	$\sigma_8(0.61)$	$0.43^{+0.17}_{-0.14} \quad (-4.4\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.514^{+0.098}_{-0.098} \quad (+1.7\sigma)$	z_{eq}	$3961^{+900}_{-900} \quad (+10.9\sigma)$	$f\sigma_8(2.33)$	$0.219^{+0.088}_{-0.074} \quad (-4.7\sigma)$
z_{re}	$8.31^{+0.73}_{-0.75} \quad (+1.0\sigma)$	k_{eq}	$0.0121^{+0.0027}_{-0.0028} \quad (+11.1\sigma)$	$\sigma_8(2.33)$	$0.219^{+0.097}_{-0.077} \quad (-4.5\sigma)$
10^9A_{s}	$1.96^{+0.64}_{-0.55} \quad (-3.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.74^{+0.13}_{-0.11} \quad (-7.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$8.5 \quad (\nu: 1.9)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.76^{+0.57}_{-0.49} \quad (-9.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.410^{+0.070}_{-0.059} \quad (-8.0\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$

$\bar{\chi}^2_{\mathrm{eff}} = 11.51$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.04$; $R - 1 = 0.00127$

6.96 base_mnu_lensing_lenspriors_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02216	$0.02222^{+0.00099}_{-0.00098}$ (+0.7 σ)	D_{810}	2656	2165^{+1000}_{-900} (−27.0 σ)	$H(0.51)$	93.4	99^{+10}_{-10} (+9.0 σ)
$\Omega_c h^2$	0.1328	$0.157^{+0.050}_{-0.046}$ (+16.0 σ)	D_{1420}	829	629^{+300}_{-300} (−36.2 σ)	$D_M(0.51)$	1926	1850^{+150}_{-160} (−3.7 σ)
$100\theta_{MC}$	1.076	$1.109^{+0.065}_{-0.069}$ (+135.3 σ)	D_{2000}	240	182^{+100}_{-90} (−25.0 σ)	$H(0.61)$	99.6	106^{+10}_{-10} (+12.1 σ)
Σm_ν [eV]	0.83	< 3.44 (+8.1 σ)	$n_{s,0.002}$	0.9616	$0.960^{+0.039}_{-0.039}$ (−0.3 σ)	$D_M(0.61)$	2237	2144^{+180}_{-190} (−4.1 σ)
$\ln(10^{10} A_s)$	3.127	$3.03^{+0.22}_{-0.23}$ (−0.7 σ)	Y_P	0.245310	$0.24532^{+0.00043}_{-0.00043}$ (+0.6 σ)	$H(2.33)$	252.3	274^{+40}_{-40} (+19.1 σ)
n_s	0.9616	$0.960^{+0.039}_{-0.039}$ (−0.3 σ)	Y_P^{BBN}	0.246637	$0.24665^{+0.00043}_{-0.00043}$ (+0.6 σ)	$D_M(2.33)$	5501	5193^{+600}_{-600} (−12.5 σ)
H_0	68.70	$70.6^{+4.2}_{-3.9}$ (+2.3 σ)	$10^5 D/H$	2.625	$2.62^{+0.19}_{-0.18}$ (−0.6 σ)	$f\sigma_8(0.15)$	0.4545	$0.457^{+0.035}_{-0.035}$ (−0.3 σ)
Ω_Λ	0.653	$0.609^{+0.087}_{-0.097}$ (−1.7 σ)	Age/Gyr	13.16	$12.4^{+1.5}_{-1.5}$ (−12.9 σ)	$\sigma_8(0.15)$	0.699	$0.669^{+0.077}_{-0.078}$ (−1.6 σ)
Ω_m	0.347	$0.391^{+0.097}_{-0.087}$ (+1.7 σ)	z_*	1091.53	$1093.8^{+5.0}_{-4.6}$ (+6.8 σ)	$f\sigma_8(0.38)$	0.4653	$0.459^{+0.034}_{-0.035}$ (−1.0 σ)
$\Omega_m h^2$	0.164	$0.196^{+0.069}_{-0.061}$ (+15.8 σ)	r_*	141.1	135^{+11}_{-12} (−17.9 σ)	$\sigma_8(0.38)$	0.617	$0.587^{+0.073}_{-0.074}$ (−1.6 σ)
$\Omega_\nu h^2$	0.0089	< 0.0370 (+8.1 σ)	$100\theta_*$	1.077	$1.110^{+0.065}_{-0.069}$ (+145.9 σ)	$f\sigma_8(0.51)$	0.4607	$0.450^{+0.035}_{-0.039}$ (−1.2 σ)
$\Omega_m h^3$	0.113	$0.139^{+0.057}_{-0.050}$ (+35.0 σ)	$D_M(z_*)/\text{Gpc}$	13.10	$12.2^{+1.8}_{-1.7}$ (−35.5 σ)	$\sigma_8(0.51)$	0.577	$0.548^{+0.071}_{-0.071}$ (−1.6 σ)
σ_8	0.759	$0.730^{+0.078}_{-0.079}$ (−1.6 σ)	z_{drag}	1060.54	$1062.6^{+4.7}_{-4.3}$ (+6.9 σ)	$f\sigma_8(0.61)$	0.4538	$0.441^{+0.036}_{-0.041}$ (−1.3 σ)
S_8	0.817	$0.830^{+0.071}_{-0.070}$ (−0.2 σ)	r_{drag}	143.7	138^{+11}_{-12} (−18.9 σ)	$\sigma_8(0.61)$	0.549	$0.520^{+0.069}_{-0.069}$ (−1.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4473	$0.454^{+0.039}_{-0.038}$ (−0.2 σ)	k_D	0.1446	$0.152^{+0.015}_{-0.014}$ (+21.6 σ)	$f\sigma_8(2.33)$	0.2828	$0.267^{+0.034}_{-0.036}$ (−1.5 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5827	$0.576^{+0.044}_{-0.044}$ (−1.2 σ)	$100\theta_D$	0.1659	$0.1701^{+0.0085}_{-0.0090}$ (+33.4 σ)	$\sigma_8(2.33)$	0.2859	$0.269^{+0.038}_{-0.040}$ (−1.6 σ)
$\sigma_8/h^{0.5}$	0.916	$0.87^{+0.11}_{-0.11}$ (−3.0 σ)	z_{eq}	3703	4271^{+1000}_{-1000} (+17.1 σ)	χ^2_{lensing}	7.50	9.96 (ν : 2.2)
$r_{\text{drag}} h$	98.72	$97.2^{+3.8}_{-3.9}$ (+0.2 σ)	k_{eq}	0.01132	$0.0131^{+0.0037}_{-0.0034}$ (+17.4 σ)	$\chi^2_{6\text{DF}}$	0.09	0.40 (ν : 0.1)
$\langle d^2 \rangle^{1/2}$	2.526	$2.50^{+0.11}_{-0.10}$ (+1.5 σ)	$100\theta_{\text{eq}}$	0.791	$0.745^{+0.10}_{-0.095}$ (−7.0 σ)	χ^2_{MGS}	0.98	0.71 (ν : 0.2)
z_{re}	8.17	$8.66^{+1.1}_{-0.97}$ (+1.4 σ)	$100\theta_{s,\text{eq}}$	0.439	$0.415^{+0.054}_{-0.048}$ (−6.9 σ)	χ^2_{DR12BAO}	2.28	3.7 (ν : 1.3)
$10^9 A_s$	2.281	$2.08^{+0.48}_{-0.46}$ (−0.3 σ)	$H(0.15)$	74.7	$77.5^{+5.9}_{-5.5}$ (+3.4 σ)	χ^2_{prior}	0.01	2.0 (ν : 2.0) (−1.5 σ)
$10^9 A_s e^{-2\tau}$	2.043	$1.87^{+0.43}_{-0.41}$ (−1.5 σ)	$D_M(0.15)$	628.6	609^{+39}_{-42} (−2.5 σ)	χ^2_{BAO}	3.35	4.9 (ν : 1.6)
D_{40}	1310	1160^{+300}_{-300} (−4.9 σ)	$H(0.38)$	86.0	$90.4^{+9.1}_{-8.4}$ (+6.3 σ)			
D_{220}	5922	5016^{+2000}_{-2000} (−17.0 σ)	$D_M(0.38)$	1491	1436^{+110}_{-110} (−3.2 σ)			

Best-fit $\chi^2_{\text{eff}} = 10.86$; $\Delta\chi^2_{\text{eff}} = -2.45$; $\bar{\chi}^2_{\text{eff}} = 16.83$; $\Delta\bar{\chi}^2_{\text{eff}} = -1.56$; $R - 1 = 0.00375$

χ^2_{eff} : BAO - 6DF: 0.09 (Δ 0.09) MGS: 0.98 (Δ -0.77) DR12BAO: 2.28 (Δ -1.35) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.50 (Δ -0.38)

6.97 base_mnu_lensing_lenspriors_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02230	$0.02223^{+0.00092}_{-0.00093}$ (+0.7 σ)	D_{810}	2802	2828^{+500}_{-600} (+21.1 σ)	$H(0.51)$	90.28	$90.9^{+4.7}_{-4.4}$ (+1.9 σ)
$\Omega_c h^2$	0.1184	$0.120^{+0.020}_{-0.019}$ (-0.2 σ)	D_{1420}	895	896^{+200}_{-200} (+16.0 σ)	$D_M(0.51)$	1969	1962^{+79}_{-83} (-1.3 σ)
$100\theta_{MC}$	1.0485	$1.054^{+0.034}_{-0.033}$ (+26.8 σ)	D_{2000}	253	255^{+50}_{-50} (+13.7 σ)	$H(0.61)$	95.9	$96.6^{+5.3}_{-5.0}$ (+2.3 σ)
Σm_ν [eV]	0.33	< 1.03 (+1.7 σ)	$n_{s,0.002}$	0.9585	$0.961^{+0.037}_{-0.038}$ (-0.1 σ)	$D_M(0.61)$	2291	2282^{+95}_{-99} (-1.3 σ)
$\ln(10^{10} A_s)$	3.143	$3.16^{+0.16}_{-0.17}$ (+7.3 σ)	Y_P	0.245367	$0.24532^{+0.00039}_{-0.00041}$ (+0.6 σ)	$H(2.33)$	237.6	240^{+18}_{-17} (+1.4 σ)
n_s	0.9585	$0.961^{+0.037}_{-0.038}$ (-0.1 σ)	Y_P^{BBN}	0.246693	$0.24665^{+0.00040}_{-0.00041}$ (+0.6 σ)	$D_M(2.33)$	5726	5688^{+310}_{-320} (-2.4 σ)
H_0	68.01	$68.1^{+2.5}_{-2.3}$ (+1.1 σ)	$10^5 D/H$	2.599	$2.62^{+0.18}_{-0.17}$ (-0.7 σ)	$f\sigma_8(0.15)$	0.4480	$0.446^{+0.031}_{-0.031}$ (-1.1 σ)
Ω_Λ	0.6881	$0.682^{+0.035}_{-0.038}$ (+0.6 σ)	Age/Gyr	13.71	$13.62^{+0.75}_{-0.77}$ (-2.4 σ)	$\sigma_8(0.15)$	0.729	$0.718^{+0.052}_{-0.057}$ (-0.3 σ)
Ω_m	0.3119	$0.318^{+0.038}_{-0.035}$ (-0.6 σ)	z_*	1089.91	$1090.3^{+2.3}_{-2.1}$ (-0.4 σ)	$f\sigma_8(0.38)$	0.4665	$0.463^{+0.029}_{-0.030}$ (-0.7 σ)
$\Omega_m h^2$	0.1442	$0.148^{+0.024}_{-0.022}$ (+0.9 σ)	r_*	144.9	$144.3^{+5.1}_{-5.3}$ (-0.1 σ)	$\sigma_8(0.38)$	0.6469	$0.636^{+0.046}_{-0.052}$ (-0.2 σ)
$\Omega_\nu h^2$	0.0036	< 0.0111 (+1.7 σ)	$100\theta_*$	1.0488	$1.055^{+0.034}_{-0.033}$ (+29.0 σ)	$f\sigma_8(0.51)$	0.4654	$0.461^{+0.028}_{-0.030}$ (-0.5 σ)
$\Omega_m h^3$	0.0981	$0.101^{+0.020}_{-0.018}$ (+4.5 σ)	$D_M(z_*)/\text{Gpc}$	13.81	$13.69^{+0.91}_{-0.92}$ (-3.8 σ)	$\sigma_8(0.51)$	0.6057	$0.596^{+0.043}_{-0.049}$ (-0.1 σ)
σ_8	0.788	$0.777^{+0.055}_{-0.061}$ (-0.3 σ)	z_{drag}	1059.70	$1059.7^{+2.9}_{-2.6}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4607	$0.456^{+0.027}_{-0.030}$ (-0.4 σ)
S_8	0.804	$0.799^{+0.062}_{-0.059}$ (-1.4 σ)	r_{drag}	147.5	$147.0^{+5.3}_{-5.5}$ (-0.2 σ)	$\sigma_8(0.61)$	0.5766	$0.567^{+0.041}_{-0.047}$ (-0.1 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4403	$0.438^{+0.034}_{-0.032}$ (-1.4 σ)	k_D	0.1404	$0.1410^{+0.0063}_{-0.0058}$ (+0.8 σ)	$f\sigma_8(2.33)$	0.2948	$0.291^{+0.018}_{-0.021}$ (+0.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5892	$0.583^{+0.040}_{-0.040}$ (-0.8 σ)	$100\theta_D$	0.16205	$0.1629^{+0.0049}_{-0.0045}$ (+6.7 σ)	$\sigma_8(2.33)$	0.3017	$0.297^{+0.021}_{-0.024}$ (+0.1 σ)
$\sigma_8/h^{0.5}$	0.956	$0.941^{+0.066}_{-0.075}$ (-0.9 σ)	z_{eq}	3361	3411^{+500}_{-500} (-0.2 σ)	χ^2_{lensing}	7.54	9.4 (ν : 2.0)
$r_{\text{drag}} h$	100.34	$100.2^{+2.3}_{-2.2}$ (+1.0 σ)	k_{eq}	0.01026	$0.0104^{+0.0015}_{-0.0014}$ (-0.1 σ)	χ^2_{JLA}	1035.08	1036.1 (ν : 1.6)
$\langle d^2 \rangle^{1/2}$	2.511	$2.52^{+0.11}_{-0.11}$ (+2.0 σ)	$100\theta_{\text{eq}}$	0.827	$0.825^{+0.058}_{-0.061}$ (+1.7 σ)	$\chi^2_{6\text{DF}}$	0.000	0.052 (ν : 0.0)
z_{re}	7.793	$7.88^{+0.50}_{-0.46}$ (+0.5 σ)	$100\theta_{s,\text{eq}}$	0.4567	$0.456^{+0.030}_{-0.031}$ (+1.7 σ)	χ^2_{MGS}	1.68	1.69 (ν : 0.2)
$10^9 A_s$	2.318	$2.36^{+0.39}_{-0.39}$ (+8.0 σ)	$H(0.15)$	73.32	$73.6^{+3.0}_{-2.8}$ (+1.3 σ)	χ^2_{DR12BAO}	3.01	3.8 (ν : 1.0)
$10^9 A_s e^{-2\tau}$	2.077	$2.12^{+0.35}_{-0.35}$ (+16.8 σ)	$D_M(0.15)$	637.5	636^{+23}_{-24} (-1.1 σ)	χ^2_{prior}	0.04	1.9 (ν : 1.8) (-1.5 σ)
D_{40}	1384	1394^{+200}_{-200} (+10.6 σ)	$H(0.38)$	83.51	$84.0^{+4.0}_{-3.7}$ (+1.6 σ)	χ^2_{BAO}	4.69	5.5 (ν : 1.3)
D_{220}	6407	6477^{+1000}_{-1000} (+18.7 σ)	$D_M(0.38)$	1520	1515^{+58}_{-61} (-1.2 σ)			

Best-fit $\chi^2_{\text{eff}} = 1047.35$; $\Delta\chi^2_{\text{eff}} = -0.69$; $\bar{\chi}^2_{\text{eff}} = 1053.01$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.09$; $R - 1 = 0.03389$
 χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.68 (Δ -0.14) DR12BAO: 3.01 (Δ -0.67) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8_CMBmarged: 7.54 (Δ -0.24) SN
- JLA Pantheon18: 1035.08 (Δ 0.34)

6.98 base_mnu_lensing_lenspriors_BAO_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02222^{+0.00099}_{-0.00098} (+0.7\sigma)$	D_{810}	$2193^{+1000}_{-1000} (-24.9\sigma)$	$H(0.51)$	$99^{+10}_{-10} (+8.9\sigma)$
$\Omega_c h^2$	$0.155^{+0.051}_{-0.047} (+15.4\sigma)$	D_{1420}	$636^{+400}_{-300} (-34.9\sigma)$	$D_M(0.51)$	$1852^{+160}_{-160} (-3.6\sigma)$
$100\theta_{MC}$	$1.110^{+0.065}_{-0.074} (+136.7\sigma)$	D_{2000}	$184^{+100}_{-100} (-24.1\sigma)$	$H(0.61)$	$106^{+10}_{-10} (+12.0\sigma)$
Σm_ν [eV]	$1.8^{+1.8}_{-1.8} (+8.8\sigma)$	$n_{s,0.002}$	$0.959^{+0.039}_{-0.039} (-0.4\sigma)$	$D_M(0.61)$	$2147^{+190}_{-190} (-4.0\sigma)$
$\ln(10^{10} A_s)$	$3.04^{+0.22}_{-0.24} (+0.1\sigma)$	Y_P	$0.24532^{+0.00043}_{-0.00043} (+0.6\sigma)$	$H(2.33)$	$274^{+50}_{-40} (+19.0\sigma)$
n_s	$0.959^{+0.039}_{-0.039} (-0.4\sigma)$	Y_P^{BBN}	$0.24665^{+0.00043}_{-0.00043} (+0.6\sigma)$	$D_M(2.33)$	$5199^{+700}_{-600} (-12.4\sigma)$
H_0	$70.5^{+4.3}_{-4.0} (+2.3\sigma)$	$10^5 D/H$	$2.62^{+0.19}_{-0.18} (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.028}_{-0.029} (-0.9\sigma)$
Ω_Λ	$0.608^{+0.092}_{-0.097} (-1.7\sigma)$	Age/Gyr	$12.4^{+1.6}_{-1.5} (-12.8\sigma)$	$\sigma_8(0.15)$	$0.655^{+0.073}_{-0.064} (-2.0\sigma)$
Ω_m	$0.392^{+0.097}_{-0.092} (+1.7\sigma)$	z_*	$1093.7^{+5.1}_{-4.7} (+6.8\sigma)$	$f\sigma_8(0.38)$	$0.450^{+0.026}_{-0.027} (-1.6\sigma)$
$\Omega_m h^2$	$0.196^{+0.070}_{-0.064} (+15.8\sigma)$	r_*	$136^{+12}_{-12} (-17.5\sigma)$	$\sigma_8(0.38)$	$0.575^{+0.071}_{-0.062} (-2.0\sigma)$
$\Omega_\nu h^2$	$0.019^{+0.019}_{-0.019} (+8.8\sigma)$	$100\theta_*$	$1.111^{+0.065}_{-0.074} (+147.5\sigma)$	$f\sigma_8(0.51)$	$0.441^{+0.028}_{-0.030} (-1.8\sigma)$
$\Omega_m h^3$	$0.139^{+0.058}_{-0.051} (+34.9\sigma)$	$D_M(z_*)/\text{Gpc}$	$12.2^{+2.0}_{-1.7} (-35.3\sigma)$	$\sigma_8(0.51)$	$0.536^{+0.069}_{-0.060} (-2.0\sigma)$
σ_8	$0.715^{+0.073}_{-0.064} (-2.0\sigma)$	z_{drag}	$1062.5^{+4.8}_{-4.4} (+6.9\sigma)$	$f\sigma_8(0.61)$	$0.432^{+0.031}_{-0.032} (-1.8\sigma)$
S_8	$0.813^{+0.061}_{-0.061} (-0.8\sigma)$	r_{drag}	$138^{+12}_{-12} (-18.5\sigma)$	$\sigma_8(0.61)$	$0.509^{+0.067}_{-0.058} (-2.0\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.033}_{-0.033} (-0.8\sigma)$	k_D	$0.152^{+0.015}_{-0.014} (+21.4\sigma)$	$f\sigma_8(2.33)$	$0.262^{+0.033}_{-0.033} (-1.8\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.564^{+0.034}_{-0.033} (-1.8\sigma)$	$100\theta_D$	$0.1701^{+0.0086}_{-0.0096} (+33.7\sigma)$	$\sigma_8(2.33)$	$0.263^{+0.038}_{-0.034} (-1.9\sigma)$
$\sigma_8/h^{0.5}$	$0.852^{+0.10}_{-0.093} (-3.5\sigma)$	z_{eq}	$4237^{+1000}_{-1000} (+16.4\sigma)$	χ^2_{lensing}	$12.3 (\nu: 2.1)$
$r_{\text{drag}} h$	$97.2^{+4.0}_{-3.9} (+0.2\sigma)$	k_{eq}	$0.0130^{+0.0038}_{-0.0035} (+16.7\sigma)$	$\chi^2_{6\text{DF}}$	$0.41 (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.10} (+1.6\sigma)$	$100\theta_{\text{eq}}$	$0.751^{+0.10}_{-0.097} (-6.3\sigma)$	χ^2_{MGS}	$0.71 (\nu: 0.2)$
z_{re}	$8.7^{+1.1}_{-1.0} (+1.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.418^{+0.056}_{-0.049} (-6.2\sigma)$	χ^2_{DR12BAO}	$3.8 (\nu: 1.3)$
$10^9 A_s$	$2.11^{+0.51}_{-0.46} (+0.5\sigma)$	$H(0.15)$	$77.4^{+6.1}_{-5.7} (+3.4\sigma)$	χ^2_{prior}	$2.0 (\nu: 2.0) (-1.5\sigma)$
$10^9 A_s e^{-2\tau}$	$1.89^{+0.46}_{-0.42} (+0.3\sigma)$	$D_M(0.15)$	$610^{+40}_{-43} (-2.4\sigma)$	χ^2_{BAO}	$4.9 (\nu: 1.6)$
D_{40}	$1177^{+300}_{-300} (-3.8\sigma)$	$H(0.38)$	$90.3^{+9.3}_{-8.7} (+6.2\sigma)$		
D_{220}	$5112^{+2000}_{-2000} (-14.7\sigma)$	$D_M(0.38)$	$1438^{+110}_{-120} (-3.2\sigma)$		

$\bar{\chi}^2_{\text{eff}} = 19.21$; $\Delta\bar{\chi}^2_{\text{eff}} = -1.94$; $R - 1 = 0.00433$

6.99 base_mnu_lensing_lenspriors_BAO_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02221^{+0.00099}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2202^{+1000}_{-1000} \quad (-24.3\sigma)$	$H(0.51)$	$99^{+10}_{-10} \quad (+8.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.155^{+0.052}_{-0.047} \quad (+15.5\sigma)$	D_{1420}	$642^{+400}_{-300} \quad (-33.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1853^{+150}_{-160} \quad (-3.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.108^{+0.066}_{-0.068} \quad (+133.0\sigma)$	D_{2000}	$186^{+100}_{-100} \quad (-23.1\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+11.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.39 \quad (+8.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2148^{+180}_{-200} \quad (-4.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.04^{+0.25}_{-0.26} \quad (-0.1\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$273^{+50}_{-40} \quad (+18.6\sigma)$
n_{s}	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5206^{+600}_{-600} \quad (-12.2\sigma)$
H_0	$70.5^{+4.3}_{-4.0} \quad (+2.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.040}_{-0.038} \quad (-0.4\sigma)$
Ω_{Λ}	$0.611^{+0.086}_{-0.098} \quad (-1.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+1.5}_{-1.5} \quad (-12.6\sigma)$	$\sigma_8(0.15)$	$0.668^{+0.079}_{-0.077} \quad (-1.6\sigma)$
Ω_{m}	$0.389^{+0.098}_{-0.086} \quad (+1.7\sigma)$	z_*	$1093.7^{+5.1}_{-4.6} \quad (+6.7\sigma)$	$f\sigma_8(0.38)$	$0.458^{+0.038}_{-0.037} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.195^{+0.070}_{-0.061} \quad (+15.4\sigma)$	r_*	$136^{+11}_{-12} \quad (-17.3\sigma)$	$\sigma_8(0.38)$	$0.587^{+0.075}_{-0.073} \quad (-1.6\sigma)$
$\Omega_{\nu}h^2$	$< 0.0365 \quad (+8.0\sigma)$	$100\theta_*$	$1.109^{+0.067}_{-0.068} \quad (+143.4\sigma)$	$f\sigma_8(0.51)$	$0.450^{+0.038}_{-0.039} \quad (-1.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.138^{+0.059}_{-0.049} \quad (+34.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.3^{+1.8}_{-1.8} \quad (-34.7\sigma)$	$\sigma_8(0.51)$	$0.547^{+0.072}_{-0.070} \quad (-1.6\sigma)$
σ_8	$0.729^{+0.081}_{-0.079} \quad (-1.6\sigma)$	z_{drag}	$1062.5^{+4.8}_{-4.3} \quad (+6.7\sigma)$	$f\sigma_8(0.61)$	$0.441^{+0.039}_{-0.041} \quad (-1.3\sigma)$
S_8	$0.827^{+0.080}_{-0.077} \quad (-0.3\sigma)$	r_{drag}	$138^{+11}_{-13} \quad (-18.3\sigma)$	$\sigma_8(0.61)$	$0.520^{+0.070}_{-0.068} \quad (-1.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.044}_{-0.042} \quad (-0.3\sigma)$	k_{D}	$0.151^{+0.015}_{-0.014} \quad (+21.0\sigma)$	$f\sigma_8(2.33)$	$0.267^{+0.034}_{-0.035} \quad (-1.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.574^{+0.049}_{-0.047} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1699^{+0.0087}_{-0.0089} \quad (+32.9\sigma)$	$\sigma_8(2.33)$	$0.269^{+0.039}_{-0.039} \quad (-1.6\sigma)$
$\sigma_8/h^{0.5}$	$0.87^{+0.11}_{-0.11} \quad (-3.0\sigma)$	z_{eq}	$4245^{+1000}_{-1000} \quad (+16.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.96 \quad (\nu: 2.4)$
$r_{\mathrm{drag}}h$	$97.3^{+3.8}_{-3.9} \quad (+0.2\sigma)$	k_{eq}	$0.0130^{+0.0039}_{-0.0035} \quad (+16.9\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.39 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.14}_{-0.13} \quad (+1.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.75^{+0.11}_{-0.10} \quad (-6.6\sigma)$	χ^2_{MGS}	$0.73 \quad (\nu: 0.2)$
z_{re}	$8.64^{+1.1}_{-0.97} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.417^{+0.056}_{-0.053} \quad (-6.6\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.7 \quad (\nu: 1.3)$
10^9A_{s}	$2.10^{+0.55}_{-0.51} \quad (+0.4\sigma)$	$H(0.15)$	$77.4^{+6.1}_{-5.5} \quad (+3.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.89^{+0.50}_{-0.46} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$610^{+39}_{-43} \quad (-2.4\sigma)$	χ^2_{BAO}	$4.9 \quad (\nu: 1.6)$
D_{40}	$1176^{+400}_{-400} \quad (-3.8\sigma)$	$H(0.38)$	$90.2^{+9.3}_{-8.4} \quad (+6.2\sigma)$		
D_{220}	$5103^{+2000}_{-2000} \quad (-14.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1439^{+110}_{-120} \quad (-3.2\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 16.84$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -1.51$; $R - 1 = 0.00475$

6.100 base_mnu_lensing_lenspriors_BAO_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02221^{+0.00098}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2177^{+900}_{-900} \quad (-26.1\sigma)$	$H(0.51)$	$99^{+11}_{-10} \quad (+8.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.156^{+0.049}_{-0.045} \quad (+15.6\sigma)$	D_{1420}	$635^{+300}_{-300} \quad (-35.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1853^{+140}_{-160} \quad (-3.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.107^{+0.064}_{-0.066} \quad (+131.2\sigma)$	D_{2000}	$184^{+90}_{-90} \quad (-24.1\sigma)$	$H(0.61)$	$105^{+10}_{-10} \quad (+11.7\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.20 \quad (+7.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2149^{+180}_{-190} \quad (-4.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.03^{+0.22}_{-0.23} \quad (-0.7\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$273^{+40}_{-40} \quad (+18.4\sigma)$
n_{s}	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5209^{+600}_{-600} \quad (-12.2\sigma)$
H_0	$70.6^{+4.1}_{-3.8} \quad (+2.3\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.035}_{-0.035} \quad (-0.1\sigma)$
Ω_{Λ}	$0.612^{+0.086}_{-0.090} \quad (-1.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.5^{+1.5}_{-1.4} \quad (-12.6\sigma)$	$\sigma_8(0.15)$	$0.675^{+0.075}_{-0.076} \quad (-1.5\sigma)$
Ω_{m}	$0.388^{+0.090}_{-0.086} \quad (+1.6\sigma)$	z_*	$1093.7^{+4.8}_{-4.4} \quad (+6.6\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.034}_{-0.035} \quad (-0.8\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.194^{+0.066}_{-0.059} \quad (+15.2\sigma)$	r_*	$136^{+11}_{-12} \quad (-17.3\sigma)$	$\sigma_8(0.38)$	$0.592^{+0.071}_{-0.072} \quad (-1.5\sigma)$
$\Omega_{\nu} h^2$	$< 0.0344 \quad (+7.5\sigma)$	$100\theta_*$	$1.108^{+0.064}_{-0.066} \quad (+141.5\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.034}_{-0.037} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.138^{+0.055}_{-0.048} \quad (+33.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.3^{+1.8}_{-1.7} \quad (-34.5\sigma)$	$\sigma_8(0.51)$	$0.552^{+0.068}_{-0.069} \quad (-1.5\sigma)$
σ_8	$0.736^{+0.076}_{-0.077} \quad (-1.4\sigma)$	z_{drag}	$1062.5^{+4.6}_{-4.2} \quad (+6.7\sigma)$	$f\sigma_8(0.61)$	$0.444^{+0.035}_{-0.040} \quad (-1.1\sigma)$
S_8	$0.833^{+0.071}_{-0.070} \quad (-0.0\sigma)$	r_{drag}	$138^{+11}_{-12} \quad (-18.3\sigma)$	$\sigma_8(0.61)$	$0.525^{+0.066}_{-0.067} \quad (-1.5\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.039}_{-0.039} \quad (-0.0\sigma)$	k_{D}	$0.151^{+0.014}_{-0.014} \quad (+20.9\sigma)$	$f\sigma_8(2.33)$	$0.269^{+0.033}_{-0.034} \quad (-1.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.579^{+0.044}_{-0.044} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1698^{+0.0084}_{-0.0087} \quad (+32.5\sigma)$	$\sigma_8(2.33)$	$0.271^{+0.037}_{-0.039} \quad (-1.5\sigma)$
$\sigma_8/h^{0.5}$	$0.88^{+0.10}_{-0.11} \quad (-2.8\sigma)$	z_{eq}	$4251^{+1000}_{-1000} \quad (+16.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$7.7 \quad (\nu: 2.3)$
$r_{\mathrm{drag}} h$	$97.3^{+3.8}_{-3.8} \quad (+0.2\sigma)$	k_{eq}	$0.0130^{+0.0037}_{-0.0034} \quad (+16.9\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.38 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.11}_{-0.10} \quad (+1.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.746^{+0.10}_{-0.092} \quad (-6.9\sigma)$	χ^2_{MGS}	$0.74 \quad (\nu: 0.2)$
z_{re}	$8.63^{+1.1}_{-0.94} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.415^{+0.053}_{-0.048} \quad (-6.8\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.7 \quad (\nu: 1.3)$
$10^9 A_{\mathrm{s}}$	$2.08^{+0.48}_{-0.45} \quad (-0.3\sigma)$	$H(0.15)$	$77.4^{+5.8}_{-5.4} \quad (+3.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.86^{+0.43}_{-0.41} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$610^{+38}_{-41} \quad (-2.4\sigma)$	χ^2_{BAO}	$4.8 \quad (\nu: 1.5)$
D_{40}	$1162^{+300}_{-300} \quad (-4.8\sigma)$	$H(0.38)$	$90.2^{+8.9}_{-8.2} \quad (+6.1\sigma)$		
D_{220}	$5028^{+2000}_{-2000} \quad (-16.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1438^{+100}_{-110} \quad (-3.2\sigma)$		
$\bar{\chi}^2_{\mathrm{eff}} = 14.55; \Delta \bar{\chi}^2_{\mathrm{eff}} = -1.60; R - 1 = 0.00373$					

6.101 base_mnu_lensing_lenspriors_BAO_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00099}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2111^{+900}_{-900} \quad (-30.9\sigma)$	$H(0.51)$	$99^{+10}_{-10} \quad (+9.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.157^{+0.051}_{-0.047} \quad (+16.3\sigma)$	D_{1420}	$614^{+300}_{-300} \quad (-39.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1848^{+150}_{-160} \quad (-3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.110^{+0.065}_{-0.069} \quad (+135.6\sigma)$	D_{2000}	$178^{+100}_{-90} \quad (-27.4\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+12.2\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.44 \quad (+8.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.040} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2142^{+180}_{-190} \quad (-4.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.01^{+0.22}_{-0.23} \quad (-2.2\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$274^{+50}_{-40} \quad (+19.2\sigma)$
n_{s}	$0.960^{+0.039}_{-0.040} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5189^{+600}_{-600} \quad (-12.6\sigma)$
H_0	$70.7^{+4.3}_{-3.9} \quad (+2.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.035}_{-0.035} \quad (-0.4\sigma)$
Ω_{Λ}	$0.609^{+0.087}_{-0.097} \quad (-1.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+1.5}_{-1.5} \quad (-13.0\sigma)$	$\sigma_8(0.15)$	$0.666^{+0.076}_{-0.077} \quad (-1.7\sigma)$
Ω_{m}	$0.391^{+0.097}_{-0.087} \quad (+1.7\sigma)$	z_*	$1093.8^{+5.0}_{-4.6} \quad (+6.9\sigma)$	$f\sigma_8(0.38)$	$0.457^{+0.034}_{-0.036} \quad (-1.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.197^{+0.070}_{-0.061} \quad (+15.9\sigma)$	r_*	$135^{+11}_{-12} \quad (-18.1\sigma)$	$\sigma_8(0.38)$	$0.584^{+0.073}_{-0.074} \quad (-1.7\sigma)$
$\Omega_{\nu}h^2$	$< 0.0370 \quad (+8.0\sigma)$	$100\theta_*$	$1.110^{+0.065}_{-0.069} \quad (+146.3\sigma)$	$f\sigma_8(0.51)$	$0.448^{+0.035}_{-0.039} \quad (-1.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.140^{+0.058}_{-0.050} \quad (+35.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.2^{+1.8}_{-1.7} \quad (-35.7\sigma)$	$\sigma_8(0.51)$	$0.545^{+0.070}_{-0.071} \quad (-1.7\sigma)$
σ_8	$0.726^{+0.078}_{-0.079} \quad (-1.7\sigma)$	z_{drag}	$1062.6^{+4.8}_{-4.4} \quad (+7.0\sigma)$	$f\sigma_8(0.61)$	$0.439^{+0.036}_{-0.041} \quad (-1.4\sigma)$
S_8	$0.826^{+0.071}_{-0.070} \quad (-0.3\sigma)$	r_{drag}	$138^{+12}_{-12} \quad (-19.1\sigma)$	$\sigma_8(0.61)$	$0.517^{+0.068}_{-0.069} \quad (-1.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.039}_{-0.038} \quad (-0.3\sigma)$	k_{D}	$0.152^{+0.015}_{-0.014} \quad (+21.9\sigma)$	$f\sigma_8(2.33)$	$0.266^{+0.034}_{-0.036} \quad (-1.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.573^{+0.044}_{-0.044} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1701^{+0.0086}_{-0.0091} \quad (+33.5\sigma)$	$\sigma_8(2.33)$	$0.267^{+0.038}_{-0.040} \quad (-1.7\sigma)$
$\sigma_8/h^{0.5}$	$0.86^{+0.11}_{-0.11} \quad (-3.1\sigma)$	z_{eq}	$4287^{+1000}_{-1000} \quad (+17.4\sigma)$	$\chi^2_{\mathrm{lensing}}$	$10.2 \quad (\nu: 2.2)$
$r_{\mathrm{drag}}h$	$97.2^{+3.9}_{-3.9} \quad (+0.2\sigma)$	k_{eq}	$0.0131^{+0.0038}_{-0.0035} \quad (+17.7\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.40 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.48^{+0.10}_{-0.099} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.743^{+0.10}_{-0.096} \quad (-7.2\sigma)$	χ^2_{MGS}	$0.71 \quad (\nu: 0.2)$
z_{re}	$8.67^{+1.1}_{-0.98} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.414^{+0.052}_{-0.050} \quad (-7.1\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.7 \quad (\nu: 1.3)$
10^9A_{s}	$2.03^{+0.47}_{-0.45} \quad (-1.7\sigma)$	$H(0.15)$	$77.6^{+6.0}_{-5.5} \quad (+3.5\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.82^{+0.42}_{-0.40} \quad (-4.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$609^{+39}_{-42} \quad (-2.5\sigma)$	χ^2_{BAO}	$4.9 \quad (\nu: 1.6)$
D_{40}	$1132^{+300}_{-300} \quad (-6.8\sigma)$	$H(0.38)$	$90.5^{+9.2}_{-8.5} \quad (+6.3\sigma)$		
D_{220}	$4887^{+2000}_{-2000} \quad (-20.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1435^{+110}_{-120} \quad (-3.3\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 17.06$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -1.35$; $R - 1 = 0.00602$

6.102 base_mnu_lensing_lenspriors_BAO_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00098}_{-0.00099} \quad (+0.7\sigma)$	D_{810}	$2142^{+1000}_{-1000} \quad (-28.7\sigma)$	$H(0.51)$	$99^{+10}_{-10} \quad (+9.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.156^{+0.052}_{-0.048} \quad (+15.6\sigma)$	D_{1420}	$622^{+400}_{-300} \quad (-37.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1852^{+160}_{-160} \quad (-3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.110^{+0.066}_{-0.075} \quad (+136.1\sigma)$	D_{2000}	$180^{+100}_{-90} \quad (-26.3\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+12.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.51 \quad (+8.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2146^{+190}_{-200} \quad (-4.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.02^{+0.23}_{-0.24} \quad (-1.4\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$274^{+50}_{-40} \quad (+19.0\sigma)$
n_{s}	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5198^{+700}_{-600} \quad (-12.4\sigma)$
H_0	$70.6^{+4.4}_{-4.0} \quad (+2.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.028}_{-0.029} \quad (-1.1\sigma)$
Ω_{Λ}	$0.608^{+0.092}_{-0.098} \quad (-1.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+1.6}_{-1.5} \quad (-12.8\sigma)$	$\sigma_8(0.15)$	$0.652^{+0.072}_{-0.064} \quad (-2.1\sigma)$
Ω_{m}	$0.392^{+0.098}_{-0.092} \quad (+1.7\sigma)$	z_*	$1093.7^{+5.1}_{-4.7} \quad (+6.8\sigma)$	$f\sigma_8(0.38)$	$0.448^{+0.026}_{-0.027} \quad (-1.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.196^{+0.071}_{-0.064} \quad (+15.8\sigma)$	r_*	$136^{+12}_{-12} \quad (-17.6\sigma)$	$\sigma_8(0.38)$	$0.573^{+0.070}_{-0.062} \quad (-2.1\sigma)$
$\Omega_{\nu}h^2$	$< 0.0378 \quad (+8.6\sigma)$	$100\theta_*$	$1.110^{+0.066}_{-0.075} \quad (+146.8\sigma)$	$f\sigma_8(0.51)$	$0.440^{+0.028}_{-0.030} \quad (-1.9\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.139^{+0.060}_{-0.052} \quad (+35.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.2^{+2.0}_{-1.7} \quad (-35.3\sigma)$	$\sigma_8(0.51)$	$0.534^{+0.068}_{-0.060} \quad (-2.1\sigma)$
σ_8	$0.712^{+0.072}_{-0.064} \quad (-2.1\sigma)$	z_{drag}	$1062.6^{+4.7}_{-4.5} \quad (+6.9\sigma)$	$f\sigma_8(0.61)$	$0.431^{+0.031}_{-0.032} \quad (-1.9\sigma)$
S_8	$0.810^{+0.061}_{-0.061} \quad (-1.0\sigma)$	r_{drag}	$138^{+12}_{-12} \quad (-18.6\sigma)$	$\sigma_8(0.61)$	$0.507^{+0.066}_{-0.059} \quad (-2.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.034}_{-0.034} \quad (-1.0\sigma)$	k_{D}	$0.152^{+0.015}_{-0.014} \quad (+21.5\sigma)$	$f\sigma_8(2.33)$	$0.261^{+0.032}_{-0.033} \quad (-1.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.562^{+0.034}_{-0.034} \quad (-1.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1701^{+0.0086}_{-0.0098} \quad (+33.5\sigma)$	$\sigma_8(2.33)$	$0.262^{+0.038}_{-0.035} \quad (-2.0\sigma)$
$\sigma_8/h^{0.5}$	$0.848^{+0.10}_{-0.094} \quad (-3.6\sigma)$	z_{eq}	$4248^{+1000}_{-1000} \quad (+16.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.5 \quad (\nu: 2.1)$
$r_{\mathrm{drag}}h$	$97.2^{+4.1}_{-3.9} \quad (+0.2\sigma)$	k_{eq}	$0.0130^{+0.0039}_{-0.0035} \quad (+17.0\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.41 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.48^{+0.10}_{-0.097} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.749^{+0.10}_{-0.098} \quad (-6.5\sigma)$	χ^2_{MGS}	$0.72 \quad (\nu: 0.2)$
z_{re}	$8.7^{+1.1}_{-1.0} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.417^{+0.054}_{-0.051} \quad (-6.4\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.8 \quad (\nu: 1.3)$
10^9A_{s}	$2.06^{+0.48}_{-0.46} \quad (-0.9\sigma)$	$H(0.15)$	$77.4^{+6.2}_{-5.7} \quad (+3.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.84^{+0.43}_{-0.42} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$610^{+40}_{-43} \quad (-2.4\sigma)$	χ^2_{BAO}	$4.9 \quad (\nu: 1.6)$
D_{40}	$1149^{+300}_{-300} \quad (-5.6\sigma)$	$H(0.38)$	$90.3^{+9.4}_{-8.8} \quad (+6.2\sigma)$		
D_{220}	$4987^{+2000}_{-2000} \quad (-17.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1438^{+110}_{-120} \quad (-3.2\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 19.44$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -1.76$; $R - 1 = 0.00654$

6.103 base_mnu_lensing_lenspriors_BAO_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00098}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2122^{+900}_{-900} \quad (-30.1\sigma)$	$H(0.51)$	$99^{+11}_{-10} \quad (+9.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.159^{+0.050}_{-0.046} \quad (+17.0\sigma)$	D_{1420}	$616^{+300}_{-300} \quad (-38.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1845^{+150}_{-160} \quad (-3.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.110^{+0.064}_{-0.067} \quad (+136.8\sigma)$	D_{2000}	$178^{+100}_{-90} \quad (-27.1\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+12.4\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.32 \quad (+7.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2138^{+180}_{-190} \quad (-4.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.01^{+0.22}_{-0.23} \quad (-1.6\sigma)$	Y_{P}	$0.24532^{+0.00042}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$275^{+40}_{-40} \quad (+19.6\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00042}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5176^{+600}_{-600} \quad (-12.8\sigma)$
H_0	$70.8^{+4.2}_{-3.9} \quad (+2.4\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.465^{+0.037}_{-0.037} \quad (+0.3\sigma)$
Ω_{Λ}	$0.608^{+0.085}_{-0.096} \quad (-1.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+1.5}_{-1.4} \quad (-13.3\sigma)$	$\sigma_8(0.15)$	$0.680^{+0.079}_{-0.081} \quad (-1.3\sigma)$
Ω_{m}	$0.392^{+0.096}_{-0.085} \quad (+1.7\sigma)$	z_*	$1093.9^{+4.9}_{-4.5} \quad (+7.1\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.036}_{-0.038} \quad (-0.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.198^{+0.068}_{-0.061} \quad (+16.2\sigma)$	r_*	$135^{+11}_{-12} \quad (-18.7\sigma)$	$\sigma_8(0.38)$	$0.597^{+0.073}_{-0.076} \quad (-1.3\sigma)$
$\Omega_{\nu} h^2$	$< 0.0357 \quad (+7.6\sigma)$	$100\theta_*$	$1.111^{+0.065}_{-0.067} \quad (+147.5\sigma)$	$f\sigma_8(0.51)$	$0.458^{+0.037}_{-0.041} \quad (-0.7\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.141^{+0.057}_{-0.050} \quad (+36.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.2^{+1.8}_{-1.7} \quad (-36.5\sigma)$	$\sigma_8(0.51)$	$0.556^{+0.071}_{-0.073} \quad (-1.4\sigma)$
σ_8	$0.742^{+0.081}_{-0.082} \quad (-1.3\sigma)$	z_{drag}	$1062.7^{+4.7}_{-4.3} \quad (+7.2\sigma)$	$f\sigma_8(0.61)$	$0.448^{+0.038}_{-0.043} \quad (-0.9\sigma)$
S_8	$0.845^{+0.075}_{-0.073} \quad (+0.4\sigma)$	r_{drag}	$137^{+11}_{-12} \quad (-19.7\sigma)$	$\sigma_8(0.61)$	$0.528^{+0.068}_{-0.071} \quad (-1.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.463^{+0.041}_{-0.040} \quad (+0.4\sigma)$	k_{D}	$0.152^{+0.015}_{-0.014} \quad (+22.5\sigma)$	$f\sigma_8(2.33)$	$0.271^{+0.034}_{-0.036} \quad (-1.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.586^{+0.047}_{-0.047} \quad (-0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1702^{+0.0085}_{-0.0089} \quad (+33.9\sigma)$	$\sigma_8(2.33)$	$0.273^{+0.038}_{-0.040} \quad (-1.4\sigma)$
$\sigma_8/h^{0.5}$	$0.88^{+0.11}_{-0.11} \quad (-2.6\sigma)$	z_{eq}	$4327^{+1000}_{-1000} \quad (+18.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.4 \quad (\nu: 2.2)$
$r_{\mathrm{drag}} h$	$97.2^{+3.8}_{-3.9} \quad (+0.2\sigma)$	k_{eq}	$0.0133^{+0.0037}_{-0.0034} \quad (+18.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.41 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.11}_{-0.10} \quad (+1.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.738^{+0.099}_{-0.094} \quad (-7.7\sigma)$	χ_{MGS}^2	$0.70 \quad (\nu: 0.2)$
z_{re}	$8.68^{+1.1}_{-0.96} \quad (+1.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.411^{+0.053}_{-0.048} \quad (-7.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.8 \quad (\nu: 1.4)$
$10^9 A_{\mathrm{s}}$	$2.05^{+0.47}_{-0.44} \quad (-1.2\sigma)$	$H(0.15)$	$77.7^{+5.9}_{-5.5} \quad (+3.5\sigma)$	χ_{prior}^2	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.84^{+0.42}_{-0.40} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$608^{+38}_{-42} \quad (-2.6\sigma)$	χ_{BAO}^2	$4.9 \quad (\nu: 1.7)$
D_{40}	$1141^{+300}_{-300} \quad (-6.1\sigma)$	$H(0.38)$	$90.7^{+9.1}_{-8.4} \quad (+6.5\sigma)$		
D_{220}	$4903^{+2000}_{-2000} \quad (-19.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1432^{+110}_{-110} \quad (-3.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 17.26; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -1.28; R - 1 = 0.00388$$

6.104 base_mnu_lensing_lenspriors_BAO_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00098}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2171^{+1000}_{-1000} \quad (-26.5\sigma)$	$H(0.51)$	$99^{+10}_{-10} \quad (+8.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.156^{+0.050}_{-0.047} \quad (+15.8\sigma)$	D_{1420}	$631^{+400}_{-300} \quad (-35.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1851^{+150}_{-160} \quad (-3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.109^{+0.065}_{-0.070} \quad (+134.4\sigma)$	D_{2000}	$183^{+100}_{-90} \quad (-24.6\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+12.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.43 \quad (+8.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2146^{+180}_{-190} \quad (-4.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.03^{+0.23}_{-0.23} \quad (-0.6\sigma)$	Y_{P}	$0.24532^{+0.00042}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$274^{+40}_{-40} \quad (+18.9\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5198^{+600}_{-600} \quad (-12.4\sigma)$
H_0	$70.6^{+4.2}_{-4.0} \quad (+2.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.035}_{-0.035} \quad (-0.3\sigma)$
Ω_{Λ}	$0.610^{+0.088}_{-0.097} \quad (-1.7\sigma)$	Age/Gyr	$12.4^{+1.5}_{-1.5} \quad (-12.8\sigma)$	$\sigma_8(0.15)$	$0.668^{+0.078}_{-0.077} \quad (-1.6\sigma)$
Ω_{m}	$0.390^{+0.097}_{-0.088} \quad (+1.7\sigma)$	z_*	$1093.7^{+5.0}_{-4.6} \quad (+6.8\sigma)$	$f\sigma_8(0.38)$	$0.458^{+0.034}_{-0.035} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.196^{+0.069}_{-0.062} \quad (+15.6\sigma)$	r_*	$135^{+11}_{-12} \quad (-17.7\sigma)$	$\sigma_8(0.38)$	$0.587^{+0.074}_{-0.073} \quad (-1.6\sigma)$
$\Omega_{\nu}h^2$	$< 0.0368 \quad (+8.1\sigma)$	$100\theta_*$	$1.109^{+0.066}_{-0.071} \quad (+145.0\sigma)$	$f\sigma_8(0.51)$	$0.450^{+0.035}_{-0.038} \quad (-1.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.139^{+0.057}_{-0.050} \quad (+34.7\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.2^{+1.9}_{-1.7} \quad (-35.2\sigma)$	$\sigma_8(0.51)$	$0.547^{+0.072}_{-0.070} \quad (-1.6\sigma)$
σ_8	$0.729^{+0.079}_{-0.078} \quad (-1.6\sigma)$	z_{drag}	$1062.6^{+4.5}_{-4.5} \quad (+6.9\sigma)$	$f\sigma_8(0.61)$	$0.441^{+0.036}_{-0.040} \quad (-1.3\sigma)$
S_8	$0.828^{+0.071}_{-0.070} \quad (-0.2\sigma)$	r_{drag}	$138^{+12}_{-12} \quad (-18.7\sigma)$	$\sigma_8(0.61)$	$0.519^{+0.070}_{-0.068} \quad (-1.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.039}_{-0.039} \quad (-0.2\sigma)$	k_{D}	$0.152^{+0.015}_{-0.014} \quad (+21.4\sigma)$	$f\sigma_8(2.33)$	$0.267^{+0.034}_{-0.035} \quad (-1.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.575^{+0.044}_{-0.044} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1700^{+0.0086}_{-0.0093} \quad (+33.2\sigma)$	$\sigma_8(2.33)$	$0.268^{+0.039}_{-0.039} \quad (-1.6\sigma)$
$\sigma_8/h^{0.5}$	$0.87^{+0.11}_{-0.11} \quad (-3.0\sigma)$	z_{eq}	$4261^{+1000}_{-1000} \quad (+16.9\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.9 \quad (\nu: 2.2)$
$r_{\mathrm{drag}}h$	$97.3^{+3.9}_{-3.9} \quad (+0.2\sigma)$	k_{eq}	$0.0131^{+0.0037}_{-0.0035} \quad (+17.2\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.40 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.10} \quad (+1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.746^{+0.11}_{-0.093} \quad (-6.8\sigma)$	χ^2_{MGS}	$0.72 \quad (\nu: 0.2)$
z_{re}	$8.65^{+1.1}_{-0.99} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.416^{+0.055}_{-0.048} \quad (-6.8\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.7 \quad (\nu: 1.3)$
10^9A_{s}	$2.08^{+0.51}_{-0.44} \quad (-0.2\sigma)$	$H(0.15)$	$77.5^{+5.9}_{-5.6} \quad (+3.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.87^{+0.46}_{-0.40} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$610^{+39}_{-42} \quad (-2.5\sigma)$	χ^2_{BAO}	$4.9 \quad (\nu: 1.6)$
D_{40}	$1163^{+300}_{-300} \quad (-4.7\sigma)$	$H(0.38)$	$90.3^{+9.1}_{-8.5} \quad (+6.2\sigma)$		
D_{220}	$5028^{+2000}_{-2000} \quad (-16.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1437^{+110}_{-110} \quad (-3.2\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 16.78; \Delta\bar{\chi}^2_{\mathrm{eff}} = -1.57; R - 1 = 0.00542$

6.105 base_mnu_lensing_lenspriors_BAO_post_agr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00099}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2198^{+1000}_{-1000} \quad (-24.6\sigma)$	$H(0.51)$	$99^{+10}_{-10} \quad (+8.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.155^{+0.051}_{-0.048} \quad (+15.2\sigma)$	D_{1420}	$637^{+400}_{-300} \quad (-34.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1853^{+160}_{-160} \quad (-3.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.110^{+0.066}_{-0.076} \quad (+136.6\sigma)$	D_{2000}	$184^{+100}_{-100} \quad (-23.8\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+11.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.57 \quad (+8.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2148^{+190}_{-200} \quad (-4.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.04^{+0.23}_{-0.24} \quad (+0.2\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$274^{+50}_{-40} \quad (+19.0\sigma)$
n_{s}	$0.959^{+0.039}_{-0.039} \quad (-0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5201^{+700}_{-600} \quad (-12.3\sigma)$
H_0	$70.5^{+4.3}_{-4.1} \quad (+2.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.028}_{-0.029} \quad (-1.1\sigma)$
Ω_{Λ}	$0.608^{+0.094}_{-0.098} \quad (-1.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+1.6}_{-1.5} \quad (-12.7\sigma)$	$\sigma_8(0.15)$	$0.653^{+0.075}_{-0.063} \quad (-2.1\sigma)$
Ω_{m}	$0.392^{+0.098}_{-0.094} \quad (+1.7\sigma)$	z_*	$1093.7^{+5.3}_{-4.7} \quad (+6.7\sigma)$	$f\sigma_8(0.38)$	$0.448^{+0.026}_{-0.027} \quad (-1.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.196^{+0.071}_{-0.065} \quad (+15.7\sigma)$	r_*	$136^{+12}_{-12} \quad (-17.4\sigma)$	$\sigma_8(0.38)$	$0.573^{+0.072}_{-0.061} \quad (-2.1\sigma)$
$\Omega_{\nu}h^2$	$< 0.0383 \quad (+8.9\sigma)$	$100\theta_*$	$1.111^{+0.066}_{-0.076} \quad (+147.3\sigma)$	$f\sigma_8(0.51)$	$0.440^{+0.029}_{-0.029} \quad (-1.9\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.139^{+0.059}_{-0.052} \quad (+34.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.2^{+2.0}_{-1.8} \quad (-35.1\sigma)$	$\sigma_8(0.51)$	$0.534^{+0.070}_{-0.060} \quad (-2.0\sigma)$
σ_8	$0.712^{+0.071}_{-0.065} \quad (-2.1\sigma)$	z_{drag}	$1062.5^{+4.8}_{-4.4} \quad (+6.9\sigma)$	$f\sigma_8(0.61)$	$0.431^{+0.031}_{-0.032} \quad (-1.9\sigma)$
S_8	$0.811^{+0.061}_{-0.061} \quad (-0.9\sigma)$	r_{drag}	$138^{+12}_{-13} \quad (-18.4\sigma)$	$\sigma_8(0.61)$	$0.507^{+0.069}_{-0.058} \quad (-2.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.033}_{-0.033} \quad (-0.9\sigma)$	k_{D}	$0.152^{+0.015}_{-0.015} \quad (+21.3\sigma)$	$f\sigma_8(2.33)$	$0.261^{+0.033}_{-0.032} \quad (-1.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.562^{+0.034}_{-0.033} \quad (-1.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1701^{+0.0086}_{-0.0099} \quad (+33.6\sigma)$	$\sigma_8(2.33)$	$0.262^{+0.039}_{-0.034} \quad (-2.0\sigma)$
$\sigma_8/h^{0.5}$	$0.849^{+0.11}_{-0.093} \quad (-3.6\sigma)$	z_{eq}	$4230^{+1000}_{-1000} \quad (+16.3\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.3 \quad (\nu: 2.1)$
$r_{\mathrm{drag}}h$	$97.2^{+4.1}_{-3.9} \quad (+0.2\sigma)$	k_{eq}	$0.0130^{+0.0038}_{-0.0036} \quad (+16.6\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.42 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.10} \quad (+1.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.752^{+0.11}_{-0.098} \quad (-6.2\sigma)$	χ^2_{MGS}	$0.71 \quad (\nu: 0.2)$
z_{re}	$8.7^{+1.1}_{-1.1} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.419^{+0.057}_{-0.050} \quad (-6.1\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.8 \quad (\nu: 1.4)$
10^9A_{s}	$2.11^{+0.52}_{-0.47} \quad (+0.7\sigma)$	$H(0.15)$	$77.4^{+6.1}_{-5.8} \quad (+3.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.89^{+0.46}_{-0.42} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$610^{+40}_{-43} \quad (-2.4\sigma)$	χ^2_{BAO}	$4.9 \quad (\nu: 1.7)$
D_{40}	$1180^{+400}_{-300} \quad (-3.6\sigma)$	$H(0.38)$	$90.3^{+9.3}_{-8.9} \quad (+6.2\sigma)$		
D_{220}	$5126^{+2000}_{-2000} \quad (-14.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1439^{+110}_{-120} \quad (-3.2\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 19.27; \Delta\bar{\chi}^2_{\mathrm{eff}} = -2.00; R - 1 = 0.00616$$

6.106 base_mnu_lensing_lenspriors_BAO_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02221^{+0.00099}_{-0.00097} \quad (+0.7\sigma)$	D_{810}	$2166^{+1000}_{-1000} \quad (-26.9\sigma)$	$H(0.51)$	$99^{+10}_{-10} \quad (+9.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.156^{+0.049}_{-0.045} \quad (+15.6\sigma)$	D_{1420}	$629^{+400}_{-300} \quad (-36.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1851^{+150}_{-160} \quad (-3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.110^{+0.064}_{-0.070} \quad (+136.3\sigma)$	D_{2000}	$182^{+100}_{-90} \quad (-25.0\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+12.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.66 \quad (+8.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.039} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2146^{+180}_{-190} \quad (-4.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.03^{+0.23}_{-0.24} \quad (-0.7\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$274^{+50}_{-40} \quad (+19.1\sigma)$
n_{s}	$0.960^{+0.039}_{-0.039} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5195^{+600}_{-600} \quad (-12.5\sigma)$
H_0	$70.6^{+4.1}_{-3.9} \quad (+2.3\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.036}_{-0.035} \quad (-0.7\sigma)$
Ω_{Λ}	$0.608^{+0.088}_{-0.097} \quad (-1.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+1.5}_{-1.4} \quad (-12.9\sigma)$	$\sigma_8(0.15)$	$0.660^{+0.083}_{-0.085} \quad (-1.9\sigma)$
Ω_{m}	$0.392^{+0.097}_{-0.088} \quad (+1.7\sigma)$	z_*	$1093.8^{+5.2}_{-4.4} \quad (+6.8\sigma)$	$f\sigma_8(0.38)$	$0.453^{+0.036}_{-0.039} \quad (-1.4\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.196^{+0.069}_{-0.061} \quad (+15.8\sigma)$	r_*	$135^{+11}_{-12} \quad (-17.7\sigma)$	$\sigma_8(0.38)$	$0.579^{+0.079}_{-0.080} \quad (-1.9\sigma)$
$\Omega_{\nu} h^2$	$< 0.0393 \quad (+8.6\sigma)$	$100\theta_*$	$1.110^{+0.065}_{-0.070} \quad (+147.0\sigma)$	$f\sigma_8(0.51)$	$0.444^{+0.038}_{-0.044} \quad (-1.6\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.139^{+0.057}_{-0.049} \quad (+34.9\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.2^{+1.8}_{-1.7} \quad (-35.5\sigma)$	$\sigma_8(0.51)$	$0.540^{+0.076}_{-0.077} \quad (-1.9\sigma)$
σ_8	$0.720^{+0.085}_{-0.087} \quad (-1.9\sigma)$	z_{drag}	$1062.6^{+4.7}_{-4.3} \quad (+6.9\sigma)$	$f\sigma_8(0.61)$	$0.435^{+0.040}_{-0.046} \quad (-1.7\sigma)$
S_8	$0.819^{+0.070}_{-0.067} \quad (-0.6\sigma)$	r_{drag}	$138^{+12}_{-12} \quad (-18.7\sigma)$	$\sigma_8(0.61)$	$0.513^{+0.074}_{-0.074} \quad (-1.9\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.038}_{-0.037} \quad (-0.6\sigma)$	k_{D}	$0.152^{+0.015}_{-0.014} \quad (+21.5\sigma)$	$f\sigma_8(2.33)$	$0.263^{+0.036}_{-0.040} \quad (-1.7\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.568^{+0.048}_{-0.048} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1701^{+0.0085}_{-0.0092} \quad (+33.6\sigma)$	$\sigma_8(2.33)$	$0.265^{+0.041}_{-0.042} \quad (-1.8\sigma)$
$\sigma_8/h^{0.5}$	$0.86^{+0.11}_{-0.12} \quad (-3.3\sigma)$	z_{eq}	$4251^{+1000}_{-1000} \quad (+16.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.8 \quad (\nu: 2.1)$
$r_{\mathrm{drag}} h$	$97.2^{+3.9}_{-3.9} \quad (+0.2\sigma)$	k_{eq}	$0.0130^{+0.0037}_{-0.0034} \quad (+17.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.41 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.10} \quad (+1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.748^{+0.099}_{-0.093} \quad (-6.6\sigma)$	χ_{MGS}^2	$0.71 \quad (\nu: 0.2)$
z_{re}	$8.66^{+1.1}_{-0.98} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.417^{+0.051}_{-0.048} \quad (-6.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.8 \quad (\nu: 1.3)$
$10^9 A_{\mathrm{s}}$	$2.08^{+0.51}_{-0.45} \quad (-0.2\sigma)$	$H(0.15)$	$77.4^{+5.9}_{-5.5} \quad (+3.4\sigma)$	χ_{prior}^2	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.87^{+0.46}_{-0.41} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$610^{+39}_{-41} \quad (-2.5\sigma)$	χ_{BAO}^2	$4.9 \quad (\nu: 1.6)$
D_{40}	$1160^{+300}_{-300} \quad (-4.9\sigma)$	$H(0.38)$	$90.3^{+9.0}_{-8.4} \quad (+6.3\sigma)$		
D_{220}	$5029^{+2000}_{-2000} \quad (-16.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1437^{+110}_{-110} \quad (-3.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 16.75; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -1.65; R - 1 = 0.00892$$

6.107 base_mnu_lensing_lenspriors_BAO_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00099}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2199^{+1000}_{-1000} \quad (-24.5\sigma)$	$H(0.51)$	$99^{+10}_{-10} \quad (+8.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.154^{+0.050}_{-0.046} \quad (+14.8\sigma)$	D_{1420}	$637^{+400}_{-300} \quad (-34.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1854^{+160}_{-160} \quad (-3.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.110^{+0.066}_{-0.071} \quad (+137.4\sigma)$	D_{2000}	$184^{+100}_{-100} \quad (-23.9\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+11.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$1.9^{+1.9}_{-1.8} \quad (+9.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2149^{+190}_{-190} \quad (-4.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.04^{+0.23}_{-0.25} \quad (+0.2\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$274^{+50}_{-40} \quad (+18.9\sigma)$
n_{s}	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5203^{+700}_{-600} \quad (-12.3\sigma)$
H_0	$70.4^{+4.2}_{-4.0} \quad (+2.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.441^{+0.028}_{-0.028} \quad (-1.5\sigma)$
Ω_{Λ}	$0.607^{+0.094}_{-0.097} \quad (-1.8\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+1.6}_{-1.5} \quad (-12.7\sigma)$	$\sigma_8(0.15)$	$0.644^{+0.080}_{-0.071} \quad (-2.3\sigma)$
Ω_{m}	$0.393^{+0.097}_{-0.094} \quad (+1.8\sigma)$	z_*	$1093.7^{+5.3}_{-4.7} \quad (+6.7\sigma)$	$f\sigma_8(0.38)$	$0.442^{+0.029}_{-0.030} \quad (-2.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.196^{+0.070}_{-0.063} \quad (+15.7\sigma)$	r_*	$136^{+12}_{-12} \quad (-17.2\sigma)$	$\sigma_8(0.38)$	$0.565^{+0.077}_{-0.068} \quad (-2.3\sigma)$
$\Omega_{\nu}h^2$	$0.020^{+0.021}_{-0.020} \quad (+9.4\sigma)$	$100\theta_*$	$1.111^{+0.066}_{-0.071} \quad (+148.3\sigma)$	$f\sigma_8(0.51)$	$0.434^{+0.032}_{-0.034} \quad (-2.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.139^{+0.059}_{-0.051} \quad (+34.7\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.2^{+1.9}_{-1.8} \quad (-35.1\sigma)$	$\sigma_8(0.51)$	$0.527^{+0.072}_{-0.067} \quad (-2.3\sigma)$
σ_8	$0.703^{+0.079}_{-0.072} \quad (-2.3\sigma)$	z_{drag}	$1062.5^{+4.7}_{-4.4} \quad (+6.8\sigma)$	$f\sigma_8(0.61)$	$0.425^{+0.035}_{-0.037} \quad (-2.3\sigma)$
S_8	$0.800^{+0.057}_{-0.057} \quad (-1.4\sigma)$	r_{drag}	$138^{+12}_{-12} \quad (-18.2\sigma)$	$\sigma_8(0.61)$	$0.500^{+0.070}_{-0.065} \quad (-2.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.438^{+0.031}_{-0.031} \quad (-1.4\sigma)$	k_{D}	$0.152^{+0.016}_{-0.014} \quad (+21.1\sigma)$	$f\sigma_8(2.33)$	$0.257^{+0.035}_{-0.035} \quad (-2.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.555^{+0.038}_{-0.036} \quad (-2.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1702^{+0.0087}_{-0.0092} \quad (+33.7\sigma)$	$\sigma_8(2.33)$	$0.259^{+0.041}_{-0.037} \quad (-2.2\sigma)$
$\sigma_8/h^{0.5}$	$0.84^{+0.11}_{-0.10} \quad (-3.9\sigma)$	z_{eq}	$4208^{+1000}_{-1000} \quad (+15.8\sigma)$	$\chi^2_{\mathrm{lensing}}$	$12.3 \quad (\nu: 2.0)$
$r_{\mathrm{drag}}h$	$97.2^{+4.1}_{-3.9} \quad (+0.1\sigma)$	k_{eq}	$0.0129^{+0.0037}_{-0.0035} \quad (+16.2\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.42 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.51^{+0.11}_{-0.10} \quad (+1.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.755^{+0.10}_{-0.095} \quad (-5.9\sigma)$	χ^2_{MGS}	$0.71 \quad (\nu: 0.2)$
z_{re}	$8.7^{+1.1}_{-1.0} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.420^{+0.053}_{-0.049} \quad (-5.7\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.8 \quad (\nu: 1.3)$
10^9A_{s}	$2.11^{+0.52}_{-0.48} \quad (+0.6\sigma)$	$H(0.15)$	$77.3^{+6.0}_{-5.6} \quad (+3.3\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.89^{+0.47}_{-0.43} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$611^{+40}_{-42} \quad (-2.4\sigma)$	χ^2_{BAO}	$5.0 \quad (\nu: 1.6)$
D_{40}	$1178^{+400}_{-300} \quad (-3.7\sigma)$	$H(0.38)$	$90.2^{+9.7}_{-8.5} \quad (+6.2\sigma)$		
D_{220}	$5136^{+2000}_{-2000} \quad (-14.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1440^{+110}_{-120} \quad (-3.1\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 19.28; \Delta\bar{\chi}^2_{\mathrm{eff}} = -2.05; R - 1 = 0.00629$

6.108 base_mnu_lensing_lenspriors_BAO_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00099}_{-0.00098} \quad (+0.7\sigma)$	D_{810}	$2153^{+900}_{-900} \quad (-27.9\sigma)$	$H(0.51)$	$99^{+11}_{-10} \quad (+8.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.156^{+0.049}_{-0.045} \quad (+15.9\sigma)$	D_{1420}	$628^{+300}_{-300} \quad (-36.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1852^{+140}_{-160} \quad (-3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.108^{+0.065}_{-0.066} \quad (+132.0\sigma)$	D_{2000}	$182^{+90}_{-90} \quad (-25.2\sigma)$	$H(0.61)$	$106^{+10}_{-10} \quad (+11.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 3.23 \quad (+7.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2147^{+180}_{-190} \quad (-4.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.02^{+0.22}_{-0.23} \quad (-1.3\sigma)$	Y_{P}	$0.24532^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$H(2.33)$	$273^{+40}_{-40} \quad (+18.6\sigma)$
n_{s}	$0.959^{+0.039}_{-0.039} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00043}_{-0.00043} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5203^{+600}_{-600} \quad (-12.3\sigma)$
H_0	$70.6^{+4.2}_{-3.9} \quad (+2.3\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.036}_{-0.035} \quad (-0.1\sigma)$
Ω_{Λ}	$0.611^{+0.086}_{-0.091} \quad (-1.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$12.4^{+1.5}_{-1.4} \quad (-12.7\sigma)$	$\sigma_8(0.15)$	$0.674^{+0.075}_{-0.077} \quad (-1.5\sigma)$
Ω_{m}	$0.389^{+0.091}_{-0.086} \quad (+1.6\sigma)$	z_*	$1093.7^{+4.9}_{-4.5} \quad (+6.7\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.034}_{-0.035} \quad (-0.8\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.195^{+0.067}_{-0.060} \quad (+15.4\sigma)$	r_*	$136^{+11}_{-12} \quad (-17.6\sigma)$	$\sigma_8(0.38)$	$0.592^{+0.071}_{-0.073} \quad (-1.5\sigma)$
$\Omega_{\nu} h^2$	$< 0.0347 \quad (+7.5\sigma)$	$100\theta_*$	$1.108^{+0.065}_{-0.067} \quad (+142.4\sigma)$	$f\sigma_8(0.51)$	$0.453^{+0.035}_{-0.038} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.138^{+0.056}_{-0.049} \quad (+34.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$12.3^{+1.8}_{-1.7} \quad (-34.8\sigma)$	$\sigma_8(0.51)$	$0.552^{+0.068}_{-0.070} \quad (-1.5\sigma)$
σ_8	$0.735^{+0.077}_{-0.078} \quad (-1.4\sigma)$	z_{drag}	$1062.5^{+4.7}_{-4.2} \quad (+6.8\sigma)$	$f\sigma_8(0.61)$	$0.444^{+0.036}_{-0.040} \quad (-1.1\sigma)$
S_8	$0.834^{+0.072}_{-0.071} \quad (-0.0\sigma)$	r_{drag}	$138^{+11}_{-12} \quad (-18.6\sigma)$	$\sigma_8(0.61)$	$0.524^{+0.066}_{-0.068} \quad (-1.5\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.039}_{-0.039} \quad (-0.0\sigma)$	k_{D}	$0.152^{+0.015}_{-0.014} \quad (+21.2\sigma)$	$f\sigma_8(2.33)$	$0.269^{+0.033}_{-0.035} \quad (-1.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.579^{+0.044}_{-0.044} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1699^{+0.0085}_{-0.0088} \quad (+32.7\sigma)$	$\sigma_8(2.33)$	$0.271^{+0.037}_{-0.039} \quad (-1.5\sigma)$
$\sigma_8/h^{0.5}$	$0.88^{+0.10}_{-0.11} \quad (-2.8\sigma)$	z_{eq}	$4266^{+1000}_{-1000} \quad (+17.0\sigma)$	$\chi^2_{\mathrm{lensing}}$	$8.7 \quad (\nu: 2.3)$
$r_{\mathrm{drag}} h$	$97.3^{+3.8}_{-3.8} \quad (+0.2\sigma)$	k_{eq}	$0.0131^{+0.0037}_{-0.0034} \quad (+17.2\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.38 \quad (\nu: 0.1)$
$\langle d^2 \rangle^{1/2}$	$2.49^{+0.11}_{-0.10} \quad (+1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.744^{+0.10}_{-0.092} \quad (-7.1\sigma)$	χ^2_{MGS}	$0.73 \quad (\nu: 0.2)$
z_{re}	$8.64^{+1.1}_{-0.94} \quad (+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.414^{+0.053}_{-0.048} \quad (-7.0\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$3.7 \quad (\nu: 1.3)$
$10^9 A_{\mathrm{s}}$	$2.06^{+0.49}_{-0.43} \quad (-0.9\sigma)$	$H(0.15)$	$77.4^{+5.9}_{-5.4} \quad (+3.4\sigma)$	χ^2_{prior}	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.85^{+0.44}_{-0.39} \quad (-2.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$609^{+38}_{-41} \quad (-2.5\sigma)$	χ^2_{BAO}	$4.8 \quad (\nu: 1.5)$
D_{40}	$1150^{+300}_{-300} \quad (-5.6\sigma)$	$H(0.38)$	$90.2^{+8.9}_{-8.3} \quad (+6.2\sigma)$		
D_{220}	$4970^{+2000}_{-2000} \quad (-18.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1437^{+100}_{-110} \quad (-3.2\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 15.55; \Delta \bar{\chi}^2_{\mathrm{eff}} = -1.46; R - 1 = 0.00430$$

6.109 base_mnu_lensing_lenspriors_BAO_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02217	$0.02218^{+0.00096}_{-0.00098}$ (+0.5 σ)	D_{810}	2916	2926^{+500}_{-500} (+28.2 σ)	$H(0.51)$	89.10	$89.1^{+1.2}_{-1.3}$ (+0.4 σ)
$\Omega_c h^2$	0.1136	$0.1136^{+0.0064}_{-0.0067}$ (-3.4 σ)	D_{1420}	930	935^{+200}_{-200} (+23.5 σ)	$D_M(0.51)$	1991.0	1992^{+38}_{-36} (-0.6 σ)
$100\theta_{MC}$	1.04088	$1.0409^{+0.0012}_{-0.0012}$ (+0.5 σ)	D_{2000}	261.4	263^{+50}_{-50} (+17.8 σ)	$H(0.61)$	94.62	$94.6^{+1.2}_{-1.3}$ (+0.1 σ)
Σm_ν [eV]	0.292	< 0.596 (+0.7 σ)	$n_{s,0.002}$	0.9607	$0.962^{+0.038}_{-0.038}$ (+0.1 σ)	$D_M(0.61)$	2317.6	2319^{+42}_{-40} (-0.6 σ)
$\ln(10^{10} A_s)$	3.178	$3.18^{+0.16}_{-0.15}$ (+8.5 σ)	Y_P	0.245315	$0.24530^{+0.00041}_{-0.00043}$ (+0.5 σ)	$H(2.33)$	233.39	$233.4^{+3.2}_{-3.3}$ (-2.2 σ)
n_s	0.9607	$0.962^{+0.038}_{-0.038}$ (+0.1 σ)	Y_P^{BBN}	0.246641	$0.24663^{+0.00042}_{-0.00043}$ (+0.5 σ)	$D_M(2.33)$	5808	5809^{+76}_{-74} (+0.1 σ)
H_0	67.41	$67.4^{+1.6}_{-1.6}$ (+0.8 σ)	$10^5 D/H$	2.623	$2.62^{+0.19}_{-0.18}$ (-0.5 σ)	$f\sigma_8(0.15)$	0.4436	$0.443^{+0.024}_{-0.026}$ (-1.4 σ)
Ω_Λ	0.6944	$0.694^{+0.017}_{-0.017}$ (+1.0 σ)	Age/Gyr	13.908	$13.91^{+0.18}_{-0.18}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7294	$0.727^{+0.044}_{-0.046}$ (+0.0 σ)
Ω_m	0.3056	$0.306^{+0.017}_{-0.017}$ (-1.0 σ)	z_*	1089.63	$1089.6^{+1.3}_{-1.2}$ (-1.6 σ)	$f\sigma_8(0.38)$	0.4634	$0.462^{+0.024}_{-0.027}$ (-0.8 σ)
$\Omega_m h^2$	0.13888	$0.1390^{+0.0042}_{-0.0043}$ (-1.8 σ)	r_*	146.23	$146.2^{+2.2}_{-1.8}$ (+3.6 σ)	$\sigma_8(0.38)$	0.6478	$0.646^{+0.039}_{-0.041}$ (+0.1 σ)
$\Omega_\nu h^2$	0.00314	< 0.00641 (+0.7 σ)	$100\theta_*$	1.04122	$1.0412^{+0.0012}_{-0.0012}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4630	$0.462^{+0.023}_{-0.026}$ (-0.5 σ)
$\Omega_m h^3$	0.09362	$0.0936^{+0.0033}_{-0.0036}$ (-1.3 σ)	$D_M(z_*)/\text{Gpc}$	14.044	$14.04^{+0.19}_{-0.18}$ (+3.7 σ)	$\sigma_8(0.51)$	0.6069	$0.605^{+0.037}_{-0.038}$ (+0.1 σ)
σ_8	0.7882	$0.786^{+0.048}_{-0.050}$ (-0.1 σ)	z_{drag}	1059.06	$1059.1^{+2.3}_{-2.4}$ (-0.5 σ)	$f\sigma_8(0.61)$	0.4588	$0.457^{+0.023}_{-0.026}$ (-0.3 σ)
S_8	0.7956	$0.794^{+0.047}_{-0.052}$ (-1.6 σ)	r_{drag}	149.00	$149.0^{+2.2}_{-2.1}$ (+3.7 σ)	$\sigma_8(0.61)$	0.5779	$0.576^{+0.035}_{-0.036}$ (+0.2 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4357	$0.435^{+0.026}_{-0.028}$ (-1.6 σ)	k_D	0.13876	$0.1388^{+0.0027}_{-0.0027}$ (-3.4 σ)	$f\sigma_8(2.33)$	0.2953	$0.294^{+0.015}_{-0.016}$ (+0.4 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5860	$0.585^{+0.034}_{-0.036}$ (-0.8 σ)	$100\theta_D$	0.16121	$0.1612^{+0.0015}_{-0.0013}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3027	$0.302^{+0.017}_{-0.019}$ (+0.4 σ)
$\sigma_8/h^{0.5}$	0.960	$0.957^{+0.052}_{-0.058}$ (-0.4 σ)	z_{eq}	3244	3244^{+160}_{-160} (-3.5 σ)	χ^2_{lensing}	7.50	9.2 (ν : 1.6)
$r_{\text{drag}} h$	100.44	$100.4^{+2.3}_{-2.2}$ (+1.1 σ)	k_{eq}	0.009903	$0.00990^{+0.00047}_{-0.00051}$ (-3.5 σ)	$\chi^2_{6\text{DF}}$	0.000	0.056 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.526	$2.52^{+0.11}_{-0.098}$ (+2.0 σ)	$100\theta_{\text{eq}}$	0.8425	$0.843^{+0.033}_{-0.030}$ (+3.6 σ)	χ^2_{MGS}	1.68	1.72 (ν : 0.2)
z_{re}	7.722	$7.73^{+0.23}_{-0.21}$ (+0.3 σ)	$100\theta_{s,\text{eq}}$	0.4648	$0.465^{+0.017}_{-0.016}$ (+3.7 σ)	χ^2_{DR12BAO}	3.43	4.3 (ν : 1.0)
$10^9 A_s$	2.400	$2.41^{+0.40}_{-0.36}$ (+9.3 σ)	$H(0.15)$	72.58	$72.5^{+1.4}_{-1.5}$ (+0.7 σ)	χ^2_{prior}	0.00	2.9 (ν : 2.8) (-1.2 σ)
$10^9 A_s e^{-2\tau}$	2.150	$2.16^{+0.35}_{-0.32}$ (+19.7 σ)	$D_M(0.15)$	643.6	644^{+14}_{-14} (-0.7 σ)	χ^2_{BAO}	5.11	6.1 (ν : 1.0)
D_{40}	1437	1434^{+200}_{-200} (+13.2 σ)	$H(0.38)$	82.50	$82.5^{+1.3}_{-1.4}$ (+0.5 σ)			
D_{220}	6745	6763^{+1000}_{-1000} (+25.7 σ)	$D_M(0.38)$	1536.3	1537^{+31}_{-29} (-0.7 σ)			

Best-fit $\chi^2_{\text{eff}} = 12.61$; $\Delta\chi^2_{\text{eff}} = -0.74$; $\bar{\chi}^2_{\text{eff}} = 18.27$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.08$; $R - 1 = 0.00180$

χ^2_{eff} : BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.68 (Δ -0.07) DR12BAO: 3.43 (Δ 0.00) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.50 (Δ -0.60)

6.110 base_mnu_lensing_lenspriors_BAO_theta_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02220	$0.02219^{+0.00096}_{-0.00098}$ (+0.6 σ)	D_{810}	2910	2929^{+500}_{-500} (+28.3 σ)	$H(0.51)$	89.16	$89.1^{+1.2}_{-1.3}$ (+0.4 σ)
$\Omega_c h^2$	0.1136	$0.1135^{+0.0063}_{-0.0067}$ (-3.4 σ)	D_{1420}	929	935^{+200}_{-200} (+23.7 σ)	$D_M(0.51)$	1989.1	1990^{+37}_{-34} (-0.7 σ)
$100\theta_{MC}$	1.04090	$1.0409^{+0.0012}_{-0.0012}$ (+0.5 σ)	D_{2000}	261.1	263^{+50}_{-50} (+18.0 σ)	$H(0.61)$	94.67	$94.6^{+1.2}_{-1.3}$ (+0.2 σ)
Σm_ν [eV]	0.284	< 0.593 (+0.7 σ)	$n_{s,0.002}$	0.9609	$0.962^{+0.038}_{-0.038}$ (+0.1 σ)	$D_M(0.61)$	2315.4	2317^{+41}_{-38} (-0.7 σ)
$\ln(10^{10} A_s)$	3.176	$3.18^{+0.16}_{-0.15}$ (+8.5 σ)	Y_P	0.245324	$0.24531^{+0.00042}_{-0.00043}$ (+0.5 σ)	$H(2.33)$	233.38	$233.4^{+3.1}_{-3.3}$ (-2.2 σ)
n_s	0.9609	$0.962^{+0.038}_{-0.038}$ (+0.1 σ)	Y_P^{BBN}	0.246650	$0.24663^{+0.00042}_{-0.00043}$ (+0.5 σ)	$D_M(2.33)$	5806	5808^{+76}_{-73} (+0.0 σ)
H_0	67.50	$67.4^{+1.5}_{-1.5}$ (+0.8 σ)	$10^5 D/H$	2.619	$2.62^{+0.19}_{-0.18}$ (-0.5 σ)	$f\sigma_8(0.15)$	0.4436	$0.442^{+0.023}_{-0.026}$ (-1.4 σ)
Ω_Λ	0.6952	$0.695^{+0.016}_{-0.016}$ (+1.0 σ)	Age/Gyr	13.901	$13.91^{+0.18}_{-0.17}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7305	$0.728^{+0.044}_{-0.046}$ (+0.0 σ)
Ω_m	0.3048	$0.305^{+0.016}_{-0.016}$ (-1.0 σ)	z_*	1089.61	$1089.6^{+1.3}_{-1.2}$ (-1.7 σ)	$f\sigma_8(0.38)$	0.4636	$0.462^{+0.023}_{-0.027}$ (-0.8 σ)
$\Omega_m h^2$	0.13884	$0.1388^{+0.0041}_{-0.0042}$ (-1.9 σ)	r_*	146.21	$146.2^{+2.2}_{-1.8}$ (+3.7 σ)	$\sigma_8(0.38)$	0.6489	$0.647^{+0.039}_{-0.041}$ (+0.1 σ)
$\Omega_\nu h^2$	0.00306	< 0.00638 (+0.7 σ)	$100\theta_*$	1.04123	$1.0412^{+0.0012}_{-0.0012}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4633	$0.462^{+0.024}_{-0.025}$ (-0.5 σ)
$\Omega_m h^3$	0.09371	$0.0936^{+0.0033}_{-0.0036}$ (-1.2 σ)	$D_M(z_*)/\text{Gpc}$	14.042	$14.04^{+0.19}_{-0.17}$ (+3.7 σ)	$\sigma_8(0.51)$	0.6079	$0.606^{+0.036}_{-0.038}$ (+0.2 σ)
σ_8	0.7893	$0.787^{+0.047}_{-0.050}$ (-0.1 σ)	z_{drag}	1059.09	$1059.1^{+2.3}_{-2.4}$ (-0.5 σ)	$f\sigma_8(0.61)$	0.4592	$0.458^{+0.024}_{-0.025}$ (-0.3 σ)
S_8	0.7955	$0.793^{+0.046}_{-0.052}$ (-1.6 σ)	r_{drag}	148.97	$149.0^{+2.2}_{-2.1}$ (+3.8 σ)	$\sigma_8(0.61)$	0.5789	$0.577^{+0.035}_{-0.036}$ (+0.2 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4357	$0.435^{+0.025}_{-0.028}$ (-1.6 σ)	k_D	0.13880	$0.1388^{+0.0026}_{-0.0027}$ (-3.5 σ)	$f\sigma_8(2.33)$	0.2958	$0.295^{+0.014}_{-0.016}$ (+0.4 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5865	$0.585^{+0.034}_{-0.036}$ (-0.8 σ)	$100\theta_D$	0.16119	$0.1612^{+0.0014}_{-0.0013}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3032	$0.302^{+0.017}_{-0.018}$ (+0.4 σ)
$\sigma_8/h^{0.5}$	0.961	$0.958^{+0.053}_{-0.056}$ (-0.4 σ)	z_{eq}	3245	3242^{+160}_{-160} (-3.6 σ)	χ^2_{lensing}	7.50	9.2 (ν : 1.6)
$r_{\text{drag}} h$	100.55	$100.5^{+2.2}_{-2.1}$ (+1.1 σ)	k_{eq}	0.009905	$0.00990^{+0.00047}_{-0.00049}$ (-3.5 σ)	χ^2_{JLA}	1034.803	1034.95 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.524	$2.52^{+0.11}_{-0.099}$ (+2.0 σ)	$100\theta_{\text{eq}}$	0.8424	$0.844^{+0.032}_{-0.030}$ (+3.7 σ)	$\chi^2_{6\text{DF}}$	0.000	0.048 (ν : 0.0)
z_{re}	7.716	$7.72^{+0.23}_{-0.21}$ (+0.3 σ)	$100\theta_{s,\text{eq}}$	0.4647	$0.465^{+0.017}_{-0.016}$ (+3.7 σ)	χ^2_{MGS}	1.75	1.79 (ν : 0.2)
$10^9 A_s$	2.395	$2.41^{+0.40}_{-0.36}$ (+9.4 σ)	$H(0.15)$	72.66	$72.6^{+1.4}_{-1.4}$ (+0.7 σ)	χ^2_{DR12BAO}	3.38	4.2 (ν : 0.7)
$10^9 A_s e^{-2\tau}$	2.146	$2.16^{+0.36}_{-0.32}$ (+19.8 σ)	$D_M(0.15)$	642.8	643^{+14}_{-13} (-0.8 σ)	χ^2_{prior}	0.00	2.9 (ν : 2.8) (-1.2 σ)
D_{40}	1434	1436^{+200}_{-200} (+13.3 σ)	$H(0.38)$	82.57	$82.5^{+1.2}_{-1.3}$ (+0.6 σ)	χ^2_{BAO}	5.13	6.0 (ν : 0.8)
D_{220}	6734	6771^{+1000}_{-1000} (+25.9 σ)	$D_M(0.38)$	1534.6	1536^{+30}_{-28} (-0.7 σ)			

Best-fit $\chi^2_{\text{eff}} = 1047.43$; $\Delta\chi^2_{\text{eff}} = -0.70$; $\bar{\chi}^2_{\text{eff}} = 1053.09$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.04$; $R - 1 = 0.00184$
 χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.75 (Δ -0.07) DR12BAO: 3.38 (Δ -0.01) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8_CMBmargd: 7.50 (Δ -0.58) SN
- JLA Pantheon18: 1034.80 (Δ 0.03)

6.111 base_mnu_lensing_lenspriors_BAO_theta_post_agr2

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02218^{+0.00096}_{-0.00098} \quad (+0.6\sigma)$	D_{810}	$2967^{+500}_{-500} \quad (+31.1\sigma)$	$H(0.51)$	$88.9^{+1.3}_{-1.3} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1125^{+0.0066}_{-0.0067} \quad (-3.9\sigma)$	D_{1420}	$946^{+200}_{-200} \quad (+25.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1995^{+38}_{-37} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$266^{+50}_{-50} \quad (+19.3\sigma)$	$H(0.61)$	$94.4^{+1.3}_{-1.3} \quad (-0.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.648 \quad (+1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.038} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2323^{+42}_{-42} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.19^{+0.17}_{-0.16} \quad (+9.2\sigma)$	Y_{P}	$0.24531^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$H(2.33)$	$233.0^{+3.3}_{-3.3} \quad (-2.4\sigma)$
n_{s}	$0.960^{+0.039}_{-0.038} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00042}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5820^{+78}_{-77} \quad (+0.3\sigma)$
H_0	$67.3^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.435^{+0.022}_{-0.024} \quad (-1.9\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.93^{+0.19}_{-0.18} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.715^{+0.041}_{-0.043} \quad (-0.3\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.6^{+1.3}_{-1.2} \quad (-1.8\sigma)$	$f\sigma_8(0.38)$	$0.455^{+0.022}_{-0.024} \quad (-1.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1385^{+0.0042}_{-0.0042} \quad (-2.0\sigma)$	r_*	$146.5^{+1.9}_{-1.9} \quad (+4.2\sigma)$	$\sigma_8(0.38)$	$0.635^{+0.037}_{-0.039} \quad (-0.2\sigma)$
$\Omega_{\nu} h^2$	$< 0.00697 \quad (+1.0\sigma)$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.022}_{-0.023} \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0931^{+0.0035}_{-0.0035} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.07^{+0.19}_{-0.18} \quad (+4.3\sigma)$	$\sigma_8(0.51)$	$0.595^{+0.034}_{-0.036} \quad (-0.2\sigma)$
σ_8	$0.772^{+0.044}_{-0.047} \quad (-0.4\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.450^{+0.021}_{-0.023} \quad (-0.7\sigma)$
S_8	$0.780^{+0.044}_{-0.046} \quad (-2.2\sigma)$	r_{drag}	$149.3^{+2.2}_{-2.1} \quad (+4.3\sigma)$	$\sigma_8(0.61)$	$0.566^{+0.033}_{-0.034} \quad (-0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.427^{+0.024}_{-0.025} \quad (-2.2\sigma)$	k_{D}	$0.1385^{+0.0027}_{-0.0027} \quad (-4.0\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.014}_{-0.015} \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.575^{+0.031}_{-0.033} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0013} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.297^{+0.016}_{-0.017} \quad (+0.1\sigma)$
$\sigma_8/h^{0.5}$	$0.942^{+0.049}_{-0.051} \quad (-0.9\sigma)$	z_{eq}	$3217^{+160}_{-160} \quad (-4.1\sigma)$	$\chi^2_{\mathrm{lensing}}$	$11.7 \quad (\nu: 1.7)$
$r_{\mathrm{drag}} h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00982^{+0.00049}_{-0.00050} \quad (-4.0\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.055 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.53^{+0.11}_{-0.10} \quad (+2.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.848^{+0.033}_{-0.032} \quad (+4.2\sigma)$	χ^2_{MGS}	$1.73 \quad (\nu: 0.2)$
z_{re}	$7.71^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.468^{+0.017}_{-0.017} \quad (+4.3\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.3 \quad (\nu: 1.0)$
$10^9 A_{\mathrm{s}}$	$2.44^{+0.41}_{-0.39} \quad (+10.2\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.5} \quad (+0.6\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$2.18^{+0.36}_{-0.35} \quad (+21.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+14}_{-14} \quad (-0.7\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 0.9)$
D_{40}	$1461^{+200}_{-200} \quad (+15.0\sigma)$	$H(0.38)$	$82.3^{+1.4}_{-1.3} \quad (+0.4\sigma)$		
D_{220}	$6900^{+1000}_{-1000} \quad (+29.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1540^{+31}_{-30} \quad (-0.6\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 20.82; \Delta \bar{\chi}^2_{\mathrm{eff}} = -0.90; R - 1 = 0.00190$$

6.112 base_mnu_lensing_lenspriors_BAO_theta_post_conslmin40

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02218^{+0.00096}_{-0.0010} \quad (+0.5\sigma)$	D_{810}	$2993^{+600}_{-500} \quad (+33.0\sigma)$	$H(0.51)$	$89.0^{+1.3}_{-1.4} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1128^{+0.0071}_{-0.0075} \quad (-3.7\sigma)$	D_{1420}	$955^{+200}_{-200} \quad (+27.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1995^{+40}_{-37} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$268^{+60}_{-50} \quad (+20.9\sigma)$	$H(0.61)$	$94.5^{+1.3}_{-1.4} \quad (+0.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.685 \quad (+0.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.962^{+0.038}_{-0.038} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2322^{+45}_{-41} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.20^{+0.18}_{-0.17} \quad (+9.8\sigma)$	Y_{P}	$0.24530^{+0.00041}_{-0.00044} \quad (+0.5\sigma)$	$H(2.33)$	$233.1^{+3.4}_{-3.6} \quad (-2.3\sigma)$
n_{s}	$0.962^{+0.038}_{-0.038} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00042}_{-0.00044} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5817^{+83}_{-80} \quad (+0.2\sigma)$
H_0	$67.3^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.440^{+0.026}_{-0.028} \quad (-1.6\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.93^{+0.20}_{-0.19} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.723^{+0.048}_{-0.050} \quad (-0.1\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.6^{+1.3}_{-1.3} \quad (-1.8\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.026}_{-0.028} \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1386^{+0.0044}_{-0.0045} \quad (-1.9\sigma)$	r_*	$146.4^{+2.2}_{-2.0} \quad (+4.0\sigma)$	$\sigma_8(0.38)$	$0.642^{+0.042}_{-0.045} \quad (-0.0\sigma)$
$\Omega_{\nu}h^2$	$< 0.00736 \quad (+0.9\sigma)$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.026}_{-0.028} \quad (-0.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0933^{+0.0037}_{-0.0038} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.06^{+0.21}_{-0.19} \quad (+4.1\sigma)$	$\sigma_8(0.51)$	$0.601^{+0.040}_{-0.042} \quad (+0.0\sigma)$
σ_8	$0.781^{+0.052}_{-0.054} \quad (-0.2\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.026}_{-0.027} \quad (-0.5\sigma)$
S_8	$0.789^{+0.052}_{-0.055} \quad (-1.8\sigma)$	r_{drag}	$149.2^{+2.4}_{-2.2} \quad (+4.1\sigma)$	$\sigma_8(0.61)$	$0.572^{+0.038}_{-0.040} \quad (+0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.432^{+0.029}_{-0.030} \quad (-1.8\sigma)$	k_{D}	$0.1386^{+0.0028}_{-0.0028} \quad (-3.8\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.016}_{-0.017} \quad (+0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.581^{+0.037}_{-0.040} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0013} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.019}_{-0.019} \quad (+0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.952^{+0.058}_{-0.061} \quad (-0.6\sigma)$	z_{eq}	$3225^{+170}_{-180} \quad (-3.9\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.1 \quad (\nu: 1.5)$
$r_{\mathrm{drag}}h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00985^{+0.00053}_{-0.00055} \quad (-3.9\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.056 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.54^{+0.13}_{-0.12} \quad (+2.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.847^{+0.037}_{-0.034} \quad (+4.1\sigma)$	χ^2_{MGS}	$1.71 \quad (\nu: 0.2)$
z_{re}	$7.72^{+0.23}_{-0.22} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.467^{+0.019}_{-0.018} \quad (+4.1\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.3 \quad (\nu: 1.0)$
10^9A_{s}	$2.46^{+0.46}_{-0.41} \quad (+10.9\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.5} \quad (+0.7\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.20^{+0.41}_{-0.37} \quad (+23.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+15}_{-14} \quad (-0.7\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 1.0)$
D_{40}	$1468^{+300}_{-300} \quad (+15.5\sigma)$	$H(0.38)$	$82.4^{+1.4}_{-1.4} \quad (+0.5\sigma)$		
D_{220}	$6942^{+1000}_{-1000} \quad (+30.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1539^{+32}_{-30} \quad (-0.6\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 18.19$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -0.08$; $R - 1 = 0.00198$

6.113 base_mnu_lensing_lenspriors_BAO_theta_post_agrlmax425

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02217^{+0.00096}_{-0.00098} \quad (+0.5\sigma)$	D_{810}	$2919^{+500}_{-500} \quad (+27.7\sigma)$	$H(0.51)$	$89.1^{+1.2}_{-1.3} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1137^{+0.0063}_{-0.0067} \quad (-3.3\sigma)$	D_{1420}	$933^{+200}_{-200} \quad (+23.1\sigma)$	$D_M(0.51)$	$1992^{+38}_{-35} \quad (-0.7\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$262^{+50}_{-50} \quad (+17.6\sigma)$	$H(0.61)$	$94.6^{+1.2}_{-1.3} \quad (+0.2\sigma)$
Σm_ν [eV]	$< 0.587 \quad (+0.6\sigma)$	$n_{s,0.002}$	$0.962^{+0.038}_{-0.038} \quad (+0.2\sigma)$	$D_M(0.61)$	$2318^{+42}_{-39} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.17^{+0.16}_{-0.15} \quad (+8.4\sigma)$	Y_P	$0.24530^{+0.00041}_{-0.00043} \quad (+0.4\sigma)$	$H(2.33)$	$233.5^{+3.2}_{-3.4} \quad (-2.1\sigma)$
n_s	$0.962^{+0.038}_{-0.038} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.24663^{+0.00041}_{-0.00043} \quad (+0.4\sigma)$	$D_M(2.33)$	$5808^{+76}_{-73} \quad (+0.0\sigma)$
H_0	$67.4^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$10^5 D/H$	$2.63^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.023}_{-0.026} \quad (-1.3\sigma)$
Ω_Λ	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	Age/Gyr	$13.91^{+0.18}_{-0.17} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.729^{+0.044}_{-0.046} \quad (+0.0\sigma)$
Ω_m	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.7^{+1.3}_{-1.2} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.463^{+0.023}_{-0.026} \quad (-0.7\sigma)$
$\Omega_m h^2$	$0.1390^{+0.0042}_{-0.0043} \quad (-1.8\sigma)$	r_*	$146.2^{+2.0}_{-1.8} \quad (+3.6\sigma)$	$\sigma_8(0.38)$	$0.647^{+0.039}_{-0.041} \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$< 0.00631 \quad (+0.6\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.023}_{-0.026} \quad (-0.4\sigma)$
$\Omega_m h^3$	$0.0937^{+0.0033}_{-0.0036} \quad (-1.2\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.04^{+0.19}_{-0.18} \quad (+3.6\sigma)$	$\sigma_8(0.51)$	$0.606^{+0.036}_{-0.038} \quad (+0.2\sigma)$
σ_8	$0.788^{+0.047}_{-0.049} \quad (-0.0\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.023}_{-0.026} \quad (-0.3\sigma)$
S_8	$0.796^{+0.046}_{-0.052} \quad (-1.5\sigma)$	r_{drag}	$148.9^{+2.2}_{-2.1} \quad (+3.6\sigma)$	$\sigma_8(0.61)$	$0.577^{+0.035}_{-0.036} \quad (+0.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	$0.436^{+0.025}_{-0.028} \quad (-1.5\sigma)$	k_D	$0.1388^{+0.0026}_{-0.0027} \quad (-3.4\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.014}_{-0.016} \quad (+0.4\sigma)$
$\sigma_8 \Omega_m^{0.25}$	$0.586^{+0.034}_{-0.036} \quad (-0.7\sigma)$	$100\theta_D$	$0.1612^{+0.0015}_{-0.0013} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.017}_{-0.019} \quad (+0.4\sigma)$
$\sigma_8/h^{0.5}$	$0.959^{+0.053}_{-0.055} \quad (-0.4\sigma)$	z_{eq}	$3248^{+160}_{-160} \quad (-3.4\sigma)$	χ^2_{lensing}	$7.0 \quad (\nu: 1.6)$
$r_{\text{drag}} h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00991^{+0.00048}_{-0.00049} \quad (-3.4\sigma)$	$\chi^2_{6\text{DF}}$	$0.056 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.52^{+0.11}_{-0.099} \quad (+2.0\sigma)$	$100\theta_{\text{eq}}$	$0.842^{+0.032}_{-0.030} \quad (+3.6\sigma)$	χ^2_{MGS}	$1.71 \quad (\nu: 0.2)$
z_{re}	$7.73^{+0.23}_{-0.22} \quad (+0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.465^{+0.017}_{-0.016} \quad (+3.6\sigma)$	χ^2_{DR12BAO}	$4.4 \quad (\nu: 1.0)$
$10^9 A_s$	$2.40^{+0.39}_{-0.36} \quad (+9.2\sigma)$	$H(0.15)$	$72.6^{+1.4}_{-1.5} \quad (+0.7\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9 A_s e^{-2\tau}$	$2.15^{+0.35}_{-0.32} \quad (+19.3\sigma)$	$D_M(0.15)$	$644^{+14}_{-14} \quad (-0.7\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 1.0)$
D_{40}	$1430^{+200}_{-200} \quad (+13.0\sigma)$	$H(0.38)$	$82.5^{+1.3}_{-1.4} \quad (+0.5\sigma)$		
D_{220}	$6741^{+1000}_{-1000} \quad (+25.1\sigma)$	$D_M(0.38)$	$1537^{+31}_{-29} \quad (-0.7\sigma)$		
$\bar{\chi}^2_{\text{eff}} = 16.07; \Delta\bar{\chi}^2_{\text{eff}} = -0.02; R - 1 = 0.00165$					

6.114 base_mnu_lensing_lenspriors_BAO_theta_post_ptt

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00098}_{-0.0010} \quad (+0.6\sigma)$	D_{810}	$3253^{+600}_{-600} \quad (+51.8\sigma)$	$H(0.51)$	$88.5^{+1.5}_{-1.5} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1098^{+0.0079}_{-0.0074} \quad (-5.1\sigma)$	D_{1420}	$1035^{+200}_{-200} \quad (+43.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2004^{+44}_{-40} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$290^{+60}_{-60} \quad (+32.6\sigma)$	$H(0.61)$	$94.0^{+1.5}_{-1.4} \quad (-0.5\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$0.50^{+0.35}_{-0.41} \quad (+1.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.038}_{-0.038} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2333^{+49}_{-45} \quad (-0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.28^{+0.17}_{-0.19} \quad (+14.7\sigma)$	Y_{P}	$0.24531^{+0.00042}_{-0.00044} \quad (+0.5\sigma)$	$H(2.33)$	$232.1^{+3.4}_{-3.3} \quad (-2.9\sigma)$
n_{s}	$0.960^{+0.038}_{-0.038} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00042}_{-0.00045} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5844^{+85}_{-88} \quad (+0.8\sigma)$
H_0	$67.0^{+1.7}_{-1.8} \quad (+0.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.18} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.432^{+0.028}_{-0.029} \quad (-2.2\sigma)$
Ω_{Λ}	$0.693^{+0.017}_{-0.018} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.99^{+0.20}_{-0.21} \quad (+0.9\sigma)$	$\sigma_8(0.15)$	$0.707^{+0.054}_{-0.053} \quad (-0.6\sigma)$
Ω_{m}	$0.307^{+0.018}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.4^{+1.3}_{-1.3} \quad (-2.2\sigma)$	$f\sigma_8(0.38)$	$0.451^{+0.029}_{-0.031} \quad (-1.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1374^{+0.0045}_{-0.0042} \quad (-2.3\sigma)$	r_*	$147.1^{+2.1}_{-2.2} \quad (+5.4\sigma)$	$\sigma_8(0.38)$	$0.628^{+0.048}_{-0.047} \quad (-0.4\sigma)$
$\Omega_{\nu}h^2$	$0.0053^{+0.0038}_{-0.0044} \quad (+1.8\sigma)$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0013} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.451^{+0.029}_{-0.030} \quad (-1.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0920^{+0.0041}_{-0.0036} \quad (-2.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.13^{+0.21}_{-0.21} \quad (+5.5\sigma)$	$\sigma_8(0.51)$	$0.588^{+0.045}_{-0.044} \quad (-0.4\sigma)$
σ_8	$0.764^{+0.058}_{-0.057} \quad (-0.7\sigma)$	z_{drag}	$1058.9^{+2.4}_{-2.5} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.447^{+0.029}_{-0.030} \quad (-1.0\sigma)$
S_8	$0.772^{+0.057}_{-0.056} \quad (-2.5\sigma)$	r_{drag}	$149.9^{+2.3}_{-2.4} \quad (+5.6\sigma)$	$\sigma_8(0.61)$	$0.560^{+0.043}_{-0.042} \quad (-0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.423^{+0.031}_{-0.031} \quad (-2.5\sigma)$	k_{D}	$0.1379^{+0.0028}_{-0.0027} \quad (-5.1\sigma)$	$f\sigma_8(2.33)$	$0.289^{+0.018}_{-0.020} \quad (+0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.568^{+0.041}_{-0.042} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0014} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.294^{+0.021}_{-0.022} \quad (-0.1\sigma)$
$\sigma_8/h^{0.5}$	$0.933^{+0.064}_{-0.064} \quad (-1.1\sigma)$	z_{eq}	$3155^{+190}_{-190} \quad (-5.3\sigma)$	$\chi^2_{\mathrm{lensing}}$	$10.6 \quad (\nu: 1.4)$
$r_{\mathrm{drag}}h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00964^{+0.00058}_{-0.00055} \quad (-5.2\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.058 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.61^{+0.13}_{-0.13} \quad (+4.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.862^{+0.038}_{-0.038} \quad (+5.6\sigma)$	χ^2_{MGS}	$1.72 \quad (\nu: 0.3)$
z_{re}	$7.69^{+0.23}_{-0.22} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.475^{+0.021}_{-0.020} \quad (+5.7\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.4 \quad (\nu: 1.0)$
10^9A_{s}	$2.66^{+0.44}_{-0.49} \quad (+17.0\sigma)$	$H(0.15)$	$72.1^{+1.6}_{-1.7} \quad (+0.5\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.9) \quad (-1.2\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.39^{+0.40}_{-0.44} \quad (+36.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$648^{+17}_{-15} \quad (-0.5\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 1.0)$
D_{40}	$1602^{+300}_{-300} \quad (+24.4\sigma)$	$H(0.38)$	$82.0^{+1.5}_{-1.5} \quad (+0.2\sigma)$		
D_{220}	$7646^{+1000}_{-2000} \quad (+47.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1547^{+36}_{-33} \quad (-0.4\sigma)$		
$\bar{\chi}^2_{\mathrm{eff}} = 19.79; \Delta\bar{\chi}^2_{\mathrm{eff}} = -2.61; R - 1 = 0.03408$					

6.115 base_mnu_lensing_lenspriors_BAO_theta_post_bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02218^{+0.00095}_{-0.00097} \quad (+0.5\sigma)$	D_{810}	$2861^{+500}_{-400} \quad (+23.4\sigma)$	$H(0.51)$	$89.1^{+1.2}_{-1.3} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1138^{+0.0063}_{-0.0067} \quad (-3.3\sigma)$	D_{1420}	$914^{+200}_{-100} \quad (+19.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1991^{+38}_{-35} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$257^{+50}_{-40} \quad (+14.8\sigma)$	$H(0.61)$	$94.6^{+1.2}_{-1.3} \quad (+0.2\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.584 \quad (+0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.963^{+0.038}_{-0.038} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+42}_{-39} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.15^{+0.16}_{-0.15} \quad (+7.1\sigma)$	Y_{P}	$0.24530^{+0.00041}_{-0.00043} \quad (+0.4\sigma)$	$H(2.33)$	$233.5^{+3.2}_{-3.4} \quad (-2.1\sigma)$
n_{s}	$0.963^{+0.038}_{-0.038} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00041}_{-0.00043} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5807^{+76}_{-73} \quad (+0.0\sigma)$
H_0	$67.4^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.17} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.440^{+0.023}_{-0.026} \quad (-1.6\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.91^{+0.18}_{-0.17} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.723^{+0.043}_{-0.046} \quad (-0.1\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.7^{+1.3}_{-1.2} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.459^{+0.024}_{-0.025} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1391^{+0.0041}_{-0.0043} \quad (-1.8\sigma)$	r_*	$146.2^{+2.0}_{-1.8} \quad (+3.5\sigma)$	$\sigma_8(0.38)$	$0.642^{+0.039}_{-0.041} \quad (-0.0\sigma)$
$\Omega_{\nu}h^2$	$< 0.00628 \quad (+0.6\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.024}_{-0.025} \quad (-0.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0937^{+0.0033}_{-0.0036} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.04^{+0.19}_{-0.18} \quad (+3.6\sigma)$	$\sigma_8(0.51)$	$0.601^{+0.036}_{-0.038} \quad (+0.0\sigma)$
σ_8	$0.781^{+0.047}_{-0.049} \quad (-0.2\sigma)$	z_{drag}	$1059.1^{+2.3}_{-2.4} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.454^{+0.023}_{-0.025} \quad (-0.5\sigma)$
S_8	$0.789^{+0.047}_{-0.050} \quad (-1.8\sigma)$	r_{drag}	$148.9^{+2.2}_{-2.0} \quad (+3.6\sigma)$	$\sigma_8(0.61)$	$0.572^{+0.034}_{-0.036} \quad (+0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.432^{+0.026}_{-0.027} \quad (-1.8\sigma)$	k_{D}	$0.1388^{+0.0026}_{-0.0027} \quad (-3.3\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.015}_{-0.015} \quad (+0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.581^{+0.034}_{-0.036} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0014}_{-0.0013} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.017}_{-0.018} \quad (+0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.951^{+0.052}_{-0.055} \quad (-0.6\sigma)$	z_{eq}	$3250^{+160}_{-160} \quad (-3.4\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.4 \quad (\nu: 1.6)$
$r_{\mathrm{drag}}h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00992^{+0.00047}_{-0.00049} \quad (-3.4\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.055 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.10}_{-0.096} \quad (+1.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.842^{+0.032}_{-0.030} \quad (+3.5\sigma)$	χ^2_{MGS}	$1.71 \quad (\nu: 0.2)$
z_{re}	$7.73^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.464^{+0.017}_{-0.016} \quad (+3.6\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.4 \quad (\nu: 1.0)$
10^9A_{s}	$2.35^{+0.38}_{-0.34} \quad (+7.7\sigma)$	$H(0.15)$	$72.6^{+1.4}_{-1.5} \quad (+0.7\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.7) \quad (-1.2\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.11^{+0.34}_{-0.31} \quad (+16.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+14}_{-13} \quad (-0.7\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 1.0)$
D_{40}	$1400^{+200}_{-200} \quad (+11.0\sigma)$	$H(0.38)$	$82.5^{+1.3}_{-1.3} \quad (+0.6\sigma)$		
D_{220}	$6599^{+1000}_{-1000} \quad (+21.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+31}_{-29} \quad (-0.7\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 18.46$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.09$; $R - 1 = 0.00205$

6.116 base_mnu_lensing_lenspriors_BAO_theta_post_agr2bfcl

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02218^{+0.00095}_{-0.00097} \quad (+0.6\sigma)$	D_{810}	$2894^{+500}_{-500} \quad (+25.8\sigma)$	$H(0.51)$	$89.0^{+1.3}_{-1.3} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1128^{+0.0065}_{-0.0067} \quad (-3.7\sigma)$	D_{1420}	$924^{+200}_{-200} \quad (+21.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1994^{+37}_{-36} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$259^{+50}_{-50} \quad (+15.9\sigma)$	$H(0.61)$	$94.5^{+1.3}_{-1.3} \quad (+0.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.628 \quad (+0.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.039}_{-0.037} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2321^{+42}_{-40} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.16^{+0.16}_{-0.16} \quad (+7.7\sigma)$	Y_{P}	$0.24531^{+0.00041}_{-0.00042} \quad (+0.5\sigma)$	$H(2.33)$	$233.2^{+3.2}_{-3.3} \quad (-2.3\sigma)$
n_{s}	$0.961^{+0.039}_{-0.037} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5816^{+78}_{-74} \quad (+0.2\sigma)$
H_0	$67.3^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.17} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.433^{+0.022}_{-0.023} \quad (-2.1\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.93^{+0.18}_{-0.18} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.711^{+0.040}_{-0.044} \quad (-0.4\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.6^{+1.3}_{-1.2} \quad (-1.8\sigma)$	$f\sigma_8(0.38)$	$0.453^{+0.022}_{-0.023} \quad (-1.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1386^{+0.0041}_{-0.0042} \quad (-1.9\sigma)$	r_*	$146.4^{+1.9}_{-1.9} \quad (+4.0\sigma)$	$\sigma_8(0.38)$	$0.632^{+0.036}_{-0.039} \quad (-0.3\sigma)$
$\Omega_{\nu}h^2$	$< 0.00675 \quad (+0.9\sigma)$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.452^{+0.022}_{-0.023} \quad (-1.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0933^{+0.0034}_{-0.0035} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.06^{+0.19}_{-0.18} \quad (+4.1\sigma)$	$\sigma_8(0.51)$	$0.592^{+0.034}_{-0.037} \quad (-0.3\sigma)$
σ_8	$0.769^{+0.043}_{-0.047} \quad (-0.5\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.448^{+0.022}_{-0.022} \quad (-0.9\sigma)$
S_8	$0.777^{+0.043}_{-0.046} \quad (-2.3\sigma)$	r_{drag}	$149.2^{+2.2}_{-2.1} \quad (+4.1\sigma)$	$\sigma_8(0.61)$	$0.564^{+0.032}_{-0.035} \quad (-0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.425^{+0.024}_{-0.025} \quad (-2.3\sigma)$	k_{D}	$0.1386^{+0.0026}_{-0.0027} \quad (-3.8\sigma)$	$f\sigma_8(2.33)$	$0.288^{+0.014}_{-0.015} \quad (+0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.572^{+0.031}_{-0.033} \quad (-1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0014}_{-0.0013} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.016}_{-0.017} \quad (-0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.937^{+0.047}_{-0.051} \quad (-1.0\sigma)$	z_{eq}	$3226^{+160}_{-160} \quad (-3.9\sigma)$	$\chi^2_{\mathrm{lensing}}$	$11.9 \quad (\nu: 1.7)$
$r_{\mathrm{drag}}h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00985^{+0.00049}_{-0.00050} \quad (-3.8\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.055 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.50^{+0.10}_{-0.10} \quad (+1.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.847^{+0.034}_{-0.030} \quad (+4.0\sigma)$	χ^2_{MGS}	$1.72 \quad (\nu: 0.2)$
z_{re}	$7.72^{+0.22}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.467^{+0.018}_{-0.016} \quad (+4.1\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.3 \quad (\nu: 1.0)$
10^9A_{s}	$2.38^{+0.39}_{-0.37} \quad (+8.5\sigma)$	$H(0.15)$	$72.5^{+1.4}_{-1.4} \quad (+0.7\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.13^{+0.35}_{-0.33} \quad (+17.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+14}_{-14} \quad (-0.7\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 0.9)$
D_{40}	$1422^{+200}_{-200} \quad (+12.5\sigma)$	$H(0.38)$	$82.4^{+1.3}_{-1.3} \quad (+0.5\sigma)$		
D_{220}	$6715^{+1000}_{-1000} \quad (+24.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1539^{+30}_{-29} \quad (-0.6\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 20.96; \Delta\bar{\chi}^2_{\mathrm{eff}} = -0.55; R - 1 = 0.00384$$

6.117 base_mnu_lensing_lenspriors_BAO_theta_post_linear

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02217^{+0.00096}_{-0.00098} \quad (+0.5\sigma)$	D_{810}	$2899^{+500}_{-400} \quad (+26.2\sigma)$	$H(0.51)$	$89.2^{+1.2}_{-1.3} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1143^{+0.0061}_{-0.0066} \quad (-3.0\sigma)$	D_{1420}	$927^{+200}_{-100} \quad (+22.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+38}_{-34} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$260^{+50}_{-40} \quad (+16.6\sigma)$	$H(0.61)$	$94.7^{+1.2}_{-1.3} \quad (+0.3\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.551 \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.963^{+0.037}_{-0.038} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2316^{+42}_{-38} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.17^{+0.16}_{-0.14} \quad (+8.0\sigma)$	Y_{P}	$0.24530^{+0.00041}_{-0.00043} \quad (+0.4\sigma)$	$H(2.33)$	$233.7^{+3.1}_{-3.3} \quad (-2.0\sigma)$
n_{s}	$0.963^{+0.037}_{-0.038} \quad (+0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00042}_{-0.00043} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5803^{+75}_{-71} \quad (-0.1\sigma)$
H_0	$67.4^{+1.5}_{-1.6} \quad (+0.8\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.63^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.024}_{-0.026} \quad (-1.0\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.018} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.89^{+0.18}_{-0.17} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.735^{+0.043}_{-0.046} \quad (+0.2\sigma)$
Ω_{m}	$0.306^{+0.018}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.7^{+1.3}_{-1.2} \quad (-1.5\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.023}_{-0.027} \quad (-0.4\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1393^{+0.0042}_{-0.0043} \quad (-1.7\sigma)$	r_*	$146.0^{+2.0}_{-1.8} \quad (+3.3\sigma)$	$\sigma_8(0.38)$	$0.653^{+0.038}_{-0.041} \quad (+0.3\sigma)$
$\Omega_{\nu} h^2$	$< 0.00593 \quad (+0.5\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.023}_{-0.026} \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0939^{+0.0032}_{-0.0036} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.03^{+0.19}_{-0.17} \quad (+3.3\sigma)$	$\sigma_8(0.51)$	$0.611^{+0.036}_{-0.038} \quad (+0.3\sigma)$
σ_8	$0.795^{+0.046}_{-0.050} \quad (+0.2\sigma)$	z_{drag}	$1059.1^{+2.3}_{-2.4} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.023}_{-0.025} \quad (-0.0\sigma)$
S_8	$0.803^{+0.047}_{-0.052} \quad (-1.3\sigma)$	r_{drag}	$148.8^{+2.2}_{-2.0} \quad (+3.4\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.034}_{-0.036} \quad (+0.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.440^{+0.026}_{-0.029} \quad (-1.3\sigma)$	k_{D}	$0.1390^{+0.0026}_{-0.0027} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.297^{+0.015}_{-0.016} \quad (+0.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.034}_{-0.036} \quad (-0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0014}_{-0.0013} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.016}_{-0.019} \quad (+0.5\sigma)$
$\sigma_8/h^{0.5}$	$0.967^{+0.051}_{-0.058} \quad (-0.2\sigma)$	z_{eq}	$3261^{+150}_{-160} \quad (-3.2\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.7 \quad (\nu: 1.6)$
$r_{\mathrm{drag}} h$	$100.3^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00996^{+0.00046}_{-0.00049} \quad (-3.1\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.056 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.52^{+0.11}_{-0.095} \quad (+1.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.840^{+0.032}_{-0.029} \quad (+3.3\sigma)$	χ^2_{MGS}	$1.71 \quad (\nu: 0.2)$
z_{re}	$7.73^{+0.23}_{-0.22} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.463^{+0.017}_{-0.015} \quad (+3.3\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.4 \quad (\nu: 1.1)$
$10^9 A_{\mathrm{s}}$	$2.39^{+0.38}_{-0.34} \quad (+8.7\sigma)$	$H(0.15)$	$72.6^{+1.4}_{-1.5} \quad (+0.8\sigma)$	χ^2_{prior}	$2.9 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$2.14^{+0.34}_{-0.30} \quad (+18.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+14}_{-13} \quad (-0.8\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 1.0)$
D_{40}	$1417^{+200}_{-200} \quad (+12.1\sigma)$	$H(0.38)$	$82.6^{+1.2}_{-1.4} \quad (+0.6\sigma)$		
D_{220}	$6673^{+1000}_{-1000} \quad (+23.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1535^{+30}_{-28} \quad (-0.7\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 18.71$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.26$; $R - 1 = 0.00239$

6.118 base_mnu_lensing_lenspriors_BAO_theta_post_acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02218^{+0.00096}_{-0.00098} \quad (+0.5\sigma)$	D_{810}	$2928^{+500}_{-500} \quad (+28.3\sigma)$	$H(0.51)$	$89.1^{+1.2}_{-1.3} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1135^{+0.0064}_{-0.0067} \quad (-3.4\sigma)$	D_{1420}	$935^{+200}_{-200} \quad (+23.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1992^{+38}_{-36} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$263^{+50}_{-50} \quad (+18.0\sigma)$	$H(0.61)$	$94.6^{+1.2}_{-1.3} \quad (+0.1\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.600 \quad (+0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.962^{+0.038}_{-0.038} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2319^{+42}_{-40} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.18^{+0.16}_{-0.15} \quad (+8.5\sigma)$	Y_{P}	$0.24530^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$H(2.33)$	$233.4^{+3.2}_{-3.4} \quad (-2.2\sigma)$
n_{s}	$0.962^{+0.038}_{-0.038} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5810^{+77}_{-74} \quad (+0.1\sigma)$
H_0	$67.4^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.442^{+0.024}_{-0.026} \quad (-1.4\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.91^{+0.18}_{-0.18} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.727^{+0.044}_{-0.046} \quad (-0.0\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.6^{+1.3}_{-1.2} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.024}_{-0.027} \quad (-0.8\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1389^{+0.0042}_{-0.0043} \quad (-1.8\sigma)$	r_*	$146.2^{+2.0}_{-1.8} \quad (+3.6\sigma)$	$\sigma_8(0.38)$	$0.645^{+0.039}_{-0.041} \quad (+0.1\sigma)$
$\Omega_{\nu} h^2$	$< 0.00646 \quad (+0.7\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.024}_{-0.025} \quad (-0.5\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0936^{+0.0034}_{-0.0036} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.04^{+0.19}_{-0.18} \quad (+3.7\sigma)$	$\sigma_8(0.51)$	$0.604^{+0.037}_{-0.039} \quad (+0.1\sigma)$
σ_8	$0.785^{+0.048}_{-0.050} \quad (-0.1\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.024}_{-0.025} \quad (-0.3\sigma)$
S_8	$0.793^{+0.047}_{-0.053} \quad (-1.6\sigma)$	r_{drag}	$149.0^{+2.2}_{-2.1} \quad (+3.7\sigma)$	$\sigma_8(0.61)$	$0.575^{+0.035}_{-0.037} \quad (+0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.435^{+0.026}_{-0.029} \quad (-1.6\sigma)$	k_{D}	$0.1388^{+0.0027}_{-0.0027} \quad (-3.5\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.015}_{-0.016} \quad (+0.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.584^{+0.035}_{-0.036} \quad (-0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0013} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.018}_{-0.018} \quad (+0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.957^{+0.054}_{-0.056} \quad (-0.5\sigma)$	z_{eq}	$3243^{+160}_{-170} \quad (-3.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.2 \quad (\nu: 1.6)$
$r_{\mathrm{drag}} h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00990^{+0.00048}_{-0.00050} \quad (-3.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.53^{+0.11}_{-0.099} \quad (+2.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.843^{+0.033}_{-0.030} \quad (+3.7\sigma)$	χ_{MGS}^2	$1.72 \quad (\nu: 0.2)$
z_{re}	$7.73^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.465^{+0.017}_{-0.016} \quad (+3.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.3 \quad (\nu: 1.0)$
$10^9 A_{\mathrm{s}}$	$2.41^{+0.40}_{-0.36} \quad (+9.3\sigma)$	$H(0.15)$	$72.5^{+1.4}_{-1.5} \quad (+0.7\sigma)$	χ_{prior}^2	$2.9 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$2.16^{+0.36}_{-0.32} \quad (+19.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+14}_{-14} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.0)$
D_{40}	$1435^{+200}_{-200} \quad (+13.3\sigma)$	$H(0.38)$	$82.5^{+1.3}_{-1.4} \quad (+0.5\sigma)$		
D_{220}	$6766^{+1000}_{-1000} \quad (+25.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+31}_{-29} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 18.25; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -0.10; R - 1 = 0.00162$$

6.119 base_mnu_lensing_lenspriors_BAO_theta_post_agr2acc

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00096}_{-0.00098} \quad (+0.6\sigma)$	D_{810}	$2975^{+500}_{-500} \quad (+31.7\sigma)$	$H(0.51)$	$88.9^{+1.3}_{-1.3} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1123^{+0.0067}_{-0.0067} \quad (-3.9\sigma)$	D_{1420}	$948^{+200}_{-200} \quad (+26.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1996^{+38}_{-37} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$266^{+50}_{-50} \quad (+19.7\sigma)$	$H(0.61)$	$94.4^{+1.3}_{-1.3} \quad (-0.1\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.660 \quad (+1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.038} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2323^{+42}_{-42} \quad (-0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.19^{+0.17}_{-0.16} \quad (+9.4\sigma)$	Y_{P}	$0.24531^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$H(2.33)$	$233.0^{+3.3}_{-3.2} \quad (-2.4\sigma)$
n_{s}	$0.960^{+0.039}_{-0.038} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00042}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5821^{+78}_{-77} \quad (+0.3\sigma)$
H_0	$67.2^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.435^{+0.022}_{-0.024} \quad (-2.0\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.94^{+0.19}_{-0.18} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.713^{+0.041}_{-0.044} \quad (-0.4\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.5^{+1.3}_{-1.2} \quad (-1.9\sigma)$	$f\sigma_8(0.38)$	$0.454^{+0.022}_{-0.024} \quad (-1.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1384^{+0.0042}_{-0.0042} \quad (-2.0\sigma)$	r_*	$146.5^{+2.0}_{-1.9} \quad (+4.2\sigma)$	$\sigma_8(0.38)$	$0.634^{+0.037}_{-0.038} \quad (-0.3\sigma)$
$\Omega_{\nu}h^2$	$< 0.00710 \quad (+1.0\sigma)$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.022}_{-0.024} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0931^{+0.0036}_{-0.0035} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.07^{+0.19}_{-0.18} \quad (+4.3\sigma)$	$\sigma_8(0.51)$	$0.594^{+0.034}_{-0.036} \quad (-0.2\sigma)$
σ_8	$0.771^{+0.045}_{-0.047} \quad (-0.5\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.449^{+0.021}_{-0.023} \quad (-0.8\sigma)$
S_8	$0.779^{+0.044}_{-0.046} \quad (-2.2\sigma)$	r_{drag}	$149.3^{+2.2}_{-2.2} \quad (+4.4\sigma)$	$\sigma_8(0.61)$	$0.565^{+0.033}_{-0.035} \quad (-0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.426^{+0.024}_{-0.025} \quad (-2.2\sigma)$	k_{D}	$0.1385^{+0.0027}_{-0.0027} \quad (-4.0\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.014}_{-0.015} \quad (+0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.573^{+0.032}_{-0.034} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0013} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.296^{+0.016}_{-0.017} \quad (+0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.940^{+0.049}_{-0.052} \quad (-0.9\sigma)$	z_{eq}	$3214^{+160}_{-170} \quad (-4.1\sigma)$	$\chi^2_{\mathrm{lensing}}$	$11.8 \quad (\nu: 1.7)$
$r_{\mathrm{drag}}h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00981^{+0.00050}_{-0.00050} \quad (-4.1\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.055 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.53^{+0.11}_{-0.10} \quad (+2.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.849^{+0.034}_{-0.031} \quad (+4.3\sigma)$	χ^2_{MGS}	$1.73 \quad (\nu: 0.2)$
z_{re}	$7.71^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.468^{+0.018}_{-0.016} \quad (+4.4\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.3 \quad (\nu: 0.9)$
10^9A_{s}	$2.44^{+0.41}_{-0.40} \quad (+10.4\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.5} \quad (+0.6\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.19^{+0.37}_{-0.35} \quad (+22.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+14}_{-14} \quad (-0.7\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 0.9)$
D_{40}	$1465^{+200}_{-200} \quad (+15.2\sigma)$	$H(0.38)$	$82.3^{+1.4}_{-1.3} \quad (+0.4\sigma)$		
D_{220}	$6921^{+1000}_{-1000} \quad (+29.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1540^{+31}_{-30} \quad (-0.6\sigma)$		
$\bar{\chi}^2_{\mathrm{eff}} = 20.92; \Delta\bar{\chi}^2_{\mathrm{eff}} = -1.02; R - 1 = 0.00208$					

6.120 base_mnu_lensing_lenspriors_BAO_theta_post_takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02218^{+0.00096}_{-0.00098} \quad (+0.5\sigma)$	D_{810}	$2935^{+500}_{-500} \quad (+28.8\sigma)$	$H(0.51)$	$89.0^{+1.3}_{-1.3} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1133^{+0.0066}_{-0.0069} \quad (-3.5\sigma)$	D_{1420}	$937^{+200}_{-200} \quad (+24.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+38}_{-36} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$264^{+50}_{-50} \quad (+18.2\sigma)$	$H(0.61)$	$94.6^{+1.3}_{-1.4} \quad (+0.1\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.619 \quad (+0.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.962^{+0.038}_{-0.038} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2320^{+43}_{-40} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.18^{+0.16}_{-0.16} \quad (+8.7\sigma)$	Y_{P}	$0.24530^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$H(2.33)$	$233.3^{+3.2}_{-3.4} \quad (-2.2\sigma)$
n_{s}	$0.962^{+0.038}_{-0.038} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5812^{+81}_{-73} \quad (+0.1\sigma)$
H_0	$67.3^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.441^{+0.025}_{-0.028} \quad (-1.5\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.92^{+0.19}_{-0.18} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.724^{+0.047}_{-0.048} \quad (-0.1\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.6^{+1.3}_{-1.2} \quad (-1.7\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.025}_{-0.028} \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1388^{+0.0042}_{-0.0043} \quad (-1.9\sigma)$	r_*	$146.3^{+2.0}_{-1.9} \quad (+3.8\sigma)$	$\sigma_8(0.38)$	$0.643^{+0.041}_{-0.043} \quad (+0.0\sigma)$
$\Omega_{\nu}h^2$	$< 0.00665 \quad (+0.8\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.026}_{-0.027} \quad (-0.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0935^{+0.0034}_{-0.0036} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.05^{+0.20}_{-0.18} \quad (+3.8\sigma)$	$\sigma_8(0.51)$	$0.602^{+0.039}_{-0.040} \quad (+0.1\sigma)$
σ_8	$0.782^{+0.050}_{-0.052} \quad (-0.2\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.025}_{-0.026} \quad (-0.4\sigma)$
S_8	$0.790^{+0.049}_{-0.054} \quad (-1.8\sigma)$	r_{drag}	$149.1^{+2.9}_{-2.1} \quad (+3.9\sigma)$	$\sigma_8(0.61)$	$0.573^{+0.037}_{-0.038} \quad (+0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.433^{+0.027}_{-0.030} \quad (-1.8\sigma)$	k_{D}	$0.1387^{+0.0027}_{-0.0028} \quad (-3.6\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.015}_{-0.017} \quad (+0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.582^{+0.035}_{-0.040} \quad (-0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0013} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.018}_{-0.019} \quad (+0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.953^{+0.054}_{-0.061} \quad (-0.6\sigma)$	z_{eq}	$3237^{+160}_{-170} \quad (-3.7\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.2 \quad (\nu: 1.6)$
$r_{\mathrm{drag}}h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00988^{+0.00049}_{-0.00051} \quad (-3.6\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.056 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.53^{+0.11}_{-0.10} \quad (+2.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.844^{+0.034}_{-0.031} \quad (+3.8\sigma)$	χ^2_{MGS}	$1.72 \quad (\nu: 0.2)$
z_{re}	$7.72^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.466^{+0.018}_{-0.016} \quad (+3.8\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.3 \quad (\nu: 1.0)$
10^9A_{s}	$2.41^{+0.40}_{-0.37} \quad (+9.5\sigma)$	$H(0.15)$	$72.5^{+1.5}_{-1.5} \quad (+0.7\sigma)$	χ^2_{prior}	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.16^{+0.36}_{-0.33} \quad (+20.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+14}_{-14} \quad (-0.7\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 1.0)$
D_{40}	$1439^{+200}_{-200} \quad (+13.6\sigma)$	$H(0.38)$	$82.4^{+1.3}_{-1.4} \quad (+0.5\sigma)$		
D_{220}	$6792^{+1000}_{-1000} \quad (+26.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1538^{+31}_{-30} \quad (-0.7\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 18.22; \Delta\bar{\chi}^2_{\mathrm{eff}} = -0.18; R - 1 = 0.00182$$

6.121 base_mnu_lensing_lenspriors_BAO_theta_post_agr2takahashi

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00095}_{-0.00099} \quad (+0.6\sigma)$	D_{810}	$2984^{+500}_{-500} \quad (+32.4\sigma)$	$H(0.51)$	$88.9^{+1.3}_{-1.3} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1120^{+0.0068}_{-0.0067} \quad (-4.1\sigma)$	D_{1420}	$951^{+200}_{-200} \quad (+26.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1997^{+37}_{-38} \quad (-0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$267^{+50}_{-50} \quad (+20.1\sigma)$	$H(0.61)$	$94.4^{+1.3}_{-1.3} \quad (-0.1\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$0.38^{+0.30}_{-0.37} \quad (+1.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.039}_{-0.038} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2324^{+42}_{-42} \quad (-0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.19^{+0.16}_{-0.17} \quad (+9.6\sigma)$	Y_{P}	$0.24531^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$H(2.33)$	$232.9^{+3.3}_{-3.3} \quad (-2.5\sigma)$
n_{s}	$0.960^{+0.039}_{-0.038} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00041}_{-0.00043} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5824^{+79}_{-79} \quad (+0.4\sigma)$
H_0	$67.2^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.62^{+0.20}_{-0.17} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.433^{+0.023}_{-0.024} \quad (-2.1\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.94^{+0.19}_{-0.19} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.710^{+0.043}_{-0.046} \quad (-0.5\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.5^{+1.3}_{-1.2} \quad (-1.9\sigma)$	$f\sigma_8(0.38)$	$0.452^{+0.023}_{-0.025} \quad (-1.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1383^{+0.0042}_{-0.0042} \quad (-2.1\sigma)$	r_*	$146.6^{+2.0}_{-2.0} \quad (+4.4\sigma)$	$\sigma_8(0.38)$	$0.631^{+0.039}_{-0.041} \quad (-0.3\sigma)$
$\Omega_{\nu}h^2$	$0.0041^{+0.0032}_{-0.0040} \quad (+1.1\sigma)$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0012} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.452^{+0.023}_{-0.025} \quad (-1.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0929^{+0.0036}_{-0.0035} \quad (-1.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.08^{+0.19}_{-0.19} \quad (+4.5\sigma)$	$\sigma_8(0.51)$	$0.591^{+0.036}_{-0.038} \quad (-0.3\sigma)$
σ_8	$0.767^{+0.047}_{-0.049} \quad (-0.6\sigma)$	z_{drag}	$1059.0^{+2.3}_{-2.4} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.448^{+0.023}_{-0.025} \quad (-0.9\sigma)$
S_8	$0.775^{+0.047}_{-0.048} \quad (-2.4\sigma)$	r_{drag}	$149.4^{+2.2}_{-2.2} \quad (+4.5\sigma)$	$\sigma_8(0.61)$	$0.563^{+0.034}_{-0.036} \quad (-0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.424^{+0.026}_{-0.026} \quad (-2.4\sigma)$	k_{D}	$0.1384^{+0.0027}_{-0.0027} \quad (-4.2\sigma)$	$f\sigma_8(2.33)$	$0.288^{+0.015}_{-0.016} \quad (+0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.571^{+0.033}_{-0.036} \quad (-1.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0013} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.017}_{-0.018} \quad (-0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.936^{+0.051}_{-0.055} \quad (-1.1\sigma)$	z_{eq}	$3207^{+170}_{-170} \quad (-4.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$11.8 \quad (\nu: 1.7)$
$r_{\mathrm{drag}}h$	$100.4^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00979^{+0.00051}_{-0.00050} \quad (-4.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.53^{+0.11}_{-0.11} \quad (+2.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.851^{+0.035}_{-0.032} \quad (+4.5\sigma)$	χ_{MGS}^2	$1.73 \quad (\nu: 0.2)$
z_{re}	$7.71^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.469^{+0.018}_{-0.017} \quad (+4.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.3 \quad (\nu: 1.0)$
10^9A_{s}	$2.45^{+0.41}_{-0.40} \quad (+10.6\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.5} \quad (+0.6\sigma)$	χ_{prior}^2	$3.0 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$2.19^{+0.37}_{-0.36} \quad (+22.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+14}_{-14} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.9)$
D_{40}	$1469^{+200}_{-200} \quad (+15.6\sigma)$	$H(0.38)$	$82.3^{+1.4}_{-1.3} \quad (+0.4\sigma)$		
D_{220}	$6952^{+1000}_{-1000} \quad (+30.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1541^{+31}_{-31} \quad (-0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 20.91; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.18; R - 1 = 0.00288$$

6.122 base_mnu_lensing_lenspriors_BAO_theta_post_Apr6

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02217^{+0.00096}_{-0.00098} \quad (+0.5\sigma)$	D_{810}	$2893^{+500}_{-500} \quad (+25.8\sigma)$	$H(0.51)$	$89.1^{+1.2}_{-1.3} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1139^{+0.0063}_{-0.0066} \quad (-3.2\sigma)$	D_{1420}	$925^{+200}_{-200} \quad (+21.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1991^{+38}_{-35} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	D_{2000}	$260^{+50}_{-40} \quad (+16.4\sigma)$	$H(0.61)$	$94.7^{+1.2}_{-1.3} \quad (+0.2\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.574 \quad (+0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.963^{+0.037}_{-0.038} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+42}_{-39} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.17^{+0.16}_{-0.15} \quad (+7.8\sigma)$	Y_{P}	$0.24530^{+0.00041}_{-0.00043} \quad (+0.4\sigma)$	$H(2.33)$	$233.6^{+3.2}_{-3.3} \quad (-2.1\sigma)$
n_{s}	$0.963^{+0.037}_{-0.038} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00041}_{-0.00043} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5807^{+76}_{-72} \quad (+0.0\sigma)$
H_0	$67.4^{+1.5}_{-1.6} \quad (+0.8\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.63^{+0.19}_{-0.18} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.023}_{-0.026} \quad (-1.3\sigma)$
Ω_{Λ}	$0.694^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.90^{+0.18}_{-0.17} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.728^{+0.043}_{-0.046} \quad (+0.0\sigma)$
Ω_{m}	$0.306^{+0.017}_{-0.017} \quad (-1.0\sigma)$	z_*	$1089.7^{+1.3}_{-1.2} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.463^{+0.023}_{-0.026} \quad (-0.7\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1391^{+0.0042}_{-0.0043} \quad (-1.8\sigma)$	r_*	$146.1^{+2.0}_{-1.8} \quad (+3.5\sigma)$	$\sigma_8(0.38)$	$0.647^{+0.038}_{-0.040} \quad (+0.1\sigma)$
$\Omega_{\nu} h^2$	$< 0.00617 \quad (+0.6\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.023}_{-0.026} \quad (-0.4\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0938^{+0.0033}_{-0.0036} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.03^{+0.19}_{-0.17} \quad (+3.5\sigma)$	$\sigma_8(0.51)$	$0.606^{+0.036}_{-0.038} \quad (+0.2\sigma)$
σ_8	$0.787^{+0.047}_{-0.049} \quad (-0.0\sigma)$	z_{drag}	$1059.1^{+2.3}_{-2.4} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.022}_{-0.026} \quad (-0.3\sigma)$
S_8	$0.795^{+0.046}_{-0.052} \quad (-1.6\sigma)$	r_{drag}	$148.9^{+2.2}_{-2.0} \quad (+3.5\sigma)$	$\sigma_8(0.61)$	$0.577^{+0.034}_{-0.036} \quad (+0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.436^{+0.025}_{-0.028} \quad (-1.6\sigma)$	k_{D}	$0.1389^{+0.0026}_{-0.0027} \quad (-3.3\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.015}_{-0.015} \quad (+0.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.586^{+0.034}_{-0.036} \quad (-0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0014}_{-0.0013} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.017}_{-0.019} \quad (+0.4\sigma)$
$\sigma_8/h^{0.5}$	$0.959^{+0.052}_{-0.055} \quad (-0.4\sigma)$	z_{eq}	$3252^{+150}_{-160} \quad (-3.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$8.0 \quad (\nu: 1.6)$
$r_{\mathrm{drag}} h$	$100.3^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	$0.00993^{+0.00047}_{-0.00049} \quad (-3.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.52^{+0.11}_{-0.097} \quad (+1.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.841^{+0.032}_{-0.029} \quad (+3.5\sigma)$	χ_{MGS}^2	$1.71 \quad (\nu: 0.2)$
z_{re}	$7.73^{+0.23}_{-0.21} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.464^{+0.017}_{-0.015} \quad (+3.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 1.0)$
$10^9 A_{\mathrm{s}}$	$2.38^{+0.39}_{-0.35} \quad (+8.5\sigma)$	$H(0.15)$	$72.6^{+1.4}_{-1.5} \quad (+0.7\sigma)$	χ_{prior}^2	$2.9 \quad (\nu: 2.8) \quad (-1.2\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$2.13^{+0.35}_{-0.31} \quad (+17.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+14}_{-13} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.0)$
D_{40}	$1416^{+200}_{-200} \quad (+12.0\sigma)$	$H(0.38)$	$82.5^{+1.3}_{-1.4} \quad (+0.6\sigma)$		
D_{220}	$6672^{+1000}_{-1000} \quad (+23.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+31}_{-29} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 17.02; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.08; R - 1 = 0.00149$$

6.123 base_mnu_lensing_lenspriors_pttagr2

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02220	$0.02220^{+0.00098}_{-0.0010}$ (+0.6 σ)	D_{40}	2016	1359^{+700}_{-600} (+8.3 σ)	$H(0.15)$	92.8	76^{+30}_{-30} (+2.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.105	$0.143^{+0.062}_{-0.058}$ (+9.9 σ)	D_{220}	9220	6093^{+4000}_{-3000} (+9.3 σ)	$D_{\mathrm{M}}(0.15)$	495	658^{+300}_{-200} (−0.0 σ)
$100\theta_{\mathrm{MC}}$	1.096	$1.09^{+0.13}_{-0.13}$ (+105.7 σ)	D_{810}	3677	2457^{+1000}_{-1000} (−5.8 σ)	$H(0.38)$	100.3	89^{+30}_{-30} (+5.2 σ)
Σm_{ν} [eV]	0.45	—	D_{1420}	1066	733^{+500}_{-400} (−15.9 σ)	$D_{\mathrm{M}}(0.38)$	1211	1529^{+600}_{-500} (−0.9 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.458	$3.15^{+0.37}_{-0.40}$ (+6.8 σ)	D_{2000}	305	221^{+200}_{-100} (−4.3 σ)	$H(0.51)$	105.5	97^{+30}_{-30} (+7.5 σ)
n_{s}	0.9609	$0.959^{+0.037}_{-0.039}$ (−0.3 σ)	$n_{\mathrm{s},0.002}$	0.9609	$0.959^{+0.037}_{-0.039}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1590	1959^{+700}_{-600} (−1.4 σ)
H_0	89.0	—	Y_{P}	0.245327	$0.24531^{+0.00042}_{-0.00044}$ (+0.5 σ)	$H(0.61)$	110.0	104^{+30}_{-30} (+10.1 σ)
Ω_{Λ}	0.83	$0.52^{+0.37}_{-0.64}$ (−4.5 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246653	$0.24664^{+0.00043}_{-0.00044}$ (+0.5 σ)	$D_{\mathrm{M}}(0.61)$	1869	2264^{+800}_{-700} (−1.7 σ)
Ω_{m}	0.17	$0.48^{+0.64}_{-0.37}$ (+4.5 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.617	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$H(2.33)$	235	267^{+60}_{-60} (+15.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.132	$0.187^{+0.087}_{-0.078}$ (+12.8 σ)	Age/Gyr	12.40	$13.0^{+3.6}_{-3.0}$ (−8.0 σ)	$D_{\mathrm{M}}(2.33)$	5134	5411^{+2000}_{-1000} (−8.0 σ)
$\Omega_{\nu}h^2$	0.0048	< 0.0469 (+10.1 σ)	z_{*}	1088.8	$1092.9^{+6.4}_{-6.0}$ (+5.1 σ)	$f\sigma_8(0.15)$	0.362	$0.427^{+0.061}_{-0.074}$ (−2.6 σ)
$\Omega_{\mathrm{m}}h^3$	0.117	$0.129^{+0.098}_{-0.080}$ (+27.1 σ)	r_{*}	148.6	138^{+20}_{-20} (−12.3 σ)	$\sigma_8(0.15)$	0.807	$0.63^{+0.20}_{-0.20}$ (−2.8 σ)
σ_8	0.853	$0.68^{+0.19}_{-0.18}$ (−2.8 σ)	$100\theta_{*}$	1.097	$1.09^{+0.13}_{-0.13}$ (+114.2 σ)	$f\sigma_8(0.38)$	0.4134	$0.421^{+0.037}_{-0.044}$ (−3.6 σ)
S_8	0.635	$0.80^{+0.22}_{-0.20}$ (−1.5 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.55	$12.7^{+3.0}_{-2.6}$ (−25.1 σ)	$\sigma_8(0.38)$	0.738	$0.55^{+0.21}_{-0.19}$ (−2.7 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.348	$0.44^{+0.12}_{-0.11}$ (−1.5 σ)	z_{drag}	1058.5	$1061.8^{+5.7}_{-5.7}$ (+5.3 σ)	$f\sigma_8(0.51)$	0.432	$0.412^{+0.048}_{-0.068}$ (−3.6 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5445	$0.541^{+0.035}_{-0.035}$ (−2.9 σ)	r_{drag}	151.4	141^{+20}_{-20} (−13.0 σ)	$\sigma_8(0.51)$	0.701	$0.51^{+0.20}_{-0.19}$ (−2.7 σ)
$\sigma_8/h^{0.5}$	0.904	$0.83^{+0.12}_{-0.11}$ (−4.1 σ)	k_{D}	0.1363	$0.149^{+0.020}_{-0.019}$ (+16.0 σ)	$f\sigma_8(0.61)$	0.441	$0.404^{+0.058}_{-0.082}$ (−3.6 σ)
$r_{\mathrm{drag}}h$	134.7	97^{+40}_{-40} (+0.1 σ)	$100\theta_{\mathrm{D}}$	0.1701	$0.168^{+0.018}_{-0.019}$ (+25.4 σ)	$\sigma_8(0.61)$	0.674	$0.49^{+0.20}_{-0.19}$ (−2.6 σ)
$\langle d^2 \rangle^{1/2}$	2.627	$2.60^{+0.15}_{-0.14}$ (+4.0 σ)	z_{eq}	3030	3950^{+1000}_{-1000} (+10.7 σ)	$f\sigma_8(2.33)$	0.355	$0.25^{+0.11}_{-0.10}$ (−2.5 σ)
z_{re}	7.71	$8.5^{+1.4}_{-1.4}$ (+1.2 σ)	k_{eq}	0.00925	$0.0121^{+0.0047}_{-0.0043}$ (+11.2 σ)	$\sigma_8(2.33)$	0.376	$0.26^{+0.13}_{-0.11}$ (−2.4 σ)
10^9A_{s}	3.17	$2.38^{+0.94}_{-0.86}$ (+8.6 σ)	$100\theta_{\mathrm{eq}}$	0.935	$0.79^{+0.17}_{-0.15}$ (−2.2 σ)	$\chi_{\mathrm{lensing}}^2$	15.50	18.6 (ν : 2.3)
$10^9A_{\mathrm{s}}e^{-2\tau}$	2.84	$2.13^{+0.84}_{-0.77}$ (+18.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.514	$0.438^{+0.089}_{-0.079}$ (−2.1 σ)	χ_{prior}^2	0.00	2.0 (ν : 2.0) (−1.5 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 15.50$; $\Delta\chi_{\mathrm{eff}}^2 = -0.07$; $\bar{\chi}_{\mathrm{eff}}^2 = 20.55$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.50$; $R - 1 = 0.00794$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmarged: 15.50 (Δ -0.07)

6.124 base_mnu_lensing_lenspriors_pttagr2_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02220	$0.02221^{+0.00098}_{-0.00096}$ (+0.7 σ)	D_{40}	1858	1373^{+700}_{-600} (+9.2 σ)	$H(0.15)$	76.7	64^{+20}_{-10} (−3.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.0991	$0.128^{+0.038}_{-0.038}$ (+3.0 σ)	D_{220}	8962	6521^{+4000}_{-3000} (+19.8 σ)	$D_{\mathrm{M}}(0.15)$	604	768^{+200}_{-200} (+5.5 σ)
$100\theta_{\mathrm{MC}}$	1.04090	$1.0409^{+0.0012}_{-0.0011}$ (+0.5 σ)	D_{810}	3670	2894^{+1000}_{-1000} (+25.8 σ)	$H(0.38)$	85.3	77^{+10}_{-6} (−3.1 σ)
Σm_{ν} [eV]	0.36	< 2.92 (+7.1 σ)	D_{1420}	1155	935^{+400}_{-300} (+23.5 σ)	$D_{\mathrm{M}}(0.38)$	1458	1758^{+300}_{-400} (+4.9 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.393	$3.15^{+0.36}_{-0.35}$ (+7.1 σ)	D_{2000}	322	264^{+100}_{-90} (+18.5 σ)	$H(0.51)$	91.1	$85.8^{+8.1}_{-3.9}$ (−2.6 σ)
n_{s}	0.9596	$0.959^{+0.039}_{-0.039}$ (−0.3 σ)	$n_{\mathrm{s},0.002}$	0.9596	$0.959^{+0.039}_{-0.039}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1900	2238^{+400}_{-400} (+4.6 σ)
H_0	72.4	< 76.9 (−4.3 σ)	Y_{P}	0.245327	$0.24532^{+0.00042}_{-0.00042}$ (+0.6 σ)	$H(0.61)$	95.97	$92.6^{+5.8}_{-3.0}$ (−2.0 σ)
Ω_{Λ}	0.76	$0.38^{+0.47}_{-0.65}$ (−9.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246653	$0.24664^{+0.00043}_{-0.00042}$ (+0.6 σ)	$D_{\mathrm{M}}(0.61)$	2221	2574^{+400}_{-500} (+4.5 σ)
Ω_{m}	0.24	$0.62^{+0.64}_{-0.47}$ (+9.0 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.617	$2.62^{+0.19}_{-0.18}$ (−0.6 σ)	$H(2.33)$	224.1	250^{+30}_{-30} (+6.5 σ)
$\Omega_{\mathrm{m}}h^2$	0.125	$0.166^{+0.052}_{-0.052}$ (+6.3 σ)	Age/Gyr	13.86	$14.30^{+0.42}_{-0.64}$ (+3.5 σ)	$D_{\mathrm{M}}(2.33)$	5776	5957^{+170}_{-280} (+3.1 σ)
$\Omega_{\nu}h^2$	0.0039	< 0.0314 (+7.1 σ)	z_{*}	1088.28	$1091.4^{+4.2}_{-4.2}$ (+1.9 σ)	$f\sigma_8(0.15)$	0.398	$0.443^{+0.050}_{-0.073}$ (−1.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.09058	$0.0902^{+0.0035}_{-0.0034}$ (−4.0 σ)	r_{*}	150.3	142^{+11}_{-10} (−4.9 σ)	$\sigma_8(0.15)$	0.736	$0.58^{+0.20}_{-0.16}$ (−4.0 σ)
σ_8	0.788	$0.64^{+0.19}_{-0.16}$ (−3.9 σ)	$100\theta_{*}$	1.04129	$1.0414^{+0.0013}_{-0.0012}$ (+1.1 σ)	$f\sigma_8(0.38)$	0.4318	$0.417^{+0.040}_{-0.049}$ (−3.9 σ)
S_8	0.703	$0.85^{+0.20}_{-0.21}$ (+0.7 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	14.43	$13.6^{+1.1}_{-0.99}$ (−5.2 σ)	$\sigma_8(0.38)$	0.662	$0.51^{+0.20}_{-0.16}$ (−4.0 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.385	$0.47^{+0.11}_{-0.11}$ (+0.7 σ)	z_{drag}	1058.03	$1060.6^{+4.2}_{-4.4}$ (+2.7 σ)	$f\sigma_8(0.51)$	0.440	$0.401^{+0.054}_{-0.069}$ (−4.4 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5508	$0.542^{+0.035}_{-0.033}$ (−2.9 σ)	r_{drag}	153.1	145^{+11}_{-11} (−5.2 σ)	$\sigma_8(0.51)$	0.624	$0.47^{+0.20}_{-0.16}$ (−4.0 σ)
$\sigma_8/h^{0.5}$	0.926	$0.855^{+0.10}_{-0.094}$ (−3.4 σ)	k_{D}	0.1346	$0.144^{+0.013}_{-0.013}$ (+7.0 σ)	$f\sigma_8(0.61)$	0.441	$0.388^{+0.066}_{-0.080}$ (−4.5 σ)
$r_{\mathrm{drag}}h$	110.8	82^{+40}_{-30} (−4.3 σ)	$100\theta_{\mathrm{D}}$	0.16171	$0.1602^{+0.0026}_{-0.0024}$ (−3.3 σ)	$\sigma_8(0.61)$	0.596	$0.45^{+0.20}_{-0.15}$ (−4.0 σ)
$\langle d^2 \rangle^{1/2}$	2.632	$2.62^{+0.12}_{-0.12}$ (+4.6 σ)	z_{eq}	2898	3581^{+900}_{-900} (+3.3 σ)	$f\sigma_8(2.33)$	0.309	$0.227^{+0.10}_{-0.084}$ (−4.2 σ)
z_{re}	7.49	$8.10^{+0.81}_{-0.83}$ (+0.8 σ)	k_{eq}	0.00885	$0.0110^{+0.0028}_{-0.0029}$ (+3.6 σ)	$\sigma_8(2.33)$	0.320	$0.229^{+0.12}_{-0.090}$ (−4.0 σ)
10^9A_{s}	2.97	$2.39^{+0.92}_{-0.78}$ (+8.9 σ)	$100\theta_{\mathrm{eq}}$	0.918	$0.80^{+0.17}_{-0.14}$ (−1.1 σ)	$\chi^2_{\mathrm{lensing}}$	15.72	18.3 (ν : 2.1)
$10^9A_{\mathrm{s}}e^{-2\tau}$	2.66	$2.14^{+0.83}_{-0.70}$ (+18.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.504	$0.442^{+0.087}_{-0.072}$ (−1.1 σ)	χ^2_{prior}	0.00	3.0 (ν : 3.0) (−1.2 σ)

Best-fit $\chi^2_{\mathrm{eff}} = 15.72$; $\Delta\chi^2_{\mathrm{eff}} = -0.11$; $\bar{\chi}^2_{\mathrm{eff}} = 21.22$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.31$; $R - 1 = 0.00948$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmarged: 15.72 (Δ -0.11)

6.125 base_mnu_lensing_lenspriors_pttagr2_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02218	$0.02221^{+0.00096}_{-0.00098}$ (+0.6 σ)	D_{810}	2869	2561^{+1000}_{-1000} (+1.7 σ)	$H(0.51)$	94.3	$96.9^{+11}_{-9.5}$ (+7.3 σ)
$\Omega_c h^2$	0.1326	$0.144^{+0.044}_{-0.041}$ (+10.2 σ)	D_{1420}	869	750^{+400}_{-400} (-12.5 σ)	$D_M(0.51)$	1918	1882^{+150}_{-150} (-3.0 σ)
$100\theta_{MC}$	1.089	$1.103^{+0.061}_{-0.069}$ (+123.3 σ)	D_{2000}	253	216^{+100}_{-100} (-6.8 σ)	$H(0.61)$	100.7	104^{+10}_{-10} (+9.8 σ)
Σm_ν [eV]	1.50	$1.9^{+1.8}_{-1.6}$ (+9.7 σ)	$n_{s,0.002}$	0.9604	$0.959^{+0.039}_{-0.039}$ (-0.4 σ)	$D_M(0.61)$	2225	2182^{+180}_{-180} (-3.3 σ)
$\ln(10^{10} A_s)$	3.224	$3.16^{+0.24}_{-0.24}$ (+7.5 σ)	Y_P	0.245316	$0.24532^{+0.00041}_{-0.00043}$ (+0.6 σ)	$H(2.33)$	257.2	267^{+40}_{-40} (+15.6 σ)
n_s	0.9604	$0.959^{+0.039}_{-0.039}$ (-0.4 σ)	Y_P^{BBN}	0.246643	$0.24664^{+0.00041}_{-0.00043}$ (+0.6 σ)	$D_M(2.33)$	5438	5300^{+600}_{-600} (-10.3 σ)
H_0	68.65	$69.6^{+3.9}_{-3.7}$ (+1.8 σ)	$10^5 D/H$	2.622	$2.62^{+0.19}_{-0.17}$ (-0.6 σ)	$f\sigma_8(0.15)$	0.4292	$0.431^{+0.030}_{-0.030}$ (-2.3 σ)
Ω_Λ	0.637	$0.617^{+0.086}_{-0.088}$ (-1.4 σ)	Age/Gyr	13.01	$12.7^{+1.5}_{-1.4}$ (-10.7 σ)	$\sigma_8(0.15)$	0.645	$0.635^{+0.069}_{-0.061}$ (-2.5 σ)
Ω_m	0.363	$0.383^{+0.088}_{-0.086}$ (+1.4 σ)	z_*	1091.88	$1093.0^{+4.7}_{-4.3}$ (+5.2 σ)	$f\sigma_8(0.38)$	0.4364	$0.434^{+0.028}_{-0.028}$ (-2.7 σ)
$\Omega_m h^2$	0.171	$0.187^{+0.061}_{-0.057}$ (+12.8 σ)	r_*	140.4	138^{+11}_{-11} (-13.2 σ)	$\sigma_8(0.38)$	0.568	$0.559^{+0.064}_{-0.061}$ (-2.5 σ)
$\Omega_\nu h^2$	0.0161	$0.021^{+0.019}_{-0.017}$ (+9.7 σ)	$100\theta_*$	1.090	$1.104^{+0.061}_{-0.069}$ (+133.2 σ)	$f\sigma_8(0.51)$	0.4308	$0.427^{+0.029}_{-0.030}$ (-2.7 σ)
$\Omega_m h^3$	0.1173	$0.130^{+0.050}_{-0.045}$ (+28.0 σ)	$D_M(z_*)/\text{Gpc}$	12.89	$12.5^{+1.8}_{-1.7}$ (-29.4 σ)	$\sigma_8(0.51)$	0.531	$0.521^{+0.062}_{-0.059}$ (-2.5 σ)
σ_8	0.701	$0.693^{+0.069}_{-0.062}$ (-2.6 σ)	z_{drag}	1060.89	$1061.9^{+4.4}_{-4.4}$ (+5.5 σ)	$f\sigma_8(0.61)$	0.4236	$0.419^{+0.031}_{-0.032}$ (-2.6 σ)
S_8	0.771	$0.779^{+0.063}_{-0.061}$ (-2.2 σ)	r_{drag}	143.1	140^{+11}_{-11} (-13.9 σ)	$\sigma_8(0.61)$	0.504	$0.495^{+0.061}_{-0.057}$ (-2.4 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4224	$0.427^{+0.035}_{-0.033}$ (-2.2 σ)	k_D	0.1456	$0.149^{+0.014}_{-0.013}$ (+16.5 σ)	$f\sigma_8(2.33)$	0.2618	$0.256^{+0.032}_{-0.031}$ (-2.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5443	$0.544^{+0.036}_{-0.036}$ (-2.8 σ)	$100\theta_D$	0.1675	$0.1692^{+0.0078}_{-0.0088}$ (+30.0 σ)	$\sigma_8(2.33)$	0.2627	$0.257^{+0.035}_{-0.033}$ (-2.3 σ)
$\sigma_8/h^{0.5}$	0.847	$0.831^{+0.098}_{-0.086}$ (-4.1 σ)	z_{eq}	3698	3964^{+1000}_{-1000} (+10.9 σ)	χ^2_{lensing}	16.01	18.4 (ν : 2.1)
$r_{\text{drag}} h$	98.21	$97.5^{+3.9}_{-3.7}$ (+0.3 σ)	k_{eq}	0.01134	$0.0122^{+0.0033}_{-0.0031}$ (+11.4 σ)	$\chi^2_{6\text{DF}}$	0.14	0.35 (ν : 0.1)
$\langle d^2 \rangle^{1/2}$	2.621	$2.60^{+0.13}_{-0.12}$ (+4.0 σ)	$100\theta_{\text{eq}}$	0.804	$0.784^{+0.10}_{-0.096}$ (-2.8 σ)	χ^2_{MGS}	0.82	0.79 (ν : 0.2)
z_{re}	8.29	$8.51^{+0.98}_{-0.94}$ (+1.3 σ)	$100\theta_{s,\text{eq}}$	0.446	$0.435^{+0.052}_{-0.050}$ (-2.6 σ)	χ^2_{DR12BAO}	2.09	3.6 (ν : 1.2)
$10^9 A_s$	2.51	$2.38^{+0.58}_{-0.55}$ (+8.5 σ)	$H(0.15)$	74.9	$76.2^{+5.5}_{-5.2}$ (+2.7 σ)	χ^2_{prior}	0.00	2.0 (ν : 1.9) (-1.5 σ)
$10^9 A_s e^{-2\tau}$	2.25	$2.13^{+0.52}_{-0.49}$ (+17.9 σ)	$D_M(0.15)$	628.0	619^{+38}_{-40} (-2.0 σ)	χ^2_{BAO}	3.05	4.7 (ν : 1.4)
D_{40}	1429	1340^{+400}_{-400} (+7.0 σ)	$H(0.38)$	86.6	$88.7^{+8.4}_{-8.0}$ (+5.1 σ)			
D_{220}	6538	5992^{+2000}_{-2000} (+6.8 σ)	$D_M(0.38)$	1486	1460^{+110}_{-110} (-2.6 σ)			

Best-fit $\chi^2_{\text{eff}} = 19.07$; $\Delta\chi^2_{\text{eff}} = -4.98$; $\bar{\chi}^2_{\text{eff}} = 25.07$; $\Delta\bar{\chi}^2_{\text{eff}} = -4.02$; $R - 1 = 0.00956$

χ^2_{eff} : BAO - 6DF: 0.14 (Δ 0.09) MGS: 0.82 (Δ -1.53) DR12BAO: 2.10 (Δ -3.07) CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmarged: 16.01 (Δ -0.39)

6.126 base_mnu_lensing_lenspriors_pttagr2_BAO_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\mathrm{b}}h^2$	0.02219	$0.02218^{+0.00098}_{-0.00096}$	(+0.6 σ)	D_{810}	3439	3410^{+600}_{-600}	(+63.2 σ)	$H(0.51)$	88.14	$88.2^{+1.4}_{-1.2}$	(−0.4 σ)
$\Omega_{\mathrm{c}}h^2$	0.1069	$0.1074^{+0.0069}_{-0.0067}$	(−6.2 σ)	D_{1420}	1092	1083^{+200}_{-200}	(+52.6 σ)	$D_{\mathrm{M}}(0.51)$	2012.8	2013^{+37}_{-39}	(−0.2 σ)
$100\theta_{\mathrm{MC}}$	1.04088	$1.0409^{+0.0012}_{-0.0012}$	(+0.5 σ)	D_{2000}	306	304^{+60}_{-60}	(+39.6 σ)	$H(0.61)$	93.61	$93.7^{+1.4}_{-1.2}$	(−0.9 σ)
Σm_{ν} [eV]	0.639	$0.62^{+0.34}_{-0.38}$	(+2.5 σ)	$n_{\mathrm{s},0.002}$	0.9595	$0.959^{+0.039}_{-0.040}$	(−0.3 σ)	$D_{\mathrm{M}}(0.61)$	2342.9	2343^{+41}_{-44}	(−0.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.334	$3.32^{+0.17}_{-0.18}$	(+17.5 σ)	Y_{P}	0.245321	$0.24531^{+0.00042}_{-0.00042}$	(+0.5 σ)	$H(2.33)$	230.95	$231.2^{+3.2}_{-3.2}$	(−3.4 σ)
n_{s}	0.9595	$0.959^{+0.039}_{-0.040}$	(−0.3 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246647	$0.24663^{+0.00043}_{-0.00042}$	(+0.5 σ)	$D_{\mathrm{M}}(2.33)$	5871	5868^{+75}_{-82}	(+1.3 σ)
H_0	66.67	$66.7^{+1.6}_{-1.5}$	(+0.5 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.620	$2.62^{+0.19}_{-0.18}$	(−0.5 σ)	$f\sigma_8(0.15)$	0.4197	$0.420^{+0.025}_{-0.025}$	(−3.1 σ)
Ω_{Λ}	0.6940	$0.693^{+0.017}_{-0.017}$	(+1.0 σ)	Age/Gyr	14.058	$14.05^{+0.18}_{-0.19}$	(+1.4 σ)	$\sigma_8(0.15)$	0.6854	$0.686^{+0.048}_{-0.045}$	(−1.1 σ)
Ω_{m}	0.3060	$0.307^{+0.017}_{-0.017}$	(−1.0 σ)	z_{*}	1089.14	$1089.2^{+1.3}_{-1.2}$	(−2.6 σ)	$f\sigma_8(0.38)$	0.4389	$0.439^{+0.026}_{-0.026}$	(−2.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.13600	$0.1363^{+0.0041}_{-0.0040}$	(−2.7 σ)	r_{*}	147.83	$147.7^{+1.9}_{-1.9}$	(+6.6 σ)	$\sigma_8(0.38)$	0.6093	$0.610^{+0.042}_{-0.041}$	(−1.0 σ)
$\Omega_{\nu}h^2$	0.00687	$0.0067^{+0.0036}_{-0.0041}$	(+2.5 σ)	$100\theta_{*}$	1.04136	$1.0414^{+0.0012}_{-0.0012}$	(+1.0 σ)	$f\sigma_8(0.51)$	0.4388	$0.439^{+0.026}_{-0.026}$	(−1.9 σ)
$\Omega_{\mathrm{m}}h^3$	0.09068	$0.0909^{+0.0035}_{-0.0034}$	(−3.4 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	14.196	$14.19^{+0.18}_{-0.19}$	(+6.8 σ)	$\sigma_8(0.51)$	0.5711	$0.571^{+0.039}_{-0.038}$	(−0.9 σ)
σ_8	0.740	$0.741^{+0.051}_{-0.049}$	(−1.3 σ)	z_{drag}	1058.67	$1058.7^{+2.3}_{-2.4}$	(−1.2 σ)	$f\sigma_8(0.61)$	0.4350	$0.435^{+0.026}_{-0.026}$	(−1.7 σ)
S_8	0.7476	$0.749^{+0.050}_{-0.049}$	(−3.4 σ)	r_{drag}	150.63	$150.5^{+2.1}_{-2.3}$	(+6.8 σ)	$\sigma_8(0.61)$	0.5440	$0.544^{+0.038}_{-0.037}$	(−0.8 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4095	$0.410^{+0.027}_{-0.027}$	(−3.4 σ)	k_{D}	0.13721	$0.1373^{+0.0027}_{-0.0026}$	(−6.3 σ)	$f\sigma_8(2.33)$	0.2820	$0.282^{+0.016}_{-0.017}$	(−0.5 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5506	$0.551^{+0.036}_{-0.035}$	(−2.4 σ)	$100\theta_{\mathrm{D}}$	0.16129	$0.1613^{+0.0014}_{-0.0014}$	(+0.6 σ)	$\sigma_8(2.33)$	0.2867	$0.287^{+0.019}_{-0.019}$	(−0.5 σ)
$\sigma_8/h^{0.5}$	0.907	$0.908^{+0.056}_{-0.056}$	(−1.9 σ)	z_{eq}	3086	3096^{+170}_{-160}	(−6.5 σ)	$\chi^2_{\mathrm{lensing}}$	15.79	17.8 (ν : 1.9)	
$r_{\mathrm{drag}}h$	100.43	$100.4^{+2.2}_{-2.2}$	(+1.1 σ)	k_{eq}	0.009430	$0.00946^{+0.00050}_{-0.00049}$	(−6.4 σ)	$\chi^2_{6\mathrm{DF}}$	0.000	0.055 (ν : 0.0)	
$\langle d^2 \rangle^{1/2}$	2.637	$2.63^{+0.13}_{-0.13}$	(+4.8 σ)	$100\theta_{\mathrm{eq}}$	0.8758	$0.874^{+0.034}_{-0.037}$	(+7.0 σ)	χ^2_{MGS}	1.68	1.71 (ν : 0.2)	
z_{re}	7.661	$7.67^{+0.23}_{-0.22}$	(+0.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.4821	$0.481^{+0.018}_{-0.019}$	(+7.1 σ)	$\chi^2_{\mathrm{DR12BAO}}$	3.40	4.3 (ν : 1.0)	
10^9A_{s}	2.806	$2.78^{+0.46}_{-0.48}$	(+20.5 σ)	$H(0.15)$	71.79	$71.8^{+1.5}_{-1.4}$	(+0.3 σ)	χ^2_{prior}	0.00	3.0 (ν : 2.9) (−1.2 σ)	
$10^9A_{\mathrm{s}}e^{-2\tau}$	2.514	$2.49^{+0.42}_{-0.43}$	(+44.3 σ)	$D_{\mathrm{M}}(0.15)$	650.6	651^{+14}_{-15}	(−0.4 σ)	χ^2_{BAO}	5.08	6.1 (ν : 1.0)	
D_{40}	1694	1677^{+300}_{-300}	(+29.3 σ)	$H(0.38)$	81.61	$81.6^{+1.4}_{-1.3}$	(−0.1 σ)				
D_{220}	8161	8082^{+1000}_{-2000}	(+58.0 σ)	$D_{\mathrm{M}}(0.38)$	1553.1	1553^{+30}_{-32}	(−0.3 σ)				

Best-fit $\chi^2_{\mathrm{eff}} = 20.88$; $\Delta\chi^2_{\mathrm{eff}} = -7.46$; $\bar{\chi}^2_{\mathrm{eff}} = 26.80$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -6.67$; $R - 1 = 0.01217$

χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.68 (Δ -0.29) DR12BAO: 3.40 (Δ 0.04) CMB - smicadx12_Dec5_ftl_mv2_ndclpttptt_p_teb_agr2_CMBmarged: 15.79 (Δ -5.93)

6.127 base_mnu_lensing_DESpriors

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
Ω_{m}	0.311	$0.32^{+0.15}_{-0.13}$	(−0.4 σ)	$\Omega_{\mathrm{b}}h^2$	0.0250	$0.026^{+0.020}_{-0.015}$	(+14.4 σ)	S_8	0.802	$0.80^{+0.11}_{-0.11}$	(−1.2 σ)
Ω_{b}	0.0540	—		$\Omega_{\mathrm{c}}h^2$	0.1137	$0.126^{+0.046}_{-0.042}$	(+2.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.439	$0.440^{+0.059}_{-0.059}$	(−1.2 σ)
H_0	68.1	—		Ω_{Λ}	0.689	$0.68^{+0.13}_{-0.15}$	(+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5880	$0.586^{+0.040}_{-0.039}$	(−0.7 σ)
Σm_{ν} [eV]	0.513	—		$\Omega_{\nu}h^2$	0.00551	$0.0058^{+0.0047}_{-0.0050}$	(+2.0 σ)	$\chi^2_{\mathrm{lensing}}$	7.25	9.5 (ν : 2.0)	
10^9A_{s}	2.68	$2.42^{+0.86}_{-0.77}$	(+9.8 σ)	$\ln(10^{10}A_{\mathrm{s}})$	3.287	$3.17^{+0.34}_{-0.34}$	(+8.1 σ)				
n_{s}	1.017	—		σ_8	0.787	$0.782^{+0.094}_{-0.088}$	(−0.2 σ)				

Best-fit $\chi^2_{\mathrm{eff}} = 7.25$; $\Delta\chi^2_{\mathrm{eff}} = -0.13$; $\bar{\chi}^2_{\mathrm{eff}} = 9.49$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -0.15$; $R - 1 = 0.00994$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.25 (Δ -0.13)

6.128 base_mnu_lensing_DESpriors_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.362	$0.334^{+0.061}_{-0.056} \quad (-0.1\sigma)$	$\Omega_{\text{c}}h^2$	0.1352	$0.133^{+0.050}_{-0.045} \quad (+5.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5830	$0.588^{+0.039}_{-0.038} \quad (-0.6\sigma)$
Ω_{b}	0.0445	< 0.0639	Ω_{Λ}	0.638	$0.666^{+0.056}_{-0.061} \quad (+0.1\sigma)$	χ^2_{lensing}	7.59	$9.6 \quad (\nu: 2.0)$
H_0	67.8	$70^{+20}_{-10} \quad (+2.0\sigma)$	$\Omega_{\nu}h^2$	0.01071	$0.0067^{+0.0041}_{-0.0052} \quad (+2.5\sigma)$	$\chi^2_{6\text{DF}}$	0.139	$0.12 \quad (\nu: 0.0)$
$\Sigma m_{\nu} [\text{eV}]$	0.996	—	$\ln(10^{10}A_{\text{s}})$	3.125	$3.12^{+0.35}_{-0.31} \quad (+4.8\sigma)$	χ^2_{MGS}	0.82	$1.34 \quad (\nu: 0.3)$
$10^9 A_{\text{s}}$	2.28	$2.29^{+0.85}_{-0.69} \quad (+6.0\sigma)$	σ_8	0.752	$0.775^{+0.059}_{-0.057} \quad (-0.4\sigma)$	χ^2_{DR12BAO}	2.11	$3.7 \quad (\nu: 1.2)$
n_{s}	0.972	—	S_8	0.825	$0.816^{+0.072}_{-0.066} \quad (-0.7\sigma)$	χ^2_{BAO}	3.07	$5.2 \quad (\nu: 1.6)$
$\Omega_{\text{b}}h^2$	0.0205	$0.024^{+0.022}_{-0.015} \quad (+9.8\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4521	$0.447^{+0.039}_{-0.036} \quad (-0.7\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 10.66$; $\Delta\chi^2_{\text{eff}} = -1.15$; $\bar{\chi}^2_{\text{eff}} = 14.70$; $\Delta\bar{\chi}^2_{\text{eff}} = -1.82$; $R - 1 = 0.01029$
 χ^2_{eff} : BAO - 6DF: 0.14 (Δ 0.09) MGS: 0.82 (Δ -0.34) DR12BAO: 2.11 (Δ -0.32) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.59 (Δ -0.58)

6.129 base_mnu_lensing_DESpriors_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.287	$0.34^{+0.16}_{-0.15} \quad (-0.1\sigma)$	$\Omega_{\text{b}}h^2$	0.02219	$0.02220^{+0.00099}_{-0.0010} \quad (+0.6\sigma)$	S_8	0.788	$0.81^{+0.12}_{-0.12} \quad (-1.0\sigma)$
Ω_{b}	0.0478	—	$\Omega_{\text{c}}h^2$	0.1069	$0.121^{+0.036}_{-0.033} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.432	$0.443^{+0.065}_{-0.068} \quad (-1.0\sigma)$
H_0	68.2	$68^{+20}_{-10} \quad (+1.0\sigma)$	Ω_{Λ}	0.713	$0.66^{+0.15}_{-0.16} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5897	$0.586^{+0.039}_{-0.038} \quad (-0.7\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.412	—	$\Omega_{\nu}h^2$	0.00443	$0.0057^{+0.0048}_{-0.0048} \quad (+1.9\sigma)$	χ^2_{lensing}	7.26	$9.4 \quad (\nu: 1.9)$
$10^9 A_{\text{s}}$	2.78	$2.47^{+0.89}_{-0.80} \quad (+11.1\sigma)$	$\ln(10^{10}A_{\text{s}})$	3.326	$3.19^{+0.34}_{-0.35} \quad (+9.1\sigma)$	χ^2_{prior}	0.00	$1.0 \quad (\nu: 1.0) \quad (-1.7\sigma)$
n_{s}	1.021	—	σ_8	0.805	$0.778^{+0.11}_{-0.098} \quad (-0.3\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 7.26$; $\Delta\chi^2_{\text{eff}} = -0.11$; $\bar{\chi}^2_{\text{eff}} = 10.46$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.11$; $R - 1 = 0.00663$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.26 (Δ -0.10)

6.130 base_mnu_lensing_DESpriors_CookeDH_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.364	$0.336^{+0.052}_{-0.053} \quad (-0.0\sigma)$	$\Omega_{\text{c}}h^2$	0.1457	$0.129^{+0.034}_{-0.032} \quad (+3.8\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5805	$0.588^{+0.039}_{-0.038} \quad (-0.6\sigma)$
Ω_{b}	0.04553	$0.0473^{+0.0042}_{-0.0043}$	Ω_{Λ}	0.636	$0.664^{+0.053}_{-0.052} \quad (+0.0\sigma)$	χ^2_{lensing}	7.65	$9.5 \quad (\nu: 2.0)$
H_0	69.83	$68.5^{+3.1}_{-3.0} \quad (+1.3\sigma)$	$\Omega_{\nu}h^2$	0.00977	$0.0067^{+0.0040}_{-0.0052} \quad (+2.5\sigma)$	$\chi^2_{6\text{DF}}$	0.141	$0.12 \quad (\nu: 0.0)$
$\Sigma m_{\nu} [\text{eV}]$	0.908	—	$\ln(10^{10}A_{\text{s}})$	3.015	$3.12^{+0.31}_{-0.29} \quad (+5.1\sigma)$	χ^2_{MGS}	0.82	$1.30 \quad (\nu: 0.3)$
$10^9 A_{\text{s}}$	2.04	$2.30^{+0.74}_{-0.64} \quad (+6.1\sigma)$	σ_8	0.747	$0.773^{+0.055}_{-0.052} \quad (-0.4\sigma)$	χ^2_{DR12BAO}	2.08	$3.6 \quad (\nu: 1.2)$
n_{s}	0.920	—	S_8	0.823	$0.817^{+0.072}_{-0.067} \quad (-0.7\sigma)$	χ^2_{prior}	0.00	$1.0 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$\Omega_{\text{b}}h^2$	0.02220	$0.02218^{+0.00097}_{-0.0010} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4510	$0.447^{+0.039}_{-0.037} \quad (-0.7\sigma)$	χ^2_{BAO}	3.04	$5.0 \quad (\nu: 1.6)$

Best-fit $\chi^2_{\text{eff}} = 10.69$; $\Delta\chi^2_{\text{eff}} = -1.30$; $\bar{\chi}^2_{\text{eff}} = 15.50$; $\Delta\bar{\chi}^2_{\text{eff}} = -1.65$; $R - 1 = 0.01121$
 χ^2_{eff} : BAO - 6DF: 0.14 (Δ 0.11) MGS: 0.82 (Δ -0.46) DR12BAO: 2.08 (Δ -0.59) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.65 (Δ -0.35)

6.131 base_mnu_DES_lenspriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02221	$0.0222^{+0.0010}_{-0.0010}$ (+0.6 σ)	$\Omega_{\mathrm{m}}h^2$	0.137	$0.169^{+0.064}_{-0.052}$ (+7.3 σ)	k_{D}	0.1381	$0.145^{+0.015}_{-0.013}$ (+9.3 σ)
$\Omega_{\mathrm{c}}h^2$	0.1105	$0.135^{+0.051}_{-0.042}$ (+6.5 σ)	$\Omega_{\nu}h^2$	0.0046	< 0.0245 (+4.7 σ)	$100\theta_{\mathrm{D}}$	0.1631	$0.170^{+0.015}_{-0.013}$ (+32.2 σ)
$100\theta_{\mathrm{MC}}$	1.053	$1.10^{+0.11}_{-0.093}$ (+121.0 σ)	$\Omega_{\mathrm{m}}h^3$	0.098	$0.133^{+0.084}_{-0.061}$ (+29.9 σ)	z_{eq}	3171	3766^{+1000}_{-1000} (+7.0 σ)
Σm_{ν} [eV]	0.42	< 2.28 (+4.7 σ)	σ_8	0.831	$0.81^{+0.18}_{-0.16}$ (+0.5 σ)	k_{eq}	0.00968	$0.0115^{+0.0038}_{-0.0031}$ (+7.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.372	$3.22^{+0.32}_{-0.35}$ (+11.3 σ)	S_8	0.7870	$0.777^{+0.050}_{-0.049}$ (−2.3 σ)	$100\theta_{\mathrm{eq}}$	0.868	$0.810^{+0.099}_{-0.10}$ (+0.1 σ)
n_{s}	0.9628	$0.962^{+0.039}_{-0.039}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4311	$0.426^{+0.027}_{-0.027}$ (−2.3 σ)	$100\theta_{\mathrm{s,eq}}$	0.478	$0.449^{+0.050}_{-0.053}$ (+0.3 σ)
b_{DES}^1	1.411	$1.47^{+0.36}_{-0.34}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.599	$0.586^{+0.078}_{-0.073}$ (−0.7 σ)	$H(0.15)$	76.3	83^{+20}_{-20} (+6.4 σ)
b_{DES}^2	1.615	$1.68^{+0.37}_{-0.35}$	$\sigma_8/h^{0.5}$	0.983	$0.92^{+0.15}_{-0.13}$ (−1.6 σ)	$D_{\mathrm{M}}(0.15)$	610	570^{+100}_{-100} (−4.4 σ)
b_{DES}^3	1.597	$1.66^{+0.36}_{-0.34}$	$r_{\mathrm{drag}}h$	107.0	110^{+20}_{-20} (+4.1 σ)	$H(0.38)$	85.7	93^{+20}_{-20} (+8.5 σ)
b_{DES}^4	1.926	$2.00^{+0.43}_{-0.40}$	$\langle d^2 \rangle^{1/2}$	2.695	$2.60^{+0.31}_{-0.31}$ (+3.9 σ)	$D_{\mathrm{M}}(0.38)$	1465	1365^{+300}_{-300} (−5.0 σ)
b_{DES}^5	1.989	$2.06^{+0.46}_{-0.43}$	z_{re}	7.71	$8.26^{+1.1}_{-0.97}$ (+0.9 σ)	$H(0.51)$	92.0	100^{+20}_{-20} (+10.5 σ)
m_{DES}^1	0.0133	$0.012^{+0.045}_{-0.045}$	$10^9 A_{\mathrm{s}}$	2.91	$2.55^{+0.86}_{-0.81}$ (+13.5 σ)	$D_{\mathrm{M}}(0.51)$	1904	1772^{+400}_{-400} (−5.4 σ)
m_{DES}^2	0.0147	$0.015^{+0.044}_{-0.043}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	2.61	$2.28^{+0.77}_{-0.73}$ (+28.8 σ)	$H(0.61)$	97.3	106^{+20}_{-20} (+12.8 σ)
m_{DES}^3	0.0071	$0.009^{+0.042}_{-0.041}$	D_{40}	1760	1484^{+600}_{-500} (+16.5 σ)	$D_{\mathrm{M}}(0.61)$	2221	2066^{+400}_{-400} (−5.7 σ)
m_{DES}^4	0.0094	$0.011^{+0.042}_{-0.041}$	D_{220}	8295	6603^{+3000}_{-3000} (+21.8 σ)	$H(2.33)$	233.3	257^{+50}_{-40} (+10.3 σ)
$A_{\mathrm{IA,DES}}$	0.480	$0.46^{+0.39}_{-0.36}$	D_{810}	3548	2687^{+1000}_{-1000} (+10.8 σ)	$D_{\mathrm{M}}(2.33)$	5674	5236^{+900}_{-1000} (−11.6 σ)
$\alpha_{\mathrm{IA,DES}}$	−1.4	—	D_{1420}	1124	790^{+500}_{-500} (−4.7 σ)	$f\sigma_8(0.15)$	0.4431	$0.437^{+0.031}_{-0.033}$ (−1.8 σ)
$\Delta z_{\mathrm{l,DES}}^1$	0.0040	$0.004^{+0.015}_{-0.015}$	D_{2000}	318	228^{+100}_{-100} (−0.4 σ)	$\sigma_8(0.15)$	0.773	$0.75^{+0.17}_{-0.16}$ (+0.6 σ)
$\Delta z_{\mathrm{l,DES}}^2$	0.0018	$0.002^{+0.013}_{-0.013}$	$n_{\mathrm{s},0.002}$	0.9628	$0.962^{+0.039}_{-0.039}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.473	$0.464^{+0.051}_{-0.054}$ (−0.7 σ)
$\Delta z_{\mathrm{l,DES}}^3$	0.0043	$0.004^{+0.013}_{-0.013}$	Y_{P}	0.245331	$0.24531^{+0.00043}_{-0.00044}$ (+0.5 σ)	$\sigma_8(0.38)$	0.691	$0.67^{+0.17}_{-0.15}$ (+0.8 σ)
$\Delta z_{\mathrm{l,DES}}^4$	0.0029	$0.002^{+0.018}_{-0.018}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246657	$0.24664^{+0.00043}_{-0.00044}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.477	$0.467^{+0.063}_{-0.064}$ (−0.2 σ)
$\Delta z_{\mathrm{l,DES}}^5$	0.0010	$0.001^{+0.019}_{-0.019}$	$10^5\mathrm{D}/\mathrm{H}$	2.616	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$\sigma_8(0.51)$	0.650	$0.63^{+0.16}_{-0.14}$ (+0.9 σ)
$\Delta z_{\mathrm{s,DES}}^1$	−0.0013	$−0.004^{+0.027}_{-0.028}$	Age/Gyr	13.60	$12.5^{+2.2}_{-2.3}$ (−11.8 σ)	$f\sigma_8(0.61)$	0.476	$0.465^{+0.070}_{-0.071}$ (+0.1 σ)
$\Delta z_{\mathrm{s,DES}}^2$	−0.0286	$−0.030^{+0.021}_{-0.021}$	z_*	1089.34	$1091.8^{+4.9}_{-4.2}$ (+2.7 σ)	$\sigma_8(0.61)$	0.620	$0.60^{+0.16}_{-0.14}$ (+1.0 σ)
$\Delta z_{\mathrm{s,DES}}^3$	0.0059	$0.007^{+0.019}_{-0.019}$	r_*	147.0	141^{+11}_{-12} (−7.4 σ)	$f\sigma_8(2.33)$	0.320	$0.312^{+0.084}_{-0.074}$ (+1.6 σ)
$\Delta z_{\mathrm{s,DES}}^4$	−0.0254	$−0.023^{+0.037}_{-0.036}$	$100\theta_*$	1.053	$1.10^{+0.11}_{-0.093}$ (+130.5 σ)	$\sigma_8(2.33)$	0.329	$0.319^{+0.089}_{-0.084}$ (+1.4 σ)
H_0	71.4	77^{+20}_{-20} (+5.5 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.95	$12.8^{+2.1}_{-2.2}$ (−22.9 σ)	χ_{DES}^2	500.5	513.5 (ν : 13.5)
Ω_{Λ}	0.731	$0.715^{+0.089}_{-0.097}$ (+1.7 σ)	z_{drag}	1058.94	$1060.8^{+4.6}_{-4.1}$ (+3.3 σ)	χ_{prior}^2	1.2	14.3 (ν : 13.7) (+1.9 σ)
Ω_{m}	0.269	$0.285^{+0.097}_{-0.089}$ (−1.7 σ)	r_{drag}	149.7	143^{+11}_{-13} (−7.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 501.73$; $\Delta\chi_{\mathrm{eff}}^2 = -0.09$; $\bar{\chi}_{\mathrm{eff}}^2 = 527.78$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.64$; $R - 1 = 0.00413$
 χ_{eff}^2 : WL - DES_1YR_final: 500.51 (Δ 0.01)

6.132 base_mnu_DESlens_lenspriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02221	$0.02219^{+0.00097}_{-0.00097}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	1.006	$0.84^{+0.23}_{-0.22}$ (−3.9 σ)	$100\theta_{\mathrm{eq}}$	0.827	$0.70^{+0.19}_{-0.17}$ (−11.5 σ)
$\Omega_{\mathrm{c}}h^2$	0.121	$0.192^{+0.11}_{-0.093}$ (+31.9 σ)	$r_{\mathrm{drag}}h$	109.1	112^{+30}_{-30} (+4.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.457	$0.393^{+0.099}_{-0.091}$ (−11.6 σ)
$100\theta_{\mathrm{MC}}$	1.062	$1.163^{+0.099}_{-0.12}$ (+239.9 σ)	$\langle d^2 \rangle^{1/2}$	2.51	$2.27^{+0.78}_{-0.70}$ (−4.7 σ)	$H(0.15)$	79.1	92^{+20}_{-20} (+11.2 σ)
Σm_{ν} [eV]	0.08	< 3.96 (+8.2 σ)	z_{re}	7.84	$9.2^{+1.8}_{-1.6}$ (+2.1 σ)	$D_{\mathrm{M}}(0.15)$	588	519^{+200}_{-90} (−7.0 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.13	$2.75^{+0.96}_{-0.96}$ (−17.9 σ)	10^9A_{s}	2.29	$1.8^{+1.9}_{-1.3}$ (−9.3 σ)	$H(0.38)$	88.6	105^{+20}_{-20} (+16.7 σ)
n_{s}	0.9604	$0.961^{+0.039}_{-0.039}$ (−0.1 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	2.05	$1.6^{+1.7}_{-1.2}$ (−21.4 σ)	$D_{\mathrm{M}}(0.38)$	1413	1235^{+300}_{-200} (−8.3 σ)
m_{DES}^1	0.0157	$0.013^{+0.045}_{-0.044}$	D_{40}	1372	1002^{+1000}_{-800} (−15.3 σ)	$H(0.51)$	95.0	113^{+20}_{-20} (+22.0 σ)
m_{DES}^2	0.0133	$0.013^{+0.044}_{-0.044}$	D_{220}	6233	4059^{+6000}_{-3000} (−40.4 σ)	$D_{\mathrm{M}}(0.51)$	1838	1598^{+400}_{-300} (−9.1 σ)
m_{DES}^3	0.0014	$0.003^{+0.043}_{-0.042}$	D_{810}	2740	1519^{+2000}_{-1000} (−73.8 σ)	$H(0.61)$	100.4	120^{+20}_{-30} (+27.8 σ)
m_{DES}^4	0.0168	$0.018^{+0.042}_{-0.042}$	D_{1420}	866	429^{+700}_{-400} (−75.3 σ)	$D_{\mathrm{M}}(0.61)$	2145	1858^{+500}_{-300} (−9.8 σ)
$A_{\mathrm{IA,DES}}$	1.33	$0.8^{+1.6}_{-1.4}$	D_{2000}	247	125^{+200}_{-100} (−55.5 σ)	$H(2.33)$	239	298^{+80}_{-70} (+31.9 σ)
$\alpha_{\mathrm{IA,DES}}$	3.35	> −2.76	$n_{\mathrm{s},0.002}$	0.9604	$0.961^{+0.039}_{-0.039}$ (−0.1 σ)	$D_{\mathrm{M}}(2.33)$	5504	4634^{+1000}_{-900} (−23.9 σ)
$\Delta z_{\mathrm{s,DES}}^1$	0.0032	$0.002^{+0.029}_{-0.029}$	Y_{P}	0.245329	$0.24531^{+0.00042}_{-0.00043}$ (+0.5 σ)	$f\sigma_8(0.15)$	0.4519	$0.434^{+0.045}_{-0.050}$ (−2.0 σ)
$\Delta z_{\mathrm{s,DES}}^2$	−0.0192	$−0.021^{+0.024}_{-0.023}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246655	$0.24664^{+0.00042}_{-0.00043}$ (+0.5 σ)	$\sigma_8(0.15)$	0.807	$0.71^{+0.26}_{-0.24}$ (−0.4 σ)
$\Delta z_{\mathrm{s,DES}}^3$	0.0081	$0.008^{+0.021}_{-0.021}$	$10^5\mathrm{D}/\mathrm{H}$	2.617	$2.62^{+0.19}_{-0.18}$ (−0.6 σ)	$f\sigma_8(0.38)$	0.483	$0.451^{+0.078}_{-0.087}$ (−1.5 σ)
$\Delta z_{\mathrm{s,DES}}^4$	−0.0175	$−0.016^{+0.040}_{-0.041}$	Age/Gyr	13.20	$11.1^{+2.7}_{-2.2}$ (−24.5 σ)	$\sigma_8(0.38)$	0.721	$0.63^{+0.25}_{-0.23}$ (−0.2 σ)
H_0	74.2	> 63.7 (+9.1 σ)	z_*	1090.2	$1096.2^{+8.4}_{-7.6}$ (+11.9 σ)	$f\sigma_8(0.51)$	0.488	$0.451^{+0.095}_{-0.10}$ (−1.2 σ)
Ω_{Λ}	0.739	$0.67^{+0.17}_{-0.22}$ (+0.2 σ)	r_*	144.4	130^{+20}_{-20} (−29.3 σ)	$\sigma_8(0.51)$	0.678	$0.60^{+0.24}_{-0.22}$ (−0.2 σ)
Ω_{m}	0.261	$0.33^{+0.22}_{-0.17}$ (−0.2 σ)	$100\theta_*$	1.063	$1.163^{+0.099}_{-0.12}$ (+258.3 σ)	$f\sigma_8(0.61)$	0.488	$0.45^{+0.11}_{-0.11}$ (−0.9 σ)
$\Omega_{\mathrm{m}}h^2$	0.144	$0.23^{+0.13}_{-0.11}$ (+26.7 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.59	$11.2^{+2.8}_{-2.5}$ (−57.3 σ)	$\sigma_8(0.61)$	0.647	$0.57^{+0.24}_{-0.22}$ (−0.1 σ)
$\Omega_{\nu}h^2$	0.0008	< 0.0426 (+8.2 σ)	z_{drag}	1059.6	$1064.5^{+7.3}_{-6.6}$ (+11.0 σ)	$f\sigma_8(2.33)$	0.329	$0.29^{+0.13}_{-0.12}$ (+0.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.107	$0.20^{+0.14}_{-0.12}$ (+83.0 σ)	r_{drag}	147.1	132^{+20}_{-20} (−30.8 σ)	$\sigma_8(2.33)$	0.342	$0.30^{+0.14}_{-0.13}$ (+0.2 σ)
σ_8	0.867	$0.77^{+0.26}_{-0.25}$ (−0.5 σ)	k_{D}	0.1408	$0.159^{+0.026}_{-0.024}$ (+36.1 σ)	χ_{DES}^2	228.7	233.8 (ν : 4.3)
S_8	0.809	$0.780^{+0.066}_{-0.067}$ (−2.2 σ)	$100\theta_{\mathrm{D}}$	0.1643	$0.178^{+0.014}_{-0.016}$ (+63.4 σ)	χ_{prior}^2	0.4	9.5 (ν : 9.0) (+0.6 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4430	$0.427^{+0.036}_{-0.037}$ (−2.2 σ)	z_{eq}	3417	5113^{+3000}_{-2000} (+34.0 σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.620	$0.57^{+0.11}_{-0.12}$ (−1.4 σ)	k_{eq}	0.0104	$0.0157^{+0.0080}_{-0.0068}$ (+34.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 229.04$; $\Delta\chi_{\mathrm{eff}}^2 = -0.01$; $\bar{\chi}_{\mathrm{eff}}^2 = 243.26$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.08$; $R - 1 = 0.00786$
 χ_{eff}^2 : WL - DES_1YR_final: 228.67 (Δ -0.04)

6.133 base_mnu_DES_lenspriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02222	$0.02220^{+0.00095}_{-0.00098}$ (+0.6 σ)	$\Omega_{\mathrm{m}}h^2$	0.147	$0.170^{+0.063}_{-0.050}$ (+7.8 σ)	k_{D}	0.1405	$0.146^{+0.015}_{-0.012}$ (+10.3 σ)
$\Omega_{\mathrm{c}}h^2$	0.1188	$0.137^{+0.050}_{-0.039}$ (+7.3 σ)	$\Omega_{\nu}h^2$	0.0058	< 0.0243 (+4.7 σ)	$100\theta_{\mathrm{D}}$	0.1645	$0.170^{+0.013}_{-0.012}$ (+31.7 σ)
$100\theta_{\mathrm{MC}}$	1.064	$1.102^{+0.096}_{-0.086}$ (+120.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.105	$0.132^{+0.078}_{-0.057}$ (+29.5 σ)	z_{eq}	3371	3810^{+1000}_{-900} (+7.8 σ)
Σm_{ν} [eV]	0.54	< 2.26 (+4.7 σ)	σ_8	0.789	$0.786^{+0.075}_{-0.071}$ (−0.1 σ)	k_{eq}	0.01029	$0.0117^{+0.0037}_{-0.0029}$ (+8.0 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.222	$3.16^{+0.17}_{-0.20}$ (+7.3 σ)	S_8	0.7747	$0.772^{+0.030}_{-0.030}$ (−2.5 σ)	$100\theta_{\mathrm{eq}}$	0.838	$0.802^{+0.088}_{-0.096}$ (−0.8 σ)
n_{s}	0.9642	$0.963^{+0.039}_{-0.039}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4243	$0.423^{+0.016}_{-0.016}$ (−2.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.4629	$0.445^{+0.044}_{-0.049}$ (−0.6 σ)
b_{DES}^1	1.500	$1.50^{+0.21}_{-0.20}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5786	$0.576^{+0.031}_{-0.030}$ (−1.2 σ)	$H(0.15)$	76.4	82^{+20}_{-10} (+5.9 σ)
b_{DES}^2	1.713	$1.71^{+0.19}_{-0.18}$	$\sigma_8/h^{0.5}$	0.935	$0.901^{+0.086}_{-0.088}$ (−2.1 σ)	$D_{\mathrm{M}}(0.15)$	610	573^{+100}_{-100} (−4.3 σ)
b_{DES}^3	1.696	$1.70^{+0.17}_{-0.16}$	$r_{\mathrm{drag}}h$	105.0	109^{+10}_{-10} (+3.7 σ)	$H(0.38)$	86.4	93^{+20}_{-10} (+8.1 σ)
b_{DES}^4	2.050	$2.04^{+0.19}_{-0.19}$	$\langle d^2 \rangle^{1/2}$	2.547	$2.524^{+0.094}_{-0.098}$ (+2.0 σ)	$D_{\mathrm{M}}(0.38)$	1460	1371^{+200}_{-300} (−4.9 σ)
b_{DES}^5	2.122	$2.12^{+0.22}_{-0.21}$	z_{re}	7.88	$8.29^{+1.1}_{-0.91}$ (+1.0 σ)	$H(0.51)$	93.1	100^{+20}_{-20} (+10.1 σ)
m_{DES}^1	0.0132	$0.012^{+0.045}_{-0.045}$	10^9A_{s}	2.508	$2.36^{+0.42}_{-0.44}$ (+8.0 σ)	$D_{\mathrm{M}}(0.51)$	1894	1779^{+300}_{-300} (−5.2 σ)
m_{DES}^2	0.0157	$0.015^{+0.044}_{-0.043}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	2.247	$2.12^{+0.38}_{-0.39}$ (+16.8 σ)	$H(0.61)$	98.7	106^{+20}_{-20} (+12.3 σ)
m_{DES}^3	0.0097	$0.010^{+0.041}_{-0.041}$	D_{40}	1482	1364^{+300}_{-300} (+8.6 σ)	$D_{\mathrm{M}}(0.61)$	2207	2073^{+300}_{-400} (−5.5 σ)
m_{DES}^4	0.0115	$0.012^{+0.041}_{-0.041}$	D_{220}	6876	6065^{+2000}_{-2000} (+8.6 σ)	$H(2.33)$	240.6	258^{+50}_{-40} (+10.8 σ)
$A_{\mathrm{IA,DES}}$	0.452	$0.44^{+0.38}_{-0.33}$	D_{810}	3012	2521^{+900}_{-1000} (−1.2 σ)	$D_{\mathrm{M}}(2.33)$	5577	5237^{+800}_{-900} (−11.6 σ)
$\alpha_{\mathrm{IA,DES}}$	−1.5	—	D_{1420}	952	744^{+300}_{-400} (−13.9 σ)	$f\sigma_8(0.15)$	0.4352	$0.434^{+0.016}_{-0.016}$ (−2.0 σ)
$\Delta z_{\mathrm{l,DES}}^1$	0.0038	$0.004^{+0.015}_{-0.015}$	D_{2000}	272	214^{+100}_{-100} (−8.0 σ)	$\sigma_8(0.15)$	0.732	$0.730^{+0.075}_{-0.071}$ (+0.1 σ)
$\Delta z_{\mathrm{l,DES}}^2$	0.0013	$0.002^{+0.013}_{-0.013}$	$n_{\mathrm{s},0.002}$	0.9642	$0.963^{+0.039}_{-0.039}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4590	$0.458^{+0.021}_{-0.021}$ (−1.1 σ)
$\Delta z_{\mathrm{l,DES}}^3$	0.0041	$0.004^{+0.013}_{-0.013}$	Y_{P}	0.245334	$0.24531^{+0.00041}_{-0.00043}$ (+0.5 σ)	$\sigma_8(0.38)$	0.652	$0.650^{+0.072}_{-0.069}$ (+0.2 σ)
$\Delta z_{\mathrm{l,DES}}^4$	0.0022	$0.002^{+0.018}_{-0.018}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246660	$0.24664^{+0.00041}_{-0.00043}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4608	$0.459^{+0.025}_{-0.025}$ (−0.6 σ)
$\Delta z_{\mathrm{l,DES}}^5$	0.0007	$0.001^{+0.019}_{-0.019}$	$10^5\mathrm{D}/\mathrm{H}$	2.614	$2.62^{+0.19}_{-0.17}$ (−0.6 σ)	$\sigma_8(0.51)$	0.612	$0.610^{+0.071}_{-0.066}$ (+0.3 σ)
$\Delta z_{\mathrm{s,DES}}^1$	−0.0015	$−0.004^{+0.028}_{-0.028}$	Age/Gyr	13.36	$12.5^{+2.0}_{-2.2}$ (−11.9 σ)	$f\sigma_8(0.61)$	0.4580	$0.457^{+0.029}_{-0.029}$ (−0.4 σ)
$\Delta z_{\mathrm{s,DES}}^2$	−0.0287	$−0.029^{+0.021}_{-0.021}$	z_*	1090.12	$1091.9^{+4.8}_{-3.9}$ (+3.0 σ)	$\sigma_8(0.61)$	0.583	$0.582^{+0.069}_{-0.065}$ (+0.4 σ)
$\Delta z_{\mathrm{s,DES}}^3$	0.0072	$0.008^{+0.019}_{-0.019}$	r_*	144.7	140^{+10}_{-12} (−8.4 σ)	$f\sigma_8(2.33)$	0.3016	$0.302^{+0.037}_{-0.034}$ (+0.9 σ)
$\Delta z_{\mathrm{s,DES}}^4$	−0.0222	$−0.021^{+0.036}_{-0.036}$	$100\theta_*$	1.065	$1.102^{+0.097}_{-0.086}$ (+129.5 σ)	$\sigma_8(2.33)$	0.3083	$0.308^{+0.041}_{-0.038}$ (+0.7 σ)
H_0	71.3	77^{+20}_{-10} (+5.1 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.59	$12.8^{+1.9}_{-2.2}$ (−23.9 σ)	$\chi_{\mathrm{lensing}}^2$	7.63	9.2 (ν : 1.3)
Ω_{Λ}	0.711	$0.709^{+0.055}_{-0.058}$ (+1.5 σ)	z_{drag}	1059.59	$1061.0^{+4.5}_{-4.1}$ (+3.6 σ)	χ_{DES}^2	501.6	513.1 (ν : 11.4)
Ω_{m}	0.289	$0.291^{+0.058}_{-0.055}$ (−1.5 σ)	r_{drag}	147.4	143^{+11}_{-12} (−8.9 σ)	χ_{prior}^2	1.0	14.1 (ν : 13.6) (+1.8 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 510.24$; $\bar{\chi}_{\mathrm{eff}}^2 = 536.32$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.37$; $R - 1 = 0.00963$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8_CMBmargd: 7.63 WL - DES_1YR_final: 501.56

6.134 base_mnu_DESlens_lenspriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02220	$0.02221^{+0.00098}_{-0.0010}$ (+0.7 σ)	$\sigma_8/h^{0.5}$	0.940	$0.89^{+0.10}_{-0.10}$ (−2.4 σ)	$100\theta_{\text{eq}}$	0.817	$0.76^{+0.12}_{-0.11}$ (−4.9 σ)
$\Omega_c h^2$	0.125	$0.157^{+0.063}_{-0.055}$ (+16.1 σ)	$r_{\text{drag}} h$	104.4	113^{+20}_{-20} (+5.0 σ)	$100\theta_{\text{s,eq}}$	0.452	$0.425^{+0.058}_{-0.056}$ (−4.7 σ)
$100\theta_{\text{MC}}$	1.071	$1.14^{+0.10}_{-0.11}$ (+186.3 σ)	$\langle d^2 \rangle^{1/2}$	2.512	$2.49^{+0.11}_{-0.11}$ (+1.0 σ)	$H(0.15)$	76.9	88^{+20}_{-20} (+9.2 σ)
Σm_ν [eV]	0.53	< 3.13 (+6.6 σ)	z_{re}	7.99	$8.7^{+1.3}_{-1.2}$ (+1.4 σ)	$D_{\text{M}}(0.15)$	607	536^{+100}_{-100} (−6.2 σ)
$\ln(10^{10} A_{\text{s}})$	3.159	$3.07^{+0.22}_{-0.24}$ (+2.0 σ)	$10^9 A_{\text{s}}$	2.35	$2.17^{+0.50}_{-0.50}$ (+2.5 σ)	$H(0.38)$	87.2	99^{+20}_{-20} (+12.9 σ)
n_{s}	0.9628	$0.960^{+0.039}_{-0.040}$ (−0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	2.109	$1.95^{+0.45}_{-0.45}$ (+4.6 σ)	$D_{\text{M}}(0.38)$	1450	1283^{+300}_{-200} (−7.1 σ)
m_{DES}^1	0.0141	$0.013^{+0.045}_{-0.045}$	D_{40}	1382	1240^{+300}_{-300} (+0.4 σ)	$H(0.51)$	94.1	107^{+20}_{-20} (+16.4 σ)
m_{DES}^2	0.0151	$0.013^{+0.043}_{-0.044}$	D_{220}	6296	5218^{+2000}_{-2000} (−12.1 σ)	$D_{\text{M}}(0.51)$	1880	1665^{+400}_{-300} (−7.7 σ)
m_{DES}^3	0.0016	$0.004^{+0.042}_{-0.042}$	D_{810}	2786	2041^{+1000}_{-1000} (−35.9 σ)	$H(0.61)$	99.8	113^{+20}_{-20} (+20.3 σ)
m_{DES}^4	0.0180	$0.017^{+0.042}_{-0.042}$	D_{1420}	875	582^{+400}_{-300} (−45.4 σ)	$D_{\text{M}}(0.61)$	2190	1940^{+400}_{-400} (−8.1 σ)
$A_{\text{IA,DES}}$	1.23	$0.6^{+1.7}_{-1.7}$	D_{2000}	252	169^{+100}_{-90} (−32.1 σ)	$H(2.33)$	245	275^{+60}_{-50} (+19.6 σ)
$\alpha_{\text{IA,DES}}$	2.88	> −2.87	$n_{\text{s},0.002}$	0.9628	$0.960^{+0.039}_{-0.040}$ (−0.3 σ)	$D_{\text{M}}(2.33)$	5508	4915^{+1000}_{-900} (−18.2 σ)
$\Delta z_{\text{s,DES}}^1$	0.0029	$0.001^{+0.029}_{-0.030}$	Y_{P}	0.245327	$0.24532^{+0.00042}_{-0.00044}$ (+0.6 σ)	$f\sigma_8(0.15)$	0.4443	$0.439^{+0.026}_{-0.025}$ (−1.7 σ)
$\Delta z_{\text{s,DES}}^2$	−0.0196	$−0.020^{+0.023}_{-0.023}$	$Y_{\text{P}}^{\text{BBN}}$	0.246653	$0.24664^{+0.00043}_{-0.00044}$ (+0.6 σ)	$\sigma_8(0.15)$	0.737	$0.746^{+0.098}_{-0.085}$ (+0.5 σ)
$\Delta z_{\text{s,DES}}^3$	0.0074	$0.008^{+0.021}_{-0.021}$	10^5D/H	2.618	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$f\sigma_8(0.38)$	0.4664	$0.464^{+0.026}_{-0.027}$ (−0.6 σ)
$\Delta z_{\text{s,DES}}^4$	−0.0171	$−0.016^{+0.041}_{-0.041}$	Age/Gyr	13.19	$11.8^{+2.4}_{-2.2}$ (−18.6 σ)	$\sigma_8(0.38)$	0.656	$0.666^{+0.093}_{-0.087}$ (+0.7 σ)
H_0	71.6	> 66.6 (+7.8 σ)	z_*	1090.7	$1093.6^{+5.8}_{-5.3}$ (+6.5 σ)	$f\sigma_8(0.51)$	0.4670	$0.467^{+0.031}_{-0.030}$ (−0.2 σ)
Ω_{Λ}	0.702	$0.714^{+0.080}_{-0.078}$ (+1.6 σ)	r_*	143.2	136^{+13}_{-14} (−17.0 σ)	$\sigma_8(0.51)$	0.615	$0.625^{+0.091}_{-0.085}$ (+0.8 σ)
Ω_{m}	0.298	$0.286^{+0.078}_{-0.080}$ (−1.6 σ)	$100\theta_*$	1.071	$1.14^{+0.10}_{-0.11}$ (+200.7 σ)	$f\sigma_8(0.61)$	0.4635	$0.464^{+0.034}_{-0.034}$ (+0.1 σ)
$\Omega_{\text{m}} h^2$	0.153	$0.194^{+0.081}_{-0.070}$ (+15.0 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.37	$12.0^{+2.4}_{-2.2}$ (−39.9 σ)	$\sigma_8(0.61)$	0.586	$0.596^{+0.089}_{-0.083}$ (+0.8 σ)
$\Omega_{\nu} h^2$	0.0057	< 0.0337 (+6.6 σ)	z_{drag}	1060.0	$1062.4^{+5.2}_{-4.8}$ (+6.6 σ)	$f\sigma_8(2.33)$	0.3020	$0.309^{+0.048}_{-0.045}$ (+1.4 σ)
$\Omega_{\text{m}} h^3$	0.109	$0.162^{+0.10}_{-0.084}$ (+53.4 σ)	r_{drag}	145.9	138^{+13}_{-14} (−18.0 σ)	$\sigma_8(2.33)$	0.309	$0.316^{+0.054}_{-0.051}$ (+1.2 σ)
σ_8	0.795	$0.804^{+0.097}_{-0.085}$ (+0.4 σ)	k_{D}	0.1421	$0.151^{+0.018}_{-0.016}$ (+20.6 σ)	χ_{lensing}^2	7.48	9.7 (ν : 1.9)
S_8	0.793	$0.781^{+0.051}_{-0.050}$ (−2.1 σ)	$100\theta_{\text{D}}$	0.1653	$0.174^{+0.014}_{-0.015}$ (+49.1 σ)	χ_{DES}^2	228.82	232.8 (ν : 3.2)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4342	$0.428^{+0.028}_{-0.028}$ (−2.1 σ)	z_{eq}	3512	4278^{+1000}_{-1000} (+17.2 σ)	χ_{prior}^2	0.4	9.4 (ν : 9.0) (+0.6 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5877	$0.586^{+0.038}_{-0.035}$ (−0.7 σ)	k_{eq}	0.01073	$0.0131^{+0.0047}_{-0.0041}$ (+17.4 σ)			

Best-fit $\chi_{\text{eff}}^2 = 236.70$; $\Delta\chi_{\text{eff}}^2 = -0.27$; $\bar{\chi}_{\text{eff}}^2 = 251.99$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.27$; $R - 1 = 0.00519$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.48 (Δ -0.23) WL - DES_1YR_final: 228.82 (Δ -0.14)

6.135 base_mnu_DES_lenspriors_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02221	$0.02219^{+0.00099}_{-0.00098}$ (+0.6 σ)	$\Omega_\nu h^2$	0.0086	$0.0104^{+0.0094}_{-0.0097}$ (+4.4 σ)	z_{eq}	3377	3531^{+700}_{-600} (+2.3 σ)
$\Omega_c h^2$	0.1191	$0.126^{+0.028}_{-0.026}$ (+2.1 σ)	$\Omega_m h^3$	0.1016	$0.108^{+0.029}_{-0.027}$ (+10.3 σ)	k_{eq}	0.01032	$0.0108^{+0.0021}_{-0.0020}$ (+2.4 σ)
$100\theta_{\text{MC}}$	1.0606	$1.070^{+0.048}_{-0.048}$ (+57.4 σ)	σ_8	0.740	$0.720^{+0.086}_{-0.077}$ (−1.9 σ)	$100\theta_{\text{eq}}$	0.835	$0.819^{+0.075}_{-0.074}$ (+1.0 σ)
Σm_ν [eV]	0.80	$0.97^{+0.87}_{-0.90}$ (+4.4 σ)	S_8	0.7714	$0.762^{+0.043}_{-0.043}$ (−2.9 σ)	$100\theta_{\text{s,eq}}$	0.4612	$0.453^{+0.038}_{-0.038}$ (+1.2 σ)
$\ln(10^{10} A_s)$	3.237	$3.15^{+0.30}_{-0.32}$ (+6.9 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4225	$0.417^{+0.023}_{-0.024}$ (−2.9 σ)	$H(0.15)$	73.31	$74.1^{+3.7}_{-3.5}$ (+1.5 σ)
n_s	0.9611	$0.961^{+0.040}_{-0.039}$ (+0.0 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5590	$0.548^{+0.044}_{-0.042}$ (−2.6 σ)	$D_M(0.15)$	638.7	633^{+27}_{-29} (−1.3 σ)
b_{DES}^1	1.599	$1.65^{+0.25}_{-0.23}$	$\sigma_8/h^{0.5}$	0.898	$0.87^{+0.11}_{-0.10}$ (−2.9 σ)	$H(0.38)$	83.9	$85.1^{+5.5}_{-5.2}$ (+2.4 σ)
b_{DES}^2	1.820	$1.87^{+0.24}_{-0.23}$	$r_{\text{drag}} h$	99.71	$99.3^{+3.0}_{-2.9}$ (+0.8 σ)	$D_M(0.38)$	1520	1504^{+73}_{-79} (−1.5 σ)
b_{DES}^3	1.793	$1.85^{+0.23}_{-0.22}$	$\langle d^2 \rangle^{1/2}$	2.579	$2.51^{+0.27}_{-0.27}$ (+1.6 σ)	$H(0.51)$	90.9	$92.3^{+6.6}_{-6.3}$ (+3.2 σ)
b_{DES}^4	2.162	$2.22^{+0.27}_{-0.26}$	z_{re}	7.92	$8.06^{+0.69}_{-0.62}$ (+0.7 σ)	$D_M(0.51)$	1966	1945^{+100}_{-110} (−1.7 σ)
b_{DES}^5	2.224	$2.29^{+0.32}_{-0.29}$	$10^9 A_s$	2.54	$2.37^{+0.73}_{-0.70}$ (+8.1 σ)	$H(0.61)$	96.7	$98.3^{+7.6}_{-7.2}$ (+4.1 σ)
m_{DES}^1	0.0129	$0.011^{+0.044}_{-0.044}$	$10^9 A_s e^{-2\tau}$	2.28	$2.12^{+0.65}_{-0.62}$ (+17.0 σ)	$D_M(0.61)$	2286	2260^{+120}_{-130} (−1.8 σ)
m_{DES}^2	0.0152	$0.014^{+0.044}_{-0.043}$	D_{40}	1494	1376^{+500}_{-400} (+9.4 σ)	$H(2.33)$	241.8	248^{+27}_{-26} (+5.3 σ)
m_{DES}^3	0.0055	$0.008^{+0.041}_{-0.041}$	D_{220}	7005	6389^{+3000}_{-2000} (+16.6 σ)	$D_M(2.33)$	5674	5585^{+430}_{-450} (−4.5 σ)
m_{DES}^4	0.0099	$0.012^{+0.042}_{-0.041}$	D_{810}	3067	2781^{+1000}_{-1000} (+17.6 σ)	$f\sigma_8(0.15)$	0.4316	$0.425^{+0.025}_{-0.025}$ (−2.7 σ)
$A_{\text{IA,DES}}$	0.415	$0.40^{+0.35}_{-0.31}$	D_{1420}	974	865^{+400}_{-400} (+9.9 σ)	$\sigma_8(0.15)$	0.683	$0.664^{+0.083}_{-0.075}$ (−1.7 σ)
$\alpha_{\text{IA,DES}}$	−2.0	—	D_{2000}	277	248^{+100}_{-100} (+10.0 σ)	$f\sigma_8(0.38)$	0.4466	$0.437^{+0.032}_{-0.032}$ (−2.5 σ)
$\Delta z_{\text{l,DES}}^1$	0.0032	$0.004^{+0.015}_{-0.015}$	$n_{\text{s},0.002}$	0.9611	$0.961^{+0.040}_{-0.039}$ (+0.0 σ)	$\sigma_8(0.38)$	0.605	$0.587^{+0.078}_{-0.071}$ (−1.6 σ)
$\Delta z_{\text{l,DES}}^2$	0.0008	$0.001^{+0.013}_{-0.013}$	Y_{P}	0.245330	$0.24531^{+0.00043}_{-0.00043}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4443	$0.434^{+0.036}_{-0.036}$ (−2.2 σ)
$\Delta z_{\text{l,DES}}^3$	0.0037	$0.004^{+0.013}_{-0.013}$	$Y_{\text{P}}^{\text{BBN}}$	0.246656	$0.24664^{+0.00043}_{-0.00043}$ (+0.5 σ)	$\sigma_8(0.51)$	0.566	$0.549^{+0.075}_{-0.068}$ (−1.6 σ)
$\Delta z_{\text{l,DES}}^4$	0.0015	$0.001^{+0.018}_{-0.018}$	10^5D/H	2.616	$2.62^{+0.19}_{-0.18}$ (−0.5 σ)	$f\sigma_8(0.61)$	0.4391	$0.428^{+0.038}_{-0.038}$ (−2.1 σ)
$\Delta z_{\text{l,DES}}^5$	0.0001	$0.000^{+0.019}_{-0.019}$	Age/Gyr	13.58	$13.4^{+1.0}_{-1.1}$ (−4.6 σ)	$\sigma_8(0.61)$	0.539	$0.523^{+0.072}_{-0.065}$ (−1.5 σ)
$\Delta z_{\text{s,DES}}^1$	−0.0013	$−0.005^{+0.027}_{-0.028}$	z_*	1090.28	$1091.0^{+3.0}_{-2.8}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.2791	$0.270^{+0.035}_{-0.034}$ (−1.3 σ)
$\Delta z_{\text{s,DES}}^2$	−0.0287	$−0.029^{+0.021}_{-0.021}$	r_*	144.4	$142.8^{+7.1}_{-7.9}$ (−3.2 σ)	$\sigma_8(2.33)$	0.2826	$0.273^{+0.040}_{-0.037}$ (−1.3 σ)
$\Delta z_{\text{s,DES}}^3$	0.0064	$0.008^{+0.019}_{-0.019}$	$100\theta_*$	1.0611	$1.070^{+0.048}_{-0.048}$ (+62.2 σ)	χ_{6DF}^2	0.014	0.11 (ν : 0.0)
$\Delta z_{\text{s,DES}}^4$	−0.0238	$−0.020^{+0.037}_{-0.036}$	$D_M(z_*)/\text{Gpc}$	13.61	$13.4^{+1.3}_{-1.3}$ (−11.1 σ)	χ_{MGS}^2	1.41	1.34 (ν : 0.3)
H_0	67.77	$68.3^{+2.9}_{-2.6}$ (+1.2 σ)	z_{drag}	1059.70	$1060.2^{+3.4}_{-3.3}$ (+1.9 σ)	χ_{DR12BAO}^2	2.57	3.5 (ν : 1.0)
Ω_Λ	0.674	$0.662^{+0.056}_{-0.058}$ (−0.0 σ)	r_{drag}	147.1	$145.5^{+7.3}_{-8.1}$ (−3.4 σ)	χ_{DES}^2	502.0	514.1 (ν : 13.1)
Ω_m	0.326	$0.338^{+0.058}_{-0.056}$ (+0.0 σ)	k_{D}	0.1409	$0.1428^{+0.0091}_{-0.0086}$ (+4.4 σ)	χ_{prior}^2	1.1	14.1 (ν : 13.5) (+1.9 σ)
$\Omega_m h^2$	0.1499	$0.158^{+0.037}_{-0.034}$ (+4.1 σ)	$100\theta_{\text{D}}$	0.1638	$0.1650^{+0.0063}_{-0.0064}$ (+14.5 σ)	χ_{BAO}^2	3.99	4.9 (ν : 1.5)

Best-fit $\chi_{\text{eff}}^2 = 507.09$; $\Delta\chi_{\text{eff}}^2 = -2.54$; $\bar{\chi}_{\text{eff}}^2 = 533.11$; $\Delta\bar{\chi}_{\text{eff}}^2 = -1.63$; $R - 1 = 0.00572$

χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.03) MGS: 1.41 (Δ -0.86) DR12BAO: 2.57 (Δ -2.07) WL - DES_1YR_final: 502.02 (Δ 0.59)

6.136 base_mnu_DESlens_lenspriors_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02217	$0.02220^{+0.00096}_{-0.00096}$ (+0.6 σ)	$r_{\text{drag}} h$	98.86	$97.4^{+3.8}_{-3.8}$ (+0.2 σ)	$H(0.15)$	75.3	$78.2^{+6.9}_{-6.5}$ (+3.8 σ)
$\Omega_c h^2$	0.139	$0.165^{+0.066}_{-0.060}$ (+19.8 σ)	$\langle d^2 \rangle^{1/2}$	2.25	$2.14^{+0.55}_{-0.52}$ (−8.1 σ)	$D_M(0.15)$	622.7	604^{+46}_{-48} (−2.7 σ)
$100\theta_{\text{MC}}$	1.075	$1.107^{+0.064}_{-0.068}$ (+130.4 σ)	z_{re}	8.21	$8.7^{+1.2}_{-1.0}$ (+1.5 σ)	$H(0.38)$	86.7	91^{+10}_{-10} (+6.8 σ)
Σm_ν [eV]	0.48	< 2.27 (+4.8 σ)	$10^9 A_s$	1.71	$1.52^{+1.2}_{-0.95}$ (−16.9 σ)	$D_M(0.38)$	1477	1424^{+130}_{-130} (−3.5 σ)
$\ln(10^{10} A_s)$	2.84	$2.65^{+0.74}_{-0.72}$ (−24.0 σ)	$10^9 A_s e^{-2\tau}$	1.53	$1.36^{+1.0}_{-0.85}$ (−38.2 σ)	$H(0.51)$	94.2	100^{+10}_{-10} (+9.7 σ)
n_s	0.9605	$0.960^{+0.039}_{-0.038}$ (−0.2 σ)	D_{40}	981	854^{+700}_{-600} (−25.2 σ)	$D_M(0.51)$	1909	1835^{+170}_{-170} (−4.0 σ)
m_{DES}^1	0.0144	$0.013^{+0.045}_{-0.045}$	D_{220}	4330	3690^{+4000}_{-3000} (−49.5 σ)	$H(0.61)$	100.4	106^{+10}_{-10} (+12.9 σ)
m_{DES}^2	0.0128	$0.012^{+0.044}_{-0.044}$	D_{810}	1979	1618^{+2000}_{-1000} (−66.6 σ)	$D_M(0.61)$	2217	2128^{+210}_{-210} (−4.4 σ)
m_{DES}^3	0.0009	$0.002^{+0.042}_{-0.042}$	D_{1420}	622	478^{+500}_{-400} (−65.7 σ)	$H(2.33)$	254.0	275^{+50}_{-40} (+19.8 σ)
m_{DES}^4	0.0186	$0.018^{+0.042}_{-0.042}$	D_{2000}	180	138^{+100}_{-100} (−48.4 σ)	$D_M(2.33)$	5457	5162^{+700}_{-600} (−13.1 σ)
$A_{\text{IA,DES}}$	1.31	$0.96^{+1.1}_{-1.1}$	$n_{\text{s},0.002}$	0.9605	$0.960^{+0.039}_{-0.038}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4362	$0.423^{+0.030}_{-0.031}$ (−2.9 σ)
$\alpha_{\text{IA,DES}}$	2.68	> −2.73	Y_{P}	0.245312	$0.24531^{+0.00041}_{-0.00042}$ (+0.5 σ)	$\sigma_8(0.15)$	0.676	$0.625^{+0.11}_{-0.092}$ (−2.8 σ)
$\Delta z_{\text{s,DES}}^1$	0.0036	$0.003^{+0.029}_{-0.029}$	$Y_{\text{P}}^{\text{BBN}}$	0.246639	$0.24664^{+0.00041}_{-0.00042}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4467	$0.426^{+0.042}_{-0.043}$ (−3.3 σ)
$\Delta z_{\text{s,DES}}^2$	−0.0201	$−0.021^{+0.023}_{-0.024}$	10^5D/H	2.624	$2.62^{+0.19}_{-0.17}$ (−0.6 σ)	$\sigma_8(0.38)$	0.597	$0.549^{+0.096}_{-0.090}$ (−2.8 σ)
$\Delta z_{\text{s,DES}}^3$	0.0074	$0.008^{+0.021}_{-0.021}$	Age/Gyr	13.06	$12.4^{+1.7}_{-1.5}$ (−13.6 σ)	$f\sigma_8(0.51)$	0.4423	$0.418^{+0.048}_{-0.047}$ (−3.3 σ)
$\Delta z_{\text{s,DES}}^4$	−0.0164	$−0.016^{+0.040}_{-0.040}$	z_*	1091.9	$1094.1^{+5.6}_{-4.9}$ (+7.5 σ)	$\sigma_8(0.51)$	0.557	$0.512^{+0.092}_{-0.086}$ (−2.7 σ)
H_0	69.37	$71.3^{+5.1}_{-4.8}$ (+2.6 σ)	r_*	139.9	134^{+13}_{-13} (−19.8 σ)	$f\sigma_8(0.61)$	0.436	$0.410^{+0.051}_{-0.050}$ (−3.2 σ)
Ω_Λ	0.655	$0.613^{+0.085}_{-0.095}$ (−1.6 σ)	$100\theta_*$	1.076	$1.107^{+0.065}_{-0.068}$ (+140.4 σ)	$\sigma_8(0.61)$	0.530	$0.486^{+0.089}_{-0.083}$ (−2.7 σ)
Ω_{m}	0.345	$0.387^{+0.095}_{-0.085}$ (+1.6 σ)	$D_M(z_*)/\text{Gpc}$	13.01	$12.2^{+1.9}_{-1.9}$ (−36.8 σ)	$f\sigma_8(2.33)$	0.2706	$0.248^{+0.047}_{-0.044}$ (−2.8 σ)
$\Omega_{\text{m}} h^2$	0.166	$0.198^{+0.073}_{-0.066}$ (+16.4 σ)	z_{drag}	1060.85	$1062.8^{+4.9}_{-4.7}$ (+7.3 σ)	$\sigma_8(2.33)$	0.2752	$0.251^{+0.050}_{-0.047}$ (−2.7 σ)
$\Omega_\nu h^2$	0.0051	< 0.0245 (+4.8 σ)	r_{drag}	142.5	137^{+13}_{-13} (−20.9 σ)	χ_{6DF}^2	0.07	0.36 (ν : 0.1)
$\Omega_{\text{m}} h^3$	0.115	$0.142^{+0.063}_{-0.055}$ (+37.4 σ)	k_{D}	0.1457	$0.153^{+0.017}_{-0.015}$ (+23.5 σ)	χ_{MGS}^2	1.04	0.77 (ν : 0.2)
σ_8	0.734	$0.681^{+0.11}_{-0.095}$ (−2.9 σ)	$100\theta_{\text{D}}$	0.1658	$0.1700^{+0.0090}_{-0.0091}$ (+33.0 σ)	χ_{DR12BAO}^2	2.27	3.6 (ν : 1.2)
S_8	0.787	$0.769^{+0.050}_{-0.052}$ (−2.6 σ)	z_{eq}	3846	4473^{+2000}_{-1000} (+21.2 σ)	χ_{DES}^2	229.0	233.7 (ν : 4.1)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4310	$0.421^{+0.027}_{-0.029}$ (−2.6 σ)	k_{eq}	0.01174	$0.0137^{+0.0048}_{-0.0044}$ (+21.2 σ)	χ_{prior}^2	0.5	9.4 (ν : 9.0) (+0.6 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.562	$0.535^{+0.055}_{-0.052}$ (−3.2 σ)	$100\theta_{\text{eq}}$	0.767	$0.72^{+0.14}_{-0.13}$ (−9.5 σ)	χ_{BAO}^2	3.38	4.8 (ν : 1.5)
$\sigma_8/h^{0.5}$	0.881	$0.81^{+0.15}_{-0.13}$ (−4.7 σ)	$100\theta_{\text{s,eq}}$	0.426	$0.402^{+0.071}_{-0.070}$ (−9.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 232.86$; $\Delta\chi_{\text{eff}}^2 = -0.55$; $\bar{\chi}_{\text{eff}}^2 = 247.92$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.18$; $R - 1 = 0.00929$

χ_{eff}^2 : BAO - 6DF: 0.07 (Δ 0.01) MGS: 1.04 (Δ -0.06) DR12BAO: 2.27 (Δ -0.04) WL - DES_1YR_final: 229.02 (Δ -0.43)

6.137 base_mnu_DES_lenspriors_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02222	$0.0222^{+0.0010}_{-0.0010}$ (+0.7 σ)	$\Omega_{\mathrm{m}}h^3$	0.0984	$0.102^{+0.023}_{-0.020}$ (+5.6 σ)	$100\theta_{\mathrm{eq}}$	0.840	$0.833^{+0.055}_{-0.059}$ (+2.5 σ)
$\Omega_{\mathrm{c}}h^2$	0.1165	$0.120^{+0.022}_{-0.019}$ (−0.5 σ)	σ_8	0.757	$0.748^{+0.055}_{-0.055}$ (−1.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.4639	$0.460^{+0.028}_{-0.030}$ (+2.6 σ)
$100\theta_{\mathrm{MC}}$	1.0535	$1.059^{+0.042}_{-0.038}$ (+36.6 σ)	S_8	0.7783	$0.776^{+0.029}_{-0.029}$ (−2.3 σ)	$H(0.15)$	73.07	$73.5^{+3.2}_{-2.8}$ (+1.3 σ)
Σm_{ν} [eV]	0.63	< 1.46 (+3.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4263	$0.425^{+0.016}_{-0.016}$ (−2.3 σ)	$D_{\mathrm{M}}(0.15)$	640.1	637^{+23}_{-25} (−1.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.231	$3.21^{+0.13}_{-0.14}$ (+10.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.5680	$0.564^{+0.027}_{-0.026}$ (−1.8 σ)	$H(0.38)$	83.37	$84.1^{+4.5}_{-4.1}$ (+1.7 σ)
n_{s}	0.9644	$0.963^{+0.039}_{-0.039}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.920	$0.908^{+0.072}_{-0.074}$ (−1.9 σ)	$D_{\mathrm{M}}(0.38)$	1525	1516^{+62}_{-67} (−1.2 σ)
b_{DES}^1	1.573	$1.59^{+0.19}_{-0.19}$	$r_{\mathrm{drag}}h$	100.16	$99.98^{+2.6}_{-2.7}$ (+1.0 σ)	$H(0.51)$	90.2	$91.0^{+5.4}_{-4.9}$ (+2.1 σ)
b_{DES}^2	1.787	$1.80^{+0.16}_{-0.16}$	$\langle d^2 \rangle^{1/2}$	2.561	$2.552^{+0.086}_{-0.087}$ (+2.7 σ)	$D_{\mathrm{M}}(0.51)$	1975	1962^{+83}_{-92} (−1.3 σ)
b_{DES}^3	1.765	$1.78^{+0.14}_{-0.14}$	z_{re}	7.83	$7.92^{+0.54}_{-0.51}$ (+0.5 σ)	$H(0.61)$	95.9	$96.9^{+6.1}_{-5.5}$ (+2.6 σ)
b_{DES}^4	2.129	$2.14^{+0.16}_{-0.16}$	$10^9 A_{\mathrm{s}}$	2.531	$2.48^{+0.35}_{-0.32}$ (+11.5 σ)	$D_{\mathrm{M}}(0.61)$	2297	2281^{+100}_{-110} (−1.4 σ)
b_{DES}^5	2.198	$2.21^{+0.20}_{-0.19}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	2.267	$2.22^{+0.31}_{-0.29}$ (+24.4 σ)	$H(2.33)$	238.4	242^{+22}_{-20} (+2.2 σ)
m_{DES}^1	0.0127	$0.011^{+0.045}_{-0.044}$	D_{40}	1488	1450^{+200}_{-200} (+14.3 σ)	$D_{\mathrm{M}}(2.33)$	5725	5672^{+340}_{-380} (−2.7 σ)
m_{DES}^2	0.0154	$0.013^{+0.043}_{-0.044}$	D_{220}	7020	6800^{+1000}_{-1000} (+26.6 σ)	$f\sigma_8(0.15)$	0.4355	$0.434^{+0.016}_{-0.015}$ (−2.1 σ)
m_{DES}^3	0.0044	$0.004^{+0.040}_{-0.040}$	D_{810}	3072	2960^{+500}_{-500} (+30.6 σ)	$\sigma_8(0.15)$	0.699	$0.691^{+0.054}_{-0.054}$ (−1.0 σ)
m_{DES}^4	0.0081	$0.008^{+0.041}_{-0.041}$	D_{1420}	981	932^{+200}_{-200} (+23.0 σ)	$f\sigma_8(0.38)$	0.4526	$0.449^{+0.017}_{-0.018}$ (−1.7 σ)
$A_{\mathrm{IA,DES}}$	0.417	$0.42^{+0.35}_{-0.30}$	D_{2000}	278	266^{+50}_{-60} (+19.6 σ)	$\sigma_8(0.38)$	0.621	$0.613^{+0.051}_{-0.052}$ (−0.9 σ)
$\alpha_{\mathrm{IA,DES}}$	−2.11	< 3.46	$n_{\mathrm{s},0.002}$	0.9644	$0.963^{+0.039}_{-0.039}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4511	$0.447^{+0.020}_{-0.021}$ (−1.4 σ)
$\Delta z_{\mathrm{l,DES}}^1$	0.0034	$0.004^{+0.015}_{-0.015}$	Y_{P}	0.245334	$0.24532^{+0.00043}_{-0.00044}$ (+0.6 σ)	$\sigma_8(0.51)$	0.5811	$0.574^{+0.049}_{-0.050}$ (−0.8 σ)
$\Delta z_{\mathrm{l,DES}}^2$	0.0011	$0.001^{+0.013}_{-0.013}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246660	$0.24664^{+0.00043}_{-0.00044}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4464	$0.442^{+0.021}_{-0.023}$ (−1.2 σ)
$\Delta z_{\mathrm{l,DES}}^3$	0.0037	$0.004^{+0.013}_{-0.013}$	$10^5 \mathrm{D}/\mathrm{H}$	2.614	$2.62^{+0.20}_{-0.18}$ (−0.6 σ)	$\sigma_8(0.61)$	0.5532	$0.546^{+0.048}_{-0.049}$ (−0.8 σ)
$\Delta z_{\mathrm{l,DES}}^4$	0.0014	$0.001^{+0.018}_{-0.018}$	Age/Gyr	13.70	$13.58^{+0.81}_{-0.91}$ (−2.8 σ)	$f\sigma_8(2.33)$	0.2857	$0.282^{+0.021}_{-0.023}$ (−0.5 σ)
$\Delta z_{\mathrm{l,DES}}^5$	0.0000	$0.000^{+0.019}_{-0.019}$	z_*	1089.95	$1090.3^{+2.4}_{-2.2}$ (−0.2 σ)	$\sigma_8(2.33)$	0.2903	$0.286^{+0.025}_{-0.028}$ (−0.6 σ)
$\Delta z_{\mathrm{s,DES}}^1$	−0.0013	$−0.004^{+0.028}_{-0.028}$	r_*	145.2	$144.3^{+5.6}_{-6.1}$ (−0.1 σ)	$\chi_{\mathrm{lensing}}^2$	8.22	9.7 (ν : 1.6)
$\Delta z_{\mathrm{s,DES}}^2$	−0.0289	$−0.030^{+0.021}_{-0.021}$	$100\theta_*$	1.0539	$1.060^{+0.042}_{-0.038}$ (+39.8 σ)	$\chi_{6\mathrm{DF}}^2$	0.002	0.070 (ν : 0.0)
$\Delta z_{\mathrm{s,DES}}^3$	0.0059	$0.006^{+0.019}_{-0.019}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.78	$13.6^{+1.0}_{-1.1}$ (−5.2 σ)	χ_{MGS}^2	1.61	1.64 (ν : 0.3)
$\Delta z_{\mathrm{s,DES}}^4$	−0.0242	$−0.024^{+0.037}_{-0.036}$	z_{drag}	1059.44	$1059.7^{+3.0}_{-3.0}$ (+0.9 σ)	$\chi_{\mathrm{DR12BAO}}^2$	2.79	3.7 (ν : 1.0)
H_0	67.69	$68.0^{+2.5}_{-2.3}$ (+1.1 σ)	r_{drag}	148.0	$147.0^{+5.8}_{-6.4}$ (−0.2 σ)	χ_{DES}^2	501.9	512.2 (ν : 10.3)
Ω_{Λ}	0.6826	$0.676^{+0.044}_{-0.047}$ (+0.4 σ)	k_{D}	0.1400	$0.1410^{+0.0073}_{-0.0066}$ (+0.9 σ)	χ_{prior}^2	1.2	14.3 (ν : 13.7) (+1.9 σ)
Ω_{m}	0.3174	$0.324^{+0.047}_{-0.044}$ (−0.4 σ)	$100\theta_{\mathrm{D}}$	0.1629	$0.1636^{+0.0055}_{-0.0051}$ (+9.3 σ)	χ_{BAO}^2	4.40	5.4 (ν : 1.6)
$\Omega_{\mathrm{m}}h^2$	0.1454	$0.150^{+0.029}_{-0.026}$ (+1.6 σ)	z_{eq}	3314	3395^{+500}_{-500} (−0.5 σ)			
$\Omega_{\nu}h^2$	0.0067	< 0.0157 (+3.2 σ)	k_{eq}	0.01012	$0.0104^{+0.0016}_{-0.0014}$ (−0.4 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 515.71$; $\Delta\chi_{\mathrm{eff}}^2 = -2.18$; $\bar{\chi}_{\mathrm{eff}}^2 = 541.63$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.01$; $R - 1 = 0.00588$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.02) MGS: 1.61 (Δ -0.51) DR12BAO: 2.79 (Δ -1.46) CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8_CMBmarged: 8.22 (Δ 0.49) WL
- DES_1YR_final: 501.86 (Δ -0.78)

6.138 base_mnu_DESlens_lenspriors_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02222	$0.02222^{+0.00098}_{-0.00097}$ (+0.7 σ)	$r_{\text{drag}} h$	99.73	$99.5^{+2.7}_{-2.9}$ (+0.9 σ)	$H(0.15)$	73.71	$74.2^{+3.6}_{-3.3}$ (+1.6 σ)
$\Omega_c h^2$	0.1227	$0.127^{+0.027}_{-0.024}$ (+2.5 σ)	$\langle d^2 \rangle^{1/2}$	2.529	$2.527^{+0.094}_{-0.094}$ (+2.1 σ)	$D_M(0.15)$	635.1	631^{+26}_{-27} (-1.4 σ)
$100\theta_{\text{MC}}$	1.0604	$1.067^{+0.048}_{-0.044}$ (+52.0 σ)	z_{re}	7.94	$8.04^{+0.66}_{-0.59}$ (+0.7 σ)	$H(0.38)$	84.3	$85.1^{+5.4}_{-4.8}$ (+2.5 σ)
Σm_ν [eV]	0.61	< 1.71 (+3.4 σ)	$10^9 A_s$	2.373	$2.34^{+0.39}_{-0.35}$ (+7.4 σ)	$D_M(0.38)$	1511	1501^{+70}_{-75} (-1.6 σ)
$\ln(10^{10} A_s)$	3.167	$3.15^{+0.16}_{-0.16}$ (+6.8 σ)	$10^9 A_s e^{-2\tau}$	2.126	$2.10^{+0.35}_{-0.31}$ (+15.4 σ)	$H(0.51)$	91.4	$92.3^{+6.5}_{-5.8}$ (+3.3 σ)
n_s	0.9617	$0.961^{+0.039}_{-0.040}$ (+0.0 σ)	D_{40}	1390	1361^{+200}_{-200} (+8.4 σ)	$D_M(0.51)$	1956	1941^{+96}_{-100} (-1.7 σ)
m_{DES}^1	0.0140	$0.013^{+0.045}_{-0.045}$	D_{220}	6422	6266^{+1000}_{-1000} (+13.6 σ)	$H(0.61)$	97.2	$98.3^{+7.5}_{-6.6}$ (+4.1 σ)
m_{DES}^2	0.0131	$0.012^{+0.043}_{-0.044}$	D_{810}	2845	2747^{+600}_{-600} (+15.2 σ)	$D_M(0.61)$	2274	2256^{+120}_{-130} (-1.9 σ)
m_{DES}^3	-0.0034	$-0.005^{+0.041}_{-0.041}$	D_{1420}	905	857^{+200}_{-300} (+8.4 σ)	$H(2.33)$	243.1	247^{+27}_{-23} (+4.9 σ)
m_{DES}^4	0.0148	$0.013^{+0.041}_{-0.042}$	D_{2000}	258	245^{+60}_{-70} (+8.7 σ)	$D_M(2.33)$	5644	5586^{+400}_{-430} (-4.5 σ)
$A_{\text{IA,DES}}$	1.32	$1.06^{+1.0}_{-0.96}$	$n_{\text{s},0.002}$	0.9617	$0.961^{+0.039}_{-0.040}$ (+0.0 σ)	$f\sigma_8(0.15)$	0.4452	$0.442^{+0.019}_{-0.019}$ (-1.4 σ)
$\alpha_{\text{IA,DES}}$	2.60	> -2.57	Y_{P}	0.245335	$0.24532^{+0.00042}_{-0.00042}$ (+0.6 σ)	$\sigma_8(0.15)$	0.706	$0.696^{+0.060}_{-0.062}$ (-0.8 σ)
$\Delta z_{\text{s,DES}}^1$	0.0039	$0.003^{+0.028}_{-0.029}$	$Y_{\text{P}}^{\text{BBN}}$	0.246662	$0.24665^{+0.00042}_{-0.00043}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.4605	$0.456^{+0.021}_{-0.023}$ (-1.2 σ)
$\Delta z_{\text{s,DES}}^2$	-0.0197	$-0.020^{+0.023}_{-0.023}$	10^5D/H	2.614	$2.62^{+0.19}_{-0.18}$ (-0.7 σ)	$\sigma_8(0.38)$	0.626	$0.616^{+0.057}_{-0.059}$ (-0.8 σ)
$\Delta z_{\text{s,DES}}^3$	0.0060	$0.006^{+0.020}_{-0.021}$	Age/Gyr	13.51	$13.37^{+0.96}_{-1.0}$ (-4.6 σ)	$f\sigma_8(0.51)$	0.4581	$0.453^{+0.024}_{-0.025}$ (-1.0 σ)
$\Delta z_{\text{s,DES}}^4$	-0.0197	$-0.020^{+0.039}_{-0.039}$	z_*	1090.48	$1090.9^{+3.0}_{-2.6}$ (+1.0 σ)	$\sigma_8(0.51)$	0.586	$0.576^{+0.054}_{-0.057}$ (-0.7 σ)
H_0	68.15	$68.5^{+2.7}_{-2.6}$ (+1.3 σ)	r_*	143.7	$142.6^{+6.6}_{-7.3}$ (-3.4 σ)	$f\sigma_8(0.61)$	0.4526	$0.447^{+0.025}_{-0.027}$ (-0.9 σ)
Ω_Λ	0.674	$0.666^{+0.051}_{-0.057}$ (+0.1 σ)	$100\theta_*$	1.0609	$1.068^{+0.048}_{-0.044}$ (+56.2 σ)	$\sigma_8(0.61)$	0.557	$0.548^{+0.053}_{-0.055}$ (-0.7 σ)
Ω_{m}	0.326	$0.334^{+0.057}_{-0.051}$ (-0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.54	$13.4^{+1.2}_{-1.3}$ (-10.6 σ)	$f\sigma_8(2.33)$	0.2870	$0.282^{+0.024}_{-0.027}$ (-0.4 σ)
$\Omega_{\text{m}} h^2$	0.1514	$0.157^{+0.037}_{-0.031}$ (+3.7 σ)	z_{drag}	1059.89	$1060.2^{+3.4}_{-3.2}$ (+2.0 σ)	$\sigma_8(2.33)$	0.2915	$0.286^{+0.029}_{-0.031}$ (-0.5 σ)
$\Omega_\nu h^2$	0.0065	< 0.0183 (+3.4 σ)	r_{drag}	146.3	$145.3^{+6.9}_{-7.5}$ (-3.7 σ)	χ_{lensing}^2	7.57	9.3 (ν : 1.5)
$\Omega_{\text{m}} h^3$	0.1032	$0.108^{+0.029}_{-0.024}$ (+10.1 σ)	k_{D}	0.1417	$0.1429^{+0.0088}_{-0.0079}$ (+4.6 σ)	$\chi_{6\text{DF}}^2$	0.014	0.09 (ν : 0.0)
σ_8	0.765	$0.755^{+0.062}_{-0.063}$ (-0.9 σ)	$100\theta_{\text{D}}$	0.1638	$0.1646^{+0.0063}_{-0.0059}$ (+13.0 σ)	χ_{MGS}^2	1.41	1.45 (ν : 0.3)
S_8	0.7977	$0.794^{+0.037}_{-0.037}$ (-1.6 σ)	z_{eq}	3463	3555^{+700}_{-600} (+2.7 σ)	χ_{DR12BAO}^2	2.58	3.5 (ν : 1.0)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4369	$0.435^{+0.020}_{-0.020}$ (-1.6 σ)	k_{eq}	0.01058	$0.0109^{+0.0020}_{-0.0018}$ (+2.8 σ)	χ_{DES}^2	229.15	232.7 (ν : 3.2)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5782	$0.573^{+0.031}_{-0.032}$ (-1.3 σ)	$100\theta_{\text{eq}}$	0.818	$0.812^{+0.064}_{-0.069}$ (+0.2 σ)	χ_{prior}^2	0.7	9.6 (ν : 9.1) (+0.6 σ)
$\sigma_8/h^{0.5}$	0.927	$0.912^{+0.081}_{-0.085}$ (-1.7 σ)	$100\theta_{\text{s,eq}}$	0.4527	$0.449^{+0.033}_{-0.035}$ (+0.3 σ)	χ_{BAO}^2	4.00	5.1 (ν : 1.5)

Best-fit $\chi_{\text{eff}}^2 = 241.37$; $\Delta\chi_{\text{eff}}^2 = -1.37$; $\bar{\chi}_{\text{eff}}^2 = 256.69$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.42$; $R - 1 = 0.00980$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ 0.01) MGS: 1.41 (Δ -0.48) DR12BAO: 2.58 (Δ -1.13) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.57 (Δ -0.14) WL
- DES_1YR_final: 229.15 (Δ 0.20)

6.139 base_mnu_DES_DESpriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.258	$0.281^{+0.072}_{-0.063} \quad (-1.8\sigma)$	m_{DES}^3	0.0072	$0.009^{+0.041}_{-0.041}$	$\Omega_{\text{b}}h^2$	0.0540	$0.029^{+0.021}_{-0.018} \quad (+30.5\sigma)$
Ω_b	0.0654	—	m_{DES}^4	0.0099	$0.011^{+0.042}_{-0.042}$	$\Omega_{\text{c}}h^2$	0.1490	$0.121^{+0.043}_{-0.041} \quad (+0.0\sigma)$
H_0	90.8	—	$A_{\text{IA,DES}}$	0.506	$0.46^{+0.40}_{-0.34}$	Ω_{Λ}	0.742	$0.719^{+0.063}_{-0.072} \quad (+1.8\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.877	—	$\alpha_{\text{IA,DES}}$	-1.3	—	$\Omega_{\nu}h^2$	0.00943	$0.0057^{+0.0047}_{-0.0049} \quad (+2.0\sigma)$
$10^9 A_{\text{s}}$	2.88	$2.8^{+1.2}_{-1.0} \quad (+21.4\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0039	$0.004^{+0.014}_{-0.015}$	$\ln(10^{10} A_{\text{s}})$	3.362	$3.32^{+0.40}_{-0.40} \quad (+17.1\sigma)$
n_{s}	1.069	—	$\Delta z_{\text{l,DES}}^2$	0.0019	$0.002^{+0.013}_{-0.013}$	σ_8	0.863	$0.81^{+0.13}_{-0.13} \quad (+0.6\sigma)$
b_{DES}^1	1.388	$1.46^{+0.29}_{-0.27}$	$\Delta z_{\text{l,DES}}^3$	0.0046	$0.004^{+0.013}_{-0.013}$	S_8	0.8001	$0.780^{+0.047}_{-0.048} \quad (-2.2\sigma)$
b_{DES}^2	1.591	$1.67^{+0.30}_{-0.27}$	$\Delta z_{\text{l,DES}}^4$	0.0029	$0.002^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4382	$0.427^{+0.026}_{-0.026} \quad (-2.2\sigma)$
b_{DES}^3	1.580	$1.66^{+0.28}_{-0.26}$	$\Delta z_{\text{l,DES}}^5$	0.0010	$0.001^{+0.019}_{-0.019}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.615	$0.589^{+0.060}_{-0.062} \quad (-0.6\sigma)$
b_{DES}^4	1.907	$2.00^{+0.34}_{-0.32}$	$\Delta z_{\text{s,DES}}^1$	-0.0013	$-0.004^{+0.027}_{-0.028}$	χ_{DES}^2	498.2	$511.6 \quad (\nu: 12.4)$
b_{DES}^5	1.969	$2.06^{+0.37}_{-0.34}$	$\Delta z_{\text{s,DES}}^2$	-0.0292	$-0.030^{+0.021}_{-0.021}$	χ_{prior}^2	1.3	$12.2 \quad (\nu: 11.6) \quad (+1.3\sigma)$
m_{DES}^1	0.0133	$0.012^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^3$	0.0064	$0.007^{+0.019}_{-0.019}$			
m_{DES}^2	0.0148	$0.014^{+0.043}_{-0.043}$	$\Delta z_{\text{s,DES}}^4$	-0.0261	$-0.023^{+0.037}_{-0.036}$			

Best-fit $\chi_{\text{eff}}^2 = 499.47$; $\Delta\chi_{\text{eff}}^2 = -0.45$; $\bar{\chi}_{\text{eff}}^2 = 523.87$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.12$; $R - 1 = 0.00686$
 χ_{eff}^2 : WL - DES_1YR_final: 498.18 (Δ -0.46)

6.140 base_mnu_DESlens_DESpriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.255	$0.31^{+0.15}_{-0.12} \quad (-1.0\sigma)$	m_{DES}^4	0.0174	$0.017^{+0.042}_{-0.042}$	Ω_{Λ}	0.745	$0.69^{+0.12}_{-0.15} \quad (+1.0\sigma)$
Ω_b	0.0374	—	$A_{\text{IA,DES}}$	1.36	$0.8^{+1.6}_{-1.4}$	$\Omega_{\nu}h^2$	0.00144	$0.0054^{+0.0049}_{-0.0046} \quad (+1.8\sigma)$
H_0	73.6	—	$\alpha_{\text{IA,DES}}$	3.51	> -2.80	$\ln(10^{10} A_{\text{s}})$	3.20	$3.11^{+0.79}_{-0.89} \quad (+4.2\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.134	—	$\Delta z_{\text{s,DES}}^1$	0.0029	$0.002^{+0.029}_{-0.030}$	σ_8	0.878	$0.79^{+0.20}_{-0.20} \quad (+0.0\sigma)$
$10^9 A_{\text{s}}$	2.44	$2.5^{+2.1}_{-1.8} \quad (+11.1\sigma)$	$\Delta z_{\text{s,DES}}^2$	-0.0192	$-0.020^{+0.023}_{-0.023}$	S_8	0.810	$0.780^{+0.064}_{-0.062} \quad (-2.2\sigma)$
n_{s}	0.969	—	$\Delta z_{\text{s,DES}}^3$	0.0079	$0.008^{+0.021}_{-0.021}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4436	$0.427^{+0.035}_{-0.034} \quad (-2.2\sigma)$
m_{DES}^1	0.0149	$0.013^{+0.044}_{-0.044}$	$\Delta z_{\text{s,DES}}^4$	-0.0167	$-0.016^{+0.040}_{-0.041}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.624	$0.580^{+0.085}_{-0.095} \quad (-1.0\sigma)$
m_{DES}^2	0.0139	$0.013^{+0.044}_{-0.043}$	$\Omega_{\text{b}}h^2$	0.0203	$0.027^{+0.020}_{-0.016} \quad (+20.1\sigma)$	χ_{DES}^2	228.7	$233.4 \quad (\nu: 3.8)$
m_{DES}^3	0.0021	$0.003^{+0.042}_{-0.042}$	$\Omega_{\text{c}}h^2$	0.117	$0.133^{+0.069}_{-0.057} \quad (+5.2\sigma)$	χ_{prior}^2	0.3	$7.5 \quad (\nu: 7.0) \quad (+0.0\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 229.04$; $\Delta\chi_{\text{eff}}^2 = 0.00$; $\bar{\chi}_{\text{eff}}^2 = 240.82$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.09$; $R - 1 = 0.00860$
 χ_{eff}^2 : WL - DES_1YR_final: 228.71 (Δ -0.04)

6.141 base_mnu_DESwT_DESpriors

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.312	$0.315^{+0.096}_{-0.085} \quad (-0.7\sigma)$	m_{DES}^3	0.0194	$0.022^{+0.042}_{-0.042}$	$\Omega_{\text{b}}h^2$	0.0380	$0.025^{+0.021}_{-0.016} \quad (+13.9\sigma)$
Ω_b	0.0580	—	m_{DES}^4	0.0059	$0.008^{+0.043}_{-0.043}$	$\Omega_{\text{c}}h^2$	0.1563	$0.117^{+0.044}_{-0.037} \quad (-2.0\sigma)$
H_0	80.9	—	$A_{\text{IA,DES}}$	0.323	$0.39^{+0.37}_{-0.32}$	Ω_{Λ}	0.688	$0.685^{+0.085}_{-0.096} \quad (+0.7\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.936	—	$\alpha_{\text{IA,DES}}$	-3.5	—	$\Omega_{\nu}h^2$	0.01007	$0.0065^{+0.0042}_{-0.0051} \quad (+2.4\sigma)$
$10^9 A_{\text{s}}$	2.23	$2.7^{+1.3}_{-1.1} \quad (+18.1\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0024	$0.003^{+0.015}_{-0.015}$	$\ln(10^{10} A_{\text{s}})$	3.106	$3.27^{+0.44}_{-0.42} \quad (+14.4\sigma)$
n_{s}	0.898	—	$\Delta z_{\text{l,DES}}^2$	0.0017	$0.002^{+0.013}_{-0.013}$	σ_8	0.766	$0.76^{+0.15}_{-0.14} \quad (-0.8\sigma)$
b_{DES}^1	1.495	$1.53^{+0.34}_{-0.32}$	$\Delta z_{\text{l,DES}}^3$	0.0050	$0.005^{+0.013}_{-0.013}$	S_8	0.781	$0.771^{+0.070}_{-0.068} \quad (-2.5\sigma)$
b_{DES}^2	1.739	$1.78^{+0.38}_{-0.33}$	$\Delta z_{\text{l,DES}}^4$	0.0036	$0.003^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4279	$0.423^{+0.038}_{-0.037} \quad (-2.5\sigma)$
b_{DES}^3	1.720	$1.76^{+0.36}_{-0.31}$	$\Delta z_{\text{l,DES}}^5$	0.0008	$0.000^{+0.019}_{-0.019}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.572	$0.566^{+0.078}_{-0.071} \quad (-1.7\sigma)$
b_{DES}^4	2.073	$2.12^{+0.44}_{-0.38}$	$\Delta z_{\text{s,DES}}^1$	0.0005	$-0.004^{+0.028}_{-0.029}$	χ_{DES}^2	249.3	$260.8 \quad (\nu: 11.8)$
b_{DES}^5	2.127	$2.17^{+0.46}_{-0.40}$	$\Delta z_{\text{s,DES}}^2$	-0.0305	$-0.031^{+0.022}_{-0.022}$	χ_{prior}^2	1.5	$13.0 \quad (\nu: 12.6) \quad (+1.5\sigma)$
m_{DES}^1	0.0127	$0.011^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^3$	0.0067	$0.008^{+0.020}_{-0.019}$			
m_{DES}^2	0.0096	$0.009^{+0.044}_{-0.045}$	$\Delta z_{\text{s,DES}}^4$	-0.0244	$-0.022^{+0.038}_{-0.038}$			

Best-fit $\chi_{\text{eff}}^2 = 250.75$; $\Delta\chi_{\text{eff}}^2 = -0.43$; $\bar{\chi}_{\text{eff}}^2 = 273.76$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.49$; $R - 1 = 0.00693$
 χ_{eff}^2 : WL - DES_1YR_final: 249.28 (Δ -0.33)

6.142 base_mnu_DES_DESpriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.2777	$0.284_{-0.045}^{+0.049}$ (-1.7σ)	m_{DES}^3	0.0114	$0.011_{-0.040}^{+0.041}$	$\Omega_{\text{b}}h^2$	0.0440	$0.030_{-0.019}^{+0.020}$ ($+33.9\sigma$)
Ω_b	0.0621	—	m_{DES}^4	0.0128	$0.013_{-0.041}^{+0.041}$	$\Omega_{\text{c}}h^2$	0.1422	$0.126_{-0.043}^{+0.044}$ ($+2.1\sigma$)
H_0	84.2	—	$A_{\text{IA,DES}}$	0.471	$0.45_{-0.34}^{+0.38}$	Ω_{Λ}	0.7223	$0.716_{-0.049}^{+0.045}$ ($+1.7\sigma$)
Σm_{ν} [eV]	0.999	—	$\alpha_{\text{IA,DES}}$	-1.2	—	$\Omega_{\nu}h^2$	0.01074	$0.0061_{-0.0049}^{+0.0045}$ ($+2.2\sigma$)
$10^9 A_{\text{s}}$	2.68	$2.60_{-0.74}^{+0.79}$ ($+15.0\sigma$)	$\Delta z_{\text{l,DES}}^1$	0.0038	$0.004_{-0.015}^{+0.015}$	$\ln(10^{10} A_{\text{s}})$	3.288	$3.24_{-0.30}^{+0.30}$ ($+12.7\sigma$)
n_{s}	1.070	—	$\Delta z_{\text{l,DES}}^2$	0.0018	$0.002_{-0.013}^{+0.013}$	σ_8	0.812	$0.798_{-0.068}^{+0.066}$ ($+0.2\sigma$)
b_{DES}^1	1.479	$1.49_{-0.19}^{+0.19}$	$\Delta z_{\text{l,DES}}^3$	0.0040	$0.004_{-0.013}^{+0.013}$	S_8	0.7811	$0.774_{-0.030}^{+0.030}$ (-2.4σ)
b_{DES}^2	1.693	$1.70_{-0.16}^{+0.17}$	$\Delta z_{\text{l,DES}}^4$	0.0021	$0.002_{-0.018}^{+0.018}$	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4278	$0.424_{-0.016}^{+0.017}$ (-2.4σ)
b_{DES}^3	1.681	$1.69_{-0.14}^{+0.15}$	$\Delta z_{\text{l,DES}}^5$	0.0004	$0.000_{-0.020}^{+0.019}$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5894	$0.582_{-0.029}^{+0.029}$ (-0.9σ)
b_{DES}^4	2.029	$2.04_{-0.17}^{+0.18}$	$\Delta z_{\text{s,DES}}^1$	-0.0016	$-0.004_{-0.028}^{+0.027}$	χ_{lensing}^2	7.44	9.0 (ν : 1.2)
b_{DES}^5	2.105	$2.11_{-0.19}^{+0.20}$	$\Delta z_{\text{s,DES}}^2$	-0.0288	$-0.029_{-0.021}^{+0.021}$	χ_{DES}^2	499.5	511.3 (ν : 10.2)
m_{DES}^1	0.0140	$0.012_{-0.045}^{+0.045}$	$\Delta z_{\text{s,DES}}^3$	0.0077	$0.008_{-0.019}^{+0.019}$	χ_{prior}^2	0.98	12.0 (ν : 11.2) ($+1.3\sigma$)
m_{DES}^2	0.0155	$0.014_{-0.043}^{+0.043}$	$\Delta z_{\text{s,DES}}^4$	-0.0223	$-0.022_{-0.036}^{+0.036}$			

Best-fit $\chi_{\text{eff}}^2 = 507.92$; $\Delta\chi_{\text{eff}}^2 = -2.08$; $\bar{\chi}_{\text{eff}}^2 = 532.21$; $\Delta\bar{\chi}_{\text{eff}}^2 = -1.19$; $R - 1 = 0.00935$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8.CMBmargd: 7.44 (Δ -0.32) WL - DES_1YR_final: 499.50 (Δ -1.75)

6.143 base_mnu_DESlens_DESpriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.291	$0.289_{-0.060}^{+0.066}$ (-1.5σ)	$A_{\text{IA,DES}}$	1.30	$0.8_{-1.3}^{+1.4}$	$\ln(10^{10} A_{\text{s}})$	3.381	$3.20_{-0.31}^{+0.31}$ ($+9.9\sigma$)
Ω_b	0.0565	—	$\alpha_{\text{IA,DES}}$	3.15	> -2.86	σ_8	0.809	$0.803_{-0.074}^{+0.077}$ ($+0.4\sigma$)
H_0	71.1	—	$\Delta z_{\text{s,DES}}^1$	0.0027	$0.002_{-0.029}^{+0.028}$	S_8	0.7963	$0.786_{-0.044}^{+0.044}$ (-1.9σ)
Σm_{ν} [eV]	0.575	—	$\Delta z_{\text{s,DES}}^2$	-0.0196	$-0.020_{-0.023}^{+0.023}$	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4362	$0.430_{-0.024}^{+0.024}$ (-1.9σ)
$10^9 A_{\text{s}}$	2.94	$2.49_{-0.73}^{+0.82}$ ($+11.7\sigma$)	$\Delta z_{\text{s,DES}}^3$	0.0082	$0.008_{-0.020}^{+0.021}$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.5939	$0.588_{-0.033}^{+0.033}$ (-0.6σ)
n_{s}	1.069	—	$\Delta z_{\text{s,DES}}^4$	-0.0165	$-0.016_{-0.041}^{+0.040}$	χ_{lensing}^2	7.09	9.1 (ν : 1.3)
m_{DES}^1	0.0147	$0.014_{-0.045}^{+0.045}$	$\Omega_{\text{b}}h^2$	0.0286	$0.028_{-0.017}^{+0.020}$ ($+23.3\sigma$)	χ_{DES}^2	228.81	232.4 (ν : 2.9)
m_{DES}^2	0.0137	$0.013_{-0.044}^{+0.044}$	$\Omega_{\text{c}}h^2$	0.1124	$0.127_{-0.044}^{+0.046}$ ($+2.5\sigma$)	χ_{prior}^2	0.4	7.4 (ν : 6.8) ($+0.0\sigma$)
m_{DES}^3	0.0018	$0.003_{-0.042}^{+0.042}$	Ω_{Λ}	0.709	$0.711_{-0.066}^{+0.060}$ ($+1.5\sigma$)			
m_{DES}^4	0.0181	$0.017_{-0.042}^{+0.042}$	$\Omega_{\nu}h^2$	0.00618	$0.0054_{-0.0046}^{+0.0049}$ ($+1.8\sigma$)			

Best-fit $\chi_{\text{eff}}^2 = 236.25$; $\Delta\chi_{\text{eff}}^2 = -0.37$; $\bar{\chi}_{\text{eff}}^2 = 248.87$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.37$; $R - 1 = 0.00676$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8.CMBmargd: 7.09 (Δ -0.28) WL - DES_1YR_final: 228.81 (Δ -0.08)

6.144 base_mnu_DESw_t_DESpriors_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.290	$0.301^{+0.073}_{-0.063} \quad (-1.2\sigma)$	m_{DES}^3	0.0216	$0.022^{+0.042}_{-0.041}$	$\Omega_{\text{b}} h^2$	0.0352	$0.027^{+0.021}_{-0.017} \quad (+21.9\sigma)$
Ω_{b}	0.0578	—	m_{DES}^4	0.0075	$0.007^{+0.043}_{-0.042}$	$\Omega_{\text{c}} h^2$	0.1311	$0.122^{+0.044}_{-0.040} \quad (+0.3\sigma)$
H_0	78.1	—	$A_{\text{IA,DES}}$	0.382	$0.41^{+0.37}_{-0.33}$	Ω_{Λ}	0.710	$0.699^{+0.063}_{-0.073} \quad (+1.2\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.999	—	$\alpha_{\text{IA,DES}}$	-2.6	—	$\Omega_{\nu} h^2$	0.01074	$0.0062^{+0.0044}_{-0.0050} \quad (+2.2\sigma)$
$10^9 A_{\text{s}}$	2.78	$2.58^{+0.84}_{-0.72} \quad (+14.6\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0026	$0.003^{+0.015}_{-0.015}$	$\ln(10^{10} A_{\text{s}})$	3.324	$3.24^{+0.31}_{-0.29} \quad (+12.3\sigma)$
n_{s}	1.057	—	$\Delta z_{\text{l,DES}}^2$	0.0016	$0.002^{+0.013}_{-0.013}$	σ_8	0.792	$0.776^{+0.075}_{-0.077} \quad (-0.4\sigma)$
b_{DES}^1	1.478	$1.49^{+0.22}_{-0.20}$	$\Delta z_{\text{l,DES}}^3$	0.0045	$0.005^{+0.013}_{-0.013}$	S_8	0.7795	$0.774^{+0.038}_{-0.037} \quad (-2.4\sigma)$
b_{DES}^2	1.721	$1.74^{+0.20}_{-0.18}$	$\Delta z_{\text{l,DES}}^4$	0.0029	$0.003^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4270	$0.424^{+0.021}_{-0.021} \quad (-2.4\sigma)$
b_{DES}^3	1.712	$1.73^{+0.19}_{-0.17}$	$\Delta z_{\text{l,DES}}^5$	0.0005	$0.000^{+0.019}_{-0.019}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5816	$0.573^{+0.031}_{-0.031} \quad (-1.3\sigma)$
b_{DES}^4	2.066	$2.08^{+0.22}_{-0.19}$	$\Delta z_{\text{s,DES}}^1$	-0.0001	$-0.004^{+0.028}_{-0.029}$	χ_{lensing}^2	7.47	$9.4 \quad (\nu: 1.7)$
b_{DES}^5	2.135	$2.15^{+0.23}_{-0.22}$	$\Delta z_{\text{s,DES}}^2$	-0.0301	$-0.031^{+0.021}_{-0.021}$	χ_{DES}^2	250.0	$260.4 \quad (\nu: 10.5)$
m_{DES}^1	0.0120	$0.011^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^3$	0.0081	$0.008^{+0.019}_{-0.019}$	χ_{prior}^2	1.3	$12.8 \quad (\nu: 12.0) \quad (+1.5\sigma)$
m_{DES}^2	0.0103	$0.009^{+0.044}_{-0.044}$	$\Delta z_{\text{s,DES}}^4$	-0.0237	$-0.022^{+0.037}_{-0.036}$			

Best-fit $\chi_{\text{eff}}^2 = 258.84$; $\Delta\chi_{\text{eff}}^2 = -1.56$; $\bar{\chi}_{\text{eff}}^2 = 282.60$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.77$; $R - 1 = 0.00944$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.47 (Δ -0.40) WL - DES_1YR_final: 250.04 (Δ -1.20)

6.145 base_mnu_DES_DESpriors_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.3153	$0.315^{+0.040}_{-0.042} \quad (-0.7\sigma)$	m_{DES}^4	0.0098	$0.011^{+0.042}_{-0.042}$	Ω_{Λ}	0.6847	$0.685^{+0.042}_{-0.040} \quad (+0.7\sigma)$
Ω_{b}	0.04988	$0.0490^{+0.0036}_{-0.0037}$	$A_{\text{IA,DES}}$	0.423	$0.42^{+0.36}_{-0.32}$	$\Omega_{\nu} h^2$	0.01061	$0.0071^{+0.0037}_{-0.0050} \quad (+2.7\sigma)$
H_0	66.80	$67.4^{+2.6}_{-2.4} \quad (+0.8\sigma)$	$\alpha_{\text{IA,DES}}$	-1.9	—	$\ln(10^{10} A_{\text{s}})$	3.464	$3.26^{+0.37}_{-0.36} \quad (+13.5\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.987	$> 0.200 \quad (+2.7\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0037	$0.004^{+0.015}_{-0.015}$	σ_8	0.759	$0.751^{+0.075}_{-0.072} \quad (-1.0\sigma)$
$10^9 A_{\text{s}}$	3.19	$2.65^{+1.0}_{-0.91} \quad (+16.5\sigma)$	$\Delta z_{\text{l,DES}}^2$	0.0014	$0.001^{+0.013}_{-0.013}$	S_8	0.7777	$0.768^{+0.044}_{-0.043} \quad (-2.6\sigma)$
n_{s}	1.070	—	$\Delta z_{\text{l,DES}}^3$	0.0038	$0.004^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4260	$0.421^{+0.024}_{-0.024} \quad (-2.6\sigma)$
b_{DES}^1	1.578	$1.58^{+0.21}_{-0.21}$	$\Delta z_{\text{l,DES}}^4$	0.0016	$0.002^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5685	$0.562^{+0.042}_{-0.040} \quad (-1.9\sigma)$
b_{DES}^2	1.797	$1.80^{+0.20}_{-0.20}$	$\Delta z_{\text{l,DES}}^5$	0.0000	$0.000^{+0.019}_{-0.019}$	χ_{6DF}^2	0.002	$0.064 \quad (\nu: 0.0)$
b_{DES}^3	1.773	$1.78^{+0.20}_{-0.19}$	$\Delta z_{\text{s,DES}}^1$	-0.0018	$-0.004^{+0.028}_{-0.028}$	χ_{MGS}^2	1.61	$1.69 \quad (\nu: 0.3)$
b_{DES}^4	2.134	$2.14^{+0.24}_{-0.23}$	$\Delta z_{\text{s,DES}}^2$	-0.0289	$-0.030^{+0.021}_{-0.021}$	χ_{DR12BAO}^2	2.90	$4.0 \quad (\nu: 1.1)$
b_{DES}^5	2.198	$2.21^{+0.28}_{-0.27}$	$\Delta z_{\text{s,DES}}^3$	0.0064	$0.007^{+0.019}_{-0.019}$	χ_{DES}^2	500.5	$512.5 \quad (\nu: 11.7)$
m_{DES}^1	0.0133	$0.011^{+0.044}_{-0.044}$	$\Delta z_{\text{s,DES}}^4$	-0.0234	$-0.021^{+0.037}_{-0.036}$	χ_{prior}^2	1.1	$13.1 \quad (\nu: 12.3) \quad (+1.6\sigma)$
m_{DES}^2	0.0152	$0.014^{+0.043}_{-0.044}$	$\Omega_{\text{b}} h^2$	0.02226	$0.02220^{+0.00098}_{-0.00096} \quad (+0.6\sigma)$	χ_{BAO}^2	4.51	$5.7 \quad (\nu: 1.5)$
m_{DES}^3	0.0062	$0.008^{+0.041}_{-0.041}$	$\Omega_{\text{c}} h^2$	0.1078	$0.114^{+0.024}_{-0.021} \quad (-3.2\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 506.14$; $\Delta\chi_{\text{eff}}^2 = -3.36$; $\bar{\chi}_{\text{eff}}^2 = 531.37$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.40$; $R - 1 = 0.00865$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.61 (Δ -0.43) DR12BAO: 2.90 (Δ -0.93) WL - DES_1YR_final: 500.53 (Δ -1.92)

6.146 base_mnu_DESlens_DESpriors_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.354	$0.347^{+0.072}_{-0.069} \quad (+0.3\sigma)$	$\alpha_{\text{IA,DES}}$	2.62	> -2.67	S_8	0.786	$0.776^{+0.054}_{-0.053} \quad (-2.4\sigma)$
Ω_b	0.0459	$0.0462^{+0.0058}_{-0.0060}$	$\Delta z_{\text{s,DES}}^1$	0.0034	$0.002^{+0.029}_{-0.029}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4303	$0.425^{+0.029}_{-0.029} \quad (-2.4\sigma)$
H_0	69.53	$69.5^{+4.6}_{-4.3} \quad (+1.8\sigma)$	$\Delta z_{\text{s,DES}}^2$	-0.0207	$-0.020^{+0.023}_{-0.023}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.558	$0.554^{+0.050}_{-0.054} \quad (-2.3\sigma)$
Σm_ν [eV]	0.739	—	$\Delta z_{\text{s,DES}}^3$	0.0074	$0.008^{+0.021}_{-0.021}$	$\chi_{6\text{DF}}^2$	0.091	$0.17 \quad (\nu: 0.0)$
$10^9 A_{\text{s}}$	1.79	$1.9^{+1.5}_{-1.2} \quad (-6.7\sigma)$	$\Delta z_{\text{s,DES}}^4$	-0.0163	$-0.016^{+0.040}_{-0.040}$	χ_{MGS}^2	0.98	$1.19 \quad (\nu: 0.3)$
n_{s}	0.987	—	$\Omega_{\text{b}} h^2$	0.02220	$0.02221^{+0.00098}_{-0.00098} \quad (+0.6\sigma)$	χ_{DR12BAO}^2	2.12	$3.6 \quad (\nu: 1.2)$
m_{DES}^1	0.0138	$0.014^{+0.044}_{-0.044}$	$\Omega_{\text{c}} h^2$	0.141	$0.140^{+0.055}_{-0.049} \quad (+8.7\sigma)$	χ_{DES}^2	229.0	$233.2 \quad (\nu: 3.8)$
m_{DES}^2	0.0136	$0.013^{+0.044}_{-0.044}$	Ω_{Λ}	0.646	$0.653^{+0.069}_{-0.072} \quad (-0.3\sigma)$	χ_{prior}^2	0.5	$8.5 \quad (\nu: 8.1) \quad (+0.3\sigma)$
m_{DES}^3	0.0004	$0.001^{+0.042}_{-0.042}$	$\Omega_{\nu} h^2$	0.00795	$0.0061^{+0.0045}_{-0.0050} \quad (+2.1\sigma)$	χ_{BAO}^2	3.19	$4.9 \quad (\nu: 1.6)$
m_{DES}^4	0.0184	$0.018^{+0.043}_{-0.042}$	$\ln(10^{10} A_{\text{s}})$	2.88	$2.85^{+0.75}_{-0.76} \quad (-11.8\sigma)$			
$A_{\text{IA,DES}}$	1.29	$0.9^{+1.2}_{-1.1}$	σ_8	0.724	$0.724^{+0.096}_{-0.096} \quad (-1.7\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 232.61$; $\Delta\chi_{\text{eff}}^2 = -0.61$; $\bar{\chi}_{\text{eff}}^2 = 246.55$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.64$; $R - 1 = 0.00549$

χ_{eff}^2 : BAO - 6DF: 0.09 (Δ 0.03) MGS: 0.98 (Δ -0.11) DR12BAO: 2.12 (Δ -0.08) WL - DES_1YR_final: 228.96 (Δ -0.46)

6.147 base_mnu_DESwt_DESpriors_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.3535	$0.322^{+0.038}_{-0.042} \quad (-0.5\sigma)$	m_{DES}^4	0.0054	$0.007^{+0.043}_{-0.043}$	Ω_{Λ}	0.6465	$0.678^{+0.042}_{-0.038} \quad (+0.5\sigma)$
Ω_b	0.04657	$0.0486^{+0.0036}_{-0.0035}$	$A_{\text{IA,DES}}$	0.280	$0.38^{+0.35}_{-0.31}$	$\Omega_{\nu} h^2$	0.01074	$0.0076^{+0.0032}_{-0.0051} \quad (+2.9\sigma)$
H_0	69.06	$67.6^{+2.6}_{-2.4} \quad (+0.9\sigma)$	$\alpha_{\text{IA,DES}}$	-4.1	—	$\ln(10^{10} A_{\text{s}})$	3.097	$3.23^{+0.38}_{-0.38} \quad (+11.7\sigma)$
Σm_ν [eV]	0.999	$> 0.240 \quad (+2.9\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0026	$0.003^{+0.015}_{-0.015}$	σ_8	0.712	$0.742^{+0.091}_{-0.082} \quad (-1.3\sigma)$
$10^9 A_{\text{s}}$	2.21	$2.57^{+1.0}_{-0.91} \quad (+14.3\sigma)$	$\Delta z_{\text{l,DES}}^2$	0.0018	$0.002^{+0.013}_{-0.013}$	S_8	0.773	$0.768^{+0.068}_{-0.066} \quad (-2.7\sigma)$
n_{s}	0.878	—	$\Delta z_{\text{l,DES}}^3$	0.0046	$0.005^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4235	$0.420^{+0.037}_{-0.036} \quad (-2.7\sigma)$
b_{DES}^1	1.599	$1.55^{+0.24}_{-0.23}$	$\Delta z_{\text{l,DES}}^4$	0.0032	$0.003^{+0.018}_{-0.017}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.549	$0.559^{+0.055}_{-0.054} \quad (-2.1\sigma)$
b_{DES}^2	1.855	$1.80^{+0.24}_{-0.23}$	$\Delta z_{\text{l,DES}}^5$	0.0007	$0.000^{+0.019}_{-0.019}$	$\chi_{6\text{DF}}^2$	0.089	$0.08 \quad (\nu: 0.0)$
b_{DES}^3	1.830	$1.79^{+0.23}_{-0.21}$	$\Delta z_{\text{s,DES}}^1$	0.0014	$-0.004^{+0.028}_{-0.029}$	χ_{MGS}^2	0.98	$1.51 \quad (\nu: 0.2)$
b_{DES}^4	2.200	$2.15^{+0.28}_{-0.26}$	$\Delta z_{\text{s,DES}}^2$	-0.0304	$-0.031^{+0.022}_{-0.022}$	χ_{DR12BAO}^2	2.11	$3.8 \quad (\nu: 1.3)$
b_{DES}^5	2.253	$2.21^{+0.32}_{-0.29}$	$\Delta z_{\text{s,DES}}^3$	0.0070	$0.009^{+0.020}_{-0.019}$	χ_{DES}^2	249.7	$260.3 \quad (\nu: 11.5)$
m_{DES}^1	0.0127	$0.011^{+0.044}_{-0.045}$	$\Delta z_{\text{s,DES}}^4$	-0.0229	$-0.022^{+0.038}_{-0.037}$	χ_{prior}^2	1.4	$13.9 \quad (\nu: 13.7) \quad (+1.8\sigma)$
m_{DES}^2	0.0094	$0.009^{+0.045}_{-0.045}$	$\Omega_{\text{b}} h^2$	0.02221	$0.02218^{+0.00099}_{-0.0010} \quad (+0.5\sigma)$	χ_{BAO}^2	3.19	$5.4 \quad (\nu: 1.5)$
m_{DES}^3	0.0188	$0.021^{+0.042}_{-0.042}$	$\Omega_{\text{c}} h^2$	0.1356	$0.117^{+0.023}_{-0.022} \quad (-1.6\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 254.22$; $\Delta\chi_{\text{eff}}^2 = -3.06$; $\bar{\chi}_{\text{eff}}^2 = 279.70$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.98$; $R - 1 = 0.00628$

χ_{eff}^2 : BAO - 6DF: 0.09 (Δ 0.09) MGS: 0.98 (Δ -0.84) DR12BAO: 2.12 (Δ -1.51) WL - DES_1YR_final: 249.66 (Δ -0.79)

6.148 base_mnu_DES_DESpriors_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.3165	$0.310^{+0.036}_{-0.035} \quad (-0.9\sigma)$	m_{DES}^4	0.0083	$0.0095^{+0.041}_{-0.041}$	Ω_{Λ}	0.6835	$0.690^{+0.035}_{-0.036} \quad (+0.9\sigma)$
Ω_b	0.04959	$0.0491^{+0.0033}_{-0.0034}$	$A_{\text{IA,DES}}$	0.421	$0.43^{+0.35}_{-0.31}$	$\Omega_{\nu} h^2$	0.01038	$0.0067^{+0.0041}_{-0.0048} \quad (+2.5\sigma)$
H_0	66.94	$67.3^{+2.4}_{-2.2} \quad (+0.7\sigma)$	$\alpha_{\text{IA,DES}}$	-2.11	< 3.44	$\ln(10^{10} A_{\text{s}})$	3.439	$3.29^{+0.22}_{-0.25} \quad (+15.7\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.965	—	$\Delta z_{\text{l,DES}}^1$	0.0037	$0.004^{+0.015}_{-0.015}$	σ_8	0.7621	$0.765^{+0.051}_{-0.045} \quad (-0.7\sigma)$
$10^9 A_{\text{s}}$	3.11	$2.72^{+0.60}_{-0.64} \quad (+18.5\sigma)$	$\Delta z_{\text{l,DES}}^2$	0.00099	$0.001^{+0.013}_{-0.013}$	S_8	0.7829	$0.777^{+0.029}_{-0.029} \quad (-2.3\sigma)$
n_{s}	1.070	—	$\Delta z_{\text{l,DES}}^3$	0.0038	$0.004^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4288	$0.425^{+0.016}_{-0.016} \quad (-2.3\sigma)$
b_{DES}^1	1.578	$1.56^{+0.17}_{-0.17}$	$\Delta z_{\text{l,DES}}^4$	0.0015	$0.002^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5717	$0.570^{+0.025}_{-0.024} \quad (-1.5\sigma)$
b_{DES}^2	1.793	$1.77^{+0.14}_{-0.14}$	$\Delta z_{\text{l,DES}}^5$	0.0002	$0.000^{+0.019}_{-0.019}$	χ_{lensing}^2	7.78	$9.2 \quad (\nu: 1.3)$
b_{DES}^3	1.773	$1.75^{+0.12}_{-0.13}$	$\Delta z_{\text{s,DES}}^1$	-0.0008	$-0.004^{+0.027}_{-0.028}$	$\chi_{6\text{DF}}^2$	0.002	$0.057 \quad (\nu: 0.0)$
b_{DES}^4	2.135	$2.11^{+0.14}_{-0.15}$	$\Delta z_{\text{s,DES}}^2$	-0.0293	$-0.030^{+0.021}_{-0.021}$	χ_{MGS}^2	1.61	$1.80 \quad (\nu: 0.2)$
b_{DES}^5	2.206	$2.18^{+0.18}_{-0.18}$	$\Delta z_{\text{s,DES}}^3$	0.0057	$0.007^{+0.019}_{-0.019}$	χ_{DR12BAO}^2	2.83	$4.1 \quad (\nu: 1.1)$
m_{DES}^1	0.0124	$0.011^{+0.044}_{-0.045}$	$\Delta z_{\text{s,DES}}^4$	-0.0242	$-0.023^{+0.036}_{-0.036}$	χ_{DES}^2	500.6	$511.3 \quad (\nu: 9.9)$
m_{DES}^2	0.0150	$0.014^{+0.043}_{-0.043}$	$\Omega_{\text{b}} h^2$	0.02222	$0.02220^{+0.00097}_{-0.00097} \quad (+0.6\sigma)$	χ_{prior}^2	1.3	$13.1 \quad (\nu: 12.1) \quad (+1.6\sigma)$
m_{DES}^3	0.0045	$0.006^{+0.039}_{-0.040}$	$\Omega_{\text{c}} h^2$	0.1093	$0.112^{+0.020}_{-0.018} \quad (-4.2\sigma)$	χ_{BAO}^2	4.44	$5.9 \quad (\nu: 1.5)$

Best-fit $\chi_{\text{eff}}^2 = 514.08$; $\Delta\chi_{\text{eff}}^2 = -3.79$; $\bar{\chi}_{\text{eff}}^2 = 539.54$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.41$; $R - 1 = 0.00724$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.61 (Δ -0.43) DR12BAO: 2.83 (Δ -1.11) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.78 (Δ -0.13)
WL - DES_1YR_final: 500.59 (Δ -2.31)

6.149 base_mnu_DESlens_DESpriors_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.3271	$0.318^{+0.039}_{-0.038} \quad (-0.6\sigma)$	$\alpha_{\text{IA,DES}}$	2.56	> -2.57	S_8	0.7998	$0.794^{+0.037}_{-0.038} \quad (-1.6\sigma)$
Ω_b	0.04896	$0.0484^{+0.0038}_{-0.0037}$	$\Delta z_{\text{s,DES}}^1$	0.0035	$0.003^{+0.028}_{-0.028}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4380	$0.435^{+0.020}_{-0.021} \quad (-1.6\sigma)$
H_0	67.33	$67.7^{+2.7}_{-2.5} \quad (+1.0\sigma)$	$\Delta z_{\text{s,DES}}^2$	-0.0199	$-0.020^{+0.023}_{-0.023}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5792	$0.579^{+0.029}_{-0.027} \quad (-1.0\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.991	—	$\Delta z_{\text{s,DES}}^3$	0.0062	$0.006^{+0.021}_{-0.021}$	χ_{lensing}^2	7.38	$9.0 \quad (\nu: 1.3)$
$10^9 A_{\text{s}}$	2.91	$2.51^{+0.66}_{-0.63} \quad (+12.4\sigma)$	$\Delta z_{\text{s,DES}}^4$	-0.0194	$-0.019^{+0.040}_{-0.039}$	$\chi_{6\text{DF}}^2$	0.020	$0.064 \quad (\nu: 0.0)$
n_{s}	1.063	—	$\Omega_{\text{b}} h^2$	0.02219	$0.0222^{+0.0010}_{-0.00097} \quad (+0.6\sigma)$	χ_{MGS}^2	1.34	$1.62 \quad (\nu: 0.2)$
m_{DES}^1	0.0146	$0.014^{+0.045}_{-0.044}$	$\Omega_{\text{c}} h^2$	0.1154	$0.118^{+0.023}_{-0.022} \quad (-1.4\sigma)$	χ_{DR12BAO}^2	2.61	$3.9 \quad (\nu: 1.3)$
m_{DES}^2	0.0130	$0.012^{+0.044}_{-0.044}$	Ω_{Λ}	0.6729	$0.682^{+0.038}_{-0.039} \quad (+0.6\sigma)$	χ_{DES}^2	228.99	$232.2 \quad (\nu: 2.8)$
m_{DES}^3	-0.0031	$-0.003^{+0.040}_{-0.040}$	$\Omega_{\nu} h^2$	0.01066	$0.0061^{+0.0045}_{-0.0049} \quad (+2.2\sigma)$	χ_{prior}^2	0.6	$8.5 \quad (\nu: 8.0) \quad (+0.3\sigma)$
m_{DES}^4	0.0148	$0.014^{+0.042}_{-0.041}$	$\ln(10^{10} A_{\text{s}})$	3.371	$3.21^{+0.25}_{-0.26} \quad (+10.7\sigma)$	χ_{BAO}^2	3.97	$5.6 \quad (\nu: 1.6)$
$A_{\text{IA,DES}}$	1.31	$1.04^{+1.1}_{-0.99}$	σ_8	0.766	$0.772^{+0.054}_{-0.048} \quad (-0.5\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 240.95$; $\Delta\chi_{\text{eff}}^2 = -1.39$; $\bar{\chi}_{\text{eff}}^2 = 255.26$; $\Delta\bar{\chi}_{\text{eff}}^2 = -1.28$; $R - 1 = 0.00788$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.02) MGS: 1.34 (Δ -0.33) DR12BAO: 2.61 (Δ -0.47) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.38 (Δ -0.41) WL
- DES_1YR_final: 228.99 (Δ -0.28)

6.150 base_mnu_DESw_t_DESpriors_lensing_BAO_CookeDH

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
Ω_{m}	0.3326	$0.320^{+0.037}_{-0.040} \quad (-0.6\sigma)$	m_{DES}^4	0.0050	$0.006^{+0.042}_{-0.043}$	Ω_{Λ}	0.6674	$0.680^{+0.040}_{-0.037} \quad (+0.6\sigma)$
Ω_b	0.04819	$0.0486^{+0.0034}_{-0.0034}$	$A_{\text{IA,DES}}$	0.310	$0.39^{+0.35}_{-0.30}$	$\Omega_{\nu} h^2$	0.01075	$0.0072^{+0.0036}_{-0.0053} \quad (+2.7\sigma)$
H_0	67.85	$67.6^{+2.4}_{-2.3} \quad (+0.9\sigma)$	$\alpha_{\text{IA,DES}}$	-3.7	—	$\ln(10^{10} A_{\text{s}})$	3.290	$3.24^{+0.24}_{-0.24} \quad (+12.5\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	0.999	$> 0.205 \quad (+2.7\sigma)$	$\Delta z_{\text{l,DES}}^1$	0.0023	$0.003^{+0.015}_{-0.015}$	σ_8	0.7443	$0.755^{+0.049}_{-0.047} \quad (-0.9\sigma)$
$10^9 A_{\text{s}}$	2.69	$2.58^{+0.65}_{-0.60} \quad (+14.5\sigma)$	$\Delta z_{\text{l,DES}}^2$	0.0016	$0.002^{+0.013}_{-0.013}$	S_8	0.7838	$0.778^{+0.036}_{-0.035} \quad (-2.3\sigma)$
n_{s}	1.003	—	$\Delta z_{\text{l,DES}}^3$	0.0046	$0.005^{+0.013}_{-0.013}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4293	$0.426^{+0.020}_{-0.019} \quad (-2.3\sigma)$
b_{DES}^1	1.564	$1.53^{+0.18}_{-0.18}$	$\Delta z_{\text{l,DES}}^4$	0.0029	$0.003^{+0.018}_{-0.018}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5653	$0.567^{+0.027}_{-0.025} \quad (-1.6\sigma)$
b_{DES}^2	1.814	$1.78^{+0.14}_{-0.14}$	$\Delta z_{\text{l,DES}}^5$	0.0004	$0.000^{+0.019}_{-0.019}$	χ_{lensing}^2	8.36	$9.6 \quad (\nu: 1.6)$
b_{DES}^3	1.797	$1.77^{+0.12}_{-0.13}$	$\Delta z_{\text{s,DES}}^1$	0.0009	$-0.004^{+0.028}_{-0.029}$	$\chi_{6\text{DF}}^2$	0.022	$0.066 \quad (\nu: 0.0)$
b_{DES}^4	2.163	$2.13^{+0.14}_{-0.15}$	$\Delta z_{\text{s,DES}}^2$	-0.0304	$-0.031^{+0.022}_{-0.022}$	χ_{MGS}^2	1.34	$1.58 \quad (\nu: 0.2)$
b_{DES}^5	2.232	$2.20^{+0.18}_{-0.18}$	$\Delta z_{\text{s,DES}}^3$	0.0064	$0.008^{+0.019}_{-0.019}$	χ_{DR12BAO}^2	2.39	$3.8 \quad (\nu: 1.1)$
m_{DES}^1	0.0128	$0.011^{+0.045}_{-0.045}$	$\Delta z_{\text{s,DES}}^4$	-0.0245	$-0.024^{+0.036}_{-0.036}$	χ_{DES}^2	250.1	$259.8 \quad (\nu: 10.3)$
m_{DES}^2	0.0095	$0.009^{+0.044}_{-0.044}$	$\Omega_{\text{b}} h^2$	0.02218	$0.02219^{+0.00099}_{-0.00098} \quad (+0.6\sigma)$	χ_{prior}^2	1.4	$13.8 \quad (\nu: 13.4) \quad (+1.8\sigma)$
m_{DES}^3	0.0190	$0.020^{+0.041}_{-0.041}$	$\Omega_{\text{c}} h^2$	0.1202	$0.117^{+0.022}_{-0.020} \quad (-1.9\sigma)$	χ_{BAO}^2	3.75	$5.4 \quad (\nu: 1.4)$

Best-fit $\chi_{\text{eff}}^2 = 263.60$; $\Delta\chi_{\text{eff}}^2 = -2.78$; $\bar{\chi}_{\text{eff}}^2 = 288.63$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.39$; $R - 1 = 0.00816$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.02) MGS: 1.34 (Δ -0.48) DR12BAO: 2.39 (Δ -0.84) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 8.36 (Δ -0.19) WL
- DES_1YR_final: 250.06 (Δ -1.36)

6.151 base_mnu_plikHM_TTTEEE_lowl_lowE_DES

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022543	$0.02251^{+0.00030}_{-0.00031}$ (+1.9 σ)	$\Delta z_{\text{l,DES}}^1$	0.0034	$0.004^{+0.015}_{-0.015}$	z_{drag}	1060.20	$1060.12^{+0.62}_{-0.60}$ (+1.8 σ)
$\Omega_c h^2$	0.11794	$0.1180^{+0.0023}_{-0.0022}$ (−1.4 σ)	$\Delta z_{\text{l,DES}}^2$	0.0006	$0.001^{+0.013}_{-0.013}$	r_{drag}	147.45	$147.47^{+0.51}_{-0.53}$ (+0.6 σ)
$100\theta_{\text{MC}}$	1.04114	$1.04110^{+0.00059}_{-0.00063}$ (+0.9 σ)	$\Delta z_{\text{l,DES}}^3$	0.0036	$0.003^{+0.013}_{-0.013}$	k_{D}	0.14061	$0.14058^{+0.00060}_{-0.00060}$ (+0.0 σ)
τ	0.0554	$0.055^{+0.016}_{-0.016}$ (+0.4 σ)	$\Delta z_{\text{l,DES}}^4$	0.0007	$0.001^{+0.018}_{-0.018}$	$100\theta_{\text{D}}$	0.160625	$0.16066^{+0.00035}_{-0.00034}$ (−1.7 σ)
Σm_ν [eV]	0.000	< 0.348 (−0.4 σ)	$\Delta z_{\text{l,DES}}^5$	−0.0007	$-0.001^{+0.019}_{-0.019}$	z_{eq}	3357.0	3357^{+51}_{-49} (−1.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.0423	$3.040^{+0.032}_{-0.032}$ (−0.0 σ)	$\Delta z_{\text{s,DES}}^1$	0.0000	$-0.004^{+0.028}_{-0.028}$	k_{eq}	0.010246	$0.01025^{+0.00016}_{-0.00015}$ (−1.3 σ)
n_{s}	0.9706	$0.9694^{+0.0082}_{-0.0084}$ (+1.3 σ)	$\Delta z_{\text{s,DES}}^2$	−0.0300	$-0.031^{+0.021}_{-0.021}$	$100\theta_{\text{eq}}$	0.8221	$0.8221^{+0.0095}_{-0.0096}$ (+1.4 σ)
y_{cal}	1.00057	$1.0005^{+0.0048}_{-0.0048}$ (+0.0 σ)	$\Delta z_{\text{s,DES}}^3$	0.0035	$0.004^{+0.019}_{-0.019}$	$100\theta_{\text{s,eq}}$	0.45383	$0.4539^{+0.0048}_{-0.0049}$ (+1.3 σ)
A_{217}^{CIB}	46.5	47^{+10}_{-10} (−0.2 σ)	$\Delta z_{\text{s,DES}}^4$	−0.0307	$-0.029^{+0.036}_{-0.035}$	$H(0.15)$	73.95	$73.1^{+1.7}_{-2.5}$ (+1.0 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.57	—	H_0	68.82	$67.9^{+2.0}_{-2.9}$ (+1.0 σ)	$D_{\text{M}}(0.15)$	631.0	639^{+25}_{-17} (−1.0 σ)
A_{143}^{tSZ}	7.16	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	Ω_{Λ}	0.7034	$0.692^{+0.024}_{-0.035}$ (+0.9 σ)	$H(0.38)$	83.81	$83.2^{+1.3}_{-2.0}$ (+1.0 σ)
A_{100}^{PS}	248	259^{+50}_{-50} (−0.2 σ)	Ω_{m}	0.2966	$0.308^{+0.035}_{-0.024}$ (−0.9 σ)	$D_{\text{M}}(0.38)$	1508.4	1525^{+51}_{-34} (−1.0 σ)
A_{143}^{PS}	48.3	45^{+20}_{-20} (−0.6 σ)	$\Omega_{\text{m}} h^2$	0.14048	$0.1416^{+0.0039}_{-0.0032}$ (−1.0 σ)	$H(0.51)$	90.39	$89.9^{+1.1}_{-1.6}$ (+1.0 σ)
$A_{143 \times 217}^{\text{PS}}$	50.1	41^{+20}_{-20} (−0.3 σ)	$\Omega_{\nu} h^2$	0.00000	< 0.00375 (−0.4 σ)	$D_{\text{M}}(0.51)$	1956	1976^{+60}_{-40} (−1.0 σ)
A_{217}^{PS}	120.0	114^{+20}_{-20} (−0.1 σ)	$\Omega_{\text{m}} h^3$	0.09668	$0.0961^{+0.0011}_{-0.0017}$ (+0.7 σ)	$H(0.61)$	95.90	$95.44^{+0.92}_{-1.4}$ (+1.0 σ)
A^{kSZ}	0.00	< 8.20 (−0.2 σ)	σ_8	0.8176	$0.795^{+0.034}_{-0.056}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2278	2300^{+66}_{-44} (−1.0 σ)
A_{100}^{dustTT}	8.82	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	S_8	0.8129	$0.804^{+0.026}_{-0.029}$ (−1.2 σ)	$H(2.33)$	235.07	$235.6^{+2.2}_{-1.9}$ (−1.0 σ)
A_{143}^{dustTT}	11.07	$11.0^{+3.5}_{-3.5}$ (+0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4453	$0.440^{+0.014}_{-0.016}$ (−1.2 σ)	$D_{\text{M}}(2.33)$	5736	5759^{+69}_{-44} (−1.0 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.0	$18.7^{+6.5}_{-6.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6034	$0.591^{+0.022}_{-0.029}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4503	$0.446^{+0.014}_{-0.015}$ (−1.1 σ)
A_{217}^{dustTT}	95.2	94^{+10}_{-10} (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9855	$0.964^{+0.036}_{-0.051}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7568	$0.735^{+0.032}_{-0.054}$ (+0.2 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.075}_{-0.075}$	$r_{\text{drag}} h$	101.48	$100.2^{+3.2}_{-4.4}$ (+1.0 σ)	$f\sigma_8(0.38)$	0.4720	$0.465^{+0.016}_{-0.019}$ (−0.6 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.058}_{-0.057}$	$\langle d^2 \rangle^{1/2}$	2.4189	$2.404^{+0.049}_{-0.048}$ (−1.2 σ)	$\sigma_8(0.38)$	0.6723	$0.652^{+0.029}_{-0.051}$ (+0.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_{re}	7.72	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4722	$0.464^{+0.016}_{-0.021}$ (−0.3 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	$10^9 A_{\text{s}}$	2.095	$2.090^{+0.068}_{-0.066}$ (−0.0 σ)	$\sigma_8(0.51)$	0.6298	$0.611^{+0.028}_{-0.048}$ (+0.3 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8754	$1.874^{+0.021}_{-0.021}$ (−0.9 σ)	$f\sigma_8(0.61)$	0.4684	$0.459^{+0.016}_{-0.023}$ (−0.2 σ)
A_{217}^{dustTE}	2.06	$2.06^{+0.53}_{-0.53}$	D_{40}	1220.0	1221^{+24}_{-23} (−0.9 σ)	$\sigma_8(0.61)$	0.5996	$0.581^{+0.027}_{-0.047}$ (+0.3 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{220}	5744	5745^{+76}_{-76} (+0.8 σ)	$f\sigma_8(2.33)$	0.3019	$0.294^{+0.013}_{-0.021}$ (+0.4 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{810}	2539.2	2537^{+26}_{-26} (−0.0 σ)	$\sigma_8(2.33)$	0.3124	$0.303^{+0.015}_{-0.025}$ (+0.4 σ)
b_{DES}^1	1.484	$1.53^{+0.18}_{-0.18}$	D_{1420}	819.2	$818.2^{+9.2}_{-9.1}$ (+0.7 σ)	f_{2000}^{143}	28.2	29^{+6}_{-5} (−0.8 σ)
b_{DES}^2	1.682	$1.73^{+0.16}_{-0.14}$	D_{2000}	231.80	$231.2^{+3.1}_{-3.1}$ (+1.0 σ)	$f_{2000}^{143 \times 217}$	31.49	32^{+4}_{-4} (−1.0 σ)
b_{DES}^3	1.671	$1.72^{+0.15}_{-0.13}$	$n_{\text{s},0.002}$	0.9706	$0.9694^{+0.0082}_{-0.0084}$ (+1.3 σ)	f_{2000}^{217}	106.03	$106.8^{+3.6}_{-3.5}$ (−0.9 σ)
b_{DES}^4	2.026	$2.08^{+0.17}_{-0.15}$	Y_{P}	0.245460	$0.24545^{+0.00011}_{-0.00012}$ (+1.7 σ)	χ_{simall}^2	396.08	397.0 (ν : 1.6) (+0.0 σ)
b_{DES}^5	2.130	$2.18^{+0.20}_{-0.19}$	$Y_{\text{P}}^{\text{BBN}}$	0.246786	$0.24677^{+0.00011}_{-0.00012}$ (+1.7 σ)	χ_{lowl}^2	22.51	22.56 (ν : 0.3) (−1.0 σ)
m_{DES}^1	0.0137	$0.012^{+0.045}_{-0.045}$	10^5D/H	2.554	$2.560^{+0.057}_{-0.053}$ (−1.9 σ)	χ_{plik}^2	2346.9	2364.5 (ν : 23.9) (+279.1 σ)
m_{DES}^2	0.0134	$0.013^{+0.044}_{-0.043}$	Age/Gyr	13.736	$13.79^{+0.16}_{-0.099}$ (−0.9 σ)	χ_{DES}^2	508.9	518.1 (ν : 11.9)
m_{DES}^3	−0.0026	$-0.002^{+0.039}_{-0.040}$	z_*	1089.52	$1089.57^{+0.56}_{-0.50}$ (−1.8 σ)	χ_{prior}^2	3.9	25 (ν : 23.3) (+4.7 σ)
m_{DES}^4	0.0017	$0.003^{+0.040}_{-0.040}$	r_*	144.84	$144.85^{+0.50}_{-0.53}$ (+0.9 σ)	χ_{CMB}^2	2765.5	2784.0 (ν : 23.5) (+273.8 σ)
$A_{\text{IA,DES}}$	0.454	$0.46^{+0.34}_{-0.31}$	$100\theta_*$	1.04129	$1.04129^{+0.00057}_{-0.00059}$ (+0.8 σ)			
$\alpha_{\text{IA,DES}}$	−2.29	< 3.04	$D_{\text{M}}(z_*)/\text{Gpc}$	13.9098	$13.910^{+0.047}_{-0.050}$ (+0.8 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3278.36$; $\Delta\chi_{\text{eff}}^2 = -1.33$; $\bar{\chi}_{\text{eff}}^2 = 3326.78$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.09$; $R - 1 = 0.00796$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.07 (Δ -0.00) commander_dx12_v3.2_29: 22.51 (Δ 0.02) plik_rd12_HM_v22b_TTTEEE: 2346.89 (Δ -1.11) WL - DES_1YR_final: 508.94 (Δ -0.21)

6.152 base_mnu_plikHM_TTTEEE_lowl_lowE_DES_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022502	$0.02252^{+0.00026}_{-0.00026}$ (+1.9 σ)	$\Delta z_{\text{l,DES}}^2$	0.0005	$0.001^{+0.013}_{-0.013}$	k_{D}	0.14065	$0.14058^{+0.00057}_{-0.00056}$ (+0.0 σ)
$\Omega_c h^2$	0.11837	$0.1180^{+0.0018}_{-0.0018}$ (−1.4 σ)	$\Delta z_{\text{l,DES}}^3$	0.0034	$0.003^{+0.013}_{-0.013}$	$100\theta_{\text{D}}$	0.160663	$0.16066^{+0.00033}_{-0.00033}$ (−1.7 σ)
$100\theta_{\text{MC}}$	1.04114	$1.04112^{+0.00055}_{-0.00056}$ (+0.9 σ)	$\Delta z_{\text{l,DES}}^4$	0.0009	$0.001^{+0.018}_{-0.018}$	z_{eq}	3366.3	3357^{+41}_{-41} (−1.2 σ)
τ	0.0538	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	$\Delta z_{\text{l,DES}}^5$	−0.0008	$−0.001^{+0.019}_{-0.019}$	k_{eq}	0.010274	$0.01025^{+0.00012}_{-0.00012}$ (−1.2 σ)
Σm_ν [eV]	0.000	< 0.178 (−0.6 σ)	$\Delta z_{\text{s,DES}}^1$	0.0009	$−0.003^{+0.028}_{-0.028}$	$100\theta_{\text{eq}}$	0.8202	$0.8220^{+0.0078}_{-0.0077}$ (+1.4 σ)
$\ln(10^{10} A_{\text{s}})$	3.0387	$3.039^{+0.032}_{-0.032}$ (−0.1 σ)	$\Delta z_{\text{s,DES}}^2$	−0.0303	$−0.031^{+0.021}_{-0.021}$	$100\theta_{\text{s,eq}}$	0.45291	$0.4538^{+0.0040}_{-0.0039}$ (+1.3 σ)
n_{s}	0.9691	$0.9694^{+0.0074}_{-0.0072}$ (+1.3 σ)	$\Delta z_{\text{s,DES}}^3$	0.0025	$0.004^{+0.019}_{-0.019}$	$H(0.15)$	73.78	$73.43^{+0.92}_{-1.0}$ (+1.2 σ)
y_{cal}	0.99999	$1.0005^{+0.0048}_{-0.0049}$ (−0.0 σ)	$\Delta z_{\text{s,DES}}^4$	−0.0314	$−0.030^{+0.035}_{-0.035}$	$D_{\text{M}}(0.15)$	632.6	$636.0^{+9.8}_{-8.8}$ (−1.1 σ)
A_{217}^{CIB}	47.7	47^{+10}_{-10} (−0.2 σ)	H_0	68.62	$68.2^{+1.0}_{-1.1}$ (+1.2 σ)	$H(0.38)$	83.69	$83.40^{+0.71}_{-0.80}$ (+1.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.40	—	Ω_{Λ}	0.7009	$0.697^{+0.013}_{-0.014}$ (+1.1 σ)	$D_{\text{M}}(0.38)$	1511.7	1519^{+20}_{-18} (−1.1 σ)
A_{143}^{tSZ}	7.34	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	Ω_{m}	0.2991	$0.303^{+0.014}_{-0.013}$ (−1.1 σ)	$H(0.51)$	90.29	$90.04^{+0.60}_{-0.68}$ (+1.2 σ)
A_{100}^{PS}	250	259^{+60}_{-50} (−0.2 σ)	$\Omega_{\text{m}} h^2$	0.14087	$0.1412^{+0.0018}_{-0.0018}$ (−1.1 σ)	$D_{\text{M}}(0.51)$	1960.2	1969^{+24}_{-21} (−1.1 σ)
A_{143}^{PS}	46.2	45^{+20}_{-20} (−0.6 σ)	$\Omega_{\nu} h^2$	0.00000	< 0.00192 (−0.6 σ)	$H(0.61)$	95.82	$95.60^{+0.51}_{-0.59}$ (+1.2 σ)
$A_{143 \times 217}^{\text{PS}}$	46.2	41^{+20}_{-20} (−0.3 σ)	$\Omega_{\text{m}} h^3$	0.09667	$0.09636^{+0.00080}_{-0.00089}$ (+0.9 σ)	$D_{\text{M}}(0.61)$	2282.6	2292^{+26}_{-23} (−1.2 σ)
A_{217}^{PS}	118.3	114^{+20}_{-20} (−0.1 σ)	σ_8	0.8173	$0.802^{+0.024}_{-0.029}$ (+0.4 σ)	$H(2.33)$	235.31	$235.4^{+1.1}_{-1.1}$ (−1.1 σ)
A^{kSZ}	0.00	< 8.19 (−0.2 σ)	S_8	0.8161	$0.807^{+0.024}_{-0.025}$ (−1.1 σ)	$D_{\text{M}}(2.33)$	5738.8	5750^{+29}_{-25} (−1.1 σ)
A_{100}^{dustTT}	8.87	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4470	$0.442^{+0.013}_{-0.014}$ (−1.1 σ)	$f\sigma_8(0.15)$	0.4518	$0.447^{+0.012}_{-0.013}$ (−1.0 σ)
A_{143}^{dustTT}	11.02	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6044	$0.596^{+0.017}_{-0.019}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7563	$0.742^{+0.022}_{-0.027}$ (+0.4 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9866	$0.971^{+0.027}_{-0.031}$ (−0.0 σ)	$f\sigma_8(0.38)$	0.4729	$0.467^{+0.012}_{-0.014}$ (−0.4 σ)
A_{217}^{dustTT}	94.6	94^{+10}_{-10} (+0.0 σ)	$r_{\text{drag}} h$	101.14	$100.6^{+1.6}_{-1.9}$ (+1.2 σ)	$\sigma_8(0.38)$	0.6716	$0.659^{+0.020}_{-0.025}$ (+0.5 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.076}_{-0.075}$	$\langle d^2 \rangle^{1/2}$	2.4220	$2.408^{+0.048}_{-0.048}$ (−1.1 σ)	$f\sigma_8(0.51)$	0.4729	$0.467^{+0.012}_{-0.013}$ (−0.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.058}_{-0.057}$	z_{re}	7.56	$7.6^{+1.5}_{-1.6}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6290	$0.617^{+0.019}_{-0.024}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.16}$	$10^9 A_{\text{s}}$	2.088	$2.089^{+0.068}_{-0.065}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4688	$0.463^{+0.012}_{-0.014}$ (+0.0 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.10}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8748	$1.874^{+0.021}_{-0.021}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5987	$0.587^{+0.018}_{-0.023}$ (+0.5 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	D_{40}	1221.3	1222^{+23}_{-23} (−0.8 σ)	$f\sigma_8(2.33)$	0.3014	$0.2967^{+0.0081}_{-0.010}$ (+0.6 σ)
A_{217}^{dustTE}	2.08	$2.06^{+0.53}_{-0.53}$	D_{220}	5736	5744^{+76}_{-77} (+0.8 σ)	$\sigma_8(2.33)$	0.3118	$0.3061^{+0.0093}_{-0.012}$ (+0.6 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{810}	2536.1	2537^{+26}_{-26} (−0.0 σ)	f_{2000}^{143}	28.6	29^{+5}_{-5} (−0.8 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{1420}	817.6	$818.0^{+9.3}_{-9.3}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	31.78	32^{+4}_{-4} (−1.0 σ)
b_{DES}^1	1.486	$1.51^{+0.15}_{-0.15}$	D_{2000}	231.24	$231.2^{+3.1}_{-3.0}$ (+1.1 σ)	f_{2000}^{217}	106.33	$106.7^{+3.4}_{-3.5}$ (−0.9 σ)
b_{DES}^2	1.684	$1.71^{+0.12}_{-0.11}$	$n_{\text{s},0.002}$	0.9691	$0.9694^{+0.0074}_{-0.0072}$ (+1.3 σ)	χ_{small}^2	395.87	396.9 (ν : 1.5) (+0.0 σ)
b_{DES}^3	1.672	$1.70^{+0.10}_{-0.096}$	Y_{P}	0.245445	$0.245450^{+0.000098}_{-0.000099}$ (+1.8 σ)	χ_{lowl}^2	22.73	22.63 (ν : 0.3) (−1.0 σ)
b_{DES}^4	2.029	$2.06^{+0.12}_{-0.11}$	$Y_{\text{P}}^{\text{BBN}}$	0.246772	$0.246776^{+0.000098}_{-0.00010}$ (+1.8 σ)	χ_{plik}^2	2346.2	2363.3 (ν : 21.9) (+278.9 σ)
b_{DES}^5	2.133	$2.16^{+0.16}_{-0.16}$	10^5D/H	2.5616	$2.559^{+0.047}_{-0.047}$ (−1.9 σ)	$\chi_{6\text{DF}}^2$	0.018	0.033 (ν : 0.0)
m_{DES}^1	0.0138	$0.012^{+0.045}_{-0.045}$	Age/Gyr	13.742	$13.769^{+0.067}_{-0.057}$ (−1.1 σ)	χ_{MGS}^2	2.12	1.84 (ν : 0.1)
m_{DES}^2	0.0134	$0.013^{+0.043}_{-0.043}$	z_*	1089.610	$1089.56^{+0.41}_{-0.41}$ (−1.8 σ)	χ_{DR12BAO}^2	3.42	3.93 (ν : 0.4)
m_{DES}^3	−0.0046	$−0.003^{+0.039}_{-0.040}$	r_*	144.761	$144.85^{+0.43}_{-0.43}$ (+0.9 σ)	χ_{DES}^2	509.5	518.3 (ν : 11.8)
m_{DES}^4	0.0017	$0.003^{+0.040}_{-0.040}$	$100\theta_*$	1.04127	$1.04130^{+0.00055}_{-0.00055}$ (+0.8 σ)	χ_{prior}^2	4.2	25 (ν : 22.8) (+4.7 σ)
$A_{\text{IA,DES}}$	0.444	$0.47^{+0.35}_{-0.30}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.9023	$13.910^{+0.041}_{-0.042}$ (+0.9 σ)	χ_{BAO}^2	5.56	5.81 (ν : 0.3)
$\alpha_{\text{IA,DES}}$	−2.56	< 3.03	z_{drag}	1060.12	$1060.13^{+0.57}_{-0.58}$ (+1.8 σ)	χ_{CMB}^2	2764.8	2782.8 (ν : 21.5) (+273.6 σ)
$\Delta z_{\text{l,DES}}^1$	0.0033	$0.004^{+0.015}_{-0.015}$	r_{drag}	147.385	$147.47^{+0.45}_{-0.46}$ (+0.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3284.12$; $\Delta\chi_{\text{eff}}^2 = -0.81$; $\bar{\chi}_{\text{eff}}^2 = 3331.54$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.52$; $R - 1 = 0.01000$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.02) MGS: 2.12 (Δ 0.37) DR12BAO: 3.42 (Δ -0.04) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ -0.21) commander_dx12_v3_2_29: 22.73 (Δ 0.23) plik_rd12_HM_v22b_TTTEEE: 2346.19 (Δ -1.66) WL - DES_1YR_final: 509.52 (Δ 0.26)

6.153 base_mnu_plikHM_TTTEEE_lowl_lowE_DES_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022566	$0.02252^{+0.00029}_{-0.00028}$ (+1.9 σ)	$\alpha_{\text{IA,DES}}$	-2.38	< 2.88	$100\theta_*$	1.04131	$1.04128^{+0.00056}_{-0.00058}$ (+0.8 σ)
$\Omega_c h^2$	0.11794	$0.1181^{+0.0021}_{-0.0020}$ (-1.3 σ)	$\Delta z_{\text{l,DES}}^1$	0.0033	$0.003^{+0.015}_{-0.015}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.9076	$13.907^{+0.045}_{-0.046}$ (+0.8 σ)
$100\theta_{\text{MC}}$	1.04118	$1.04111^{+0.00057}_{-0.00060}$ (+0.9 σ)	$\Delta z_{\text{l,DES}}^2$	0.0007	$0.001^{+0.013}_{-0.013}$	z_{drag}	1060.24	$1060.15^{+0.58}_{-0.60}$ (+1.8 σ)
τ	0.0561	$0.057^{+0.016}_{-0.014}$ (+0.6 σ)	$\Delta z_{\text{l,DES}}^3$	0.0035	$0.003^{+0.013}_{-0.013}$	r_{drag}	147.426	$147.43^{+0.48}_{-0.49}$ (+0.6 σ)
$\Sigma m_\nu [\text{eV}]$	0.000	< 0.187 (-0.6 σ)	$\Delta z_{\text{l,DES}}^4$	0.0008	$0.001^{+0.018}_{-0.018}$	k_{D}	0.14066	$0.14062^{+0.00057}_{-0.00056}$ (+0.1 σ)
$\ln(10^{10} A_{\text{s}})$	3.0445	$3.045^{+0.031}_{-0.029}$ (+0.3 σ)	$\Delta z_{\text{l,DES}}^5$	-0.0007	$-0.001^{+0.019}_{-0.019}$	$100\theta_{\text{D}}$	0.160597	$0.16064^{+0.00034}_{-0.00034}$ (-1.8 σ)
n_{s}	0.9707	$0.9690^{+0.0079}_{-0.0078}$ (+1.2 σ)	$\Delta z_{\text{s,DES}}^1$	0.0009	$-0.003^{+0.028}_{-0.028}$	z_{eq}	3357.7	3360^{+47}_{-46} (-1.2 σ)
y_{cal}	1.00084	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\Delta z_{\text{s,DES}}^2$	-0.0303	$-0.031^{+0.021}_{-0.022}$	k_{eq}	0.010248	$0.01026^{+0.00014}_{-0.00014}$ (-1.2 σ)
A_{217}^{CIB}	45.4	47^{+10}_{-10} (-0.2 σ)	$\Delta z_{\text{s,DES}}^3$	0.0033	$0.004^{+0.018}_{-0.019}$	$100\theta_{\text{eq}}$	0.8220	$0.8215^{+0.0089}_{-0.0089}$ (+1.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.69	—	$\Delta z_{\text{s,DES}}^4$	-0.0301	$-0.031^{+0.035}_{-0.035}$	$100\theta_{\text{s,eq}}$	0.45379	$0.4535^{+0.0045}_{-0.0046}$ (+1.2 σ)
A_{143}^{tSZ}	7.15	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	H_0	68.84	$68.2^{+1.5}_{-1.7}$ (+1.2 σ)	$H(0.15)$	73.97	$73.4^{+1.3}_{-1.5}$ (+1.2 σ)
A_{100}^{PS}	247	258^{+50}_{-50} (-0.3 σ)	Ω_{Λ}	0.7035	$0.696^{+0.018}_{-0.021}$ (+1.1 σ)	$D_{\text{M}}(0.15)$	630.8	636^{+15}_{-12} (-1.1 σ)
A_{143}^{PS}	49.7	45^{+20}_{-20} (-0.7 σ)	Ω_{m}	0.2965	$0.304^{+0.021}_{-0.018}$ (-1.1 σ)	$H(0.38)$	83.84	$83.42^{+0.97}_{-1.2}$ (+1.2 σ)
$A_{143 \times 217}^{\text{PS}}$	53.2	42^{+20}_{-20} (-0.3 σ)	$\Omega_{\text{m}} h^2$	0.14051	$0.1413^{+0.0027}_{-0.0025}$ (-1.1 σ)	$D_{\text{M}}(0.38)$	1508.0	1518^{+30}_{-25} (-1.2 σ)
A_{217}^{PS}	121.9	115^{+20}_{-20} (-0.1 σ)	$\Omega_{\nu} h^2$	0.00000	< 0.00201 (-0.6 σ)	$H(0.51)$	90.41	$90.06^{+0.80}_{-0.97}$ (+1.2 σ)
A^{kSZ}	0.00	< 8.03 (-0.2 σ)	$\Omega_{\text{m}} h^3$	0.09674	$0.09642^{+0.00084}_{-0.00095}$ (+1.0 σ)	$D_{\text{M}}(0.51)$	1955.8	1968^{+36}_{-30} (-1.2 σ)
A_{100}^{dustTT}	8.76	$8.9^{+3.6}_{-3.6}$ (-0.0 σ)	σ_8	0.8185	$0.807^{+0.021}_{-0.028}$ (+0.5 σ)	$H(0.61)$	95.92	$95.62^{+0.67}_{-0.82}$ (+1.2 σ)
A_{143}^{dustTT}	11.05	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	S_8	0.8136	$0.811^{+0.021}_{-0.021}$ (-0.9 σ)	$D_{\text{M}}(0.61)$	2277.8	2291^{+39}_{-32} (-1.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4456	$0.444^{+0.012}_{-0.011}$ (-0.9 σ)	$H(2.33)$	235.10	$235.5^{+1.6}_{-1.5}$ (-1.1 σ)
A_{217}^{dustTT}	95.8	94^{+10}_{-10} (+0.0 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6039	$0.599^{+0.014}_{-0.015}$ (-0.1 σ)	$D_{\text{M}}(2.33)$	5734.4	5749^{+39}_{-32} (-1.2 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.076}_{-0.075}$	$\sigma_8/h^{0.5}$	0.9864	$0.977^{+0.023}_{-0.026}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4507	$0.450^{+0.011}_{-0.011}$ (-0.8 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.133	$0.134^{+0.058}_{-0.057}$	$r_{\text{drag}} h$	101.49	$100.6^{+2.4}_{-2.7}$ (+1.2 σ)	$\sigma_8(0.15)$	0.7577	$0.746^{+0.020}_{-0.027}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.17}_{-0.16}$	$\langle d^2 \rangle^{1/2}$	2.4212	$2.419^{+0.040}_{-0.038}$ (-0.8 σ)	$f\sigma_8(0.38)$	0.4724	$0.4696^{+0.0096}_{-0.011}$ (-0.2 σ)
A_{143}^{dustTE}	0.221	$0.22^{+0.11}_{-0.10}$	z_{re}	7.78	$7.8^{+1.5}_{-1.5}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6731	$0.662^{+0.019}_{-0.026}$ (+0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.661	$0.66^{+0.16}_{-0.16}$	$10^9 A_{\text{s}}$	2.100	$2.102^{+0.065}_{-0.060}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4727	$0.469^{+0.010}_{-0.011}$ (+0.0 σ)
A_{217}^{dustTE}	2.06	$2.06^{+0.53}_{-0.53}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8771	$1.876^{+0.021}_{-0.020}$ (-0.7 σ)	$\sigma_8(0.51)$	0.6305	$0.620^{+0.018}_{-0.025}$ (+0.6 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{40}	1221.1	1225^{+23}_{-22} (-0.6 σ)	$f\sigma_8(0.61)$	0.4689	$0.465^{+0.010}_{-0.011}$ (+0.1 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	D_{220}	5750	5750^{+74}_{-75} (+0.9 σ)	$\sigma_8(0.61)$	0.6003	$0.590^{+0.017}_{-0.024}$ (+0.6 σ)
b_{DES}^1	1.483	$1.50^{+0.15}_{-0.15}$	D_{810}	2541.4	2539^{+26}_{-25} (+0.1 σ)	$f\sigma_8(2.33)$	0.3023	$0.2981^{+0.0081}_{-0.011}$ (+0.7 σ)
b_{DES}^2	1.680	$1.70^{+0.12}_{-0.11}$	D_{1420}	820.0	$818.4^{+9.3}_{-9.1}$ (+0.8 σ)	$\sigma_8(2.33)$	0.3128	$0.3077^{+0.0094}_{-0.013}$ (+0.7 σ)
b_{DES}^3	1.669	$1.69^{+0.11}_{-0.094}$	D_{2000}	232.12	$231.4^{+3.1}_{-3.0}$ (+1.2 σ)	χ_{lensing}^2	8.81	9.5 (ν : 0.6)
b_{DES}^4	2.025	$2.05^{+0.12}_{-0.11}$	$n_{\text{s},0.002}$	0.9707	$0.9690^{+0.0079}_{-0.0078}$ (+1.2 σ)	χ_{small}^2	396.20	397.3 (ν : 2.2) (+0.2 σ)
b_{DES}^5	2.128	$2.15^{+0.16}_{-0.16}$	Y_{P}	0.245468	$0.24545^{+0.00011}_{-0.00011}$ (+1.8 σ)	χ_{lowl}^2	22.54	22.83 (ν : 0.3) (-0.8 σ)
m_{DES}^1	0.0133	$0.012^{+0.045}_{-0.045}$	$Y_{\text{P}}^{\text{BBN}}$	0.246795	$0.24678^{+0.00011}_{-0.00011}$ (+1.8 σ)	χ_{plik}^2	2346.8	2362.1 (ν : 18.8) (+278.7 σ)
m_{DES}^2	0.0135	$0.012^{+0.044}_{-0.044}$	10^5D/H	2.550	$2.558^{+0.052}_{-0.052}$ (-1.9 σ)	χ_{DES}^2	509.0	518.5 (ν : 12.7)
m_{DES}^3	-0.0031	$-0.004^{+0.039}_{-0.039}$	Age/Gyr	13.733	$13.766^{+0.089}_{-0.071}$ (-1.1 σ)	χ_{prior}^2	3.9	25 (ν : 23.1) (+4.8 σ)
m_{DES}^4	0.0020	$0.002^{+0.040}_{-0.040}$	z_*	1089.490	$1089.56^{+0.48}_{-0.48}$ (-1.8 σ)	χ_{CMB}^2	2774.3	2791.8 (ν : 21.8) (+275.1 σ)
$A_{\text{IA,DES}}$	0.453	$0.47^{+0.35}_{-0.30}$	r_*	144.821	$144.81^{+0.47}_{-0.48}$ (+0.8 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3287.27$; $\Delta\chi_{\text{eff}}^2 = -1.59$; $\bar{\chi}_{\text{eff}}^2 = 3335.12$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.21$; $R - 1 = 0.00852$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.81 (Δ -0.24) simall_100x143_offlike5_EE_Aplanck_B: 396.20 (Δ -0.02) commander_dx12_v3_2_29: 22.54 (Δ -0.16) plik_rd12_HM_v22b_TTTEEE: 2346.80 (Δ -0.37) WL - DES_1YR_final: 508.98 (Δ -0.53)

6.154 base_mnu_plikHM_TTTEEE_lowl_lowE_DES_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022515	$0.02252^{+0.00026}_{-0.00026}$ (+1.9 σ)	$\Delta z_{\text{l,DES}}^2$	0.0005	$0.001^{+0.013}_{-0.013}$	k_D	0.14070	$0.14063^{+0.00055}_{-0.00054}$ (+0.1 σ)
$\Omega_c h^2$	0.11843	$0.1182^{+0.0017}_{-0.0017}$ (-1.3 σ)	$\Delta z_{\text{l,DES}}^3$	0.0034	$0.003^{+0.013}_{-0.013}$	$100\theta_D$	0.160645	$0.16065^{+0.00033}_{-0.00033}$ (-1.8 σ)
$100\theta_{\text{MC}}$	1.04116	$1.04110^{+0.00055}_{-0.00055}$ (+0.9 σ)	$\Delta z_{\text{l,DES}}^4$	0.0008	$0.000^{+0.018}_{-0.018}$	z_{eq}	3368.2	3362^{+38}_{-38} (-1.1 σ)
τ	0.0558	$0.056^{+0.016}_{-0.014}$ (+0.6 σ)	$\Delta z_{\text{l,DES}}^5$	-0.0005	$-0.001^{+0.019}_{-0.019}$	k_{eq}	0.010280	$0.01026^{+0.00012}_{-0.00012}$ (-1.1 σ)
Σm_ν [eV]	0.001	< 0.139 (-0.7 σ)	$\Delta z_{\text{s,DES}}^1$	0.00097	$-0.003^{+0.028}_{-0.028}$	$100\theta_{\text{eq}}$	0.8200	$0.8211^{+0.0073}_{-0.0072}$ (+1.3 σ)
$\ln(10^{10} A_s)$	3.0430	$3.044^{+0.030}_{-0.028}$ (+0.2 σ)	$\Delta z_{\text{s,DES}}^2$	-0.0303	$-0.031^{+0.021}_{-0.021}$	$100\theta_{\text{s,eq}}$	0.45275	$0.4533^{+0.0038}_{-0.0037}$ (+1.2 σ)
n_s	0.9686	$0.9688^{+0.0072}_{-0.0071}$ (+1.2 σ)	$\Delta z_{\text{s,DES}}^3$	0.0024	$0.003^{+0.018}_{-0.018}$	$H(0.15)$	73.78	$73.48^{+0.85}_{-0.92}$ (+1.2 σ)
y_{cal}	0.99998	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\Delta z_{\text{s,DES}}^4$	-0.0323	$-0.031^{+0.035}_{-0.036}$	$D_M(0.15)$	632.7	$635.5^{+8.9}_{-8.2}$ (-1.2 σ)
A_{217}^{CIB}	48.3	47^{+10}_{-10} (-0.2 σ)	H_0	68.62	$68.29^{+0.97}_{-1.0}$ (+1.2 σ)	$H(0.38)$	83.69	$83.45^{+0.66}_{-0.71}$ (+1.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.28	—	Ω_Λ	0.7006	$0.697^{+0.012}_{-0.013}$ (+1.1 σ)	$D_M(0.38)$	1511.8	1518^{+18}_{-17} (-1.2 σ)
A_{143}^{tSZ}	7.38	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	Ω_m	0.2994	$0.303^{+0.013}_{-0.012}$ (-1.1 σ)	$H(0.51)$	90.30	$90.09^{+0.55}_{-0.60}$ (+1.3 σ)
A_{100}^{PS}	251	258^{+60}_{-50} (-0.2 σ)	$\Omega_m h^2$	0.14096	$0.1413^{+0.0018}_{-0.0017}$ (-1.1 σ)	$D_M(0.51)$	1960.3	1967^{+22}_{-20} (-1.2 σ)
A_{143}^{PS}	44.5	45^{+20}_{-20} (-0.6 σ)	$\Omega_\nu h^2$	0.00001	< 0.00150 (-0.7 σ)	$H(0.61)$	95.832	$95.65^{+0.47}_{-0.52}$ (+1.3 σ)
$A_{143 \times 217}^{\text{PS}}$	42.8	42^{+20}_{-20} (-0.3 σ)	$\Omega_m h^3$	0.09672	$0.09647^{+0.00072}_{-0.00075}$ (+1.0 σ)	$D_M(0.61)$	2282.6	2290^{+23}_{-22} (-1.2 σ)
A_{217}^{PS}	117.0	115^{+20}_{-20} (-0.1 σ)	σ_8	0.8190	$0.809^{+0.018}_{-0.021}$ (+0.5 σ)	$H(2.33)$	235.37	$235.5^{+1.1}_{-1.1}$ (-1.1 σ)
A^{kSZ}	0.00	< 8.05 (-0.2 σ)	S_8	0.8182	$0.813^{+0.019}_{-0.019}$ (-0.9 σ)	$D_M(2.33)$	5738.2	5748^{+25}_{-23} (-1.2 σ)
A_{100}^{dustTT}	8.82	$8.9^{+3.6}_{-3.6}$ (-0.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4481	$0.445^{+0.011}_{-0.011}$ (-0.9 σ)	$f\sigma_8(0.15)$	0.4530	$0.4502^{+0.0099}_{-0.010}$ (-0.8 σ)
A_{143}^{dustTT}	11.03	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6058	$0.600^{+0.013}_{-0.014}$ (-0.0 σ)	$\sigma_8(0.15)$	0.7579	$0.748^{+0.017}_{-0.020}$ (+0.6 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.6	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9887	$0.978^{+0.020}_{-0.022}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4740	$0.4704^{+0.0091}_{-0.010}$ (-0.2 σ)
A_{217}^{dustTT}	94.5	94^{+10}_{-10} (+0.0 σ)	$r_{\text{drag}} h$	101.11	$100.7^{+1.5}_{-1.7}$ (+1.2 σ)	$\sigma_8(0.38)$	0.6730	$0.664^{+0.015}_{-0.018}$ (+0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.076}_{-0.075}$	$\langle d^2 \rangle^{1/2}$	2.4288	$2.420^{+0.039}_{-0.038}$ (-0.8 σ)	$f\sigma_8(0.51)$	0.4740	$0.4700^{+0.0087}_{-0.010}$ (+0.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.058}_{-0.057}$	z_{re}	7.77	$7.8^{+1.5}_{-1.4}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6303	$0.622^{+0.015}_{-0.017}$ (+0.7 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.16}$	$10^9 A_s$	2.097	$2.099^{+0.063}_{-0.059}$ (+0.2 σ)	$f\sigma_8(0.61)$	0.4699	$0.4658^{+0.0090}_{-0.0098}$ (+0.2 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.10}_{-0.10}$	$10^9 A_s e^{-2\tau}$	1.8753	$1.876^{+0.020}_{-0.020}$ (-0.7 σ)	$\sigma_8(0.61)$	0.6000	$0.592^{+0.014}_{-0.017}$ (+0.7 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	D_{40}	1223.6	1225^{+22}_{-22} (-0.6 σ)	$f\sigma_8(2.33)$	0.3020	$0.2987^{+0.0065}_{-0.0075}$ (+0.7 σ)
A_{217}^{dustTE}	2.07	$2.06^{+0.52}_{-0.54}$	D_{220}	5740	5749^{+73}_{-75} (+0.9 σ)	$\sigma_8(2.33)$	0.3124	$0.3083^{+0.0074}_{-0.0088}$ (+0.8 σ)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{810}	2535.9	2539^{+26}_{-25} (+0.1 σ)	f_{2000}^{143}	28.7	29^{+5}_{-5} (-0.9 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	D_{1420}	817.4	$818.2^{+9.3}_{-9.1}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	31.75	32^{+4}_{-4} (-1.1 σ)
b_{DES}^1	1.485	$1.50^{+0.14}_{-0.15}$	D_{2000}	231.20	$231.3^{+3.1}_{-3.0}$ (+1.1 σ)	f_{2000}^{217}	106.37	$106.7^{+3.4}_{-3.5}$ (-1.0 σ)
b_{DES}^2	1.680	$1.70^{+0.11}_{-0.11}$	$n_{\text{s},0.002}$	0.9686	$0.9688^{+0.0072}_{-0.0071}$ (+1.2 σ)	χ_{lensing}^2	8.76	9.45 (ν : 0.5)
b_{DES}^3	1.669	$1.688^{+0.092}_{-0.091}$	Y_{P}	0.245450	$0.245450^{+0.000098}_{-0.000099}$ (+1.8 σ)	χ_{small}^2	396.19	397.2 (ν : 1.9) (+0.1 σ)
b_{DES}^4	2.025	$2.05^{+0.11}_{-0.11}$	$Y_{\text{P}}^{\text{BBN}}$	0.246777	$0.246776^{+0.000098}_{-0.000099}$ (+1.8 σ)	χ_{lowl}^2	22.92	22.86 (ν : 0.3) (-0.8 σ)
b_{DES}^5	2.127	$2.15^{+0.15}_{-0.15}$	10^5D/H	2.5592	$2.559^{+0.047}_{-0.047}$ (-1.9 σ)	χ_{plik}^2	2345.5	2361.6 (ν : 18.3) (+278.6 σ)
m_{DES}^1	0.0137	$0.012^{+0.045}_{-0.045}$	Age/Gyr	13.741	$13.763^{+0.058}_{-0.052}$ (-1.2 σ)	$\chi_{6\text{DF}}^2$	0.016	0.029 (ν : 0.0)
m_{DES}^2	0.0136	$0.012^{+0.044}_{-0.044}$	z_*	1089.598	$1089.58^{+0.40}_{-0.40}$ (-1.8 σ)	χ_{MGS}^2	2.12	1.87 (ν : 0.1)
m_{DES}^3	-0.0050	$-0.005^{+0.039}_{-0.039}$	r_*	144.733	$144.80^{+0.40}_{-0.41}$ (+0.8 σ)	χ_{DR12BAO}^2	3.41	3.85 (ν : 0.3)
m_{DES}^4	0.0006	$0.001^{+0.039}_{-0.040}$	$100\theta_*$	1.04129	$1.04127^{+0.00054}_{-0.00055}$ (+0.8 σ)	χ_{DES}^2	509.7	518.6 (ν : 12.2)
$A_{\text{IA,DES}}$	0.443	$0.48^{+0.35}_{-0.30}$	$D_M(z_*)/\text{Gpc}$	13.8994	$13.906^{+0.039}_{-0.040}$ (+0.7 σ)	χ_{prior}^2	4.5	25 (ν : 23.1) (+4.8 σ)
$\alpha_{\text{IA,DES}}$	-2.62	< 2.86	z_{drag}	1060.16	$1060.14^{+0.59}_{-0.55}$ (+1.8 σ)	χ_{CMB}^2	2773.4	2791.0 (ν : 20.7) (+275.0 σ)
$\Delta z_{\text{l,DES}}^1$	0.0030	$0.003^{+0.015}_{-0.015}$	r_{drag}	147.352	$147.42^{+0.43}_{-0.44}$ (+0.5 σ)	χ_{BAO}^2	5.55	5.75 (ν : 0.3)

Best-fit $\chi_{\text{eff}}^2 = 3293.06$; $\Delta\chi_{\text{eff}}^2 = -1.03$; $\bar{\chi}_{\text{eff}}^2 = 3340.25$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.08$; $R - 1 = 0.00952$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.02) MGS: 2.12 (Δ 0.44) DR12BAO: 3.42 (Δ -0.11) CMB - smicadx12_Dec5_ftl_mv2.ndclpp_p-teb_consext8: 8.76 (Δ -0.32) simall_100x143_offlike5_EE_Aplanck 396.19 (Δ -0.09) commander_dx12_v3.2.29: 22.92 (Δ 0.27) plik_rd12_HM_v22b.TTTEEE: 2345.49 (Δ -1.78) WL - DES_1YR_final: 509.67 (Δ 0.29)

6.155 base_mnu_plikHM_TTTEE_lowl_lowE_DES_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02251^{+0.00030}_{-0.00031} \quad (+1.9\sigma)$	$\Delta z_{\mathrm{l,DES}}^1$	$0.004^{+0.015}_{-0.015}$	z_{drag}	$1060.12^{+0.61}_{-0.61} \quad (+1.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1179^{+0.0023}_{-0.0022} \quad (-1.4\sigma)$	$\Delta z_{\mathrm{l,DES}}^2$	$0.001^{+0.013}_{-0.013}$	r_{drag}	$147.48^{+0.51}_{-0.53} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04110^{+0.00059}_{-0.00063} \quad (+0.9\sigma)$	$\Delta z_{\mathrm{l,DES}}^3$	$0.003^{+0.013}_{-0.013}$	k_{D}	$0.14057^{+0.00060}_{-0.00060} \quad (+0.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\Delta z_{\mathrm{l,DES}}^4$	$0.001^{+0.018}_{-0.018}$	$100\theta_{\mathrm{D}}$	$0.16065^{+0.00035}_{-0.00035} \quad (-1.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.353 \quad (-0.4\sigma)$	$\Delta z_{\mathrm{l,DES}}^5$	$-0.001^{+0.019}_{-0.019}$	z_{eq}	$3356^{+50}_{-48} \quad (-1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$\Delta z_{\mathrm{s,DES}}^1$	$-0.004^{+0.028}_{-0.028}$	k_{eq}	$0.01024^{+0.00016}_{-0.00015} \quad (-1.3\sigma)$
n_{s}	$0.9695^{+0.0081}_{-0.0084} \quad (+1.3\sigma)$	$\Delta z_{\mathrm{s,DES}}^2$	$-0.031^{+0.021}_{-0.021}$	$100\theta_{\mathrm{eq}}$	$0.8223^{+0.0094}_{-0.0095} \quad (+1.4\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0047} \quad (-0.0\sigma)$	$\Delta z_{\mathrm{s,DES}}^3$	$0.004^{+0.019}_{-0.019}$	$100\theta_{\mathrm{s,eq}}$	$0.4540^{+0.0048}_{-0.0049} \quad (+1.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\Delta z_{\mathrm{s,DES}}^4$	$-0.029^{+0.036}_{-0.036}$	$H(0.15)$	$73.2^{+1.7}_{-2.5} \quad (+1.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	H_0	$67.9^{+2.0}_{-2.9} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+25}_{-17} \quad (-1.0\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	Ω_{Λ}	$0.693^{+0.024}_{-0.036} \quad (+0.9\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-2.0} \quad (+1.0\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.2\sigma)$	Ω_{m}	$0.307^{+0.036}_{-0.024} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+52}_{-34} \quad (-1.0\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.7\sigma)$	$\Omega_{\mathrm{m}} h^2$	$0.1416^{+0.0039}_{-0.0032} \quad (-1.0\sigma)$	$H(0.51)$	$89.9^{+1.1}_{-1.7} \quad (+1.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$41^{+20}_{-20} \quad (-0.3\sigma)$	$\Omega_{\nu} h^2$	$< 0.00380 \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+61}_{-41} \quad (-1.0\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.0961^{+0.0012}_{-0.0017} \quad (+0.7\sigma)$	$H(0.61)$	$95.44^{+0.92}_{-1.4} \quad (+1.0\sigma)$
A^{kSZ}	$< 8.18 \quad (-0.2\sigma)$	σ_8	$0.795^{+0.034}_{-0.057} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+67}_{-44} \quad (-1.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	S_8	$0.804^{+0.026}_{-0.029} \quad (-1.2\sigma)$	$H(2.33)$	$235.6^{+2.2}_{-1.9} \quad (-1.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.440^{+0.014}_{-0.016} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5759^{+70}_{-44} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.592^{+0.022}_{-0.029} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.014}_{-0.015} \quad (-1.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.965^{+0.036}_{-0.052} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.735^{+0.032}_{-0.055} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.075}$	$r_{\mathrm{drag}} h$	$100.2^{+3.2}_{-4.4} \quad (+1.0\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.016}_{-0.019} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.057}$	$\langle d^2 \rangle^{1/2}$	$2.406^{+0.048}_{-0.045} \quad (-1.1\sigma)$	$\sigma_8(0.38)$	$0.653^{+0.029}_{-0.051} \quad (+0.3\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_{re}	$< 8.96 \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.016}_{-0.022} \quad (-0.3\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.060}_{-0.054} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.611^{+0.028}_{-0.049} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.021}_{-0.021} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.016}_{-0.023} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.06^{+0.53}_{-0.54}$	D_{40}	$1221^{+24}_{-23} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.027}_{-0.047} \quad (+0.4\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	D_{220}	$5745^{+76}_{-76} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.012}_{-0.022} \quad (+0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.014}_{-0.025} \quad (+0.4\sigma)$
b_{DES}^1	$1.53^{+0.18}_{-0.18}$	D_{1420}	$818.2^{+9.2}_{-9.1} \quad (+0.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.8\sigma)$
b_{DES}^2	$1.73^{+0.16}_{-0.14}$	D_{2000}	$231.2^{+3.1}_{-3.1} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
b_{DES}^3	$1.71^{+0.15}_{-0.13}$	$n_{\mathrm{s},0.002}$	$0.9695^{+0.0081}_{-0.0084} \quad (+1.3\sigma)$	f_{2000}^{217}	$106.7^{+3.6}_{-3.5} \quad (-0.9\sigma)$
b_{DES}^4	$2.08^{+0.17}_{-0.15}$	Y_{P}	$0.24545^{+0.00011}_{-0.00012} \quad (+1.8\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.7) \quad (+0.0\sigma)$
b_{DES}^5	$2.18^{+0.20}_{-0.19}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00011}_{-0.00012} \quad (+1.8\sigma)$	χ_{lowl}^2	$22.56 \quad (\nu: 0.3) \quad (-1.0\sigma)$
m_{DES}^1	$0.012^{+0.045}_{-0.045}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.560^{+0.057}_{-0.053} \quad (-1.9\sigma)$	χ_{plik}^2	$2364.3 \quad (\nu: 23.8) \quad (+279.0\sigma)$
m_{DES}^2	$0.013^{+0.044}_{-0.043}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.79^{+0.16}_{-0.099} \quad (-0.9\sigma)$	χ_{DES}^2	$518.1 \quad (\nu: 12.0)$
m_{DES}^3	$-0.003^{+0.039}_{-0.040}$	z_*	$1089.56^{+0.52}_{-0.52} \quad (-1.8\sigma)$	χ_{prior}^2	$25 \quad (\nu: 23.3) \quad (+4.7\sigma)$
m_{DES}^4	$0.003^{+0.040}_{-0.040}$	r_*	$144.85^{+0.50}_{-0.53} \quad (+0.9\sigma)$	χ_{CMB}^2	$2783.8 \quad (\nu: 23.2) \quad (+273.7\sigma)$
$A_{\mathrm{IA,DES}}$	$0.46^{+0.34}_{-0.31}$	$100\theta_*$	$1.04130^{+0.00057}_{-0.00059} \quad (+0.8\sigma)$		
$\alpha_{\mathrm{IA,DES}}$	< 3.04	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.911^{+0.047}_{-0.050} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3326.52; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.08; R - 1 = 0.00752$$

6.156 base_mnu_plikHM_TTTEE_lowl_lowE_DES_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02252^{+0.00026}_{-0.00026}$ (+1.9 σ)	$\Delta z_{\mathrm{l,DES}}^2$	$0.001^{+0.013}_{-0.013}$	k_{D}	$0.14057^{+0.00057}_{-0.00056}$ (+0.0 σ)
$\Omega_{\mathrm{c}} h^2$	$0.1179^{+0.0018}_{-0.0018}$ (−1.4 σ)	$\Delta z_{\mathrm{l,DES}}^3$	$0.003^{+0.013}_{-0.013}$	$100\theta_{\mathrm{D}}$	$0.16065^{+0.00033}_{-0.00033}$ (−1.8 σ)
$100\theta_{\mathrm{MC}}$	$1.04112^{+0.00055}_{-0.00056}$ (+0.9 σ)	$\Delta z_{\mathrm{l,DES}}^4$	$0.001^{+0.018}_{-0.018}$	z_{eq}	3356^{+40}_{-40} (−1.3 σ)
τ	$0.055^{+0.013}_{-0.012}$ (+0.5 σ)	$\Delta z_{\mathrm{l,DES}}^5$	$-0.001^{+0.019}_{-0.019}$	k_{eq}	$0.01024^{+0.00012}_{-0.00012}$ (−1.3 σ)
Σm_{ν} [eV]	< 0.180 (−0.6 σ)	$\Delta z_{\mathrm{s,DES}}^1$	$-0.003^{+0.028}_{-0.028}$	$100\theta_{\mathrm{eq}}$	$0.8222^{+0.0078}_{-0.0076}$ (+1.4 σ)
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.026}$ (+0.1 σ)	$\Delta z_{\mathrm{s,DES}}^2$	$-0.031^{+0.021}_{-0.021}$	$100\theta_{\mathrm{s,eq}}$	$0.4539^{+0.0040}_{-0.0039}$ (+1.3 σ)
n_{s}	$0.9695^{+0.0074}_{-0.0071}$ (+1.3 σ)	$\Delta z_{\mathrm{s,DES}}^3$	$0.004^{+0.019}_{-0.019}$	$H(0.15)$	$73.43^{+0.92}_{-1.0}$ (+1.2 σ)
y_{cal}	$1.0005^{+0.0048}_{-0.0049}$ (−0.0 σ)	$\Delta z_{\mathrm{s,DES}}^4$	$-0.030^{+0.035}_{-0.036}$	$D_{\mathrm{M}}(0.15)$	$636.0^{+9.8}_{-8.9}$ (−1.1 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	H_0	$68.2^{+1.1}_{-1.1}$ (+1.2 σ)	$H(0.38)$	$83.40^{+0.72}_{-0.80}$ (+1.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Ω_{Λ}	$0.697^{+0.013}_{-0.014}$ (+1.1 σ)	$D_{\mathrm{M}}(0.38)$	1519^{+20}_{-18} (−1.1 σ)
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	Ω_{m}	$0.303^{+0.014}_{-0.013}$ (−1.1 σ)	$H(0.51)$	$90.04^{+0.60}_{-0.68}$ (+1.2 σ)
A_{100}^{PS}	258^{+60}_{-50} (−0.2 σ)	$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0018}_{-0.0018}$ (−1.2 σ)	$D_{\mathrm{M}}(0.51)$	1969^{+24}_{-22} (−1.1 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.7 σ)	$\Omega_{\nu} h^2$	< 0.00193 (−0.6 σ)	$H(0.61)$	$95.60^{+0.52}_{-0.59}$ (+1.2 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	41^{+20}_{-20} (−0.3 σ)	$\Omega_{\mathrm{m}} h^3$	$0.09635^{+0.00080}_{-0.00089}$ (+0.9 σ)	$D_{\mathrm{M}}(0.61)$	2292^{+26}_{-23} (−1.2 σ)
A_{217}^{PS}	114^{+20}_{-20} (−0.1 σ)	σ_8	$0.803^{+0.023}_{-0.029}$ (+0.4 σ)	$H(2.33)$	$235.4^{+1.1}_{-1.1}$ (−1.1 σ)
A^{kSZ}	< 8.17 (−0.2 σ)	S_8	$0.807^{+0.023}_{-0.025}$ (−1.1 σ)	$D_{\mathrm{M}}(2.33)$	5750^{+29}_{-25} (−1.1 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.013}_{-0.014}$ (−1.1 σ)	$f\sigma_8(0.15)$	$0.448^{+0.012}_{-0.013}$ (−1.0 σ)
$A_{143}^{\mathrm{dustTT}}$	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.596^{+0.017}_{-0.019}$ (−0.2 σ)	$\sigma_8(0.15)$	$0.743^{+0.022}_{-0.028}$ (+0.4 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	$0.972^{+0.027}_{-0.031}$ (−0.0 σ)	$f\sigma_8(0.38)$	$0.468^{+0.012}_{-0.013}$ (−0.4 σ)
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10} (+0.0 σ)	$r_{\mathrm{drag}} h$	$100.6^{+1.6}_{-1.9}$ (+1.2 σ)	$\sigma_8(0.38)$	$0.660^{+0.019}_{-0.025}$ (+0.5 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.075}$	$\langle d^2 \rangle^{1/2}$	$2.410^{+0.046}_{-0.045}$ (−1.0 σ)	$f\sigma_8(0.51)$	$0.467^{+0.012}_{-0.013}$ (−0.1 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.057}$	z_{re}	< 8.91 (+0.3 σ)	$\sigma_8(0.51)$	$0.618^{+0.018}_{-0.024}$ (+0.5 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.059}_{-0.053}$ (+0.1 σ)	$f\sigma_8(0.61)$	$0.463^{+0.012}_{-0.013}$ (+0.0 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.021}_{-0.021}$ (−0.9 σ)	$\sigma_8(0.61)$	$0.588^{+0.017}_{-0.023}$ (+0.6 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	D_{40}	1222^{+23}_{-23} (−0.8 σ)	$f\sigma_8(2.33)$	$0.2970^{+0.0080}_{-0.010}$ (+0.6 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.06^{+0.52}_{-0.53}$	D_{220}	5744^{+76}_{-77} (+0.8 σ)	$\sigma_8(2.33)$	$0.3064^{+0.0091}_{-0.012}$ (+0.6 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{810}	2537^{+26}_{-26} (−0.0 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.9 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{1420}	$818.0^{+9.3}_{-9.3}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−1.0 σ)
b_{DES}^1	$1.51^{+0.15}_{-0.15}$	D_{2000}	$231.2^{+3.0}_{-3.0}$ (+1.1 σ)	f_{2000}^{217}	$106.7^{+3.4}_{-3.5}$ (−1.0 σ)
b_{DES}^2	$1.71^{+0.12}_{-0.11}$	$n_{\mathrm{s},0.002}$	$0.9695^{+0.0074}_{-0.0071}$ (+1.3 σ)	χ_{small}^2	396.9 (ν : 1.5) (−0.0 σ)
b_{DES}^3	$1.70^{+0.10}_{-0.096}$	Y_{P}	$0.245451^{+0.000098}_{-0.000099}$ (+1.8 σ)	χ_{lowl}^2	22.64 (ν : 0.3) (−1.0 σ)
b_{DES}^4	$2.06^{+0.12}_{-0.11}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246778^{+0.000099}_{-0.000099}$ (+1.8 σ)	χ_{plik}^2	2363.1 (ν : 21.6) (+278.8 σ)
b_{DES}^5	$2.16^{+0.16}_{-0.16}$	$10^5 \mathrm{D/H}$	$2.559^{+0.047}_{-0.047}$ (−1.9 σ)	$\chi_{6\mathrm{DF}}^2$	0.033 (ν : 0.0)
m_{DES}^1	$0.012^{+0.045}_{-0.045}$	Age/Gyr	$13.769^{+0.067}_{-0.057}$ (−1.1 σ)	χ_{MGS}^2	1.85 (ν : 0.1)
m_{DES}^2	$0.013^{+0.043}_{-0.043}$	z_*	$1089.55^{+0.40}_{-0.41}$ (−1.8 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.93 (ν : 0.4)
m_{DES}^3	$-0.003^{+0.039}_{-0.040}$	r_*	$144.86^{+0.42}_{-0.43}$ (+0.9 σ)	χ_{DES}^2	518.3 (ν : 11.9)
m_{DES}^4	$0.003^{+0.040}_{-0.040}$	$100\theta_*$	$1.04130^{+0.00055}_{-0.00055}$ (+0.8 σ)	χ_{prior}^2	25 (ν : 22.8) (+4.7 σ)
$A_{\mathrm{IA,DES}}$	$0.47^{+0.35}_{-0.30}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.911^{+0.041}_{-0.042}$ (+0.9 σ)	χ_{BAO}^2	5.81 (ν : 0.3)
$\alpha_{\mathrm{IA,DES}}$	< 3.04	z_{drag}	$1060.13^{+0.56}_{-0.58}$ (+1.8 σ)	χ_{CMB}^2	2782.6 (ν : 21.0) (+273.5 σ)
$\Delta z_{\mathrm{l,DES}}^1$	$0.004^{+0.015}_{-0.015}$	r_{drag}	$147.48^{+0.45}_{-0.46}$ (+0.7 σ)		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3331.28; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.53; R - 1 = 0.00944$$

6.157 base_mnu_plikHM_TTTEE_lowl_lowE_DES_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02252^{+0.00029}_{-0.00028}$ (+2.0 σ)	$\Delta z_{\text{l,DES}}^1$	$0.003^{+0.015}_{-0.015}$	z_{drag}	$1060.15^{+0.58}_{-0.60}$ (+1.8 σ)
$\Omega_c h^2$	$0.1181^{+0.0021}_{-0.0020}$ (−1.3 σ)	$\Delta z_{\text{l,DES}}^2$	$0.001^{+0.013}_{-0.013}$	r_{drag}	$147.44^{+0.48}_{-0.49}$ (+0.6 σ)
$100\theta_{\text{MC}}$	$1.04111^{+0.00057}_{-0.00060}$ (+0.9 σ)	$\Delta z_{\text{l,DES}}^3$	$0.003^{+0.013}_{-0.013}$	k_{D}	$0.14062^{+0.00057}_{-0.00056}$ (+0.1 σ)
τ	$0.057^{+0.014}_{-0.013}$ (+0.7 σ)	$\Delta z_{\text{l,DES}}^4$	$0.001^{+0.018}_{-0.018}$	$100\theta_{\text{D}}$	$0.16064^{+0.00034}_{-0.00034}$ (−1.8 σ)
Σm_ν [eV]	< 0.188 (−0.6 σ)	$\Delta z_{\text{l,DES}}^5$	$-0.001^{+0.019}_{-0.019}$	z_{eq}	3360^{+46}_{-45} (−1.2 σ)
$\ln(10^{10} A_s)$	$3.046^{+0.028}_{-0.026}$ (+0.4 σ)	$\Delta z_{\text{s,DES}}^1$	$-0.003^{+0.028}_{-0.028}$	k_{eq}	$0.01025^{+0.00014}_{-0.00014}$ (−1.2 σ)
n_s	$0.9691^{+0.0079}_{-0.0078}$ (+1.3 σ)	$\Delta z_{\text{s,DES}}^2$	$-0.031^{+0.021}_{-0.022}$	$100\theta_{\text{eq}}$	$0.8216^{+0.0088}_{-0.0088}$ (+1.3 σ)
y_{cal}	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\Delta z_{\text{s,DES}}^3$	$0.004^{+0.018}_{-0.019}$	$100\theta_{\text{s,eq}}$	$0.4536^{+0.0045}_{-0.0045}$ (+1.3 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	$\Delta z_{\text{s,DES}}^4$	$-0.031^{+0.035}_{-0.035}$	$H(0.15)$	$73.5^{+1.3}_{-1.5}$ (+1.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	—	H_0	$68.3^{+1.5}_{-1.7}$ (+1.2 σ)	$D_{\text{M}}(0.15)$	636^{+15}_{-12} (−1.1 σ)
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	Ω_Λ	$0.697^{+0.018}_{-0.021}$ (+1.1 σ)	$H(0.38)$	$83.43^{+0.97}_{-1.2}$ (+1.2 σ)
A_{100}^{PS}	258^{+60}_{-50} (−0.3 σ)	Ω_{m}	$0.303^{+0.021}_{-0.018}$ (−1.1 σ)	$D_{\text{M}}(0.38)$	1518^{+30}_{-25} (−1.2 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.7 σ)	$\Omega_{\text{m}} h^2$	$0.1413^{+0.0027}_{-0.0025}$ (−1.1 σ)	$H(0.51)$	$90.07^{+0.80}_{-0.98}$ (+1.2 σ)
$A_{143 \times 217}^{\text{PS}}$	42^{+20}_{-20} (−0.3 σ)	$\Omega_\nu h^2$	< 0.00202 (−0.6 σ)	$D_{\text{M}}(0.51)$	1968^{+36}_{-30} (−1.2 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.1 σ)	$\Omega_{\text{m}} h^3$	$0.09642^{+0.00085}_{-0.00095}$ (+1.0 σ)	$H(0.61)$	$95.63^{+0.68}_{-0.83}$ (+1.2 σ)
A^{kSZ}	< 8.02 (−0.2 σ)	σ_8	$0.807^{+0.021}_{-0.028}$ (+0.5 σ)	$D_{\text{M}}(0.61)$	2291^{+39}_{-32} (−1.2 σ)
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	S_8	$0.811^{+0.021}_{-0.021}$ (−0.9 σ)	$H(2.33)$	$235.5^{+1.6}_{-1.5}$ (−1.1 σ)
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.444^{+0.012}_{-0.011}$ (−0.9 σ)	$D_{\text{M}}(2.33)$	5749^{+40}_{-32} (−1.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.599^{+0.014}_{-0.015}$ (−0.1 σ)	$f\sigma_8(0.15)$	$0.450^{+0.011}_{-0.011}$ (−0.8 σ)
A_{217}^{dustTT}	94^{+10}_{-10} (+0.0 σ)	$\sigma_8/h^{0.5}$	$0.977^{+0.023}_{-0.026}$ (+0.1 σ)	$\sigma_8(0.15)$	$0.747^{+0.020}_{-0.027}$ (+0.5 σ)
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.075}$	$r_{\text{drag}} h$	$100.6^{+2.4}_{-2.7}$ (+1.2 σ)	$f\sigma_8(0.38)$	$0.4697^{+0.0096}_{-0.011}$ (−0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.058}_{-0.057}$	$\langle d^2 \rangle^{1/2}$	$2.419^{+0.039}_{-0.038}$ (−0.8 σ)	$\sigma_8(0.38)$	$0.663^{+0.018}_{-0.026}$ (+0.6 σ)
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	z_{re}	$7.9^{+1.2}_{-1.4}$ (+0.5 σ)	$f\sigma_8(0.51)$	$0.469^{+0.010}_{-0.011}$ (+0.0 σ)
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	$10^9 A_s$	$2.104^{+0.059}_{-0.055}$ (+0.4 σ)	$\sigma_8(0.51)$	$0.621^{+0.018}_{-0.025}$ (+0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.021}_{-0.020}$ (−0.7 σ)	$f\sigma_8(0.61)$	$0.465^{+0.010}_{-0.011}$ (+0.1 σ)
A_{217}^{dustTE}	$2.06^{+0.53}_{-0.53}$	D_{40}	1225^{+23}_{-22} (−0.6 σ)	$\sigma_8(0.61)$	$0.591^{+0.017}_{-0.024}$ (+0.6 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{220}	5750^{+74}_{-75} (+0.9 σ)	$f\sigma_8(2.33)$	$0.2983^{+0.0080}_{-0.011}$ (+0.7 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{810}	2539^{+26}_{-25} (+0.1 σ)	$\sigma_8(2.33)$	$0.3078^{+0.0093}_{-0.013}$ (+0.7 σ)
b_{DES}^1	$1.50^{+0.15}_{-0.15}$	D_{1420}	$818.4^{+9.3}_{-9.1}$ (+0.8 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.9 σ)
b_{DES}^2	$1.70^{+0.12}_{-0.11}$	D_{2000}	$231.4^{+3.1}_{-3.0}$ (+1.2 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−1.1 σ)
b_{DES}^3	$1.69^{+0.10}_{-0.099}$	$n_{\text{s},0.002}$	$0.9691^{+0.0079}_{-0.0078}$ (+1.3 σ)	f_{2000}^{217}	$106.7^{+3.5}_{-3.5}$ (−1.0 σ)
b_{DES}^4	$2.05^{+0.12}_{-0.11}$	Y_{P}	$0.24545^{+0.00011}_{-0.00011}$ (+1.8 σ)	χ_{lensing}^2	9.5 (ν : 0.5)
b_{DES}^5	$2.15^{+0.16}_{-0.16}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24678^{+0.00011}_{-0.00011}$ (+1.8 σ)	χ_{simall}^2	397.3 (ν : 2.2) (+0.2 σ)
m_{DES}^1	$0.012^{+0.045}_{-0.045}$	10^5D/H	$2.558^{+0.051}_{-0.052}$ (−1.9 σ)	χ_{lowl}^2	22.82 (ν : 0.3) (−0.8 σ)
m_{DES}^2	$0.012^{+0.044}_{-0.044}$	Age/Gyr	$13.766^{+0.089}_{-0.071}$ (−1.1 σ)	χ_{plik}^2	2362.0 (ν : 18.8) (+278.6 σ)
m_{DES}^3	$-0.004^{+0.039}_{-0.039}$	z_*	$1089.56^{+0.47}_{-0.48}$ (−1.8 σ)	χ_{DES}^2	518.5 (ν : 12.7)
m_{DES}^4	$0.002^{+0.040}_{-0.040}$	r_*	$144.82^{+0.47}_{-0.48}$ (+0.9 σ)	χ_{prior}^2	25 (ν : 23.1) (+4.8 σ)
$A_{\text{IA,DES}}$	$0.47^{+0.35}_{-0.30}$	$100\theta_*$	$1.04128^{+0.00056}_{-0.00058}$ (+0.8 σ)	χ_{CMB}^2	2791.7 (ν : 21.7) (+275.1 σ)
$\alpha_{\text{IA,DES}}$	< 2.89	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.908^{+0.045}_{-0.045}$ (+0.8 σ)		

$$\bar{\chi}_{\text{eff}}^2 = 3334.99; \Delta \bar{\chi}_{\text{eff}}^2 = 0.24; R - 1 = 0.00823$$

6.158 base_mnu_plikHM_TTTEE_lowl_lowE_DES_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02252^{+0.00026}_{-0.00026}$ (+1.9 σ)	$\Delta z_{1,\text{DES}}^2$	$0.001^{+0.013}_{-0.013}$	k_D	$0.14063^{+0.00055}_{-0.00053}$ (+0.1 σ)
$\Omega_c h^2$	$0.1182^{+0.0017}_{-0.0017}$ (−1.3 σ)	$\Delta z_{1,\text{DES}}^3$	$0.003^{+0.013}_{-0.013}$	$100\theta_D$	$0.16065^{+0.00033}_{-0.00033}$ (−1.8 σ)
$100\theta_{\text{MC}}$	$1.04111^{+0.00055}_{-0.00055}$ (+0.9 σ)	$\Delta z_{1,\text{DES}}^4$	$0.000^{+0.018}_{-0.018}$	z_{eq}	3362^{+38}_{-38} (−1.2 σ)
τ	$0.057^{+0.013}_{-0.012}$ (+0.6 σ)	$\Delta z_{1,\text{DES}}^5$	$-0.001^{+0.019}_{-0.019}$	k_{eq}	$0.01026^{+0.00012}_{-0.00012}$ (−1.2 σ)
Σm_ν [eV]	< 0.140 (−0.7 σ)	$\Delta z_{s,\text{DES}}^1$	$-0.003^{+0.028}_{-0.028}$	$100\theta_{\text{eq}}$	$0.8212^{+0.0072}_{-0.0071}$ (+1.3 σ)
$\ln(10^{10} A_s)$	$3.045^{+0.027}_{-0.026}$ (+0.3 σ)	$\Delta z_{s,\text{DES}}^2$	$-0.031^{+0.021}_{-0.021}$	$100\theta_{s,\text{eq}}$	$0.4534^{+0.0037}_{-0.0036}$ (+1.2 σ)
n_s	$0.9688^{+0.0071}_{-0.0070}$ (+1.2 σ)	$\Delta z_{s,\text{DES}}^3$	$0.003^{+0.018}_{-0.019}$	$H(0.15)$	$73.49^{+0.85}_{-0.92}$ (+1.2 σ)
y_{cal}	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\Delta z_{s,\text{DES}}^4$	$-0.031^{+0.035}_{-0.036}$	$D_M(0.15)$	$635.4^{+8.9}_{-8.2}$ (−1.2 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	H_0	$68.29^{+0.98}_{-1.0}$ (+1.2 σ)	$H(0.38)$	$83.46^{+0.66}_{-0.71}$ (+1.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Ω_Λ	$0.697^{+0.012}_{-0.013}$ (+1.1 σ)	$D_M(0.38)$	1518^{+18}_{-17} (−1.2 σ)
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	Ω_m	$0.303^{+0.013}_{-0.012}$ (−1.1 σ)	$H(0.51)$	$90.09^{+0.55}_{-0.60}$ (+1.3 σ)
A_{100}^{PS}	258^{+60}_{-50} (−0.2 σ)	$\Omega_m h^2$	$0.1413^{+0.0018}_{-0.0017}$ (−1.1 σ)	$D_M(0.51)$	1967^{+22}_{-20} (−1.2 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.7 σ)	$\Omega_\nu h^2$	< 0.00151 (−0.7 σ)	$H(0.61)$	$95.65^{+0.47}_{-0.52}$ (+1.3 σ)
$A_{143 \times 217}^{\text{PS}}$	42^{+20}_{-20} (−0.3 σ)	$\Omega_m h^3$	$0.09647^{+0.00072}_{-0.00075}$ (+1.0 σ)	$D_M(0.61)$	2290^{+24}_{-22} (−1.2 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.1 σ)	σ_8	$0.809^{+0.018}_{-0.021}$ (+0.5 σ)	$H(2.33)$	$235.5^{+1.1}_{-1.1}$ (−1.1 σ)
A^{kSZ}	< 8.04 (−0.2 σ)	S_8	$0.813^{+0.019}_{-0.019}$ (−0.9 σ)	$D_M(2.33)$	5748^{+25}_{-23} (−1.2 σ)
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.011}_{-0.011}$ (−0.9 σ)	$f\sigma_8(0.15)$	$0.4503^{+0.0099}_{-0.0099}$ (−0.8 σ)
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	$0.600^{+0.013}_{-0.014}$ (−0.0 σ)	$\sigma_8(0.15)$	$0.748^{+0.017}_{-0.020}$ (+0.6 σ)
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	$0.979^{+0.020}_{-0.022}$ (+0.2 σ)	$f\sigma_8(0.38)$	$0.4706^{+0.0091}_{-0.010}$ (−0.2 σ)
A_{217}^{dustTT}	94^{+10}_{-10} (+0.0 σ)	$r_{\text{drag}} h$	$100.7^{+1.6}_{-1.6}$ (+1.2 σ)	$\sigma_8(0.38)$	$0.664^{+0.015}_{-0.019}$ (+0.6 σ)
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.075}$	$\langle d^2 \rangle^{1/2}$	$2.420^{+0.038}_{-0.037}$ (−0.7 σ)	$f\sigma_8(0.51)$	$0.4702^{+0.0087}_{-0.010}$ (+0.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.057}$	z_{re}	$7.8^{+1.2}_{-1.3}$ (+0.4 σ)	$\sigma_8(0.51)$	$0.622^{+0.014}_{-0.018}$ (+0.7 σ)
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$10^9 A_s$	$2.102^{+0.057}_{-0.054}$ (+0.3 σ)	$f\sigma_8(0.61)$	$0.4659^{+0.0089}_{-0.0098}$ (+0.2 σ)
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.10}$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.020}_{-0.020}$ (−0.7 σ)	$\sigma_8(0.61)$	$0.592^{+0.014}_{-0.017}$ (+0.7 σ)
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	D_{40}	1225^{+22}_{-22} (−0.6 σ)	$f\sigma_8(2.33)$	$0.2988^{+0.0064}_{-0.0075}$ (+0.7 σ)
A_{217}^{dustTE}	$2.06^{+0.52}_{-0.54}$	D_{220}	5749^{+73}_{-75} (+0.9 σ)	$\sigma_8(2.33)$	$0.3084^{+0.0073}_{-0.0088}$ (+0.8 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	D_{810}	2538^{+26}_{-25} (+0.1 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.9 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	D_{1420}	$818.2^{+9.3}_{-9.1}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−1.1 σ)
b_{DES}^1	$1.50^{+0.14}_{-0.14}$	D_{2000}	$231.3^{+3.1}_{-3.0}$ (+1.1 σ)	f_{2000}^{217}	$106.7^{+3.4}_{-3.5}$ (−1.0 σ)
b_{DES}^2	$1.70^{+0.11}_{-0.11}$	$n_{s,0.002}$	$0.9688^{+0.0071}_{-0.0070}$ (+1.2 σ)	χ_{lensing}^2	9.40 (ν : 0.4)
b_{DES}^3	$1.687^{+0.092}_{-0.091}$	Y_{P}	$0.245450^{+0.000098}_{-0.000099}$ (+1.8 σ)	χ_{small}^2	397.2 (ν : 1.9) (+0.1 σ)
b_{DES}^4	$2.05^{+0.11}_{-0.11}$	$Y_{\text{P}}^{\text{BBN}}$	$0.246777^{+0.000098}_{-0.000099}$ (+1.8 σ)	χ_{lowl}^2	22.86 (ν : 0.3) (−0.8 σ)
b_{DES}^5	$2.15^{+0.15}_{-0.15}$	10^5D/H	$2.559^{+0.047}_{-0.047}$ (−1.9 σ)	χ_{plik}^2	2361.5 (ν : 18.2) (+278.5 σ)
m_{DES}^1	$0.012^{+0.045}_{-0.045}$	Age/Gyr	$13.763^{+0.058}_{-0.052}$ (−1.2 σ)	$\chi_{6\text{DF}}^2$	0.030 (ν : 0.0)
m_{DES}^2	$0.012^{+0.044}_{-0.044}$	z_*	$1089.57^{+0.40}_{-0.40}$ (−1.8 σ)	χ_{MGS}^2	1.88 (ν : 0.1)
m_{DES}^3	$-0.005^{+0.039}_{-0.039}$	r_*	$144.80^{+0.40}_{-0.40}$ (+0.8 σ)	χ_{DR12BAO}^2	3.85 (ν : 0.3)
m_{DES}^4	$0.001^{+0.040}_{-0.040}$	$100\theta_*$	$1.04128^{+0.00054}_{-0.00055}$ (+0.8 σ)	χ_{DES}^2	518.6 (ν : 12.2)
$A_{\text{IA,DES}}$	$0.48^{+0.33}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$13.906^{+0.039}_{-0.039}$ (+0.8 σ)	χ_{prior}^2	25 (ν : 23.1) (+4.8 σ)
$\alpha_{\text{IA,DES}}$	< 2.86	z_{drag}	$1060.14^{+0.59}_{-0.55}$ (+1.8 σ)	χ_{CMB}^2	2790.9 (ν : 20.4) (+274.9 σ)
$\Delta z_{1,\text{DES}}^1$	$0.003^{+0.015}_{-0.015}$	r_{drag}	$147.42^{+0.43}_{-0.43}$ (+0.5 σ)	χ_{BAO}^2	5.76 (ν : 0.3)

$$\bar{\chi}_{\text{eff}}^2 = 3340.12; \Delta \bar{\chi}_{\text{eff}}^2 = 0.09; R - 1 = 0.00912$$

6.159 base_mnu_plikHM_TTTEEE_lowl_lowE_DESlens

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022462	$0.02243^{+0.00029}_{-0.00028}$ (+1.6 σ)	$\Delta z_{s,DES}^2$	-0.0205	$-0.021^{+0.023}_{-0.023}$	k_D	0.14076	$0.14072^{+0.00060}_{-0.00060}$ (+0.3 σ)
$\Omega_c h^2$	0.11903	$0.1190^{+0.0023}_{-0.0022}$ (-0.9 σ)	$\Delta z_{s,DES}^3$	0.0047	$0.004^{+0.020}_{-0.020}$	$100\theta_D$	0.160687	$0.16072^{+0.00034}_{-0.00034}$ (-1.5 σ)
$100\theta_{MC}$	1.04107	$1.04100^{+0.00060}_{-0.00060}$ (+0.7 σ)	$\Delta z_{s,DES}^4$	-0.0213	$-0.022^{+0.039}_{-0.039}$	z_{eq}	3381	3381^{+51}_{-50} (-0.8 σ)
τ	0.0535	$0.054^{+0.016}_{-0.016}$ (+0.2 σ)	H_0	68.33	$67.6^{+1.7}_{-2.0}$ (+0.9 σ)	k_{eq}	0.010320	$0.01032^{+0.00016}_{-0.00015}$ (-0.8 σ)
Σm_ν [eV]	0.002	< 0.248 (-0.5 σ)	Ω_Λ	0.6969	$0.688^{+0.021}_{-0.026}$ (+0.8 σ)	$100\theta_{eq}$	0.8174	$0.8175^{+0.0096}_{-0.0095}$ (+0.9 σ)
$\ln(10^{10} A_s)$	3.0406	$3.040^{+0.031}_{-0.031}$ (-0.0 σ)	Ω_m	0.3031	$0.312^{+0.026}_{-0.021}$ (-0.8 σ)	$100\theta_{s,eq}$	0.45144	$0.4515^{+0.0049}_{-0.0049}$ (+0.8 σ)
n_s	0.9682	$0.9672^{+0.0080}_{-0.0080}$ (+1.0 σ)	$\Omega_m h^2$	0.14152	$0.1424^{+0.0030}_{-0.0028}$ (-0.8 σ)	$H(0.15)$	73.53	$72.9^{+1.5}_{-1.8}$ (+0.9 σ)
y_{cal}	1.00044	$1.0004^{+0.0048}_{-0.0049}$ (-0.1 σ)	$\Omega_\nu h^2$	0.00003	< 0.00266 (-0.5 σ)	$D_M(0.15)$	635.1	641^{+18}_{-14} (-0.9 σ)
A_{217}^{CIB}	47.0	47^{+10}_{-10} (-0.2 σ)	$\Omega_m h^3$	0.09670	$0.09624^{+0.00097}_{-0.0012}$ (+0.8 σ)	$H(0.38)$	83.51	$83.0^{+1.1}_{-1.4}$ (+0.9 σ)
$\xi^{tSZ \times CIB}$	0.47	—	σ_8	0.8200	$0.802^{+0.028}_{-0.039}$ (+0.4 σ)	$D_M(0.38)$	1516.6	1530^{+36}_{-29} (-0.9 σ)
A_{143}^{tSZ}	7.21	$5.5^{+3.7}_{-3.9}$ (+0.3 σ)	S_8	0.8243	$0.818^{+0.026}_{-0.027}$ (-0.7 σ)	$H(0.51)$	90.15	$89.72^{+0.92}_{-1.1}$ (+0.9 σ)
A_{100}^{PS}	249	258^{+50}_{-50} (-0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4515	$0.448^{+0.014}_{-0.015}$ (-0.7 σ)	$D_M(0.51)$	1966.0	1982^{+43}_{-35} (-0.9 σ)
A_{143}^{PS}	47.2	45^{+10}_{-20} (-0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6085	$0.599^{+0.019}_{-0.022}$ (-0.0 σ)	$H(0.61)$	95.72	$95.34^{+0.78}_{-0.97}$ (+0.9 σ)
$A_{143 \times 217}^{PS}$	47.9	42^{+20}_{-20} (-0.2 σ)	$\sigma_8/h^{0.5}$	0.9921	$0.976^{+0.031}_{-0.037}$ (+0.1 σ)	$D_M(0.61)$	2288.8	2306^{+47}_{-38} (-0.9 σ)
A_{217}^{PS}	119.5	114^{+20}_{-20} (-0.1 σ)	$r_{drag} h$	100.61	$99.6^{+2.7}_{-3.2}$ (+0.9 σ)	$H(2.33)$	235.70	$236.1^{+1.8}_{-1.7}$ (-0.7 σ)
A^{kSZ}	0.00	< 8.09 (-0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4331	$2.423^{+0.047}_{-0.048}$ (-0.7 σ)	$D_M(2.33)$	5743.1	5762^{+48}_{-37} (-0.9 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (+0.0 σ)	z_{re}	7.55	$7.6^{+1.5}_{-1.6}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4560	$0.453^{+0.013}_{-0.014}$ (-0.6 σ)
A_{143}^{dustTT}	11.01	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	$10^9 A_s$	2.092	$2.091^{+0.066}_{-0.064}$ (-0.0 σ)	$\sigma_8(0.15)$	0.7585	$0.741^{+0.027}_{-0.037}$ (+0.4 σ)
$A_{143 \times 217}^{dustTT}$	19.8	$18.7^{+6.3}_{-6.4}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8796	$1.878^{+0.022}_{-0.022}$ (-0.6 σ)	$f\sigma_8(0.38)$	0.4763	$0.471^{+0.014}_{-0.015}$ (-0.2 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.0 σ)	D_{40}	1224.2	1226^{+24}_{-24} (-0.6 σ)	$\sigma_8(0.38)$	0.6731	$0.657^{+0.024}_{-0.035}$ (+0.4 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.076}_{-0.075}$	D_{220}	5736	5736^{+76}_{-78} (+0.6 σ)	$f\sigma_8(0.51)$	0.4758	$0.470^{+0.014}_{-0.016}$ (+0.0 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.058}_{-0.058}$	D_{810}	2539.5	2537^{+26}_{-27} (+0.0 σ)	$\sigma_8(0.51)$	0.6302	$0.615^{+0.023}_{-0.033}$ (+0.5 σ)
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.17}_{-0.17}$	D_{1420}	818.5	$817.4^{+9.3}_{-9.3}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4714	$0.465^{+0.014}_{-0.016}$ (+0.1 σ)
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	D_{2000}	231.50	$230.9^{+3.1}_{-3.1}$ (+0.9 σ)	$\sigma_8(0.61)$	0.5998	$0.585^{+0.022}_{-0.032}$ (+0.5 σ)
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.16}_{-0.16}$	$n_{s,0.002}$	0.9682	$0.9672^{+0.0080}_{-0.0080}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3018	$0.296^{+0.010}_{-0.014}$ (+0.5 σ)
A_{217}^{dustTE}	2.09	$2.07^{+0.53}_{-0.53}$	Y_P	0.245431	$0.24542^{+0.00011}_{-0.00011}$ (+1.5 σ)	$\sigma_8(2.33)$	0.3120	$0.304^{+0.012}_{-0.017}$ (+0.5 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	Y_P^{BBN}	0.246757	$0.24674^{+0.00011}_{-0.00011}$ (+1.5 σ)	f_{2000}^{143}	28.4	29^{+5}_{-5} (-0.8 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	$10^5 D/H$	2.569	$2.575^{+0.052}_{-0.051}$ (-1.6 σ)	$f_{2000}^{143 \times 217}$	31.67	32^{+4}_{-4} (-0.9 σ)
m_{DES}^1	0.0144	$0.014^{+0.045}_{-0.044}$	Age/Gyr	13.751	$13.79^{+0.11}_{-0.084}$ (-0.9 σ)	f_{2000}^{217}	106.30	$106.9^{+3.5}_{-3.5}$ (-0.9 σ)
m_{DES}^2	0.0124	$0.012^{+0.043}_{-0.043}$	z_*	1089.714	$1089.76^{+0.50}_{-0.49}$ (-1.4 σ)	χ_{small}^2	395.86	$397.0 (\nu: 1.4)$ (+0.0 σ)
m_{DES}^3	-0.0067	$-0.008^{+0.039}_{-0.040}$	r_*	144.62	$144.63^{+0.51}_{-0.51}$ (+0.5 σ)	χ_{lowl}^2	22.90	$22.99 (\nu: 0.3)$ (-0.7 σ)
m_{DES}^4	0.0119	$0.011^{+0.041}_{-0.040}$	$100\theta_*$	1.04121	$1.04119^{+0.00059}_{-0.00058}$ (+0.6 σ)	χ_{plik}^2	2344.9	$2361.4 (\nu: 19.6)$ (+278.5 σ)
$A_{IA,DES}$	1.43	$1.24^{+0.96}_{-0.95}$	$D_M(z_*)/\text{Gpc}$	13.8894	$13.891^{+0.048}_{-0.048}$ (+0.4 σ)	χ_{DES}^2	229.21	$232.0 (\nu: 3.2)$
$\alpha_{IA,DES}$	2.44	> -2.12	z_{drag}	1060.09	$1060.01^{+0.61}_{-0.57}$ (+1.5 σ)	χ_{prior}^2	2.7	$19.6 (\nu: 17.8)$ (+3.3 σ)
$\Delta z_{s,DES}^1$	0.0045	$0.005^{+0.028}_{-0.029}$	r_{drag}	147.25	$147.28^{+0.52}_{-0.52}$ (+0.3 σ)	χ_{CMB}^2	2763.6	$2781.4 (\nu: 19.3)$ (+273.3 σ)

Best-fit $\chi_{eff}^2 = 2995.54$; $\Delta\chi_{eff}^2 = -1.13$; $\bar{\chi}_{eff}^2 = 3033.01$; $\Delta\bar{\chi}_{eff}^2 = 0.68$; $R - 1 = 0.00759$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.86 (Δ -0.00) commander_dx12_v3.2_29: 22.90 (Δ 0.07) plik_rd12_HM_v22b_TTTEEE: 2344.87 (Δ -1.15) WL - DES_1YR_final: 229.21 (Δ 0.02)

6.160 base_mnu_plikHM_TTTEEE_lowl_lowE_DESlens_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022444	$0.02246^{+0.00026}_{-0.00026}$ (+1.7 σ)	$\Delta z_{s,DES}^4$	-0.0221	$-0.022^{+0.039}_{-0.039}$	$100\theta_{eq}$	0.8173	$0.8186^{+0.0079}_{-0.0077}$ (+1.0 σ)
$\Omega_c h^2$	0.11906	$0.1188^{+0.0018}_{-0.0018}$ (-1.0 σ)	H_0	68.29	$67.99^{+0.95}_{-1.1}$ (+1.1 σ)	$100\theta_{s,eq}$	0.45139	$0.4521^{+0.0040}_{-0.0039}$ (+0.9 σ)
$100\theta_{MC}$	1.04104	$1.04105^{+0.00056}_{-0.00057}$ (+0.8 σ)	Ω_Λ	0.6965	$0.693^{+0.012}_{-0.013}$ (+1.0 σ)	$H(0.15)$	73.49	$73.23^{+0.87}_{-0.90}$ (+1.1 σ)
τ	0.0532	$0.054^{+0.015}_{-0.015}$ (+0.3 σ)	Ω_m	0.3035	$0.307^{+0.013}_{-0.012}$ (-1.0 σ)	$D_M(0.15)$	635.4	$638.0^{+8.8}_{-8.4}$ (-1.0 σ)
Σm_ν [eV]	0.002	< 0.146 (-0.7 σ)	$\Omega_m h^2$	0.14153	$0.1418^{+0.0018}_{-0.0018}$ (-1.0 σ)	$H(0.38)$	83.48	$83.27^{+0.67}_{-0.70}$ (+1.1 σ)
$\ln(10^{10} A_s)$	3.0387	$3.040^{+0.032}_{-0.031}$ (+0.0 σ)	$\Omega_\nu h^2$	0.00003	< 0.00157 (-0.7 σ)	$D_M(0.38)$	1517.3	1523^{+18}_{-17} (-1.0 σ)
n_s	0.9684	$0.9680^{+0.0072}_{-0.0072}$ (+1.1 σ)	$\Omega_m h^3$	0.09665	$0.09643^{+0.00072}_{-0.00078}$ (+1.0 σ)	$H(0.51)$	90.13	$89.94^{+0.56}_{-0.59}$ (+1.1 σ)
y_{cal}	0.99984	$1.0004^{+0.0048}_{-0.0049}$ (-0.0 σ)	σ_8	0.8194	$0.808^{+0.021}_{-0.025}$ (+0.5 σ)	$D_M(0.51)$	1966.8	1973^{+21}_{-20} (-1.1 σ)
A_{217}^{CIB}	46.8	47^{+10}_{-10} (-0.2 σ)	S_8	0.8242	$0.818^{+0.023}_{-0.025}$ (-0.7 σ)	$H(0.61)$	95.693	$95.53^{+0.48}_{-0.51}$ (+1.1 σ)
$\xi^{tSZ \times CIB}$	0.48	—	$\sigma_8 \Omega_m^{0.5}$	0.4514	$0.448^{+0.013}_{-0.013}$ (-0.7 σ)	$D_M(0.61)$	2289.7	2297^{+23}_{-22} (-1.1 σ)
A_{143}^{tSZ}	7.30	$5.6^{+3.8}_{-3.8}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6082	$0.602^{+0.016}_{-0.017}$ (+0.1 σ)	$H(2.33)$	235.70	$235.8^{+1.1}_{-1.1}$ (-0.9 σ)
A_{100}^{PS}	248	258^{+50}_{-50} (-0.3 σ)	$\sigma_8/h^{0.5}$	0.9916	$0.980^{+0.025}_{-0.027}$ (+0.2 σ)	$D_M(2.33)$	5744.3	5753^{+25}_{-23} (-1.1 σ)
A_{143}^{PS}	47.3	45^{+10}_{-20} (-0.6 σ)	$r_{drag} h$	100.57	$100.2^{+1.6}_{-1.7}$ (+1.0 σ)	$f\sigma_8(0.15)$	0.4559	$0.453^{+0.012}_{-0.013}$ (-0.6 σ)
$A_{143 \times 217}^{PS}$	48.3	42^{+20}_{-20} (-0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4310	$2.423^{+0.045}_{-0.047}$ (-0.7 σ)	$\sigma_8(0.15)$	0.7579	$0.748^{+0.019}_{-0.023}$ (+0.6 σ)
A_{217}^{PS}	119.7	115^{+20}_{-20} (-0.1 σ)	z_{re}	7.53	$7.6^{+1.5}_{-1.6}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4761	$0.472^{+0.012}_{-0.012}$ (-0.1 σ)
A^{kSZ}	0.00	< 7.98 (-0.2 σ)	$10^9 A_s$	2.088	$2.091^{+0.068}_{-0.064}$ (+0.0 σ)	$\sigma_8(0.38)$	0.6725	$0.663^{+0.017}_{-0.021}$ (+0.6 σ)
A_{100}^{dustTT}	8.89	$8.9^{+3.6}_{-3.7}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8769	$1.877^{+0.021}_{-0.021}$ (-0.6 σ)	$f\sigma_8(0.51)$	0.4756	$0.471^{+0.011}_{-0.012}$ (+0.1 σ)
A_{143}^{dustTT}	11.07	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	D_{40}	1221.9	1225^{+23}_{-22} (-0.6 σ)	$\sigma_8(0.51)$	0.6296	$0.621^{+0.016}_{-0.020}$ (+0.6 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	D_{220}	5725	5736^{+75}_{-76} (+0.6 σ)	$f\sigma_8(0.61)$	0.4712	$0.467^{+0.011}_{-0.012}$ (+0.2 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.1 σ)	D_{810}	2536.0	2537^{+26}_{-27} (-0.0 σ)	$\sigma_8(0.61)$	0.5992	$0.591^{+0.016}_{-0.019}$ (+0.6 σ)
A_{100}^{dustTE}	0.115	$0.114^{+0.074}_{-0.075}$	D_{1420}	817.4	$817.6^{+9.4}_{-9.2}$ (+0.6 σ)	$f\sigma_8(2.33)$	0.3015	$0.2981^{+0.0072}_{-0.0085}$ (+0.7 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.134^{+0.058}_{-0.058}$	D_{2000}	231.15	$231.1^{+3.0}_{-3.0}$ (+1.0 σ)	$\sigma_8(2.33)$	0.3116	$0.3075^{+0.0081}_{-0.0098}$ (+0.7 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.17}_{-0.17}$	$n_{s,0.002}$	0.9684	$0.9680^{+0.0072}_{-0.0072}$ (+1.1 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (-0.9 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	Y_P	0.245424	$0.245428^{+0.000097}_{-0.00010}$ (+1.6 σ)	$f_{2000}^{143 \times 217}$	31.74	32^{+4}_{-4} (-1.0 σ)
$A_{143 \times 217}^{dustTE}$	0.663	$0.66^{+0.15}_{-0.15}$	Y_P^{BBN}	0.246751	$0.246754^{+0.000098}_{-0.00010}$ (+1.6 σ)	f_{2000}^{217}	106.27	$106.7^{+3.6}_{-3.5}$ (-0.9 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.51}_{-0.53}$	$10^5 D/H$	2.5719	$2.570^{+0.048}_{-0.047}$ (-1.7 σ)	χ_{small}^2	395.84	397.0 (ν : 1.4) (+0.0 σ)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	Age/Gyr	13.754	$13.774^{+0.057}_{-0.053}$ (-1.1 σ)	χ_{lowl}^2	22.84	22.92 (ν : 0.3) (-0.8 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0013}$ (-0.1 σ)	z_*	1089.740	$1089.70^{+0.40}_{-0.41}$ (-1.5 σ)	χ_{plik}^2	2345.0	2360.9 (ν : 18.4) (+278.4 σ)
m_{DES}^1	0.0155	$0.014^{+0.045}_{-0.045}$	r_*	144.625	$144.69^{+0.44}_{-0.43}$ (+0.6 σ)	χ_{6DF}^2	0.000	0.033 (ν : 0.0)
m_{DES}^2	0.0116	$0.012^{+0.043}_{-0.043}$	$100\theta_*$	1.04119	$1.04123^{+0.00057}_{-0.00057}$ (+0.7 σ)	χ_{MGS}^2	1.75	1.57 (ν : 0.1)
m_{DES}^3	-0.0071	$-0.007^{+0.040}_{-0.040}$	$D_M(z_*)/\text{Gpc}$	13.8904	$13.896^{+0.041}_{-0.041}$ (+0.5 σ)	$\chi_{DR12BAO}^2$	3.47	4.2 (ν : 0.6)
m_{DES}^4	0.0121	$0.011^{+0.041}_{-0.039}$	z_{drag}	1060.05	$1060.05^{+0.57}_{-0.57}$ (+1.6 σ)	χ_{DES}^2	229.17	231.9 (ν : 3.0)
$A_{IA,DES}$	1.45	$1.23^{+0.97}_{-0.95}$	r_{drag}	147.264	$147.33^{+0.46}_{-0.45}$ (+0.4 σ)	χ_{prior}^2	2.8	19.4 (ν : 17.8) (+3.3 σ)
$\alpha_{IA,DES}$	2.51	> -2.25	k_D	0.14073	$0.14068^{+0.00057}_{-0.00057}$ (+0.2 σ)	χ_{BAO}^2	5.22	5.78 (ν : 0.3)
$\Delta z_{s,DES}^1$	0.0044	$0.004^{+0.028}_{-0.029}$	$100\theta_D$	0.160707	$0.16070^{+0.00033}_{-0.00033}$ (-1.6 σ)	χ_{CMB}^2	2763.7	2780.8 (ν : 18.0) (+273.2 σ)
$\Delta z_{s,DES}^2$	-0.0207	$-0.021^{+0.023}_{-0.023}$	z_{eq}	3381.5	3375^{+41}_{-41} (-0.9 σ)			
$\Delta z_{s,DES}^3$	0.0050	$0.005^{+0.020}_{-0.020}$	k_{eq}	0.010320	$0.01030^{+0.00012}_{-0.00013}$ (-0.9 σ)			

Best-fit $\chi_{eff}^2 = 3000.82$; $\Delta\chi_{eff}^2 = -1.30$; $\bar{\chi}_{eff}^2 = 3037.89$; $\Delta\bar{\chi}_{eff}^2 = 0.12$; $R - 1 = 0.00772$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.75 (Δ 0.34) DR12BAO: 3.47 (Δ -0.47) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.84 (Δ -0.21) commander_dx12_v3_2_29: 22.84 (Δ 0.17) plik_rd12_HM_v22b_TTTEEE: 2344.98 (Δ -1.38) WL - DES_1YR_final: 229.17 (Δ 0.11)

6.161 base_mnu_plikHM_TTTEEE_lowl_lowE_DESlens_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022472	$0.02244^{+0.00028}_{-0.00027}$ (+1.6 σ)	$\Delta z_{s,\text{DES}}^3$	0.0048	$0.004^{+0.019}_{-0.020}$	z_{eq}	3380.6	3382^{+49}_{-47} (−0.7 σ)
$\Omega_c h^2$	0.11899	$0.1191^{+0.0022}_{-0.0021}$ (−0.9 σ)	$\Delta z_{s,\text{DES}}^4$	−0.0223	$-0.023^{+0.039}_{-0.039}$	k_{eq}	0.010318	$0.01032^{+0.00015}_{-0.00014}$ (−0.7 σ)
$100\theta_{\text{MC}}$	1.04104	$1.04100^{+0.00059}_{-0.00060}$ (+0.7 σ)	H_0	68.34	$67.7^{+1.5}_{-1.8}$ (+0.9 σ)	$100\theta_{\text{eq}}$	0.8175	$0.8172^{+0.0091}_{-0.0091}$ (+0.8 σ)
τ	0.0540	$0.055^{+0.015}_{-0.015}$ (+0.4 σ)	Ω_Λ	0.6971	$0.689^{+0.019}_{-0.022}$ (+0.8 σ)	$100\theta_{s,\text{eq}}$	0.45150	$0.4513^{+0.0047}_{-0.0047}$ (+0.8 σ)
Σm_ν [eV]	0.001	< 0.198 (−0.6 σ)	Ω_m	0.3029	$0.311^{+0.022}_{-0.019}$ (−0.8 σ)	$H(0.15)$	73.54	$73.0^{+1.3}_{-1.6}$ (+1.0 σ)
$\ln(10^{10} A_s)$	3.0418	$3.043^{+0.030}_{-0.029}$ (+0.2 σ)	$\Omega_m h^2$	0.14148	$0.1423^{+0.0028}_{-0.0026}$ (−0.8 σ)	$D_M(0.15)$	635.0	640^{+15}_{-13} (−0.9 σ)
n_s	0.9689	$0.9670^{+0.0078}_{-0.0077}$ (+0.9 σ)	$\Omega_\nu h^2$	0.00001	< 0.00213 (−0.6 σ)	$H(0.38)$	83.52	$83.1^{+1.0}_{-1.2}$ (+1.0 σ)
y_{cal}	1.00052	$1.0006^{+0.0048}_{-0.0048}$ (+0.0 σ)	$\Omega_m h^3$	0.09669	$0.09635^{+0.00085}_{-0.00099}$ (+0.9 σ)	$D_M(0.38)$	1516.4	1528^{+31}_{-26} (−0.9 σ)
A_{217}^{CIB}	45.1	47^{+10}_{-10} (−0.2 σ)	σ_8	0.8206	$0.807^{+0.022}_{-0.028}$ (+0.5 σ)	$H(0.51)$	90.16	$89.80^{+0.83}_{-0.99}$ (+1.0 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.80	—	S_8	0.8246	$0.821^{+0.021}_{-0.021}$ (−0.5 σ)	$D_M(0.51)$	1965.7	1979^{+37}_{-31} (−0.9 σ)
A_{143}^{tSZ}	7.09	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4517	$0.450^{+0.012}_{-0.012}$ (−0.5 σ)	$H(0.61)$	95.72	$95.41^{+0.69}_{-0.83}$ (+1.0 σ)
A_{100}^{PS}	246	258^{+50}_{-50} (−0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6088	$0.602^{+0.014}_{-0.015}$ (+0.1 σ)	$D_M(0.61)$	2288.5	2303^{+40}_{-34} (−0.9 σ)
A_{143}^{PS}	51.7	45^{+20}_{-20} (−0.6 σ)	$\sigma_8/h^{0.5}$	0.9927	$0.981^{+0.023}_{-0.026}$ (+0.2 σ)	$H(2.33)$	235.68	$236.1^{+1.6}_{-1.6}$ (−0.8 σ)
$A_{143 \times 217}^{\text{PS}}$	56.4	42^{+20}_{-20} (−0.2 σ)	$r_{\text{drag}} h$	100.64	$99.7^{+2.5}_{-2.8}$ (+0.9 σ)	$D_M(2.33)$	5742.9	5758^{+40}_{-33} (−1.0 σ)
A_{217}^{PS}	122.9	115^{+20}_{-20} (−0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4330	$2.430^{+0.038}_{-0.038}$ (−0.5 σ)	$f\sigma_8(0.15)$	0.4562	$0.455^{+0.011}_{-0.011}$ (−0.5 σ)
A^{kSZ}	0.00	< 7.98 (−0.2 σ)	z_{re}	7.60	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7590	$0.746^{+0.021}_{-0.027}$ (+0.5 σ)
A_{100}^{dustTT}	8.85	$8.9^{+3.6}_{-3.7}$ (−0.0 σ)	$10^9 A_s$	2.094	$2.098^{+0.064}_{-0.060}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4765	$0.473^{+0.010}_{-0.011}$ (−0.0 σ)
A_{143}^{dustTT}	10.99	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8801	$1.879^{+0.021}_{-0.020}$ (−0.5 σ)	$\sigma_8(0.38)$	0.6736	$0.661^{+0.019}_{-0.026}$ (+0.6 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.3	$18.6^{+6.3}_{-6.5}$ (+0.1 σ)	D_{40}	1223.3	1228^{+23}_{-22} (−0.4 σ)	$f\sigma_8(0.51)$	0.4761	$0.472^{+0.010}_{-0.011}$ (+0.2 σ)
A_{217}^{dustTT}	95.8	94^{+10}_{-10} (+0.1 σ)	D_{220}	5736	5740^{+75}_{-76} (+0.7 σ)	$\sigma_8(0.51)$	0.6307	$0.619^{+0.019}_{-0.025}$ (+0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.075}$	D_{810}	2540.7	2539^{+26}_{-26} (+0.1 σ)	$f\sigma_8(0.61)$	0.4717	$0.467^{+0.010}_{-0.011}$ (+0.3 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.134^{+0.057}_{-0.057}$	D_{1420}	819.2	$817.7^{+9.3}_{-9.2}$ (+0.6 σ)	$\sigma_8(0.61)$	0.6002	$0.589^{+0.018}_{-0.024}$ (+0.6 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.17}$	D_{2000}	231.77	$231.1^{+3.0}_{-3.0}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3020	$0.2973^{+0.0084}_{-0.011}$ (+0.6 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$n_{s,0.002}$	0.9689	$0.9670^{+0.0078}_{-0.0077}$ (+0.9 σ)	$\sigma_8(2.33)$	0.3122	$0.3064^{+0.0098}_{-0.013}$ (+0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.66^{+0.15}_{-0.15}$	Y_P	0.245434	$0.24542^{+0.00010}_{-0.00011}$ (+1.5 σ)	f_{2000}^{143}	28.1	29^{+5}_{-5} (−0.8 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.52}_{-0.54}$	Y_P^{BBN}	0.246761	$0.24675^{+0.00010}_{-0.00011}$ (+1.5 σ)	$f_{2000}^{143 \times 217}$	31.64	32^{+4}_{-4} (−1.0 σ)
c_{100}	0.99977	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	10^5D/H	2.567	$2.573^{+0.051}_{-0.051}$ (−1.6 σ)	f_{2000}^{217}	106.07	$106.8^{+3.5}_{-3.5}$ (−0.9 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0013}$ (−0.1 σ)	Age/Gyr	13.751	$13.786^{+0.092}_{-0.074}$ (−1.0 σ)	χ_{lensing}^2	8.84	9.29 (ν : 0.3)
m_{DES}^1	0.0151	$0.014^{+0.046}_{-0.045}$	z_*	1089.699	$1089.75^{+0.48}_{-0.48}$ (−1.4 σ)	χ_{small}^2	395.92	397.1 (ν : 1.6) (+0.1 σ)
m_{DES}^2	0.0128	$0.011^{+0.043}_{-0.044}$	r_*	144.620	$144.61^{+0.48}_{-0.49}$ (+0.5 σ)	χ_{lowl}^2	22.80	23.13 (ν : 0.3) (−0.6 σ)
m_{DES}^3	−0.0069	$-0.009^{+0.040}_{-0.039}$	$100\theta_*$	1.04118	$1.04118^{+0.00058}_{-0.00058}$ (+0.6 σ)	χ_{plik}^2	2345.2	2360.4 (ν : 16.7) (+278.4 σ)
m_{DES}^4	0.0129	$0.010^{+0.041}_{-0.040}$	$D_M(z_*)/\text{Gpc}$	13.8900	$13.889^{+0.045}_{-0.046}$ (+0.4 σ)	χ_{DES}^2	229.17	232.1 (ν : 3.3)
$A_{\text{IA,DES}}$	1.46	$1.26^{+0.95}_{-0.94}$	z_{drag}	1060.09	$1060.03^{+0.59}_{-0.60}$ (+1.6 σ)	χ_{prior}^2	2.5	19.6 (ν : 17.9) (+3.3 σ)
$\alpha_{\text{IA,DES}}$	2.50	> −2.14	r_{drag}	147.252	$147.25^{+0.48}_{-0.49}$ (+0.2 σ)	χ_{CMB}^2	2772.7	2789.9 (ν : 18.2) (+274.8 σ)
$\Delta z_{s,\text{DES}}^1$	0.0050	$0.005^{+0.028}_{-0.029}$	k_D	0.14077	$0.14075^{+0.00057}_{-0.00057}$ (+0.3 σ)			
$\Delta z_{s,\text{DES}}^2$	−0.0205	$-0.021^{+0.023}_{-0.023}$	$100\theta_D$	0.160670	$0.16071^{+0.00034}_{-0.00033}$ (−1.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3004.39$; $\Delta\chi_{\text{eff}}^2 = -1.10$; $\bar{\chi}_{\text{eff}}^2 = 3041.59$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.43$; $R - 1 = 0.00745$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.84 (Δ 0.07) small_100x143_offlike5_EE_Aplanck.B: 395.92 (Δ -0.29) commander_dx12.v3.2_29: 22.80 (Δ -0.04) plik_rd12_HM.v22b_TTTEEE: 2345.16 (Δ -0.59) WL - DES.1YR_final: 229.17 (Δ -0.13)

6.162 base_mnu_plikHM_TTTEE_lowl_lowE_DESlens_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022459	$0.02246^{+0.00026}_{-0.00025}$ (+1.7 σ)	$\Delta z_{s,DES}^4$	-0.0219	$-0.022^{+0.039}_{-0.039}$	$100\theta_{eq}$	0.8171	$0.8182^{+0.0073}_{-0.0072}$ (+0.9 σ)
$\Omega_c h^2$	0.11909	$0.1189^{+0.0017}_{-0.0017}$ (-1.0 σ)	H_0	68.30	$68.01^{+0.93}_{-1.0}$ (+1.1 σ)	$100\theta_{s,eq}$	0.45130	$0.4519^{+0.0038}_{-0.0037}$ (+0.9 σ)
$100\theta_{MC}$	1.04105	$1.04104^{+0.00055}_{-0.00057}$ (+0.8 σ)	Ω_Λ	0.6965	$0.693^{+0.012}_{-0.013}$ (+1.0 σ)	$H(0.15)$	73.50	$73.25^{+0.81}_{-0.90}$ (+1.1 σ)
τ	0.0539	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	Ω_m	0.3035	$0.307^{+0.013}_{-0.012}$ (-1.0 σ)	$D_M(0.15)$	635.3	$637.8^{+8.4}_{-8.2}$ (-1.0 σ)
Σm_ν [eV]	0.000	< 0.128 (-0.7 σ)	$\Omega_m h^2$	0.14156	$0.1418^{+0.0017}_{-0.0017}$ (-1.0 σ)	$H(0.38)$	83.49	$83.29^{+0.65}_{-0.67}$ (+1.1 σ)
$\ln(10^{10} A_s)$	3.0415	$3.043^{+0.030}_{-0.028}$ (+0.2 σ)	$\Omega_\nu h^2$	0.00000	< 0.00138 (-0.7 σ)	$D_M(0.38)$	1517.1	1522^{+17}_{-17} (-1.1 σ)
n_s	0.9684	$0.9676^{+0.0072}_{-0.0071}$ (+1.0 σ)	$\Omega_m h^3$	0.09668	$0.09647^{+0.00065}_{-0.00074}$ (+1.0 σ)	$H(0.51)$	90.14	$89.96^{+0.52}_{-0.59}$ (+1.1 σ)
y_{cal}	1.00034	$1.0005^{+0.0047}_{-0.0048}$ (+0.0 σ)	σ_8	0.8208	$0.811^{+0.017}_{-0.020}$ (+0.6 σ)	$D_M(0.51)$	1966.6	1973^{+20}_{-20} (-1.1 σ)
A_{217}^{CIB}	45.6	47^{+10}_{-10} (-0.2 σ)	S_8	0.8255	$0.820^{+0.019}_{-0.020}$ (-0.6 σ)	$H(0.61)$	95.705	$95.55^{+0.45}_{-0.51}$ (+1.2 σ)
$\xi^{tSZ \times CIB}$	0.71	—	$\sigma_8 \Omega_m^{0.5}$	0.4522	$0.449^{+0.011}_{-0.011}$ (-0.6 σ)	$D_M(0.61)$	2289.4	2296^{+22}_{-22} (-1.1 σ)
A_{143}^{tSZ}	7.08	$5.6^{+3.8}_{-3.8}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6092	$0.604^{+0.013}_{-0.013}$ (+0.2 σ)	$H(2.33)$	235.73	$235.8^{+1.1}_{-1.1}$ (-0.9 σ)
A_{100}^{PS}	246	257^{+50}_{-50} (-0.3 σ)	$\sigma_8/h^{0.5}$	0.9932	$0.984^{+0.020}_{-0.021}$ (+0.3 σ)	$D_M(2.33)$	5743.6	5752^{+23}_{-22} (-1.1 σ)
A_{143}^{PS}	50.7	45^{+10}_{-20} (-0.6 σ)	$r_{drag} h$	100.56	$100.2^{+1.5}_{-1.6}$ (+1.1 σ)	$f\sigma_8(0.15)$	0.4567	$0.4541^{+0.0099}_{-0.010}$ (-0.5 σ)
$A_{143 \times 217}^{PS}$	54.0	42^{+20}_{-20} (-0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4346	$2.429^{+0.037}_{-0.038}$ (-0.5 σ)	$\sigma_8(0.15)$	0.7591	$0.750^{+0.016}_{-0.019}$ (+0.6 σ)
A_{217}^{PS}	122.1	115^{+20}_{-20} (-0.0 σ)	z_{re}	7.59	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4769	$0.4735^{+0.0090}_{-0.0097}$ (+0.0 σ)
A^{kSZ}	0.00	< 7.92 (-0.3 σ)	$10^9 A_s$	2.094	$2.097^{+0.063}_{-0.059}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6736	$0.665^{+0.015}_{-0.017}$ (+0.7 σ)
A_{100}^{dustTT}	8.80	$8.9^{+3.6}_{-3.7}$ (-0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8798	$1.878^{+0.020}_{-0.020}$ (-0.5 σ)	$f\sigma_8(0.51)$	0.4763	$0.4727^{+0.0086}_{-0.0097}$ (+0.2 σ)
A_{143}^{dustTT}	11.06	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	D_{40}	1223.9	1226^{+22}_{-21} (-0.5 σ)	$\sigma_8(0.51)$	0.6306	$0.623^{+0.014}_{-0.016}$ (+0.7 σ)
$A_{143 \times 217}^{dustTT}$	20.2	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	D_{220}	5734	5740^{+74}_{-76} (+0.7 σ)	$f\sigma_8(0.61)$	0.4719	$0.4681^{+0.0088}_{-0.0092}$ (+0.3 σ)
A_{217}^{dustTT}	95.5	94^{+10}_{-10} (+0.1 σ)	D_{810}	2539.7	2538^{+26}_{-26} (+0.1 σ)	$\sigma_8(0.61)$	0.6002	$0.593^{+0.013}_{-0.016}$ (+0.7 σ)
A_{100}^{dustTE}	0.116	$0.114^{+0.074}_{-0.076}$	D_{1420}	818.6	$817.8^{+9.3}_{-9.1}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.3020	$0.2990^{+0.0062}_{-0.0069}$ (+0.7 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.134^{+0.057}_{-0.057}$	D_{2000}	231.57	$231.2^{+3.0}_{-3.0}$ (+1.0 σ)	$\sigma_8(2.33)$	0.3121	$0.3085^{+0.0070}_{-0.0081}$ (+0.8 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$n_{s,0.002}$	0.9684	$0.9676^{+0.0072}_{-0.0071}$ (+1.0 σ)	f_{2000}^{143}	28.3	29^{+5}_{-5} (-0.9 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	Y_P	0.245430	$0.245428^{+0.000097}_{-0.00010}$ (+1.6 σ)	$f_{2000}^{143 \times 217}$	31.66	32^{+4}_{-4} (-1.0 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.66^{+0.15}_{-0.15}$	Y_P^{BBN}	0.246756	$0.246755^{+0.000097}_{-0.00010}$ (+1.6 σ)	f_{2000}^{217}	106.16	$106.7^{+3.5}_{-3.5}$ (-0.9 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.51}_{-0.53}$	$10^5 D/H$	2.5692	$2.569^{+0.047}_{-0.047}$ (-1.7 σ)	$\chi_{lensing}^2$	8.85	9.24 (ν : 0.2)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	Age/Gyr	13.752	$13.771^{+0.054}_{-0.051}$ (-1.1 σ)	χ_{small}^2	395.93	397.0 (ν : 1.5) (+0.0 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0013}$ (-0.1 σ)	z_*	1089.724	$1089.71^{+0.40}_{-0.41}$ (-1.5 σ)	χ_{lowl}^2	22.90	23.04 (ν : 0.3) (-0.7 σ)
m_{DES}^1	0.0150	$0.014^{+0.045}_{-0.045}$	r_*	144.604	$144.66^{+0.41}_{-0.40}$ (+0.6 σ)	χ_{plik}^2	2344.9	2360.1 (ν : 16.5) (+278.3 σ)
m_{DES}^2	0.0128	$0.011^{+0.043}_{-0.043}$	$100\theta_*$	1.04119	$1.04121^{+0.00056}_{-0.00056}$ (+0.6 σ)	χ_{6DF}^2	0.000	0.031 (ν : 0.0)
m_{DES}^3	-0.0081	$-0.008^{+0.039}_{-0.040}$	$D_M(z_*)/\text{Gpc}$	13.8883	$13.894^{+0.039}_{-0.039}$ (+0.5 σ)	χ_{MGS}^2	1.75	1.58 (ν : 0.1)
m_{DES}^4	0.0117	$0.011^{+0.040}_{-0.039}$	z_{drag}	1060.09	$1060.06^{+0.56}_{-0.55}$ (+1.6 σ)	$\chi_{DR12BAO}^2$	3.48	4.1 (ν : 0.5)
$A_{IA,DES}$	1.46	$1.25^{+0.96}_{-0.94}$	r_{drag}	147.238	$147.30^{+0.43}_{-0.43}$ (+0.3 σ)	χ_{DES}^2	229.18	232.0 (ν : 3.1)
$\alpha_{IA,DES}$	2.52	> -2.16	k_D	0.14077	$0.14071^{+0.00055}_{-0.00055}$ (+0.3 σ)	χ_{prior}^2	2.6	19.4 (ν : 17.9) (+3.3 σ)
$\Delta z_{s,DES}^1$	0.0049	$0.004^{+0.028}_{-0.029}$	$100\theta_D$	0.160686	$0.16069^{+0.00033}_{-0.00033}$ (-1.6 σ)	χ_{CMB}^2	2772.6	2789.4 (ν : 17.5) (+274.7 σ)
$\Delta z_{s,DES}^2$	-0.0209	$-0.021^{+0.022}_{-0.023}$	z_{eq}	3382.7	3377^{+38}_{-39} (-0.8 σ)	χ_{BAO}^2	5.22	5.75 (ν : 0.3)
$\Delta z_{s,DES}^3$	0.0049	$0.004^{+0.019}_{-0.020}$	k_{eq}	0.010324	$0.01031^{+0.00012}_{-0.00012}$ (-0.9 σ)			

Best-fit $\chi_{eff}^2 = 3009.63$; $\Delta\chi_{eff}^2 = -1.38$; $\bar{\chi}_{eff}^2 = 3046.60$; $\Delta\bar{\chi}_{eff}^2 = -0.08$; $R - 1 = 0.00939$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.75 (Δ 0.34) DR12BAO: 3.48 (Δ -0.46) CMB - smicadx12.Dec5.ftl_mv2.ndclpp-p.teb.consext8: 8.85 (Δ -0.01) small_100x143.offlike5_EE_Aplanc
395.93 (Δ -0.27) commander_dx12_v3.2.29: 22.90 (Δ 0.16) plik_rd12_HM.v22b.TTTEE: 2344.91 (Δ -1.24) WL - DES_1YR_final: 229.18 (Δ 0.12)

6.163 base_mnu_plikHM_TTTEE_lowl_lowE_DESlens_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02244^{+0.00029}_{-0.00028}$ (+1.6 σ)	$\Delta z_{\mathrm{s,DES}}^2$	$-0.021^{+0.023}_{-0.023}$	k_{D}	$0.14071^{+0.00059}_{-0.00060}$ (+0.3 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1190^{+0.0022}_{-0.0022}$ (−0.9 σ)	$\Delta z_{\mathrm{s,DES}}^3$	$0.004^{+0.020}_{-0.020}$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00034}_{-0.00034}$ (−1.5 σ)
$100\theta_{\mathrm{MC}}$	$1.04101^{+0.00060}_{-0.00060}$ (+0.7 σ)	$\Delta z_{\mathrm{s,DES}}^4$	$-0.023^{+0.039}_{-0.039}$	z_{eq}	3379^{+51}_{-49} (−0.8 σ)
τ	$0.055^{+0.013}_{-0.012}$ (+0.4 σ)	H_0	$67.6^{+1.7}_{-2.0}$ (+0.9 σ)	k_{eq}	$0.01031^{+0.00016}_{-0.00015}$ (−0.8 σ)
Σm_{ν} [eV]	< 0.251 (−0.5 σ)	Ω_{Λ}	$0.688^{+0.021}_{-0.026}$ (+0.8 σ)	$100\theta_{\mathrm{eq}}$	$0.8177^{+0.0095}_{-0.0095}$ (+0.9 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.027}_{-0.026}$ (+0.2 σ)	Ω_{m}	$0.312^{+0.026}_{-0.021}$ (−0.8 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0048}_{-0.0049}$ (+0.8 σ)
n_{s}	$0.9674^{+0.0079}_{-0.0080}$ (+1.0 σ)	$\Omega_{\mathrm{m}}h^2$	$0.1424^{+0.0030}_{-0.0028}$ (−0.8 σ)	$H(0.15)$	$72.9^{+1.5}_{-1.8}$ (+0.9 σ)
y_{cal}	$1.0004^{+0.0048}_{-0.0049}$ (−0.1 σ)	$\Omega_{\nu}h^2$	< 0.00269 (−0.5 σ)	$D_{\mathrm{M}}(0.15)$	641^{+18}_{-14} (−0.9 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	$\Omega_{\mathrm{m}}h^3$	$0.09624^{+0.00098}_{-0.0012}$ (+0.8 σ)	$H(0.38)$	$83.0^{+1.1}_{-1.4}$ (+0.9 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	σ_8	$0.803^{+0.028}_{-0.039}$ (+0.4 σ)	$D_{\mathrm{M}}(0.38)$	1529^{+36}_{-29} (−0.9 σ)
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.9}$ (+0.3 σ)	S_8	$0.818^{+0.026}_{-0.027}$ (−0.6 σ)	$H(0.51)$	$89.73^{+0.93}_{-1.2}$ (+0.9 σ)
A_{100}^{PS}	258^{+50}_{-50} (−0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.014}_{-0.015}$ (−0.6 σ)	$D_{\mathrm{M}}(0.51)$	1981^{+43}_{-35} (−0.9 σ)
A_{143}^{PS}	45^{+10}_{-20} (−0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.019}_{-0.022}$ (−0.0 σ)	$H(0.61)$	$95.35^{+0.78}_{-0.98}$ (+0.9 σ)
$A_{143\times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.2 σ)	$\sigma_8/h^{0.5}$	$0.977^{+0.031}_{-0.038}$ (+0.1 σ)	$D_{\mathrm{M}}(0.61)$	2305^{+47}_{-38} (−0.9 σ)
A_{217}^{PS}	114^{+20}_{-20} (−0.1 σ)	$r_{\mathrm{drag}}h$	$99.6^{+2.7}_{-3.2}$ (+0.9 σ)	$H(2.33)$	$236.1^{+1.8}_{-1.7}$ (−0.8 σ)
A^{kSZ}	< 8.05 (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.046}_{-0.046}$ (−0.6 σ)	$D_{\mathrm{M}}(2.33)$	5761^{+48}_{-37} (−0.9 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6}$ (+0.0 σ)	z_{re}	< 8.88 (+0.3 σ)	$f\sigma_8(0.15)$	$0.453^{+0.013}_{-0.014}$ (−0.6 σ)
$A_{143}^{\mathrm{dustTT}}$	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}$	$2.096^{+0.058}_{-0.054}$ (+0.2 σ)	$\sigma_8(0.15)$	$0.742^{+0.026}_{-0.038}$ (+0.4 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	$18.7^{+6.3}_{-6.4}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.021}_{-0.022}$ (−0.6 σ)	$f\sigma_8(0.38)$	$0.471^{+0.014}_{-0.015}$ (−0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10} (+0.1 σ)	D_{40}	1226^{+24}_{-24} (−0.6 σ)	$\sigma_8(0.38)$	$0.658^{+0.024}_{-0.035}$ (+0.5 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.075}$	D_{220}	5735^{+76}_{-78} (+0.6 σ)	$f\sigma_8(0.51)$	$0.470^{+0.014}_{-0.016}$ (+0.0 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.058}$	D_{810}	2537^{+26}_{-26} (−0.0 σ)	$\sigma_8(0.51)$	$0.616^{+0.023}_{-0.033}$ (+0.5 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	D_{1420}	$817.4^{+9.3}_{-9.2}$ (+0.6 σ)	$f\sigma_8(0.61)$	$0.465^{+0.014}_{-0.017}$ (+0.1 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	D_{2000}	$231.0^{+3.1}_{-3.1}$ (+0.9 σ)	$\sigma_8(0.61)$	$0.586^{+0.022}_{-0.032}$ (+0.5 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$n_{\mathrm{s},0.002}$	$0.9674^{+0.0079}_{-0.0080}$ (+1.0 σ)	$f\sigma_8(2.33)$	$0.296^{+0.010}_{-0.014}$ (+0.5 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.53}_{-0.54}$	Y_{P}	$0.24542^{+0.00011}_{-0.00011}$ (+1.5 σ)	$\sigma_8(2.33)$	$0.305^{+0.012}_{-0.017}$ (+0.6 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00011}_{-0.00011}$ (+1.5 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.8 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	$2.574^{+0.052}_{-0.051}$ (−1.6 σ)	$f_{2000}^{143\times 217}$	32^{+4}_{-4} (−0.9 σ)
m_{DES}^1	$0.014^{+0.045}_{-0.044}$	Age/Gyr	$13.79^{+0.11}_{-0.084}$ (−0.9 σ)	f_{2000}^{217}	$106.8^{+3.5}_{-3.5}$ (−0.9 σ)
m_{DES}^2	$0.012^{+0.044}_{-0.043}$	z_*	$1089.75^{+0.49}_{-0.48}$ (−1.4 σ)	χ_{small}^2	396.9 (ν : 1.4) (−0.0 σ)
m_{DES}^3	$-0.008^{+0.039}_{-0.040}$	r_*	$144.64^{+0.51}_{-0.51}$ (+0.5 σ)	χ_{lowl}^2	22.99 (ν : 0.3) (−0.7 σ)
m_{DES}^4	$0.011^{+0.040}_{-0.040}$	$100\theta_*$	$1.04120^{+0.00058}_{-0.00059}$ (+0.6 σ)	χ_{plik}^2	2361.2 (ν : 19.4) (+278.5 σ)
$A_{\mathrm{IA,DES}}$	$1.25^{+0.96}_{-0.95}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.047}_{-0.048}$ (+0.5 σ)	χ_{DES}^2	232.1 (ν : 3.2)
$\alpha_{\mathrm{IA,DES}}$	> −2.12	z_{drag}	$1060.02^{+0.60}_{-0.58}$ (+1.6 σ)	χ_{prior}^2	19.6 (ν : 17.9) (+3.4 σ)
$\Delta z_{\mathrm{s,DES}}^1$	$0.005^{+0.028}_{-0.029}$	r_{drag}	$147.29^{+0.51}_{-0.52}$ (+0.3 σ)	χ_{CMB}^2	2781.1 (ν : 18.7) (+273.3 σ)

$$\bar{\chi}_{\mathrm{eff}}^2 = 3032.75; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.68; R - 1 = 0.00988$$

6.164 base_mnu_plikHM_TTTEE_lowl_lowE_DESlens_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02246^{+0.00026}_{-0.00026} \quad (+1.7\sigma)$	$\Delta z_{\mathrm{s,DES}}^4$	$-0.022^{+0.039}_{-0.039}$	$100\theta_{\mathrm{eq}}$	$0.8187^{+0.0078}_{-0.0077} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1187^{+0.0018}_{-0.0018} \quad (-1.0\sigma)$	H_0	$68.0^{+1.0}_{-1.0} \quad (+1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4522^{+0.0040}_{-0.0039} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00057}_{-0.00057} \quad (+0.8\sigma)$	Ω_{Λ}	$0.693^{+0.012}_{-0.013} \quad (+1.0\sigma)$	$H(0.15)$	$73.24^{+0.87}_{-0.90} \quad (+1.1\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	Ω_{m}	$0.307^{+0.013}_{-0.012} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.9^{+8.8}_{-8.5} \quad (-1.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.148 \quad (-0.7\sigma)$	$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0018}_{-0.0017} \quad (-1.0\sigma)$	$H(0.38)$	$83.27^{+0.68}_{-0.70} \quad (+1.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.028}_{-0.026} \quad (+0.2\sigma)$	$\Omega_{\nu} h^2$	$< 0.00159 \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+18}_{-17} \quad (-1.0\sigma)$
n_{s}	$0.9681^{+0.0072}_{-0.0072} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.09643^{+0.00072}_{-0.00078} \quad (+1.0\sigma)$	$H(0.51)$	$89.95^{+0.57}_{-0.59} \quad (+1.1\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0049} \quad (-0.1\sigma)$	σ_8	$0.809^{+0.020}_{-0.025} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+21}_{-20} \quad (-1.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	S_8	$0.818^{+0.023}_{-0.025} \quad (-0.6\sigma)$	$H(0.61)$	$95.53^{+0.49}_{-0.51} \quad (+1.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+23}_{-22} \quad (-1.1\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.015}_{-0.017} \quad (+0.1\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.1} \quad (-0.9\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.024}_{-0.027} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+25}_{-24} \quad (-1.1\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.6\sigma)$	$r_{\mathrm{drag}} h$	$100.2^{+1.6}_{-1.7} \quad (+1.1\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.012}_{-0.012} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.044}_{-0.045} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.019}_{-0.023} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	z_{re}	$< 8.89 \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.012} \quad (-0.0\sigma)$
A^{kSZ}	$< 7.92 \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.059}_{-0.054} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.017}_{-0.021} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.7} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.012} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	D_{40}	$1224^{+23}_{-23} \quad (-0.6\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.016}_{-0.020} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.7^{+6.3}_{-6.3} \quad (+0.1\sigma)$	D_{220}	$5736^{+75}_{-76} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.012} \quad (+0.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.015}_{-0.019} \quad (+0.7\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.074}_{-0.075}$	D_{1420}	$817.6^{+9.3}_{-9.2} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.2984^{+0.0070}_{-0.0084} \quad (+0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.057}$	D_{2000}	$231.1^{+3.0}_{-3.0} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0079}_{-0.0098} \quad (+0.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$n_{\mathrm{s},0.002}$	$0.9681^{+0.0072}_{-0.0072} \quad (+1.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.9\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	Y_{P}	$0.245429^{+0.00097}_{-0.00010} \quad (+1.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.15}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246755^{+0.00098}_{-0.00010} \quad (+1.6\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.5} \quad (-0.9\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.52}_{-0.53}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.569^{+0.048}_{-0.047} \quad (-1.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.774^{+0.058}_{-0.054} \quad (-1.1\sigma)$	χ_{lowl}^2	$22.92 \quad (\nu: 0.3) \quad (-0.8\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.1\sigma)$	z_*	$1089.69^{+0.41}_{-0.41} \quad (-1.5\sigma)$	χ_{plik}^2	$2360.7 \quad (\nu: 18.1) \quad (+278.4\sigma)$
m_{DES}^1	$0.014^{+0.045}_{-0.045}$	r_*	$144.70^{+0.44}_{-0.43} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.032 \quad (\nu: 0.0)$
m_{DES}^2	$0.011^{+0.043}_{-0.043}$	$100\theta_*$	$1.04123^{+0.00057}_{-0.00057} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.58 \quad (\nu: 0.1)$
m_{DES}^3	$-0.007^{+0.040}_{-0.040}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.041}_{-0.041} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.2 \quad (\nu: 0.6)$
m_{DES}^4	$0.011^{+0.040}_{-0.040}$	z_{drag}	$1060.05^{+0.57}_{-0.58} \quad (+1.6\sigma)$	χ_{DES}^2	$231.9 \quad (\nu: 3.0)$
$A_{\mathrm{IA,DES}}$	$1.24^{+0.97}_{-0.95}$	r_{drag}	$147.33^{+0.46}_{-0.45} \quad (+0.4\sigma)$	χ_{prior}^2	$19.4 \quad (\nu: 17.9) \quad (+3.3\sigma)$
$\alpha_{\mathrm{IA,DES}}$	> -2.26	k_{D}	$0.14068^{+0.00057}_{-0.00057} \quad (+0.2\sigma)$	χ_{BAO}^2	$5.77 \quad (\nu: 0.3)$
$\Delta z_{\mathrm{s,DES}}^1$	$0.004^{+0.028}_{-0.029}$	$100\theta_{\mathrm{D}}$	$0.16070^{+0.00033}_{-0.00033} \quad (-1.6\sigma)$	χ_{CMB}^2	$2780.5 \quad (\nu: 17.4) \quad (+273.1\sigma)$
$\Delta z_{\mathrm{s,DES}}^2$	$-0.021^{+0.023}_{-0.023}$	z_{eq}	$3374^{+41}_{-41} \quad (-0.9\sigma)$		
$\Delta z_{\mathrm{s,DES}}^3$	$0.005^{+0.019}_{-0.020}$	k_{eq}	$0.01030^{+0.00012}_{-0.00013} \quad (-0.9\sigma)$		

 $\bar{\chi}_{\mathrm{eff}}^2 = 3037.64; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.11; R - 1 = 0.00834$

6.165 base_mnu_plikHM_TTTEE_lowl_lowE_DESlens_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02244^{+0.00028}_{-0.00028} \quad (+1.6\sigma)$	$\Delta z_{s,\text{DES}}^3$	$0.004^{+0.019}_{-0.020}$	z_{eq}	$3381^{+48}_{-47} \quad (-0.8\sigma)$
$\Omega_c h^2$	$0.1190^{+0.0021}_{-0.0021} \quad (-0.9\sigma)$	$\Delta z_{s,\text{DES}}^4$	$-0.023^{+0.039}_{-0.038}$	k_{eq}	$0.01032^{+0.00015}_{-0.00014} \quad (-0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04100^{+0.00059}_{-0.00060} \quad (+0.7\sigma)$	H_0	$67.7^{+1.5}_{-1.8} \quad (+1.0\sigma)$	$100\theta_{\text{eq}}$	$0.8174^{+0.0090}_{-0.0089} \quad (+0.9\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	Ω_Λ	$0.690^{+0.019}_{-0.023} \quad (+0.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.4515^{+0.0046}_{-0.0046} \quad (+0.8\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.199 \quad (-0.6\sigma)$	Ω_{m}	$0.310^{+0.023}_{-0.019} \quad (-0.9\sigma)$	$H(0.15)$	$73.0^{+1.3}_{-1.6} \quad (+1.0\sigma)$
$\ln(10^{10} A_s)$	$3.045^{+0.027}_{-0.025} \quad (+0.3\sigma)$	$\Omega_{\text{m}} h^2$	$0.1423^{+0.0028}_{-0.0026} \quad (-0.8\sigma)$	$D_{\text{M}}(0.15)$	$640^{+15}_{-13} \quad (-0.9\sigma)$
n_s	$0.9671^{+0.0077}_{-0.0076} \quad (+0.9\sigma)$	$\Omega_\nu h^2$	$< 0.00214 \quad (-0.6\sigma)$	$H(0.38)$	$83.1^{+1.0}_{-1.2} \quad (+1.0\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$\Omega_{\text{m}} h^3$	$0.09634^{+0.00085}_{-0.0010} \quad (+0.9\sigma)$	$D_{\text{M}}(0.38)$	$1527^{+31}_{-26} \quad (-0.9\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	σ_8	$0.808^{+0.022}_{-0.028} \quad (+0.5\sigma)$	$H(0.51)$	$89.80^{+0.83}_{-0.99} \quad (+1.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	S_8	$0.821^{+0.021}_{-0.021} \quad (-0.5\sigma)$	$D_{\text{M}}(0.51)$	$1979^{+37}_{-31} \quad (-0.9\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$H(0.61)$	$95.41^{+0.69}_{-0.84} \quad (+1.0\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.603^{+0.014}_{-0.015} \quad (+0.1\sigma)$	$D_{\text{M}}(0.61)$	$2303^{+40}_{-34} \quad (-0.9\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.023}_{-0.026} \quad (+0.2\sigma)$	$H(2.33)$	$236.1^{+1.6}_{-1.5} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$r_{\text{drag}} h$	$99.7^{+2.5}_{-2.8} \quad (+0.9\sigma)$	$D_{\text{M}}(2.33)$	$5758^{+41}_{-33} \quad (-1.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.037}_{-0.037} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	$< 7.96 \quad (-0.2\sigma)$	z_{re}	$< 8.95 \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.021}_{-0.028} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.7} \quad (-0.0\sigma)$	$10^9 A_s$	$2.101^{+0.057}_{-0.053} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.010}_{-0.011} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.020}_{-0.020} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.019}_{-0.026} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.3}_{-6.5} \quad (+0.1\sigma)$	D_{40}	$1227^{+23}_{-22} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.010}_{-0.011} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	D_{220}	$5740^{+75}_{-76} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.018}_{-0.025} \quad (+0.6\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.075}$	D_{810}	$2538^{+26}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.011} \quad (+0.3\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.057}$	D_{1420}	$817.7^{+9.3}_{-9.2} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.018}_{-0.024} \quad (+0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	D_{2000}	$231.1^{+3.0}_{-3.0} \quad (+1.0\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0083}_{-0.011} \quad (+0.6\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$n_{s,0.002}$	$0.9671^{+0.0077}_{-0.0076} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0097}_{-0.013} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.15}$	Y_{P}	$0.24542^{+0.00010}_{-0.00011} \quad (+1.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
A_{217}^{dustTE}	$2.07^{+0.52}_{-0.54}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24675^{+0.00010}_{-0.00011} \quad (+1.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	10^5D/H	$2.572^{+0.052}_{-0.050} \quad (-1.6\sigma)$	f_{2000}^{217}	$106.8^{+3.5}_{-3.5} \quad (-0.9\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.1\sigma)$	Age/Gyr	$13.786^{+0.092}_{-0.074} \quad (-1.0\sigma)$	χ_{lensing}^2	$9.25 \quad (\nu: 0.3)$
m_{DES}^1	$0.014^{+0.046}_{-0.045}$	z_*	$1089.74^{+0.47}_{-0.47} \quad (-1.4\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.7) \quad (+0.1\sigma)$
m_{DES}^2	$0.011^{+0.043}_{-0.044}$	r_*	$144.62^{+0.47}_{-0.48} \quad (+0.5\sigma)$	χ_{lowl}^2	$23.12 \quad (\nu: 0.3) \quad (-0.6\sigma)$
m_{DES}^3	$-0.009^{+0.040}_{-0.039}$	$100\theta_*$	$1.04119^{+0.00058}_{-0.00058} \quad (+0.6\sigma)$	χ_{plik}^2	$2360.3 \quad (\nu: 16.6) \quad (+278.3\sigma)$
m_{DES}^4	$0.010^{+0.041}_{-0.040}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.890^{+0.044}_{-0.045} \quad (+0.4\sigma)$	χ_{DES}^2	$232.1 \quad (\nu: 3.3)$
$A_{\text{IA,DES}}$	$1.26^{+0.96}_{-0.95}$	z_{drag}	$1060.04^{+0.58}_{-0.56} \quad (+1.6\sigma)$	χ_{prior}^2	$19.5 \quad (\nu: 17.9) \quad (+3.3\sigma)$
$\alpha_{\text{IA,DES}}$	> -2.16	r_{drag}	$147.26^{+0.47}_{-0.48} \quad (+0.2\sigma)$	χ_{CMB}^2	$2789.7 \quad (\nu: 17.9) \quad (+274.7\sigma)$
$\Delta z_{s,\text{DES}}^1$	$0.005^{+0.028}_{-0.029}$	k_{D}	$0.14074^{+0.00057}_{-0.00057} \quad (+0.3\sigma)$		
$\Delta z_{s,\text{DES}}^2$	$-0.021^{+0.022}_{-0.023}$	$100\theta_{\text{D}}$	$0.16070^{+0.00034}_{-0.00033} \quad (-1.6\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 3041.41$; $\Delta \bar{\chi}_{\text{eff}}^2 = 0.47$; $R - 1 = 0.00879$

6.166 base_mnu_plikHM_TTTEE_lowl_lowE_DESlens_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02246^{+0.00026}_{-0.00026} \quad (+1.7\sigma)$	$\Delta z_{s,DES}^4$	$-0.023^{+0.039}_{-0.038}$	$100\theta_{eq}$	$0.8183^{+0.0072}_{-0.0071} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1188^{+0.0017}_{-0.0017} \quad (-1.0\sigma)$	H_0	$68.02^{+0.93}_{-1.0} \quad (+1.1\sigma)$	$100\theta_{s,eq}$	$0.4519^{+0.0037}_{-0.0037} \quad (+0.9\sigma)$
$100\theta_{MC}$	$1.04104^{+0.00056}_{-0.00057} \quad (+0.8\sigma)$	Ω_Λ	$0.693^{+0.012}_{-0.013} \quad (+1.0\sigma)$	$H(0.15)$	$73.26^{+0.81}_{-0.91} \quad (+1.1\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	Ω_m	$0.307^{+0.013}_{-0.012} \quad (-1.0\sigma)$	$D_M(0.15)$	$637.7^{+8.5}_{-8.2} \quad (-1.0\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.129 \quad (-0.7\sigma)$	$\Omega_m h^2$	$0.1418^{+0.0017}_{-0.0017} \quad (-1.0\sigma)$	$H(0.38)$	$83.29^{+0.65}_{-0.67} \quad (+1.1\sigma)$
$\ln(10^{10} A_s)$	$3.045^{+0.027}_{-0.025} \quad (+0.3\sigma)$	$\Omega_\nu h^2$	$< 0.00139 \quad (-0.7\sigma)$	$D_M(0.38)$	$1522^{+17}_{-17} \quad (-1.1\sigma)$
n_s	$0.9678^{+0.0071}_{-0.0071} \quad (+1.0\sigma)$	$\Omega_m h^3$	$0.09647^{+0.00065}_{-0.00074} \quad (+1.0\sigma)$	$H(0.51)$	$89.96^{+0.55}_{-0.56} \quad (+1.1\sigma)$
y_{cal}	$1.0005^{+0.0047}_{-0.0048} \quad (+0.0\sigma)$	σ_8	$0.812^{+0.017}_{-0.020} \quad (+0.6\sigma)$	$D_M(0.51)$	$1972^{+20}_{-20} \quad (-1.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	S_8	$0.820^{+0.019}_{-0.020} \quad (-0.6\sigma)$	$H(0.61)$	$95.55^{+0.47}_{-0.48} \quad (+1.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$D_M(0.61)$	$2296^{+22}_{-22} \quad (-1.1\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.012}_{-0.013} \quad (+0.2\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.1} \quad (-0.9\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.020}_{-0.021} \quad (+0.3\sigma)$	$D_M(2.33)$	$5752^{+24}_{-23} \quad (-1.1\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.6\sigma)$	$r_{drag} h$	$100.2^{+1.5}_{-1.6} \quad (+1.1\sigma)$	$f\sigma_8(0.15)$	$0.4542^{+0.0099}_{-0.0099} \quad (-0.5\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.036}_{-0.036} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.016}_{-0.019} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	z_{re}	$< 8.94 \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.4737^{+0.0090}_{-0.0097} \quad (+0.0\sigma)$
A^{kSZ}	$< 7.89 \quad (-0.3\sigma)$	$10^9 A_s$	$2.101^{+0.056}_{-0.052} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.014}_{-0.017} \quad (+0.7\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.7} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.878^{+0.020}_{-0.020} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.4728^{+0.0089}_{-0.0092} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	D_{40}	$1226^{+22}_{-21} \quad (-0.5\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.014}_{-0.016} \quad (+0.7\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.3}_{-6.4} \quad (+0.1\sigma)$	D_{220}	$5740^{+74}_{-76} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4682^{+0.0087}_{-0.0092} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.013}_{-0.016} \quad (+0.7\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.076}$	D_{1420}	$817.7^{+9.3}_{-9.1} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.2991^{+0.0060}_{-0.0069} \quad (+0.7\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.134^{+0.058}_{-0.057}$	D_{2000}	$231.2^{+3.0}_{-3.0} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3086^{+0.0069}_{-0.0082} \quad (+0.8\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	$n_{s,0.002}$	$0.9678^{+0.0071}_{-0.0071} \quad (+1.0\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.9\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	Y_P	$0.245429^{+0.00097}_{-0.00010} \quad (+1.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.15}_{-0.15}$	Y_P^{BBN}	$0.246756^{+0.00097}_{-0.00010} \quad (+1.6\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.5} \quad (-0.9\sigma)$
A_{217}^{dustTE}	$2.07^{+0.52}_{-0.53}$	$10^5 D/H$	$2.569^{+0.048}_{-0.047} \quad (-1.7\sigma)$	$\chi^2_{lensing}$	$9.21 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	Age/Gyr	$13.771^{+0.054}_{-0.051} \quad (-1.1\sigma)$	χ^2_{small}	$397.0 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.1\sigma)$	z_*	$1089.70^{+0.40}_{-0.40} \quad (-1.5\sigma)$	χ^2_{lowl}	$23.04 \quad (\nu: 0.3) \quad (-0.7\sigma)$
m_{DES}^1	$0.014^{+0.046}_{-0.045}$	r_*	$144.67^{+0.40}_{-0.40} \quad (+0.6\sigma)$	χ^2_{plik}	$2360.0 \quad (\nu: 16.3) \quad (+278.3\sigma)$
m_{DES}^2	$0.011^{+0.043}_{-0.044}$	$100\theta_*$	$1.04121^{+0.00056}_{-0.00056} \quad (+0.6\sigma)$	χ^2_{6DF}	$0.030 \quad (\nu: 0.0)$
m_{DES}^3	$-0.008^{+0.039}_{-0.039}$	$D_M(z_*)/\text{Gpc}$	$13.895^{+0.038}_{-0.039} \quad (+0.5\sigma)$	χ^2_{MGS}	$1.59 \quad (\nu: 0.1)$
m_{DES}^4	$0.011^{+0.040}_{-0.039}$	z_{drag}	$1060.06^{+0.56}_{-0.55} \quad (+1.7\sigma)$	$\chi^2_{DR12BAO}$	$4.1 \quad (\nu: 0.5)$
$A_{IA,DES}$	$1.25^{+0.96}_{-0.94}$	r_{drag}	$147.31^{+0.42}_{-0.43} \quad (+0.3\sigma)$	χ^2_{DES}	$232.0 \quad (\nu: 3.1)$
$\alpha_{IA,DES}$	> -2.17	k_D	$0.14071^{+0.00055}_{-0.00054} \quad (+0.3\sigma)$	χ^2_{prior}	$19.4 \quad (\nu: 18.0) \quad (+3.3\sigma)$
$\Delta z_{s,DES}^1$	$0.004^{+0.029}_{-0.029}$	$100\theta_D$	$0.16069^{+0.00033}_{-0.00033} \quad (-1.6\sigma)$	χ^2_{CMB}	$2789.3 \quad (\nu: 17.1) \quad (+274.7\sigma)$
$\Delta z_{s,DES}^2$	$-0.021^{+0.022}_{-0.023}$	z_{eq}	$3376^{+38}_{-38} \quad (-0.9\sigma)$	χ^2_{BAO}	$5.74 \quad (\nu: 0.3)$
$\Delta z_{s,DES}^3$	$0.004^{+0.019}_{-0.020}$	k_{eq}	$0.01030^{+0.00012}_{-0.00012} \quad (-0.9\sigma)$		

$\bar{\chi}^2_{eff} = 3046.43$; $\Delta \bar{\chi}^2_{eff} = -0.06$; $R - 1 = 0.00976$

6.167 base_mnu_BAO_Cooke17

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02217	$0.0222^{+0.0010}_{-0.00094}$ (+0.8 σ)	Age/Gyr	12.18	$12.7^{+2.3}_{-2.2}$ (−10.7 σ)	$D_{\mathrm{M}}(0.15)$	594	620^{+70}_{-70} (−1.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.175	$0.143^{+0.10}_{-0.095}$ (+9.8 σ)	z_*	1094.7	$1093.2^{+7.4}_{-6.7}$ (+5.6 σ)	$H(0.38)$	92.1	89^{+10}_{-10} (+5.3 σ)
$100\theta_{\mathrm{MC}}$	1.102	$1.107^{+0.074}_{-0.076}$ (+131.4 σ)	r_*	132.3	138^{+20}_{-20} (−12.9 σ)	$D_{\mathrm{M}}(0.38)$	1403	1462^{+200}_{-200} (−2.6 σ)
Σm_{ν} [eV]	0.06	—	$100\theta_*$	1.102	$1.108^{+0.074}_{-0.075}$ (+142.0 σ)	$H(0.51)$	100.5	97^{+20}_{-20} (+7.7 σ)
H_0	72.4	70^{+8}_{-7} (+1.8 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	12.00	$12.5^{+2.6}_{-2.5}$ (−29.8 σ)	$D_{\mathrm{M}}(0.51)$	1808	1884^{+300}_{-200} (−3.0 σ)
Ω_{Λ}	0.622	$0.61^{+0.10}_{-0.10}$ (−1.7 σ)	z_{drag}	1063.1	$1062.1^{+6.2}_{-5.8}$ (+6.0 σ)	$H(0.61)$	107.4	104^{+20}_{-20} (+10.4 σ)
Ω_{m}	0.378	$0.39^{+0.10}_{-0.10}$ (+1.7 σ)	r_{drag}	134.8	140^{+20}_{-20} (−13.7 σ)	$D_{\mathrm{M}}(0.61)$	2097	2184^{+300}_{-300} (−3.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.198	$0.192^{+0.094}_{-0.083}$ (+14.3 σ)	k_{D}	0.1546	$0.150^{+0.023}_{-0.021}$ (+17.7 σ)	$H(2.33)$	277	270^{+60}_{-60} (+16.8 σ)
$\Omega_{\nu}h^2$	0.0007	< 0.0511 (+12.7 σ)	$100\theta_{\mathrm{D}}$	0.1693	$0.170^{+0.010}_{-0.011}$ (+31.4 σ)	$D_{\mathrm{M}}(2.33)$	5093	5299^{+900}_{-900} (−10.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.144	$0.135^{+0.082}_{-0.070}$ (+31.6 σ)	z_{eq}	4724	3943^{+2000}_{-2000} (+10.5 σ)	$\chi^2_{\mathrm{Cooke17}}$	0.00	1.0 (ν : 1.0)
$r_{\mathrm{drag}}h$	97.60	$97.3^{+4.3}_{-4.1}$ (+0.2 σ)	k_{eq}	0.0144	$0.0122^{+0.0074}_{-0.0067}$ (+11.5 σ)	$\chi^2_{6\mathrm{DF}}$	0.23	0.41 (ν : 0.1)
Y_{P}	0.245314	$0.24533^{+0.00041}_{-0.00044}$ (+0.7 σ)	$100\theta_{\mathrm{eq}}$	0.677	$0.84^{+0.39}_{-0.31}$ (+3.5 σ)	χ^2_{MGS}	0.63	0.74 (ν : 0.2)
$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246640	$0.24665^{+0.00041}_{-0.00044}$ (+0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.379	$0.46^{+0.20}_{-0.16}$ (+3.5 σ)	$\chi^2_{\mathrm{DR12BAO}}$	2.13	3.9 (ν : 1.6)
$10^5\mathrm{D}/\mathrm{H}$	2.623	$2.61^{+0.18}_{-0.18}$ (−0.7 σ)	$H(0.15)$	79.2	76^{+10}_{-9} (+2.8 σ)	χ^2_{BAO}	2.98	5.1 (ν : 2.0)

Best-fit $\chi^2_{\mathrm{eff}} = 2.98$; $\Delta\chi^2_{\mathrm{eff}} = -0.32$; $\bar{\chi}^2_{\mathrm{eff}} = 6.05$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.08$; $R - 1 = 0.01904$

χ^2_{eff} : Abund - D.Cooke2017: 0.00 (Δ -0.04) BAO - 6DF: 0.23 (Δ 0.13) MGS: 0.62 (Δ -0.36) DR12BAO: 2.13 (Δ -0.05)

6.168 base_mnu_BAO_Cooke17_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02218	$0.0222^{+0.0010}_{-0.00094}$ (+0.8 σ)	z_*	1089.93	$1088.4^{+3.4}_{-3.2}$ (−4.3 σ)	$D_{\mathrm{M}}(0.38)$	1526	1593^{+120}_{-130} (+0.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.117	$0.084^{+0.051}_{-0.049}$ (−16.8 σ)	r_*	145.3	152^{+12}_{-12} (+14.7 σ)	$H(0.51)$	89.9	$86.4^{+7.9}_{-7.5}$ (−2.1 σ)
$100\theta_{\mathrm{MC}}$	1.0478	$1.050^{+0.038}_{-0.039}$ (+18.1 σ)	$100\theta_*$	1.0481	$1.051^{+0.037}_{-0.039}$ (+20.5 σ)	$D_{\mathrm{M}}(0.51)$	1976	2064^{+160}_{-170} (+0.9 σ)
Σm_{ν} [eV]	0.38	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.87	$14.5^{+1.6}_{-1.5}$ (+12.8 σ)	$H(0.61)$	95.6	$91.8^{+8.6}_{-8.3}$ (−2.8 σ)
H_0	67.77	$65.0^{+4.8}_{-4.5}$ (−0.4 σ)	z_{drag}	1059.32	$1058.2^{+3.9}_{-3.5}$ (−2.3 σ)	$D_{\mathrm{M}}(0.61)$	2300	2401^{+190}_{-200} (+1.0 σ)
Ω_{Λ}	0.6885	$0.686^{+0.039}_{-0.041}$ (+0.7 σ)	r_{drag}	148.1	155^{+12}_{-12} (+15.2 σ)	$H(2.33)$	236.7	228^{+30}_{-20} (−5.1 σ)
Ω_{m}	0.3115	$0.314^{+0.041}_{-0.039}$ (−0.7 σ)	k_{D}	0.1397	$0.134^{+0.011}_{-0.010}$ (−11.7 σ)	$D_{\mathrm{M}}(2.33)$	5748	5997^{+580}_{-570} (+3.9 σ)
$\Omega_{\mathrm{m}}h^2$	0.1431	$0.133^{+0.032}_{-0.030}$ (−3.6 σ)	$100\theta_{\mathrm{D}}$	0.1621	$0.1619^{+0.0051}_{-0.0051}$ (+3.0 σ)	$\chi^2_{\mathrm{Cooke17}}$	0.00	1.0 (ν : 1.0)
$\Omega_{\nu}h^2$	0.0041	< 0.0510 (+13.0 σ)	z_{eq}	3321	2534^{+1000}_{-1000} (−17.8 σ)	χ^2_{JLA}	1035.06	1036.0 (ν : 1.5)
$\Omega_{\mathrm{m}}h^3$	0.0969	$0.087^{+0.027}_{-0.025}$ (−6.7 σ)	k_{eq}	0.01014	$0.0079^{+0.0035}_{-0.0033}$ (−16.3 σ)	$\chi^2_{6\mathrm{DF}}$	0.000	0.052 (ν : 0.0)
$r_{\mathrm{drag}}h$	100.34	$100.3^{+2.4}_{-2.3}$ (+1.1 σ)	$100\theta_{\mathrm{eq}}$	0.834	$1.09^{+0.46}_{-0.36}$ (+30.7 σ)	χ^2_{MGS}	1.68	1.75 (ν : 0.2)
Y_{P}	0.245318	$0.24533^{+0.00045}_{-0.00042}$ (+0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.460	$0.59^{+0.23}_{-0.18}$ (+30.6 σ)	$\chi^2_{\mathrm{DR12BAO}}$	3.03	4.0 (ν : 1.2)
$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246644	$0.24665^{+0.00045}_{-0.00042}$ (+0.7 σ)	$H(0.15)$	73.1	$70.1^{+5.6}_{-5.2}$ (−0.6 σ)	χ^2_{BAO}	4.71	5.8 (ν : 1.6)
$10^5\mathrm{D}/\mathrm{H}$	2.622	$2.61^{+0.18}_{-0.19}$ (−0.7 σ)	$D_{\mathrm{M}}(0.15)$	639.8	668^{+48}_{-50} (+0.5 σ)			
Age/Gyr	13.76	$14.4^{+1.4}_{-1.4}$ (+4.1 σ)	$H(0.38)$	83.2	$79.9^{+6.9}_{-6.6}$ (−1.4 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 1039.77$; $\Delta\chi^2_{\mathrm{eff}} = 0.00$; $\bar{\chi}^2_{\mathrm{eff}} = 1042.80$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.09$; $R - 1 = 0.00676$

χ^2_{eff} : Abund - D.Cooke2017: 0.00 (Δ 0.00) BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.68 (Δ 0.00) DR12BAO: 3.03 (Δ 0.08) SN - JLA Pantheon18: 1035.06 (Δ -0.08)

6.169 base_mnu_BAO_Cooke17_Pantheon18_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.02219	$0.0223^{+0.0010}_{-0.00092}$ (+0.9 σ)	z_*	1089.37	$1087.8^{+2.3}_{-1.9}$ (−5.5 σ)	$D_{\text{M}}(0.38)$	1544	1611^{+74}_{-88} (+1.2 σ)
$\Omega_{\text{c}}h^2$	0.1104	$0.078^{+0.039}_{-0.036}$ (−19.4 σ)	r_*	147.0	$153.5^{+6.7}_{-8.1}$ (+18.0 σ)	$H(0.51)$	88.63	$85.0^{+4.6}_{-3.6}$ (−3.3 σ)
$100\theta_{\text{MC}}$	1.04093	$1.0409^{+0.0012}_{-0.0012}$ (+0.5 σ)	$100\theta_*$	1.04134	$1.0417^{+0.0013}_{-0.0013}$ (+1.6 σ)	$D_{\text{M}}(0.51)$	2002	2088^{+94}_{-110} (+1.4 σ)
Σm_{ν} [eV]	0.46	—	$D_{\text{M}}(z_*)/\text{Gpc}$	14.12	$14.73^{+0.64}_{-0.77}$ (+18.6 σ)	$H(0.61)$	94.13	$90.3^{+4.9}_{-3.8}$ (−4.5 σ)
H_0	67.05	$64.3^{+3.7}_{-3.0}$ (−0.7 σ)	z_{drag}	1058.90	$1057.8^{+2.9}_{-2.7}$ (−3.1 σ)	$D_{\text{M}}(0.61)$	2330	2431^{+110}_{-130} (+1.6 σ)
Ω_{Λ}	0.6941	$0.694^{+0.016}_{-0.016}$ (+1.0 σ)	r_{drag}	149.8	$156.4^{+6.9}_{-8.3}$ (+18.7 σ)	$H(2.33)$	232.2	$223^{+12}_{-9.7}$ (−7.8 σ)
Ω_{m}	0.3059	$0.306^{+0.016}_{-0.016}$ (−1.0 σ)	k_{D}	0.1380	$0.1327^{+0.0072}_{-0.0056}$ (−15.1 σ)	$D_{\text{M}}(2.33)$	5838	6092^{+260}_{-320} (+5.8 σ)
$\Omega_{\text{m}}h^2$	0.1375	$0.127^{+0.014}_{-0.011}$ (−5.7 σ)	$100\theta_{\text{D}}$	0.16125	$0.1608^{+0.0015}_{-0.0016}$ (−1.4 σ)	χ^2_{Cooke17}	0.00	0.99 (ν : 1.0)
$\Omega_{\nu}h^2$	0.0050	< 0.0509 (+12.5 σ)	z_{eq}	3168	2397^{+900}_{-900} (−20.5 σ)	χ^2_{JLA}	1034.833	1034.96 (ν : 0.0)
$\Omega_{\text{m}}h^3$	0.0922	$0.082^{+0.014}_{-0.010}$ (−10.8 σ)	k_{eq}	0.00967	$0.0075^{+0.0026}_{-0.0023}$ (−19.0 σ)	$\chi^2_{6\text{DF}}$	0.000	0.048 (ν : 0.0)
$r_{\text{drag}}h$	100.43	$100.5^{+2.2}_{-2.0}$ (+1.1 σ)	$100\theta_{\text{eq}}$	0.858	$1.12^{+0.40}_{-0.31}$ (+33.7 σ)	χ^2_{MGS}	1.68	1.80 (ν : 0.2)
Y_{P}	0.245323	$0.24534^{+0.00042}_{-0.00043}$ (+0.8 σ)	$100\theta_{\text{s,eq}}$	0.473	$0.61^{+0.20}_{-0.16}$ (+33.5 σ)	χ^2_{DR12BAO}	3.42	4.1 (ν : 0.7)
$Y_{\text{P}}^{\text{BBN}}$	0.246649	$0.24667^{+0.00042}_{-0.00043}$ (+0.8 σ)	$H(0.15)$	72.20	$69.3^{+3.9}_{-3.2}$ (−1.1 σ)	χ^2_{prior}	0.00	1.1 (ν : 1.2) (−1.7 σ)
$10^5\text{D}/\text{H}$	2.619	$2.61^{+0.18}_{-0.19}$ (−0.8 σ)	$D_{\text{M}}(0.15)$	647.0	675^{+32}_{-38} (+0.8 σ)	χ^2_{BAO}	5.09	6.0 (ν : 0.8)
Age/Gyr	13.98	$14.59^{+0.62}_{-0.76}$ (+6.1 σ)	$H(0.38)$	82.07	$78.7^{+4.3}_{-3.4}$ (−2.2 σ)			

Best-fit $\chi^2_{\text{eff}} = 1039.93$; $\Delta\chi^2_{\text{eff}} = -0.03$; $\bar{\chi}^2_{\text{eff}} = 1042.99$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.12$; $R - 1 = 0.01446$

χ^2_{eff} : Abund - D.Cooke2017: 0.00 (Δ 0.00) BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.68 (Δ -0.07) DR12BAO: 3.42 (Δ -0.01) SN - JLA Pantheon18: 1034.83 (Δ 0.04)

6.170 base_mnu_BAO_Cooke17_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.02219	$0.02221^{+0.00099}_{-0.00097}$ (+0.7 σ)	z_*	1089.18	$1087.8^{+2.3}_{-2.0}$ (−5.5 σ)	$D_{\text{M}}(0.38)$	1553	1616^{+72}_{-87} (+1.3 σ)
$\Omega_{\text{c}}h^2$	0.1075	$0.077^{+0.040}_{-0.037}$ (−20.0 σ)	r_*	147.7	$153.8^{+6.5}_{-8.0}$ (+18.6 σ)	$H(0.51)$	88.18	$84.8^{+4.5}_{-3.5}$ (−3.5 σ)
$100\theta_{\text{MC}}$	1.04093	$1.0409^{+0.0012}_{-0.0011}$ (+0.5 σ)	$100\theta_*$	1.04139	$1.0417^{+0.0012}_{-0.0012}$ (+1.7 σ)	$D_{\text{M}}(0.51)$	2013	2095^{+92}_{-110} (+1.6 σ)
Σm_{ν} [eV]	0.62	—	$D_{\text{M}}(z_*)/\text{Gpc}$	14.18	$14.76^{+0.62}_{-0.77}$ (+19.2 σ)	$H(0.61)$	93.66	$90.1^{+4.8}_{-3.7}$ (−4.7 σ)
H_0	66.66	$64.1^{+3.7}_{-3.0}$ (−0.8 σ)	z_{drag}	1058.71	$1057.6^{+2.9}_{-2.7}$ (−3.5 σ)	$D_{\text{M}}(0.61)$	2343	2438^{+110}_{-130} (+1.8 σ)
Ω_{Λ}	0.6931	$0.693^{+0.017}_{-0.017}$ (+1.0 σ)	r_{drag}	150.5	$156.7^{+6.8}_{-8.3}$ (+19.4 σ)	$H(2.33)$	231.2	$222^{+12}_{-9.5}$ (−8.0 σ)
Ω_{m}	0.3069	$0.307^{+0.017}_{-0.017}$ (−1.0 σ)	k_{D}	0.1373	$0.1324^{+0.0070}_{-0.0054}$ (−15.7 σ)	$D_{\text{M}}(2.33)$	5868	6107^{+250}_{-320} (+6.1 σ)
$\Omega_{\text{m}}h^2$	0.1363	$0.126^{+0.014}_{-0.011}$ (−5.8 σ)	$100\theta_{\text{D}}$	0.16128	$0.1608^{+0.0016}_{-0.0016}$ (−1.2 σ)	χ^2_{Cooke17}	0.00	1.0 (ν : 1.1)
$\Omega_{\nu}h^2$	0.0067	< 0.0510 (+13.1 σ)	z_{eq}	3099	2363^{+900}_{-900} (−21.2 σ)	$\chi^2_{6\text{DF}}$	0.001	0.055 (ν : 0.0)
$\Omega_{\text{m}}h^3$	0.0909	$0.0810^{+0.013}_{-0.0099}$ (−11.3 σ)	k_{eq}	0.00947	$0.0074^{+0.0026}_{-0.0023}$ (−19.7 σ)	χ^2_{MGS}	1.61	1.72 (ν : 0.2)
$r_{\text{drag}}h$	100.31	$100.4^{+2.2}_{-2.2}$ (+1.1 σ)	$100\theta_{\text{eq}}$	0.873	$1.13^{+0.40}_{-0.32}$ (+34.9 σ)	χ^2_{DR12BAO}	3.47	4.3 (ν : 0.9)
Y_{P}	0.245322	$0.24532^{+0.00043}_{-0.00043}$ (+0.6 σ)	$100\theta_{\text{s,eq}}$	0.481	$0.61^{+0.20}_{-0.16}$ (+34.7 σ)	χ^2_{prior}	0.00	0.99 (ν : 0.9) (−1.7 σ)
$Y_{\text{P}}^{\text{BBN}}$	0.246648	$0.24665^{+0.00043}_{-0.00043}$ (+0.6 σ)	$H(0.15)$	71.79	$69.0^{+3.9}_{-3.1}$ (−1.2 σ)	χ^2_{BAO}	5.08	6.1 (ν : 0.9)
$10^5\text{D}/\text{H}$	2.620	$2.62^{+0.19}_{-0.18}$ (−0.6 σ)	$D_{\text{M}}(0.15)$	650.7	677^{+31}_{-37} (+0.9 σ)			
Age/Gyr	14.05	$14.62^{+0.61}_{-0.75}$ (+6.4 σ)	$H(0.38)$	81.63	$78.5^{+4.3}_{-3.3}$ (−2.4 σ)			

Best-fit $\chi^2_{\text{eff}} = 5.08$; $\Delta\chi^2_{\text{eff}} = -0.08$; $\bar{\chi}^2_{\text{eff}} = 8.05$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.15$; $R - 1 = 0.07129$

χ^2_{eff} : Abund - D.Cooke2017: 0.00 (Δ -0.01) BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.61 (Δ -0.07) DR12BAO: 3.47 (Δ -0.01)

7 nnu

7.1 base_nnu_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02202	$0.02207^{+0.00060}_{-0.00059}$	$\sigma_8 \Omega_m^{0.5}$	0.4621	$0.460^{+0.027}_{-0.026}$	$100\theta_{s,eq}$	0.4460	$0.448^{+0.012}_{-0.012}$
$\Omega_c h^2$	0.1188	$0.1200^{+0.0081}_{-0.0076}$	$\sigma_8 \Omega_m^{0.25}$	0.6108	$0.610^{+0.023}_{-0.023}$	$H(0.15)$	71.12	$71.9^{+4.5}_{-4.3}$
$100\theta_{MC}$	1.04093	$1.0409^{+0.0011}_{-0.0011}$	$\sigma_8/h^{0.5}$	0.9958	$0.993^{+0.031}_{-0.031}$	$D_M(0.15)$	658.4	652^{+43}_{-41}
τ	0.0519	$0.051^{+0.016}_{-0.016}$	$r_{drag}h$	97.65	$98.2^{+4.3}_{-4.1}$	$H(0.38)$	81.40	$82.2^{+4.3}_{-4.1}$
N_{eff}	2.90	$3.00^{+0.57}_{-0.53}$	$\langle d^2 \rangle^{1/2}$	2.467	$2.457^{+0.089}_{-0.087}$	$D_M(0.38)$	1566	1551^{+95}_{-91}
$\ln(10^{10} A_s)$	3.0355	$3.037^{+0.040}_{-0.040}$	z_{re}	7.47	$7.4^{+1.6}_{-1.7}$	$H(0.51)$	88.20	$89.0^{+4.3}_{-4.1}$
n_s	0.9575	$0.961^{+0.026}_{-0.025}$	$10^9 A_s$	2.081	$2.085^{+0.084}_{-0.083}$	$D_M(0.51)$	2026	2007^{+120}_{-110}
y_{cal}	1.00046	$1.0005^{+0.0049}_{-0.0048}$	$10^9 A_s e^{-2\tau}$	1.8760	$1.881^{+0.043}_{-0.044}$	$H(0.61)$	93.88	$94.7^{+4.3}_{-4.1}$
A_{217}^{CIB}	46.8	48^{+10}_{-10}	D_{40}	1239.8	1237^{+44}_{-42}	$D_M(0.61)$	2356	2334^{+130}_{-130}
$\xi^{tSZ \times CIB}$	0.55	—	D_{220}	5710	5713^{+81}_{-79}	$H(2.33)$	235.0	$236.1^{+7.2}_{-6.9}$
A_{143}^{tSZ}	6.95	$5.1^{+3.8}_{-4.0}$	D_{810}	2536.8	2536^{+28}_{-27}	$D_M(2.33)$	5844	5801^{+250}_{-240}
A_{100}^{PS}	250	262^{+60}_{-60}	D_{1420}	816.5	815^{+10}_{-10}	$f\sigma_8(0.15)$	0.4653	$0.464^{+0.024}_{-0.024}$
A_{143}^{PS}	50.6	49^{+20}_{-20}	D_{2000}	230.89	$229.9^{+4.4}_{-4.5}$	$\sigma_8(0.15)$	0.7445	$0.747^{+0.026}_{-0.025}$
$A_{143 \times 217}^{PS}$	51.5	44^{+20}_{-20}	$n_{s,0.002}$	0.9575	$0.961^{+0.026}_{-0.025}$	$f\sigma_8(0.38)$	0.4800	$0.479^{+0.019}_{-0.019}$
A_{217}^{PS}	121.2	115^{+20}_{-20}	Y_P	0.2432	$0.2446^{+0.0076}_{-0.0076}$	$\sigma_8(0.38)$	0.6582	$0.661^{+0.024}_{-0.024}$
A^{kSZ}	0.00	< 8.45	Y_P^{BBN}	0.2445	$0.2459^{+0.0076}_{-0.0076}$	$f\sigma_8(0.51)$	0.4767	$0.477^{+0.016}_{-0.017}$
A_{100}^{dustTT}	8.77	$8.9^{+3.6}_{-3.6}$	$10^5 D/H$	2.599	$2.62^{+0.14}_{-0.13}$	$\sigma_8(0.51)$	0.6153	$0.618^{+0.024}_{-0.023}$
A_{143}^{dustTT}	10.74	$10.7^{+3.5}_{-3.5}$	Age/Gyr	13.99	$13.89^{+0.59}_{-0.57}$	$f\sigma_8(0.61)$	0.4705	$0.471^{+0.015}_{-0.016}$
$A_{143 \times 217}^{dustTT}$	19.7	$18.2^{+6.5}_{-6.5}$	z_*	1090.11	$1090.25^{+0.97}_{-0.95}$	$\sigma_8(0.61)$	0.5850	$0.588^{+0.023}_{-0.022}$
A_{217}^{dustTT}	95.2	93^{+10}_{-10}	r_*	145.76	$144.9^{+5.0}_{-4.9}$	$f\sigma_8(2.33)$	0.2944	$0.296^{+0.012}_{-0.012}$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04126	$1.0411^{+0.0014}_{-0.0014}$	$\sigma_8(2.33)$	0.3028	$0.305^{+0.014}_{-0.013}$
c_{217}	0.99824	$0.9982^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.999	$13.92^{+0.46}_{-0.46}$	f_{2000}^{143}	29.2	31^{+7}_{-7}
H_0	65.73	$66.5^{+4.7}_{-4.4}$	z_{drag}	1058.94	$1059.2^{+2.1}_{-2.1}$	$f_{2000}^{143 \times 217}$	32.4	33^{+5}_{-5}
Ω_Λ	0.6725	$0.677^{+0.034}_{-0.037}$	r_{drag}	148.6	$147.7^{+5.2}_{-5.2}$	f_{2000}^{217}	106.89	$107.9^{+4.6}_{-4.6}$
Ω_m	0.3275	$0.323^{+0.037}_{-0.034}$	k_D	0.13965	$0.1402^{+0.0037}_{-0.0036}$	χ_{simall}^2	395.85	$396.9 (\nu: 1.2)$
$\Omega_m h^2$	0.1415	$0.1428^{+0.0084}_{-0.0078}$	$100\theta_D$	0.16071	$0.1610^{+0.0013}_{-0.0012}$	χ_{lowl}^2	24.50	$24.4 (\nu: 2.5)$
$\Omega_m h^3$	0.0930	$0.095^{+0.011}_{-0.010}$	z_{eq}	3436	3419^{+130}_{-120}	χ_{plik}^2	757.7	$771.7 (\nu: 17.1)$
σ_8	0.8074	$0.810^{+0.027}_{-0.026}$	k_{eq}	0.010379	$0.01040^{+0.00032}_{-0.00031}$	χ_{prior}^2	1.3	$7.3 (\nu: 6.5)$
S_8	0.8436	$0.840^{+0.049}_{-0.047}$	$100\theta_{eq}$	0.8063	$0.810^{+0.024}_{-0.023}$	χ_{CMB}^2	1178.0	$1192.9 (\nu: 15.6)$

Best-fit $\chi_{eff}^2 = 1179.27$; $\Delta\chi_{eff}^2 = -0.31$; $\bar{\chi}_{eff}^2 = 1200.18$; $\Delta\bar{\chi}_{eff}^2 = 0.61$; $R - 1 = 0.00449$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.85 (Δ -0.02) commander_dx12_v3_2_29: 24.50 (Δ 0.89) plik_rd12_HM_v22_TT: 757.66 (Δ -1.09)

7.2 base_nnu_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02201	$0.02206^{+0.00057}_{-0.00056}$ (-0.0σ)	$\sigma_8 \Omega_m^{0.25}$	0.6060	$0.607^{+0.016}_{-0.016}$ (-0.3σ)	$D_M(0.15)$	660.8	653^{+39}_{-38} ($+0.1\sigma$)
$\Omega_c h^2$	0.1175	$0.1190^{+0.0077}_{-0.0074}$ (-0.3σ)	$\sigma_8/h^{0.5}$	0.9906	$0.990^{+0.021}_{-0.021}$ (-0.2σ)	$H(0.38)$	81.07	$81.9^{+4.0}_{-3.8}$ (-0.1σ)
$100\theta_{MC}$	1.04110	$1.0410^{+0.0011}_{-0.0011}$ ($+0.2\sigma$)	$r_{drag}h$	97.78	$98.3^{+3.4}_{-3.3}$ ($+0.0\sigma$)	$D_M(0.38)$	1572	1555^{+86}_{-84} ($+0.1\sigma$)
τ	0.0503	$0.051^{+0.016}_{-0.016}$ (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.459	$2.454^{+0.060}_{-0.061}$ (-0.1σ)	$H(0.51)$	87.84	$88.7^{+4.0}_{-3.9}$ (-0.1σ)
N_{eff}	2.83	$2.95^{+0.55}_{-0.51}$ (-0.2σ)	z_{re}	7.28	$7.4^{+1.6}_{-1.7}$ (-0.0σ)	$D_M(0.51)$	2034	2013^{+110}_{-100} ($+0.1\sigma$)
$\ln(10^{10} A_s)$	3.0283	$3.034^{+0.039}_{-0.040}$ (-0.2σ)	$10^9 A_s$	2.066	$2.078^{+0.083}_{-0.081}$ (-0.2σ)	$H(0.61)$	93.48	$94.3^{+4.1}_{-3.9}$ (-0.1σ)
n_s	0.9559	$0.959^{+0.023}_{-0.023}$ (-0.1σ)	$10^9 A_s e^{-2\tau}$	1.8685	$1.876^{+0.042}_{-0.044}$ (-0.2σ)	$D_M(0.61)$	2365	2341^{+120}_{-120} ($+0.1\sigma$)
y_{cal}	1.00025	$1.0005^{+0.0049}_{-0.0049}$ (-0.0σ)	D_{40}	1240.1	1237^{+37}_{-37} ($+0.0\sigma$)	$H(2.33)$	233.8	$235.2^{+7.0}_{-6.8}$ (-0.2σ)
A_{217}^{CIB}	46.8	47^{+10}_{-10} (-0.0σ)	D_{220}	5712	5715^{+82}_{-80} ($+0.1\sigma$)	$D_M(2.33)$	5869	5821^{+240}_{-230} ($+0.2\sigma$)
$\xi^{tSZ \times CIB}$	0.53	—	D_{810}	2534.5	2535^{+28}_{-28} (-0.1σ)	$f\sigma_8(0.15)$	0.4615	$0.461^{+0.016}_{-0.016}$ (-0.2σ)
A_{143}^{tSZ}	6.99	$5.2^{+3.7}_{-4.0}$ ($+0.0\sigma$)	D_{1420}	816.7	815^{+10}_{-10} ($+0.1\sigma$)	$\sigma_8(0.15)$	0.7393	$0.744^{+0.025}_{-0.024}$ (-0.2σ)
A_{100}^{PS}	248	261^{+60}_{-50} (-0.0σ)	D_{2000}	231.20	$230.1^{+4.3}_{-4.5}$ ($+0.1\sigma$)	$f\sigma_8(0.38)$	0.4762	$0.477^{+0.013}_{-0.013}$ (-0.2σ)
A_{143}^{PS}	49.2	48^{+20}_{-20} (-0.1σ)	$n_{s,0.002}$	0.9559	$0.959^{+0.023}_{-0.023}$ (-0.1σ)	$\sigma_8(0.38)$	0.6538	$0.658^{+0.024}_{-0.023}$ (-0.2σ)
$A_{143 \times 217}^{PS}$	50.2	43^{+20}_{-20} (-0.0σ)	Y_P	0.2423	$0.2439^{+0.0074}_{-0.0074}$ (-0.2σ)	$f\sigma_8(0.51)$	0.4731	$0.474^{+0.013}_{-0.012}$ (-0.3σ)
A_{217}^{PS}	120.4	115^{+20}_{-20} (-0.0σ)	Y_P^{BBN}	0.2436	$0.2452^{+0.0074}_{-0.0074}$ (-0.2σ)	$\sigma_8(0.51)$	0.6112	$0.616^{+0.023}_{-0.023}$ (-0.2σ)
A^{kSZ}	0.01	< 8.38 (-0.0σ)	$10^5 D/H$	2.578	$2.61^{+0.14}_{-0.13}$ (-0.2σ)	$f\sigma_8(0.61)$	0.4670	$0.469^{+0.013}_{-0.012}$ (-0.3σ)
A_{100}^{dustTT}	8.82	$9.0^{+3.6}_{-3.5}$ ($+0.0\sigma$)	Age/Gyr	14.05	$13.93^{+0.56}_{-0.56}$ ($+0.2\sigma$)	$\sigma_8(0.61)$	0.5812	$0.585^{+0.023}_{-0.022}$ (-0.2σ)
A_{143}^{dustTT}	10.70	$10.7^{+3.6}_{-3.5}$ (-0.0σ)	z_*	1089.93	$1090.12^{+0.93}_{-0.91}$ (-0.3σ)	$f\sigma_8(2.33)$	0.2925	$0.295^{+0.012}_{-0.012}$ (-0.2σ)
$A_{143 \times 217}^{dustTT}$	19.4	$18.2^{+6.4}_{-6.6}$ (-0.0σ)	r_*	146.47	$145.5^{+4.9}_{-4.8}$ ($+0.2\sigma$)	$\sigma_8(2.33)$	0.3009	$0.303^{+0.014}_{-0.013}$ (-0.2σ)
A_{217}^{dustTT}	94.7	93^{+10}_{-10} ($+0.0\sigma$)	$100\theta_*$	1.04145	$1.0412^{+0.0014}_{-0.0014}$ ($+0.2\sigma$)	f_{2000}^{143}	28.7	30^{+7}_{-7} (-0.1σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ ($+0.0\sigma$)	$D_M(z_*)/\text{Gpc}$	14.064	$13.97^{+0.45}_{-0.45}$ ($+0.2\sigma$)	$f_{2000}^{143 \times 217}$	32.0	33^{+5}_{-5} (-0.1σ)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (-0.0σ)	z_{drag}	1058.75	$1059.1^{+2.1}_{-2.1}$ (-0.1σ)	f_{2000}^{217}	106.46	$107.6^{+4.6}_{-4.6}$ (-0.1σ)
H_0	65.50	$66.3^{+4.2}_{-3.9}$ (-0.1σ)	r_{drag}	149.3	$148.3^{+5.1}_{-5.0}$ ($+0.2\sigma$)	$\chi^2_{lensing}$	8.61	9.37 ($\nu: 0.5$)
Ω_Λ	0.6734	$0.678^{+0.028}_{-0.029}$ ($+0.1\sigma$)	k_D	0.13915	$0.1398^{+0.0036}_{-0.0036}$ (-0.2σ)	χ^2_{small}	395.69	396.8 ($\nu: 1.1$) (-0.0σ)
Ω_m	0.3266	$0.322^{+0.029}_{-0.028}$ (-0.1σ)	$100\theta_D$	0.16054	$0.1608^{+0.0013}_{-0.0012}$ (-0.2σ)	χ^2_{lowl}	24.61	24.4 ($\nu: 1.8$) ($+0.0\sigma$)
$\Omega_m h^2$	0.1401	$0.1417^{+0.0080}_{-0.0077}$ (-0.3σ)	z_{eq}	3432	3416^{+99}_{-99} (-0.1σ)	χ^2_{plik}	757.8	771.1 ($\nu: 15.2$) (-0.1σ)
$\Omega_m h^3$	0.0918	$0.0941^{+0.011}_{-0.0099}$ (-0.2σ)	k_{eq}	0.010323	$0.01035^{+0.00027}_{-0.00027}$ (-0.3σ)	χ^2_{prior}	1.3	7.3 ($\nu: 6.6$) ($+0.0\sigma$)
σ_8	0.8017	$0.806^{+0.025}_{-0.025}$ (-0.3σ)	$100\theta_{eq}$	0.8070	$0.810^{+0.019}_{-0.018}$ ($+0.0\sigma$)	χ^2_{CMB}	1186.7	1201.7 ($\nu: 15.8$) ($+1.6\sigma$)
S_8	0.8365	$0.835^{+0.032}_{-0.032}$ (-0.2σ)	$100\theta_{s,eq}$	0.4464	$0.4479^{+0.0096}_{-0.0093}$ ($+0.0\sigma$)			
$\sigma_8 \Omega_m^{0.5}$	0.4582	$0.458^{+0.018}_{-0.017}$ (-0.2σ)	$H(0.15)$	70.86	$71.7^{+4.1}_{-3.9}$ (-0.1σ)			

Best-fit $\chi^2_{eff} = 1188.03$; $\Delta\chi^2_{eff} = -0.54$; $\bar{\chi}^2_{eff} = 1208.98$; $\Delta\bar{\chi}^2_{eff} = 0.57$; $R - 1 = 0.00963$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.62 (Δ -0.29) small.100x143_offlike5_EE_Aplanck_B: 395.69 (Δ -0.17) commander_dx12_v3.2.29: 24.61 (Δ 1.37) plik_rd12_HM_v22.TT: 757.83 (Δ -1.49)

7.3 base_nnu_plikHM_TT_lowl_lowE_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02202	$0.02205^{+0.00052}_{-0.00051} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4611	$0.461^{+0.026}_{-0.025} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	0.4464	$0.447^{+0.011}_{-0.010} \quad (-0.1\sigma)$
$\Omega_c h^2$	0.1189	$0.1196^{+0.0058}_{-0.0056} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6101	$0.610^{+0.023}_{-0.022} \quad (-0.0\sigma)$	$H(0.15)$	71.24	$71.6^{+3.3}_{-3.1} \quad (-0.1\sigma)$
$100\theta_{MC}$	1.04095	$1.0409^{+0.0010}_{-0.00096} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9947	$0.994^{+0.031}_{-0.031} \quad (+0.0\sigma)$	$D_M(0.15)$	657.2	$654^{+32}_{-31} \quad (+0.1\sigma)$
τ	0.0518	$0.051^{+0.016}_{-0.015} \quad (-0.0\sigma)$	$r_{drag} h$	97.79	$98.0^{+3.8}_{-3.7} \quad (-0.1\sigma)$	$H(0.38)$	81.50	$81.9^{+3.1}_{-2.9} \quad (-0.1\sigma)$
N_{eff}	2.908	$2.96^{+0.37}_{-0.36} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.464	$2.461^{+0.082}_{-0.081} \quad (+0.1\sigma)$	$D_M(0.38)$	1564	$1557^{+69}_{-67} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	3.0351	$3.035^{+0.036}_{-0.036} \quad (-0.1\sigma)$	z_{re}	7.47	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.51)$	88.30	$88.7^{+3.0}_{-2.8} \quad (-0.1\sigma)$
n_s	0.9580	$0.959^{+0.019}_{-0.019} \quad (-0.1\sigma)$	$10^9 A_s$	2.080	$2.081^{+0.077}_{-0.075} \quad (-0.1\sigma)$	$D_M(0.51)$	2023	$2015^{+85}_{-83} \quad (+0.1\sigma)$
y_{cal}	1.00035	$1.0005^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8756	$1.879^{+0.035}_{-0.034} \quad (-0.1\sigma)$	$H(0.61)$	93.98	$94.4^{+2.9}_{-2.8} \quad (-0.1\sigma)$
A_{217}^{CIB}	48.1	$47^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	1238.6	$1239^{+36}_{-37} \quad (+0.1\sigma)$	$D_M(0.61)$	2352	$2342^{+95}_{-94} \quad (+0.1\sigma)$
$\xi^{tSZ \times CIB}$	0.38	—	D_{220}	5708	$5713^{+80}_{-77} \quad (+0.0\sigma)$	$H(2.33)$	235.02	$235.7^{+5.0}_{-4.8} \quad (-0.1\sigma)$
A_{143}^{tSZ}	7.04	$5.2^{+3.7}_{-4.0} \quad (+0.0\sigma)$	D_{810}	2535.6	$2536^{+28}_{-27} \quad (-0.0\sigma)$	$D_M(2.33)$	5838	$5817^{+170}_{-170} \quad (+0.1\sigma)$
A_{100}^{PS}	252	$261^{+60}_{-50} \quad (-0.0\sigma)$	D_{1420}	815.9	$815.0^{+9.9}_{-9.7} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	0.4645	$0.464^{+0.024}_{-0.023} \quad (+0.0\sigma)$
A_{143}^{PS}	48.6	$48^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	230.61	$230.0^{+3.7}_{-3.8} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7444	$0.746^{+0.020}_{-0.020} \quad (-0.1\sigma)$
$A_{143 \times 217}^{PS}$	47.2	$44^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	0.9580	$0.959^{+0.019}_{-0.019} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4794	$0.479^{+0.018}_{-0.018} \quad (-0.0\sigma)$
A_{217}^{PS}	119.1	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	0.2434	$0.2440^{+0.0051}_{-0.0050} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6583	$0.660^{+0.018}_{-0.018} \quad (-0.1\sigma)$
A^{kSZ}	0.00	$< 8.26 \quad (-0.0\sigma)$	Y_P^{BBN}	0.2447	$0.2454^{+0.0051}_{-0.0051} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4763	$0.476^{+0.016}_{-0.016} \quad (-0.0\sigma)$
A_{100}^{dustTT}	8.79	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$10^5 D/H$	2.603	$2.617^{+0.098}_{-0.095} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6154	$0.617^{+0.018}_{-0.018} \quad (-0.1\sigma)$
A_{143}^{dustTT}	10.80	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	13.973	$13.92^{+0.40}_{-0.39} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	0.4701	$0.470^{+0.014}_{-0.014} \quad (-0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	19.5	$18.3^{+6.5}_{-6.4} \quad (+0.0\sigma)$	z_*	1090.13	$1090.21^{+0.78}_{-0.77} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	0.5852	$0.586^{+0.017}_{-0.017} \quad (-0.1\sigma)$
A_{217}^{dustTT}	94.7	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	145.69	$145.3^{+3.3}_{-3.3} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2945	$0.2952^{+0.0091}_{-0.0090} \quad (-0.1\sigma)$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	1.04126	$1.0412^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.3030	$0.304^{+0.010}_{-0.0098} \quad (-0.1\sigma)$
c_{217}	0.99825	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.992	$13.95^{+0.31}_{-0.31} \quad (+0.1\sigma)$	χ_{small}^2	395.84	$396.8 \quad (\nu: 1.2) \quad (-0.0\sigma)$
H_0	65.86	$66.2^{+3.4}_{-3.3} \quad (-0.1\sigma)$	z_{drag}	1058.94	$1059.1^{+1.6}_{-1.6} \quad (-0.1\sigma)$	χ_{lowl}^2	24.40	$24.5 \quad (\nu: 1.8) \quad (+0.1\sigma)$
Ω_Λ	0.6736	$0.675^{+0.030}_{-0.032} \quad (-0.1\sigma)$	r_{drag}	148.48	$148.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	χ_{plik}^2	757.7	$770.9 \quad (\nu: 15.0) \quad (-0.1\sigma)$
Ω_m	0.3264	$0.325^{+0.032}_{-0.030} \quad (+0.1\sigma)$	k_D	0.13967	$0.1400^{+0.0026}_{-0.0025} \quad (-0.1\sigma)$	χ_{Aver15}^2	0.00	$0.44 \quad (\nu: 0.2)$
$\Omega_m h^2$	0.1416	$0.1423^{+0.0060}_{-0.0057} \quad (-0.1\sigma)$	$100\theta_D$	0.16076	$0.16089^{+0.00088}_{-0.00084} \quad (-0.1\sigma)$	$\chi_{Cooke17}^2$	0.02	$0.27 \quad (\nu: 0.1)$
$\Omega_m h^3$	0.0932	$0.0942^{+0.0075}_{-0.0069} \quad (-0.1\sigma)$	z_{eq}	3431	$3425^{+110}_{-110} \quad (+0.1\sigma)$	χ_{prior}^2	1.4	$7.2 \quad (\nu: 6.5) \quad (-0.0\sigma)$
σ_8	0.8072	$0.808^{+0.022}_{-0.022} \quad (-0.1\sigma)$	k_{eq}	0.010374	$0.01039^{+0.00029}_{-0.00028} \quad (-0.0\sigma)$	χ_{CMB}^2	1177.9	$1192.2 \quad (\nu: 14.6) \quad (-0.1\sigma)$
S_8	0.8419	$0.841^{+0.048}_{-0.046} \quad (+0.0\sigma)$	$100\theta_{eq}$	0.8072	$0.808^{+0.021}_{-0.020} \quad (-0.1\sigma)$	χ_{Abund}^2	0.03	$0.71 \quad (\nu: 0.4)$

Best-fit $\chi_{eff}^2 = 1179.31$; $\bar{\chi}_{eff}^2 = 1200.19$; $R - 1 = 0.00823$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.02 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.84 commander_dx12_v3.2_29: 24.40 plik_rd12_HM_v22_TT: 757.67

7.4 base_nnu_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02210^{+0.00059}_{-0.00059} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.460^{+0.027}_{-0.026} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.448^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1202^{+0.0082}_{-0.0076} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.611^{+0.023}_{-0.023} \quad (+0.1\sigma)$	$H(0.15)$	$72.1^{+4.5}_{-4.3} \quad (+0.1\sigma)$
$100\theta_{MC}$	$1.0408^{+0.0011}_{-0.0011} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$D_M(0.15)$	$650^{+43}_{-41} \quad (-0.1\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{drag} h$	$98.4^{+4.2}_{-4.1} \quad (+0.1\sigma)$	$H(0.38)$	$82.3^{+4.3}_{-4.1} \quad (+0.1\sigma)$
N_{eff}	$3.02^{+0.56}_{-0.54} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.459^{+0.088}_{-0.086} \quad (+0.0\sigma)$	$D_M(0.38)$	$1548^{+94}_{-90} \quad (-0.1\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.037}_{-0.032} \quad (+0.2\sigma)$	z_{re}	$< 8.80 \quad (+0.3\sigma)$	$H(0.51)$	$89.1^{+4.2}_{-4.1} \quad (+0.1\sigma)$
n_s	$0.962^{+0.025}_{-0.025} \quad (+0.1\sigma)$	$10^9 A_s$	$2.094^{+0.075}_{-0.070} \quad (+0.2\sigma)$	$D_M(0.51)$	$2003^{+120}_{-110} \quad (-0.1\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.882^{+0.043}_{-0.044} \quad (+0.0\sigma)$	$H(0.61)$	$94.8^{+4.2}_{-4.1} \quad (+0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{40}	$1235^{+43}_{-42} \quad (-0.1\sigma)$	$D_M(0.61)$	$2330^{+130}_{-130} \quad (-0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5713^{+82}_{-78} \quad (+0.0\sigma)$	$H(2.33)$	$236.3^{+7.2}_{-6.9} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (-0.0\sigma)$	D_{810}	$2536^{+28}_{-27} \quad (+0.0\sigma)$	$D_M(2.33)$	$5793^{+250}_{-240} \quad (-0.1\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (+0.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.024} \quad (+0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$229.8^{+4.4}_{-4.4} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.025}_{-0.024} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.962^{+0.025}_{-0.025} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.019} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.2448^{+0.0075}_{-0.0076} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.023}_{-0.022} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.49 \quad (+0.0\sigma)$	Y_P^{BBN}	$0.2461^{+0.0075}_{-0.0076} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$10^5 D/H$	$2.63^{+0.14}_{-0.13} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.023}_{-0.021} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.87^{+0.58}_{-0.56} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.015}_{-0.015} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.2^{+6.5}_{-6.5} \quad (+0.0\sigma)$	z_*	$1090.25^{+0.97}_{-0.95} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.022}_{-0.021} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	r_*	$144.8^{+5.0}_{-4.9} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.297^{+0.012}_{-0.011} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.0411^{+0.0014}_{-0.0014} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.013}_{-0.013} \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.91^{+0.46}_{-0.46} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (+0.0\sigma)$
H_0	$66.7^{+4.6}_{-4.4} \quad (+0.1\sigma)$	z_{drag}	$1059.3^{+2.1}_{-2.1} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (+0.0\sigma)$
Ω_Λ	$0.678^{+0.033}_{-0.036} \quad (+0.1\sigma)$	r_{drag}	$147.6^{+5.2}_{-5.1} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.9^{+4.6}_{-4.6} \quad (+0.0\sigma)$
Ω_m	$0.322^{+0.036}_{-0.033} \quad (-0.1\sigma)$	k_D	$0.1403^{+0.0037}_{-0.0036} \quad (+0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.2) \quad (-0.1\sigma)$
$\Omega_m h^2$	$0.1429^{+0.0084}_{-0.0078} \quad (+0.0\sigma)$	$100\theta_D$	$0.1610^{+0.0013}_{-0.0013} \quad (+0.0\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 2.4) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.095^{+0.011}_{-0.010} \quad (+0.1\sigma)$	z_{eq}	$3415^{+120}_{-120} \quad (-0.1\sigma)$	χ_{plik}^2	$771.7 \quad (\nu: 17.1) \quad (-0.0\sigma)$
σ_8	$0.811^{+0.026}_{-0.025} \quad (+0.1\sigma)$	k_{eq}	$0.01040^{+0.00032}_{-0.00031} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.5) \quad (+0.0\sigma)$
S_8	$0.840^{+0.049}_{-0.047} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.810^{+0.024}_{-0.023} \quad (+0.1\sigma)$	χ_{CMB}^2	$1192.7 \quad (\nu: 15.3) \quad (-0.0\sigma)$

$$\bar{\chi}_{eff}^2 = 1199.93; \Delta \bar{\chi}_{eff}^2 = 0.61; R - 1 = 0.00341$$

7.5 base_nnu_plikHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02209^{+0.00056}_{-0.00056} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.608^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$D_M(0.15)$	$651^{+38}_{-37} \quad (-0.0\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0077}_{-0.0075} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.020} \quad (-0.2\sigma)$	$H(0.38)$	$82.1^{+4.0}_{-3.8} \quad (-0.0\sigma)$
$100\theta_{MC}$	$1.0409^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	$r_{drag} h$	$98.5^{+3.4}_{-3.2} \quad (+0.1\sigma)$	$D_M(0.38)$	$1551^{+85}_{-82} \quad (+0.0\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.454^{+0.060}_{-0.061} \quad (-0.1\sigma)$	$H(0.51)$	$88.9^{+4.0}_{-3.8} \quad (-0.1\sigma)$
N_{eff}	$2.97^{+0.54}_{-0.52} \quad (-0.1\sigma)$	z_{re}	$< 8.76 \quad (+0.2\sigma)$	$D_M(0.51)$	$2008^{+110}_{-100} \quad (+0.0\sigma)$
$\ln(10^{10} A_s)$	$3.038^{+0.036}_{-0.032} \quad (+0.1\sigma)$	$10^9 A_s$	$2.087^{+0.076}_{-0.066} \quad (+0.1\sigma)$	$H(0.61)$	$94.5^{+4.0}_{-3.8} \quad (-0.1\sigma)$
n_s	$0.961^{+0.023}_{-0.022} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.042}_{-0.045} \quad (-0.2\sigma)$	$D_M(0.61)$	$2335^{+120}_{-120} \quad (+0.0\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1236^{+36}_{-36} \quad (-0.0\sigma)$	$H(2.33)$	$235.4^{+7.0}_{-6.9} \quad (-0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.0\sigma)$	D_{220}	$5716^{+82}_{-79} \quad (+0.1\sigma)$	$D_M(2.33)$	$5811^{+230}_{-230} \quad (+0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{810}	$2535^{+28}_{-28} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.024}_{-0.023} \quad (-0.1\sigma)$
A_{100}^{PS}	$261^{+60}_{-50} \quad (-0.0\sigma)$	D_{2000}	$230.1^{+4.4}_{-4.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.961^{+0.023}_{-0.022} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.023}_{-0.022} \quad (-0.1\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.2442^{+0.0073}_{-0.0073} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.2455^{+0.0073}_{-0.0073} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.022}_{-0.022} \quad (-0.1\sigma)$
A^{kSZ}	$< 8.42 \quad (-0.0\sigma)$	$10^5 D/H$	$2.61^{+0.14}_{-0.13} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.91^{+0.55}_{-0.55} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.022}_{-0.021} \quad (-0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.11^{+0.94}_{-0.91} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.012}_{-0.011} \quad (-0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.2^{+6.4}_{-6.6} \quad (-0.0\sigma)$	r_*	$145.3^{+4.9}_{-4.8} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.013}_{-0.012} \quad (-0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.96^{+0.45}_{-0.44} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.2^{+2.0}_{-2.0} \quad (-0.0\sigma)$	f_{2000}^{217}	$107.7^{+4.6}_{-4.6} \quad (-0.1\sigma)$
H_0	$66.6^{+4.1}_{-4.0} \quad (+0.0\sigma)$	r_{drag}	$148.1^{+5.1}_{-5.0} \quad (+0.1\sigma)$	$\chi_{lensing}^2$	$9.38 \quad (\nu: 0.5)$
Ω_Λ	$0.679^{+0.027}_{-0.028} \quad (+0.2\sigma)$	k_D	$0.1399^{+0.0036}_{-0.0036} \quad (-0.2\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.1) \quad (-0.1\sigma)$
Ω_m	$0.321^{+0.028}_{-0.027} \quad (-0.2\sigma)$	$100\theta_D$	$0.1609^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 1.7) \quad (-0.1\sigma)$
$\Omega_m h^2$	$0.1418^{+0.0080}_{-0.0079} \quad (-0.2\sigma)$	z_{eq}	$3410^{+97}_{-96} \quad (-0.2\sigma)$	χ_{plik}^2	$771.2 \quad (\nu: 15.2) \quad (-0.1\sigma)$
$\Omega_m h^3$	$0.0944^{+0.011}_{-0.0098} \quad (-0.1\sigma)$	k_{eq}	$0.01035^{+0.00027}_{-0.00027} \quad (-0.3\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
σ_8	$0.808^{+0.024}_{-0.024} \quad (-0.1\sigma)$	$100\theta_{eq}$	$0.811^{+0.018}_{-0.018} \quad (+0.1\sigma)$	χ_{CMB}^2	$1201.4 \quad (\nu: 15.6) \quad (+1.5\sigma)$
S_8	$0.835^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$100\theta_{s,eq}$	$0.4485^{+0.0093}_{-0.0091} \quad (+0.1\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.457^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$H(0.15)$	$71.9^{+4.0}_{-3.8} \quad (-0.0\sigma)$		

$$\bar{\chi}_{eff}^2 = 1208.73; \Delta \bar{\chi}_{eff}^2 = 0.57; R - 1 = 0.01118$$

7.6 base_nnu_plikHM_TT_lowl_lowE_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02206^{+0.00051}_{-0.00051} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.022}_{-0.022} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$653^{+31}_{-31} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0058}_{-0.0056} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.995^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$H(0.38)$	$82.0^{+3.0}_{-2.9} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0010}_{-0.00096} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.1^{+3.7}_{-3.7} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1555^{+68}_{-67} \quad (+0.1\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.463^{+0.082}_{-0.081} \quad (+0.1\sigma)$	$H(0.51)$	$88.8^{+2.9}_{-2.8} \quad (-0.1\sigma)$
N_{eff}	$2.97^{+0.37}_{-0.35} \quad (-0.1\sigma)$	z_{re}	$< 8.76 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2012^{+83}_{-83} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.032}_{-0.029} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.090^{+0.066}_{-0.061} \quad (+0.1\sigma)$	$H(0.61)$	$94.4^{+2.9}_{-2.8} \quad (-0.1\sigma)$
n_{s}	$0.960^{+0.019}_{-0.019} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.035}_{-0.034} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2339^{+94}_{-93} \quad (+0.1\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	D_{40}	$1238^{+36}_{-36} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+5.0}_{-4.8} \quad (-0.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.0\sigma)$	D_{220}	$5713^{+80}_{-77} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5812^{+170}_{-170} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2536^{+28}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.023} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.2^{+3.7}_{-4.0} \quad (+0.0\sigma)$	D_{1420}	$815.0^{+9.9}_{-9.7} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.019}_{-0.018} \quad (+0.0\sigma)$
A_{100}^{PS}	$261^{+60}_{-50} \quad (-0.0\sigma)$	D_{2000}	$230.1^{+3.7}_{-3.8} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.018} \quad (+0.1\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.019}_{-0.019} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.018}_{-0.016} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.2442^{+0.0051}_{-0.0050} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.015}_{-0.015} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2455^{+0.0051}_{-0.0050} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.017}_{-0.016} \quad (-0.0\sigma)$
A^{kSZ}	$< 8.26 \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.617^{+0.099}_{-0.095} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.014}_{-0.014} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.91^{+0.39}_{-0.39} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.016}_{-0.015} \quad (-0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.20^{+0.78}_{-0.77} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2959^{+0.0086}_{-0.0081} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.4} \quad (+0.0\sigma)$	r_*	$145.2^{+3.3}_{-3.3} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3046^{+0.0096}_{-0.0090} \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.94^{+0.31}_{-0.31} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.1^{+1.6}_{-1.6} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.7^{+4.0}_{-4.0} \quad (-0.1\sigma)$
H_0	$66.3^{+3.4}_{-3.3} \quad (-0.1\sigma)$	r_{drag}	$148.0^{+3.5}_{-3.4} \quad (+0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.2) \quad (-0.1\sigma)$
Ω_{Λ}	$0.676^{+0.030}_{-0.032} \quad (-0.0\sigma)$	k_{D}	$0.1400^{+0.0026}_{-0.0025} \quad (-0.1\sigma)$	χ_{lowl}^2	$24.5 \quad (\nu: 1.7) \quad (+0.0\sigma)$
Ω_{m}	$0.324^{+0.032}_{-0.030} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16090^{+0.00087}_{-0.00084} \quad (-0.1\sigma)$	χ_{plik}^2	$770.8 \quad (\nu: 14.9) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0060}_{-0.0057} \quad (-0.1\sigma)$	z_{eq}	$3422^{+110}_{-110} \quad (+0.0\sigma)$	χ_{Aver15}^2	$0.44 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0944^{+0.0074}_{-0.0068} \quad (-0.1\sigma)$	k_{eq}	$0.01039^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.28 \quad (\nu: 0.1)$
σ_8	$0.810^{+0.021}_{-0.020} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.809^{+0.021}_{-0.020} \quad (-0.0\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.4) \quad (-0.0\sigma)$
S_8	$0.842^{+0.048}_{-0.046} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.447^{+0.011}_{-0.010} \quad (-0.0\sigma)$	χ_{CMB}^2	$1191.9 \quad (\nu: 14.2) \quad (-0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.461^{+0.026}_{-0.025} \quad (+0.1\sigma)$	$H(0.15)$	$71.7^{+3.3}_{-3.1} \quad (-0.1\sigma)$	χ_{Abund}^2	$0.72 \quad (\nu: 0.4)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1199.89; R - 1 = 0.00918$$

7.7 base_nnu_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022194	$0.02225^{+0.00045}_{-0.00042}$ (+0.6 σ)	$\Omega_m h^2$	0.1401	$0.1413^{+0.0059}_{-0.0060}$ (−0.4 σ)	k_{eq}	0.010317	$0.01035^{+0.00023}_{-0.00023}$ (−0.3 σ)
$\Omega_c h^2$	0.1172	$0.1184^{+0.0057}_{-0.0057}$ (−0.4 σ)	$\Omega_m h^3$	0.0922	$0.0938^{+0.0073}_{-0.0072}$ (−0.2 σ)	$100\theta_{\text{eq}}$	0.8082	$0.810^{+0.013}_{-0.013}$ (+0.0 σ)
$100\theta_{\text{MC}}$	1.04123	$1.04111^{+0.00086}_{-0.00084}$ (+0.4 σ)	σ_8	0.8040	$0.806^{+0.022}_{-0.021}$ (−0.3 σ)	$100\theta_{\text{s,eq}}$	0.4468	$0.4477^{+0.0068}_{-0.0067}$ (+0.0 σ)
τ	0.0538	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	S_8	0.8347	$0.833^{+0.031}_{-0.031}$ (−0.3 σ)	$H(0.15)$	71.15	$71.7^{+2.8}_{-2.7}$ (−0.1 σ)
N_{eff}	2.836	$2.92^{+0.36}_{-0.37}$ (−0.3 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4572	$0.456^{+0.017}_{-0.017}$ (−0.3 σ)	$D_{\text{M}}(0.15)$	657.8	653^{+27}_{-26} (+0.0 σ)
$\ln(10^{10} A_s)$	3.0365	$3.038^{+0.037}_{-0.035}$ (+0.0 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6063	$0.607^{+0.017}_{-0.017}$ (−0.3 σ)	$H(0.38)$	81.33	$81.9^{+2.7}_{-2.7}$ (−0.1 σ)
n_s	0.9579	$0.960^{+0.017}_{-0.017}$ (−0.1 σ)	$\sigma_8/h^{0.5}$	0.9910	$0.989^{+0.023}_{-0.023}$ (−0.2 σ)	$D_{\text{M}}(0.38)$	1566	1554^{+60}_{-58} (+0.1 σ)
y_{cal}	1.00052	$1.0008^{+0.0050}_{-0.0048}$ (+0.1 σ)	$r_{\text{drag}} h$	98.15	$98.5^{+2.5}_{-2.4}$ (+0.1 σ)	$H(0.51)$	88.07	$88.7^{+2.8}_{-2.7}$ (−0.1 σ)
A_{217}^{CIB}	43.5	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.460	$2.456^{+0.060}_{-0.058}$ (−0.0 σ)	$D_{\text{M}}(0.51)$	2026	2012^{+75}_{-72} (+0.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.96	—	z_{re}	7.60	$7.5^{+1.5}_{-1.6}$ (+0.1 σ)	$H(0.61)$	93.70	$94.3^{+2.8}_{-2.8}$ (−0.2 σ)
A_{143}^{tSZ}	6.85	$5.6^{+3.8}_{-3.7}$ (+0.2 σ)	$10^9 A_s$	2.083	$2.086^{+0.077}_{-0.073}$ (+0.0 σ)	$D_{\text{M}}(0.61)$	2357	2340^{+85}_{-82} (+0.1 σ)
A_{100}^{PS}	244	256^{+60}_{-50} (−0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8707	$1.876^{+0.034}_{-0.035}$ (−0.2 σ)	$H(2.33)$	233.9	$234.9^{+5.0}_{-5.2}$ (−0.3 σ)
A_{143}^{PS}	52.4	45^{+20}_{-20} (−0.5 σ)	D_{40}	1239.7	1239^{+32}_{-30} (+0.1 σ)	$D_{\text{M}}(2.33)$	5857	5822^{+170}_{-160} (+0.2 σ)
$A_{143 \times 217}^{\text{PS}}$	58.7	42^{+20}_{-20} (−0.1 σ)	D_{220}	5730	5734^{+76}_{-74} (+0.5 σ)	$f\sigma_8(0.15)$	0.4608	$0.460^{+0.016}_{-0.016}$ (−0.3 σ)
A_{217}^{PS}	124.4	115^{+20}_{-20} (+0.0 σ)	D_{810}	2539.3	2539^{+27}_{-26} (+0.2 σ)	$\sigma_8(0.15)$	0.7418	$0.744^{+0.021}_{-0.020}$ (−0.2 σ)
A^{kSZ}	0.00	< 7.77 (−0.2 σ)	D_{1420}	819.7	$818.0^{+9.4}_{-9.2}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.4763	$0.476^{+0.014}_{-0.013}$ (−0.3 σ)
A_{100}^{dustTT}	8.70	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	232.48	$231.6^{+3.5}_{-3.5}$ (+0.8 σ)	$\sigma_8(0.38)$	0.6563	$0.659^{+0.019}_{-0.018}$ (−0.2 σ)
A_{143}^{dustTT}	10.90	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9579	$0.960^{+0.017}_{-0.017}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4736	$0.474^{+0.013}_{-0.013}$ (−0.3 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.4^{+6.4}_{-6.5}$ (+0.1 σ)	Y_{P}	0.2425	$0.2436^{+0.0050}_{-0.0053}$ (−0.3 σ)	$\sigma_8(0.51)$	0.6137	$0.616^{+0.019}_{-0.018}$ (−0.2 σ)
A_{217}^{dustTT}	96.0	94^{+10}_{-10} (+0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2438	$0.2449^{+0.0050}_{-0.0053}$ (−0.3 σ)	$f\sigma_8(0.61)$	0.4677	$0.468^{+0.013}_{-0.012}$ (−0.3 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.075}$	10^5D/H	2.546	$2.564^{+0.085}_{-0.086}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5836	$0.586^{+0.018}_{-0.017}$ (−0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.058}_{-0.059}$	Age/Gyr	14.018	$13.94^{+0.40}_{-0.38}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2938	$0.2950^{+0.0094}_{-0.0088}$ (−0.1 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.69	$1089.81^{+0.66}_{-0.64}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3024	$0.304^{+0.010}_{-0.0095}$ (−0.1 σ)
A_{143}^{dustTE}	0.225	$0.23^{+0.10}_{-0.11}$	r_*	146.36	$145.6^{+3.7}_{-3.4}$ (+0.3 σ)	f_{2000}^{143}	27.2	29^{+6}_{-6} (−0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.668	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	1.04156	$1.0414^{+0.0011}_{-0.0010}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	30.88	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dustTE}	2.09	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.052	$13.98^{+0.34}_{-0.32}$ (+0.3 σ)	f_{2000}^{217}	105.44	$106.5^{+3.8}_{-3.8}$ (−0.6 σ)
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.17	$1059.4^{+1.6}_{-1.5}$ (+0.2 σ)	χ_{small}^2	396.03	397.0 (ν : 1.5) (+0.1 σ)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	149.11	$148.3^{+3.8}_{-3.6}$ (+0.2 σ)	χ_{lowl}^2	24.41	24.3 (ν : 1.2) (−0.0 σ)
H_0	65.82	$66.4^{+2.8}_{-2.8}$ (−0.1 σ)	k_{D}	0.13944	$0.1400^{+0.0026}_{-0.0027}$ (−0.1 σ)	χ_{plik}^2	2343.0	2359.2 (ν : 18.0) (+271.5 σ)
Ω_{Λ}	0.6767	$0.679^{+0.020}_{-0.021}$ (+0.1 σ)	$100\theta_{\text{D}}$	0.16033	$0.16052^{+0.00077}_{-0.00080}$ (−0.7 σ)	χ_{prior}^2	1.3	11.6 (ν : 10.5) (+1.2 σ)
Ω_{m}	0.3233	$0.321^{+0.021}_{-0.020}$ (−0.1 σ)	z_{eq}	3429	3420^{+72}_{-70} (+0.0 σ)	χ_{CMB}^2	2763.4	2780.5 (ν : 17.8) (+284.4 σ)

Best-fit $\chi_{\text{eff}}^2 = 2764.72$; $\Delta\chi_{\text{eff}}^2 = -1.05$; $\bar{\chi}_{\text{eff}}^2 = 2792.10$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.33$; $R - 1 = 0.01315$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.03 (Δ -0.02) commander_dx12_v3.2.29: 24.41 (Δ 1.15) plik_rd12_HM_v22b_TTTEEE: 2342.95 (Δ -1.69)

7.8 base_nnu_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022195	$0.02224^{+0.00043}_{-0.00043}$ (+0.5 σ)	$\Omega_m h^3$	0.0918	$0.0933^{+0.0073}_{-0.0074}$ (-0.3 σ)	$100\theta_{s,eq}$	0.4472	$0.4478^{+0.0062}_{-0.0060}$ (+0.0 σ)
$\Omega_c h^2$	0.1167	$0.1179^{+0.0054}_{-0.0057}$ (-0.5 σ)	σ_8	0.8018	$0.804^{+0.020}_{-0.019}$ (-0.4 σ)	$H(0.15)$	71.10	$71.6^{+2.7}_{-2.7}$ (-0.1 σ)
$100\theta_{MC}$	1.04130	$1.04116^{+0.00084}_{-0.00083}$ (+0.5 σ)	S_8	0.8312	$0.831^{+0.025}_{-0.024}$ (-0.4 σ)	$D_M(0.15)$	658.2	654^{+26}_{-25} (+0.1 σ)
τ	0.0533	$0.053^{+0.014}_{-0.014}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4553	$0.455^{+0.013}_{-0.013}$ (-0.4 σ)	$H(0.38)$	81.25	$81.8^{+2.7}_{-2.7}$ (-0.2 σ)
N_{eff}	2.815	$2.89^{+0.36}_{-0.38}$ (-0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6042	$0.605^{+0.014}_{-0.013}$ (-0.4 σ)	$D_M(0.38)$	1567	1557^{+59}_{-57} (+0.1 σ)
$\ln(10^{10} A_s)$	3.0339	$3.036^{+0.033}_{-0.031}$ (-0.0 σ)	$\sigma_8/h^{0.5}$	0.9885	$0.988^{+0.017}_{-0.018}$ (-0.3 σ)	$H(0.51)$	87.97	$88.5^{+2.7}_{-2.8}$ (-0.2 σ)
n_s	0.9577	$0.959^{+0.016}_{-0.017}$ (-0.1 σ)	$r_{drag} h$	98.27	$98.5^{+2.3}_{-2.2}$ (+0.1 σ)	$D_M(0.51)$	2028	2015^{+75}_{-71} (+0.1 σ)
y_{cal}	1.00049	$1.0007^{+0.0050}_{-0.0048}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4559	$2.454^{+0.049}_{-0.047}$ (-0.1 σ)	$H(0.61)$	93.59	$94.1^{+2.7}_{-2.9}$ (-0.2 σ)
A_{217}^{CIB}	43.4	46^{+10}_{-10} (-0.2 σ)	z_{re}	7.53	$7.5^{+1.4}_{-1.5}$ (+0.1 σ)	$D_M(0.61)$	2359	2344^{+85}_{-81} (+0.1 σ)
$\xi^{tSZ \times CIB}$	0.98	—	$10^9 A_s$	2.078	$2.083^{+0.070}_{-0.065}$ (-0.1 σ)	$H(2.33)$	233.5	$234.5^{+4.9}_{-5.2}$ (-0.4 σ)
A_{143}^{tSZ}	6.95	$5.6^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8679	$1.873^{+0.033}_{-0.035}$ (-0.4 σ)	$D_M(2.33)$	5864	5832^{+180}_{-160} (+0.2 σ)
A_{100}^{PS}	242	256^{+60}_{-60} (-0.2 σ)	D_{40}	1239.1	1240^{+30}_{-28} (+0.1 σ)	$f\sigma_8(0.15)$	0.4589	$0.459^{+0.012}_{-0.012}$ (-0.4 σ)
A_{143}^{PS}	52.0	44^{+20}_{-20} (-0.5 σ)	D_{220}	5730	5736^{+74}_{-74} (+0.6 σ)	$\sigma_8(0.15)$	0.7399	$0.742^{+0.019}_{-0.018}$ (-0.4 σ)
$A_{143 \times 217}^{PS}$	59.1	42^{+20}_{-20} (-0.2 σ)	D_{810}	2538.8	2538^{+27}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.4747	$0.475^{+0.011}_{-0.011}$ (-0.4 σ)
A_{217}^{PS}	124.4	115^{+20}_{-20} (-0.0 σ)	D_{1420}	819.9	$818.1^{+9.3}_{-9.2}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6547	$0.657^{+0.018}_{-0.017}$ (-0.3 σ)
A^{kSZ}	0.01	< 7.83 (-0.2 σ)	D_{2000}	232.64	$231.7^{+3.5}_{-3.5}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4720	$0.473^{+0.010}_{-0.010}$ (-0.4 σ)
A_{100}^{dustTT}	8.69	$8.9^{+3.7}_{-3.7}$ (-0.0 σ)	$n_{s,0.002}$	0.9577	$0.959^{+0.016}_{-0.017}$ (-0.1 σ)	$\sigma_8(0.51)$	0.6122	$0.615^{+0.017}_{-0.017}$ (-0.3 σ)
A_{143}^{dustTT}	10.89	$10.8^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P	0.2422	$0.2433^{+0.0050}_{-0.0055}$ (-0.3 σ)	$f\sigma_8(0.61)$	0.4662	$0.467^{+0.010}_{-0.010}$ (-0.4 σ)
$A_{143 \times 217}^{dustTT}$	20.3	$18.4^{+6.3}_{-6.6}$ (+0.0 σ)	Y_P^{BBN}	0.2435	$0.2446^{+0.0051}_{-0.0055}$ (-0.3 σ)	$\sigma_8(0.61)$	0.5822	$0.585^{+0.017}_{-0.016}$ (-0.3 σ)
A_{217}^{dustTT}	96.1	94^{+10}_{-10} (+0.0 σ)	$10^5 D/H$	2.538	$2.558^{+0.082}_{-0.084}$ (-1.0 σ)	$f\sigma_8(2.33)$	0.2932	$0.2944^{+0.0090}_{-0.0086}$ (-0.2 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.075}_{-0.077}$	Age/Gyr	14.036	$13.96^{+0.42}_{-0.38}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3018	$0.3031^{+0.0099}_{-0.0093}$ (-0.2 σ)
$A_{100 \times 143}^{dustTE}$	0.136	$0.135^{+0.057}_{-0.059}$	z_*	1089.62	$1089.75^{+0.63}_{-0.61}$ (-1.0 σ)	f_{2000}^{143}	26.9	29^{+6}_{-6} (-0.6 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.18}$	r_*	146.61	$145.9^{+3.7}_{-3.4}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	30.75	31^{+4}_{-4} (-0.7 σ)
A_{143}^{dustTE}	0.228	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	1.04165	$1.0415^{+0.0011}_{-0.0010}$ (+0.5 σ)	f_{2000}^{217}	105.29	$106.4^{+3.7}_{-3.9}$ (-0.7 σ)
$A_{143 \times 217}^{dustTE}$	0.669	$0.67^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	14.075	$14.01^{+0.35}_{-0.31}$ (+0.4 σ)	$\chi^2_{lensing}$	8.50	9.02 (ν : 0.2)
A_{217}^{dustTE}	2.09	$2.08^{+0.54}_{-0.52}$	z_{drag}	1059.09	$1059.3^{+1.6}_{-1.5}$ (+0.1 σ)	χ^2_{small}	395.95	396.8 (ν : 1.1) (-0.0 σ)
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	149.36	$148.6^{+3.9}_{-3.5}$ (+0.3 σ)	χ^2_{lowl}	24.36	24.4 (ν : 1.1) (+0.0 σ)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	k_D	0.13926	$0.1398^{+0.0026}_{-0.0028}$ (-0.2 σ)	χ^2_{plik}	2343.0	2359.1 (ν : 17.2) (+271.5 σ)
H_0	65.79	$66.3^{+2.8}_{-2.7}$ (-0.1 σ)	$100\theta_D$	0.16027	$0.16046^{+0.00076}_{-0.00080}$ (-0.8 σ)	χ^2_{prior}	1.4	11.6 (ν : 10.5) (+1.2 σ)
Ω_Λ	0.6776	$0.679^{+0.019}_{-0.019}$ (+0.2 σ)	z_{eq}	3426	3419^{+64}_{-63} (-0.0 σ)	χ^2_{CMB}	2771.9	2789.3 (ν : 17.7) (+286.0 σ)
Ω_m	0.3224	$0.321^{+0.019}_{-0.019}$ (-0.2 σ)	k_{eq}	0.010292	$0.01033^{+0.00021}_{-0.00020}$ (-0.5 σ)			
$\Omega_m h^2$	0.1395	$0.1408^{+0.0057}_{-0.0059}$ (-0.5 σ)	$100\theta_{eq}$	0.8088	$0.810^{+0.012}_{-0.012}$ (+0.0 σ)			

Best-fit $\chi^2_{eff} = 2773.28$; $\Delta\chi^2_{eff} = -1.35$; $\bar{\chi}^2_{eff} = 2800.86$; $\Delta\bar{\chi}^2_{eff} = 0.17$; $R - 1 = 0.01957$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.50 (Δ -0.37) small_100x143_offlike5_EE_Aplanck_B: 395.95 (Δ -0.10) commander_dx12_v3_2_29: 24.36 (Δ 1.11) plik_rd12_HM_v22b_TTTEEE: 2343.04 (Δ -1.89)

7.9 base_nnu_plikHM_TTTEEE_lowl_lowE_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022210	$0.02225^{+0.00040}_{-0.00038}$ $(+0.6\sigma)$	$\Omega_{\mathrm{m}} h^2$	0.14107	$0.1417^{+0.0049}_{-0.0048}$ (-0.3σ)	k_{eq}	0.010350	$0.01036^{+0.00021}_{-0.00021}$ (-0.2σ)
$\Omega_{\mathrm{c}} h^2$	0.11821	$0.1188^{+0.0047}_{-0.0047}$ (-0.3σ)	$\Omega_{\mathrm{m}} h^3$	0.0933	$0.0943^{+0.0059}_{-0.0058}$ (-0.1σ)	$100\theta_{\mathrm{eq}}$	0.8085	$0.810^{+0.013}_{-0.013}$ $(+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	1.04113	$1.04105^{+0.00076}_{-0.00075}$ $(+0.3\sigma)$	σ_8	0.8069	$0.807^{+0.020}_{-0.018}$ (-0.2σ)	$100\theta_{\mathrm{s,eq}}$	0.4470	$0.4478^{+0.0065}_{-0.0064}$ $(+0.0\sigma)$
τ	0.0538	$0.053^{+0.015}_{-0.015}$ $(+0.2\sigma)$	S_8	0.8371	$0.835^{+0.031}_{-0.030}$ (-0.2σ)	$H(0.15)$	71.45	$71.8^{+2.4}_{-2.2}$ (-0.0σ)
N_{eff}	2.891	$2.94^{+0.30}_{-0.29}$ (-0.2σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4585	$0.457^{+0.017}_{-0.017}$ (-0.2σ)	$D_{\mathrm{M}}(0.15)$	655.0	651^{+22}_{-22} (-0.0σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0389	$3.039^{+0.035}_{-0.033}$ $(+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6082	$0.608^{+0.016}_{-0.016}$ (-0.2σ)	$H(0.38)$	81.66	$82.0^{+2.3}_{-2.2}$ (-0.1σ)
n_{s}	0.9596	$0.960^{+0.014}_{-0.014}$ (-0.0σ)	$\sigma_8/h^{0.5}$	0.9925	$0.990^{+0.022}_{-0.022}$ (-0.2σ)	$D_{\mathrm{M}}(0.38)$	1559.3	1551^{+48}_{-49} $(+0.0\sigma)$
y_{cal}	1.00050	$1.0008^{+0.0050}_{-0.0049}$ $(+0.1\sigma)$	$r_{\mathrm{drag}} h$	98.19	$98.5^{+2.3}_{-2.3}$ $(+0.1\sigma)$	$H(0.51)$	88.42	$88.8^{+2.3}_{-2.2}$ (-0.1σ)
A_{217}^{CIB}	44.2	46^{+10}_{-10} (-0.2σ)	$\langle d^2 \rangle^{1/2}$	2.460	$2.455^{+0.058}_{-0.056}$ (-0.0σ)	$D_{\mathrm{M}}(0.51)$	2018	2008^{+60}_{-60} $(+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.88	—	z_{re}	7.62	$7.5^{+1.5}_{-1.6}$ $(+0.1\sigma)$	$H(0.61)$	94.07	$94.5^{+2.3}_{-2.2}$ (-0.1σ)
A_{143}^{tSZ}	6.95	$5.5^{+3.8}_{-3.8}$ $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.088	$2.088^{+0.074}_{-0.068}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2347	2336^{+68}_{-68} $(+0.0\sigma)$
A_{100}^{PS}	245	257^{+60}_{-60} (-0.2σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8752	$1.878^{+0.030}_{-0.030}$ (-0.1σ)	$H(2.33)$	234.72	$235.3^{+4.1}_{-4.1}$ (-0.2σ)
A_{143}^{PS}	52.2	45^{+20}_{-20} (-0.4σ)	D_{40}	1237.6	1238^{+29}_{-28} $(+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5834	5812^{+130}_{-130} $(+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	57.6	42^{+20}_{-20} (-0.1σ)	D_{220}	5727	5733^{+74}_{-73} $(+0.5\sigma)$	$f\sigma_8(0.15)$	0.4621	$0.461^{+0.016}_{-0.015}$ (-0.2σ)
A_{217}^{PS}	124.0	115^{+20}_{-20} $(+0.0\sigma)$	D_{810}	2539.8	2539^{+27}_{-26} $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7446	$0.745^{+0.018}_{-0.017}$ (-0.1σ)
A^{kSZ}	0.01	< 7.90 (-0.2σ)	D_{1420}	819.1	$817.8^{+9.2}_{-9.1}$ $(+0.6\sigma)$	$f\sigma_8(0.38)$	0.4778	$0.477^{+0.013}_{-0.013}$ (-0.2σ)
$A_{100}^{\mathrm{dustTT}}$	8.70	$8.9^{+3.7}_{-3.7}$ (-0.0σ)	D_{2000}	232.06	$231.4^{+3.3}_{-3.3}$ $(+0.7\sigma)$	$\sigma_8(0.38)$	0.6588	$0.660^{+0.017}_{-0.016}$ (-0.1σ)
$A_{143}^{\mathrm{dustTT}}$	10.89	$10.8^{+3.5}_{-3.4}$ $(+0.1\sigma)$	$n_{\mathrm{s},0.002}$	0.9596	$0.960^{+0.014}_{-0.014}$ (-0.0σ)	$f\sigma_8(0.51)$	0.4751	$0.475^{+0.012}_{-0.012}$ (-0.2σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.3	$18.5^{+6.3}_{-6.6}$ $(+0.1\sigma)$	Y_{P}	0.24323	$0.2439^{+0.0041}_{-0.0042}$ (-0.2σ)	$\sigma_8(0.51)$	0.6160	$0.617^{+0.016}_{-0.015}$ (-0.1σ)
$A_{217}^{\mathrm{dustTT}}$	96.0	94^{+10}_{-10} $(+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24455	$0.2452^{+0.0041}_{-0.0042}$ (-0.2σ)	$f\sigma_8(0.61)$	0.4693	$0.469^{+0.012}_{-0.011}$ (-0.2σ)
$A_{100}^{\mathrm{dustTE}}$	0.116	$0.114^{+0.075}_{-0.077}$	$10^5 \mathrm{D}/\mathrm{H}$	2.562	$2.573^{+0.072}_{-0.070}$ (-0.8σ)	$\sigma_8(0.61)$	0.5859	$0.587^{+0.016}_{-0.014}$ (-0.1σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.136	$0.135^{+0.057}_{-0.059}$	Age/Gyr	13.964	$13.91^{+0.32}_{-0.31}$ $(+0.1\sigma)$	$f\sigma_8(2.33)$	0.2950	$0.2955^{+0.0080}_{-0.0075}$ (-0.1σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.485	$0.48^{+0.17}_{-0.17}$	z_*	1089.81	$1089.87^{+0.58}_{-0.58}$ (-0.8σ)	$\sigma_8(2.33)$	0.3036	$0.3043^{+0.0087}_{-0.0081}$ (-0.1σ)
$A_{143}^{\mathrm{dustTE}}$	0.227	$0.23^{+0.10}_{-0.11}$	r_*	145.81	$145.4^{+2.9}_{-2.7}$ $(+0.2\sigma)$	χ_{small}^2	396.04	396.9 $(\nu: 1.4)$ $(+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.668	$0.67^{+0.15}_{-0.16}$	$100\theta_*$	1.04143	$1.04132^{+0.00091}_{-0.00090}$ $(+0.3\sigma)$	χ_{lowl}^2	24.18	24.2 $(\nu: 0.9)$ (-0.1σ)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.09^{+0.52}_{-0.52}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.001	$13.96^{+0.27}_{-0.26}$ $(+0.2\sigma)$	χ_{plik}^2	2343.2	2359.2 $(\nu: 17.4)$ $(+271.5\sigma)$
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	z_{drag}	1059.32	$1059.5^{+1.3}_{-1.3}$ $(+0.3\sigma)$	χ_{Aver15}^2	0.01	0.28 $(\nu: 0.1)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	r_{drag}	148.54	$148.1^{+3.0}_{-2.9}$ $(+0.1\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	0.36	0.38 $(\nu: 0.1)$
H_0	66.11	$66.5^{+2.4}_{-2.3}$ (-0.0σ)	k_{D}	0.13983	$0.1401^{+0.0022}_{-0.0022}$ (-0.0σ)	χ_{prior}^2	1.4	11.6 $(\nu: 10.4)$ $(+1.2\sigma)$
Ω_{Λ}	0.6772	$0.679^{+0.019}_{-0.019}$ $(+0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.16047	$0.16059^{+0.00063}_{-0.00064}$ (-0.6σ)	χ_{CMB}^2	2763.4	2780.3 $(\nu: 17.0)$ $(+284.4\sigma)$
Ω_{m}	0.3228	$0.321^{+0.019}_{-0.019}$ (-0.1σ)	z_{eq}	3427	3419^{+68}_{-67} (-0.0σ)	χ_{Abund}^2	0.37	0.67 $(\nu: 0.2)$

Best-fit $\chi_{\mathrm{eff}}^2 = 2765.22$; $\bar{\chi}_{\mathrm{eff}}^2 = 2792.58$; $R - 1 = 0.01890$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.01 D_Cooke2017: 0.36 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.04 commander_dx12_v3_2_29: 24.18 plik_rd12_HM_v22b_TTTEEE: 2343.20

7.10 base_nnu_plikHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02225^{+0.00045}_{-0.00041} \quad (+0.6\sigma)$	$\Omega_{\text{m}}h^2$	$0.1413^{+0.0059}_{-0.0060} \quad (-0.4\sigma)$	k_{eq}	$0.01035^{+0.00023}_{-0.00023} \quad (-0.3\sigma)$
$\Omega_{\text{c}}h^2$	$0.1184^{+0.0057}_{-0.0057} \quad (-0.4\sigma)$	$\Omega_{\text{m}}h^3$	$0.0939^{+0.0073}_{-0.0072} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	$0.810^{+0.013}_{-0.013} \quad (+0.1\sigma)$
$100\theta_{\text{MC}}$	$1.04111^{+0.00087}_{-0.00084} \quad (+0.4\sigma)$	σ_8	$0.807^{+0.021}_{-0.020} \quad (-0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.4479^{+0.0067}_{-0.0068} \quad (+0.0\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	S_8	$0.834^{+0.031}_{-0.031} \quad (-0.2\sigma)$	$H(0.15)$	$71.8^{+2.8}_{-2.7} \quad (-0.1\sigma)$
N_{eff}	$2.92^{+0.36}_{-0.37} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.457^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$D_{\text{M}}(0.15)$	$652^{+27}_{-26} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.041^{+0.033}_{-0.030} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.607^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$H(0.38)$	$82.0^{+2.7}_{-2.7} \quad (-0.1\sigma)$
n_{s}	$0.960^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.022}_{-0.022} \quad (-0.2\sigma)$	$D_{\text{M}}(0.38)$	$1553^{+60}_{-58} \quad (+0.0\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0048} \quad (+0.1\sigma)$	$r_{\text{drag}}h$	$98.5^{+2.4}_{-2.4} \quad (+0.1\sigma)$	$H(0.51)$	$88.7^{+2.8}_{-2.7} \quad (-0.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.458^{+0.059}_{-0.057} \quad (+0.0\sigma)$	$D_{\text{M}}(0.51)$	$2011^{+75}_{-72} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 8.83 \quad (+0.3\sigma)$	$H(0.61)$	$94.3^{+2.8}_{-2.8} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.7} \quad (+0.2\sigma)$	$10^9 A_{\text{s}}$	$2.092^{+0.068}_{-0.064} \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	$2338^{+85}_{-81} \quad (+0.1\sigma)$
A_{100}^{PS}	$256^{+60}_{-50} \quad (-0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.876^{+0.034}_{-0.035} \quad (-0.2\sigma)$	$H(2.33)$	$235.0^{+5.0}_{-5.2} \quad (-0.3\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{40}	$1239^{+32}_{-30} \quad (+0.1\sigma)$	$D_{\text{M}}(2.33)$	$5819^{+170}_{-160} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5734^{+75}_{-74} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.020}_{-0.019} \quad (-0.1\sigma)$
A^{kSZ}	$< 7.75 \quad (-0.2\sigma)$	D_{1420}	$818.0^{+9.3}_{-9.2} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$231.6^{+3.5}_{-3.5} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.019}_{-0.018} \quad (-0.1\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.960^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.013}_{-0.012} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.2437^{+0.0050}_{-0.0053} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.018}_{-0.017} \quad (-0.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2450^{+0.0050}_{-0.0053} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.075}$	$10^5 \text{D}/\text{H}$	$2.565^{+0.085}_{-0.086} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.017}_{-0.016} \quad (-0.1\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	Age/Gyr	$13.93^{+0.40}_{-0.38} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2955^{+0.0091}_{-0.0084} \quad (-0.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.81^{+0.66}_{-0.64} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3043^{+0.0098}_{-0.0091} \quad (-0.1\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	r_*	$145.6^{+3.6}_{-3.4} \quad (+0.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	$1.0414^{+0.0011}_{-0.0010} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.98^{+0.34}_{-0.32} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.5^{+3.8}_{-3.8} \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.4^{+1.6}_{-1.5} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$148.3^{+3.8}_{-3.5} \quad (+0.2\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.2) \quad (-0.0\sigma)$
H_0	$66.4^{+2.8}_{-2.8} \quad (-0.0\sigma)$	k_{D}	$0.1400^{+0.0026}_{-0.0027} \quad (-0.1\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 18.0) \quad (+271.5\sigma)$
Ω_{Λ}	$0.680^{+0.020}_{-0.021} \quad (+0.2\sigma)$	$100\theta_{\text{D}}$	$0.16053^{+0.00077}_{-0.00080} \quad (-0.7\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.5) \quad (+1.2\sigma)$
Ω_{m}	$0.320^{+0.021}_{-0.020} \quad (-0.2\sigma)$	z_{eq}	$3418^{+72}_{-70} \quad (-0.0\sigma)$	χ_{CMB}^2	$2780.3 \quad (\nu: 17.5) \quad (+284.4\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 2791.81; \Delta\bar{\chi}_{\text{eff}}^2 = 0.28; R - 1 = 0.01491$$

7.11 base_nnu_plikHM_TTTEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02224^{+0.00044}_{-0.00043} \quad (+0.5\sigma)$	$\Omega_m h^3$	$0.0934^{+0.0072}_{-0.0074} \quad (-0.3\sigma)$	$100\theta_{s,eq}$	$0.4480^{+0.0061}_{-0.0060} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0055}_{-0.0057} \quad (-0.5\sigma)$	σ_8	$0.805^{+0.020}_{-0.018} \quad (-0.3\sigma)$	$H(0.15)$	$71.7^{+2.8}_{-2.7} \quad (-0.1\sigma)$
$100\theta_{MC}$	$1.04116^{+0.00084}_{-0.00085} \quad (+0.5\sigma)$	S_8	$0.831^{+0.025}_{-0.024} \quad (-0.4\sigma)$	$D_M(0.15)$	$653^{+26}_{-25} \quad (+0.1\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.455^{+0.020}_{-0.013} \quad (-0.4\sigma)$	$H(0.38)$	$81.8^{+2.7}_{-2.7} \quad (-0.2\sigma)$
N_{eff}	$2.90^{+0.36}_{-0.38} \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.606^{+0.014}_{-0.013} \quad (-0.4\sigma)$	$D_M(0.38)$	$1555^{+59}_{-57} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.038^{+0.030}_{-0.028} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$H(0.51)$	$88.6^{+2.7}_{-2.8} \quad (-0.2\sigma)$
n_s	$0.959^{+0.016}_{-0.017} \quad (-0.1\sigma)$	$r_{drag} h$	$98.6^{+2.2}_{-2.2} \quad (+0.2\sigma)$	$D_M(0.51)$	$2014^{+74}_{-71} \quad (+0.1\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.048}_{-0.047} \quad (-0.0\sigma)$	$H(0.61)$	$94.2^{+2.7}_{-2.8} \quad (-0.2\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 8.73 \quad (+0.3\sigma)$	$D_M(0.61)$	$2342^{+84}_{-81} \quad (+0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.087^{+0.063}_{-0.059} \quad (+0.1\sigma)$	$H(2.33)$	$234.6^{+4.9}_{-5.2} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.873^{+0.033}_{-0.034} \quad (-0.4\sigma)$	$D_M(2.33)$	$5829^{+170}_{-160} \quad (+0.2\sigma)$
A_{100}^{PS}	$256^{+60}_{-60} \quad (-0.2\sigma)$	D_{40}	$1239^{+30}_{-28} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.012}_{-0.012} \quad (-0.4\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.5\sigma)$	D_{220}	$5735^{+73}_{-73} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.019}_{-0.018} \quad (-0.3\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$818.0^{+9.3}_{-9.2} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.018}_{-0.016} \quad (-0.2\sigma)$
A^{kSZ}	$< 7.82 \quad (-0.2\sigma)$	D_{2000}	$231.6^{+3.5}_{-3.4} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.010}_{-0.010} \quad (-0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.959^{+0.016}_{-0.017} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.017}_{-0.016} \quad (-0.2\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.4} \quad (+0.0\sigma)$	Y_P	$0.2433^{+0.0050}_{-0.0054} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.010}_{-0.0097} \quad (-0.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.4^{+6.3}_{-6.6} \quad (+0.0\sigma)$	Y_P^{BBN}	$0.2446^{+0.0050}_{-0.0054} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.017}_{-0.015} \quad (-0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 D/H$	$2.558^{+0.082}_{-0.083} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2948^{+0.0088}_{-0.0081} \quad (-0.2\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.077}$	Age/Gyr	$13.95^{+0.41}_{-0.38} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3036^{+0.0096}_{-0.0089} \quad (-0.2\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.059}$	z_*	$1089.75^{+0.62}_{-0.61} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.18}$	r_*	$145.9^{+3.8}_{-3.4} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-0.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	$1.0415^{+0.0011}_{-0.0010} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.4^{+3.7}_{-3.9} \quad (-0.7\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$14.01^{+0.35}_{-0.31} \quad (+0.4\sigma)$	$\chi_{lensing}^2$	$9.01 \quad (\nu: 0.2)$
A_{217}^{dustTE}	$2.08^{+0.54}_{-0.52}$	z_{drag}	$1059.4^{+1.6}_{-1.6} \quad (+0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.2) \quad (-0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$148.6^{+3.9}_{-3.6} \quad (+0.3\sigma)$	χ_{lowl}^2	$24.4 \quad (\nu: 1.1) \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_D	$0.1398^{+0.0026}_{-0.0028} \quad (-0.2\sigma)$	χ_{plik}^2	$2358.9 \quad (\nu: 17.3) \quad (+271.5\sigma)$
H_0	$66.3^{+2.8}_{-2.7} \quad (-0.1\sigma)$	$100\theta_D$	$0.16047^{+0.00077}_{-0.00079} \quad (-0.8\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.4) \quad (+1.2\sigma)$
Ω_Λ	$0.680^{+0.018}_{-0.019} \quad (+0.2\sigma)$	z_{eq}	$3417^{+63}_{-63} \quad (-0.0\sigma)$	χ_{CMB}^2	$2789.1 \quad (\nu: 17.5) \quad (+286.0\sigma)$
Ω_m	$0.320^{+0.019}_{-0.018} \quad (-0.2\sigma)$	k_{eq}	$0.01032^{+0.00021}_{-0.00020} \quad (-0.5\sigma)$		
$\Omega_m h^2$	$0.1408^{+0.0057}_{-0.0059} \quad (-0.5\sigma)$	$100\theta_{eq}$	$0.810^{+0.012}_{-0.012} \quad (+0.1\sigma)$		

$$\bar{\chi}_{eff}^2 = 2800.61; \Delta\bar{\chi}_{eff}^2 = 0.11; R - 1 = 0.02136$$

7.12 base_nnu_plikHM_TTTEEE_lowl_lowE_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02225^{+0.00040}_{-0.00038} \quad (+0.6\sigma)$	$\Omega_{\text{m}}h^3$	$0.0943^{+0.0059}_{-0.0058} \quad (-0.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.4479^{+0.0065}_{-0.0065} \quad (+0.0\sigma)$
$\Omega_{\text{c}}h^2$	$0.1188^{+0.0047}_{-0.0047} \quad (-0.3\sigma)$	σ_8	$0.808^{+0.017}_{-0.017} \quad (-0.1\sigma)$	$H(0.15)$	$71.9^{+2.4}_{-2.2} \quad (-0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04105^{+0.00077}_{-0.00076} \quad (+0.3\sigma)$	S_8	$0.835^{+0.031}_{-0.030} \quad (-0.2\sigma)$	$D_{\text{M}}(0.15)$	$651^{+22}_{-22} \quad (-0.0\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.458^{+0.017}_{-0.016} \quad (-0.2\sigma)$	$H(0.38)$	$82.1^{+2.3}_{-2.2} \quad (-0.0\sigma)$
N_{eff}	$2.94^{+0.30}_{-0.29} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.608^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$D_{\text{M}}(0.38)$	$1551^{+48}_{-49} \quad (-0.0\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.041^{+0.031}_{-0.029} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$H(0.51)$	$88.8^{+2.3}_{-2.2} \quad (-0.1\sigma)$
n_{s}	$0.961^{+0.014}_{-0.014} \quad (+0.0\sigma)$	$r_{\text{drag}}h$	$98.5^{+2.3}_{-2.3} \quad (+0.1\sigma)$	$D_{\text{M}}(0.51)$	$2007^{+60}_{-60} \quad (+0.0\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.458^{+0.057}_{-0.055} \quad (+0.0\sigma)$	$H(0.61)$	$94.5^{+2.3}_{-2.2} \quad (-0.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 8.80 \quad (+0.3\sigma)$	$D_{\text{M}}(0.61)$	$2335^{+68}_{-68} \quad (+0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}$	$2.094^{+0.064}_{-0.060} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+4.1}_{-4.1} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.878^{+0.030}_{-0.030} \quad (-0.2\sigma)$	$D_{\text{M}}(2.33)$	$5811^{+130}_{-130} \quad (+0.1\sigma)$
A_{100}^{PS}	$257^{+60}_{-50} \quad (-0.2\sigma)$	D_{40}	$1238^{+29}_{-28} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.015} \quad (-0.2\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{220}	$5732^{+74}_{-73} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.018}_{-0.016} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2539^{+27}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$817.7^{+9.3}_{-9.1} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.016}_{-0.015} \quad (-0.0\sigma)$
A^{kSZ}	$< 7.90 \quad (-0.2\sigma)$	D_{2000}	$231.4^{+3.3}_{-3.3} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	$n_{\text{s},0.002}$	$0.961^{+0.014}_{-0.014} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.016}_{-0.014} \quad (-0.0\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_{P}	$0.2440^{+0.0041}_{-0.0042} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.011}_{-0.011} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.2}_{-6.6} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2453^{+0.0041}_{-0.0042} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.015}_{-0.014} \quad (-0.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.573^{+0.072}_{-0.070} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2959^{+0.0078}_{-0.0071} \quad (-0.0\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.078}$	Age/Gyr	$13.91^{+0.32}_{-0.31} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3047^{+0.0084}_{-0.0076} \quad (+0.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.059}$	z_*	$1089.86^{+0.58}_{-0.57} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$145.4^{+2.9}_{-2.7} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
A_{143}^{dustTE}	$0.23^{+0.10}_{-0.11}$	$100\theta_*$	$1.04132^{+0.00091}_{-0.00091} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.6^{+3.5}_{-3.7} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.15}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.96^{+0.27}_{-0.26} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
A_{217}^{dustTE}	$2.08^{+0.52}_{-0.52}$	z_{drag}	$1059.5^{+1.4}_{-1.3} \quad (+0.3\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 0.9) \quad (-0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$148.1^{+3.0}_{-2.9} \quad (+0.1\sigma)$	χ_{plik}^2	$2359.0 \quad (\nu: 17.5) \quad (+271.5\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.1402^{+0.0022}_{-0.0022} \quad (-0.0\sigma)$	χ_{Aver15}^2	$0.28 \quad (\nu: 0.1)$
H_0	$66.5^{+2.4}_{-2.3} \quad (+0.0\sigma)$	$100\theta_{\text{D}}$	$0.16059^{+0.00063}_{-0.00064} \quad (-0.6\sigma)$	χ_{Cooke17}^2	$0.39 \quad (\nu: 0.1)$
Ω_{Λ}	$0.680^{+0.019}_{-0.019} \quad (+0.2\sigma)$	z_{eq}	$3418^{+69}_{-67} \quad (-0.0\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
Ω_{m}	$0.320^{+0.019}_{-0.019} \quad (-0.2\sigma)$	k_{eq}	$0.01036^{+0.00021}_{-0.00021} \quad (-0.2\sigma)$	χ_{CMB}^2	$2780.1 \quad (\nu: 16.8) \quad (+284.4\sigma)$
$\Omega_{\text{m}}h^2$	$0.1417^{+0.0049}_{-0.0048} \quad (-0.3\sigma)$	$100\theta_{\text{eq}}$	$0.810^{+0.013}_{-0.013} \quad (+0.1\sigma)$	χ_{Abund}^2	$0.67 \quad (\nu: 0.2)$

$$\bar{\chi}_{\text{eff}}^2 = 2792.34; R - 1 = 0.02177$$

7.13 base_nnu_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02199	$0.02204^{+0.00062}_{-0.00062} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4606	$0.460^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$H(0.15)$	71.08	$71.5^{+4.8}_{-4.4} \quad (-0.2\sigma)$
$\Omega_c h^2$	0.1187	$0.1192^{+0.0082}_{-0.0078} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6089	$0.609^{+0.024}_{-0.024} \quad (-0.1\sigma)$	$D_M(0.15)$	658.8	$655^{+45}_{-44} \quad (+0.2\sigma)$
$100\theta_{MC}$	1.04101	$1.0410^{+0.0012}_{-0.0011} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9931	$0.992^{+0.032}_{-0.033} \quad (-0.0\sigma)$	$H(0.38)$	81.35	$81.8^{+4.6}_{-4.3} \quad (-0.2\sigma)$
τ	0.0502	$0.051^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	97.67	$98.1^{+4.5}_{-4.3} \quad (-0.1\sigma)$	$D_M(0.38)$	1567	$1559^{+99}_{-97} \quad (+0.2\sigma)$
N_{eff}	2.89	$2.94^{+0.59}_{-0.56} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.462	$2.457^{+0.091}_{-0.090} \quad (+0.0\sigma)$	$H(0.51)$	88.14	$88.6^{+4.5}_{-4.3} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	3.0298	$3.033^{+0.041}_{-0.042} \quad (-0.2\sigma)$	z_{re}	7.30	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$D_M(0.51)$	2028	$2017^{+120}_{-120} \quad (+0.2\sigma)$
n_s	0.9569	$0.959^{+0.027}_{-0.026} \quad (-0.1\sigma)$	$10^9 A_s$	2.069	$2.077^{+0.087}_{-0.086} \quad (-0.2\sigma)$	$H(0.61)$	93.82	$94.3^{+4.5}_{-4.3} \quad (-0.2\sigma)$
y_{cal}	1.00028	$1.0004^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8717	$1.874^{+0.045}_{-0.046} \quad (-0.3\sigma)$	$D_M(0.61)$	2357	$2346^{+140}_{-140} \quad (+0.2\sigma)$
A_{100}^{PS}	234	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	1238.2	$1236^{+45}_{-44} \quad (-0.0\sigma)$	$H(2.33)$	234.8	$235.3^{+7.4}_{-7.2} \quad (-0.2\sigma)$
A_{143}^{PS}	39.3	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	5700	$5702^{+82}_{-82} \quad (-0.3\sigma)$	$D_M(2.33)$	5848	$5826^{+260}_{-260} \quad (+0.2\sigma)$
A_{217}^{PS}	101.3	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	2531.6	$2532^{+29}_{-28} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.4638	$0.463^{+0.025}_{-0.024} \quad (-0.1\sigma)$
A_{217}^{CIB}	45.0	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{1420}	814.7	$815^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	0.7422	$0.744^{+0.027}_{-0.026} \quad (-0.2\sigma)$
A_{143}^{tSZ}	6.61	$< 7.46 \quad (-0.6\sigma)$	D_{2000}	230.25	$230.1^{+4.6}_{-4.6} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	0.4785	$0.478^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.592	$0.65^{+0.26}_{-0.25}$	$n_{s,0.002}$	0.9569	$0.959^{+0.027}_{-0.026} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6562	$0.658^{+0.025}_{-0.025} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.78	—	Y_P	0.2431	$0.2438^{+0.0079}_{-0.0080} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	0.4752	$0.475^{+0.017}_{-0.017} \quad (-0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.08	—	Y_P^{BBN}	0.2444	$0.2451^{+0.0080}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	0.6134	$0.616^{+0.024}_{-0.024} \quad (-0.2\sigma)$
A^{kSZ}	0.0	—	10^5D/H	2.602	$2.61^{+0.14}_{-0.14} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	0.4690	$0.469^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.38}$	Age/Gyr	14.00	$13.94^{+0.62}_{-0.60} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	0.5833	$0.585^{+0.024}_{-0.023} \quad (-0.2\sigma)$
A_{143}^{dust}	0.989	$0.97^{+0.34}_{-0.34}$	z_*	1090.13	$1090.16^{+0.99}_{-0.97} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	0.2935	$0.295^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{217}^{dust}	0.967	$0.97^{+0.20}_{-0.20}$	r_*	145.9	$145.5^{+5.2}_{-5.0} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	0.3019	$0.303^{+0.014}_{-0.014} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.011	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04133	$1.0413^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	f_{2000}^{143}	30.0	$30^{+7}_{-7} \quad (-0.2\sigma)$
c_{100}	0.99758	$0.9975^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	$D_M(z_*)/\text{Gpc}$	14.008	$13.97^{+0.49}_{-0.47} \quad (+0.2\sigma)$	f_{2000}^{217}	106.85	$107.1^{+4.9}_{-4.9} \quad (-0.4\sigma)$
c_{217}	1.00132	$1.0011^{+0.0030}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	1058.83	$1059.0^{+2.2}_{-2.2} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	32.2	$32^{+5}_{-5} \quad (-0.4\sigma)$
H_0	65.69	$66.2^{+4.9}_{-4.6} \quad (-0.2\sigma)$	r_{drag}	148.7	$148.3^{+5.5}_{-5.3} \quad (+0.2\sigma)$	χ_{small}^2	395.70	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
Ω_Λ	0.6725	$0.675^{+0.036}_{-0.038} \quad (-0.1\sigma)$	k_D	0.13952	$0.1398^{+0.0038}_{-0.0037} \quad (-0.2\sigma)$	χ_{lowl}^2	24.43	$24.4 \quad (\nu: 2.7) \quad (+0.0\sigma)$
Ω_m	0.3275	$0.325^{+0.038}_{-0.036} \quad (+0.1\sigma)$	$100\theta_D$	0.16074	$0.1608^{+0.0014}_{-0.0013} \quad (-0.2\sigma)$	χ_{CamSpec}^2	7049.2	$7063.3 \quad (\nu: 16.5)$
$\Omega_m h^2$	0.1413	$0.1419^{+0.0085}_{-0.0081} \quad (-0.2\sigma)$	z_{eq}	3435	$3425^{+130}_{-130} \quad (+0.1\sigma)$	χ_{prior}^2	2.1	$7.6 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_m h^3$	0.0928	$0.094^{+0.012}_{-0.011} \quad (-0.2\sigma)$	k_{eq}	0.010371	$0.01037^{+0.00033}_{-0.00031} \quad (-0.2\sigma)$	χ_{CMB}^2	7469.3	$7484.6 \quad (\nu: 15.8) \quad (+1127.2\sigma)$
σ_8	0.8049	$0.807^{+0.028}_{-0.027} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	0.8065	$0.809^{+0.025}_{-0.024} \quad (-0.1\sigma)$			
S_8	0.8410	$0.839^{+0.050}_{-0.048} \quad (-0.0\sigma)$	$100\theta_{s,\text{eq}}$	0.4461	$0.447^{+0.013}_{-0.012} \quad (-0.1\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 7471.42$; $\Delta\chi_{\text{eff}}^2 = -0.31$; $\bar{\chi}_{\text{eff}}^2 = 7492.17$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.63$; $R - 1 = 0.00609$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.70 (Δ -0.14) commander_dx12_v3.2.29: 24.43 (Δ 1.04) CamSpec like_10.7HM: 7049.22 (Δ -1.12)

7.14 base_nnu_CamSpecHM_TT_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02202^{+0.00059}_{-0.00059} \quad (-0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.018}_{-0.018} \quad (-0.2\sigma)$	$H(0.15)$	$71.3^{+4.3}_{-4.1} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0076}_{-0.0075} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$658^{+41}_{-40} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0012}_{-0.0011} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$H(0.38)$	$81.5^{+4.2}_{-4.0} \quad (-0.3\sigma)$
τ	$0.051^{+0.016}_{-0.015} \quad (+0.0\sigma)$	$r_{\mathrm{drag}} h$	$98.0^{+3.6}_{-3.5} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1565^{+92}_{-89} \quad (+0.3\sigma)$
N_{eff}	$2.89^{+0.56}_{-0.54} \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.457^{+0.063}_{-0.063} \quad (-0.0\sigma)$	$H(0.51)$	$88.2^{+4.2}_{-4.0} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.031^{+0.041}_{-0.042} \quad (-0.3\sigma)$	z_{re}	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$2025^{+110}_{-110} \quad (+0.3\sigma)$
n_{s}	$0.958^{+0.024}_{-0.024} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.072^{+0.086}_{-0.086} \quad (-0.3\sigma)$	$H(0.61)$	$93.9^{+4.2}_{-4.1} \quad (-0.4\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.869^{+0.043}_{-0.044} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2355^{+130}_{-130} \quad (+0.3\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1237^{+37}_{-37} \quad (+0.0\sigma)$	$H(2.33)$	$234.5^{+7.0}_{-7.1} \quad (-0.5\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5705^{+81}_{-81} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5848^{+250}_{-240} \quad (+0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2532^{+29}_{-27} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.025}_{-0.026} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+4.5}_{-4.5} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.958^{+0.024}_{-0.024} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.025}_{-0.025} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2430^{+0.0077}_{-0.0079} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.013}_{-0.013} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2443^{+0.0077}_{-0.0079} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.024}_{-0.024} \quad (-0.4\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.60^{+0.14}_{-0.14} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.00^{+0.60}_{-0.58} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.024}_{-0.023} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.04^{+0.92}_{-0.90} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.013}_{-0.012} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$146.0^{+5.2}_{-5.0} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.014}_{-0.014} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0414^{+0.0014}_{-0.0014} \quad (+0.4\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.02^{+0.48}_{-0.46} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+4.8}_{-4.8} \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1058.9^{+2.1}_{-2.2} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.5\sigma)$
H_0	$65.9^{+4.4}_{-4.2} \quad (-0.3\sigma)$	r_{drag}	$148.8^{+5.4}_{-5.2} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.33 \quad (\nu: 0.5)$
Ω_{Λ}	$0.675^{+0.029}_{-0.031} \quad (-0.1\sigma)$	k_{D}	$0.1394^{+0.0037}_{-0.0037} \quad (-0.4\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.0\sigma)$
Ω_{m}	$0.325^{+0.031}_{-0.029} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1607^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	χ_{lowl}^2	$24.5 \quad (\nu: 2.1) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1408^{+0.0080}_{-0.0078} \quad (-0.5\sigma)$	z_{eq}	$3425^{+100}_{-100} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.7 \quad (\nu: 14.4)$
$\Omega_{\mathrm{m}} h^3$	$0.093^{+0.011}_{-0.010} \quad (-0.4\sigma)$	k_{eq}	$0.01034^{+0.00027}_{-0.00027} \quad (-0.4\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.8) \quad (+0.1\sigma)$
σ_8	$0.804^{+0.026}_{-0.026} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.808^{+0.020}_{-0.019} \quad (-0.1\sigma)$	χ_{CMB}^2	$7493.4 \quad (\nu: 15.5) \quad (+1128.8\sigma)$
S_8	$0.836^{+0.033}_{-0.033} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.447^{+0.010}_{-0.0098} \quad (-0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7500.99; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.75; R - 1 = 0.00870$$

7.15 base_nnu_CamSpecHM_TT_lowl_lowE_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02203^{+0.00052}_{-0.00052} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$H(0.38)$	$81.8^{+3.1}_{-3.0} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0059}_{-0.0058} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.993^{+0.032}_{-0.032} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1559^{+72}_{-69} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0010}_{-0.00099} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.0^{+3.8}_{-3.8} \quad (-0.1\sigma)$	$H(0.51)$	$88.6^{+3.1}_{-3.0} \quad (-0.2\sigma)$
τ	$0.051^{+0.016}_{-0.015} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.458^{+0.084}_{-0.082} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$2017^{+88}_{-86} \quad (+0.2\sigma)$
N_{eff}	$2.94^{+0.37}_{-0.37} \quad (-0.2\sigma)$	z_{re}	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.61)$	$94.2^{+3.0}_{-2.9} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.036}_{-0.036} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.077^{+0.076}_{-0.074} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2346^{+99}_{-96} \quad (+0.2\sigma)$
n_{s}	$0.959^{+0.020}_{-0.020} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.035}_{-0.034} \quad (-0.3\sigma)$	$H(2.33)$	$235.3^{+5.0}_{-5.0} \quad (-0.2\sigma)$
y_{cal}	$1.0004^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1236^{+37}_{-37} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5826^{+170}_{-170} \quad (+0.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5701^{+81}_{-81} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.025}_{-0.024} \quad (-0.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{810}	$2532^{+28}_{-27} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.020}_{-0.020} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$814.5^{+9.7}_{-9.9} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.019}_{-0.019} \quad (-0.1\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.0^{+3.7}_{-3.7} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.018}_{-0.018} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.020}_{-0.020} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.016}_{-0.016} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_{P}	$0.2438^{+0.0051}_{-0.0052} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.018}_{-0.017} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2451^{+0.0051}_{-0.0053} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.014}_{-0.014} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.611^{+0.095}_{-0.095} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.017}_{-0.017} \quad (-0.2\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.94^{+0.41}_{-0.40} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2947^{+0.0093}_{-0.0089} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1090.17^{+0.79}_{-0.78} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.010}_{-0.0098} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	r_*	$145.5^{+3.4}_{-3.3} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.1^{+4.2}_{-4.2} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.97^{+0.32}_{-0.31} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	z_{drag}	$1059.0^{+1.7}_{-1.6} \quad (-0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.2) \quad (-0.0\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$148.3^{+3.6}_{-3.5} \quad (+0.2\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.8) \quad (-0.0\sigma)$
H_0	$66.1^{+3.6}_{-3.4} \quad (-0.2\sigma)$	k_{D}	$0.1398^{+0.0026}_{-0.0026} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.8 \quad (\nu: 14.8)$
Ω_{Λ}	$0.675^{+0.031}_{-0.034} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00087}_{-0.00087} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.45 \quad (\nu: 0.2)$
Ω_{m}	$0.325^{+0.034}_{-0.031} \quad (+0.1\sigma)$	z_{eq}	$3426^{+110}_{-110} \quad (+0.1\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.28 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0060}_{-0.0060} \quad (-0.2\sigma)$	k_{eq}	$0.01038^{+0.00030}_{-0.00029} \quad (-0.1\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.7) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0938^{+0.0074}_{-0.0071} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.808^{+0.021}_{-0.021} \quad (-0.1\sigma)$	χ_{CMB}^2	$7484.0 \quad (\nu: 14.7) \quad (+1127.1\sigma)$
σ_8	$0.807^{+0.022}_{-0.021} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.447^{+0.011}_{-0.011} \quad (-0.1\sigma)$	χ_{Abund}^2	$0.73 \quad (\nu: 0.4)$
S_8	$0.840^{+0.050}_{-0.047} \quad (-0.0\sigma)$	$H(0.15)$	$71.5^{+3.4}_{-3.3} \quad (-0.2\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.460^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$655^{+33}_{-32} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7492.26; R - 1 = 0.00836$

7.16 base_nnu_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02206^{+0.00062}_{-0.00061} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.460^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$H(0.15)$	$71.7^{+4.7}_{-4.4} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0082}_{-0.0078} \quad (-0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$653^{+44}_{-43} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0012}_{-0.0011} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.993^{+0.032}_{-0.032} \quad (+0.0\sigma)$	$H(0.38)$	$82.0^{+4.5}_{-4.2} \quad (-0.1\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$98.2^{+4.4}_{-4.2} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1555^{+98}_{-95} \quad (+0.1\sigma)$
N_{eff}	$2.96^{+0.59}_{-0.55} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.458^{+0.091}_{-0.089} \quad (+0.0\sigma)$	$H(0.51)$	$88.7^{+4.5}_{-4.2} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.038}_{-0.033} \quad (+0.0\sigma)$	z_{re}	$< 8.82 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2013^{+120}_{-120} \quad (+0.1\sigma)$
n_{s}	$0.960^{+0.026}_{-0.026} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.086^{+0.081}_{-0.069} \quad (+0.0\sigma)$	$H(0.61)$	$94.4^{+4.5}_{-4.2} \quad (-0.1\sigma)$
y_{cal}	$1.0004^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.045}_{-0.046} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2340^{+140}_{-130} \quad (+0.1\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1234^{+44}_{-43} \quad (-0.1\sigma)$	$H(2.33)$	$235.5^{+7.3}_{-7.1} \quad (-0.2\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5702^{+81}_{-82} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5817^{+260}_{-250} \quad (+0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2532^{+29}_{-28} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.025}_{-0.024} \quad (-0.0\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.026}_{-0.024} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.6\sigma)$	D_{2000}	$230.0^{+4.5}_{-4.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.960^{+0.026}_{-0.026} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.024}_{-0.023} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2440^{+0.0079}_{-0.0079} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.017}_{-0.017} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0079}_{-0.0079} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.023}_{-0.022} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.61^{+0.14}_{-0.14} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.015}_{-0.015} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.92^{+0.61}_{-0.60} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.023}_{-0.021} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.16^{+0.98}_{-0.97} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.012}_{-0.012} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$145.3^{+5.2}_{-5.0} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.014}_{-0.013} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.31}$	$100\theta_*$	$1.0412^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.48}_{-0.46} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.1^{+4.9}_{-4.9} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1059.1^{+2.2}_{-2.2} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.4\sigma)$
H_0	$66.4^{+4.9}_{-4.5} \quad (-0.1\sigma)$	r_{drag}	$148.1^{+5.4}_{-5.2} \quad (+0.2\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{Λ}	$0.677^{+0.035}_{-0.038} \quad (+0.0\sigma)$	k_{D}	$0.1399^{+0.0037}_{-0.0037} \quad (-0.2\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 2.5) \quad (-0.0\sigma)$
Ω_{m}	$0.323^{+0.038}_{-0.035} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1609^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.2 \quad (\nu: 16.5)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0085}_{-0.0081} \quad (-0.2\sigma)$	z_{eq}	$3420^{+130}_{-130} \quad (+0.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.094^{+0.011}_{-0.011} \quad (-0.1\sigma)$	k_{eq}	$0.01037^{+0.00032}_{-0.00031} \quad (-0.2\sigma)$	χ_{CMB}^2	$7484.3 \quad (\nu: 15.2) \quad (+1127.2\sigma)$
σ_8	$0.809^{+0.027}_{-0.026} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.025}_{-0.023} \quad (+0.0\sigma)$		
S_8	$0.839^{+0.050}_{-0.048} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.448^{+0.013}_{-0.012} \quad (+0.0\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7491.86$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.60$; $R - 1 = 0.00538$

7.17 base_nnu_CamSpecHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02205^{+0.00058}_{-0.00058} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.018}_{-0.018} \quad (-0.2\sigma)$	$H(0.15)$	$71.5^{+4.2}_{-4.0} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1183^{+0.0076}_{-0.0075} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$655^{+41}_{-39} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0012}_{-0.0011} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.021}_{-0.021} \quad (-0.1\sigma)$	$H(0.38)$	$81.7^{+4.1}_{-4.0} \quad (-0.2\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$98.3^{+3.5}_{-3.3} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1560^{+91}_{-86} \quad (+0.2\sigma)$
N_{eff}	$2.91^{+0.56}_{-0.53} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.456^{+0.062}_{-0.063} \quad (-0.0\sigma)$	$H(0.51)$	$88.4^{+4.1}_{-4.1} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.035^{+0.038}_{-0.033} \quad (-0.1\sigma)$	z_{re}	$< 8.78 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2019^{+110}_{-110} \quad (+0.2\sigma)$
n_{s}	$0.959^{+0.024}_{-0.024} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.081^{+0.079}_{-0.068} \quad (-0.1\sigma)$	$H(0.61)$	$94.1^{+4.2}_{-4.1} \quad (-0.3\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.043}_{-0.044} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2348^{+130}_{-120} \quad (+0.2\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1236^{+37}_{-36} \quad (-0.0\sigma)$	$H(2.33)$	$234.6^{+7.0}_{-7.0} \quad (-0.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5705^{+81}_{-81} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5837^{+250}_{-240} \quad (+0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2532^{+28}_{-27} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.024}_{-0.024} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+4.5}_{-4.4} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.959^{+0.024}_{-0.024} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.024}_{-0.023} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2433^{+0.0075}_{-0.0077} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.013}_{-0.012} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2446^{+0.0075}_{-0.0078} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.023}_{-0.022} \quad (-0.2\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.60^{+0.14}_{-0.13} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.97^{+0.60}_{-0.57} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.022}_{-0.022} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.03^{+0.92}_{-0.89} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$145.9^{+5.2}_{-4.9} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.014}_{-0.013} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.31}$	$100\theta_*$	$1.0414^{+0.0014}_{-0.0014} \quad (+0.4\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.01^{+0.48}_{-0.45} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+4.8}_{-4.8} \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1058.9^{+2.1}_{-2.2} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.5\sigma)$
H_0	$66.1^{+4.3}_{-4.1} \quad (-0.2\sigma)$	r_{drag}	$148.7^{+5.4}_{-5.1} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.34 \quad (\nu: 0.5)$
Ω_{Λ}	$0.677^{+0.028}_{-0.029} \quad (+0.0\sigma)$	k_{D}	$0.1395^{+0.0037}_{-0.0038} \quad (-0.4\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{m}	$0.323^{+0.029}_{-0.028} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1607^{+0.0013}_{-0.0013} \quad (-0.3\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.9) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1410^{+0.0079}_{-0.0079} \quad (-0.4\sigma)$	z_{eq}	$3418^{+99}_{-100} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.7 \quad (\nu: 14.4)$
$\Omega_{\mathrm{m}} h^3$	$0.093^{+0.011}_{-0.010} \quad (-0.3\sigma)$	k_{eq}	$0.01033^{+0.00027}_{-0.00026} \quad (-0.4\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.8) \quad (+0.1\sigma)$
σ_8	$0.806^{+0.025}_{-0.024} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.019}_{-0.018} \quad (+0.0\sigma)$	χ_{CMB}^2	$7493.2 \quad (\nu: 15.0) \quad (+1128.8\sigma)$
S_8	$0.835^{+0.033}_{-0.032} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4478^{+0.0097}_{-0.0092} \quad (+0.0\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7500.70$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.69$; $R - 1 = 0.00702$

7.18 base_nnu_CamSpecHM_TT_lowl_lowE_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02205^{+0.00052}_{-0.00052} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.023}_{-0.022} \quad (-0.0\sigma)$	$H(0.38)$	$81.9^{+3.1}_{-3.0} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0058}_{-0.0058} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.032}_{-0.031} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1557^{+71}_{-69} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0010}_{-0.0010} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.1^{+3.8}_{-3.8} \quad (-0.0\sigma)$	$H(0.51)$	$88.6^{+3.0}_{-2.9} \quad (-0.2\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.460^{+0.084}_{-0.080} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$2014^{+87}_{-85} \quad (+0.1\sigma)$
N_{eff}	$2.95^{+0.37}_{-0.36} \quad (-0.2\sigma)$	z_{re}	$< 8.78 \quad (+0.2\sigma)$	$H(0.61)$	$94.3^{+3.0}_{-2.9} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.037^{+0.031}_{-0.029} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.085^{+0.066}_{-0.061} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2342^{+98}_{-95} \quad (+0.1\sigma)$
n_{s}	$0.960^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.035}_{-0.035} \quad (-0.3\sigma)$	$H(2.33)$	$235.4^{+5.0}_{-5.0} \quad (-0.2\sigma)$
y_{cal}	$1.0004^{+0.0050}_{-0.0050} \quad (-0.0\sigma)$	D_{40}	$1235^{+37}_{-37} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5820^{+170}_{-170} \quad (+0.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5701^{+81}_{-81} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.023} \quad (-0.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{810}	$2532^{+28}_{-27} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.019}_{-0.018} \quad (-0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$814.6^{+9.7}_{-9.9} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.018}_{-0.018} \quad (-0.0\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$230.1^{+3.7}_{-3.8} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.018}_{-0.016} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.016}_{-0.016} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_{P}	$0.2439^{+0.0051}_{-0.0052} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.017}_{-0.016} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2452^{+0.0051}_{-0.0052} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.014}_{-0.014} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.612^{+0.096}_{-0.096} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.016}_{-0.015} \quad (-0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.93^{+0.41}_{-0.40} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2954^{+0.0088}_{-0.0081} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1090.16^{+0.78}_{-0.78} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3041^{+0.0098}_{-0.0090} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	r_*	$145.4^{+3.4}_{-3.3} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.1^{+4.2}_{-4.2} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.32}_{-0.31} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	z_{drag}	$1059.1^{+1.6}_{-1.6} \quad (-0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.2) \quad (-0.1\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0029} \quad (+4.6\sigma)$	r_{drag}	$148.2^{+3.6}_{-3.5} \quad (+0.2\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 1.7) \quad (-0.1\sigma)$
H_0	$66.2^{+3.5}_{-3.4} \quad (-0.1\sigma)$	k_{D}	$0.1399^{+0.0026}_{-0.0026} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.7 \quad (\nu: 14.7)$
Ω_{Λ}	$0.676^{+0.030}_{-0.033} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16086^{+0.00086}_{-0.00087} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.45 \quad (\nu: 0.2)$
Ω_{m}	$0.324^{+0.033}_{-0.030} \quad (+0.0\sigma)$	z_{eq}	$3422^{+110}_{-110} \quad (+0.0\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.28 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0060}_{-0.0060} \quad (-0.2\sigma)$	k_{eq}	$0.01037^{+0.00029}_{-0.00029} \quad (-0.2\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0940^{+0.0074}_{-0.0071} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.809^{+0.021}_{-0.021} \quad (-0.0\sigma)$	χ_{CMB}^2	$7483.7 \quad (\nu: 14.1) \quad (+1127.1\sigma)$
σ_8	$0.808^{+0.021}_{-0.020} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.447^{+0.011}_{-0.011} \quad (-0.0\sigma)$	χ_{Abund}^2	$0.73 \quad (\nu: 0.4)$
S_8	$0.840^{+0.050}_{-0.046} \quad (-0.0\sigma)$	$H(0.15)$	$71.6^{+3.4}_{-3.2} \quad (-0.1\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.460^{+0.027}_{-0.025} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$654^{+33}_{-32} \quad (+0.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7491.99; R - 1 = 0.00722$

7.19 base_nnu_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022177	$0.02220^{+0.00044}_{-0.00044}$ (+0.4 σ)	σ_8	0.8020	$0.803^{+0.024}_{-0.023}$ (−0.5 σ)	$100\theta_{\text{eq}}$	0.8118	$0.812^{+0.015}_{-0.015}$ (+0.2 σ)
$\Omega_c h^2$	0.1174	$0.1179^{+0.0068}_{-0.0065}$ (−0.5 σ)	S_8	0.8267	$0.826^{+0.032}_{-0.032}$ (−0.6 σ)	$100\theta_{\text{s,eq}}$	0.4487	$0.4490^{+0.0076}_{-0.0075}$ (+0.2 σ)
$100\theta_{\text{MC}}$	1.04112	$1.04108^{+0.00096}_{-0.00090}$ (+0.4 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4528	$0.453^{+0.017}_{-0.017}$ (−0.6 σ)	$H(0.15)$	71.61	$71.8^{+3.3}_{-3.1}$ (−0.0 σ)
τ	0.0527	$0.052^{+0.016}_{-0.015}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6026	$0.603^{+0.018}_{-0.018}$ (−0.6 σ)	$D_{\text{M}}(0.15)$	653.2	651^{+31}_{-30} (−0.0 σ)
N_{eff}	2.885	$2.92^{+0.45}_{-0.43}$ (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9848	$0.984^{+0.023}_{-0.024}$ (−0.5 σ)	$H(0.38)$	81.74	$82.0^{+3.2}_{-3.1}$ (−0.1 σ)
$\ln(10^{10} A_{\text{s}})$	3.0322	$3.032^{+0.038}_{-0.037}$ (−0.2 σ)	$r_{\text{drag}} h$	98.70	$98.8^{+2.7}_{-2.7}$ (+0.3 σ)	$D_{\text{M}}(0.38)$	1556	1552^{+69}_{-67} (+0.0 σ)
n_{s}	0.9607	$0.961^{+0.018}_{-0.019}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.442	$2.440^{+0.061}_{-0.061}$ (−0.4 σ)	$H(0.51)$	88.45	$88.7^{+3.3}_{-3.2}$ (−0.1 σ)
y_{cal}	1.00022	$1.0005^{+0.0048}_{-0.0049}$ (−0.0 σ)	z_{re}	7.50	$7.4^{+1.6}_{-1.7}$ (−0.0 σ)	$D_{\text{M}}(0.51)$	2015	2009^{+86}_{-84} (+0.0 σ)
A_{100}^{PS}	230.1	236^{+50}_{-50} (−0.9 σ)	$10^9 A_{\text{s}}$	2.074	$2.074^{+0.080}_{-0.077}$ (−0.2 σ)	$H(0.61)$	94.07	$94.3^{+3.3}_{-3.2}$ (−0.2 σ)
A_{143}^{PS}	42.7	38^{+20}_{-20} (−1.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8666	$1.869^{+0.038}_{-0.039}$ (−0.5 σ)	$D_{\text{M}}(0.61)$	2343	2337^{+98}_{-96} (+0.0 σ)
A_{217}^{PS}	105.0	103^{+20}_{-30} (−1.2 σ)	D_{40}	1230.9	1231^{+33}_{-31} (−0.2 σ)	$H(2.33)$	234.1	$234.6^{+6.1}_{-6.0}$ (−0.4 σ)
A_{217}^{CIB}	41.1	39^{+10}_{-10} (−1.3 σ)	D_{220}	5712	5715^{+74}_{-76} (+0.1 σ)	$D_{\text{M}}(2.33)$	5836	5823^{+190}_{-190} (+0.2 σ)
A_{143}^{tSZ}	5.90	< 7.56 (−0.6 σ)	D_{810}	2532.6	2533^{+27}_{-27} (−0.2 σ)	$f\sigma_8(0.15)$	0.4568	$0.457^{+0.016}_{-0.016}$ (−0.6 σ)
$r_{143 \times 217}^{\text{PS}}$	0.687	$0.66^{+0.25}_{-0.26}$	D_{1420}	816.9	$816.4^{+9.9}_{-9.8}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7404	$0.741^{+0.023}_{-0.022}$ (−0.4 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.75	—	D_{2000}	231.28	$230.9^{+4.1}_{-4.0}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4733	$0.473^{+0.014}_{-0.014}$ (−0.6 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.51	—	$n_{\text{s},0.002}$	0.9607	$0.961^{+0.018}_{-0.019}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6555	$0.656^{+0.021}_{-0.020}$ (−0.4 σ)
A^{kSZ}	0.8	—	Y_{P}	0.2431	$0.2436^{+0.0061}_{-0.0061}$ (−0.3 σ)	$f\sigma_8(0.51)$	0.4711	$0.471^{+0.014}_{-0.013}$ (−0.6 σ)
A_{100}^{dust}	1.017	$1.01^{+0.39}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.2445	$0.2449^{+0.0061}_{-0.0062}$ (−0.3 σ)	$\sigma_8(0.51)$	0.6132	$0.614^{+0.020}_{-0.020}$ (−0.3 σ)
A_{143}^{dust}	0.973	$0.96^{+0.35}_{-0.34}$	$10^5 \text{D}/\text{H}$	2.566	$2.57^{+0.11}_{-0.11}$ (−0.7 σ)	$f\sigma_8(0.61)$	0.4656	$0.466^{+0.013}_{-0.013}$ (−0.6 σ)
A_{217}^{dust}	0.979	$0.98^{+0.21}_{-0.20}$	Age/Gyr	13.970	$13.94^{+0.46}_{-0.45}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5832	$0.584^{+0.020}_{-0.019}$ (−0.3 σ)
$A_{143 \times 217}^{\text{dust}}$	1.011	$1.02^{+0.32}_{-0.32}$	z_*	1089.77	$1089.83^{+0.79}_{-0.79}$ (−0.9 σ)	$f\sigma_8(2.33)$	0.2938	$0.294^{+0.010}_{-0.010}$ (−0.3 σ)
c_{100}	0.99769	$0.9975^{+0.0020}_{-0.0021}$ (−3.4 σ)	r_*	146.09	$145.8^{+4.2}_{-4.1}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3026	$0.303^{+0.011}_{-0.011}$ (−0.2 σ)
c_{217}	1.00117	$1.0011^{+0.0030}_{-0.0031}$ (+4.5 σ)	$100\theta_*$	1.04143	$1.0414^{+0.0012}_{-0.0011}$ (+0.4 σ)	f_{2000}^{143}	28.5	29^{+7}_{-7} (−0.6 σ)
c_{TE}	0.9956	$0.996^{+0.010}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.028	$14.00^{+0.39}_{-0.38}$ (+0.3 σ)	f_{2000}^{217}	105.81	$106.2^{+4.5}_{-4.4}$ (−0.7 σ)
c_{EE}	0.9902	$0.991^{+0.011}_{-0.011}$	z_{drag}	1059.17	$1059.3^{+1.7}_{-1.6}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	31.09	31^{+5}_{-5} (−0.8 σ)
H_0	66.32	$66.5^{+3.3}_{-3.2}$ (+0.0 σ)	r_{drag}	148.84	$148.5^{+4.4}_{-4.3}$ (+0.3 σ)	χ_{simall}^2	395.87	396.8 (ν : 1.3) (−0.0 σ)
Ω_{Λ}	0.6813	$0.682^{+0.022}_{-0.023}$ (+0.3 σ)	k_{D}	0.13951	$0.1397^{+0.0031}_{-0.0030}$ (−0.3 σ)	χ_{lowl}^2	23.68	23.8 (ν : 1.1) (−0.3 σ)
Ω_{m}	0.3187	$0.318^{+0.023}_{-0.022}$ (−0.3 σ)	$100\theta_{\text{D}}$	0.16053	$0.1606^{+0.0010}_{-0.0010}$ (−0.6 σ)	χ_{CamSpec}^2	11498.6	11514.5 (ν : 17.2)
$\Omega_{\text{m}} h^2$	0.1402	$0.1407^{+0.0070}_{-0.0068}$ (−0.5 σ)	z_{eq}	3408	3405^{+80}_{-78} (−0.2 σ)	χ_{prior}^2	2.1	7.9 (ν : 5.9) (+0.2 σ)
$\Omega_{\text{m}} h^3$	0.0930	$0.0937^{+0.0088}_{-0.0083}$ (−0.2 σ)	k_{eq}	0.010288	$0.01030^{+0.00025}_{-0.00025}$ (−0.6 σ)	χ_{CMB}^2	11918.2	11935.2 (ν : 17.3) (+1924.6 σ)

Best-fit $\chi_{\text{eff}}^2 = 11920.27$; $\Delta\chi_{\text{eff}}^2 = -0.49$; $\bar{\chi}_{\text{eff}}^2 = 11943.05$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.59$; $R - 1 = 0.00888$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ -0.03) commander_dx12.v3.2.29: 23.68 (Δ 0.68) CamSpec like_10.7HM_1400_unified: 11498.65 (Δ -0.99)

7.20 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02217^{+0.00044}_{-0.00043} \quad (+0.3\sigma)$	S_8	$0.828^{+0.025}_{-0.025} \quad (-0.5\sigma)$	$H(0.15)$	$71.5^{+3.2}_{-3.0} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1175^{+0.0066}_{-0.0063} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$654^{+30}_{-30} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04113^{+0.00096}_{-0.00089} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.38)$	$81.7^{+3.2}_{-3.0} \quad (-0.2\sigma)$
τ	$0.053^{+0.015}_{-0.014} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1558^{+66}_{-67} \quad (+0.2\sigma)$
N_{eff}	$2.88^{+0.44}_{-0.42} \quad (-0.4\sigma)$	$r_{\mathrm{drag}}h$	$98.6^{+2.5}_{-2.4} \quad (+0.2\sigma)$	$H(0.51)$	$88.4^{+3.3}_{-3.0} \quad (-0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.033^{+0.035}_{-0.035} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.049}_{-0.051} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2017^{+83}_{-84} \quad (+0.2\sigma)$
n_{s}	$0.960^{+0.018}_{-0.018} \quad (-0.1\sigma)$	z_{re}	$7.5^{+1.5}_{-1.5} \quad (+0.1\sigma)$	$H(0.61)$	$94.0^{+3.3}_{-3.1} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.075^{+0.075}_{-0.071} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2346^{+94}_{-95} \quad (+0.2\sigma)$
A_{100}^{PS}	$236^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.868^{+0.038}_{-0.037} \quad (-0.6\sigma)$	$H(2.33)$	$234.1^{+5.9}_{-5.8} \quad (-0.6\sigma)$
A_{143}^{PS}	$37^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1235^{+31}_{-30} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5840^{+190}_{-190} \quad (+0.3\sigma)$
A_{217}^{PS}	$104^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5718^{+76}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{CIB}	$38^{+10}_{-10} \quad (-1.4\sigma)$	D_{810}	$2533^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.022}_{-0.020} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.6\sigma)$	D_{1420}	$816.8^{+9.9}_{-9.8} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.26}_{-0.26}$	D_{2000}	$231.2^{+4.1}_{-4.0} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.021}_{-0.019} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.960^{+0.018}_{-0.018} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2431^{+0.0061}_{-0.0061} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.020}_{-0.018} \quad (-0.4\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2444^{+0.0061}_{-0.0061} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.57^{+0.11}_{-0.11} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.019}_{-0.018} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.98^{+0.45}_{-0.46} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.010}_{-0.0095} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.79^{+0.77}_{-0.75} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.011}_{-0.010} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	r_*	$146.1^{+4.2}_{-4.1} \quad (+0.5\sigma)$	f_{2000}^{143}	$28^{+7}_{-6} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.0414^{+0.0012}_{-0.0011} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.1^{+4.5}_{-4.3} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.03^{+0.38}_{-0.38} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.9\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0099}$	z_{drag}	$1059.1^{+1.7}_{-1.6} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.08 \quad (\nu: 0.3)$
c_{EE}	$0.990^{+0.011}_{-0.011}$	r_{drag}	$148.9^{+4.3}_{-4.3} \quad (+0.4\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.1) \quad (-0.0\sigma)$
H_0	$66.2^{+3.3}_{-3.1} \quad (-0.1\sigma)$	k_{D}	$0.1395^{+0.0031}_{-0.0029} \quad (-0.4\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 1.1) \quad (-0.1\sigma)$
Ω_{Λ}	$0.680^{+0.021}_{-0.021} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1605^{+0.0010}_{-0.0010} \quad (-0.7\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.8 \quad (\nu: 16.5)$
Ω_{m}	$0.320^{+0.021}_{-0.021} \quad (-0.2\sigma)$	z_{eq}	$3412^{+72}_{-72} \quad (-0.1\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.8) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1403^{+0.0068}_{-0.0066} \quad (-0.6\sigma)$	k_{eq}	$0.01030^{+0.00022}_{-0.00022} \quad (-0.6\sigma)$	χ_{CMB}^2	$11943.8 \quad (\nu: 17.7) \quad (+1926.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0930^{+0.0088}_{-0.0080} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.014}_{-0.013} \quad (+0.1\sigma)$		
σ_8	$0.802^{+0.022}_{-0.021} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4484^{+0.0070}_{-0.0068} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11951.65; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.20; R - 1 = 0.01144$$

7.21 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00040}_{-0.00039} \quad (+0.4\sigma)$	S_8	$0.827^{+0.031}_{-0.032} \quad (-0.5\sigma)$	$H(0.15)$	$72.0^{+2.6}_{-2.5} \quad (+0.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1183^{+0.0052}_{-0.0050} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$650^{+24}_{-24} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04103^{+0.00079}_{-0.00077} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$H(0.38)$	$82.1^{+2.5}_{-2.4} \quad (-0.0\sigma)$
τ	$0.052^{+0.016}_{-0.015} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.024} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1549^{+53}_{-54} \quad (-0.0\sigma)$
N_{eff}	$2.95^{+0.34}_{-0.32} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.8^{+2.5}_{-2.4} \quad (+0.3\sigma)$	$H(0.51)$	$88.8^{+2.5}_{-2.4} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.035}_{-0.035} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.059}_{-0.059} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$2005^{+66}_{-67} \quad (-0.0\sigma)$
n_{s}	$0.962^{+0.015}_{-0.015} \quad (+0.1\sigma)$	z_{re}	$7.4^{+1.6}_{-1.7} \quad (+0.0\sigma)$	$H(0.61)$	$94.5^{+2.5}_{-2.4} \quad (-0.1\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.076^{+0.074}_{-0.072} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2333^{+75}_{-76} \quad (-0.0\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.032}_{-0.032} \quad (-0.4\sigma)$	$H(2.33)$	$234.9^{+4.6}_{-4.4} \quad (-0.3\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{40}	$1230^{+30}_{-29} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5813^{+150}_{-150} \quad (+0.1\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{220}	$5714^{+75}_{-75} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.016}_{-0.016} \quad (-0.5\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2533^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.019}_{-0.019} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.6\sigma)$	D_{1420}	$816.1^{+9.5}_{-9.6} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.014}_{-0.014} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{2000}	$230.7^{+3.6}_{-3.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.018}_{-0.017} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.962^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.013} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2439^{+0.0046}_{-0.0045} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.017}_{-0.016} \quad (-0.3\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0046}_{-0.0045} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.012}_{-0.012} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.583^{+0.083}_{-0.083} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.016}_{-0.015} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.91^{+0.34}_{-0.35} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2947^{+0.0085}_{-0.0080} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	z_*	$1089.89^{+0.65}_{-0.64} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3036^{+0.0092}_{-0.0087} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$145.5^{+3.1}_{-3.1} \quad (+0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04129^{+0.00095}_{-0.00092} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.4^{+4.1}_{-4.1} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0032} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.98^{+0.28}_{-0.29} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0098}$	z_{drag}	$1059.3^{+1.4}_{-1.3} \quad (+0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.0\sigma)$
c_{EE}	$0.991^{+0.010}_{-0.010}$	r_{drag}	$148.3^{+3.2}_{-3.2} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.7 \quad (\nu: 0.9) \quad (-0.3\sigma)$
H_0	$66.7^{+2.7}_{-2.6} \quad (+0.1\sigma)$	k_{D}	$0.1399^{+0.0023}_{-0.0023} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.2 \quad (\nu: 17.0)$
Ω_{Λ}	$0.682^{+0.020}_{-0.021} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00077}_{-0.00075} \quad (-0.4\sigma)$	χ_{Aver15}^2	$0.35 \quad (\nu: 0.1)$
Ω_{m}	$0.318^{+0.021}_{-0.020} \quad (-0.3\sigma)$	z_{eq}	$3404^{+73}_{-71} \quad (-0.2\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.35 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0053}_{-0.0051} \quad (-0.4\sigma)$	k_{eq}	$0.01032^{+0.00021}_{-0.00021} \quad (-0.5\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0941^{+0.0067}_{-0.0061} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.014}_{-0.014} \quad (+0.3\sigma)$	χ_{CMB}^2	$11934.7 \quad (\nu: 17.3) \quad (+1924.6\sigma)$
σ_8	$0.804^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4491^{+0.0069}_{-0.0069} \quad (+0.2\sigma)$	χ_{Abund}^2	$0.69 \quad (\nu: 0.3)$

$\bar{\chi}_{\mathrm{eff}}^2 = 11943.28; R - 1 = 0.01315$

7.22 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02221^{+0.00044}_{-0.00044} \quad (+0.4\sigma)$	σ_8	$0.804^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.015}_{-0.015} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1179^{+0.0068}_{-0.0065} \quad (-0.5\sigma)$	S_8	$0.827^{+0.032}_{-0.032} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4492^{+0.0076}_{-0.0075} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04108^{+0.00096}_{-0.00090} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.15)$	$71.9^{+3.3}_{-3.1} \quad (+0.0\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.018}_{-0.017} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$651^{+31}_{-30} \quad (-0.0\sigma)$
N_{eff}	$2.93^{+0.44}_{-0.43} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$H(0.38)$	$82.1^{+3.2}_{-3.1} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.036^{+0.035}_{-0.030} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.9^{+2.7}_{-2.7} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1550^{+69}_{-66} \quad (-0.0\sigma)$
n_{s}	$0.962^{+0.018}_{-0.019} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.060}_{-0.059} \quad (-0.3\sigma)$	$H(0.51)$	$88.8^{+3.2}_{-3.1} \quad (-0.1\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	z_{re}	$< 8.78 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2007^{+86}_{-83} \quad (+0.0\sigma)$
A_{100}^{PS}	$236^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.082^{+0.071}_{-0.065} \quad (-0.1\sigma)$	$H(0.61)$	$94.4^{+3.3}_{-3.2} \quad (-0.1\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.869^{+0.039}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2335^{+97}_{-94} \quad (+0.0\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{40}	$1231^{+33}_{-31} \quad (-0.3\sigma)$	$H(2.33)$	$234.6^{+6.0}_{-5.9} \quad (-0.4\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{220}	$5715^{+75}_{-76} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5819^{+190}_{-190} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.6\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.016}_{-0.016} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	D_{1420}	$816^{+10}_{-9.7} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.022}_{-0.021} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$230.9^{+4.1}_{-4.0} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.014}_{-0.014} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.962^{+0.018}_{-0.019} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.020}_{-0.019} \quad (-0.3\sigma)$
A^{kSZ}	—	Y_{P}	$0.2437^{+0.0060}_{-0.0062} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0061}_{-0.0062} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.020}_{-0.018} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.58^{+0.11}_{-0.11} \quad (-0.7\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.013}_{-0.012} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.93^{+0.46}_{-0.45} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.019}_{-0.018} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	z_*	$1089.83^{+0.79}_{-0.79} \quad (-0.9\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.010}_{-0.0094} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_*	$145.7^{+4.2}_{-4.1} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.011}_{-0.010} \quad (-0.1\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	$100\theta_*$	$1.0414^{+0.0012}_{-0.0011} \quad (+0.4\sigma)$	f_{2000}^{143}	$29^{+7}_{-7} \quad (-0.6\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.010}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.99^{+0.39}_{-0.38} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.2^{+4.5}_{-4.3} \quad (-0.7\sigma)$
c_{EE}	$0.991^{+0.011}_{-0.011}$	z_{drag}	$1059.3^{+1.7}_{-1.6} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.8\sigma)$
H_0	$66.6^{+3.3}_{-3.2} \quad (+0.0\sigma)$	r_{drag}	$148.5^{+4.3}_{-4.2} \quad (+0.3\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{Λ}	$0.682^{+0.022}_{-0.023} \quad (+0.3\sigma)$	k_{D}	$0.1398^{+0.0030}_{-0.0030} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.7 \quad (\nu: 1.1) \quad (-0.3\sigma)$
Ω_{m}	$0.318^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1606^{+0.0010}_{-0.0010} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.4 \quad (\nu: 17.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1408^{+0.0070}_{-0.0068} \quad (-0.5\sigma)$	z_{eq}	$3403^{+79}_{-77} \quad (-0.3\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.8) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0938^{+0.0088}_{-0.0083} \quad (-0.2\sigma)$	k_{eq}	$0.01030^{+0.00025}_{-0.00025} \quad (-0.6\sigma)$	χ_{CMB}^2	$11934.9 \quad (\nu: 17.1) \quad (+1924.6\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11942.78; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.60; R - 1 = 0.01065$$

7.23 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02218^{+0.00043}_{-0.00043} \quad (+0.3\sigma)$	S_8	$0.828^{+0.025}_{-0.025} \quad (-0.5\sigma)$	$H(0.15)$	$71.6^{+3.2}_{-3.0} \quad (-0.1\sigma)$
$\Omega_c h^2$	$0.1175^{+0.0066}_{-0.0063} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$D_M(0.15)$	$653^{+30}_{-30} \quad (+0.1\sigma)$
$100\theta_{MC}$	$1.04113^{+0.00096}_{-0.00089} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.38)$	$81.8^{+3.2}_{-3.0} \quad (-0.2\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$D_M(0.38)$	$1556^{+66}_{-66} \quad (+0.1\sigma)$
N_{eff}	$2.89^{+0.44}_{-0.43} \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$98.7^{+2.5}_{-2.3} \quad (+0.2\sigma)$	$H(0.51)$	$88.5^{+3.3}_{-3.1} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	$3.035^{+0.033}_{-0.029} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.049}_{-0.050} \quad (-0.2\sigma)$	$D_M(0.51)$	$2015^{+83}_{-83} \quad (+0.1\sigma)$
n_s	$0.960^{+0.018}_{-0.018} \quad (-0.0\sigma)$	z_{re}	$< 8.76 \quad (+0.2\sigma)$	$H(0.61)$	$94.1^{+3.3}_{-3.1} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s$	$2.081^{+0.071}_{-0.059} \quad (-0.1\sigma)$	$D_M(0.61)$	$2344^{+94}_{-95} \quad (+0.1\sigma)$
A_{100}^{PS}	$236^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s e^{-2\tau}$	$1.868^{+0.038}_{-0.037} \quad (-0.6\sigma)$	$H(2.33)$	$234.2^{+6.0}_{-5.9} \quad (-0.5\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1234^{+31}_{-30} \quad (-0.1\sigma)$	$D_M(2.33)$	$5836^{+190}_{-190} \quad (+0.3\sigma)$
A_{217}^{PS}	$104^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5718^{+77}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{CIB}	$38^{+10}_{-10} \quad (-1.4\sigma)$	D_{810}	$2533^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.021}_{-0.019} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{1420}	$816.8^{+9.9}_{-9.8} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.67^{+0.26}_{-0.26}$	D_{2000}	$231.2^{+4.1}_{-4.0} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.020}_{-0.018} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$n_{s,0.002}$	$0.960^{+0.018}_{-0.018} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P	$0.2432^{+0.0061}_{-0.0061} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.019}_{-0.018} \quad (-0.3\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.2445^{+0.0061}_{-0.0061} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	10^5D/H	$2.57^{+0.11}_{-0.11} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.019}_{-0.017} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.35}$	Age/Gyr	$13.97^{+0.46}_{-0.45} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.010}_{-0.0091} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.79^{+0.77}_{-0.76} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.011}_{-0.010} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.33}_{-0.32}$	r_*	$146.1^{+4.1}_{-4.1} \quad (+0.4\sigma)$	f_{2000}^{143}	$28^{+7}_{-6} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.0414^{+0.0012}_{-0.0011} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.1^{+4.5}_{-4.3} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.5\sigma)$	$D_M(z_*)/\text{Gpc}$	$14.03^{+0.38}_{-0.38} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.9\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0098}$	z_{drag}	$1059.2^{+1.7}_{-1.6} \quad (-0.0\sigma)$	χ_{lensing}^2	$9.05 \quad (\nu: 0.3)$
c_{EE}	$0.990^{+0.011}_{-0.011}$	r_{drag}	$148.8^{+4.3}_{-4.2} \quad (+0.4\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.2) \quad (-0.1\sigma)$
H_0	$66.3^{+3.3}_{-3.0} \quad (-0.1\sigma)$	k_D	$0.1396^{+0.0031}_{-0.0030} \quad (-0.4\sigma)$	χ_{lowl}^2	$24.0 \quad (\nu: 1.1) \quad (-0.2\sigma)$
Ω_Λ	$0.681^{+0.020}_{-0.020} \quad (+0.2\sigma)$	$100\theta_D$	$0.1605^{+0.0010}_{-0.0010} \quad (-0.7\sigma)$	χ_{CamSpec}^2	$11513.8 \quad (\nu: 16.4)$
Ω_m	$0.319^{+0.020}_{-0.020} \quad (-0.2\sigma)$	z_{eq}	$3409^{+70}_{-72} \quad (-0.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1403^{+0.0068}_{-0.0066} \quad (-0.6\sigma)$	k_{eq}	$0.01029^{+0.00022}_{-0.00022} \quad (-0.7\sigma)$	χ_{CMB}^2	$11943.5 \quad (\nu: 17.3) \quad (+1926.1\sigma)$
$\Omega_m h^3$	$0.0931^{+0.0088}_{-0.0081} \quad (-0.3\sigma)$	$100\theta_{\text{eq}}$	$0.812^{+0.014}_{-0.013} \quad (+0.2\sigma)$		
σ_8	$0.803^{+0.022}_{-0.020} \quad (-0.5\sigma)$	$100\theta_{s,\text{eq}}$	$0.4486^{+0.0069}_{-0.0066} \quad (+0.2\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 11951.41$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.16$; $R - 1 = 0.01353$

7.24 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02220^{+0.00040}_{-0.00039} \quad (+0.4\sigma)$	S_8	$0.828^{+0.031}_{-0.032} \quad (-0.5\sigma)$	$H(0.15)$	$72.0^{+2.6}_{-2.5} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1183^{+0.0052}_{-0.0050} \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.454^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$D_M(0.15)$	$650^{+24}_{-24} \quad (-0.1\sigma)$
$100\theta_{MC}$	$1.04103^{+0.00079}_{-0.00076} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.38)$	$82.2^{+2.5}_{-2.4} \quad (+0.0\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$D_M(0.38)$	$1548^{+53}_{-54} \quad (-0.1\sigma)$
N_{eff}	$2.95^{+0.33}_{-0.32} \quad (-0.2\sigma)$	$r_{\text{drag}} h$	$98.9^{+2.5}_{-2.5} \quad (+0.3\sigma)$	$H(0.51)$	$88.9^{+2.5}_{-2.4} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	$3.037^{+0.031}_{-0.028} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.057}_{-0.057} \quad (-0.3\sigma)$	$D_M(0.51)$	$2004^{+67}_{-67} \quad (-0.1\sigma)$
n_s	$0.962^{+0.015}_{-0.015} \quad (+0.1\sigma)$	z_{re}	$< 8.80 \quad (+0.2\sigma)$	$H(0.61)$	$94.5^{+2.6}_{-2.4} \quad (-0.1\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_s$	$2.084^{+0.066}_{-0.059} \quad (-0.0\sigma)$	$D_M(0.61)$	$2331^{+75}_{-75} \quad (-0.0\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.032}_{-0.031} \quad (-0.4\sigma)$	$H(2.33)$	$235.0^{+4.5}_{-4.4} \quad (-0.3\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{40}	$1230^{+30}_{-29} \quad (-0.3\sigma)$	$D_M(2.33)$	$5810^{+140}_{-150} \quad (+0.1\sigma)$
A_{217}^{PS}	$103^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5713^{+75}_{-75} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.016}_{-0.016} \quad (-0.5\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2533^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.019}_{-0.017} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.6\sigma)$	D_{1420}	$816.1^{+9.6}_{-9.5} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.014}_{-0.014} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{2000}	$230.7^{+3.6}_{-3.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.017}_{-0.015} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$n_{s,0.002}$	$0.962^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.012}_{-0.012} \quad (-0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P	$0.2440^{+0.0046}_{-0.0045} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.016}_{-0.015} \quad (-0.2\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.2453^{+0.0046}_{-0.0045} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.012}_{-0.011} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	10^5D/H	$2.584^{+0.084}_{-0.083} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.016}_{-0.014} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.35}$	Age/Gyr	$13.91^{+0.34}_{-0.34} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2953^{+0.0082}_{-0.0073} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	z_*	$1089.89^{+0.65}_{-0.64} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3042^{+0.0088}_{-0.0080} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$145.5^{+3.1}_{-3.1} \quad (+0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04129^{+0.00095}_{-0.00091} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.4^{+4.2}_{-4.1} \quad (-0.7\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0032} \quad (+4.6\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.97^{+0.29}_{-0.28} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0098}$	z_{drag}	$1059.4^{+1.3}_{-1.3} \quad (+0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.3) \quad (-0.1\sigma)$
c_{EE}	$0.991^{+0.010}_{-0.010}$	r_{drag}	$148.2^{+3.2}_{-3.2} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 0.9) \quad (-0.3\sigma)$
H_0	$66.7^{+2.7}_{-2.6} \quad (+0.1\sigma)$	k_D	$0.1399^{+0.0023}_{-0.0023} \quad (-0.2\sigma)$	χ_{CamSpec}^2	$11514.1 \quad (\nu: 17.0)$
Ω_Λ	$0.683^{+0.020}_{-0.021} \quad (+0.3\sigma)$	$100\theta_D$	$0.16069^{+0.00077}_{-0.00075} \quad (-0.4\sigma)$	χ_{Aver15}^2	$0.35 \quad (\nu: 0.1)$
Ω_m	$0.317^{+0.021}_{-0.020} \quad (-0.3\sigma)$	z_{eq}	$3402^{+72}_{-71} \quad (-0.3\sigma)$	χ_{Cooke17}^2	$0.35 \quad (\nu: 0.1)$
$\Omega_m h^2$	$0.1412^{+0.0053}_{-0.0052} \quad (-0.4\sigma)$	k_{eq}	$0.01032^{+0.00021}_{-0.00022} \quad (-0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_m h^3$	$0.0942^{+0.0067}_{-0.0062} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.813^{+0.014}_{-0.014} \quad (+0.3\sigma)$	χ_{CMB}^2	$11934.5 \quad (\nu: 16.9) \quad (+1924.5\sigma)$
σ_8	$0.805^{+0.020}_{-0.018} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.4493^{+0.0069}_{-0.0069} \quad (+0.3\sigma)$	χ_{Abund}^2	$0.70 \quad (\nu: 0.3)$

$$\bar{\chi}_{\text{eff}}^2 = 11943.02; R - 1 = 0.01235$$

7.25 base_nnu_plikHM_TE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02243	$0.02247^{+0.00079}_{-0.00079}$ (+1.3 σ)	$r_{\text{drag}} h$	100.71	$100.9^{+4.9}_{-4.7}$ (+1.2 σ)	$100\theta_{\text{s,eq}}$	0.4539	$0.454^{+0.014}_{-0.014}$ (+1.1 σ)
$\Omega_c h^2$	0.1162	$0.117^{+0.015}_{-0.013}$ (−0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.390	$2.39^{+0.11}_{-0.11}$ (−1.6 σ)	$H(0.15)$	73.0	$73.5^{+7.2}_{-6.5}$ (+0.7 σ)
$100\theta_{\text{MC}}$	1.04154	$1.0415^{+0.0020}_{-0.0018}$ (+1.1 σ)	z_{re}	7.07	$7.1^{+1.8}_{-1.8}$ (−0.4 σ)	$D_{\text{M}}(0.15)$	640	637^{+63}_{-60} (−0.7 σ)
τ	0.0491	$0.050^{+0.016}_{-0.018}$ (−0.2 σ)	$10^9 A_{\text{s}}$	2.037	$2.042^{+0.097}_{-0.099}$ (−1.0 σ)	$H(0.38)$	82.9	$83.4^{+7.3}_{-6.5}$ (+0.6 σ)
N_{eff}	2.95	$3.03^{+1.0}_{-0.95}$ (+0.1 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.846	$1.849^{+0.056}_{-0.061}$ (−1.5 σ)	$D_{\text{M}}(0.38)$	1528	1521^{+140}_{-140} (−0.6 σ)
$\ln(10^{10} A_{\text{s}})$	3.0140	$3.016^{+0.047}_{-0.049}$ (−1.0 σ)	D_{40}	1218	1214^{+67}_{-64} (−1.0 σ)	$H(0.51)$	89.5	$90.0^{+7.4}_{-6.6}$ (+0.5 σ)
n_{s}	0.9633	$0.966^{+0.037}_{-0.037}$ (+0.4 σ)	D_{220}	5701	5693^{+110}_{-110} (−0.5 σ)	$D_{\text{M}}(0.51)$	1981	1972^{+180}_{-170} (−0.6 σ)
A_{100}^{dustTE}	0.114	$0.113^{+0.075}_{-0.075}$	D_{810}	2508	2507^{+51}_{-52} (−2.0 σ)	$H(0.61)$	95.0	$95.5^{+7.5}_{-6.7}$ (+0.4 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.136^{+0.058}_{-0.058}$	D_{1420}	808.3	808^{+29}_{-29} (−1.3 σ)	$D_{\text{M}}(0.61)$	2307	2296^{+200}_{-200} (−0.6 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.475	$0.48^{+0.17}_{-0.17}$	D_{2000}	228.4	228^{+13}_{-13} (−0.8 σ)	$H(2.33)$	233.9	235^{+13}_{-12} (−0.3 σ)
A_{143}^{dustTE}	0.220	$0.22^{+0.11}_{-0.11}$	$n_{\text{s},0.002}$	0.9633	$0.966^{+0.037}_{-0.037}$ (+0.4 σ)	$D_{\text{M}}(2.33)$	5788	5763^{+410}_{-410} (−0.3 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.661	$0.66^{+0.16}_{-0.16}$	Y_{P}	0.2441	$0.245^{+0.013}_{-0.013}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4395	$0.440^{+0.025}_{-0.024}$ (−1.9 σ)
A_{217}^{dustTE}	2.04	$2.04^{+0.53}_{-0.54}$	$Y_{\text{P}}^{\text{BBN}}$	0.2454	$0.246^{+0.014}_{-0.013}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7300	$0.733^{+0.038}_{-0.036}$ (−1.1 σ)
c_{100}	1.00017	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	10^5D/H	2.542	$2.56^{+0.25}_{-0.23}$ (−0.9 σ)	$f\sigma_8(0.38)$	0.4592	$0.460^{+0.021}_{-0.021}$ (−2.0 σ)
c_{217}	0.99800	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	Age/Gyr	13.86	$13.80^{+0.97}_{-0.97}$ (−0.3 σ)	$\sigma_8(0.38)$	0.6480	$0.651^{+0.036}_{-0.034}$ (−0.8 σ)
y_{cal}	0.99998	$0.99997^{+0.0048}_{-0.0049}$ (−0.2 σ)	z_*	1089.42	$1089.5^{+1.7}_{-1.5}$ (−1.5 σ)	$f\sigma_8(0.51)$	0.4588	$0.460^{+0.020}_{-0.020}$ (−1.9 σ)
H_0	67.8	$68.3^{+7.2}_{-6.6}$ (+0.8 σ)	r_*	145.9	$145.3^{+9.0}_{-8.8}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6068	$0.610^{+0.035}_{-0.033}$ (−0.7 σ)
Ω_{Λ}	0.6970	$0.698^{+0.036}_{-0.040}$ (+1.2 σ)	$100\theta_*$	1.04178	$1.0417^{+0.0025}_{-0.0024}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4547	$0.456^{+0.020}_{-0.019}$ (−1.9 σ)
Ω_{m}	0.3030	$0.302^{+0.040}_{-0.036}$ (−1.2 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	14.00	$13.95^{+0.83}_{-0.82}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5776	$0.580^{+0.034}_{-0.032}$ (−0.6 σ)
$\Omega_{\text{m}} h^2$	0.1393	$0.141^{+0.015}_{-0.014}$ (−0.5 σ)	z_{drag}	1059.70	$1060.0^{+3.4}_{-3.3}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.2916	$0.293^{+0.018}_{-0.017}$ (−0.5 σ)
$\Omega_{\text{m}} h^3$	0.0944	$0.096^{+0.020}_{-0.018}$ (+0.2 σ)	r_{drag}	148.5	$147.9^{+9.3}_{-9.2}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3010	$0.303^{+0.020}_{-0.019}$ (−0.3 σ)
σ_8	0.7891	$0.792^{+0.039}_{-0.037}$ (−1.3 σ)	k_{D}	0.1398	$0.1403^{+0.0066}_{-0.0063}$ (+0.0 σ)	χ_{small}^2	395.65	396.8 (ν : 1.2) (−0.0 σ)
S_8	0.7931	$0.795^{+0.049}_{-0.047}$ (−1.9 σ)	$100\theta_{\text{D}}$	0.16053	$0.1607^{+0.0024}_{-0.0022}$ (−0.4 σ)	χ_{plikTE}^2	852.9	860.8 (ν : 7.8)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4344	$0.435^{+0.027}_{-0.026}$ (−1.9 σ)	z_{eq}	3357	3355^{+140}_{-140} (−1.0 σ)	χ_{prior}^2	0.4	7.4 (ν : 6.6) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5855	$0.587^{+0.026}_{-0.026}$ (−2.0 σ)	k_{eq}	0.010180	$0.01022^{+0.00045}_{-0.00043}$ (−1.1 σ)	χ_{CMB}^2	1248.5	1257.6 (ν : 9.0) (+11.6 σ)
$\sigma_8/h^{0.5}$	0.9583	$0.959^{+0.036}_{-0.036}$ (−2.1 σ)	$100\theta_{\text{eq}}$	0.8220	$0.823^{+0.028}_{-0.027}$ (+1.1 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1248.90$; $\Delta\chi_{\text{eff}}^2 = -0.08$; $\bar{\chi}_{\text{eff}}^2 = 1264.95$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.95$; $R - 1 = 0.00876$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.65 (Δ -0.04) plik_rd12_HM_v22_TE: 852.89 (Δ 0.04)

7.26 base_nnu_plikHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02249^{+0.00079}_{-0.00078} \quad (+1.4\sigma)$	$r_{\mathrm{drag}} h$	$101.0^{+4.9}_{-4.7} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.455^{+0.014}_{-0.013} \quad (+1.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.118^{+0.015}_{-0.013} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.39^{+0.10}_{-0.10} \quad (-1.5\sigma)$	$H(0.15)$	$73.7^{+7.2}_{-6.5} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0415^{+0.0020}_{-0.0018} \quad (+1.0\sigma)$	z_{re}	$< 8.56 \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+63}_{-60} \quad (-0.8\sigma)$
τ	$0.0528^{+0.012}_{-0.0099} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.057^{+0.087}_{-0.079} \quad (-0.7\sigma)$	$H(0.38)$	$83.6^{+7.3}_{-6.5} \quad (+0.7\sigma)$
N_{eff}	$3.06^{+1.0}_{-0.95} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.850^{+0.056}_{-0.059} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1517^{+140}_{-140} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.024^{+0.042}_{-0.039} \quad (-0.7\sigma)$	D_{40}	$1212^{+66}_{-64} \quad (-1.1\sigma)$	$H(0.51)$	$90.2^{+7.4}_{-6.6} \quad (+0.6\sigma)$
n_{s}	$0.968^{+0.036}_{-0.036} \quad (+0.5\sigma)$	D_{220}	$5691^{+110}_{-110} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1967^{+180}_{-170} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.074}$	D_{810}	$2508^{+51}_{-52} \quad (-2.0\sigma)$	$H(0.61)$	$95.7^{+7.5}_{-6.7} \quad (+0.5\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.136^{+0.058}_{-0.058}$	D_{1420}	$808^{+29}_{-29} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2290^{+200}_{-200} \quad (-0.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	D_{2000}	$228^{+13}_{-13} \quad (-0.8\sigma)$	$H(2.33)$	$235^{+13}_{-12} \quad (-0.3\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$n_{\mathrm{s},0.002}$	$0.968^{+0.036}_{-0.036} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5752^{+410}_{-410} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	Y_{P}	$0.245^{+0.013}_{-0.013} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.442^{+0.024}_{-0.024} \quad (-1.8\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.04^{+0.53}_{-0.54}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.247^{+0.013}_{-0.013} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.736^{+0.037}_{-0.035} \quad (-0.8\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.56^{+0.25}_{-0.23} \quad (-0.9\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.021}_{-0.021} \quad (-1.8\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.77^{+0.97}_{-0.96} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.654^{+0.035}_{-0.033} \quad (-0.6\sigma)$
y_{cal}	$0.99997^{+0.0048}_{-0.0049} \quad (-0.2\sigma)$	z_*	$1089.6^{+1.7}_{-1.5} \quad (-1.4\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.019}_{-0.020} \quad (-1.8\sigma)$
H_0	$68.5^{+7.2}_{-6.5} \quad (+0.9\sigma)$	r_*	$145.1^{+8.9}_{-8.8} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.034}_{-0.032} \quad (-0.5\sigma)$
Ω_{Λ}	$0.699^{+0.036}_{-0.038} \quad (+1.2\sigma)$	$100\theta_*$	$1.0416^{+0.0025}_{-0.0024} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.019}_{-0.019} \quad (-1.6\sigma)$
Ω_{m}	$0.301^{+0.038}_{-0.036} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.93^{+0.82}_{-0.81} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.033}_{-0.031} \quad (-0.4\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.141^{+0.015}_{-0.014} \quad (-0.5\sigma)$	z_{drag}	$1060.0^{+3.4}_{-3.3} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.018}_{-0.016} \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.097^{+0.020}_{-0.018} \quad (+0.3\sigma)$	r_{drag}	$147.7^{+9.2}_{-9.1} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.020}_{-0.018} \quad (-0.1\sigma)$
σ_8	$0.796^{+0.037}_{-0.036} \quad (-1.0\sigma)$	k_{D}	$0.1404^{+0.0066}_{-0.0062} \quad (+0.1\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
S_8	$0.797^{+0.048}_{-0.046} \quad (-1.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1607^{+0.0023}_{-0.0022} \quad (-0.4\sigma)$	χ_{plikTE}^2	$860.9 \quad (\nu: 7.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.436^{+0.026}_{-0.025} \quad (-1.8\sigma)$	z_{eq}	$3351^{+140}_{-140} \quad (-1.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.5) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.589^{+0.026}_{-0.026} \quad (-1.8\sigma)$	k_{eq}	$0.01022^{+0.00045}_{-0.00043} \quad (-1.1\sigma)$	χ_{CMB}^2	$1257.2 \quad (\nu: 8.5) \quad (+11.5\sigma)$
$\sigma_8/h^{0.5}$	$0.962^{+0.035}_{-0.034} \quad (-1.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.824^{+0.028}_{-0.026} \quad (+1.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1264.59$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.94$; $R - 1 = 0.01129$

7.27 base_nnu_plikHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.0214	$0.0228^{+0.0052}_{-0.0049}$ (+2.4 σ)	D_{40}	1248	1234^{+68}_{-76} (−0.1 σ)	$D_M(0.15)$	740	684^{+200}_{-200} (+1.5 σ)
$\Omega_c h^2$	0.0958	$0.108^{+0.042}_{-0.035}$ (−3.0 σ)	D_{220}	5741	5844^{+530}_{-540} (+3.2 σ)	$H(0.38)$	73.0	80^{+20}_{-20} (−1.0 σ)
$100\theta_{MC}$	1.0437	$1.0421^{+0.0076}_{-0.0065}$ (+2.2 σ)	D_{810}	2585	2583^{+77}_{-78} (+3.3 σ)	$D_M(0.38)$	1755	1627^{+500}_{-500} (+1.6 σ)
τ	0.0511	$0.051^{+0.019}_{-0.018}$ (−0.0 σ)	D_{1420}	861.7	850^{+47}_{-51} (+6.7 σ)	$H(0.51)$	79.3	86^{+20}_{-20} (−1.2 σ)
N_{eff}	1.57	< 5.32 (−1.9 σ)	D_{2000}	252.6	246^{+24}_{-26} (+6.9 σ)	$D_M(0.51)$	2268	2105^{+600}_{-600} (+1.7 σ)
$\ln(10^{10} A_s)$	2.982	$3.01^{+0.13}_{-0.14}$ (−1.3 σ)	$n_{s,0.002}$	0.937	$0.960^{+0.086}_{-0.082}$ (−0.1 σ)	$H(0.61)$	84.6	92^{+20}_{-20} (−1.3 σ)
n_s	0.937	$0.960^{+0.086}_{-0.082}$ (−0.1 σ)	Y_P	0.2228	$0.235^{+0.042}_{-0.041}$ (−2.5 σ)	$D_M(0.61)$	2634	2447^{+700}_{-700} (+1.7 σ)
y_{cal}	1.00000	$0.9999^{+0.0049}_{-0.0049}$ (−0.2 σ)	Y_P^{BBN}	0.2240	$0.236^{+0.042}_{-0.041}$ (−2.5 σ)	$H(2.33)$	214.0	226^{+40}_{-40} (−2.7 σ)
H_0	58.4	65^{+20}_{-20} (−0.5 σ)	$10^5 D/H$	2.220	$2.29^{+0.45}_{-0.40}$ (−4.8 σ)	$D_M(2.33)$	6480	6088^{+1000}_{-1000} (+2.3 σ)
Ω_Λ	0.654	$0.68^{+0.12}_{-0.13}$ (+0.2 σ)	Age/Gyr	15.51	$14.6^{+3.4}_{-3.3}$ (+2.3 σ)	$f\sigma_8(0.15)$	0.441	$0.436^{+0.061}_{-0.057}$ (−2.3 σ)
Ω_m	0.346	$0.32^{+0.13}_{-0.12}$ (−0.2 σ)	z_*	1087.27	$1087.7^{+3.6}_{-3.3}$ (−5.2 σ)	$\sigma_8(0.15)$	0.686	$0.714^{+0.10}_{-0.096}$ (−2.5 σ)
$\Omega_m h^2$	0.1179	$0.131^{+0.046}_{-0.038}$ (−2.8 σ)	r_*	161.1	153^{+30}_{-30} (+3.1 σ)	$f\sigma_8(0.38)$	0.4503	$0.452^{+0.047}_{-0.046}$ (−2.9 σ)
$\Omega_m h^3$	0.069	$0.088^{+0.065}_{-0.047}$ (−1.2 σ)	$100\theta_*$	1.0451	$1.043^{+0.010}_{-0.0086}$ (+2.3 σ)	$\sigma_8(0.38)$	0.605	$0.633^{+0.10}_{-0.093}$ (−2.3 σ)
σ_8	0.746	$0.773^{+0.10}_{-0.097}$ (−2.7 σ)	$D_M(z_*)/\text{Gpc}$	15.42	$14.6^{+2.8}_{-2.8}$ (+3.1 σ)	$f\sigma_8(0.51)$	0.4453	$0.450^{+0.045}_{-0.045}$ (−3.1 σ)
S_8	0.801	$0.79^{+0.12}_{-0.12}$ (−2.0 σ)	z_{drag}	1054.7	1059^{+17}_{-16} (−0.1 σ)	$\sigma_8(0.51)$	0.565	$0.592^{+0.099}_{-0.090}$ (−2.2 σ)
$\sigma_8 \Omega_m^{0.5}$	0.439	$0.433^{+0.067}_{-0.065}$ (−2.0 σ)	r_{drag}	164.4	155^{+30}_{-30} (+3.0 σ)	$f\sigma_8(0.61)$	0.4383	$0.446^{+0.047}_{-0.045}$ (−3.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.572	$0.578^{+0.059}_{-0.058}$ (−2.8 σ)	k_D	0.1296	$0.137^{+0.024}_{-0.023}$ (−1.8 σ)	$\sigma_8(0.61)$	0.537	$0.564^{+0.097}_{-0.088}$ (−2.1 σ)
$\sigma_8/h^{0.5}$	0.977	$0.963^{+0.095}_{-0.086}$ (−1.9 σ)	$100\theta_D$	0.15718	$0.1583^{+0.0042}_{-0.0038}$ (−4.1 σ)	$f\sigma_8(2.33)$	0.270	$0.284^{+0.053}_{-0.048}$ (−1.8 σ)
$r_{\text{drag}} h$	95.9	100^{+20}_{-10} (+0.6 σ)	z_{eq}	3496	3420^{+350}_{-330} (+0.0 σ)	$\sigma_8(2.33)$	0.277	$0.294^{+0.060}_{-0.053}$ (−1.6 σ)
$\langle d^2 \rangle^{1/2}$	2.456	$2.41^{+0.21}_{-0.21}$ (−1.1 σ)	k_{eq}	0.00955	$0.0099^{+0.0013}_{-0.0012}$ (−3.0 σ)	χ_{simall}^2	395.57	$396.7 (\nu: 1.2)$ (−0.1 σ)
z_{re}	6.96	$7.0^{+1.7}_{-1.9}$ (−0.5 σ)	$100\theta_{\text{eq}}$	0.795	$0.814^{+0.076}_{-0.068}$ (+0.3 σ)	χ_{plikEE}^2	738.0	$744.0 (\nu: 6.0)$
$10^9 A_s$	1.973	$2.03^{+0.26}_{-0.29}$ (−1.2 σ)	$100\theta_{s,\text{eq}}$	0.4407	$0.449^{+0.035}_{-0.032}$ (+0.2 σ)	χ_{prior}^2	0.00	$0.99 (\nu: 1.0)$ (−1.7 σ)
$10^9 A_s e^{-2\tau}$	1.781	$1.84^{+0.20}_{-0.23}$ (−2.1 σ)	$H(0.15)$	63.4	70^{+20}_{-20} (−0.7 σ)	χ_{CMB}^2	1133.5	$1140.8 (\nu: 7.4)$ (−9.3 σ)

Best-fit $\chi_{\text{eff}}^2 = 1133.52$; $\Delta\chi_{\text{eff}}^2 = -1.03$; $\bar{\chi}_{\text{eff}}^2 = 1141.76$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.14$; $R - 1 = 0.00807$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.57 (Δ -0.03) plik_rd12_HM_v22_EE: 737.95 (Δ -1.00)

7.28 base_nnu_plikHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0231^{+0.0053}_{-0.0049} \quad (+3.3\sigma)$	D_{40}	$1231^{+67}_{-76} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$669^{+200}_{-200} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.111^{+0.042}_{-0.036} \quad (-2.3\sigma)$	D_{220}	$5861^{+520}_{-560} \quad (+3.6\sigma)$	$H(0.38)$	$82^{+20}_{-20} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0416^{+0.0078}_{-0.0063} \quad (+1.3\sigma)$	D_{810}	$2583^{+76}_{-78} \quad (+3.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1593^{+500}_{-400} \quad (+0.9\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.5\sigma)$	D_{1420}	$847^{+49}_{-50} \quad (+6.2\sigma)$	$H(0.51)$	$88^{+20}_{-20} \quad (-0.4\sigma)$
N_{eff}	$< 5.52 \quad (-1.1\sigma)$	D_{2000}	$244^{+25}_{-26} \quad (+6.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2062^{+700}_{-600} \quad (+0.9\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.03^{+0.12}_{-0.14} \quad (-0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.966^{+0.088}_{-0.083} \quad (+0.4\sigma)$	$H(0.61)$	$93^{+20}_{-20} \quad (-0.6\sigma)$
n_{s}	$0.966^{+0.088}_{-0.083} \quad (+0.4\sigma)$	Y_{P}	$0.238^{+0.043}_{-0.043} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2399^{+700}_{-600} \quad (+1.0\sigma)$
y_{cal}	$0.9999^{+0.0050}_{-0.0050} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.239^{+0.043}_{-0.043} \quad (-1.7\sigma)$	$H(2.33)$	$229^{+40}_{-40} \quad (-1.9\sigma)$
H_0	$67^{+20}_{-20} \quad (+0.1\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.32^{+0.45}_{-0.40} \quad (-4.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5987^{+1000}_{-1000} \quad (+1.5\sigma)$
Ω_{Λ}	$0.69^{+0.12}_{-0.13} \quad (+0.5\sigma)$	Age/Gyr	$14.3^{+3.5}_{-3.2} \quad (+1.5\sigma)$	$f\sigma_8(0.15)$	$0.438^{+0.061}_{-0.057} \quad (-2.2\sigma)$
Ω_{m}	$0.31^{+0.13}_{-0.12} \quad (-0.5\sigma)$	z_*	$1087.8^{+3.6}_{-3.3} \quad (-5.0\sigma)$	$\sigma_8(0.15)$	$0.724^{+0.10}_{-0.097} \quad (-1.8\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.135^{+0.046}_{-0.040} \quad (-2.0\sigma)$	r_*	$151^{+30}_{-30} \quad (+2.2\sigma)$	$f\sigma_8(0.38)$	$0.455^{+0.046}_{-0.046} \quad (-2.5\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.093^{+0.067}_{-0.051} \quad (-0.5\sigma)$	$100\theta_*$	$1.042^{+0.010}_{-0.0085} \quad (+1.4\sigma)$	$\sigma_8(0.38)$	$0.643^{+0.10}_{-0.095} \quad (-1.5\sigma)$
σ_8	$0.783^{+0.10}_{-0.097} \quad (-2.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.4^{+2.9}_{-2.7} \quad (+2.2\sigma)$	$f\sigma_8(0.51)$	$0.454^{+0.044}_{-0.044} \quad (-2.6\sigma)$
S_8	$0.79^{+0.12}_{-0.12} \quad (-2.0\sigma)$	z_{drag}	$1060^{+16}_{-17} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.602^{+0.098}_{-0.092} \quad (-1.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.434^{+0.067}_{-0.065} \quad (-2.0\sigma)$	r_{drag}	$153^{+30}_{-30} \quad (+2.1\sigma)$	$f\sigma_8(0.61)$	$0.450^{+0.045}_{-0.044} \quad (-2.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.582^{+0.057}_{-0.058} \quad (-2.4\sigma)$	k_{D}	$0.139^{+0.024}_{-0.023} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.573^{+0.096}_{-0.090} \quad (-1.3\sigma)$
$\sigma_8/h^{0.5}$	$0.964^{+0.091}_{-0.089} \quad (-1.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1586^{+0.0042}_{-0.0039} \quad (-3.6\sigma)$	$f\sigma_8(2.33)$	$0.289^{+0.052}_{-0.049} \quad (-1.1\sigma)$
$r_{\mathrm{drag}}h$	$100^{+20}_{-10} \quad (+1.0\sigma)$	z_{eq}	$3400^{+360}_{-320} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.059}_{-0.054} \quad (-0.8\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.41^{+0.22}_{-0.21} \quad (-1.1\sigma)$	k_{eq}	$0.0100^{+0.0013}_{-0.0013} \quad (-2.4\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 1.0) \quad (-0.2\sigma)$
z_{re}	$< 8.54 \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.075}_{-0.070} \quad (+0.7\sigma)$	χ_{plikEE}^2	$744.1 \quad (\nu: 6.1)$
10^9A_{s}	$2.07^{+0.24}_{-0.29} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.451^{+0.035}_{-0.033} \quad (+0.5\sigma)$	χ_{prior}^2	$1.0 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.85^{+0.19}_{-0.24} \quad (-1.4\sigma)$	$H(0.15)$	$72^{+20}_{-20} \quad (-0.0\sigma)$	χ_{CMB}^2	$1140.6 \quad (\nu: 7.0) \quad (-9.4\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1141.65; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.34; R - 1 = 0.00915$$

7.29 base_nnu_plikHM_TE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02239	$0.02240^{+0.00056}_{-0.00056}$ (+1.1 σ)	$\langle d^2 \rangle^{1/2}$	2.389	$2.393^{+0.065}_{-0.064}$ (−1.4 σ)	$D_M(0.15)$	644.6	642^{+40}_{-38} (−0.4 σ)
$\Omega_c h^2$	0.1152	$0.116^{+0.013}_{-0.012}$ (−0.9 σ)	z_{re}	7.06	$7.0^{+1.7}_{-1.8}$ (−0.5 σ)	$H(0.38)$	82.35	$82.7^{+4.8}_{-4.5}$ (+0.3 σ)
$100\theta_{\text{MC}}$	1.04169	$1.0416^{+0.0018}_{-0.0017}$ (+1.3 σ)	$10^9 A_s$	2.035	$2.035^{+0.093}_{-0.095}$ (−1.2 σ)	$D_M(0.38)$	1539	1533^{+91}_{-89} (−0.4 σ)
τ	0.0493	$0.049^{+0.016}_{-0.018}$ (−0.3 σ)	$10^9 A_s e^{-2\tau}$	1.844	$1.846^{+0.056}_{-0.059}$ (−1.6 σ)	$H(0.51)$	88.93	$89.3^{+5.0}_{-4.7}$ (+0.2 σ)
N_{eff}	2.87	$2.94^{+0.77}_{-0.69}$ (−0.2 σ)	D_{40}	1213.7	1218^{+50}_{-48} (−0.8 σ)	$D_M(0.51)$	1995	1987^{+120}_{-110} (−0.3 σ)
$\ln(10^{10} A_s)$	3.0129	$3.013^{+0.045}_{-0.047}$ (−1.2 σ)	D_{220}	5690	5695^{+110}_{-110} (−0.4 σ)	$H(0.61)$	94.4	$94.9^{+5.2}_{-4.8}$ (+0.1 σ)
n_s	0.9643	$0.963^{+0.025}_{-0.026}$ (+0.2 σ)	D_{810}	2513	2508^{+50}_{-51} (−2.0 σ)	$D_M(0.61)$	2322	2313^{+130}_{-130} (−0.3 σ)
y_{cal}	0.99998	$1.0000^{+0.0048}_{-0.0048}$ (−0.2 σ)	D_{1420}	812.6	809^{+27}_{-28} (−1.1 σ)	$H(2.33)$	232.9	234^{+11}_{-10} (−0.6 σ)
A_{100}^{dustTE}	0.113	$0.113^{+0.075}_{-0.073}$	D_{2000}	230.2	229^{+12}_{-12} (−0.5 σ)	$D_M(2.33)$	5820	5798^{+300}_{-300} (−0.0 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.136^{+0.058}_{-0.058}$	$n_{s,0.002}$	0.9643	$0.963^{+0.025}_{-0.026}$ (+0.2 σ)	$f\sigma_8(0.15)$	0.4404	$0.441^{+0.020}_{-0.020}$ (−1.9 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.473	$0.48^{+0.17}_{-0.17}$	Y_{P}	0.2431	$0.244^{+0.010}_{-0.010}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7288	$0.730^{+0.035}_{-0.034}$ (−1.3 σ)
A_{143}^{dustTE}	0.219	$0.22^{+0.11}_{-0.11}$	$Y_{\text{P}}^{\text{BBN}}$	0.2444	$0.245^{+0.010}_{-0.010}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4596	$0.460^{+0.020}_{-0.020}$ (−2.0 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.659	$0.66^{+0.16}_{-0.16}$	10^5D/H	2.522	$2.54^{+0.22}_{-0.20}$ (−1.2 σ)	$\sigma_8(0.38)$	0.6467	$0.648^{+0.031}_{-0.031}$ (−1.0 σ)
A_{217}^{dustTE}	2.03	$2.04^{+0.53}_{-0.53}$	Age/Gyr	13.93	$13.88^{+0.72}_{-0.72}$ (−0.0 σ)	$f\sigma_8(0.51)$	0.4589	$0.460^{+0.020}_{-0.020}$ (−2.0 σ)
c_{100}	1.00017	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	z_*	1089.30	$1089.5^{+1.6}_{-1.4}$ (−1.6 σ)	$\sigma_8(0.51)$	0.6055	$0.607^{+0.030}_{-0.030}$ (−0.9 σ)
c_{217}	0.99795	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	r_*	146.6	$146.0^{+7.3}_{-7.3}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4546	$0.455^{+0.020}_{-0.020}$ (−1.9 σ)
H_0	67.30	$67.6^{+4.3}_{-4.1}$ (+0.5 σ)	$100\theta_*$	1.04199	$1.0419^{+0.0022}_{-0.0021}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5763	$0.578^{+0.029}_{-0.028}$ (−0.9 σ)
Ω_Λ	0.6947	$0.695^{+0.016}_{-0.017}$ (+1.0 σ)	$D_M(z_*)/\text{Gpc}$	14.06	$14.01^{+0.67}_{-0.68}$ (+0.4 σ)	$f\sigma_8(2.33)$	0.2909	$0.291^{+0.015}_{-0.014}$ (−0.7 σ)
Ω_m	0.3053	$0.305^{+0.017}_{-0.016}$ (−1.0 σ)	z_{drag}	1059.51	$1059.7^{+2.5}_{-2.4}$ (+0.4 σ)	$\sigma_8(2.33)$	0.3001	$0.301^{+0.016}_{-0.015}$ (−0.6 σ)
$\Omega_m h^2$	0.1383	$0.140^{+0.014}_{-0.012}$ (−0.8 σ)	r_{drag}	149.2	$148.7^{+7.5}_{-7.5}$ (+0.4 σ)	χ_{small}^2	395.67	396.8 (ν : 1.3) (−0.0 σ)
$\Omega_m h^3$	0.0930	$0.094^{+0.015}_{-0.014}$ (−0.1 σ)	k_{D}	0.1393	$0.1397^{+0.0055}_{-0.0051}$ (−0.3 σ)	χ_{plikTE}^2	852.9	860.0 (ν : 7.3)
σ_8	0.7881	$0.790^{+0.037}_{-0.037}$ (−1.5 σ)	$100\theta_{\text{D}}$	0.16034	$0.1605^{+0.0019}_{-0.0018}$ (−0.7 σ)	χ_{6DF}^2	0.000	0.048 (ν : 0.0)
S_8	0.7950	$0.796^{+0.037}_{-0.036}$ (−1.8 σ)	z_{eq}	3367	3366^{+67}_{-65} (−0.8 σ)	χ_{MGS}^2	1.68	1.76 (ν : 0.2)
$\sigma_8 \Omega_m^{0.5}$	0.4354	$0.436^{+0.020}_{-0.020}$ (−1.8 σ)	k_{eq}	0.010155	$0.01020^{+0.00047}_{-0.00042}$ (−1.3 σ)	χ_{DR12BAO}^2	3.46	4.2 (ν : 0.7)
$\sigma_8 \Omega_m^{0.25}$	0.5858	$0.587^{+0.026}_{-0.025}$ (−2.0 σ)	$100\theta_{\text{eq}}$	0.8202	$0.820^{+0.012}_{-0.012}$ (+0.9 σ)	χ_{prior}^2	0.4	7.4 (ν : 6.8) (+0.0 σ)
$\sigma_8/h^{0.5}$	0.9607	$0.960^{+0.027}_{-0.028}$ (−2.0 σ)	$100\theta_{\text{s,eq}}$	0.4530	$0.4530^{+0.0063}_{-0.0063}$ (+0.9 σ)	χ_{BAO}^2	5.14	6.0 (ν : 0.7)
$r_{\text{drag}} h$	100.44	$100.4^{+2.1}_{-2.1}$ (+1.0 σ)	$H(0.15)$	72.45	$72.8^{+4.5}_{-4.2}$ (+0.4 σ)	χ_{CMB}^2	1248.6	1256.9 (ν : 8.7) (+11.5 σ)

Best-fit $\chi_{\text{eff}}^2 = 1254.11$; $\Delta\chi_{\text{eff}}^2 = -0.12$; $\bar{\chi}_{\text{eff}}^2 = 1270.28$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.86$; $R - 1 = 0.00797$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.68 (Δ -0.07) DR12BAO: 3.46 (Δ 0.02) CMB - small_100x143_offlike5_EE_Aplanck_B: 395.67 (Δ 0.00) plik_rd12_HM_v22_TE: 852.90 (Δ -0.03)

7.30 base_nnu_plikHM_TE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00053}_{-0.00054} \quad (+1.1\sigma)$	z_{re}	$7.6^{+1.4}_{-1.6} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1550^{+84}_{-85} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.115^{+0.012}_{-0.011} \quad (-1.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.071^{+0.078}_{-0.078} \quad (-0.3\sigma)$	$H(0.51)$	$88.5^{+4.6}_{-4.3} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0418^{+0.0017}_{-0.0016} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.856^{+0.050}_{-0.052} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2008^{+110}_{-110} \quad (+0.0\sigma)$
τ	$0.055^{+0.015}_{-0.015} \quad (+0.4\sigma)$	D_{40}	$1225^{+49}_{-49} \quad (-0.5\sigma)$	$H(0.61)$	$94.1^{+4.8}_{-4.4} \quad (-0.3\sigma)$
N_{eff}	$2.83^{+0.71}_{-0.63} \quad (-0.6\sigma)$	D_{220}	$5724^{+110}_{-110} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2337^{+120}_{-120} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.030^{+0.037}_{-0.038} \quad (-0.3\sigma)$	D_{810}	$2533^{+41}_{-43} \quad (-0.2\sigma)$	$H(2.33)$	$233^{+10}_{-9.4} \quad (-0.9\sigma)$
n_{s}	$0.963^{+0.024}_{-0.025} \quad (+0.2\sigma)$	D_{1420}	$820^{+23}_{-25} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5843^{+280}_{-290} \quad (+0.3\sigma)$
y_{cal}	$1.0005^{+0.0051}_{-0.0049} \quad (-0.0\sigma)$	D_{2000}	$233^{+10}_{-11} \quad (+1.4\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.016}_{-0.015} \quad (-1.3\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.076}_{-0.074}$	$n_{\mathrm{s},0.002}$	$0.963^{+0.024}_{-0.025} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.736^{+0.030}_{-0.029} \quad (-0.8\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.138^{+0.058}_{-0.059}$	Y_{P}	$0.2424^{+0.0096}_{-0.0091} \quad (-0.6\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.017}_{-0.015} \quad (-1.3\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2437^{+0.0096}_{-0.0091} \quad (-0.6\sigma)$	$\sigma_8(0.38)$	$0.653^{+0.027}_{-0.027} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.51^{+0.20}_{-0.18} \quad (-1.7\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.017}_{-0.016} \quad (-1.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.99^{+0.66}_{-0.68} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.611^{+0.026}_{-0.026} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.06^{+0.54}_{-0.51}$	z_{*}	$1089.3^{+1.4}_{-1.3} \quad (-2.0\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.017}_{-0.016} \quad (-1.3\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0015} \quad (+1.0\sigma)$	r_{*}	$146.8^{+6.6}_{-6.8} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.581^{+0.025}_{-0.025} \quad (-0.6\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	$100\theta_{*}$	$1.0421^{+0.0022}_{-0.0020} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.013}_{-0.013} \quad (-0.5\sigma)$
H_0	$66.8^{+4.0}_{-3.7} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$14.09^{+0.61}_{-0.63} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.013}_{-0.014} \quad (-0.4\sigma)$
Ω_{Λ}	$0.689^{+0.016}_{-0.017} \quad (+0.7\sigma)$	z_{drag}	$1059.5^{+2.3}_{-2.2} \quad (+0.3\sigma)$	$\chi^2_{\mathrm{lensing}}$	$10.2 \quad (\nu: 1.8)$
Ω_{m}	$0.311^{+0.017}_{-0.016} \quad (-0.7\sigma)$	r_{drag}	$149.5^{+6.8}_{-7.1} \quad (+0.7\sigma)$	χ^2_{small}	$396.9 \quad (\nu: 1.7) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.138^{+0.012}_{-0.011} \quad (-1.0\sigma)$	k_{D}	$0.1393^{+0.0050}_{-0.0047} \quad (-0.5\sigma)$	χ^2_{plikTE}	$860.5 \quad (\nu: 7.3)$
$\Omega_{\mathrm{m}}h^3$	$0.093^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1602^{+0.0018}_{-0.0016} \quad (-1.3\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.063 \quad (\nu: 0.0)$
σ_8	$0.797^{+0.032}_{-0.031} \quad (-1.0\sigma)$	z_{eq}	$3391^{+63}_{-61} \quad (-0.4\sigma)$	χ^2_{MGS}	$1.35 \quad (\nu: 0.1)$
S_8	$0.810^{+0.030}_{-0.028} \quad (-1.2\sigma)$	k_{eq}	$0.01020^{+0.00042}_{-0.00037} \quad (-1.3\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.8 \quad (\nu: 1.4)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.016}_{-0.015} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.011}_{-0.012} \quad (+0.5\sigma)$	χ^2_{prior}	$7.6 \quad (\nu: 7.3) \quad (+0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.595^{+0.021}_{-0.020} \quad (-1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0056}_{-0.0062} \quad (+0.5\sigma)$	χ^2_{CMB}	$1267.6 \quad (\nu: 9.2) \quad (+13.4\sigma)$
$\sigma_8/h^{0.5}$	$0.975^{+0.020}_{-0.019} \quad (-1.1\sigma)$	$H(0.15)$	$72.0^{+4.1}_{-3.8} \quad (+0.0\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 0.9)$
$r_{\mathrm{drag}}h$	$99.8^{+2.0}_{-1.9} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$650^{+36}_{-37} \quad (-0.1\sigma)$		
$\langle d^2 \rangle^{1/2}$	$2.422^{+0.058}_{-0.055} \quad (-0.8\sigma)$	$H(0.38)$	$81.9^{+4.4}_{-4.1} \quad (-0.1\sigma)$		

$$\bar{\chi}^2_{\mathrm{eff}} = 1281.35; \Delta\bar{\chi}^2_{\mathrm{eff}} = 0.66; R - 1 = 0.02891$$

7.31 base_nnu_plikHM_TE_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00056}_{-0.00057} \quad (+1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.401^{+0.062}_{-0.059} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$642^{+40}_{-39} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.117^{+0.013}_{-0.012} \quad (-0.9\sigma)$	z_{re}	$< 8.48 \quad (-0.0\sigma)$	$H(0.38)$	$82.8^{+4.8}_{-4.4} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0416^{+0.0018}_{-0.0017} \quad (+1.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.052^{+0.082}_{-0.077} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1532^{+91}_{-89} \quad (-0.4\sigma)$
τ	$0.0526^{+0.011}_{-0.0095} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.847^{+0.057}_{-0.059} \quad (-1.5\sigma)$	$H(0.51)$	$89.4^{+5.0}_{-4.6} \quad (+0.2\sigma)$
N_{eff}	$2.95^{+0.77}_{-0.69} \quad (-0.2\sigma)$	D_{40}	$1217^{+49}_{-49} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1985^{+120}_{-110} \quad (-0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.021^{+0.039}_{-0.038} \quad (-0.8\sigma)$	D_{220}	$5694^{+110}_{-120} \quad (-0.5\sigma)$	$H(0.61)$	$94.9^{+5.2}_{-4.8} \quad (+0.1\sigma)$
n_{s}	$0.964^{+0.026}_{-0.026} \quad (+0.3\sigma)$	D_{810}	$2509^{+50}_{-51} \quad (-1.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+130}_{-130} \quad (-0.4\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0049} \quad (-0.2\sigma)$	D_{1420}	$809^{+27}_{-28} \quad (-1.0\sigma)$	$H(2.33)$	$234^{+11}_{-10} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.073}$	D_{2000}	$229^{+12}_{-12} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5793^{+300}_{-300} \quad (-0.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.136^{+0.057}_{-0.058}$	$n_{\mathrm{s},0.002}$	$0.964^{+0.026}_{-0.026} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.019}_{-0.019} \quad (-1.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	Y_{P}	$0.244^{+0.010}_{-0.0099} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.034}_{-0.032} \quad (-1.0\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.245^{+0.010}_{-0.0099} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.020}_{-0.019} \quad (-1.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.54^{+0.22}_{-0.20} \quad (-1.2\sigma)$	$\sigma_8(0.38)$	$0.651^{+0.030}_{-0.029} \quad (-0.8\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.04^{+0.54}_{-0.53}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.87^{+0.71}_{-0.72} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.020}_{-0.019} \quad (-1.8\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.5^{+1.6}_{-1.4} \quad (-1.6\sigma)$	$\sigma_8(0.51)$	$0.610^{+0.029}_{-0.028} \quad (-0.7\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	r_*	$145.9^{+7.2}_{-7.3} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.020}_{-0.019} \quad (-1.7\sigma)$
H_0	$67.7^{+4.4}_{-4.1} \quad (+0.5\sigma)$	$100\theta_*$	$1.0418^{+0.0022}_{-0.0021} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.580^{+0.028}_{-0.027} \quad (-0.6\sigma)$
Ω_{Λ}	$0.695^{+0.017}_{-0.018} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.00^{+0.66}_{-0.67} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.014}_{-0.014} \quad (-0.5\sigma)$
Ω_{m}	$0.305^{+0.018}_{-0.017} \quad (-1.0\sigma)$	z_{drag}	$1059.7^{+2.5}_{-2.4} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.015}_{-0.014} \quad (-0.4\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.140^{+0.014}_{-0.012} \quad (-0.8\sigma)$	r_{drag}	$148.6^{+7.4}_{-7.5} \quad (+0.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.095^{+0.015}_{-0.014} \quad (-0.1\sigma)$	k_{D}	$0.1398^{+0.0055}_{-0.0051} \quad (-0.2\sigma)$	χ_{plikTE}^2	$860.1 \quad (\nu: 7.4)$
σ_8	$0.793^{+0.036}_{-0.034} \quad (-1.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1605^{+0.0019}_{-0.0017} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
S_8	$0.800^{+0.036}_{-0.035} \quad (-1.7\sigma)$	z_{eq}	$3366^{+68}_{-65} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.78 \quad (\nu: 0.2)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.438^{+0.020}_{-0.019} \quad (-1.7\sigma)$	k_{eq}	$0.01020^{+0.00047}_{-0.00042} \quad (-1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.2 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.589^{+0.025}_{-0.024} \quad (-1.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.012}_{-0.013} \quad (+0.9\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 6.9) \quad (+0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.964^{+0.026}_{-0.025} \quad (-1.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4531^{+0.0063}_{-0.0064} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.7)$
$r_{\mathrm{drag}} h$	$100.5^{+2.1}_{-2.1} \quad (+1.1\sigma)$	$H(0.15)$	$72.9^{+4.5}_{-4.2} \quad (+0.4\sigma)$	χ_{CMB}^2	$1256.5 \quad (\nu: 8.3) \quad (+11.4\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1269.92; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.92; R - 1 = 0.01050$$

7.32 base_nnu_plikHM_TE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00053}_{-0.00054} \quad (+1.1\sigma)$	z_{re}	$< 8.81 \quad (+0.3\sigma)$	$D_{\text{M}}(0.38)$	$1550^{+83}_{-85} \quad (-0.0\sigma)$
$\Omega_c h^2$	$0.115^{+0.012}_{-0.011} \quad (-1.2\sigma)$	$10^9 A_{\text{s}}$	$2.075^{+0.074}_{-0.068} \quad (-0.2\sigma)$	$H(0.51)$	$88.6^{+4.6}_{-4.3} \quad (-0.2\sigma)$
$100\theta_{\text{MC}}$	$1.0418^{+0.0017}_{-0.0016} \quad (+1.6\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.856^{+0.050}_{-0.052} \quad (-1.1\sigma)$	$D_{\text{M}}(0.51)$	$2008^{+110}_{-110} \quad (+0.0\sigma)$
τ	$0.056^{+0.012}_{-0.012} \quad (+0.5\sigma)$	D_{40}	$1225^{+49}_{-49} \quad (-0.5\sigma)$	$H(0.61)$	$94.1^{+4.8}_{-4.4} \quad (-0.3\sigma)$
N_{eff}	$2.83^{+0.71}_{-0.63} \quad (-0.6\sigma)$	D_{220}	$5722^{+110}_{-110} \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	$2336^{+120}_{-120} \quad (+0.0\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.033^{+0.035}_{-0.033} \quad (-0.2\sigma)$	D_{810}	$2532^{+41}_{-43} \quad (-0.3\sigma)$	$H(2.33)$	$233^{+10}_{-9.5} \quad (-0.9\sigma)$
n_{s}	$0.963^{+0.024}_{-0.025} \quad (+0.2\sigma)$	D_{1420}	$820^{+24}_{-25} \quad (+1.0\sigma)$	$D_{\text{M}}(2.33)$	$5842^{+270}_{-290} \quad (+0.3\sigma)$
y_{cal}	$1.0005^{+0.0051}_{-0.0049} \quad (-0.0\sigma)$	D_{2000}	$233^{+10}_{-11} \quad (+1.4\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.016}_{-0.015} \quad (-1.2\sigma)$
A_{100}^{dustTE}	$0.113^{+0.076}_{-0.074}$	$n_{\text{s},0.002}$	$0.963^{+0.024}_{-0.025} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.737^{+0.030}_{-0.029} \quad (-0.8\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.138^{+0.058}_{-0.059}$	Y_{P}	$0.2424^{+0.0096}_{-0.0091} \quad (-0.6\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.016}_{-0.015} \quad (-1.3\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$Y_{\text{P}}^{\text{BBN}}$	$0.2437^{+0.0096}_{-0.0091} \quad (-0.6\sigma)$	$\sigma_8(0.38)$	$0.653^{+0.027}_{-0.026} \quad (-0.6\sigma)$
A_{143}^{dustTE}	$0.224^{+0.099}_{-0.11}$	10^5D/H	$2.51^{+0.20}_{-0.18} \quad (-1.7\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.017}_{-0.016} \quad (-1.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	Age/Gyr	$13.99^{+0.65}_{-0.68} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.611^{+0.026}_{-0.025} \quad (-0.6\sigma)$
A_{217}^{dustTE}	$2.06^{+0.54}_{-0.50}$	z_*	$1089.3^{+1.4}_{-1.4} \quad (-2.0\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.017}_{-0.016} \quad (-1.2\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0015} \quad (+1.0\sigma)$	r_*	$146.8^{+6.6}_{-6.8} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.024}_{-0.024} \quad (-0.5\sigma)$
c_{217}	$0.9980^{+0.0012}_{-0.0013} \quad (-0.4\sigma)$	$100\theta_*$	$1.0421^{+0.0021}_{-0.0020} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.012}_{-0.012} \quad (-0.4\sigma)$
H_0	$66.8^{+3.9}_{-3.9} \quad (+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$14.09^{+0.61}_{-0.63} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.013}_{-0.013} \quad (-0.3\sigma)$
Ω_{Λ}	$0.690^{+0.016}_{-0.016} \quad (+0.7\sigma)$	z_{drag}	$1059.5^{+2.3}_{-2.2} \quad (+0.3\sigma)$	χ_{lensing}^2	$10.1 \quad (\nu: 1.6)$
Ω_{m}	$0.310^{+0.016}_{-0.016} \quad (-0.7\sigma)$	r_{drag}	$149.5^{+6.8}_{-7.1} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.8) \quad (+0.0\sigma)$
$\Omega_{\text{m}} h^2$	$0.138^{+0.012}_{-0.011} \quad (-1.1\sigma)$	k_{D}	$0.1393^{+0.0050}_{-0.0047} \quad (-0.5\sigma)$	χ_{plikTE}^2	$860.4 \quad (\nu: 7.0)$
$\Omega_{\text{m}} h^3$	$0.093^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$100\theta_{\text{D}}$	$0.1602^{+0.0018}_{-0.0016} \quad (-1.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.061 \quad (\nu: 0.0)$
σ_8	$0.797^{+0.032}_{-0.031} \quad (-0.9\sigma)$	z_{eq}	$3390^{+66}_{-58} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.2)$
S_8	$0.811^{+0.029}_{-0.028} \quad (-1.2\sigma)$	k_{eq}	$0.01019^{+0.00042}_{-0.00037} \quad (-1.3\sigma)$	χ_{DR12BAO}^2	$4.7 \quad (\nu: 1.3)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.444^{+0.016}_{-0.015} \quad (-1.2\sigma)$	$100\theta_{\text{eq}}$	$0.816^{+0.011}_{-0.012} \quad (+0.6\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 7.4) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.595^{+0.021}_{-0.020} \quad (-1.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4508^{+0.0056}_{-0.0060} \quad (+0.5\sigma)$	χ_{CMB}^2	$1267.4 \quad (\nu: 8.8) \quad (+13.3\sigma)$
$\sigma_8/h^{0.5}$	$0.976^{+0.019}_{-0.019} \quad (-1.1\sigma)$	$H(0.15)$	$72.0^{+4.1}_{-3.8} \quad (+0.0\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.9)$
$r_{\text{drag}} h$	$99.8^{+1.9}_{-1.9} \quad (+0.7\sigma)$	$D_{\text{M}}(0.15)$	$650^{+36}_{-37} \quad (-0.1\sigma)$		
$\langle d^2 \rangle^{1/2}$	$2.424^{+0.058}_{-0.054} \quad (-0.8\sigma)$	$H(0.38)$	$82.0^{+4.4}_{-4.0} \quad (-0.1\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1281.05; \Delta \bar{\chi}_{\text{eff}}^2 = 0.53; R - 1 = 0.03229$$

7.33 base_nnu_plikHM_EE_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02342	$0.0230^{+0.0017}_{-0.0019}$ (+2.9 σ)	D_{810}	2612	2589^{+71}_{-73} (+3.7 σ)	$D_M(0.51)$	2052	2075^{+300}_{-300} (+1.2 σ)
$\Omega_c h^2$	0.1056	$0.106^{+0.031}_{-0.030}$ (-3.5 σ)	D_{1420}	863	854^{+51}_{-52} (+7.6 σ)	$H(0.61)$	91.7	91^{+10}_{-10} (-1.6 σ)
$100\theta_{MC}$	1.0415	$1.0421^{+0.0058}_{-0.0052}$ (+2.1 σ)	D_{2000}	250.4	248^{+25}_{-25} (+7.8 σ)	$D_M(0.61)$	2389	2415^{+400}_{-300} (+1.2 σ)
τ	0.0522	$0.051^{+0.016}_{-0.018}$ (+0.0 σ)	$n_{s,0.002}$	0.9643	$0.962^{+0.039}_{-0.039}$ (+0.1 σ)	$H(2.33)$	225.7	225^{+30}_{-30} (-3.1 σ)
N_{eff}	2.37	$2.4^{+1.8}_{-1.8}$ (-2.2 σ)	Y_P	0.2363	$0.235^{+0.026}_{-0.028}$ (-2.4 σ)	$D_M(2.33)$	5996	6051^{+900}_{-800} (+2.0 σ)
$\ln(10^{10} A_s)$	3.032	$3.015^{+0.086}_{-0.093}$ (-1.1 σ)	Y_P^{BBN}	0.2376	$0.236^{+0.026}_{-0.028}$ (-2.4 σ)	$f\sigma_8(0.15)$	0.4293	$0.429^{+0.044}_{-0.045}$ (-2.9 σ)
n_s	0.9643	$0.962^{+0.039}_{-0.039}$ (+0.1 σ)	$10^5 D/H$	2.182	$2.25^{+0.45}_{-0.44}$ (-5.4 σ)	$\sigma_8(0.15)$	0.714	$0.709^{+0.084}_{-0.086}$ (-2.9 σ)
y_{cal}	1.00042	$0.99997^{+0.0048}_{-0.0049}$ (-0.2 σ)	Age/Gyr	14.36	$14.5^{+2.1}_{-1.8}$ (+2.0 σ)	$f\sigma_8(0.38)$	0.4487	$0.447^{+0.047}_{-0.049}$ (-3.4 σ)
H_0	65.5	65^{+10}_{-9} (-0.6 σ)	z_*	1086.77	$1087.2^{+3.7}_{-3.3}$ (-6.2 σ)	$\sigma_8(0.38)$	0.634	$0.629^{+0.076}_{-0.077}$ (-2.6 σ)
Ω_Λ	0.6976	$0.694^{+0.022}_{-0.024}$ (+1.0 σ)	r_*	151.2	152^{+20}_{-20} (+3.0 σ)	$f\sigma_8(0.51)$	0.4484	$0.447^{+0.048}_{-0.050}$ (-3.5 σ)
Ω_m	0.3024	$0.306^{+0.024}_{-0.022}$ (-1.0 σ)	$100\theta_*$	1.0420	$1.0427^{+0.0071}_{-0.0065}$ (+2.2 σ)	$\sigma_8(0.51)$	0.593	$0.589^{+0.071}_{-0.073}$ (-2.4 σ)
$\Omega_m h^2$	0.1297	$0.130^{+0.032}_{-0.031}$ (-3.2 σ)	$D_M(z_*)/\text{Gpc}$	14.51	$14.6^{+2.0}_{-1.8}$ (+3.0 σ)	$f\sigma_8(0.61)$	0.4444	$0.442^{+0.049}_{-0.050}$ (-3.6 σ)
$\Omega_m h^3$	0.0849	$0.085^{+0.034}_{-0.032}$ (-1.8 σ)	z_{drag}	1060.8	$1059.6^{+6.9}_{-7.7}$ (+0.4 σ)	$\sigma_8(0.61)$	0.565	$0.561^{+0.068}_{-0.070}$ (-2.3 σ)
σ_8	0.771	$0.767^{+0.089}_{-0.091}$ (-3.1 σ)	r_{drag}	153.6	155^{+20}_{-20} (+2.8 σ)	$f\sigma_8(2.33)$	0.2852	$0.283^{+0.035}_{-0.036}$ (-2.1 σ)
S_8	0.774	$0.774^{+0.078}_{-0.081}$ (-2.7 σ)	k_D	0.1376	$0.137^{+0.015}_{-0.015}$ (-1.9 σ)	$\sigma_8(2.33)$	0.2944	$0.292^{+0.037}_{-0.037}$ (-1.8 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4242	$0.424^{+0.043}_{-0.045}$ (-2.7 σ)	$100\theta_D$	0.15735	$0.1579^{+0.0040}_{-0.0040}$ (-4.8 σ)	χ^2_{simall}	395.54	$396.7 (\nu: 1.2)$ (-0.1 σ)
$\sigma_8 \Omega_m^{0.25}$	0.572	$0.570^{+0.061}_{-0.064}$ (-3.4 σ)	z_{eq}	3392	3390^{+84}_{-77} (-0.5 σ)	χ^2_{plikEE}	738.8	$743.5 (\nu: 5.0)$
$\sigma_8/h^{0.5}$	0.9531	$0.951^{+0.049}_{-0.051}$ (-2.6 σ)	k_{eq}	0.00987	$0.0098^{+0.0012}_{-0.0011}$ (-3.5 σ)	$\chi^2_{6\text{DF}}$	0.000	$0.064 (\nu: 0.0)$
$r_{\text{drag}} h$	100.58	$100.3^{+2.5}_{-2.4}$ (+1.0 σ)	$100\theta_{\text{eq}}$	0.8181	$0.817^{+0.014}_{-0.015}$ (+0.7 σ)	χ^2_{MGS}	1.75	$1.70 (\nu: 0.3)$
$\langle d^2 \rangle^{1/2}$	2.398	$2.390^{+0.074}_{-0.077}$ (-1.5 σ)	$100\theta_{s,\text{eq}}$	0.4511	$0.4511^{+0.0069}_{-0.0071}$ (+0.6 σ)	χ^2_{DR12BAO}	3.56	$4.5 (\nu: 1.1)$
z_{re}	6.95	$6.9^{+1.6}_{-1.9}$ (-0.6 σ)	$H(0.15)$	70.5	70^{+10}_{-10} (-0.8 σ)	χ^2_{prior}	0.03	$0.98 (\nu: 1.0)$ (-1.7 σ)
$10^9 A_s$	2.073	$2.04^{+0.18}_{-0.19}$ (-1.0 σ)	$D_M(0.15)$	663	671^{+100}_{-100} (+0.9 σ)	χ^2_{BAO}	5.30	$6.2 (\nu: 1.0)$
$10^9 A_s e^{-2\tau}$	1.868	$1.84^{+0.14}_{-0.16}$ (-1.8 σ)	$H(0.38)$	80.0	80^{+10}_{-10} (-1.2 σ)	χ^2_{CMB}	1134.3	$1140.2 (\nu: 6.3)$ (-9.5 σ)
D_{40}	1247	1235^{+61}_{-62} (-0.1 σ)	$D_M(0.38)$	1583	1601^{+200}_{-200} (+1.1 σ)			
D_{220}	5969	5880^{+270}_{-260} (+4.1 σ)	$H(0.51)$	86.4	86^{+10}_{-10} (-1.4 σ)			

Best-fit $\chi^2_{\text{eff}} = 1139.64$; $\Delta\chi^2_{\text{eff}} = -0.53$; $\bar{\chi}^2_{\text{eff}} = 1147.36$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.01$; $R - 1 = 0.00877$

χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.75 (Δ -0.14) DR12BAO: 3.56 (Δ -0.04) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.54 (Δ -0.07) plik_rd12_HM_v22_EE: 738.76 (Δ -0.28)

7.34 base_nnu_plikHM_EE_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0230^{+0.0014}_{-0.0015} \quad (+2.9\sigma)$	D_{810}	$2586^{+56}_{-56} \quad (+3.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2065^{+200}_{-200} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.106^{+0.023}_{-0.022} \quad (-3.4\sigma)$	D_{1420}	$852^{+42}_{-41} \quad (+7.2\sigma)$	$H(0.61)$	$91.5^{+9.6}_{-9.2} \quad (-1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0418^{+0.0044}_{-0.0041} \quad (+1.7\sigma)$	D_{2000}	$247^{+20}_{-19} \quad (+7.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2404^{+300}_{-200} \quad (+1.0\sigma)$
τ	$0.051^{+0.015}_{-0.017} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.963^{+0.031}_{-0.030} \quad (+0.2\sigma)$	$H(2.33)$	$226^{+21}_{-20} \quad (-2.9\sigma)$
N_{eff}	$2.4^{+1.4}_{-1.3} \quad (-2.1\sigma)$	Y_{P}	$0.236^{+0.019}_{-0.021} \quad (-2.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$6023^{+640}_{-580} \quad (+1.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.018^{+0.059}_{-0.062} \quad (-0.9\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.237^{+0.020}_{-0.021} \quad (-2.2\sigma)$	$f\sigma_8(0.15)$	$0.430^{+0.031}_{-0.031} \quad (-2.8\sigma)$
n_{s}	$0.963^{+0.031}_{-0.030} \quad (+0.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.26^{+0.35}_{-0.32} \quad (-5.2\sigma)$	$\sigma_8(0.15)$	$0.712^{+0.060}_{-0.059} \quad (-2.7\sigma)$
y_{cal}	$0.9999^{+0.0048}_{-0.0048} \quad (-0.2\sigma)$	Age/Gyr	$14.4^{+1.5}_{-1.4} \quad (+1.8\sigma)$	$f\sigma_8(0.38)$	$0.449^{+0.033}_{-0.033} \quad (-3.2\sigma)$
H_0	$65^{+8}_{-7} \quad (-0.6\sigma)$	z_*	$1087.3^{+2.7}_{-2.5} \quad (-5.9\sigma)$	$\sigma_8(0.38)$	$0.632^{+0.054}_{-0.054} \quad (-2.4\sigma)$
Ω_{Λ}	$0.694^{+0.021}_{-0.023} \quad (+1.0\sigma)$	r_*	$152^{+16}_{-14} \quad (+2.7\sigma)$	$f\sigma_8(0.51)$	$0.448^{+0.034}_{-0.034} \quad (-3.4\sigma)$
Ω_{m}	$0.306^{+0.023}_{-0.021} \quad (-1.0\sigma)$	$100\theta_*$	$1.0424^{+0.0054}_{-0.0050} \quad (+1.8\sigma)$	$\sigma_8(0.51)$	$0.591^{+0.051}_{-0.051} \quad (-2.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.130^{+0.024}_{-0.023} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.6^{+1.5}_{-1.3} \quad (+2.7\sigma)$	$f\sigma_8(0.61)$	$0.444^{+0.034}_{-0.034} \quad (-3.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.085^{+0.026}_{-0.024} \quad (-1.8\sigma)$	z_{drag}	$1059.7^{+5.3}_{-5.6} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.563^{+0.049}_{-0.049} \quad (-2.2\sigma)$
σ_8	$0.770^{+0.063}_{-0.063} \quad (-2.9\sigma)$	r_{drag}	$154^{+17}_{-15} \quad (+2.5\sigma)$	$f\sigma_8(2.33)$	$0.284^{+0.025}_{-0.025} \quad (-1.9\sigma)$
S_8	$0.776^{+0.056}_{-0.056} \quad (-2.6\sigma)$	k_{D}	$0.137^{+0.011}_{-0.011} \quad (-1.8\sigma)$	$\sigma_8(2.33)$	$0.293^{+0.027}_{-0.027} \quad (-1.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.425^{+0.031}_{-0.031} \quad (-2.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1580^{+0.0031}_{-0.0029} \quad (-4.6\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.2 \quad (\nu: 0.7)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.572^{+0.043}_{-0.043} \quad (-3.3\sigma)$	z_{eq}	$3387^{+74}_{-68} \quad (-0.5\sigma)$	χ^2_{simall}	$396.6 \quad (\nu: 1.0) \quad (-0.2\sigma)$
$\sigma_8/h^{0.5}$	$0.953^{+0.033}_{-0.036} \quad (-2.5\sigma)$	k_{eq}	$0.00986^{+0.00087}_{-0.00082} \quad (-3.4\sigma)$	χ^2_{plikEE}	$742.5 \quad (\nu: 3.6)$
$r_{\mathrm{drag}}h$	$100.3^{+2.4}_{-2.3} \quad (+1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.013}_{-0.013} \quad (+0.7\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.061 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.391^{+0.059}_{-0.061} \quad (-1.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4514^{+0.0062}_{-0.0063} \quad (+0.6\sigma)$	χ^2_{MGS}	$1.68 \quad (\nu: 0.2)$
z_{re}	$6.9^{+1.5}_{-1.8} \quad (-0.6\sigma)$	$H(0.15)$	$70^{+8}_{-8} \quad (-0.8\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.4 \quad (\nu: 1.0)$
$10^9 A_{\mathrm{s}}$	$2.05^{+0.12}_{-0.13} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$668^{+80}_{-70} \quad (+0.7\sigma)$	χ^2_{prior}	$0.96 \quad (\nu: 0.9) \quad (-1.7\sigma)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.85^{+0.10}_{-0.11} \quad (-1.5\sigma)$	$H(0.38)$	$79.8^{+8.8}_{-8.3} \quad (-1.1\sigma)$	χ^2_{CMB}	$1148.2 \quad (\nu: 6.2) \quad (-8.0\sigma)$
D_{40}	$1234^{+54}_{-55} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1593^{+200}_{-200} \quad (+0.9\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 0.9)$
D_{220}	$5873^{+220}_{-220} \quad (+3.9\sigma)$	$H(0.51)$	$86.2^{+9.2}_{-8.8} \quad (-1.3\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 1155.37$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -0.32$; $R - 1 = 0.00317$

7.35 base_nnu_plikHM_EE_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0230^{+0.0017}_{-0.0019} \quad (+3.0\sigma)$	D_{810}	$2586^{+71}_{-72} \quad (+3.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2058^{+300}_{-300} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.108^{+0.031}_{-0.030} \quad (-3.1\sigma)$	D_{1420}	$851^{+50}_{-51} \quad (+7.0\sigma)$	$H(0.61)$	$92^{+10}_{-10} \quad (-1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0418^{+0.0056}_{-0.0050} \quad (+1.6\sigma)$	D_{2000}	$246^{+25}_{-24} \quad (+7.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2395^{+400}_{-300} \quad (+0.9\sigma)$
τ	$0.055^{+0.012}_{-0.011} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.964^{+0.038}_{-0.038} \quad (+0.3\sigma)$	$H(2.33)$	$227^{+30}_{-30} \quad (-2.6\sigma)$
N_{eff}	$2.5^{+1.8}_{-1.7} \quad (-1.9\sigma)$	Y_{P}	$0.237^{+0.026}_{-0.027} \quad (-2.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$6004^{+800}_{-700} \quad (+1.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.028^{+0.077}_{-0.084} \quad (-0.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.238^{+0.026}_{-0.027} \quad (-2.0\sigma)$	$f\sigma_8(0.15)$	$0.433^{+0.042}_{-0.044} \quad (-2.5\sigma)$
n_{s}	$0.964^{+0.038}_{-0.038} \quad (+0.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.27^{+0.45}_{-0.44} \quad (-5.1\sigma)$	$\sigma_8(0.15)$	$0.717^{+0.081}_{-0.083} \quad (-2.3\sigma)$
y_{cal}	$0.99995^{+0.0048}_{-0.0049} \quad (-0.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.4^{+2.0}_{-1.8} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.452^{+0.046}_{-0.047} \quad (-2.9\sigma)$
H_0	$66^{+10}_{-9} \quad (-0.4\sigma)$	z_*	$1087.4^{+3.6}_{-3.3} \quad (-5.7\sigma)$	$\sigma_8(0.38)$	$0.636^{+0.073}_{-0.075} \quad (-2.0\sigma)$
Ω_{Λ}	$0.695^{+0.022}_{-0.024} \quad (+1.0\sigma)$	r_*	$151^{+20}_{-20} \quad (+2.5\sigma)$	$f\sigma_8(0.51)$	$0.451^{+0.047}_{-0.048} \quad (-3.0\sigma)$
Ω_{m}	$0.305^{+0.024}_{-0.022} \quad (-1.0\sigma)$	$100\theta_*$	$1.0423^{+0.0069}_{-0.0062} \quad (+1.7\sigma)$	$\sigma_8(0.51)$	$0.596^{+0.069}_{-0.070} \quad (-1.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.131^{+0.032}_{-0.031} \quad (-2.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.5^{+1.9}_{-1.7} \quad (+2.5\sigma)$	$f\sigma_8(0.61)$	$0.447^{+0.047}_{-0.048} \quad (-3.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.087^{+0.034}_{-0.032} \quad (-1.5\sigma)$	z_{drag}	$1060.0^{+6.8}_{-7.5} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.567^{+0.066}_{-0.067} \quad (-1.8\sigma)$
σ_8	$0.775^{+0.087}_{-0.088} \quad (-2.5\sigma)$	r_{drag}	$154^{+20}_{-20} \quad (+2.3\sigma)$	$f\sigma_8(2.33)$	$0.286^{+0.034}_{-0.034} \quad (-1.5\sigma)$
S_8	$0.781^{+0.075}_{-0.078} \quad (-2.4\sigma)$	k_{D}	$0.137^{+0.014}_{-0.014} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.035}_{-0.036} \quad (-1.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.428^{+0.041}_{-0.043} \quad (-2.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.1581^{+0.0042}_{-0.0038} \quad (-4.4\sigma)$	χ_{simall}^2	$396.4 \quad (\nu: 0.9) \quad (-0.3\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.576^{+0.059}_{-0.060} \quad (-2.9\sigma)$	z_{eq}	$3387^{+84}_{-75} \quad (-0.5\sigma)$	χ_{plikEE}^2	$743.4 \quad (\nu: 4.9)$
$\sigma_8/h^{0.5}$	$0.957^{+0.045}_{-0.047} \quad (-2.2\sigma)$	k_{eq}	$0.0099^{+0.0012}_{-0.0011} \quad (-3.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.063 \quad (\nu: 0.0)$
$r_{\mathrm{drag}}h$	$100.4^{+2.4}_{-2.4} \quad (+1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.014}_{-0.015} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.73 \quad (\nu: 0.3)$
$\langle d^2 \rangle^{1/2}$	$2.401^{+0.070}_{-0.066} \quad (-1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4514^{+0.0068}_{-0.0070} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 1.0)$
z_{re}	$< 8.42 \quad (-0.1\sigma)$	$H(0.15)$	$71^{+10}_{-10} \quad (-0.6\sigma)$	χ_{prior}^2	$0.97 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_{\mathrm{s}}$	$2.07^{+0.16}_{-0.17} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$665^{+100}_{-90} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.0)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.85^{+0.14}_{-0.15} \quad (-1.4\sigma)$	$H(0.38)$	$80^{+10}_{-10} \quad (-0.9\sigma)$	χ_{CMB}^2	$1139.8 \quad (\nu: 5.8) \quad (-9.5\sigma)$
D_{40}	$1234^{+60}_{-62} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1588^{+200}_{-200} \quad (+0.8\sigma)$		
D_{220}	$5875^{+270}_{-260} \quad (+4.0\sigma)$	$H(0.51)$	$87^{+10}_{-10} \quad (-1.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1147.01$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.05$; $R - 1 = 0.00611$

7.36 base_nnu_plikHM_EE_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0229^{+0.0014}_{-0.0015} \quad (+2.7\sigma)$	D_{810}	$2582^{+54}_{-54} \quad (+3.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2060^{+200}_{-200} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.107^{+0.023}_{-0.023} \quad (-3.3\sigma)$	D_{1420}	$850^{+42}_{-41} \quad (+6.7\sigma)$	$H(0.61)$	$91.7^{+9.8}_{-9.3} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0417^{+0.0045}_{-0.0041} \quad (+1.5\sigma)$	D_{2000}	$246^{+21}_{-19} \quad (+6.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2398^{+300}_{-300} \quad (+1.0\sigma)$
τ	$0.0549^{+0.011}_{-0.0096} \quad (+0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.964^{+0.031}_{-0.031} \quad (+0.2\sigma)$	$H(2.33)$	$226^{+22}_{-21} \quad (-2.8\sigma)$
N_{eff}	$2.4^{+1.4}_{-1.3} \quad (-2.0\sigma)$	Y_{P}	$0.237^{+0.020}_{-0.021} \quad (-2.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$6009^{+650}_{-590} \quad (+1.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.025^{+0.055}_{-0.059} \quad (-0.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.238^{+0.020}_{-0.021} \quad (-2.1\sigma)$	$f\sigma_8(0.15)$	$0.432^{+0.031}_{-0.030} \quad (-2.6\sigma)$
n_{s}	$0.964^{+0.031}_{-0.031} \quad (+0.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.28^{+0.35}_{-0.33} \quad (-5.0\sigma)$	$\sigma_8(0.15)$	$0.715^{+0.059}_{-0.060} \quad (-2.4\sigma)$
y_{cal}	$0.9998^{+0.0047}_{-0.0048} \quad (-0.3\sigma)$	Age/Gyr	$14.4^{+1.5}_{-1.4} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.451^{+0.033}_{-0.033} \quad (-3.0\sigma)$
H_0	$65^{+8}_{-7} \quad (-0.5\sigma)$	z_*	$1087.5^{+2.7}_{-2.6} \quad (-5.7\sigma)$	$\sigma_8(0.38)$	$0.635^{+0.053}_{-0.054} \quad (-2.1\sigma)$
Ω_{Λ}	$0.695^{+0.021}_{-0.023} \quad (+1.0\sigma)$	r_*	$151^{+16}_{-15} \quad (+2.6\sigma)$	$f\sigma_8(0.51)$	$0.450^{+0.033}_{-0.034} \quad (-3.1\sigma)$
Ω_{m}	$0.305^{+0.023}_{-0.021} \quad (-1.0\sigma)$	$100\theta_*$	$1.0423^{+0.0057}_{-0.0048} \quad (+1.6\sigma)$	$\sigma_8(0.51)$	$0.594^{+0.051}_{-0.051} \quad (-2.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.131^{+0.024}_{-0.024} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.5^{+1.5}_{-1.3} \quad (+2.6\sigma)$	$f\sigma_8(0.61)$	$0.446^{+0.034}_{-0.034} \quad (-3.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.086^{+0.026}_{-0.025} \quad (-1.7\sigma)$	z_{drag}	$1059.7^{+5.4}_{-5.7} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.566^{+0.048}_{-0.049} \quad (-1.9\sigma)$
σ_8	$0.773^{+0.062}_{-0.063} \quad (-2.7\sigma)$	r_{drag}	$154^{+17}_{-15} \quad (+2.4\sigma)$	$f\sigma_8(2.33)$	$0.286^{+0.025}_{-0.025} \quad (-1.7\sigma)$
S_8	$0.780^{+0.055}_{-0.055} \quad (-2.5\sigma)$	k_{D}	$0.137^{+0.011}_{-0.011} \quad (-1.7\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.026}_{-0.027} \quad (-1.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.427^{+0.030}_{-0.030} \quad (-2.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1581^{+0.0031}_{-0.0030} \quad (-4.3\sigma)$	$\chi^2_{\mathrm{lensing}}$	$9.1 \quad (\nu: 0.7)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.575^{+0.043}_{-0.042} \quad (-3.0\sigma)$	z_{eq}	$3383^{+72}_{-66} \quad (-0.6\sigma)$	χ^2_{simall}	$396.3 \quad (\nu: 0.7) \quad (-0.3\sigma)$
$\sigma_8/h^{0.5}$	$0.957^{+0.032}_{-0.034} \quad (-2.2\sigma)$	k_{eq}	$0.00988^{+0.00089}_{-0.00083} \quad (-3.3\sigma)$	χ^2_{plikEE}	$742.4 \quad (\nu: 3.5)$
$r_{\mathrm{drag}}h$	$100.4^{+2.4}_{-2.4} \quad (+1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.013}_{-0.014} \quad (+0.8\sigma)$	$\chi^2_{6\mathrm{DF}}$	$0.061 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.398^{+0.056}_{-0.057} \quad (-1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0061}_{-0.0063} \quad (+0.7\sigma)$	χ^2_{MGS}	$1.72 \quad (\nu: 0.3)$
z_{re}	$< 8.35 \quad (-0.1\sigma)$	$H(0.15)$	$70^{+8}_{-8} \quad (-0.7\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	$4.4 \quad (\nu: 1.0)$
10^9A_{s}	$2.06^{+0.11}_{-0.13} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$666^{+80}_{-70} \quad (+0.7\sigma)$	χ^2_{prior}	$0.9 \quad (\nu: 0.9) \quad (-1.8\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.847^{+0.099}_{-0.11} \quad (-1.5\sigma)$	$H(0.38)$	$80^{+9}_{-8} \quad (-1.0\sigma)$	χ^2_{CMB}	$1147.9 \quad (\nu: 5.7) \quad (-8.1\sigma)$
D_{40}	$1232^{+52}_{-55} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1589^{+200}_{-200} \quad (+0.8\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 0.9)$
D_{220}	$5860^{+210}_{-210} \quad (+3.6\sigma)$	$H(0.51)$	$86.4^{+9.3}_{-8.8} \quad (-1.2\sigma)$		

$\bar{\chi}^2_{\mathrm{eff}} = 1155.01$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -0.38$; $R - 1 = 0.00359$

7.37 base_nnu_plikHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022244	$0.02227^{+0.00046}_{-0.00044}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9823	$0.983^{+0.024}_{-0.024}$ (−0.6 σ)	$D_M(0.38)$	1525	1518^{+59}_{-58} (−0.7 σ)
$\Omega_c h^2$	0.1193	$0.1206^{+0.0080}_{-0.0074}$ (+0.1 σ)	$r_{\text{drag}} h$	99.87	$99.96^{+2.1}_{-2.0}$ (+0.8 σ)	$H(0.51)$	89.87	$90.3^{+3.1}_{-3.0}$ (+0.6 σ)
$100\theta_{\text{MC}}$	1.04094	$1.0408^{+0.0011}_{-0.0011}$ (−0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.425	$2.426^{+0.056}_{-0.055}$ (−0.7 σ)	$D_M(0.51)$	1976	1967^{+74}_{-74} (−0.7 σ)
τ	0.0545	$0.054^{+0.016}_{-0.016}$ (+0.3 σ)	z_{re}	7.72	$7.7^{+1.6}_{-1.7}$ (+0.3 σ)	$H(0.61)$	95.47	$96.0^{+3.2}_{-3.1}$ (+0.6 σ)
N_{eff}	3.075	$3.15^{+0.46}_{-0.44}$ (+0.5 σ)	$10^9 A_s$	2.095	$2.100^{+0.083}_{-0.082}$ (+0.4 σ)	$D_M(0.61)$	2300	2289^{+85}_{-84} (−0.7 σ)
$\ln(10^{10} A_s)$	3.0421	$3.044^{+0.039}_{-0.040}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8787	$1.885^{+0.042}_{-0.042}$ (+0.2 σ)	$H(2.33)$	236.1	$237.1^{+6.8}_{-6.5}$ (+0.3 σ)
n_s	0.9686	$0.970^{+0.016}_{-0.017}$ (+0.7 σ)	D_{40}	1221.3	1222^{+29}_{-29} (−0.7 σ)	$D_M(2.33)$	5754	5728^{+180}_{-180} (−0.6 σ)
y_{cal}	1.00034	$1.0006^{+0.0048}_{-0.0049}$ (+0.0 σ)	D_{220}	5714	5719^{+78}_{-80} (+0.2 σ)	$f\sigma_8(0.15)$	0.4546	$0.456^{+0.017}_{-0.017}$ (−0.7 σ)
A_{217}^{CIB}	49.7	48^{+10}_{-10} (+0.1 σ)	D_{810}	2536.1	2537^{+28}_{-28} (+0.1 σ)	$\sigma_8(0.15)$	0.7477	$0.750^{+0.026}_{-0.025}$ (+0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.19	—	D_{1420}	815.8	815^{+10}_{-10} (+0.0 σ)	$f\sigma_8(0.38)$	0.4734	$0.475^{+0.016}_{-0.016}$ (−0.5 σ)
A_{143}^{tSZ}	7.05	$4.9^{+3.9}_{-3.9}$ (−0.1 σ)	D_{2000}	230.01	$229.4^{+4.3}_{-4.4}$ (−0.2 σ)	$\sigma_8(0.38)$	0.6630	$0.666^{+0.023}_{-0.022}$ (+0.4 σ)
A_{100}^{PS}	257	266^{+60}_{-60} (+0.1 σ)	$n_{s,0.002}$	0.9686	$0.970^{+0.016}_{-0.017}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4723	$0.474^{+0.016}_{-0.015}$ (−0.3 σ)
A_{143}^{PS}	47.6	50^{+20}_{-20} (+0.1 σ)	Y_{P}	0.2457	$0.2466^{+0.0061}_{-0.0060}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6206	$0.623^{+0.022}_{-0.021}$ (+0.4 σ)
$A_{143 \times 217}^{\text{PS}}$	43.4	44^{+20}_{-20} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2471	$0.2480^{+0.0061}_{-0.0061}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4675	$0.469^{+0.016}_{-0.015}$ (−0.2 σ)
A_{217}^{PS}	117.6	115^{+20}_{-20} (−0.0 σ)	10^5D/H	2.620	$2.64^{+0.14}_{-0.13}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5906	$0.593^{+0.021}_{-0.020}$ (+0.4 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.777	$13.71^{+0.44}_{-0.43}$ (−0.6 σ)	$f\sigma_8(2.33)$	0.2979	$0.299^{+0.011}_{-0.010}$ (+0.5 σ)
A_{100}^{dustTT}	8.86	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	z_*	1090.05	$1090.19^{+0.98}_{-0.93}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3072	$0.308^{+0.012}_{-0.011}$ (+0.6 σ)
A_{143}^{dustTT}	10.81	$10.8^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	144.55	$143.9^{+4.3}_{-4.3}$ (−0.4 σ)	f_{2000}^{143}	30.5	32^{+7}_{-7} (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.1	$18.3^{+6.5}_{-6.5}$ (+0.0 σ)	$100\theta_*$	1.04111	$1.0410^{+0.0013}_{-0.0013}$ (−0.2 σ)	$f_{2000}^{143 \times 217}$	33.22	34^{+5}_{-5} (+0.2 σ)
A_{217}^{dustTT}	94.1	93^{+10}_{-10} (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.884	$13.82^{+0.40}_{-0.40}$ (−0.4 σ)	f_{2000}^{217}	107.69	$108.5^{+4.5}_{-4.4}$ (+0.2 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.63	$1059.8^{+1.7}_{-1.7}$ (+0.6 σ)	χ_{small}^2	396.05	$397.1 (\nu: 1.8)$ (+0.1 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.26	$146.6^{+4.5}_{-4.4}$ (−0.4 σ)	χ_{lowl}^2	22.69	$22.8 (\nu: 0.7)$ (−0.7 σ)
H_0	67.82	$68.2^{+2.9}_{-2.8}$ (+0.7 σ)	k_{D}	0.14048	$0.1410^{+0.0033}_{-0.0032}$ (+0.4 σ)	χ_{plik}^2	760.2	$773.2 (\nu: 16.2)$ (+0.3 σ)
Ω_Λ	0.6908	$0.691^{+0.016}_{-0.016}$ (+0.8 σ)	$100\theta_{\text{D}}$	0.16107	$0.1612^{+0.0012}_{-0.0011}$ (+0.4 σ)	$\chi_{6\text{DF}}^2$	0.016	$0.057 (\nu: 0.0)$
Ω_{m}	0.3092	$0.309^{+0.016}_{-0.016}$ (−0.8 σ)	z_{eq}	3370	3368^{+60}_{-62} (−0.8 σ)	χ_{MGS}^2	1.34	$1.47 (\nu: 0.2)$
$\Omega_{\text{m}} h^2$	0.1422	$0.1435^{+0.0081}_{-0.0076}$ (+0.2 σ)	k_{eq}	0.010307	$0.01035^{+0.00030}_{-0.00028}$ (−0.3 σ)	χ_{DR12BAO}^2	4.05	$4.7 (\nu: 1.2)$
$\Omega_{\text{m}} h^3$	0.0965	$0.0979^{+0.0094}_{-0.0086}$ (+0.5 σ)	$100\theta_{\text{eq}}$	0.8187	$0.819^{+0.012}_{-0.011}$ (+0.8 σ)	χ_{prior}^2	1.4	$7.3 (\nu: 6.7)$ (+0.0 σ)
σ_8	0.8089	$0.812^{+0.027}_{-0.026}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.4523	$0.4525^{+0.0060}_{-0.0057}$ (+0.8 σ)	χ_{BAO}^2	5.41	$6.2 (\nu: 0.9)$
S_8	0.8213	$0.823^{+0.032}_{-0.032}$ (−0.7 σ)	$H(0.15)$	73.08	$73.5^{+2.9}_{-2.8}$ (+0.7 σ)	χ_{CMB}^2	1178.9	$1193.0 (\nu: 15.8)$ (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4498	$0.451^{+0.018}_{-0.017}$ (−0.7 σ)	$D_M(0.15)$	639.4	636^{+26}_{-26} (−0.7 σ)			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6032	$0.605^{+0.021}_{-0.020}$ (−0.5 σ)	$H(0.38)$	83.17	$83.6^{+3.0}_{-2.9}$ (+0.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1185.72$; $\Delta\chi_{\text{eff}}^2 = -0.03$; $\bar{\chi}_{\text{eff}}^2 = 1206.54$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.52$; $R - 1 = 0.01083$

χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.34 (Δ 0.06) DR12BAO: 4.05 (Δ -0.14) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.05 (Δ 0.16) commander_dx12_v3_2_29: 22.69 (Δ -0.14) plik_rd12_HM_v22_TT: 760.20 (Δ 0.10)

7.38 base_nnu_plikHM_TT_lowl_lowE_BAO_post_lensing_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022247	$0.02227^{+0.00045}_{-0.00044}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9834	$0.984^{+0.018}_{-0.018}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1528	1520^{+58}_{-57} (−0.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.1192	$0.1202^{+0.0073}_{-0.0070}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	99.76	$99.9^{+1.9}_{-1.9}$ (+0.8 σ)	$H(0.51)$	89.76	$90.2^{+3.0}_{-3.0}$ (+0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04096	$1.0409^{+0.0011}_{-0.0011}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4284	$2.431^{+0.045}_{-0.044}$ (−0.6 σ)	$D_{\mathrm{M}}(0.51)$	1979	1970^{+74}_{-71} (−0.6 σ)
τ	0.0545	$0.055^{+0.015}_{-0.014}$ (+0.5 σ)	z_{re}	7.72	$7.8^{+1.5}_{-1.5}$ (+0.5 σ)	$H(0.61)$	95.37	$95.8^{+3.1}_{-3.0}$ (+0.5 σ)
N_{eff}	3.060	$3.12^{+0.44}_{-0.42}$ (+0.4 σ)	$10^9 A_{\mathrm{s}}$	2.097	$2.105^{+0.072}_{-0.070}$ (+0.5 σ)	$D_{\mathrm{M}}(0.61)$	2303	2293^{+84}_{-82} (−0.6 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0429	$3.047^{+0.034}_{-0.033}$ (+0.5 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8801	$1.884^{+0.038}_{-0.040}$ (+0.1 σ)	$H(2.33)$	236.0	$236.9^{+6.3}_{-6.2}$ (+0.2 σ)
n_{s}	0.9680	$0.969^{+0.016}_{-0.016}$ (+0.6 σ)	D_{40}	1223.3	1225^{+28}_{-28} (−0.5 σ)	$D_{\mathrm{M}}(2.33)$	5760	5736^{+180}_{-180} (−0.5 σ)
y_{cal}	1.00062	$1.0007^{+0.0047}_{-0.0048}$ (+0.1 σ)	D_{220}	5720	5725^{+78}_{-78} (+0.3 σ)	$f\sigma_8(0.15)$	0.4552	$0.456^{+0.013}_{-0.013}$ (−0.6 σ)
A_{217}^{CIB}	48.0	48^{+10}_{-10} (+0.1 σ)	D_{810}	2538.8	2538^{+26}_{-26} (+0.1 σ)	$\sigma_8(0.15)$	0.7478	$0.751^{+0.022}_{-0.022}$ (+0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.42	—	D_{1420}	816.9	815^{+10}_{-10} (+0.1 σ)	$f\sigma_8(0.38)$	0.4739	$0.475^{+0.012}_{-0.012}$ (−0.4 σ)
A_{143}^{tSZ}	6.90	$5.0^{+3.9}_{-3.9}$ (−0.1 σ)	D_{2000}	230.45	$229.6^{+4.3}_{-4.3}$ (−0.1 σ)	$\sigma_8(0.38)$	0.6630	$0.666^{+0.020}_{-0.020}$ (+0.4 σ)
A_{100}^{PS}	253	265^{+60}_{-50} (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9680	$0.969^{+0.016}_{-0.016}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4726	$0.474^{+0.012}_{-0.012}$ (−0.3 σ)
A_{143}^{PS}	50.5	49^{+20}_{-20} (+0.1 σ)	Y_{P}	0.2455	$0.2464^{+0.0058}_{-0.0059}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6205	$0.623^{+0.019}_{-0.019}$ (+0.4 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	49.1	43^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2469	$0.2477^{+0.0058}_{-0.0059}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4678	$0.469^{+0.012}_{-0.012}$ (−0.2 σ)
A_{217}^{PS}	120.3	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.614	$2.63^{+0.13}_{-0.12}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5905	$0.593^{+0.019}_{-0.018}$ (+0.4 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.791	$13.73^{+0.43}_{-0.42}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.2978	$0.2991^{+0.0098}_{-0.0096}$ (+0.5 σ)
$A_{100}^{\mathrm{dustTT}}$	8.89	$9.0^{+3.7}_{-3.6}$ (+0.0 σ)	z_*	1090.02	$1090.14^{+0.91}_{-0.88}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3071	$0.308^{+0.011}_{-0.010}$ (+0.6 σ)
$A_{143}^{\mathrm{dustTT}}$	10.81	$10.7^{+3.6}_{-3.5}$ (+0.0 σ)	r_*	144.66	$144.1^{+4.1}_{-4.1}$ (−0.3 σ)	f_{2000}^{143}	30.0	31^{+7}_{-7} (+0.2 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.3^{+6.5}_{-6.5}$ (+0.0 σ)	$100\theta_*$	1.04115	$1.0410^{+0.0013}_{-0.0013}$ (−0.1 σ)	$f_{2000}^{143 \times 217}$	33.02	34^{+5}_{-5} (+0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94.7	93^{+10}_{-10} (−0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.894	$13.84^{+0.39}_{-0.38}$ (−0.3 σ)	f_{2000}^{217}	107.48	$108.3^{+4.4}_{-4.3}$ (+0.2 σ)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.59	$1059.8^{+1.6}_{-1.6}$ (+0.5 σ)	$\chi_{\mathrm{lensing}}^2$	8.92	9.45 (ν : 0.3)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.37	$146.8^{+4.3}_{-4.2}$ (−0.4 σ)	χ_{small}^2	396.08	397.1 (ν : 1.8) (+0.2 σ)
H_0	67.70	$68.1^{+2.8}_{-2.7}$ (+0.7 σ)	k_{D}	0.14043	$0.1408^{+0.0031}_{-0.0031}$ (+0.3 σ)	χ_{lowl}^2	22.79	23.0 (ν : 0.7) (−0.6 σ)
Ω_{Λ}	0.6899	$0.691^{+0.015}_{-0.015}$ (+0.8 σ)	$100\theta_{\mathrm{D}}$	0.16101	$0.1612^{+0.0011}_{-0.0011}$ (+0.3 σ)	χ_{plik}^2	760.1	772.5 (ν : 15.3) (+0.1 σ)
Ω_{m}	0.3101	$0.309^{+0.015}_{-0.015}$ (−0.8 σ)	z_{eq}	3374	3370^{+56}_{-57} (−0.8 σ)	χ_{JLA}^2	706.709	706.73 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.1421	$0.1432^{+0.0075}_{-0.0072}$ (+0.1 σ)	k_{eq}	0.010309	$0.01034^{+0.00026}_{-0.00025}$ (−0.4 σ)	$\chi_{6\mathrm{DF}}^2$	0.022	0.053 (ν : 0.0)
$\Omega_{\mathrm{m}}h^3$	0.0962	$0.0975^{+0.0088}_{-0.0083}$ (+0.4 σ)	$100\theta_{\mathrm{eq}}$	0.8180	$0.819^{+0.011}_{-0.010}$ (+0.8 σ)	χ_{MGS}^2	1.28	1.43 (ν : 0.2)
σ_8	0.8091	$0.812^{+0.023}_{-0.023}$ (+0.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.4519	$0.4523^{+0.0055}_{-0.0054}$ (+0.8 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.20	4.6 (ν : 1.1)
S_8	0.8226	$0.824^{+0.024}_{-0.024}$ (−0.7 σ)	$H(0.15)$	72.97	$73.4^{+2.8}_{-2.8}$ (+0.6 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.6) (−0.0 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4506	$0.451^{+0.013}_{-0.013}$ (−0.7 σ)	$D_{\mathrm{M}}(0.15)$	640.5	637^{+26}_{-25} (−0.7 σ)	χ_{CMB}^2	1187.9	1202.0 (ν : 15.9) (+1.6 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6038	$0.605^{+0.016}_{-0.016}$ (−0.4 σ)	$H(0.38)$	83.05	$83.5^{+2.9}_{-2.9}$ (+0.6 σ)	χ_{BAO}^2	5.50	6.1 (ν : 0.7)

Best-fit $\chi_{\mathrm{eff}}^2 = 1901.41$; $\bar{\chi}_{\mathrm{eff}}^2 = 1922.14$; $R - 1 = 0.01097$

χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.20 CMB - smicadx12_Dec5.ftl_mv2_ndclpp_p.teb_consext8: 8.92 small_100x143_offlike5_EE_Aplanck_B: 396.08 commander_dx12.v3.2.29: 22.79 plik_rd12_HM.v22_TT: 760.13 SN - JLA December_2013: 706.71

7.39 base_nnu_plikHM_TT_lowl_lowE_BAO_post_lensing_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022279	$0.02228^{+0.00045}_{-0.00044}$ ($+0.7\sigma$)	$\sigma_8/h^{0.5}$	0.9832	$0.984^{+0.018}_{-0.018}$ (-0.5σ)	$D_{\mathrm{M}}(0.38)$	1523	1519^{+57}_{-56} (-0.7σ)
$\Omega_{\mathrm{c}}h^2$	0.1197	$0.1203^{+0.0073}_{-0.0069}$ ($+0.1\sigma$)	$r_{\mathrm{drag}}h$	99.88	$99.96^{+1.9}_{-1.8}$ ($+0.8\sigma$)	$H(0.51)$	90.00	$90.2^{+3.0}_{-2.9}$ ($+0.6\sigma$)
$100\theta_{\mathrm{MC}}$	1.04093	$1.0409^{+0.0011}_{-0.0011}$ ($+0.0\sigma$)	$\langle d^2 \rangle^{1/2}$	2.4272	$2.430^{+0.045}_{-0.044}$ (-0.6σ)	$D_{\mathrm{M}}(0.51)$	1974	1968^{+72}_{-70} (-0.7σ)
τ	0.0545	$0.055^{+0.015}_{-0.014}$ ($+0.5\sigma$)	z_{re}	7.72	$7.8^{+1.5}_{-1.5}$ ($+0.5\sigma$)	$H(0.61)$	95.61	$95.9^{+3.1}_{-3.0}$ ($+0.6\sigma$)
N_{eff}	3.092	$3.13^{+0.44}_{-0.42}$ ($+0.5\sigma$)	$10^9 A_{\mathrm{s}}$	2.099	$2.106^{+0.071}_{-0.069}$ ($+0.5\sigma$)	$D_{\mathrm{M}}(0.61)$	2297	2291^{+82}_{-80} (-0.7σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0441	$3.047^{+0.033}_{-0.033}$ ($+0.5\sigma$)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8823	$1.885^{+0.038}_{-0.039}$ ($+0.2\sigma$)	$H(2.33)$	236.4	$236.9^{+6.3}_{-6.2}$ ($+0.2\sigma$)
n_{s}	0.9689	$0.969^{+0.016}_{-0.016}$ ($+0.7\sigma$)	D_{40}	1222.7	1224^{+28}_{-28} (-0.6σ)	$D_{\mathrm{M}}(2.33)$	5746	5733^{+180}_{-170} (-0.5σ)
y_{cal}	1.00071	$1.0007^{+0.0047}_{-0.0048}$ ($+0.1\sigma$)	D_{220}	5722	5725^{+78}_{-78} ($+0.3\sigma$)	$f\sigma_8(0.15)$	0.4553	$0.456^{+0.013}_{-0.013}$ (-0.6σ)
A_{217}^{CIB}	49.2	48^{+10}_{-10} ($+0.1\sigma$)	D_{810}	2539.1	2538^{+26}_{-26} ($+0.1\sigma$)	$\sigma_8(0.15)$	0.7490	$0.751^{+0.022}_{-0.021}$ ($+0.3\sigma$)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.25	—	D_{1420}	816.6	815^{+10}_{-10} ($+0.1\sigma$)	$f\sigma_8(0.38)$	0.4742	$0.475^{+0.012}_{-0.012}$ (-0.4σ)
A_{143}^{tSZ}	7.08	$5.0^{+3.9}_{-3.9}$ (-0.1σ)	D_{2000}	230.24	$229.6^{+4.3}_{-4.3}$ (-0.1σ)	$\sigma_8(0.38)$	0.6642	$0.666^{+0.020}_{-0.020}$ ($+0.4\sigma$)
A_{100}^{PS}	256	265^{+60}_{-50} ($+0.1\sigma$)	$n_{\mathrm{s},0.002}$	0.9689	$0.969^{+0.016}_{-0.016}$ ($+0.7\sigma$)	$f\sigma_8(0.51)$	0.4731	$0.474^{+0.012}_{-0.012}$ (-0.3σ)
A_{143}^{PS}	48.4	49^{+20}_{-20} ($+0.1\sigma$)	Y_{P}	0.2460	$0.2464^{+0.0057}_{-0.0058}$ ($+0.5\sigma$)	$\sigma_8(0.51)$	0.6217	$0.623^{+0.019}_{-0.019}$ ($+0.4\sigma$)
$A_{143 \times 217}^{\mathrm{PS}}$	45.1	43^{+20}_{-20} (-0.0σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2473	$0.2478^{+0.0057}_{-0.0058}$ ($+0.5\sigma$)	$f\sigma_8(0.61)$	0.4683	$0.469^{+0.012}_{-0.012}$ (-0.2σ)
A_{217}^{PS}	118.5	115^{+20}_{-20} (-0.0σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.619	$2.63^{+0.13}_{-0.12}$ ($+0.1\sigma$)	$\sigma_8(0.61)$	0.5916	$0.593^{+0.019}_{-0.018}$ ($+0.5\sigma$)
A^{kSZ}	0.0	—	Age/Gyr	13.758	$13.73^{+0.42}_{-0.41}$ (-0.5σ)	$f\sigma_8(2.33)$	0.2984	$0.2993^{+0.0097}_{-0.0095}$ ($+0.5\sigma$)
$A_{100}^{\mathrm{dustTT}}$	8.89	$9.0^{+3.7}_{-3.6}$ ($+0.0\sigma$)	z_*	1090.05	$1090.15^{+0.91}_{-0.88}$ (-0.2σ)	$\sigma_8(2.33)$	0.3077	$0.309^{+0.010}_{-0.010}$ ($+0.6\sigma$)
$A_{143}^{\mathrm{dustTT}}$	10.78	$10.7^{+3.6}_{-3.5}$ ($+0.0\sigma$)	r_*	144.35	$144.0^{+4.1}_{-4.0}$ (-0.4σ)	f_{2000}^{143}	30.4	31^{+7}_{-7} ($+0.2\sigma$)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.4	$18.3^{+6.5}_{-6.5}$ ($+0.0\sigma$)	$100\theta_*$	1.04109	$1.0410^{+0.0013}_{-0.0013}$ (-0.1σ)	$f_{2000}^{143 \times 217}$	33.22	34^{+5}_{-5} ($+0.2\sigma$)
$A_{217}^{\mathrm{dustTT}}$	94.6	93^{+10}_{-10} (-0.0σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.865	$13.84^{+0.38}_{-0.38}$ (-0.4σ)	f_{2000}^{217}	107.74	$108.3^{+4.4}_{-4.4}$ ($+0.2\sigma$)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ ($+0.0\sigma$)	z_{drag}	1059.74	$1059.8^{+1.6}_{-1.6}$ ($+0.5\sigma$)	$\chi_{\mathrm{lensing}}^2$	8.98	9.45 ($\nu: 0.3$)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ ($+0.0\sigma$)	r_{drag}	147.04	$146.7^{+4.2}_{-4.2}$ (-0.4σ)	χ_{simall}^2	396.05	397.2 ($\nu: 1.8$) ($+0.2\sigma$)
H_0	67.92	$68.1^{+2.8}_{-2.7}$ ($+0.7\sigma$)	k_{D}	0.14067	$0.1409^{+0.0031}_{-0.0031}$ ($+0.4\sigma$)	χ_{lowl}^2	22.70	22.9 ($\nu: 0.6$) (-0.7σ)
Ω_{Λ}	0.6909	$0.691^{+0.015}_{-0.015}$ ($+0.8\sigma$)	$100\theta_{\mathrm{D}}$	0.16107	$0.1612^{+0.0011}_{-0.0011}$ ($+0.3\sigma$)	χ_{plik}^2	760.1	772.6 ($\nu: 15.2$) ($+0.1\sigma$)
Ω_{m}	0.3091	$0.309^{+0.015}_{-0.015}$ (-0.8σ)	z_{eq}	3372	3369^{+55}_{-55} (-0.8σ)	χ_{JLA}^2	1034.95	1035.04 ($\nu: 0.1$)
$\Omega_{\mathrm{m}}h^2$	0.1426	$0.1432^{+0.0075}_{-0.0071}$ ($+0.1\sigma$)	k_{eq}	0.010323	$0.01034^{+0.00026}_{-0.00026}$ (-0.4σ)	$\chi_{6\mathrm{DF}}^2$	0.016	0.048 ($\nu: 0.0$)
$\Omega_{\mathrm{m}}h^3$	0.0969	$0.0976^{+0.0088}_{-0.0082}$ ($+0.5\sigma$)	$100\theta_{\mathrm{eq}}$	0.8185	$0.819^{+0.010}_{-0.010}$ ($+0.8\sigma$)	χ_{MGS}^2	1.34	1.45 ($\nu: 0.1$)
σ_8	0.8103	$0.812^{+0.023}_{-0.023}$ ($+0.2\sigma$)	$100\theta_{\mathrm{s,eq}}$	0.4522	$0.4525^{+0.0053}_{-0.0052}$ ($+0.8\sigma$)	$\chi_{\mathrm{DR12BAO}}^2$	4.05	4.5 ($\nu: 0.9$)
S_8	0.8226	$0.824^{+0.024}_{-0.024}$ (-0.7σ)	$H(0.15)$	73.19	$73.4^{+2.8}_{-2.7}$ ($+0.7\sigma$)	χ_{prior}^2	1.4	7.3 ($\nu: 6.6$) ($+0.0\sigma$)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4506	$0.451^{+0.013}_{-0.013}$ (-0.7σ)	$D_{\mathrm{M}}(0.15)$	638.4	637^{+25}_{-24} (-0.7σ)	χ_{CMB}^2	1187.9	1202.1 ($\nu: 15.9$) ($+1.6\sigma$)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6042	$0.605^{+0.016}_{-0.016}$ (-0.4σ)	$H(0.38)$	83.29	$83.5^{+2.9}_{-2.8}$ ($+0.6\sigma$)	χ_{BAO}^2	5.41	6.0 ($\nu: 0.6$)

Best-fit $\chi_{\mathrm{eff}}^2 = 2229.65$; $\Delta\chi_{\mathrm{eff}}^2 = -0.06$; $\bar{\chi}_{\mathrm{eff}}^2 = 2250.41$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.64$; $R - 1 = 0.01118$

χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.00) MGS: 1.34 (Δ 0.00) DR12BAO: 4.05 (Δ 0.02) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.98 (Δ 0.10) simall_100x143_offlike5_EE_Aplanck.L
396.06 (Δ -0.31) commander_dx12_v3.2_29: 22.70 (Δ -0.11) plik_rd12_HM_v22_TT: 760.14 (Δ 0.35) SN - JLA Pantheon18: 1034.95 (Δ -0.01)

7.40 base_nnu_plikHM_TT_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022244	$0.02225^{+0.00046}_{-0.00044}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9835	$0.985^{+0.018}_{-0.018}$ (−0.5 σ)	$D_M(0.38)$	1530	1523^{+59}_{-58} (−0.6 σ)
$\Omega_c h^2$	0.1192	$0.1201^{+0.0073}_{-0.0070}$ (+0.0 σ)	$r_{\text{drag}} h$	99.65	$99.8^{+2.0}_{-1.9}$ (+0.7 σ)	$H(0.51)$	89.67	$90.1^{+3.0}_{-3.0}$ (+0.5 σ)
$100\theta_{\text{MC}}$	1.04095	$1.0409^{+0.0011}_{-0.0011}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4306	$2.432^{+0.045}_{-0.045}$ (−0.6 σ)	$D_M(0.51)$	1982	1973^{+74}_{-73} (−0.6 σ)
τ	0.0544	$0.055^{+0.015}_{-0.014}$ (+0.5 σ)	z_{re}	7.70	$7.8^{+1.5}_{-1.5}$ (+0.4 σ)	$H(0.61)$	95.29	$95.7^{+3.1}_{-3.1}$ (+0.5 σ)
N_{eff}	3.050	$3.11^{+0.44}_{-0.43}$ (+0.4 σ)	$10^9 A_s$	2.095	$2.103^{+0.072}_{-0.070}$ (+0.4 σ)	$D_M(0.61)$	2306	2296^{+85}_{-83} (−0.6 σ)
$\ln(10^{10} A_s)$	3.0420	$3.046^{+0.034}_{-0.034}$ (+0.4 σ)	$10^9 A_s e^{-2\tau}$	1.8789	$1.884^{+0.038}_{-0.040}$ (+0.1 σ)	$H(2.33)$	235.9	$236.7^{+6.3}_{-6.3}$ (+0.2 σ)
n_s	0.9671	$0.968^{+0.016}_{-0.017}$ (+0.6 σ)	D_{40}	1224.7	1225^{+29}_{-29} (−0.5 σ)	$D_M(2.33)$	5765	5742^{+180}_{-180} (−0.5 σ)
y_{cal}	1.00054	$1.0007^{+0.0047}_{-0.0048}$ (+0.1 σ)	D_{220}	5720	5724^{+78}_{-78} (+0.3 σ)	$f\sigma_8(0.15)$	0.4555	$0.456^{+0.013}_{-0.013}$ (−0.6 σ)
A_{217}^{CIB}	49.2	48^{+10}_{-10} (+0.1 σ)	D_{810}	2537.2	2538^{+26}_{-26} (+0.1 σ)	$\sigma_8(0.15)$	0.7472	$0.750^{+0.022}_{-0.022}$ (+0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.23	—	D_{1420}	816.3	815^{+10}_{-10} (+0.1 σ)	$f\sigma_8(0.38)$	0.4740	$0.475^{+0.012}_{-0.012}$ (−0.4 σ)
A_{143}^{tSZ}	7.15	$5.0^{+3.9}_{-3.9}$ (−0.1 σ)	D_{2000}	230.29	$229.7^{+4.3}_{-4.3}$ (−0.1 σ)	$\sigma_8(0.38)$	0.6624	$0.665^{+0.020}_{-0.020}$ (+0.3 σ)
A_{100}^{PS}	254	265^{+60}_{-50} (+0.1 σ)	$n_{s,0.002}$	0.9671	$0.968^{+0.016}_{-0.017}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4726	$0.474^{+0.012}_{-0.012}$ (−0.3 σ)
A_{143}^{PS}	47.5	49^{+20}_{-20} (+0.1 σ)	Y_{P}	0.2454	$0.2462^{+0.0059}_{-0.0059}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6199	$0.623^{+0.020}_{-0.019}$ (+0.4 σ)
$A_{143 \times 217}^{\text{PS}}$	44.2	43^{+20}_{-20} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2467	$0.2475^{+0.0059}_{-0.0059}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4677	$0.469^{+0.012}_{-0.012}$ (−0.2 σ)
A_{217}^{PS}	118.0	115^{+20}_{-20} (−0.0 σ)	10^5D/H	2.611	$2.63^{+0.13}_{-0.12}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5899	$0.592^{+0.019}_{-0.019}$ (+0.4 σ)
A^{kSZ}	0.1	—	Age/Gyr	13.802	$13.75^{+0.43}_{-0.42}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.2975	$0.2988^{+0.0099}_{-0.0096}$ (+0.5 σ)
A_{100}^{dustTT}	9.00	$9.0^{+3.7}_{-3.6}$ (+0.0 σ)	z_*	1090.01	$1090.14^{+0.91}_{-0.87}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3067	$0.308^{+0.011}_{-0.010}$ (+0.5 σ)
A_{143}^{dustTT}	10.76	$10.7^{+3.6}_{-3.5}$ (+0.0 σ)	r_*	144.72	$144.2^{+4.2}_{-4.1}$ (−0.3 σ)	f_{2000}^{143}	30.2	31^{+7}_{-7} (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.3	$18.3^{+6.5}_{-6.4}$ (+0.0 σ)	$100\theta_*$	1.04113	$1.0410^{+0.0013}_{-0.0013}$ (−0.1 σ)	$f_{2000}^{143 \times 217}$	33.07	34^{+5}_{-5} (+0.1 σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.900	$13.85^{+0.39}_{-0.38}$ (−0.3 σ)	f_{2000}^{217}	107.57	$108.3^{+4.5}_{-4.3}$ (+0.1 σ)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.59	$1059.7^{+1.7}_{-1.7}$ (+0.5 σ)	χ_{lensing}^2	8.90	9.42 (ν : 0.3)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.43	$146.9^{+4.4}_{-4.2}$ (−0.3 σ)	χ_{simall}^2	396.08	397.1 (ν : 1.7) (+0.2 σ)
H_0	67.59	$68.0^{+2.9}_{-2.8}$ (+0.6 σ)	k_{D}	0.14040	$0.1408^{+0.0031}_{-0.0031}$ (+0.3 σ)	χ_{lowl}^2	22.94	23.0 (ν : 0.7) (−0.6 σ)
Ω_Λ	0.6890	$0.690^{+0.016}_{-0.016}$ (+0.7 σ)	$100\theta_{\text{D}}$	0.16098	$0.1612^{+0.0011}_{-0.0011}$ (+0.3 σ)	χ_{plik}^2	759.7	772.4 (ν : 15.2) (+0.1 σ)
Ω_{m}	0.3110	$0.310^{+0.016}_{-0.016}$ (−0.7 σ)	z_{eq}	3378	3373^{+57}_{-58} (−0.7 σ)	$\chi_{6\text{DF}}^2$	0.029	0.060 (ν : 0.0)
$\Omega_{\text{m}} h^2$	0.1421	$0.1430^{+0.0075}_{-0.0073}$ (+0.1 σ)	k_{eq}	0.010313	$0.01034^{+0.00026}_{-0.00025}$ (−0.4 σ)	χ_{MGS}^2	1.22	1.37 (ν : 0.2)
$\Omega_{\text{m}} h^3$	0.0960	$0.0973^{+0.0089}_{-0.0083}$ (+0.4 σ)	$100\theta_{\text{eq}}$	0.8173	$0.818^{+0.011}_{-0.011}$ (+0.7 σ)	χ_{DR12BAO}^2	4.38	4.8 (ν : 1.3)
σ_8	0.8086	$0.812^{+0.023}_{-0.023}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.4516	$0.4521^{+0.0056}_{-0.0055}$ (+0.7 σ)	χ_{prior}^2	1.5	7.3 (ν : 6.6) (−0.0 σ)
S_8	0.8233	$0.825^{+0.024}_{-0.025}$ (−0.6 σ)	$H(0.15)$	72.87	$73.2^{+2.9}_{-2.8}$ (+0.6 σ)	χ_{CMB}^2	1187.6	1201.9 (ν : 15.8) (+1.6 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4509	$0.452^{+0.013}_{-0.013}$ (−0.6 σ)	$D_M(0.15)$	641.4	638^{+26}_{-25} (−0.6 σ)	χ_{BAO}^2	5.63	6.2 (ν : 0.9)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6038	$0.606^{+0.016}_{-0.016}$ (−0.4 σ)	$H(0.38)$	82.96	$83.4^{+3.0}_{-2.9}$ (+0.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1194.71$; $\Delta\chi_{\text{eff}}^2 = 0.03$; $\bar{\chi}_{\text{eff}}^2 = 1215.41$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.68$; $R - 1 = 0.01056$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.38 (Δ 0.01) CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.90 (Δ 0.03) simall_100x143_offlike5_EE_Aplanck.L
396.08 (Δ -0.01) commander_dx12_v3.2_29: 22.94 (Δ -0.02) plik_rd12_HM_v22_TT: 759.72 (Δ -0.09)

7.41 base_nnu_plikHM_TT_lowl_lowE_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00043}_{-0.00041} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+49}_{-47} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0063}_{-0.0061} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+2.0}_{-2.0} \quad (+0.7\sigma)$	$H(0.51)$	$89.8^{+2.5}_{-2.4} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0010}_{-0.0010} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.055}_{-0.055} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+61}_{-60} \quad (-0.5\sigma)$
τ	$0.054^{+0.016}_{-0.016} \quad (+0.3\sigma)$	z_{re}	$7.6^{+1.6}_{-1.7} \quad (+0.3\sigma)$	$H(0.61)$	$95.4^{+2.5}_{-2.5} \quad (+0.3\sigma)$
N_{eff}	$3.06^{+0.36}_{-0.35} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.079}_{-0.077} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+70}_{-68} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.037}_{-0.038} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.036}_{-0.036} \quad (-0.1\sigma)$	$H(2.33)$	$235.9^{+5.3}_{-5.3} \quad (-0.1\sigma)$
n_{s}	$0.967^{+0.014}_{-0.014} \quad (+0.5\sigma)$	D_{40}	$1225^{+28}_{-28} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+150}_{-150} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5720^{+77}_{-79} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.016}_{-0.016} \quad (-0.8\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.021}_{-0.021} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815.4^{+9.9}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.015}_{-0.015} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-4.0} \quad (-0.0\sigma)$	D_{2000}	$229.9^{+4.0}_{-4.0} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.019}_{-0.019} \quad (+0.1\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.967^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.014}_{-0.014} \quad (-0.6\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.2455^{+0.0048}_{-0.0048} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.018}_{-0.018} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2468^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.014}_{-0.014} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.12}_{-0.11} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.017}_{-0.018} \quad (+0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.80^{+0.35}_{-0.35} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0089}_{-0.0089} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.05^{+0.85}_{-0.82} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0094}_{-0.0095} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.7^{+3.5}_{-3.4} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-4} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.90^{+0.32}_{-0.32} \quad (-0.1\sigma)$	f_{2000}^{217}	$108.0^{+4.2}_{-4.1} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.5^{+1.4}_{-1.4} \quad (+0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.4^{+3.6}_{-3.5} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.6) \quad (-0.6\sigma)$
H_0	$67.7^{+2.4}_{-2.3} \quad (+0.5\sigma)$	k_{D}	$0.1404^{+0.0026}_{-0.0026} \quad (+0.1\sigma)$	χ_{plik}^2	$772.6 \quad (\nu: 15.5) \quad (+0.1\sigma)$
Ω_{Λ}	$0.690^{+0.016}_{-0.016} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16105^{+0.00097}_{-0.00094} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.60 \quad (\nu: 0.3)$
Ω_{m}	$0.310^{+0.016}_{-0.016} \quad (-0.7\sigma)$	z_{eq}	$3373^{+59}_{-60} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0064}_{-0.0063} \quad (-0.2\sigma)$	k_{eq}	$0.01030^{+0.00026}_{-0.00024} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0962^{+0.0072}_{-0.0068} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.4)$
σ_8	$0.808^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4521^{+0.0058}_{-0.0056} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
S_8	$0.821^{+0.031}_{-0.030} \quad (-0.8\sigma)$	$H(0.15)$	$73.0^{+2.4}_{-2.3} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.0)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+22}_{-21} \quad (-0.5\sigma)$	χ_{CMB}^2	$1192.7 \quad (\nu: 15.3) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.019}_{-0.019} \quad (-0.7\sigma)$	$H(0.38)$	$83.0^{+2.4}_{-2.3} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1206.79; R - 1 = 0.01271$$

7.42 base_nnu_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00043}_{-0.00041} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+2.0}_{-2.0} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+58}_{-57} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0057}_{-0.0056} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.055}_{-0.055} \quad (-0.7\sigma)$	$H(0.61)$	$95.3^{+2.4}_{-2.3} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04098^{+0.00097}_{-0.00097} \quad (+0.2\sigma)$	z_{re}	$7.6^{+1.6}_{-1.7} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+67}_{-65} \quad (-0.5\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.078}_{-0.077} \quad (+0.2\sigma)$	$H(2.33)$	$235.9^{+4.9}_{-4.9} \quad (-0.1\sigma)$
N_{eff}	$3.06^{+0.33}_{-0.32} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.034}_{-0.035} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+140}_{-140} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.037}_{-0.037} \quad (+0.2\sigma)$	D_{40}	$1225^{+28}_{-28} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.016} \quad (-0.8\sigma)$
n_{s}	$0.967^{+0.014}_{-0.014} \quad (+0.5\sigma)$	D_{220}	$5720^{+76}_{-79} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.020}_{-0.020} \quad (-0.0\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.014}_{-0.014} \quad (-0.7\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{1420}	$815.4^{+9.7}_{-9.9} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.018}_{-0.018} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$229.9^{+3.7}_{-3.7} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.014} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.967^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.017}_{-0.017} \quad (+0.1\sigma)$
A_{100}^{PS}	$264^{+60}_{-50} \quad (+0.1\sigma)$	Y_{P}	$0.2455^{+0.0044}_{-0.0045} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2468^{+0.0044}_{-0.0045} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.017}_{-0.017} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.618^{+0.097}_{-0.094} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0084}_{-0.0085} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.80^{+0.33}_{-0.33} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0090}_{-0.0090} \quad (+0.3\sigma)$
A^{kSZ}	—	z_*	$1090.04^{+0.73}_{-0.71} \quad (-0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.7^{+3.3}_{-3.1} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	f_{2000}^{217}	$108.0^{+4.0}_{-3.9} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.90^{+0.30}_{-0.29} \quad (-0.1\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.5^{+1.4}_{-1.4} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.5^{+3.4}_{-3.3} \quad (-0.1\sigma)$	χ_{plik}^2	$772.4 \quad (\nu: 15.2) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.1403^{+0.0025}_{-0.0025} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.54 \quad (\nu: 0.2)$
H_0	$67.7^{+2.3}_{-2.2} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16105^{+0.00082}_{-0.00080} \quad (+0.1\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.27 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.016}_{-0.016} \quad (+0.7\sigma)$	z_{eq}	$3373^{+59}_{-60} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.016}_{-0.016} \quad (-0.7\sigma)$	k_{eq}	$0.01030^{+0.00024}_{-0.00023} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0059}_{-0.0058} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.4)$
$\Omega_{\mathrm{m}}h^3$	$0.0961^{+0.0066}_{-0.0064} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4521^{+0.0058}_{-0.0056} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
σ_8	$0.808^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$H(0.15)$	$73.0^{+2.3}_{-2.2} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.0)$
S_8	$0.821^{+0.030}_{-0.030} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+21}_{-20} \quad (-0.5\sigma)$	χ_{CMB}^2	$1192.5 \quad (\nu: 15.0) \quad (-0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.016}_{-0.016} \quad (-0.8\sigma)$	$H(0.38)$	$83.0^{+2.3}_{-2.2} \quad (+0.4\sigma)$	χ_{Abund}^2	$0.81 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.018}_{-0.018} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+46}_{-45} \quad (-0.5\sigma)$		
$\sigma_8/h^{0.5}$	$0.982^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$H(0.51)$	$89.7^{+2.3}_{-2.3} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1206.80; R - 1 = 0.01238$$

7.43 base_nnu_plikHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02227^{+0.00046}_{-0.00044} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$D_M(0.38)$	$1517^{+58}_{-58} \quad (-0.7\sigma)$
$\Omega_c h^2$	$0.1206^{+0.0080}_{-0.0074} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$99.99^{+2.1}_{-2.0} \quad (+0.8\sigma)$	$H(0.51)$	$90.4^{+3.1}_{-3.0} \quad (+0.7\sigma)$
$100\theta_{\text{MC}}$	$1.0408^{+0.0011}_{-0.0011} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.054}_{-0.053} \quad (-0.7\sigma)$	$D_M(0.51)$	$1965^{+74}_{-74} \quad (-0.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	z_{re}	$< 9.03 \quad (+0.5\sigma)$	$H(0.61)$	$96.0^{+3.2}_{-3.1} \quad (+0.6\sigma)$
N_{eff}	$3.15^{+0.47}_{-0.44} \quad (+0.5\sigma)$	$10^9 A_s$	$2.105^{+0.075}_{-0.071} \quad (+0.5\sigma)$	$D_M(0.61)$	$2287^{+84}_{-84} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.035}_{-0.034} \quad (+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.041}_{-0.042} \quad (+0.2\sigma)$	$H(2.33)$	$237.2^{+6.8}_{-6.5} \quad (+0.3\sigma)$
n_s	$0.970^{+0.016}_{-0.016} \quad (+0.7\sigma)$	D_{40}	$1222^{+30}_{-29} \quad (-0.7\sigma)$	$D_M(2.33)$	$5725^{+180}_{-180} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5719^{+78}_{-80} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.017}_{-0.016} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2537^{+28}_{-28} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.025}_{-0.023} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.016}_{-0.015} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (-0.1\sigma)$	D_{2000}	$229.4^{+4.3}_{-4.4} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.023}_{-0.021} \quad (+0.5\sigma)$
A_{100}^{PS}	$266^{+60}_{-60} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.970^{+0.016}_{-0.016} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.016}_{-0.015} \quad (-0.3\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.2467^{+0.0061}_{-0.0060} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.021}_{-0.020} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2480^{+0.0061}_{-0.0060} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.015}_{-0.014} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.64^{+0.14}_{-0.13} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.020}_{-0.019} \quad (+0.5\sigma)$
A^{kSZ}	—	Age/Gyr	$13.71^{+0.44}_{-0.44} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.011}_{-0.0099} \quad (+0.6\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.20^{+0.98}_{-0.94} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.011}_{-0.011} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.9^{+4.3}_{-4.3} \quad (-0.4\sigma)$	f_{2000}^{143}	$32^{+7}_{-7} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0410^{+0.0013}_{-0.0013} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.82^{+0.40}_{-0.40} \quad (-0.4\sigma)$	f_{2000}^{217}	$108.4^{+4.5}_{-4.4} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.8^{+1.7}_{-1.7} \quad (+0.6\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.9) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.6^{+4.5}_{-4.4} \quad (-0.4\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 0.7) \quad (-0.7\sigma)$
H_0	$68.2^{+2.9}_{-2.8} \quad (+0.7\sigma)$	k_{D}	$0.1410^{+0.0033}_{-0.0032} \quad (+0.4\sigma)$	χ_{plik}^2	$773.0 \quad (\nu: 16.0) \quad (+0.2\sigma)$
Ω_{Λ}	$0.692^{+0.016}_{-0.016} \quad (+0.8\sigma)$	$100\theta_{\text{D}}$	$0.1613^{+0.0012}_{-0.0011} \quad (+0.4\sigma)$	$\chi_{6\text{DF}}^2$	$0.056 \quad (\nu: 0.0)$
Ω_{m}	$0.308^{+0.016}_{-0.016} \quad (-0.8\sigma)$	z_{eq}	$3368^{+60}_{-62} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.48 \quad (\nu: 0.2)$
$\Omega_{\text{m}} h^2$	$0.1436^{+0.0082}_{-0.0077} \quad (+0.2\sigma)$	k_{eq}	$0.01035^{+0.00030}_{-0.00028} \quad (-0.3\sigma)$	χ_{DR12BAO}^2	$4.6 \quad (\nu: 1.2)$
$\Omega_{\text{m}} h^3$	$0.0980^{+0.0094}_{-0.0086} \quad (+0.5\sigma)$	$100\theta_{\text{eq}}$	$0.819^{+0.012}_{-0.011} \quad (+0.8\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
σ_8	$0.813^{+0.027}_{-0.025} \quad (+0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.4526^{+0.0060}_{-0.0057} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
S_8	$0.824^{+0.032}_{-0.031} \quad (-0.7\sigma)$	$H(0.15)$	$73.5^{+2.9}_{-2.8} \quad (+0.7\sigma)$	χ_{CMB}^2	$1192.8 \quad (\nu: 15.3) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.018}_{-0.017} \quad (-0.7\sigma)$	$D_M(0.15)$	$636^{+26}_{-26} \quad (-0.7\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.606^{+0.020}_{-0.019} \quad (-0.4\sigma)$	$H(0.38)$	$83.6^{+3.0}_{-2.9} \quad (+0.7\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1206.29$; $\Delta \bar{\chi}_{\text{eff}}^2 = 0.53$; $R - 1 = 0.01028$

7.44 base_nnu_plikHM_TT_lowl_lowE_BAO_post_lensing_JLA_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02227^{+0.00045}_{-0.00044} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1520^{+58}_{-56} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1202^{+0.0073}_{-0.0070} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$99.9^{+1.9}_{-1.8} \quad (+0.8\sigma)$	$H(0.51)$	$90.2^{+3.0}_{-3.0} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0011}_{-0.0011} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.045}_{-0.044} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1969^{+73}_{-71} \quad (-0.6\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$H(0.61)$	$95.8^{+3.1}_{-3.0} \quad (+0.6\sigma)$
N_{eff}	$3.13^{+0.44}_{-0.42} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.108^{+0.067}_{-0.065} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2292^{+84}_{-81} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.048^{+0.033}_{-0.030} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.038}_{-0.040} \quad (+0.1\sigma)$	$H(2.33)$	$236.9^{+6.3}_{-6.2} \quad (+0.2\sigma)$
n_{s}	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	D_{40}	$1224^{+28}_{-28} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5735^{+180}_{-180} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5724^{+78}_{-78} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.021}_{-0.021} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.012}_{-0.012} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-3.9} \quad (-0.1\sigma)$	D_{2000}	$229.6^{+4.3}_{-4.3} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.020}_{-0.019} \quad (+0.4\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.2464^{+0.0058}_{-0.0059} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.019}_{-0.019} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2477^{+0.0058}_{-0.0059} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.63^{+0.13}_{-0.13} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.018}_{-0.018} \quad (+0.5\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.73^{+0.43}_{-0.42} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2993^{+0.0096}_{-0.0093} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.14^{+0.91}_{-0.88} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.010}_{-0.010} \quad (+0.6\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.1^{+4.2}_{-4.1} \quad (-0.3\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0410^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.84^{+0.39}_{-0.38} \quad (-0.3\sigma)$	f_{2000}^{217}	$108.3^{+4.4}_{-4.3} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.8^{+1.6}_{-1.6} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.41 \quad (\nu: 0.3)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.8^{+4.3}_{-4.2} \quad (-0.4\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.2\sigma)$
H_0	$68.1^{+2.8}_{-2.7} \quad (+0.7\sigma)$	k_{D}	$0.1409^{+0.0031}_{-0.0031} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 0.7) \quad (-0.6\sigma)$
Ω_{Λ}	$0.691^{+0.015}_{-0.015} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	χ_{plik}^2	$772.4 \quad (\nu: 15.2) \quad (+0.1\sigma)$
Ω_{m}	$0.309^{+0.015}_{-0.015} \quad (-0.8\sigma)$	z_{eq}	$3370^{+56}_{-56} \quad (-0.8\sigma)$	χ_{JLA}^2	$706.72 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0076}_{-0.0072} \quad (+0.1\sigma)$	k_{eq}	$0.01034^{+0.00026}_{-0.00025} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^3$	$0.0975^{+0.0088}_{-0.0083} \quad (+0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.011}_{-0.010} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.44 \quad (\nu: 0.1)$
σ_8	$0.813^{+0.023}_{-0.022} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4524^{+0.0055}_{-0.0053} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.0)$
S_8	$0.824^{+0.024}_{-0.025} \quad (-0.6\sigma)$	$H(0.15)$	$73.4^{+2.8}_{-2.8} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+25}_{-25} \quad (-0.7\sigma)$	χ_{CMB}^2	$1201.9 \quad (\nu: 15.6) \quad (+1.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$H(0.38)$	$83.5^{+2.9}_{-2.8} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$

$\bar{\chi}_{\mathrm{eff}}^2 = 1921.98; R - 1 = 0.01169$

7.45 base_nnu_plikHM_TT_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02228^{+0.00045}_{-0.00044} \quad (+0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$D_M(0.38)$	$1519^{+56}_{-55} \quad (-0.7\sigma)$
$\Omega_c h^2$	$0.1203^{+0.0073}_{-0.0069} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$99.98^{+1.8}_{-1.8} \quad (+0.8\sigma)$	$H(0.51)$	$90.3^{+3.0}_{-2.9} \quad (+0.6\sigma)$
$100\theta_{\text{MC}}$	$1.0409^{+0.0011}_{-0.0011} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.044}_{-0.043} \quad (-0.6\sigma)$	$D_M(0.51)$	$1968^{+72}_{-70} \quad (-0.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.6\sigma)$	$H(0.61)$	$95.9^{+3.0}_{-3.0} \quad (+0.6\sigma)$
N_{eff}	$3.13^{+0.44}_{-0.42} \quad (+0.5\sigma)$	$10^9 A_s$	$2.108^{+0.067}_{-0.064} \quad (+0.6\sigma)$	$D_M(0.61)$	$2290^{+82}_{-80} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.032}_{-0.029} \quad (+0.6\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.038}_{-0.040} \quad (+0.2\sigma)$	$H(2.33)$	$236.9^{+6.3}_{-6.2} \quad (+0.2\sigma)$
n_s	$0.969^{+0.016}_{-0.016} \quad (+0.7\sigma)$	D_{40}	$1224^{+28}_{-28} \quad (-0.6\sigma)$	$D_M(2.33)$	$5732^{+180}_{-170} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5725^{+78}_{-78} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.021}_{-0.021} \quad (+0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.012}_{-0.012} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-3.9} \quad (-0.1\sigma)$	D_{2000}	$229.6^{+4.3}_{-4.3} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.020}_{-0.019} \quad (+0.4\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.969^{+0.016}_{-0.016} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.2465^{+0.0057}_{-0.0058} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.019}_{-0.018} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2478^{+0.0058}_{-0.0058} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.63^{+0.13}_{-0.13} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.018}_{-0.018} \quad (+0.5\sigma)$
A^{kSZ}	—	Age/Gyr	$13.72^{+0.42}_{-0.41} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2995^{+0.0096}_{-0.0091} \quad (+0.6\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.14^{+0.91}_{-0.88} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.010}_{-0.0098} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.0^{+4.1}_{-4.0} \quad (-0.4\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0410^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.84^{+0.38}_{-0.38} \quad (-0.4\sigma)$	f_{2000}^{217}	$108.3^{+4.4}_{-4.4} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.8^{+1.6}_{-1.6} \quad (+0.6\sigma)$	χ_{lensing}^2	$9.42 \quad (\nu: 0.3)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.7^{+4.2}_{-4.2} \quad (-0.4\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.2\sigma)$
H_0	$68.2^{+2.8}_{-2.7} \quad (+0.7\sigma)$	k_{D}	$0.1409^{+0.0031}_{-0.0031} \quad (+0.4\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 0.6) \quad (-0.7\sigma)$
Ω_{Λ}	$0.692^{+0.014}_{-0.015} \quad (+0.8\sigma)$	$100\theta_{\text{D}}$	$0.1612^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	χ_{plik}^2	$772.5 \quad (\nu: 15.1) \quad (+0.1\sigma)$
Ω_{m}	$0.308^{+0.015}_{-0.014} \quad (-0.8\sigma)$	z_{eq}	$3368^{+55}_{-55} \quad (-0.8\sigma)$	χ_{JLA}^2	$1035.03 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^2$	$0.1432^{+0.0075}_{-0.0072} \quad (+0.1\sigma)$	k_{eq}	$0.01034^{+0.00026}_{-0.00025} \quad (-0.4\sigma)$	$\chi_{6\text{DF}}^2$	$0.047 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.0977^{+0.0088}_{-0.0082} \quad (+0.5\sigma)$	$100\theta_{\text{eq}}$	$0.819^{+0.010}_{-0.010} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.47 \quad (\nu: 0.1)$
σ_8	$0.813^{+0.022}_{-0.022} \quad (+0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.4525^{+0.0053}_{-0.0051} \quad (+0.8\sigma)$	χ_{DR12BAO}^2	$4.5 \quad (\nu: 0.9)$
S_8	$0.824^{+0.024}_{-0.024} \quad (-0.7\sigma)$	$H(0.15)$	$73.4^{+2.8}_{-2.7} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$D_M(0.15)$	$636^{+25}_{-24} \quad (-0.7\sigma)$	χ_{CMB}^2	$1202.0 \quad (\nu: 15.6) \quad (+1.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.606^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$H(0.38)$	$83.5^{+2.9}_{-2.8} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$

$\bar{\chi}_{\text{eff}}^2 = 2250.26$; $\Delta \bar{\chi}_{\text{eff}}^2 = 0.63$; $R - 1 = 0.01176$

7.46 base_nnu_plikHM_TT_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02226^{+0.00046}_{-0.00044} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+59}_{-57} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0073}_{-0.0070} \quad (+0.0\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+2.0}_{-1.9} \quad (+0.8\sigma)$	$H(0.51)$	$90.1^{+3.0}_{-3.0} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0011}_{-0.0011} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.044}_{-0.044} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+74}_{-72} \quad (-0.6\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$H(0.61)$	$95.7^{+3.1}_{-3.0} \quad (+0.5\sigma)$
N_{eff}	$3.11^{+0.44}_{-0.43} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.067}_{-0.065} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+85}_{-83} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.033}_{-0.030} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.038}_{-0.040} \quad (+0.1\sigma)$	$H(2.33)$	$236.8^{+6.3}_{-6.3} \quad (+0.2\sigma)$
n_{s}	$0.968^{+0.016}_{-0.016} \quad (+0.6\sigma)$	D_{40}	$1225^{+29}_{-29} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5741^{+180}_{-180} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5724^{+78}_{-78} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.022}_{-0.021} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.012}_{-0.012} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (-0.1\sigma)$	D_{2000}	$229.7^{+4.3}_{-4.3} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.020}_{-0.019} \quad (+0.4\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.2462^{+0.0058}_{-0.0059} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.019}_{-0.019} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2475^{+0.0059}_{-0.0059} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.63^{+0.13}_{-0.13} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.019}_{-0.018} \quad (+0.4\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.74^{+0.43}_{-0.42} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2991^{+0.0097}_{-0.0094} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.14^{+0.91}_{-0.88} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.308^{+0.010}_{-0.010} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.2^{+4.2}_{-4.1} \quad (-0.3\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.0410^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.85^{+0.39}_{-0.38} \quad (-0.3\sigma)$	f_{2000}^{217}	$108.2^{+4.5}_{-4.3} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.7^{+1.6}_{-1.6} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.39 \quad (\nu: 0.3)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.9^{+4.4}_{-4.2} \quad (-0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
H_0	$68.0^{+2.9}_{-2.8} \quad (+0.6\sigma)$	k_{D}	$0.1408^{+0.0031}_{-0.0031} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.7) \quad (-0.6\sigma)$
Ω_{Λ}	$0.690^{+0.015}_{-0.016} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	χ_{plik}^2	$772.3 \quad (\nu: 15.1) \quad (+0.1\sigma)$
Ω_{m}	$0.310^{+0.016}_{-0.015} \quad (-0.8\sigma)$	z_{eq}	$3372^{+56}_{-58} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1430^{+0.0075}_{-0.0073} \quad (+0.1\sigma)$	k_{eq}	$0.01034^{+0.00026}_{-0.00025} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0973^{+0.0089}_{-0.0084} \quad (+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.2)$
σ_8	$0.812^{+0.023}_{-0.022} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4521^{+0.0056}_{-0.0053} \quad (+0.7\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.6) \quad (-0.0\sigma)$
S_8	$0.825^{+0.024}_{-0.025} \quad (-0.6\sigma)$	$H(0.15)$	$73.3^{+2.9}_{-2.8} \quad (+0.6\sigma)$	χ_{CMB}^2	$1201.8 \quad (\nu: 15.6) \quad (+1.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$638^{+26}_{-25} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$H(0.38)$	$83.4^{+3.0}_{-2.9} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1215.24$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.67$; $R - 1 = 0.01151$

7.47 base_nnu_plikHM_TT_lowl_lowE_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00043}_{-0.00041} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.022}_{-0.022} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+48}_{-47} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0063}_{-0.0061} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+2.0}_{-1.9} \quad (+0.8\sigma)$	$H(0.51)$	$89.8^{+2.5}_{-2.4} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04098^{+0.00099}_{-0.0010} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.053}_{-0.052} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+61}_{-59} \quad (-0.5\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	z_{re}	$< 8.99 \quad (+0.4\sigma)$	$H(0.61)$	$95.4^{+2.5}_{-2.5} \quad (+0.3\sigma)$
N_{eff}	$3.06^{+0.36}_{-0.35} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.071}_{-0.066} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+69}_{-68} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.034}_{-0.031} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.036}_{-0.037} \quad (-0.1\sigma)$	$H(2.33)$	$236.0^{+5.3}_{-5.3} \quad (-0.0\sigma)$
n_{s}	$0.967^{+0.014}_{-0.014} \quad (+0.5\sigma)$	D_{40}	$1225^{+28}_{-28} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5760^{+150}_{-140} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	D_{220}	$5720^{+77}_{-79} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.016}_{-0.016} \quad (-0.7\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.021}_{-0.020} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815.4^{+9.9}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.015}_{-0.014} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	D_{2000}	$229.9^{+4.0}_{-4.0} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.019}_{-0.018} \quad (+0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-50} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.967^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.014}_{-0.014} \quad (-0.5\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.2455^{+0.0048}_{-0.0048} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.018}_{-0.017} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2469^{+0.0048}_{-0.0048} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.62^{+0.12}_{-0.11} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.017}_{-0.016} \quad (+0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.79^{+0.35}_{-0.34} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0086}_{-0.0083} \quad (+0.3\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.05^{+0.85}_{-0.82} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0091}_{-0.0088} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.7^{+3.5}_{-3.4} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-4} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.90^{+0.32}_{-0.32} \quad (-0.1\sigma)$	f_{2000}^{217}	$108.0^{+4.2}_{-4.1} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.4^{+3.6}_{-3.5} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.6) \quad (-0.6\sigma)$
H_0	$67.7^{+2.4}_{-2.3} \quad (+0.5\sigma)$	k_{D}	$0.1404^{+0.0026}_{-0.0026} \quad (+0.1\sigma)$	χ_{plik}^2	$772.4 \quad (\nu: 15.1) \quad (+0.1\sigma)$
Ω_{Λ}	$0.690^{+0.016}_{-0.016} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16106^{+0.00096}_{-0.00093} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.61 \quad (\nu: 0.3)$
Ω_{m}	$0.310^{+0.016}_{-0.016} \quad (-0.7\sigma)$	z_{eq}	$3372^{+59}_{-60} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.060 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0064}_{-0.0063} \quad (-0.2\sigma)$	k_{eq}	$0.01030^{+0.00026}_{-0.00024} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0963^{+0.0072}_{-0.0068} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.4)$
σ_8	$0.809^{+0.023}_{-0.022} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4522^{+0.0058}_{-0.0056} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
S_8	$0.822^{+0.031}_{-0.030} \quad (-0.7\sigma)$	$H(0.15)$	$73.0^{+2.3}_{-2.3} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.017}_{-0.017} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+21}_{-21} \quad (-0.5\sigma)$	χ_{CMB}^2	$1192.4 \quad (\nu: 14.6) \quad (-0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.018}_{-0.018} \quad (-0.6\sigma)$	$H(0.38)$	$83.1^{+2.4}_{-2.3} \quad (+0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1206.51; R - 1 = 0.01186$

7.48 base_nnu_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00043}_{-0.00041} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$99.8^{+2.0}_{-1.9} \quad (+0.8\sigma)$	$D_M(0.51)$	$1979^{+58}_{-57} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0057}_{-0.0056} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.053}_{-0.052} \quad (-0.6\sigma)$	$H(0.61)$	$95.4^{+2.4}_{-2.3} \quad (+0.3\sigma)$
$100\theta_{\text{MC}}$	$1.04098^{+0.00096}_{-0.00097} \quad (+0.2\sigma)$	z_{re}	$< 8.99 \quad (+0.4\sigma)$	$D_M(0.61)$	$2303^{+66}_{-65} \quad (-0.5\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$10^9 A_s$	$2.097^{+0.070}_{-0.065} \quad (+0.3\sigma)$	$H(2.33)$	$235.9^{+4.9}_{-4.9} \quad (-0.1\sigma)$
N_{eff}	$3.06^{+0.33}_{-0.31} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.878^{+0.034}_{-0.035} \quad (-0.1\sigma)$	$D_M(2.33)$	$5761^{+140}_{-140} \quad (-0.3\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.033}_{-0.031} \quad (+0.3\sigma)$	D_{40}	$1225^{+28}_{-28} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.015}_{-0.015} \quad (-0.7\sigma)$
n_s	$0.967^{+0.013}_{-0.014} \quad (+0.5\sigma)$	D_{220}	$5720^{+76}_{-78} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.020}_{-0.019} \quad (+0.0\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.014}_{-0.014} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{1420}	$815.5^{+9.7}_{-9.8} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.018}_{-0.017} \quad (+0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.9^{+3.7}_{-3.7} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.967^{+0.013}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.017}_{-0.016} \quad (+0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-50} \quad (+0.1\sigma)$	Y_{P}	$0.2455^{+0.0044}_{-0.0044} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2468^{+0.0044}_{-0.0044} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.016}_{-0.015} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.618^{+0.097}_{-0.094} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0081}_{-0.0078} \quad (+0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.79^{+0.33}_{-0.32} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0086}_{-0.0083} \quad (+0.3\sigma)$
A^{kSZ}	—	z_*	$1090.04^{+0.73}_{-0.72} \quad (-0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.7^{+3.2}_{-3.1} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.9^{+4.0}_{-3.9} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.90^{+0.30}_{-0.29} \quad (-0.1\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.8) \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.4^{+3.4}_{-3.3} \quad (-0.1\sigma)$	χ_{plik}^2	$772.2 \quad (\nu: 14.8) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.1404^{+0.0025}_{-0.0025} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.55 \quad (\nu: 0.2)$
H_0	$67.7^{+2.3}_{-2.2} \quad (+0.5\sigma)$	$100\theta_{\text{D}}$	$0.16105^{+0.00082}_{-0.00080} \quad (+0.1\sigma)$	χ_{Cooke17}^2	$0.27 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.016}_{-0.016} \quad (+0.7\sigma)$	z_{eq}	$3372^{+59}_{-60} \quad (-0.7\sigma)$	$\chi_{6\text{DF}}^2$	$0.060 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.016}_{-0.016} \quad (-0.7\sigma)$	k_{eq}	$0.01030^{+0.00024}_{-0.00023} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.2)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0059}_{-0.0058} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+0.7\sigma)$	χ_{DR12BAO}^2	$4.8 \quad (\nu: 1.4)$
$\Omega_{\text{m}} h^3$	$0.0962^{+0.0066}_{-0.0063} \quad (+0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.4521^{+0.0058}_{-0.0056} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
σ_8	$0.809^{+0.021}_{-0.021} \quad (-0.1\sigma)$	$H(0.15)$	$73.0^{+2.3}_{-2.2} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
S_8	$0.822^{+0.030}_{-0.029} \quad (-0.7\sigma)$	$D_M(0.15)$	$640^{+21}_{-20} \quad (-0.5\sigma)$	χ_{CMB}^2	$1192.2 \quad (\nu: 14.3) \quad (-0.1\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.38)$	$83.1^{+2.3}_{-2.2} \quad (+0.4\sigma)$	χ_{Abund}^2	$0.82 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.603^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$D_M(0.38)$	$1528^{+46}_{-45} \quad (-0.5\sigma)$		
$\sigma_8/h^{0.5}$	$0.983^{+0.022}_{-0.021} \quad (-0.6\sigma)$	$H(0.51)$	$89.8^{+2.3}_{-2.3} \quad (+0.4\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1206.53$; $R - 1 = 0.01138$

7.49 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022382	$0.02239^{+0.00036}_{-0.00036}$ (+1.0 σ)	σ_8	0.8060	$0.808^{+0.023}_{-0.022}$ (−0.1 σ)	$D_M(0.15)$	645.7	643^{+21}_{-21} (−0.4 σ)
$\Omega_c h^2$	0.1179	$0.1186^{+0.0060}_{-0.0059}$ (−0.4 σ)	S_8	0.8229	$0.823^{+0.027}_{-0.027}$ (−0.7 σ)	$H(0.38)$	82.48	$82.8^{+2.4}_{-2.3}$ (+0.3 σ)
$100\theta_{MC}$	1.04119	$1.04110^{+0.00088}_{-0.00086}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4507	$0.451^{+0.015}_{-0.015}$ (−0.7 σ)	$D_M(0.38)$	1539.6	1534^{+47}_{-47} (−0.4 σ)
τ	0.0551	$0.056^{+0.016}_{-0.015}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6027	$0.603^{+0.017}_{-0.017}$ (−0.6 σ)	$H(0.51)$	89.17	$89.5^{+2.4}_{-2.4}$ (+0.2 σ)
N_{eff}	2.956	$3.01^{+0.35}_{-0.34}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9837	$0.984^{+0.022}_{-0.021}$ (−0.6 σ)	$D_M(0.51)$	1994	1987^{+60}_{-59} (−0.4 σ)
$\ln(10^{10} A_s)$	3.0415	$3.043^{+0.038}_{-0.036}$ (+0.3 σ)	$r_{\text{drag}} h$	99.43	$99.6^{+1.7}_{-1.7}$ (+0.6 σ)	$H(0.61)$	94.77	$95.1^{+2.5}_{-2.5}$ (+0.2 σ)
n_s	0.9652	$0.966^{+0.014}_{-0.014}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.436	$2.436^{+0.051}_{-0.050}$ (−0.5 σ)	$D_M(0.61)$	2320	2312^{+68}_{-68} (−0.3 σ)
y_{cal}	1.00061	$1.0007^{+0.0049}_{-0.0049}$ (+0.1 σ)	z_{re}	7.72	$7.8^{+1.6}_{-1.6}$ (+0.4 σ)	$H(2.33)$	234.9	$235.5^{+5.2}_{-5.2}$ (−0.2 σ)
A_{217}^{CIB}	44.0	46^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.094	$2.098^{+0.081}_{-0.075}$ (+0.3 σ)	$D_M(2.33)$	5795	5777^{+150}_{-150} (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.89	—	$10^9 A_s e^{-2\tau}$	1.8751	$1.877^{+0.035}_{-0.036}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4552	$0.455^{+0.014}_{-0.014}$ (−0.7 σ)
A_{143}^{tSZ}	7.01	$5.6^{+3.8}_{-3.7}$ (+0.2 σ)	D_{40}	1228.4	1229^{+27}_{-26} (−0.3 σ)	$\sigma_8(0.15)$	0.7447	$0.746^{+0.022}_{-0.021}$ (−0.0 σ)
A_{100}^{PS}	244	257^{+50}_{-50} (−0.2 σ)	D_{220}	5736	5737^{+77}_{-76} (+0.6 σ)	$f\sigma_8(0.38)$	0.4732	$0.474^{+0.014}_{-0.014}$ (−0.6 σ)
A_{143}^{PS}	52.0	45^{+20}_{-20} (−0.4 σ)	D_{810}	2541.0	2539^{+27}_{-27} (+0.2 σ)	$\sigma_8(0.38)$	0.6600	$0.662^{+0.020}_{-0.019}$ (+0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	57.7	42^{+20}_{-20} (−0.2 σ)	D_{1420}	820.1	$818.1^{+9.6}_{-9.8}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4716	$0.472^{+0.013}_{-0.013}$ (−0.5 σ)
A_{217}^{PS}	124.0	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.28	$231.4^{+3.6}_{-3.7}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6176	$0.619^{+0.019}_{-0.018}$ (+0.1 σ)
A^{kSZ}	0.01	< 7.88 (−0.2 σ)	$n_{s,0.002}$	0.9652	$0.966^{+0.014}_{-0.014}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4666	$0.467^{+0.013}_{-0.013}$ (−0.4 σ)
A_{100}^{dustTT}	8.76	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.24418	$0.2448^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5876	$0.589^{+0.018}_{-0.017}$ (+0.1 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.24551	$0.2461^{+0.0048}_{-0.0048}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.2962	$0.2970^{+0.0092}_{-0.0087}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.5	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	10^5D/H	2.552	$2.569^{+0.089}_{-0.091}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3053	$0.3062^{+0.0098}_{-0.0091}$ (+0.2 σ)
A_{217}^{dustTT}	96.2	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.874	$13.83^{+0.35}_{-0.35}$ (−0.2 σ)	f_{2000}^{143}	27.5	29^{+6}_{-6} (−0.5 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.074}$	z_*	1089.63	$1089.74^{+0.68}_{-0.70}$ (−1.0 σ)	$f_{2000}^{143 \times 217}$	31.16	32^{+4}_{-4} (−0.6 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.057}_{-0.058}$	r_*	145.42	$145.0^{+3.5}_{-3.4}$ (+0.0 σ)	f_{2000}^{217}	105.72	$106.7^{+3.9}_{-3.9}$ (−0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04144	$1.0413^{+0.0011}_{-0.0010}$ (+0.3 σ)	χ_{small}^2	396.16	397.3 (ν : 2.3) (+0.3 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	13.964	$13.93^{+0.32}_{-0.32}$ (+0.0 σ)	χ_{lowl}^2	23.21	23.3 (ν : 0.6) (−0.5 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.66^{+0.15}_{-0.16}$	z_{drag}	1059.74	$1059.8^{+1.4}_{-1.4}$ (+0.6 σ)	χ_{plik}^2	2344.8	2360.4 (ν : 19.2) (+271.7 σ)
A_{217}^{dustTE}	2.07	$2.08^{+0.52}_{-0.52}$	r_{drag}	148.10	$147.7^{+3.6}_{-3.5}$ (−0.0 σ)	$\chi_{6\text{DF}}^2$	0.047	0.066 (ν : 0.0)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14017	$0.1404^{+0.0026}_{-0.0026}$ (+0.1 σ)	χ_{MGS}^2	1.10	1.23 (ν : 0.1)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.16051	$0.16065^{+0.00078}_{-0.00080}$ (−0.5 σ)	χ_{DR12BAO}^2	4.79	5.0 (ν : 1.3)
H_0	67.14	$67.4^{+2.3}_{-2.2}$ (+0.4 σ)	z_{eq}	3393.6	3389^{+50}_{-49} (−0.5 σ)	χ_{prior}^2	1.5	11.6 (ν : 10.4) (+1.2 σ)
Ω_Λ	0.6873	$0.688^{+0.013}_{-0.014}$ (+0.6 σ)	k_{eq}	0.010295	$0.01031^{+0.00023}_{-0.00023}$ (−0.5 σ)	χ_{BAO}^2	5.93	6.3 (ν : 0.9)
Ω_m	0.3127	$0.312^{+0.014}_{-0.013}$ (−0.6 σ)	$100\theta_{\text{eq}}$	0.8150	$0.8159^{+0.0094}_{-0.0093}$ (+0.5 σ)	χ_{CMB}^2	2764.2	2781.0 (ν : 18.3) (+284.5 σ)
$\Omega_m h^2$	0.1409	$0.1417^{+0.0062}_{-0.0061}$ (−0.3 σ)	$100\theta_{s,\text{eq}}$	0.45027	$0.4507^{+0.0047}_{-0.0047}$ (+0.5 σ)			
$\Omega_m h^3$	0.0946	$0.0956^{+0.0071}_{-0.0067}$ (+0.1 σ)	$H(0.15)$	72.40	$72.7^{+2.3}_{-2.2}$ (+0.4 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2771.61$; $\Delta\chi_{\text{eff}}^2 = -0.30$; $\bar{\chi}_{\text{eff}}^2 = 2798.95$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.05$; $R - 1 = 0.01038$
 χ_{eff}^2 : BAO - 6DF: 0.05 (Δ 0.02) MGS: 1.10 (Δ -0.12) DR12BAO: 4.79 (Δ 0.38) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.16 (Δ -0.04) commander_dx12_v3_2_29: 23.21 (Δ 0.34) plik_rd12_HM_v22b_TTTEEE: 2344.84 (Δ -0.67)

7.50 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022382	$0.02238^{+0.00035}_{-0.00035}$ (+1.0 σ)	σ_8	0.8061	$0.808^{+0.020}_{-0.019}$ (−0.1 σ)	$D_M(0.15)$	645.5	643^{+20}_{-20} (−0.4 σ)
$\Omega_c h^2$	0.1176	$0.1185^{+0.0057}_{-0.0052}$ (−0.4 σ)	S_8	0.8218	$0.824^{+0.021}_{-0.021}$ (−0.7 σ)	$H(0.38)$	82.47	$82.7^{+2.3}_{-2.1}$ (+0.3 σ)
$100\theta_{MC}$	1.04119	$1.04110^{+0.00079}_{-0.00081}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4501	$0.451^{+0.012}_{-0.011}$ (−0.7 σ)	$D_M(0.38)$	1539.5	1534^{+45}_{-46} (−0.4 σ)
τ	0.0566	$0.057^{+0.015}_{-0.014}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6023	$0.604^{+0.014}_{-0.013}$ (−0.6 σ)	$H(0.51)$	89.15	$89.4^{+2.3}_{-2.2}$ (+0.2 σ)
N_{eff}	2.948	$3.00^{+0.34}_{-0.32}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9836	$0.984^{+0.017}_{-0.017}$ (−0.5 σ)	$D_M(0.51)$	1994	1988^{+56}_{-57} (−0.3 σ)
$\ln(10^{10} A_s)$	3.0438	$3.045^{+0.034}_{-0.031}$ (+0.4 σ)	$r_{\text{drag}} h$	99.54	$99.6^{+1.6}_{-1.5}$ (+0.6 σ)	$H(0.61)$	94.74	$95.1^{+2.4}_{-2.3}$ (+0.2 σ)
n_s	0.9649	$0.965^{+0.013}_{-0.013}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4377	$2.439^{+0.042}_{-0.040}$ (−0.4 σ)	$D_M(0.61)$	2320	2313^{+64}_{-65} (−0.3 σ)
y_{cal}	1.00079	$1.0008^{+0.0048}_{-0.0051}$ (+0.1 σ)	z_{re}	7.86	$7.9^{+1.5}_{-1.4}$ (+0.5 σ)	$H(2.33)$	234.68	$235.4^{+4.9}_{-4.7}$ (−0.2 σ)
A_{217}^{CIB}	45.2	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.099	$2.102^{+0.073}_{-0.065}$ (+0.4 σ)	$D_M(2.33)$	5798	5780^{+140}_{-140} (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.75	—	$10^9 A_s e^{-2\tau}$	1.8740	$1.877^{+0.033}_{-0.032}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4547	$0.456^{+0.011}_{-0.011}$ (−0.7 σ)
A_{143}^{tSZ}	7.06	$5.6^{+3.7}_{-3.8}$ (+0.2 σ)	D_{40}	1229.7	1230^{+25}_{-25} (−0.3 σ)	$\sigma_8(0.15)$	0.7448	$0.747^{+0.019}_{-0.018}$ (−0.0 σ)
A_{100}^{PS}	246	256^{+50}_{-60} (−0.2 σ)	D_{220}	5740	5739^{+74}_{-76} (+0.6 σ)	$f\sigma_8(0.38)$	0.4728	$0.474^{+0.011}_{-0.011}$ (−0.6 σ)
A_{143}^{PS}	50.0	45^{+20}_{-20} (−0.5 σ)	D_{810}	2540.7	2539^{+25}_{-27} (+0.2 σ)	$\sigma_8(0.38)$	0.6602	$0.662^{+0.017}_{-0.016}$ (+0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	54.1	42^{+20}_{-20} (−0.2 σ)	D_{1420}	820.0	$818.5^{+9.2}_{-9.9}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4714	$0.473^{+0.011}_{-0.010}$ (−0.5 σ)
A_{217}^{PS}	122.2	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.26	$231.5^{+3.6}_{-3.7}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6178	$0.619^{+0.017}_{-0.015}$ (+0.1 σ)
A^{kSZ}	0.00	< 7.83 (−0.2 σ)	$n_{s,0.002}$	0.9649	$0.965^{+0.013}_{-0.013}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4664	$0.468^{+0.011}_{-0.010}$ (−0.4 σ)
A_{100}^{dustTT}	8.82	$8.8^{+3.8}_{-3.5}$ (−0.1 σ)	Y_P	0.24408	$0.2447^{+0.0045}_{-0.0044}$ (+0.0 σ)	$\sigma_8(0.61)$	0.5879	$0.589^{+0.016}_{-0.015}$ (+0.1 σ)
A_{143}^{dustTT}	11.01	$10.8^{+3.4}_{-3.8}$ (+0.1 σ)	Y_P^{BBN}	0.24540	$0.2460^{+0.0046}_{-0.0044}$ (+0.0 σ)	$f\sigma_8(2.33)$	0.2964	$0.2972^{+0.0084}_{-0.0076}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.5^{+6.3}_{-6.6}$ (+0.1 σ)	10^5D/H	2.549	$2.567^{+0.084}_{-0.085}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3056	$0.3064^{+0.0091}_{-0.0080}$ (+0.3 σ)
A_{217}^{dustTT}	95.5	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.881	$13.84^{+0.32}_{-0.33}$ (−0.2 σ)	f_{2000}^{143}	27.7	29^{+6}_{-6} (−0.6 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.073}_{-0.074}$	z_*	1089.60	$1089.72^{+0.63}_{-0.62}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	31.23	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.057}_{-0.058}$	r_*	145.54	$145.1^{+3.1}_{-3.2}$ (+0.1 σ)	f_{2000}^{217}	105.87	$106.6^{+3.8}_{-3.9}$ (−0.6 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04144	$1.04132^{+0.00096}_{-0.00099}$ (+0.3 σ)	χ^2_{lensing}	8.58	9.06 (ν : 0.2)
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.975	$13.93^{+0.29}_{-0.30}$ (+0.0 σ)	χ^2_{small}	396.47	397.4 (ν : 2.2) (+0.3 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.67^{+0.15}_{-0.16}$	z_{drag}	1059.70	$1059.8^{+1.3}_{-1.3}$ (+0.6 σ)	χ^2_{lowl}	23.29	23.4 (ν : 0.5) (−0.4 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.52}_{-0.52}$	r_{drag}	148.22	$147.8^{+3.2}_{-3.4}$ (+0.0 σ)	χ^2_{plik}	2344.5	2359.6 (ν : 17.2) (+271.6 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14007	$0.1404^{+0.0025}_{-0.0023}$ (+0.1 σ)	χ^2_{JLA}	706.758	706.79 (ν : 0.0)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.16049	$0.16063^{+0.00076}_{-0.00076}$ (−0.5 σ)	$\chi^2_{6\text{DF}}$	0.038	0.063 (ν : 0.0)
H_0	67.16	$67.4^{+2.2}_{-2.1}$ (+0.4 σ)	z_{eq}	3389.7	3388^{+46}_{-46} (−0.5 σ)	χ^2_{MGS}	1.16	1.23 (ν : 0.1)
Ω_Λ	0.6882	$0.688^{+0.013}_{-0.013}$ (+0.6 σ)	k_{eq}	0.010278	$0.01031^{+0.00022}_{-0.00020}$ (−0.6 σ)	χ^2_{DR12BAO}	4.58	5.0 (ν : 1.1)
Ω_m	0.3118	$0.312^{+0.013}_{-0.013}$ (−0.6 σ)	$100\theta_{\text{eq}}$	0.8157	$0.8160^{+0.0090}_{-0.0087}$ (+0.5 σ)	χ^2_{prior}	1.6	11.6 (ν : 10.3) (+1.2 σ)
$\Omega_m h^2$	0.1406	$0.1415^{+0.0058}_{-0.0054}$ (−0.3 σ)	$100\theta_{s,\text{eq}}$	0.45064	$0.4508^{+0.0045}_{-0.0044}$ (+0.5 σ)	χ^2_{CMB}	2772.9	2789.4 (ν : 17.7) (+286.0 σ)
$\Omega_m h^3$	0.0944	$0.0954^{+0.0066}_{-0.0064}$ (+0.1 σ)	$H(0.15)$	72.41	$72.7^{+2.2}_{-2.1}$ (+0.3 σ)	χ^2_{BAO}	5.77	6.3 (ν : 0.7)

Best-fit $\chi^2_{\text{eff}} = 3486.99$; $\bar{\chi}^2_{\text{eff}} = 3514.05$; $R - 1 = 0.03296$
 χ^2_{eff} : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.58 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.58 small_100x143.offlike5_EE_Aplanck_B: 396.47 commander_dx12.v3.2.29: 23.29 plik_rd12_HM_v22b_TTTEEE: 2344.53 SN - JLA December_2013: 706.76

7.51 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022397	$0.02239^{+0.00035}_{-0.00034}$ (+1.0 σ)	σ_8	0.8068	$0.808^{+0.020}_{-0.019}$ (−0.1 σ)	$D_M(0.15)$	644.4	643^{+20}_{-20} (−0.4 σ)
$\Omega_c h^2$	0.1180	$0.1185^{+0.0057}_{-0.0056}$ (−0.4 σ)	S_8	0.8225	$0.823^{+0.022}_{-0.021}$ (−0.7 σ)	$H(0.38)$	82.60	$82.8^{+2.3}_{-2.2}$ (+0.3 σ)
$100\theta_{MC}$	1.04115	$1.04111^{+0.00084}_{-0.00083}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4505	$0.451^{+0.012}_{-0.012}$ (−0.7 σ)	$D_M(0.38)$	1536.9	1534^{+46}_{-45} (−0.4 σ)
τ	0.0559	$0.057^{+0.015}_{-0.014}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6029	$0.603^{+0.014}_{-0.014}$ (−0.6 σ)	$H(0.51)$	89.30	$89.5^{+2.3}_{-2.3}$ (+0.2 σ)
N_{eff}	2.971	$3.00^{+0.34}_{-0.33}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9837	$0.984^{+0.017}_{-0.017}$ (−0.6 σ)	$D_M(0.51)$	1991	1987^{+57}_{-57} (−0.4 σ)
$\ln(10^{10} A_s)$	3.0437	$3.045^{+0.033}_{-0.032}$ (+0.4 σ)	$r_{\text{drag}} h$	99.53	$99.6^{+1.6}_{-1.5}$ (+0.7 σ)	$H(0.61)$	94.89	$95.1^{+2.4}_{-2.3}$ (+0.2 σ)
n_s	0.9653	$0.966^{+0.013}_{-0.013}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4371	$2.438^{+0.041}_{-0.041}$ (−0.4 σ)	$D_M(0.61)$	2317	2312^{+66}_{-65} (−0.3 σ)
y_{cal}	1.00085	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	z_{re}	7.80	$7.9^{+1.4}_{-1.4}$ (+0.5 σ)	$H(2.33)$	235.07	$235.4^{+5.0}_{-5.0}$ (−0.2 σ)
A_{217}^{CIB}	46.4	46^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.098	$2.102^{+0.070}_{-0.066}$ (+0.4 σ)	$D_M(2.33)$	5788	5778^{+140}_{-140} (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.50	—	$10^9 A_s e^{-2\tau}$	1.8762	$1.877^{+0.032}_{-0.034}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4550	$0.455^{+0.012}_{-0.011}$ (−0.7 σ)
A_{143}^{tSZ}	7.18	$5.6^{+3.7}_{-3.8}$ (+0.2 σ)	D_{40}	1229.6	1230^{+26}_{-25} (−0.3 σ)	$\sigma_8(0.15)$	0.7455	$0.747^{+0.019}_{-0.018}$ (−0.0 σ)
A_{100}^{PS}	249	257^{+50}_{-50} (−0.2 σ)	D_{220}	5741	5740^{+77}_{-75} (+0.7 σ)	$f\sigma_8(0.38)$	0.4732	$0.474^{+0.011}_{-0.011}$ (−0.6 σ)
A_{143}^{PS}	46.9	45^{+20}_{-20} (−0.5 σ)	D_{810}	2541.0	2539^{+27}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6608	$0.662^{+0.017}_{-0.017}$ (+0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	48.3	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.7	$818.4^{+9.6}_{-9.8}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4718	$0.472^{+0.011}_{-0.011}$ (−0.5 σ)
A_{217}^{PS}	120.1	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.05	$231.5^{+3.6}_{-3.7}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6184	$0.620^{+0.016}_{-0.016}$ (+0.1 σ)
A^{kSZ}	0.00	< 7.83 (−0.2 σ)	$n_{s,0.002}$	0.9653	$0.966^{+0.013}_{-0.013}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4668	$0.467^{+0.011}_{-0.011}$ (−0.4 σ)
A_{100}^{dustTT}	8.79	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.24440	$0.2448^{+0.0045}_{-0.0046}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5884	$0.590^{+0.016}_{-0.015}$ (+0.1 σ)
A_{143}^{dustTT}	11.00	$10.9^{+3.5}_{-3.6}$ (+0.1 σ)	Y_P^{BBN}	0.24573	$0.2461^{+0.0045}_{-0.0046}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.2967	$0.2973^{+0.0082}_{-0.0079}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.6^{+6.3}_{-6.5}$ (+0.1 σ)	10^5D/H	2.555	$2.565^{+0.085}_{-0.088}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3058	$0.3065^{+0.0088}_{-0.0084}$ (+0.3 σ)
A_{217}^{dustTT}	95.1	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.858	$13.83^{+0.34}_{-0.33}$ (−0.2 σ)	f_{2000}^{143}	28.0	29^{+6}_{-6} (−0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.074}$	z_*	1089.64	$1089.71^{+0.64}_{-0.66}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	31.35	32^{+4}_{-4} (−0.6 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	145.29	$145.1^{+3.3}_{-3.3}$ (+0.1 σ)	f_{2000}^{217}	106.12	$106.6^{+3.8}_{-3.9}$ (−0.6 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04138	$1.0413^{+0.0010}_{-0.0010}$ (+0.3 σ)	χ_{lensing}^2	8.62	9.06 (ν : 0.2)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.952	$13.93^{+0.31}_{-0.30}$ (+0.0 σ)	χ_{small}^2	396	230 (ν : 17298.3) (−107.7 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.78	$1059.8^{+1.3}_{-1.3}$ (+0.6 σ)	χ_{lowl}^2	23	191 (ν : 17305.2) (+75.0 σ)
A_{217}^{dustTE}	2.08	$2.07^{+0.53}_{-0.53}$	r_{drag}	147.96	$147.7^{+3.5}_{-3.4}$ (+0.0 σ)	χ_{plik}^2	2344.6	2359.9 (ν : 18.0) (+271.7 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14026	$0.1404^{+0.0025}_{-0.0025}$ (+0.1 σ)	χ_{JLA}^2	1035.07	1035.12 (ν : 0.1)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.16054	$0.16062^{+0.00076}_{-0.00077}$ (−0.5 σ)	$\chi_{6\text{DF}}^2$	0.04	0.59 (ν : 0.2)
H_0	67.27	$67.4^{+2.2}_{-2.1}$ (+0.4 σ)	z_{eq}	3390.1	3387^{+45}_{-45} (−0.5 σ)	χ_{MGS}^2	1.16	0.72 (ν : 0.2)
Ω_Λ	0.6882	$0.689^{+0.013}_{-0.013}$ (+0.7 σ)	k_{eq}	0.010295	$0.01030^{+0.00021}_{-0.00021}$ (−0.6 σ)	χ_{DR12BAO}^2	4.60	4.9 (ν : 1.0)
Ω_m	0.3118	$0.311^{+0.013}_{-0.013}$ (−0.7 σ)	$100\theta_{\text{eq}}$	0.8157	$0.8163^{+0.0087}_{-0.0085}$ (+0.6 σ)	χ_{prior}^2	1.7	11.6 (ν : 10.2) (+1.2 σ)
$\Omega_m h^2$	0.1411	$0.1415^{+0.0059}_{-0.0058}$ (−0.3 σ)	$100\theta_{s,\text{eq}}$	0.45060	$0.4509^{+0.0044}_{-0.0043}$ (+0.5 σ)	χ_{CMB}^2	2772.8	2789.7 (ν : 18.3) (+286.1 σ)
$\Omega_m h^3$	0.0949	$0.0955^{+0.0068}_{-0.0064}$ (+0.1 σ)	$H(0.15)$	72.53	$72.7^{+2.2}_{-2.1}$ (+0.4 σ)	χ_{BAO}^2	5.79	6.2 (ν : 0.6)

Best-fit $\chi_{\text{eff}}^2 = 3815.38$; $\Delta\chi_{\text{eff}}^2 = -0.29$; $\bar{\chi}_{\text{eff}}^2 = 3842.56$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.70$; $R - 1 = 0.01451$

χ_{eff}^2 : BAO - 6DF: 0.04 (Δ 0.02) MGS: 1.16 (Δ -0.12) DR12BAO: 4.60 (Δ 0.35) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.62 (Δ -0.10) small_100x143_offlike5_EE_Aplanck396.33 (Δ -0.19) commander_dx12_v3.2_29: 23.25 (Δ 0.37) plik_rd12_HM_v22b.TTTEEE: 2344.60 (Δ -0.67) SN - JLA Pantheon18: 1035.07 (Δ 0.10)

7.52 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022341	$0.02237^{+0.00036}_{-0.00035}$ (+1.0 σ)	σ_8	0.8047	$0.808^{+0.020}_{-0.020}$ (−0.2 σ)	$D_M(0.15)$	648.2	644^{+20}_{-21} (−0.3 σ)
$\Omega_c h^2$	0.1173	$0.1183^{+0.0057}_{-0.0056}$ (−0.4 σ)	S_8	0.8229	$0.824^{+0.022}_{-0.021}$ (−0.7 σ)	$H(0.38)$	82.19	$82.7^{+2.3}_{-2.2}$ (+0.2 σ)
$100\theta_{MC}$	1.04126	$1.04112^{+0.00084}_{-0.00083}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4507	$0.451^{+0.012}_{-0.012}$ (−0.7 σ)	$D_M(0.38)$	1545.4	1537^{+46}_{-46} (−0.3 σ)
τ	0.0558	$0.056^{+0.015}_{-0.014}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6022	$0.604^{+0.014}_{-0.014}$ (−0.6 σ)	$H(0.51)$	88.88	$89.4^{+2.4}_{-2.3}$ (+0.2 σ)
N_{eff}	2.914	$2.99^{+0.34}_{-0.33}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9841	$0.984^{+0.017}_{-0.017}$ (−0.5 σ)	$D_M(0.51)$	2002	1990^{+58}_{-59} (−0.3 σ)
$\ln(10^{10} A_s)$	3.0412	$3.044^{+0.033}_{-0.032}$ (+0.4 σ)	$r_{\text{drag}} h$	99.31	$99.5^{+1.6}_{-1.6}$ (+0.6 σ)	$H(0.61)$	94.46	$95.0^{+2.4}_{-2.4}$ (+0.1 σ)
n_s	0.9635	$0.965^{+0.013}_{-0.013}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.4400	$2.440^{+0.041}_{-0.041}$ (−0.4 σ)	$D_M(0.61)$	2329	2316^{+66}_{-67} (−0.3 σ)
y_{cal}	1.00056	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	z_{re}	7.78	$7.8^{+1.5}_{-1.5}$ (+0.5 σ)	$H(2.33)$	234.3	$235.3^{+5.0}_{-5.0}$ (−0.2 σ)
A_{217}^{CIB}	44.0	46^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.093	$2.100^{+0.070}_{-0.066}$ (+0.4 σ)	$D_M(2.33)$	5814	5785^{+140}_{-140} (−0.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.92	—	$10^9 A_s e^{-2\tau}$	1.8719	$1.876^{+0.033}_{-0.034}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4551	$0.456^{+0.012}_{-0.011}$ (−0.7 σ)
A_{143}^{tSZ}	6.98	$5.6^{+3.7}_{-3.7}$ (+0.2 σ)	D_{40}	1230.9	1231^{+25}_{-25} (−0.3 σ)	$\sigma_8(0.15)$	0.7434	$0.746^{+0.019}_{-0.019}$ (−0.1 σ)
A_{100}^{PS}	243	256^{+50}_{-60} (−0.2 σ)	D_{220}	5736	5739^{+77}_{-75} (+0.6 σ)	$f\sigma_8(0.38)$	0.4728	$0.474^{+0.011}_{-0.011}$ (−0.6 σ)
A_{143}^{PS}	51.9	45^{+20}_{-20} (−0.5 σ)	D_{810}	2540.1	2539^{+27}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6587	$0.661^{+0.017}_{-0.017}$ (+0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	58.2	42^{+20}_{-20} (−0.2 σ)	D_{1420}	820.1	$818.4^{+9.6}_{-9.8}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4712	$0.472^{+0.011}_{-0.011}$ (−0.5 σ)
A_{217}^{PS}	123.9	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.41	$231.5^{+3.6}_{-3.7}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6163	$0.619^{+0.016}_{-0.016}$ (+0.1 σ)
A^{kSZ}	0.01	< 7.76 (−0.2 σ)	$n_{s,0.002}$	0.9635	$0.965^{+0.013}_{-0.013}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4660	$0.467^{+0.011}_{-0.011}$ (−0.4 σ)
A_{100}^{dustTT}	8.73	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.24360	$0.2445^{+0.0046}_{-0.0046}$ (−0.0 σ)	$\sigma_8(0.61)$	0.5864	$0.589^{+0.016}_{-0.015}$ (+0.1 σ)
A_{143}^{dustTT}	10.94	$10.9^{+3.5}_{-3.6}$ (+0.1 σ)	Y_P^{BBN}	0.24492	$0.2459^{+0.0046}_{-0.0046}$ (−0.0 σ)	$f\sigma_8(2.33)$	0.2956	$0.2969^{+0.0083}_{-0.0078}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.3	$18.6^{+6.3}_{-6.5}$ (+0.1 σ)	10^5D/H	2.545	$2.564^{+0.086}_{-0.088}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3046	$0.3061^{+0.0090}_{-0.0083}$ (+0.2 σ)
A_{217}^{dustTT}	95.8	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.918	$13.85^{+0.34}_{-0.34}$ (−0.1 σ)	f_{2000}^{143}	27.3	29^{+6}_{-6} (−0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.074}$	z_*	1089.59	$1089.71^{+0.64}_{-0.66}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	31.03	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	145.84	$145.2^{+3.3}_{-3.3}$ (+0.1 σ)	f_{2000}^{217}	105.56	$106.6^{+3.8}_{-3.9}$ (−0.6 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04153	$1.0413^{+0.0010}_{-0.0010}$ (+0.3 σ)	χ^2_{lensing}	8.54	9.05 (ν : 0.2)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	14.002	$13.94^{+0.31}_{-0.31}$ (+0.1 σ)	χ^2_{small}	396	229 (ν : 17290.5) (−108.0 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.55	$1059.8^{+1.3}_{-1.3}$ (+0.5 σ)	χ^2_{lowl}	23	192 (ν : 17299.5) (+75.3 σ)
A_{217}^{dustTE}	2.08	$2.07^{+0.53}_{-0.53}$	r_{drag}	148.53	$147.9^{+3.4}_{-3.4}$ (+0.1 σ)	χ^2_{plik}	2344.3	2359.7 (ν : 18.0) (+271.6 σ)
c_{100}	0.99977	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.13985	$0.1403^{+0.0025}_{-0.0025}$ (+0.1 σ)	$\chi^2_{6\text{DF}}$	0.06	0.57 (ν : 0.2)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.16043	$0.16060^{+0.00076}_{-0.00078}$ (−0.6 σ)	χ^2_{MGS}	1.04	0.69 (ν : 0.2)
H_0	66.86	$67.3^{+2.3}_{-2.1}$ (+0.3 σ)	z_{eq}	3396.3	3391^{+47}_{-47} (−0.5 σ)	χ^2_{DR12BAO}	5.00	5.1 (ν : 1.3)
Ω_Λ	0.6863	$0.688^{+0.013}_{-0.013}$ (+0.6 σ)	k_{eq}	0.010274	$0.01031^{+0.00022}_{-0.00021}$ (−0.6 σ)	χ^2_{prior}	1.4	11.6 (ν : 10.1) (+1.2 σ)
Ω_m	0.3137	$0.312^{+0.013}_{-0.013}$ (−0.6 σ)	$100\theta_{\text{eq}}$	0.8144	$0.8155^{+0.0091}_{-0.0088}$ (+0.5 σ)	χ^2_{CMB}	2772.7	2789.5 (ν : 18.3) (+286.1 σ)
$\Omega_m h^2$	0.1403	$0.1414^{+0.0059}_{-0.0058}$ (−0.3 σ)	$100\theta_{s,\text{eq}}$	0.45000	$0.4505^{+0.0046}_{-0.0044}$ (+0.5 σ)	χ^2_{BAO}	6.09	6.4 (ν : 0.9)
$\Omega_m h^3$	0.0938	$0.0952^{+0.0068}_{-0.0064}$ (+0.0 σ)	$H(0.15)$	72.12	$72.6^{+2.3}_{-2.1}$ (+0.3 σ)			

Best-fit $\chi^2_{\text{eff}} = 2780.19$; $\Delta\chi^2_{\text{eff}} = -0.51$; $\bar{\chi}^2_{\text{eff}} = 2807.45$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.60$; $R - 1 = 0.01513$

χ^2_{eff} : BAO - 6DF: 0.06 (Δ 0.03) MGS: 1.04 (Δ -0.18) DR12BAO: 5.00 (Δ 0.58) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.54 (Δ -0.19) small_100x143_offlike5_EE_Aplanck 396.33 (Δ -0.19) commander_dx12_v3.2_29: 23.47 (Δ 0.57) plik_rd12_HM_v22b_TTTEEE: 2344.34 (Δ -0.98)

7.53 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00034}_{-0.00033} \quad (+1.0\sigma)$	σ_8	$0.807^{+0.021}_{-0.020} \quad (-0.2\sigma)$	$D_M(0.15)$	$645^{+18}_{-18} \quad (-0.3\sigma)$
$\Omega_c h^2$	$0.1182^{+0.0053}_{-0.0052} \quad (-0.5\sigma)$	S_8	$0.823^{+0.026}_{-0.026} \quad (-0.7\sigma)$	$H(0.38)$	$82.6^{+2.0}_{-2.0} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.04114^{+0.00079}_{-0.00080} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_M(0.38)$	$1537^{+41}_{-41} \quad (-0.3\sigma)$
τ	$0.055^{+0.016}_{-0.015} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.603^{+0.017}_{-0.016} \quad (-0.6\sigma)$	$H(0.51)$	$89.3^{+2.1}_{-2.0} \quad (+0.2\sigma)$
N_{eff}	$2.98^{+0.30}_{-0.29} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$D_M(0.51)$	$1991^{+51}_{-52} \quad (-0.3\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.037}_{-0.035} \quad (+0.2\sigma)$	$r_{\text{drag}} h$	$99.5^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$H(0.61)$	$94.9^{+2.1}_{-2.1} \quad (+0.1\sigma)$
n_s	$0.965^{+0.012}_{-0.012} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.051}_{-0.049} \quad (-0.5\sigma)$	$D_M(0.61)$	$2317^{+59}_{-59} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.4\sigma)$	$H(2.33)$	$235.2^{+4.5}_{-4.5} \quad (-0.3\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.095^{+0.078}_{-0.072} \quad (+0.2\sigma)$	$D_M(2.33)$	$5787^{+120}_{-120} \quad (-0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.875^{+0.032}_{-0.032} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.014}_{-0.014} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.7} \quad (+0.2\sigma)$	D_{40}	$1230^{+26}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.019}_{-0.019} \quad (-0.1\sigma)$
A_{100}^{PS}	$256^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5737^{+78}_{-75} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.018}_{-0.017} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.3^{+9.5}_{-9.8} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.012} \quad (-0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.4}_{-3.5} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.017}_{-0.016} \quad (+0.0\sigma)$
A^{kSZ}	$< 7.79 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.965^{+0.012}_{-0.012} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.012}_{-0.012} \quad (-0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_P	$0.2445^{+0.0041}_{-0.0040} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.016}_{-0.015} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2458^{+0.0041}_{-0.0041} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.2965^{+0.0081}_{-0.0077} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.3}_{-6.5} \quad (+0.1\sigma)$	$10^5 D/H$	$2.564^{+0.081}_{-0.082} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3057^{+0.0087}_{-0.0081} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.85^{+0.30}_{-0.30} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.074}$	z_*	$1089.70^{+0.62}_{-0.64} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$145.2^{+2.9}_{-2.9} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.5^{+3.8}_{-3.8} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04137^{+0.00096}_{-0.00094} \quad (+0.4\sigma)$	χ_{small}^2	$228 \quad (\nu: 17312.0) \quad (-108.6\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	$13.95^{+0.27}_{-0.27} \quad (+0.1\sigma)$	χ_{lowl}^2	$192 \quad (\nu: 17315.1) \quad (+75.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.7^{+1.2}_{-1.2} \quad (+0.5\sigma)$	χ_{plik}^2	$2359.9 \quad (\nu: 18.6) \quad (+271.7\sigma)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.53}$	r_{drag}	$147.9^{+3.1}_{-3.1} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.32 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.1403^{+0.0023}_{-0.0022} \quad (+0.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.58 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16060^{+0.00069}_{-0.00069} \quad (-0.6\sigma)$	χ_{MGS}^2	$0.69 \quad (\nu: 0.2)$
H_0	$67.3^{+2.0}_{-1.9} \quad (+0.3\sigma)$	z_{eq}	$3390^{+48}_{-48} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$5.1 \quad (\nu: 1.4)$
Ω_Λ	$0.688^{+0.013}_{-0.013} \quad (+0.6\sigma)$	k_{eq}	$0.01030^{+0.00021}_{-0.00021} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_m	$0.312^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\text{eq}}$	$0.8156^{+0.0092}_{-0.0090} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.9)$
$\Omega_m h^2$	$0.1413^{+0.0054}_{-0.0053} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.4506^{+0.0046}_{-0.0046} \quad (+0.5\sigma)$	χ_{CMB}^2	$2780.6 \quad (\nu: 17.8) \quad (+284.5\sigma)$
$\Omega_m h^3$	$0.0950^{+0.0060}_{-0.0057} \quad (+0.0\sigma)$	$H(0.15)$	$72.5^{+2.0}_{-1.9} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2798.91; R - 1 = 0.01423$$

7.54 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02237^{+0.00034}_{-0.00033} \quad (+1.0\sigma)$	S_8	$0.824^{+0.026}_{-0.025} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+40}_{-40} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1187^{+0.0050}_{-0.0048} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$H(0.51)$	$89.5^{+2.0}_{-2.0} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04108^{+0.00076}_{-0.00076} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.016}_{-0.015} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+50}_{-50} \quad (-0.3\sigma)$
τ	$0.055^{+0.016}_{-0.015} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.021}_{-0.021} \quad (-0.5\sigma)$	$H(0.61)$	$95.1^{+2.1}_{-2.0} \quad (+0.2\sigma)$
N_{eff}	$3.01^{+0.28}_{-0.28} \quad (+0.0\sigma)$	$r_{\mathrm{drag}} h$	$99.5^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2313^{+57}_{-57} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.037}_{-0.034} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.051}_{-0.049} \quad (-0.5\sigma)$	$H(2.33)$	$235.6^{+4.3}_{-4.2} \quad (-0.2\sigma)$
n_{s}	$0.965^{+0.012}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5778^{+120}_{-120} \quad (-0.2\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.078}_{-0.071} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.014}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.031}_{-0.031} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.019}_{-0.018} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{40}	$1229^{+26}_{-25} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{220}	$5735^{+78}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.017}_{-0.016} \quad (+0.1\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{810}	$2539^{+27}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.012}_{-0.012} \quad (-0.5\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{1420}	$818.0^{+9.4}_{-9.7} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.016}_{-0.015} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{2000}	$231.3^{+3.3}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.012}_{-0.011} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.015}_{-0.015} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.90 \quad (-0.2\sigma)$	Y_{P}	$0.2448^{+0.0039}_{-0.0039} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0080}_{-0.0074} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2462^{+0.0039}_{-0.0039} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0084}_{-0.0078} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.572^{+0.074}_{-0.073} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.83^{+0.29}_{-0.28} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.77^{+0.57}_{-0.58} \quad (-1.0\sigma)$	f_{2000}^{217}	$106.7^{+3.7}_{-3.7} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.074}$	r_*	$145.0^{+2.8}_{-2.8} \quad (+0.0\sigma)$	χ_{small}^2	$230 \quad (\nu: 17284.6) \quad (-107.4\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.04129^{+0.00090}_{-0.00090} \quad (+0.3\sigma)$	χ_{lowl}^2	$190 \quad (\nu: 17286.9) \quad (+74.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.92^{+0.26}_{-0.26} \quad (+0.0\sigma)$	χ_{plik}^2	$2359.9 \quad (\nu: 18.3) \quad (+271.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1059.8^{+1.2}_{-1.2} \quad (+0.5\sigma)$	χ_{Aver15}^2	$0.34 \quad (\nu: 0.1)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.7^{+2.9}_{-2.9} \quad (-0.0\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.40 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	k_{D}	$0.1404^{+0.0022}_{-0.0021} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.57 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16067^{+0.00063}_{-0.00064} \quad (-0.5\sigma)$	χ_{MGS}^2	$0.69 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3390^{+49}_{-47} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 \quad (\nu: 1.4)$
H_0	$67.4^{+1.9}_{-1.9} \quad (+0.4\sigma)$	k_{eq}	$0.01032^{+0.00020}_{-0.00020} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8157^{+0.0092}_{-0.0090} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.9)$
Ω_{m}	$0.312^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0046}_{-0.0046} \quad (+0.5\sigma)$	χ_{CMB}^2	$2780.5 \quad (\nu: 17.5) \quad (+284.4\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1417^{+0.0052}_{-0.0050} \quad (-0.3\sigma)$	$H(0.15)$	$72.7^{+1.9}_{-1.9} \quad (+0.3\sigma)$	χ_{Abund}^2	$0.74 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0955^{+0.0057}_{-0.0055} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+18}_{-17} \quad (-0.4\sigma)$		
σ_8	$0.808^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$H(0.38)$	$82.8^{+2.0}_{-1.9} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2799.26; R - 1 = 0.01400$$

7.55 base_nnu_plikHM_TTTEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00036}_{-0.00036} \quad (+1.0\sigma)$	σ_8	$0.809^{+0.023}_{-0.022} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+21}_{-21} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1186^{+0.0060}_{-0.0059} \quad (-0.4\sigma)$	S_8	$0.824^{+0.027}_{-0.026} \quad (-0.7\sigma)$	$H(0.38)$	$82.8^{+2.4}_{-2.3} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04110^{+0.00088}_{-0.00085} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+47}_{-47} \quad (-0.4\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.51)$	$89.5^{+2.4}_{-2.4} \quad (+0.3\sigma)$
N_{eff}	$3.01^{+0.35}_{-0.34} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+60}_{-59} \quad (-0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.035}_{-0.032} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$H(0.61)$	$95.1^{+2.5}_{-2.4} \quad (+0.2\sigma)$
n_{s}	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.050}_{-0.047} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+68}_{-68} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 9.10 \quad (+0.5\sigma)$	$H(2.33)$	$235.6^{+5.2}_{-5.2} \quad (-0.2\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.073}_{-0.068} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5776^{+150}_{-150} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.035}_{-0.036} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.014}_{-0.014} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1229^{+27}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.021}_{-0.020} \quad (+0.0\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5737^{+77}_{-76} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{810}	$2539^{+27}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.019}_{-0.018} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.1^{+9.6}_{-9.8} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.6}_{-3.7} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.018}_{-0.017} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.85 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.013}_{-0.012} \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2449^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.018}_{-0.016} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2462^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0090}_{-0.0083} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.569^{+0.088}_{-0.090} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0096}_{-0.0087} \quad (+0.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.83^{+0.35}_{-0.35} \quad (-0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.074}$	z_*	$1089.74^{+0.67}_{-0.70} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.058}$	r_*	$145.0^{+3.5}_{-3.4} \quad (+0.0\sigma)$	f_{2000}^{217}	$106.6^{+3.9}_{-3.9} \quad (-0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0010} \quad (+0.3\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.4) \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.92^{+0.32}_{-0.31} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.6) \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1059.8^{+1.3}_{-1.4} \quad (+0.6\sigma)$	χ_{plik}^2	$2360.2 \quad (\nu: 19.1) \quad (+271.7\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.52}$	r_{drag}	$147.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.065 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1405^{+0.0026}_{-0.0026} \quad (+0.1\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16065^{+0.00077}_{-0.00080} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.3)$
H_0	$67.4^{+2.3}_{-2.2} \quad (+0.4\sigma)$	z_{eq}	$3388^{+49}_{-49} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.013}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01031^{+0.00023}_{-0.00023} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
Ω_{m}	$0.312^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8160^{+0.0093}_{-0.0092} \quad (+0.5\sigma)$	χ_{CMB}^2	$2780.8 \quad (\nu: 18.1) \quad (+284.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1417^{+0.0062}_{-0.0061} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0047}_{-0.0046} \quad (+0.5\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.0956^{+0.0071}_{-0.0067} \quad (+0.1\sigma)$	$H(0.15)$	$72.7^{+2.3}_{-2.2} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.76; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.04; R - 1 = 0.01049$$

7.56 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_JLA_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00035}_{-0.00035} \quad (+1.0\sigma)$	σ_8	$0.809^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$D_M(0.15)$	$643^{+20}_{-20} \quad (-0.4\sigma)$
$\Omega_c h^2$	$0.1185^{+0.0057}_{-0.0052} \quad (-0.4\sigma)$	S_8	$0.824^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$82.8^{+2.3}_{-2.1} \quad (+0.3\sigma)$
$100\theta_{MC}$	$1.04110^{+0.00079}_{-0.00081} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.012}_{-0.011} \quad (-0.7\sigma)$	$D_M(0.38)$	$1534^{+44}_{-46} \quad (-0.4\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.014}_{-0.013} \quad (-0.5\sigma)$	$H(0.51)$	$89.5^{+2.3}_{-2.2} \quad (+0.2\sigma)$
N_{eff}	$3.00^{+0.34}_{-0.31} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$D_M(0.51)$	$1987^{+56}_{-58} \quad (-0.3\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.034}_{-0.029} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.6}_{-1.5} \quad (+0.6\sigma)$	$H(0.61)$	$95.1^{+2.4}_{-2.2} \quad (+0.2\sigma)$
n_s	$0.966^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.041}_{-0.039} \quad (-0.4\sigma)$	$D_M(0.61)$	$2313^{+63}_{-66} \quad (-0.3\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.6\sigma)$	$H(2.33)$	$235.4^{+4.9}_{-4.6} \quad (-0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.104^{+0.067}_{-0.063} \quad (+0.4\sigma)$	$D_M(2.33)$	$5779^{+140}_{-140} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.877^{+0.033}_{-0.032} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1230^{+25}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.019}_{-0.017} \quad (+0.0\sigma)$
A_{100}^{PS}	$256^{+50}_{-60} \quad (-0.2\sigma)$	D_{220}	$5738^{+74}_{-76} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.010} \quad (-0.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+26}_{-28} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.018}_{-0.016} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.4^{+9.3}_{-10} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.010} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.6}_{-3.7} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.017}_{-0.015} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.83 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.966^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A_{100}^{dustTT}	$8.8^{+3.9}_{-3.5} \quad (-0.1\sigma)$	Y_P	$0.2447^{+0.0046}_{-0.0044} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.016}_{-0.014} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.8} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2461^{+0.0046}_{-0.0044} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0084}_{-0.0073} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.3}_{-6.6} \quad (+0.1\sigma)$	$10^5 D/H$	$2.567^{+0.084}_{-0.085} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0089}_{-0.0079} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.84^{+0.32}_{-0.33} \quad (-0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
A_{100}^{dustTE}	$0.114^{+0.073}_{-0.075}$	z_*	$1089.72^{+0.63}_{-0.62} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.058}$	r_*	$145.1^{+3.1}_{-3.2} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.6^{+3.9}_{-3.9} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04131^{+0.00096}_{-0.00098} \quad (+0.3\sigma)$	χ_{lensing}^2	$9.04 \quad (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.93^{+0.29}_{-0.30} \quad (+0.0\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.3) \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1059.8^{+1.3}_{-1.3} \quad (+0.6\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.5) \quad (-0.4\sigma)$
A_{217}^{dustTE}	$2.07^{+0.52}_{-0.52}$	r_{drag}	$147.7^{+3.2}_{-3.4} \quad (+0.0\sigma)$	χ_{plik}^2	$2359.6 \quad (\nu: 17.1) \quad (+271.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.1404^{+0.0025}_{-0.0023} \quad (+0.1\sigma)$	χ_{JLA}^2	$706.78 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16063^{+0.00075}_{-0.00075} \quad (-0.5\sigma)$	$\chi_{6\text{DF}}^2$	$0.061 \quad (\nu: 0.0)$
H_0	$67.4^{+2.2}_{-2.1} \quad (+0.4\sigma)$	z_{eq}	$3388^{+45}_{-46} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
Ω_Λ	$0.689^{+0.013}_{-0.013} \quad (+0.7\sigma)$	k_{eq}	$0.01031^{+0.00022}_{-0.00020} \quad (-0.6\sigma)$	χ_{DR12BAO}^2	$4.9 \quad (\nu: 1.1)$
Ω_m	$0.311^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.8161^{+0.0089}_{-0.0085} \quad (+0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.2\sigma)$
$\Omega_m h^2$	$0.1415^{+0.0058}_{-0.0054} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.4508^{+0.0045}_{-0.0043} \quad (+0.5\sigma)$	χ_{CMB}^2	$2789.3 \quad (\nu: 17.5) \quad (+286.0\sigma)$
$\Omega_m h^3$	$0.0954^{+0.0065}_{-0.0064} \quad (+0.1\sigma)$	$H(0.15)$	$72.7^{+2.2}_{-2.1} \quad (+0.3\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$

$$\bar{\chi}_{\text{eff}}^2 = 3513.91; R - 1 = 0.03578$$

7.57 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00035}_{-0.00035} \quad (+1.0\sigma)$	σ_8	$0.808^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$D_M(0.15)$	$643^{+20}_{-20} \quad (-0.4\sigma)$
$\Omega_c h^2$	$0.1184^{+0.0057}_{-0.0056} \quad (-0.4\sigma)$	S_8	$0.823^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$82.8^{+2.3}_{-2.2} \quad (+0.3\sigma)$
$100\theta_{MC}$	$1.04111^{+0.00084}_{-0.00082} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.012}_{-0.011} \quad (-0.7\sigma)$	$D_M(0.38)$	$1533^{+45}_{-45} \quad (-0.4\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.51)$	$89.5^{+2.3}_{-2.3} \quad (+0.2\sigma)$
N_{eff}	$3.00^{+0.34}_{-0.33} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.016} \quad (-0.5\sigma)$	$D_M(0.51)$	$1986^{+57}_{-57} \quad (-0.4\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.032}_{-0.029} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.6}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$95.1^{+2.4}_{-2.3} \quad (+0.2\sigma)$
n_s	$0.966^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.041}_{-0.039} \quad (-0.4\sigma)$	$D_M(0.61)$	$2311^{+65}_{-65} \quad (-0.3\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.6\sigma)$	$H(2.33)$	$235.4^{+5.0}_{-5.0} \quad (-0.2\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.104^{+0.065}_{-0.062} \quad (+0.5\sigma)$	$D_M(2.33)$	$5778^{+140}_{-140} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.877^{+0.032}_{-0.034} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1230^{+26}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.019}_{-0.018} \quad (+0.0\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5740^{+77}_{-75} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.017}_{-0.016} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.4^{+9.6}_{-9.8} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.6}_{-3.7} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.016}_{-0.015} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.80 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.966^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_P	$0.2448^{+0.0045}_{-0.0046} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.016}_{-0.015} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2461^{+0.0045}_{-0.0046} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0081}_{-0.0076} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.3}_{-6.5} \quad (+0.1\sigma)$	$10^5 D/H$	$2.565^{+0.085}_{-0.088} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0087}_{-0.0081} \quad (+0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.83^{+0.34}_{-0.33} \quad (-0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.074}$	z_*	$1089.70^{+0.64}_{-0.66} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.058}$	r_*	$145.1^{+3.3}_{-3.2} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.6^{+3.8}_{-3.9} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.0413^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	χ^2_{lensing}	$9.03 \quad (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.93^{+0.31}_{-0.30} \quad (+0.0\sigma)$	χ^2_{simall}	$230 \quad (\nu: 17285.0) \quad (-107.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.8^{+1.3}_{-1.3} \quad (+0.6\sigma)$	χ^2_{lowl}	$190 \quad (\nu: 17292.0) \quad (+74.7\sigma)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.53}$	r_{drag}	$147.7^{+3.4}_{-3.4} \quad (+0.0\sigma)$	χ^2_{plik}	$2359.8 \quad (\nu: 17.9) \quad (+271.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.1404^{+0.0025}_{-0.0025} \quad (+0.1\sigma)$	χ^2_{JLA}	$1035.11 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16063^{+0.00075}_{-0.00077} \quad (-0.5\sigma)$	$\chi^2_{6\text{DF}}$	$0.59 \quad (\nu: 0.2)$
H_0	$67.5^{+2.2}_{-2.1} \quad (+0.4\sigma)$	z_{eq}	$3386^{+44}_{-45} \quad (-0.5\sigma)$	χ^2_{MGS}	$0.73 \quad (\nu: 0.2)$
Ω_Λ	$0.689^{+0.012}_{-0.013} \quad (+0.7\sigma)$	k_{eq}	$0.01030^{+0.00021}_{-0.00022} \quad (-0.6\sigma)$	χ^2_{DR12BAO}	$4.8 \quad (\nu: 1.0)$
Ω_m	$0.311^{+0.013}_{-0.012} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.8163^{+0.0087}_{-0.0083} \quad (+0.6\sigma)$	χ^2_{prior}	$11.6 \quad (\nu: 10.1) \quad (+1.2\sigma)$
$\Omega_m h^2$	$0.1415^{+0.0059}_{-0.0058} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.4510^{+0.0044}_{-0.0042} \quad (+0.5\sigma)$	χ^2_{CMB}	$2789.6 \quad (\nu: 18.0) \quad (+286.1\sigma)$
$\Omega_m h^3$	$0.0955^{+0.0068}_{-0.0064} \quad (+0.1\sigma)$	$H(0.15)$	$72.7^{+2.2}_{-2.2} \quad (+0.4\sigma)$	χ^2_{BAO}	$6.1 \quad (\nu: 0.6)$

$$\bar{\chi}^2_{\text{eff}} = 3842.41; \Delta\bar{\chi}^2_{\text{eff}} = 0.67; R - 1 = 0.01464$$

7.58 base_nnu_plikHM_TTTEE_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02238^{+0.00036}_{-0.00035} \quad (+1.0\sigma)$	σ_8	$0.808^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+20}_{-21} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1183^{+0.0057}_{-0.0056} \quad (-0.4\sigma)$	S_8	$0.824^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$82.7^{+2.3}_{-2.2} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04113^{+0.00084}_{-0.00083} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+46}_{-46} \quad (-0.3\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.51)$	$89.4^{+2.4}_{-2.3} \quad (+0.2\sigma)$
N_{eff}	$2.99^{+0.34}_{-0.33} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+57}_{-59} \quad (-0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.031}_{-0.029} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.5^{+1.6}_{-1.6} \quad (+0.6\sigma)$	$H(0.61)$	$95.0^{+2.4}_{-2.4} \quad (+0.1\sigma)$
n_{s}	$0.965^{+0.013}_{-0.013} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.041}_{-0.040} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2315^{+66}_{-67} \quad (-0.3\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.6\sigma)$	$H(2.33)$	$235.3^{+5.0}_{-5.0} \quad (-0.2\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.065}_{-0.061} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5785^{+140}_{-140} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.033}_{-0.034} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1231^{+26}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.019}_{-0.018} \quad (-0.0\sigma)$
A_{100}^{PS}	$256^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5739^{+77}_{-75} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.017}_{-0.016} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.4^{+9.6}_{-9.8} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.6}_{-3.7} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.016}_{-0.015} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.76 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.013}_{-0.013} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.010} \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2446^{+0.0046}_{-0.0046} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.016}_{-0.015} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2459^{+0.0046}_{-0.0046} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0082}_{-0.0076} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.564^{+0.085}_{-0.088} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0088}_{-0.0081} \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.85^{+0.34}_{-0.34} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.073}_{-0.074}$	z_*	$1089.71^{+0.64}_{-0.66} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.058}$	r_*	$145.2^{+3.3}_{-3.3} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.5^{+3.8}_{-3.9} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.0413^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.02 \quad (\nu: 0.2)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.94^{+0.31}_{-0.30} \quad (+0.1\sigma)$	χ_{small}^2	$230 \quad (\nu: 17276.4) \quad (-107.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.8^{+1.3}_{-1.3} \quad (+0.5\sigma)$	χ_{lowl}^2	$191 \quad (\nu: 17285.7) \quad (+75.0\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.53}_{-0.52}$	r_{drag}	$147.9^{+3.4}_{-3.4} \quad (+0.1\sigma)$	χ_{plik}^2	$2359.6 \quad (\nu: 17.9) \quad (+271.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1403^{+0.0025}_{-0.0025} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.57 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16060^{+0.00076}_{-0.00078} \quad (-0.6\sigma)$	χ_{MGS}^2	$0.69 \quad (\nu: 0.2)$
H_0	$67.3^{+2.3}_{-2.1} \quad (+0.3\sigma)$	z_{eq}	$3390^{+47}_{-47} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 \quad (\nu: 1.2)$
Ω_{Λ}	$0.688^{+0.013}_{-0.013} \quad (+0.6\sigma)$	k_{eq}	$0.01030^{+0.00021}_{-0.00022} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.1) \quad (+1.2\sigma)$
Ω_{m}	$0.312^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8156^{+0.0091}_{-0.0087} \quad (+0.5\sigma)$	χ_{CMB}^2	$2789.4 \quad (\nu: 18.0) \quad (+286.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1414^{+0.0059}_{-0.0058} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0045}_{-0.0044} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}}h^3$	$0.0952^{+0.0068}_{-0.0065} \quad (+0.0\sigma)$	$H(0.15)$	$72.6^{+2.3}_{-2.1} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.29; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.57; R - 1 = 0.01488$$

7.59 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02237^{+0.00034}_{-0.00033} \quad (+1.0\sigma)$	σ_8	$0.807^{+0.020}_{-0.019} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+18}_{-18} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1182^{+0.0053}_{-0.0052} \quad (-0.5\sigma)$	S_8	$0.823^{+0.026}_{-0.025} \quad (-0.7\sigma)$	$H(0.38)$	$82.6^{+2.0}_{-1.9} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04114^{+0.00079}_{-0.00080} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+41}_{-41} \quad (-0.3\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.016}_{-0.016} \quad (-0.6\sigma)$	$H(0.51)$	$89.3^{+2.1}_{-2.0} \quad (+0.2\sigma)$
N_{eff}	$2.98^{+0.30}_{-0.29} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+51}_{-52} \quad (-0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.033}_{-0.031} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.5^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$H(0.61)$	$94.9^{+2.2}_{-2.1} \quad (+0.1\sigma)$
n_{s}	$0.965^{+0.012}_{-0.012} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.050}_{-0.046} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2316^{+59}_{-59} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 9.07 \quad (+0.5\sigma)$	$H(2.33)$	$235.2^{+4.5}_{-4.5} \quad (-0.3\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.069}_{-0.065} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5787^{+120}_{-120} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.032}_{-0.033} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.014}_{-0.013} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.7} \quad (+0.2\sigma)$	D_{40}	$1230^{+26}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.019}_{-0.018} \quad (-0.1\sigma)$
A_{100}^{PS}	$256^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5736^{+78}_{-76} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.017}_{-0.016} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.3^{+9.5}_{-9.9} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.012}_{-0.012} \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.4}_{-3.6} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.016}_{-0.015} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.76 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.012} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2445^{+0.0041}_{-0.0041} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.015}_{-0.014} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2458^{+0.0041}_{-0.0041} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0080}_{-0.0073} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.3}_{-6.6} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.564^{+0.080}_{-0.082} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0085}_{-0.0077} \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.85^{+0.30}_{-0.30} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.074}$	z_*	$1089.70^{+0.62}_{-0.64} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$145.2^{+3.0}_{-2.9} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.5^{+3.8}_{-3.8} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04137^{+0.00096}_{-0.00094} \quad (+0.4\sigma)$	χ_{small}^2	$229 \quad (\nu: 17290.3) \quad (-107.9\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.95^{+0.27}_{-0.27} \quad (+0.1\sigma)$	χ_{lowl}^2	$191 \quad (\nu: 17293.8) \quad (+75.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.15}$	z_{drag}	$1059.8^{+1.2}_{-1.2} \quad (+0.5\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 18.3) \quad (+271.6\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.53}_{-0.52}$	r_{drag}	$147.9^{+3.1}_{-3.0} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.32 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1403^{+0.0023}_{-0.0022} \quad (+0.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.58 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16060^{+0.00069}_{-0.00069} \quad (-0.6\sigma)$	χ_{MGS}^2	$0.69 \quad (\nu: 0.2)$
H_0	$67.3^{+2.0}_{-1.9} \quad (+0.3\sigma)$	z_{eq}	$3390^{+49}_{-47} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 \quad (\nu: 1.3)$
Ω_{Λ}	$0.688^{+0.013}_{-0.013} \quad (+0.6\sigma)$	k_{eq}	$0.01030^{+0.00021}_{-0.00021} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_{m}	$0.312^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8157^{+0.0092}_{-0.0090} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}}h^2$	$0.1413^{+0.0054}_{-0.0053} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0046}_{-0.0046} \quad (+0.5\sigma)$	χ_{CMB}^2	$2780.4 \quad (\nu: 17.4) \quad (+284.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0951^{+0.0060}_{-0.0057} \quad (+0.0\sigma)$	$H(0.15)$	$72.6^{+2.0}_{-1.9} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.70; R - 1 = 0.01387$$

7.60 base_nnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00034}_{-0.00033} \quad (+1.0\sigma)$	S_8	$0.825^{+0.025}_{-0.025} \quad (-0.6\sigma)$	$D_M(0.38)$	$1534^{+40}_{-40} \quad (-0.4\sigma)$
$\Omega_c h^2$	$0.1187^{+0.0050}_{-0.0048} \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.51)$	$89.5^{+2.0}_{-2.0} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.04108^{+0.00076}_{-0.00076} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.016}_{-0.015} \quad (-0.5\sigma)$	$D_M(0.51)$	$1987^{+50}_{-50} \quad (-0.3\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.020}_{-0.019} \quad (-0.5\sigma)$	$H(0.61)$	$95.1^{+2.1}_{-2.0} \quad (+0.2\sigma)$
N_{eff}	$3.01^{+0.28}_{-0.28} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	$99.5^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$D_M(0.61)$	$2312^{+57}_{-57} \quad (-0.3\sigma)$
$\ln(10^{10} A_s)$	$3.045^{+0.033}_{-0.031} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.050}_{-0.046} \quad (-0.4\sigma)$	$H(2.33)$	$235.6^{+4.3}_{-4.2} \quad (-0.1\sigma)$
n_s	$0.966^{+0.012}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 9.08 \quad (+0.5\sigma)$	$D_M(2.33)$	$5777^{+120}_{-120} \quad (-0.2\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s$	$2.101^{+0.069}_{-0.064} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.014}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.877^{+0.031}_{-0.031} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.018}_{-0.017} \quad (+0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	$1229^{+26}_{-25} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.012} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{220}	$5734^{+78}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.017}_{-0.015} \quad (+0.1\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.012}_{-0.011} \quad (-0.4\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{1420}	$817.9^{+9.4}_{-9.7} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.016}_{-0.014} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{2000}	$231.3^{+3.3}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.012}_{-0.011} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.966^{+0.012}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.015}_{-0.014} \quad (+0.2\sigma)$
A^{kSZ}	$< 7.87 \quad (-0.2\sigma)$	Y_{P}	$0.2449^{+0.0038}_{-0.0039} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0077}_{-0.0070} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2462^{+0.0039}_{-0.0039} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0083}_{-0.0074} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.6}_{-3.6} \quad (+0.1\sigma)$	10^5D/H	$2.572^{+0.074}_{-0.073} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.83^{+0.29}_{-0.28} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.77^{+0.57}_{-0.57} \quad (-1.0\sigma)$	f_{2000}^{217}	$106.7^{+3.7}_{-3.7} \quad (-0.5\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.074}$	r_*	$145.0^{+2.8}_{-2.8} \quad (+0.0\sigma)$	χ_{small}^2	$231 \quad (\nu: 17261.9) \quad (-106.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.058}$	$100\theta_*$	$1.04129^{+0.00090}_{-0.00090} \quad (+0.3\sigma)$	χ_{lowl}^2	$190 \quad (\nu: 17264.5) \quad (+74.3\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.92^{+0.26}_{-0.26} \quad (+0.0\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 18.0) \quad (+271.6\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1059.8^{+1.2}_{-1.2} \quad (+0.6\sigma)$	χ_{Aver15}^2	$0.34 \quad (\nu: 0.1)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.15}$	r_{drag}	$147.7^{+2.9}_{-2.9} \quad (-0.0\sigma)$	χ_{Cooke17}^2	$0.40 \quad (\nu: 0.1)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.52}$	k_{D}	$0.1404^{+0.0022}_{-0.0021} \quad (+0.1\sigma)$	$\chi_{6\text{DF}}^2$	$0.57 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\text{D}}$	$0.16067^{+0.00063}_{-0.00064} \quad (-0.5\sigma)$	χ_{MGS}^2	$0.70 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3389^{+49}_{-47} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$5.1 \quad (\nu: 1.3)$
H_0	$67.4^{+1.9}_{-1.9} \quad (+0.4\sigma)$	k_{eq}	$0.01032^{+0.00020}_{-0.00020} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$100\theta_{\text{eq}}$	$0.8158^{+0.0091}_{-0.0090} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.9)$
Ω_{m}	$0.312^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4507^{+0.0046}_{-0.0046} \quad (+0.5\sigma)$	χ_{CMB}^2	$2780.3 \quad (\nu: 17.1) \quad (+284.4\sigma)$
$\Omega_{\text{m}} h^2$	$0.1417^{+0.0052}_{-0.0050} \quad (-0.3\sigma)$	$H(0.15)$	$72.7^{+1.9}_{-1.9} \quad (+0.3\sigma)$	χ_{Abund}^2	$0.74 \quad (\nu: 0.2)$
$\Omega_{\text{m}} h^3$	$0.0955^{+0.0057}_{-0.0055} \quad (+0.1\sigma)$	$D_M(0.15)$	$643^{+18}_{-17} \quad (-0.4\sigma)$		
σ_8	$0.809^{+0.020}_{-0.018} \quad (-0.1\sigma)$	$H(0.38)$	$82.8^{+2.0}_{-1.9} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2799.05; R - 1 = 0.01367$$

7.61 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022321	$0.02231^{+0.00038}_{-0.00036} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4481	$0.448^{+0.014}_{-0.014} \quad (-0.9\sigma)$	$H(0.38)$	82.89	$82.8^{+2.7}_{-2.6} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.1186	$0.1182^{+0.0068}_{-0.0063} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6006	$0.600^{+0.017}_{-0.017} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	1531	$1534^{+54}_{-53} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	1.04099	$1.04106^{+0.00092}_{-0.00092} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9791	$0.979^{+0.021}_{-0.021} \quad (-0.9\sigma)$	$H(0.51)$	89.59	$89.4^{+2.8}_{-2.7} \quad (+0.2\sigma)$
τ	0.0533	$0.054^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	99.76	$99.8^{+1.8}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	1983	$1987^{+68}_{-67} \quad (-0.3\sigma)$
N_{eff}	3.023	$3.00^{+0.41}_{-0.38} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.423	$2.423^{+0.049}_{-0.051} \quad (-0.8\sigma)$	$H(0.61)$	95.18	$95.0^{+2.9}_{-2.7} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0368	$3.036^{+0.036}_{-0.035} \quad (-0.0\sigma)$	z_{re}	7.57	$7.6^{+1.5}_{-1.6} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	2308	$2312^{+78}_{-77} \quad (-0.3\sigma)$
n_{s}	0.9667	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	2.084	$2.083^{+0.076}_{-0.073} \quad (-0.0\sigma)$	$H(2.33)$	235.5	$235.1^{+5.8}_{-5.6} \quad (-0.3\sigma)$
y_{cal}	1.00020	$1.0005^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8729	$1.871^{+0.038}_{-0.038} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	5772	$5782^{+170}_{-170} \quad (-0.2\sigma)$
A_{100}^{PS}	233.9	$238^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	1222.9	$1224^{+27}_{-27} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	0.4528	$0.452^{+0.014}_{-0.014} \quad (-0.9\sigma)$
A_{143}^{PS}	45.4	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	5718	$5720^{+74}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	0.7439	$0.743^{+0.022}_{-0.021} \quad (-0.3\sigma)$
A_{217}^{PS}	101.0	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	2532.9	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	0.4714	$0.471^{+0.013}_{-0.013} \quad (-0.9\sigma)$
A_{217}^{CIB}	43.3	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	815.8	$816^{+10}_{-9.6} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	0.6596	$0.659^{+0.020}_{-0.020} \quad (-0.2\sigma)$
A_{143}^{tSZ}	5.94	$< 7.54 \quad (-0.6\sigma)$	D_{2000}	230.39	$230.7^{+4.1}_{-4.0} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	0.4701	$0.470^{+0.013}_{-0.013} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.641	$0.66^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	0.9667	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	0.6173	$0.617^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.90	—	Y_{P}	0.2451	$0.2447^{+0.0055}_{-0.0054} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4653	$0.465^{+0.013}_{-0.013} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.55	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2464	$0.2460^{+0.0055}_{-0.0054} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	0.5874	$0.587^{+0.018}_{-0.018} \quad (-0.1\sigma)$
A^{kSZ}	1.3	—	$10^5 \mathrm{D}/\mathrm{H}$	2.587	$2.58^{+0.11}_{-0.11} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	0.2962	$0.2959^{+0.0093}_{-0.0092} \quad (-0.0\sigma)$
A_{100}^{dust}	1.012	$1.01^{+0.39}_{-0.38}$	Age/Gyr	13.818	$13.84^{+0.39}_{-0.40} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	0.3055	$0.305^{+0.010}_{-0.0098} \quad (+0.1\sigma)$
A_{143}^{dust}	0.998	$0.96^{+0.34}_{-0.34}$	z_*	1089.83	$1089.79^{+0.81}_{-0.78} \quad (-0.9\sigma)$	f_{2000}^{143}	30.1	$29^{+7}_{-6} \quad (-0.5\sigma)$
A_{217}^{dust}	0.981	$0.98^{+0.20}_{-0.20}$	r_*	144.95	$145.2^{+3.8}_{-3.8} \quad (+0.1\sigma)$	f_{2000}^{217}	106.63	$106.5^{+4.4}_{-4.4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	0.974	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	1.04120	$1.0413^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	31.93	$32^{+5}_{-5} \quad (-0.6\sigma)$
c_{100}	0.99766	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.922	$13.95^{+0.35}_{-0.36} \quad (+0.1\sigma)$	χ_{small}^2	395.88	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{217}	1.00145	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	1059.70	$1059.6^{+1.5}_{-1.4} \quad (+0.4\sigma)$	χ_{lowl}^2	22.86	$23.0 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{TE}	0.9966	$0.997^{+0.010}_{-0.0099}$	r_{drag}	147.64	$147.9^{+3.9}_{-4.0} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	11500.0	$11515.3 \quad (\nu: 17.7)$
c_{EE}	0.9922	$0.992^{+0.011}_{-0.010}$	k_{D}	0.14034	$0.1402^{+0.0029}_{-0.0028} \quad (-0.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.022	$0.056 \quad (\nu: 0.0)$
H_0	67.57	$67.5^{+2.6}_{-2.5} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	0.16079	$0.16074^{+0.00097}_{-0.00094} \quad (-0.3\sigma)$	χ_{MGS}^2	1.28	$1.35 \quad (\nu: 0.1)$
Ω_{Λ}	0.6900	$0.690^{+0.014}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	3377	$3378^{+52}_{-53} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.22	$4.7 \quad (\nu: 1.1)$
Ω_{m}	0.3100	$0.310^{+0.014}_{-0.014} \quad (-0.7\sigma)$	k_{eq}	0.010292	$0.01028^{+0.00025}_{-0.00024} \quad (-0.8\sigma)$	χ_{prior}^2	2.3	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.1415	$0.1411^{+0.0070}_{-0.0065} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	0.8176	$0.818^{+0.010}_{-0.0097} \quad (+0.7\sigma)$	χ_{BAO}^2	5.52	$6.1 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	0.0956	$0.0952^{+0.0081}_{-0.0074} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4517	$0.4517^{+0.0052}_{-0.0049} \quad (+0.7\sigma)$	χ_{CMB}^2	11918.7	$11935.2 \quad (\nu: 17.3) \quad (+1924.6\sigma)$
σ_8	0.8049	$0.804^{+0.023}_{-0.023} \quad (-0.4\sigma)$	$H(0.15)$	72.83	$72.7^{+2.6}_{-2.5} \quad (+0.4\sigma)$			
S_8	0.8182	$0.817^{+0.026}_{-0.026} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	641.7	$643^{+24}_{-23} \quad (-0.4\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 11926.54$; $\bar{\chi}_{\mathrm{eff}}^2 = 11949.07$; $\Delta\chi_{\mathrm{eff}}^2 = 0.79$; $R - 1 = 0.00571$
 χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.22 CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.88 commander_dx12_v3.2.29: 22.86 CamSpec like_10.7HM_1400_unified: 11499.97

7.62 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_JLA

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00038}_{-0.00036} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.7^{+2.6}_{-2.5} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0064}_{-0.0059} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+52}_{-50} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04108^{+0.00090}_{-0.00094} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.017} \quad (-0.7\sigma)$	$H(0.51)$	$89.3^{+2.7}_{-2.6} \quad (+0.2\sigma)$
τ	$0.055^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$99.6^{+1.6}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+65}_{-64} \quad (-0.3\sigma)$
N_{eff}	$2.99^{+0.39}_{-0.36} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.042}_{-0.043} \quad (-0.6\sigma)$	$H(0.61)$	$94.9^{+2.7}_{-2.6} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.031}_{-0.032} \quad (+0.2\sigma)$	z_{re}	$7.7^{+1.4}_{-1.4} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2316^{+74}_{-73} \quad (-0.3\sigma)$
n_{s}	$0.965^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.066}_{-0.065} \quad (+0.2\sigma)$	$H(2.33)$	$235.1^{+5.6}_{-5.3} \quad (-0.3\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.873^{+0.035}_{-0.034} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5788^{+160}_{-160} \quad (-0.1\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1227^{+27}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.012} \quad (-0.8\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5726^{+72}_{-74} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.019}_{-0.020} \quad (-0.2\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+28}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$817^{+10}_{-10} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.017}_{-0.018} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$4.0^{+3.5}_{-4.0} \quad (-0.6\sigma)$	D_{2000}	$231.0^{+4.2}_{-4.1} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	$n_{\mathrm{s},0.002}$	$0.965^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.016}_{-0.017} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2446^{+0.0052}_{-0.0051} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2459^{+0.0053}_{-0.0051} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.016}_{-0.017} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.58^{+0.11}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2964^{+0.0082}_{-0.0086} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.86^{+0.38}_{-0.38} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3056^{+0.0089}_{-0.0092} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	z_*	$1089.78^{+0.78}_{-0.74} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+7}_{-6} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.3^{+3.6}_{-3.7} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.4^{+4.4}_{-4.4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.95^{+0.34}_{-0.34} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.29 \quad (\nu: 0.4)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.6^{+1.5}_{-1.4} \quad (+0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (+0.1\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0097}$	r_{drag}	$148.0^{+3.7}_{-3.8} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 0.6) \quad (-0.5\sigma)$
c_{EE}	$0.992^{+0.011}_{-0.0099}$	k_{D}	$0.1401^{+0.0028}_{-0.0027} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.6 \quad (\nu: 17.4)$
H_0	$67.3^{+2.4}_{-2.4} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00094}_{-0.00087} \quad (-0.4\sigma)$	χ_{JLA}^2	$706.78 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.013}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3382^{+51}_{-48} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.061 \quad (\nu: 0.0)$
Ω_{m}	$0.311^{+0.014}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01028^{+0.00023}_{-0.00022} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.27 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0066}_{-0.0061} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8168^{+0.0092}_{-0.0094} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0950^{+0.0076}_{-0.0071} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0047}_{-0.0049} \quad (+0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.5) \quad (+0.1\sigma)$
σ_8	$0.806^{+0.020}_{-0.021} \quad (-0.3\sigma)$	$H(0.15)$	$72.6^{+2.5}_{-2.4} \quad (+0.3\sigma)$	χ_{CMB}^2	$11944.1 \quad (\nu: 17.9) \quad (+1926.2\sigma)$
S_8	$0.821^{+0.021}_{-0.022} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+23}_{-22} \quad (-0.3\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12664.75; R - 1 = 0.04059$$

7.63 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022296	$0.02232^{+0.00037}_{-0.00036} (+0.8\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4488	$0.449^{+0.012}_{-0.012} (-0.8\sigma)$	$H(0.38)$	82.61	$82.8^{+2.5}_{-2.5} (+0.3\sigma)$
$\Omega_c h^2$	0.1179	$0.1182^{+0.0064}_{-0.0060} (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6009	$0.602^{+0.014}_{-0.014} (-0.7\sigma)$	$D_M(0.38)$	1536	$1534^{+52}_{-49} (-0.4\sigma)$
$100\theta_{MC}$	1.04105	$1.04106^{+0.00091}_{-0.00089} (+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9809	$0.982^{+0.017}_{-0.017} (-0.7\sigma)$	$H(0.51)$	89.29	$89.4^{+2.6}_{-2.6} (+0.2\sigma)$
τ	0.0546	$0.056^{+0.015}_{-0.014} (+0.5\sigma)$	$r_{drag}h$	99.64	$99.7^{+1.6}_{-1.6} (+0.7\sigma)$	$D_M(0.51)$	1990	$1987^{+66}_{-62} (-0.3\sigma)$
N_{eff}	2.981	$3.00^{+0.39}_{-0.37} (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4288	$2.431^{+0.041}_{-0.041} (-0.6\sigma)$	$H(0.61)$	94.88	$95.0^{+2.7}_{-2.7} (+0.2\sigma)$
$\ln(10^{10} A_s)$	3.0388	$3.042^{+0.032}_{-0.032} (+0.2\sigma)$	z_{re}	7.69	$7.8^{+1.4}_{-1.4} (+0.4\sigma)$	$D_M(0.61)$	2316	$2312^{+75}_{-71} (-0.3\sigma)$
n_s	0.9657	$0.966^{+0.014}_{-0.014} (+0.4\sigma)$	$10^9 A_s$	2.088	$2.094^{+0.068}_{-0.066} (+0.2\sigma)$	$H(2.33)$	234.9	$235.2^{+5.5}_{-5.4} (-0.3\sigma)$
y_{cal}	1.00064	$1.0007^{+0.0048}_{-0.0049} (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8721	$1.873^{+0.035}_{-0.035} (-0.4\sigma)$	$D_M(2.33)$	5789	$5782^{+160}_{-160} (-0.2\sigma)$
A_{100}^{PS}	231.1	$238^{+50}_{-50} (-0.8\sigma)$	D_{40}	1225.3	$1226^{+27}_{-25} (-0.5\sigma)$	$f\sigma_8(0.15)$	0.4534	$0.454^{+0.011}_{-0.011} (-0.8\sigma)$
A_{143}^{PS}	41.8	$38^{+20}_{-20} (-1.2\sigma)$	D_{220}	5723	$5726^{+73}_{-74} (+0.3\sigma)$	$\sigma_8(0.15)$	0.7436	$0.745^{+0.019}_{-0.019} (-0.2\sigma)$
A_{217}^{PS}	104.0	$103^{+20}_{-30} (-1.2\sigma)$	D_{810}	2535.5	$2535^{+27}_{-27} (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4717	$0.472^{+0.011}_{-0.011} (-0.8\sigma)$
A_{217}^{CIB}	42.9	$39^{+10}_{-10} (-1.2\sigma)$	D_{1420}	817.3	$817^{+10}_{-9.7} (+0.4\sigma)$	$\sigma_8(0.38)$	0.6592	$0.661^{+0.018}_{-0.018} (-0.0\sigma)$
A_{143}^{tSZ}	6.57	$< 7.54 (-0.6\sigma)$	D_{2000}	231.05	$230.9^{+4.0}_{-3.9} (+0.5\sigma)$	$f\sigma_8(0.51)$	0.4704	$0.471^{+0.011}_{-0.011} (-0.7\sigma)$
$r_{143 \times 217}^{PS}$	0.650	$0.66^{+0.27}_{-0.27}$	$n_{s,0.002}$	0.9657	$0.966^{+0.014}_{-0.014} (+0.4\sigma)$	$\sigma_8(0.51)$	0.6169	$0.618^{+0.017}_{-0.017} (+0.0\sigma)$
$r_{143 \times 217}^{CIB}$	0.80	—	Y_P	0.2445	$0.2447^{+0.0052}_{-0.0052} (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4655	$0.466^{+0.011}_{-0.011} (-0.6\sigma)$
$\xi^{tSZ \times CIB}$	0.33	—	Y_P^{BBN}	0.2458	$0.2460^{+0.0052}_{-0.0053} (+0.0\sigma)$	$\sigma_8(0.61)$	0.5870	$0.588^{+0.016}_{-0.016} (+0.0\sigma)$
A^{kSZ}	0.0	—	$10^5 D/H$	2.577	$2.58^{+0.10}_{-0.10} (-0.6\sigma)$	$f\sigma_8(2.33)$	0.2960	$0.2967^{+0.0085}_{-0.0086} (+0.1\sigma)$
A_{100}^{dust}	1.008	$1.01^{+0.39}_{-0.39}$	Age/Gyr	13.860	$13.84^{+0.38}_{-0.37} (-0.1\sigma)$	$\sigma_8(2.33)$	0.3052	$0.3059^{+0.0091}_{-0.0092} (+0.2\sigma)$
A_{143}^{dust}	0.968	$0.95^{+0.34}_{-0.33}$	z_*	1089.77	$1089.78^{+0.76}_{-0.74} (-1.0\sigma)$	f_{2000}^{143}	29.1	$29^{+6}_{-6} (-0.5\sigma)$
A_{217}^{dust}	0.975	$0.98^{+0.20}_{-0.20}$	r_*	145.35	$145.2^{+3.7}_{-3.6} (+0.1\sigma)$	f_{2000}^{217}	106.27	$106.5^{+4.4}_{-4.4} (-0.6\sigma)$
$A_{143 \times 217}^{dust}$	1.002	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	1.04129	$1.0413^{+0.0011}_{-0.0011} (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	31.47	$32^{+5}_{-5} (-0.7\sigma)$
c_{100}	0.99776	$0.9976^{+0.0021}_{-0.0021} (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	13.959	$13.94^{+0.34}_{-0.34} (+0.1\sigma)$	$\chi^2_{lensing}$	8.94	$9.32 (\nu: 0.4)$
c_{217}	1.00120	$1.0011^{+0.0032}_{-0.0030} (+4.6\sigma)$	z_{drag}	1059.55	$1059.6^{+1.4}_{-1.4} (+0.4\sigma)$	χ^2_{small}	396.09	$397.1 (\nu: 1.7) (+0.2\sigma)$
c_{TE}	0.9964	$0.996^{+0.010}_{-0.0099}$	r_{drag}	148.05	$147.9^{+3.8}_{-3.8} (+0.1\sigma)$	χ^2_{lowl}	23.00	$23.1 (\nu: 0.6) (-0.6\sigma)$
c_{EE}	0.9918	$0.992^{+0.011}_{-0.010}$	k_D	0.14005	$0.1402^{+0.0027}_{-0.0027} (-0.0\sigma)$	$\chi^2_{CamSpec}$	11499.7	$11514.7 (\nu: 16.7)$
H_0	67.30	$67.5^{+2.4}_{-2.4} (+0.4\sigma)$	$100\theta_D$	0.16070	$0.16073^{+0.00092}_{-0.00090} (-0.4\sigma)$	χ^2_{JLA}	1035.03	$1035.09 (\nu: 0.1)$
Ω_Λ	0.6890	$0.690^{+0.013}_{-0.013} (+0.7\sigma)$	z_{eq}	3380.9	$3379^{+48}_{-48} (-0.6\sigma)$	χ^2_{6DF}	0.030	$0.053 (\nu: 0.0)$
Ω_m	0.3110	$0.310^{+0.013}_{-0.013} (-0.7\sigma)$	k_{eq}	0.010274	$0.01028^{+0.00023}_{-0.00022} (-0.7\sigma)$	χ^2_{MGS}	1.22	$1.32 (\nu: 0.1)$
$\Omega_m h^2$	0.1409	$0.1412^{+0.0065}_{-0.0062} (-0.4\sigma)$	$100\theta_{eq}$	0.8170	$0.8174^{+0.0091}_{-0.0089} (+0.7\sigma)$	$\chi^2_{DR12BAO}$	4.39	$4.7 (\nu: 1.0)$
$\Omega_m h^3$	0.0948	$0.0953^{+0.0076}_{-0.0072} (+0.0\sigma)$	$100\theta_{s,eq}$	0.45136	$0.4516^{+0.0046}_{-0.0046} (+0.7\sigma)$	χ^2_{prior}	2.0	$7.7 (\nu: 5.8) (+0.1\sigma)$
σ_8	0.8047	$0.806^{+0.020}_{-0.020} (-0.3\sigma)$	$H(0.15)$	72.55	$72.7^{+2.4}_{-2.4} (+0.4\sigma)$	χ^2_{CMB}	11927.7	$11944.3 (\nu: 17.6) (+1926.3\sigma)$
S_8	0.8194	$0.820^{+0.021}_{-0.022} (-0.8\sigma)$	$D_M(0.15)$	644.2	$643^{+23}_{-21} (-0.4\sigma)$	χ^2_{BAO}	5.64	$6.1 (\nu: 0.6)$

Best-fit $\chi^2_{eff} = 12970.39$; $\Delta\chi^2_{eff} = -0.10$; $\bar{\chi}^2_{eff} = 12993.15$; $\Delta\bar{\chi}^2_{eff} = 0.76$; $R - 1 = 0.01037$
 χ^2_{eff} : BAO - 6DF: 0.03 (Δ 0.01) MGS: 1.22 (Δ -0.06) DR12BAO: 4.39 (Δ 0.16) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.94 (Δ -0.03) small_100x143_offlike5_EE_Aplanck 396.09 (Δ 0.04) commander_dx12_v3_2.29: 23.00 (Δ 0.23) CamSpec like_10.7HM_1400_unified: 11499.66 (Δ -0.52) SN - JLA Pantheon18: 1035.03 (Δ 0.05)

7.64 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00038}_{-0.00037} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.450^{+0.011}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.6^{+2.6}_{-2.6} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0064}_{-0.0060} \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.602^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_M(0.38)$	$1537^{+54}_{-51} \quad (-0.3\sigma)$
$100\theta_{MC}$	$1.04108^{+0.00091}_{-0.00090} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.017}_{-0.017} \quad (-0.7\sigma)$	$H(0.51)$	$89.3^{+2.7}_{-2.6} \quad (+0.1\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.7}_{-1.7} \quad (+0.6\sigma)$	$D_M(0.51)$	$1991^{+68}_{-64} \quad (-0.3\sigma)$
N_{eff}	$2.98^{+0.39}_{-0.38} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.041}_{-0.042} \quad (-0.5\sigma)$	$H(0.61)$	$94.9^{+2.7}_{-2.7} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.033}_{-0.032} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.4}_{-1.4} \quad (+0.4\sigma)$	$D_M(0.61)$	$2317^{+77}_{-73} \quad (-0.3\sigma)$
n_s	$0.965^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$10^9 A_s$	$2.092^{+0.069}_{-0.066} \quad (+0.2\sigma)$	$H(2.33)$	$235.0^{+5.6}_{-5.4} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.872^{+0.036}_{-0.036} \quad (-0.4\sigma)$	$D_M(2.33)$	$5791^{+160}_{-160} \quad (-0.1\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1227^{+27}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.012} \quad (-0.8\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+73}_{-74} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.019}_{-0.020} \quad (-0.2\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$817^{+10}_{-9.7} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.018}_{-0.018} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.56 \quad (-0.6\sigma)$	D_{2000}	$230.9^{+4.0}_{-3.9} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.27}_{-0.27}$	$n_{s,0.002}$	$0.965^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.017}_{-0.017} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.2445^{+0.0053}_{-0.0053} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.2458^{+0.0053}_{-0.0053} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.017}_{-0.017} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.58^{+0.11}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2962^{+0.0086}_{-0.0087} \quad (+0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	Age/Gyr	$13.86^{+0.39}_{-0.38} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3054^{+0.0093}_{-0.0092} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.33}$	z_*	$1089.78^{+0.76}_{-0.75} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.4^{+3.7}_{-3.7} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.4^{+4.4}_{-4.5} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.96^{+0.34}_{-0.34} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.27 \quad (\nu: 0.4)$
c_{217}	$1.0011^{+0.0032}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (+0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0099}$	r_{drag}	$148.1^{+3.9}_{-3.8} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 0.6) \quad (-0.5\sigma)$
c_{EE}	$0.992^{+0.011}_{-0.010}$	k_{D}	$0.1401^{+0.0028}_{-0.0027} \quad (-0.1\sigma)$	χ_{CamSpec}^2	$11514.5 \quad (\nu: 16.7)$
H_0	$67.3^{+2.5}_{-2.5} \quad (+0.3\sigma)$	$100\theta_{\text{D}}$	$0.16070^{+0.00093}_{-0.00091} \quad (-0.4\sigma)$	$\chi_{6\text{DF}}^2$	$0.065 \quad (\nu: 0.0)$
Ω_{Λ}	$0.688^{+0.014}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3383^{+49}_{-50} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.25 \quad (\nu: 0.1)$
Ω_{m}	$0.312^{+0.014}_{-0.014} \quad (-0.7\sigma)$	k_{eq}	$0.01028^{+0.00023}_{-0.00022} \quad (-0.8\sigma)$	χ_{DR12BAO}^2	$5.0 \quad (\nu: 1.3)$
$\Omega_{\text{m}} h^2$	$0.1410^{+0.0066}_{-0.0062} \quad (-0.4\sigma)$	$100\theta_{\text{eq}}$	$0.8166^{+0.0096}_{-0.0093} \quad (+0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.7) \quad (+0.1\sigma)$
$\Omega_{\text{m}} h^3$	$0.0949^{+0.0077}_{-0.0073} \quad (-0.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.4512^{+0.0049}_{-0.0047} \quad (+0.6\sigma)$	χ_{CMB}^2	$11944.1 \quad (\nu: 17.6) \quad (+1926.2\sigma)$
σ_8	$0.805^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$H(0.15)$	$72.5^{+2.5}_{-2.5} \quad (+0.3\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
S_8	$0.821^{+0.021}_{-0.022} \quad (-0.8\sigma)$	$D_M(0.15)$	$645^{+24}_{-22} \quad (-0.3\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11958.08; \Delta\bar{\chi}_{\text{eff}}^2 = 0.68; R - 1 = 0.01000$$

7.65 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02229^{+0.00035}_{-0.00034} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.014}_{-0.014} \quad (-1.0\sigma)$	$H(0.38)$	$82.6^{+2.2}_{-2.2} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1177^{+0.0056}_{-0.0053} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.599^{+0.016}_{-0.016} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+45}_{-44} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04111^{+0.00083}_{-0.00083} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.978^{+0.020}_{-0.021} \quad (-0.9\sigma)$	$H(0.51)$	$89.2^{+2.3}_{-2.2} \quad (+0.1\sigma)$
τ	$0.054^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.7}_{-1.6} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1992^{+57}_{-56} \quad (-0.3\sigma)$
N_{eff}	$2.97^{+0.33}_{-0.32} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.049}_{-0.050} \quad (-0.7\sigma)$	$H(0.61)$	$94.8^{+2.3}_{-2.3} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.035^{+0.035}_{-0.035} \quad (-0.1\sigma)$	z_{re}	$7.6^{+1.5}_{-1.6} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+65}_{-64} \quad (-0.3\sigma)$
n_{s}	$0.965^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.081^{+0.074}_{-0.071} \quad (-0.1\sigma)$	$H(2.33)$	$234.7^{+4.9}_{-4.6} \quad (-0.4\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.869^{+0.033}_{-0.033} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5794^{+140}_{-140} \quad (-0.1\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+26}_{-25} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.013}_{-0.014} \quad (-1.0\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5720^{+74}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.019}_{-0.019} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.013}_{-0.013} \quad (-1.0\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$817^{+10}_{-9.7} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.017}_{-0.017} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.60 \quad (-0.6\sigma)$	D_{2000}	$230.9^{+3.8}_{-3.7} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.012}_{-0.012} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	$n_{\mathrm{s},0.002}$	$0.965^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.017}_{-0.016} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2443^{+0.0045}_{-0.0044} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.012}_{-0.012} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2456^{+0.0045}_{-0.0044} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.574^{+0.095}_{-0.092} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2953^{+0.0081}_{-0.0081} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.87^{+0.33}_{-0.33} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3045^{+0.0087}_{-0.0086} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	z_*	$1089.74^{+0.70}_{-0.68} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.5^{+3.2}_{-3.2} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.3^{+4.2}_{-4.2} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	$1.0414^{+0.0010}_{-0.0010} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.97^{+0.29}_{-0.30} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.5^{+1.2}_{-1.2} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.5) \quad (-0.6\sigma)$
c_{TE}	$0.9964^{+0.010}_{-0.0099}$	r_{drag}	$148.2^{+3.3}_{-3.3} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.9 \quad (\nu: 16.9)$
c_{EE}	$0.992^{+0.010}_{-0.010}$	k_{D}	$0.1399^{+0.0025}_{-0.0023} \quad (-0.1\sigma)$	χ_{Aver15}^2	$0.36 \quad (\nu: 0.1)$
H_0	$67.3^{+2.1}_{-2.1} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00081}_{-0.00080} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.013}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3379^{+50}_{-49} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.32 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.014}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01026^{+0.00022}_{-0.00021} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1406^{+0.0058}_{-0.0054} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8173^{+0.0093}_{-0.0092} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0946^{+0.0066}_{-0.0061} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0047}_{-0.0047} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
σ_8	$0.803^{+0.021}_{-0.021} \quad (-0.5\sigma)$	$H(0.15)$	$72.5^{+2.1}_{-2.1} \quad (+0.3\sigma)$	χ_{CMB}^2	$11934.9 \quad (\nu: 16.8) \quad (+1924.6\sigma)$
S_8	$0.817^{+0.025}_{-0.026} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+20}_{-19} \quad (-0.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11949.20$; $R - 1 = 0.00729$

7.66 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02229^{+0.00035}_{-0.00034} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.015}_{-0.016} \quad (-0.9\sigma)$	$H(0.51)$	$89.4^{+2.2}_{-2.1} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0052}_{-0.0050} \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.020}_{-0.021} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1988^{+54}_{-53} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00080}_{-0.00078} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$H(0.61)$	$95.0^{+2.2}_{-2.1} \quad (+0.2\sigma)$
τ	$0.053^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.048}_{-0.050} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2314^{+62}_{-61} \quad (-0.3\sigma)$
N_{eff}	$3.00^{+0.31}_{-0.29} \quad (-0.0\sigma)$	z_{re}	$7.6^{+1.5}_{-1.6} \quad (+0.2\sigma)$	$H(2.33)$	$235.1^{+4.6}_{-4.4} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.036^{+0.035}_{-0.035} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.082^{+0.073}_{-0.071} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5784^{+130}_{-130} \quad (-0.1\sigma)$
n_{s}	$0.966^{+0.012}_{-0.012} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.032}_{-0.032} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.013}_{-0.014} \quad (-0.9\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1224^{+26}_{-25} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.019}_{-0.019} \quad (-0.3\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5719^{+74}_{-75} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.012} \quad (-0.9\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.017}_{-0.017} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{1420}	$816.2^{+9.6}_{-9.6} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{2000}	$230.6^{+3.6}_{-3.5} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.016}_{-0.016} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.59 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.966^{+0.012}_{-0.012} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.012}_{-0.012} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	Y_{P}	$0.2447^{+0.0042}_{-0.0041} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.015}_{-0.015} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2460^{+0.0042}_{-0.0042} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2958^{+0.0078}_{-0.0078} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.583^{+0.084}_{-0.084} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3050^{+0.0084}_{-0.0082} \quad (+0.0\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.85^{+0.31}_{-0.31} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	z_*	$1089.80^{+0.63}_{-0.63} \quad (-0.9\sigma)$	f_{2000}^{217}	$106.5^{+4.1}_{-4.1} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$145.3^{+3.0}_{-3.0} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04128^{+0.00095}_{-0.00094} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.95^{+0.27}_{-0.28} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.00 \quad (\nu: 0.5) \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.6^{+1.2}_{-1.2} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.9 \quad (\nu: 16.8)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$148.0^{+3.1}_{-3.1} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.36 \quad (\nu: 0.1)$
c_{TE}	$0.9966^{+0.010}_{-0.0098}$	k_{D}	$0.1401^{+0.0023}_{-0.0022} \quad (-0.1\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.35 \quad (\nu: 0.1)$
c_{EE}	$0.992^{+0.010}_{-0.010}$	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00072}_{-0.00072} \quad (-0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
H_0	$67.4^{+2.1}_{-2.0} \quad (+0.4\sigma)$	z_{eq}	$3378^{+49}_{-48} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.32 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.013}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01027^{+0.00021}_{-0.00020} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.1)$
Ω_{m}	$0.310^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0092}_{-0.0092} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1410^{+0.0054}_{-0.0051} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0047}_{-0.0047} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.0951^{+0.0062}_{-0.0058} \quad (+0.0\sigma)$	$H(0.15)$	$72.7^{+2.1}_{-2.0} \quad (+0.3\sigma)$	χ_{CMB}^2	$11934.8 \quad (\nu: 16.6) \quad (+1924.6\sigma)$
σ_8	$0.804^{+0.020}_{-0.020} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+19}_{-19} \quad (-0.4\sigma)$	χ_{Abund}^2	$0.71 \quad (\nu: 0.2)$
S_8	$0.818^{+0.024}_{-0.026} \quad (-0.9\sigma)$	$H(0.38)$	$82.7^{+2.1}_{-2.0} \quad (+0.3\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.013}_{-0.014} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1535^{+43}_{-42} \quad (-0.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11949.40; R - 1 = 0.00827$

7.67 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02231^{+0.00038}_{-0.00036} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.014}_{-0.014} \quad (-0.9\sigma)$	$H(0.38)$	$82.8^{+2.7}_{-2.6} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0068}_{-0.0063} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.017}_{-0.016} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+54}_{-53} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00093}_{-0.00092} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.020}_{-0.019} \quad (-0.8\sigma)$	$H(0.51)$	$89.5^{+2.8}_{-2.7} \quad (+0.2\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.8}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+68}_{-67} \quad (-0.4\sigma)$
N_{eff}	$3.00^{+0.41}_{-0.38} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.048}_{-0.047} \quad (-0.7\sigma)$	$H(0.61)$	$95.1^{+2.9}_{-2.7} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.039^{+0.033}_{-0.031} \quad (+0.1\sigma)$	z_{re}	$< 8.87 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+78}_{-77} \quad (-0.3\sigma)$
n_{s}	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.089^{+0.069}_{-0.065} \quad (+0.1\sigma)$	$H(2.33)$	$235.1^{+5.8}_{-5.6} \quad (-0.3\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.038}_{-0.038} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5781^{+170}_{-170} \quad (-0.2\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+27}_{-27} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.013}_{-0.013} \quad (-0.9\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5720^{+74}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.021}_{-0.020} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816^{+10}_{-9.6} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.019}_{-0.019} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{2000}	$230.7^{+4.1}_{-4.0} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.013}_{-0.012} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.018}_{-0.018} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2448^{+0.0055}_{-0.0054} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.013}_{-0.012} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2461^{+0.0055}_{-0.0054} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.017}_{-0.017} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.58^{+0.11}_{-0.11} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2963^{+0.0091}_{-0.0088} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.84^{+0.39}_{-0.40} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3056^{+0.0098}_{-0.0093} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.78^{+0.81}_{-0.78} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+7}_{-6} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.2^{+3.8}_{-3.8} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.5^{+4.5}_{-4.4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0011} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.94^{+0.35}_{-0.36} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.6^{+1.5}_{-1.4} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0098}$	r_{drag}	$147.9^{+3.9}_{-4.0} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.1 \quad (\nu: 17.5)$
c_{EE}	$0.992^{+0.011}_{-0.011}$	k_{D}	$0.1402^{+0.0029}_{-0.0028} \quad (-0.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
H_0	$67.5^{+2.6}_{-2.5} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00097}_{-0.00094} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.36 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.014}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3377^{+52}_{-53} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.1)$
Ω_{m}	$0.310^{+0.014}_{-0.014} \quad (-0.7\sigma)$	k_{eq}	$0.01028^{+0.00025}_{-0.00024} \quad (-0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0069}_{-0.0065} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.0097} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.0953^{+0.0081}_{-0.0074} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4518^{+0.0052}_{-0.0049} \quad (+0.7\sigma)$	χ_{CMB}^2	$11935.0 \quad (\nu: 17.0) \quad (+1924.6\sigma)$
σ_8	$0.805^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$H(0.15)$	$72.7^{+2.6}_{-2.5} \quad (+0.4\sigma)$		
S_8	$0.818^{+0.026}_{-0.026} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+24}_{-23} \quad (-0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11948.82; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.83; R - 1 = 0.00628$$

7.68 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_JLA_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02231^{+0.00038}_{-0.00037} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.7^{+2.6}_{-2.5} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0064}_{-0.0058} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+52}_{-50} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04108^{+0.00090}_{-0.00094} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.51)$	$89.3^{+2.7}_{-2.6} \quad (+0.2\sigma)$
τ	$0.056^{+0.012}_{-0.012} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.6}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+64}_{-63} \quad (-0.3\sigma)$
N_{eff}	$2.99^{+0.39}_{-0.36} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.041}_{-0.041} \quad (-0.5\sigma)$	$H(0.61)$	$94.9^{+2.7}_{-2.7} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.031}_{-0.028} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.1}_{-1.2} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2315^{+74}_{-73} \quad (-0.3\sigma)$
n_{s}	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.065}_{-0.058} \quad (+0.2\sigma)$	$H(2.33)$	$235.0^{+5.6}_{-5.4} \quad (-0.3\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.873^{+0.035}_{-0.034} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5787^{+160}_{-160} \quad (-0.1\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1227^{+27}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.011} \quad (-0.8\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+72}_{-73} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.019}_{-0.019} \quad (-0.2\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$817^{+11}_{-10} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.017}_{-0.017} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.6\sigma)$	D_{2000}	$231.0^{+4.2}_{-4.0} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	$n_{\mathrm{s},0.002}$	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.016}_{-0.017} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2446^{+0.0052}_{-0.0052} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2459^{+0.0053}_{-0.0052} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.015}_{-0.016} \quad (+0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.58^{+0.11}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2966^{+0.0082}_{-0.0083} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.86^{+0.38}_{-0.38} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3058^{+0.0088}_{-0.0090} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.95^{+0.33}_{-0.33}$	z_*	$1089.77^{+0.78}_{-0.75} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+7}_{-6} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.3^{+3.6}_{-3.7} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.4^{+4.4}_{-4.4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.95^{+0.34}_{-0.34} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.23 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.6^{+1.5}_{-1.4} \quad (+0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.1\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.0097}$	r_{drag}	$148.0^{+3.8}_{-3.8} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 0.6) \quad (-0.5\sigma)$
c_{EE}	$0.992^{+0.011}_{-0.010}$	k_{D}	$0.1401^{+0.0028}_{-0.0027} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.5 \quad (\nu: 17.4)$
H_0	$67.3^{+2.4}_{-2.4} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00094}_{-0.00087} \quad (-0.4\sigma)$	χ_{JLA}^2	$706.78 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.013}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3382^{+50}_{-48} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.059 \quad (\nu: 0.0)$
Ω_{m}	$0.311^{+0.014}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01028^{+0.00023}_{-0.00022} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.28 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1410^{+0.0066}_{-0.0060} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8169^{+0.0091}_{-0.0095} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0950^{+0.0076}_{-0.0072} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0046}_{-0.0049} \quad (+0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.4) \quad (+0.1\sigma)$
σ_8	$0.806^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$H(0.15)$	$72.6^{+2.4}_{-2.4} \quad (+0.3\sigma)$	χ_{CMB}^2	$11943.9 \quad (\nu: 17.7) \quad (+1926.2\sigma)$
S_8	$0.821^{+0.021}_{-0.022} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+23}_{-22} \quad (-0.4\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12664.58; R - 1 = 0.04058$$

7.69 **base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5**

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00037}_{-0.00036} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.8^{+2.5}_{-2.5} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0064}_{-0.0060} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+52}_{-48} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00092}_{-0.00089} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.51)$	$89.4^{+2.6}_{-2.6} \quad (+0.2\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+66}_{-62} \quad (-0.3\sigma)$
N_{eff}	$3.00^{+0.38}_{-0.37} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.040}_{-0.040} \quad (-0.6\sigma)$	$H(0.61)$	$95.0^{+2.7}_{-2.7} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.031}_{-0.029} \quad (+0.3\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+75}_{-71} \quad (-0.3\sigma)$
n_{s}	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.067}_{-0.060} \quad (+0.3\sigma)$	$H(2.33)$	$235.2^{+5.5}_{-5.4} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.873^{+0.035}_{-0.035} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5782^{+160}_{-160} \quad (-0.2\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1226^{+26}_{-25} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.011} \quad (-0.8\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+73}_{-74} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.019}_{-0.019} \quad (-0.1\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$817^{+10}_{-9.7} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.018}_{-0.017} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.6\sigma)$	D_{2000}	$230.9^{+4.1}_{-3.9} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	$n_{\mathrm{s},0.002}$	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.017}_{-0.017} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2447^{+0.0052}_{-0.0052} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2461^{+0.0052}_{-0.0053} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.58^{+0.10}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0084}_{-0.0083} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.84^{+0.38}_{-0.37} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0090}_{-0.0090} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.33}$	z_*	$1089.78^{+0.76}_{-0.74} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.2^{+3.7}_{-3.6} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.4^{+4.4}_{-4.4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.94^{+0.34}_{-0.34} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.27 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0032}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (+0.4\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.2\sigma)$
c_{TE}	$0.9964^{+0.010}_{-0.0099}$	r_{drag}	$147.9^{+3.8}_{-3.7} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{EE}	$0.992^{+0.011}_{-0.010}$	k_{D}	$0.1402^{+0.0027}_{-0.0027} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.7 \quad (\nu: 16.6)$
H_0	$67.5^{+2.4}_{-2.4} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00092}_{-0.00090} \quad (-0.4\sigma)$	χ_{JLA}^2	$1035.09 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.013}_{-0.013} \quad (+0.7\sigma)$	z_{eq}	$3379^{+48}_{-47} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.013}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01028^{+0.00023}_{-0.00022} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.33 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0065}_{-0.0062} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0091}_{-0.0090} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}} h^3$	$0.0953^{+0.0076}_{-0.0072} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0046}_{-0.0046} \quad (+0.7\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.8) \quad (+0.1\sigma)$
σ_8	$0.807^{+0.020}_{-0.020} \quad (-0.2\sigma)$	$H(0.15)$	$72.7^{+2.4}_{-2.4} \quad (+0.4\sigma)$	χ_{CMB}^2	$11944.2 \quad (\nu: 17.4) \quad (+1926.3\sigma)$
S_8	$0.820^{+0.021}_{-0.021} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+23}_{-21} \quad (-0.4\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12993.02; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.76; R - 1 = 0.01132$$

7.70 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00038}_{-0.00036} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.012} \quad (-0.8\sigma)$	$H(0.38)$	$82.6^{+2.6}_{-2.6} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1180^{+0.0064}_{-0.0060} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+54}_{-50} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04108^{+0.00091}_{-0.00090} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.51)$	$89.3^{+2.7}_{-2.6} \quad (+0.2\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.6^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1991^{+68}_{-64} \quad (-0.3\sigma)$
N_{eff}	$2.98^{+0.39}_{-0.38} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.041}_{-0.041} \quad (-0.5\sigma)$	$H(0.61)$	$94.9^{+2.7}_{-2.7} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.032}_{-0.029} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.1}_{-1.3} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2317^{+77}_{-73} \quad (-0.3\sigma)$
n_{s}	$0.965^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.067}_{-0.060} \quad (+0.2\sigma)$	$H(2.33)$	$235.0^{+5.6}_{-5.4} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.036}_{-0.036} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5790^{+160}_{-160} \quad (-0.1\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1227^{+27}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.012} \quad (-0.8\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5724^{+73}_{-73} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.019}_{-0.019} \quad (-0.2\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$817^{+10}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.018}_{-0.018} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.6\sigma)$	D_{2000}	$231.0^{+4.1}_{-3.8} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	$n_{\mathrm{s},0.002}$	$0.965^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.017}_{-0.017} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2445^{+0.0053}_{-0.0053} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2458^{+0.0053}_{-0.0053} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.016}_{-0.016} \quad (+0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.58^{+0.11}_{-0.10} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2964^{+0.0085}_{-0.0084} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.86^{+0.39}_{-0.38} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3056^{+0.0091}_{-0.0091} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.33}$	z_*	$1089.77^{+0.76}_{-0.75} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.4^{+3.7}_{-3.7} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.4^{+4.4}_{-4.5} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0011} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.34}_{-0.34} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.22 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0032}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (+0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{TE}	$0.9963^{+0.010}_{-0.0098}$	r_{drag}	$148.1^{+3.9}_{-3.8} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 0.6) \quad (-0.5\sigma)$
c_{EE}	$0.992^{+0.011}_{-0.011}$	k_{D}	$0.1401^{+0.0028}_{-0.0027} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.5 \quad (\nu: 16.6)$
H_0	$67.3^{+2.4}_{-2.5} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16070^{+0.00093}_{-0.00091} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.063 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.014}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3383^{+50}_{-50} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.26 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.014}_{-0.014} \quad (-0.7\sigma)$	k_{eq}	$0.01028^{+0.00023}_{-0.00022} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1410^{+0.0066}_{-0.0062} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8167^{+0.0096}_{-0.0093} \quad (+0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.7) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0949^{+0.0077}_{-0.0073} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4512^{+0.0048}_{-0.0047} \quad (+0.6\sigma)$	χ_{CMB}^2	$11944.0 \quad (\nu: 17.4) \quad (+1926.2\sigma)$
σ_8	$0.806^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$H(0.15)$	$72.5^{+2.5}_{-2.5} \quad (+0.3\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
S_8	$0.821^{+0.021}_{-0.022} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+24}_{-22} \quad (-0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.94; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.68; R - 1 = 0.01105$$

7.71 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00035}_{-0.00034} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.013}_{-0.014} \quad (-0.9\sigma)$	$H(0.38)$	$82.6^{+2.2}_{-2.2} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1177^{+0.0056}_{-0.0053} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.015}_{-0.015} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+45}_{-44} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04111^{+0.00083}_{-0.00083} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.020}_{-0.020} \quad (-0.8\sigma)$	$H(0.51)$	$89.3^{+2.3}_{-2.2} \quad (+0.1\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1991^{+57}_{-55} \quad (-0.3\sigma)$
N_{eff}	$2.97^{+0.33}_{-0.32} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.047}_{-0.045} \quad (-0.7\sigma)$	$H(0.61)$	$94.8^{+2.3}_{-2.3} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.031}_{-0.030} \quad (+0.0\sigma)$	z_{re}	$< 8.84 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2317^{+65}_{-64} \quad (-0.3\sigma)$
n_{s}	$0.965^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.086^{+0.065}_{-0.062} \quad (+0.0\sigma)$	$H(2.33)$	$234.7^{+4.9}_{-4.6} \quad (-0.4\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.869^{+0.033}_{-0.033} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5793^{+140}_{-140} \quad (-0.1\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+26}_{-25} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.013}_{-0.013} \quad (-0.9\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5720^{+74}_{-74} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.019}_{-0.018} \quad (-0.3\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.012} \quad (-0.9\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$817^{+10}_{-9.7} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.017}_{-0.016} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.59 \quad (-0.6\sigma)$	D_{2000}	$230.9^{+3.8}_{-3.7} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.012}_{-0.012} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	$n_{\mathrm{s},0.002}$	$0.965^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2443^{+0.0045}_{-0.0044} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.012}_{-0.011} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2457^{+0.0045}_{-0.0044} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.015}_{-0.015} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.574^{+0.095}_{-0.092} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2957^{+0.0079}_{-0.0076} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.87^{+0.33}_{-0.32} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3049^{+0.0084}_{-0.0081} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.73^{+0.70}_{-0.69} \quad (-1.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.5^{+3.2}_{-3.2} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.3^{+4.2}_{-4.2} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_*$	$1.0414^{+0.0010}_{-0.0010} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.97^{+0.29}_{-0.30} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.5^{+1.2}_{-1.2} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.5) \quad (-0.6\sigma)$
c_{TE}	$0.9963^{+0.0099}_{-0.0099}$	r_{drag}	$148.2^{+3.3}_{-3.3} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.8 \quad (\nu: 16.7)$
c_{EE}	$0.991^{+0.010}_{-0.010}$	k_{D}	$0.1400^{+0.0024}_{-0.0023} \quad (-0.1\sigma)$	χ_{Aver15}^2	$0.36 \quad (\nu: 0.1)$
H_0	$67.3^{+2.1}_{-2.1} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00081}_{-0.00080} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.013}_{-0.013} \quad (+0.7\sigma)$	z_{eq}	$3379^{+50}_{-48} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.33 \quad (\nu: 0.1)$
Ω_{m}	$0.310^{+0.013}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01026^{+0.00022}_{-0.00021} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1406^{+0.0058}_{-0.0055} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0092}_{-0.0092} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0947^{+0.0066}_{-0.0062} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0047}_{-0.0047} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
σ_8	$0.804^{+0.020}_{-0.020} \quad (-0.4\sigma)$	$H(0.15)$	$72.6^{+2.1}_{-2.1} \quad (+0.3\sigma)$	χ_{CMB}^2	$11934.7 \quad (\nu: 16.5) \quad (+1924.6\sigma)$
S_8	$0.817^{+0.024}_{-0.025} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+20}_{-19} \quad (-0.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11948.97$; $R - 1 = 0.00928$

7.72 **base_nnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5**

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02229^{+0.00035}_{-0.00034} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.015}_{-0.015} \quad (-0.8\sigma)$	$H(0.51)$	$89.4^{+2.1}_{-2.1} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0051}_{-0.0050} \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.019}_{-0.019} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1988^{+54}_{-53} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00081}_{-0.00078} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+0.7\sigma)$	$H(0.61)$	$95.0^{+2.2}_{-2.1} \quad (+0.2\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.047}_{-0.045} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2313^{+61}_{-60} \quad (-0.3\sigma)$
N_{eff}	$3.00^{+0.31}_{-0.29} \quad (-0.0\sigma)$	z_{re}	$< 8.84 \quad (+0.3\sigma)$	$H(2.33)$	$235.1^{+4.6}_{-4.4} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.039^{+0.031}_{-0.030} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.088^{+0.064}_{-0.061} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5783^{+130}_{-130} \quad (-0.1\sigma)$
n_{s}	$0.966^{+0.012}_{-0.012} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.032}_{-0.032} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.012}_{-0.013} \quad (-0.9\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1224^{+26}_{-25} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.018}_{-0.017} \quad (-0.2\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5718^{+74}_{-75} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.016}_{-0.015} \quad (-0.1\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{1420}	$816.2^{+9.7}_{-9.6} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.012}_{-0.011} \quad (-0.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{2000}	$230.6^{+3.7}_{-3.5} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.015}_{-0.015} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.966^{+0.012}_{-0.012} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.27}_{-0.27}$	Y_{P}	$0.2447^{+0.0042}_{-0.0041} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.015}_{-0.014} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2460^{+0.0042}_{-0.0041} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2962^{+0.0075}_{-0.0072} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.583^{+0.084}_{-0.084} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3054^{+0.0081}_{-0.0077} \quad (+0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.85^{+0.30}_{-0.31} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	z_*	$1089.80^{+0.63}_{-0.63} \quad (-0.9\sigma)$	f_{2000}^{217}	$106.5^{+4.2}_{-4.1} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$145.2^{+2.9}_{-3.0} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	$1.04128^{+0.00096}_{-0.00094} \quad (+0.2\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.95^{+0.27}_{-0.28} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.01 \quad (\nu: 0.5) \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.6^{+1.2}_{-1.2} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.7 \quad (\nu: 16.6)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.9^{+3.1}_{-3.1} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.36 \quad (\nu: 0.1)$
c_{TE}	$0.9966^{+0.0098}_{-0.0097}$	k_{D}	$0.1401^{+0.0023}_{-0.0022} \quad (-0.1\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.35 \quad (\nu: 0.1)$
c_{EE}	$0.992^{+0.010}_{-0.010}$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00072}_{-0.00072} \quad (-0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
H_0	$67.4^{+2.0}_{-2.0} \quad (+0.4\sigma)$	z_{eq}	$3378^{+49}_{-48} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.013}_{-0.013} \quad (+0.7\sigma)$	k_{eq}	$0.01027^{+0.00021}_{-0.00020} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.0)$
Ω_{m}	$0.310^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8176^{+0.0091}_{-0.0092} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0054}_{-0.0051} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0046}_{-0.0047} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}} h^3$	$0.0951^{+0.0062}_{-0.0058} \quad (+0.0\sigma)$	$H(0.15)$	$72.7^{+2.0}_{-2.0} \quad (+0.3\sigma)$	χ_{CMB}^2	$11934.6 \quad (\nu: 16.2) \quad (+1924.5\sigma)$
σ_8	$0.805^{+0.019}_{-0.018} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+19}_{-18} \quad (-0.4\sigma)$	χ_{Abund}^2	$0.71 \quad (\nu: 0.2)$
S_8	$0.819^{+0.024}_{-0.025} \quad (-0.9\sigma)$	$H(0.38)$	$82.7^{+2.1}_{-2.0} \quad (+0.3\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.013}_{-0.014} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+43}_{-42} \quad (-0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11949.15$; $R - 1 = 0.01020$

7.73 base_nnu_plikHM_TT_lowl_lowE_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022625	$0.02260^{+0.00045}_{-0.00045}$ (+1.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6042	$0.606^{+0.023}_{-0.023}$ (−0.4 σ)	$D_{\mathrm{M}}(0.15)$	611.1	610^{+23}_{-22} (−1.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.1238	$0.1248^{+0.0071}_{-0.0070}$ (+1.2 σ)	$\sigma_8/h^{0.5}$	0.9757	$0.977^{+0.029}_{-0.029}$ (−1.0 σ)	$H(0.38)$	86.33	$86.6^{+2.6}_{-2.6}$ (+2.0 σ)
$100\theta_{\mathrm{MC}}$	1.04058	$1.0405^{+0.0011}_{-0.0010}$ (−0.6 σ)	$r_{\mathrm{drag}}h$	102.21	$102.2^{+2.9}_{-2.9}$ (+1.8 σ)	$D_{\mathrm{M}}(0.38)$	1462	1459^{+51}_{-48} (−2.0 σ)
τ	0.0568	$0.057^{+0.017}_{-0.016}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.387	$2.391^{+0.068}_{-0.066}$ (−1.5 σ)	$H(0.51)$	93.01	$93.3^{+2.6}_{-2.6}$ (+2.0 σ)
N_{eff}	3.478	$3.53^{+0.39}_{-0.38}$ (+1.9 σ)	z_{re}	7.99	$8.0^{+1.7}_{-1.7}$ (+0.8 σ)	$D_{\mathrm{M}}(0.51)$	1897	1893^{+64}_{-61} (−2.0 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0599	$3.061^{+0.039}_{-0.036}$ (+1.2 σ)	10^9A_{s}	2.132	$2.136^{+0.084}_{-0.075}$ (+1.2 σ)	$H(0.61)$	98.62	$98.9^{+2.7}_{-2.7}$ (+2.0 σ)
n_{s}	0.9858	$0.986^{+0.015}_{-0.015}$ (+1.9 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.9035	$1.905^{+0.036}_{-0.037}$ (+1.1 σ)	$D_{\mathrm{M}}(0.61)$	2210	2205^{+73}_{-69} (−2.0 σ)
y_{cal}	1.00109	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{40}	1200.2	1201^{+30}_{-30} (−1.6 σ)	$H(2.33)$	240.7	$241.4^{+5.8}_{-5.7}$ (+1.5 σ)
A_{217}^{CIB}	48.4	50^{+10}_{-10} (+0.3 σ)	D_{220}	5730	5724^{+81}_{-80} (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5581	5566^{+150}_{-140} (−1.9 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.59	—	D_{810}	2545.7	2542^{+28}_{-28} (+0.4 σ)	$f\sigma_8(0.15)$	0.4500	$0.452^{+0.022}_{-0.021}$ (−1.0 σ)
A_{143}^{tSZ}	5.42	$4.6^{+3.9}_{-3.9}$ (−0.2 σ)	D_{1420}	816.1	814^{+11}_{-10} (−0.2 σ)	$\sigma_8(0.15)$	0.7624	$0.764^{+0.023}_{-0.022}$ (+1.3 σ)
A_{100}^{PS}	265	272^{+60}_{-60} (+0.4 σ)	D_{2000}	228.71	$227.7^{+4.3}_{-4.1}$ (−0.9 σ)	$f\sigma_8(0.38)$	0.4732	$0.475^{+0.019}_{-0.019}$ (−0.5 σ)
A_{143}^{PS}	54.9	53^{+20}_{-20} (+0.6 σ)	$n_{\mathrm{s},0.002}$	0.9858	$0.986^{+0.015}_{-0.015}$ (+1.9 σ)	$\sigma_8(0.38)$	0.6781	$0.680^{+0.020}_{-0.020}$ (+1.5 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	50.2	45^{+20}_{-20} (+0.1 σ)	Y_{P}	0.25111	$0.2517^{+0.0049}_{-0.0049}$ (+1.8 σ)	$f\sigma_8(0.51)$	0.4743	$0.476^{+0.017}_{-0.017}$ (−0.1 σ)
A_{217}^{PS}	118.5	115^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.25245	$0.2530^{+0.0049}_{-0.0049}$ (+1.8 σ)	$\sigma_8(0.51)$	0.6356	$0.637^{+0.019}_{-0.019}$ (+1.6 σ)
A^{kSZ}	3.0	—	$10^5\mathrm{D}/\mathrm{H}$	2.686	$2.71^{+0.12}_{-0.12}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4710	$0.472^{+0.016}_{-0.016}$ (+0.2 σ)
$A_{100}^{\mathrm{dustTT}}$	9.01	$9.1^{+3.6}_{-3.6}$ (+0.1 σ)	Age/Gyr	13.366	$13.33^{+0.35}_{-0.34}$ (−1.9 σ)	$\sigma_8(0.61)$	0.6054	$0.607^{+0.018}_{-0.018}$ (+1.6 σ)
$A_{143}^{\mathrm{dustTT}}$	10.96	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	z_{*}	1090.35	$1090.50^{+0.94}_{-0.97}$ (+0.5 σ)	$f\sigma_8(2.33)$	0.3060	$0.3068^{+0.0093}_{-0.0091}$ (+1.7 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.4	$18.5^{+6.5}_{-6.5}$ (+0.1 σ)	r_{*}	141.20	$140.8^{+3.5}_{-3.4}$ (−1.7 σ)	$\sigma_8(2.33)$	0.3165	$0.317^{+0.010}_{-0.0096}$ (+1.8 σ)
$A_{217}^{\mathrm{dustTT}}$	94.5	93^{+10}_{-10} (−0.0 σ)	$100\theta_{*}$	1.04046	$1.0403^{+0.0012}_{-0.0012}$ (−1.1 σ)	f_{2000}^{143}	32.8	34^{+6}_{-6} (+0.9 σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.571	$13.53^{+0.32}_{-0.32}$ (−1.7 σ)	$f_{2000}^{143 \times 217}$	35.12	36^{+5}_{-5} (+1.0 σ)
c_{217}	0.99833	$0.9983^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1061.12	$1061.2^{+1.4}_{-1.4}$ (+1.8 σ)	f_{2000}^{217}	109.46	$110.1^{+4.2}_{-4.3}$ (+0.9 σ)
H_0	71.11	$71.3^{+2.7}_{-2.8}$ (+2.1 σ)	r_{drag}	143.74	$143.3^{+3.6}_{-3.5}$ (−1.7 σ)	χ_{small}^2	396.30	397.5 (ν : 2.5) (+0.4 σ)
Ω_{Λ}	0.7091	$0.708^{+0.020}_{-0.022}$ (+1.8 σ)	k_{D}	0.14304	$0.1433^{+0.0027}_{-0.0027}$ (+1.7 σ)	χ_{lowl}^2	20.96	21.17 (ν : 0.3) (−1.4 σ)
Ω_{m}	0.2909	$0.292^{+0.022}_{-0.020}$ (−1.8 σ)	$100\theta_{\mathrm{D}}$	0.16184	$0.16200^{+0.00099}_{-0.00099}$ (+1.6 σ)	χ_{plik}^2	765.1	777.8 (ν : 18.5) (+1.0 σ)
$\Omega_{\mathrm{m}}h^2$	0.1471	$0.1480^{+0.0073}_{-0.0071}$ (+1.3 σ)	z_{eq}	3308	3308^{+84}_{-81} (−1.8 σ)	$\chi_{\mathrm{H073p45}}^2$	1.99	2.4 (ν : 3.0)
$\Omega_{\mathrm{m}}h^3$	0.1046	$0.1055^{+0.0080}_{-0.0076}$ (+1.9 σ)	k_{eq}	0.010384	$0.01042^{+0.00032}_{-0.00032}$ (+0.1 σ)	χ_{prior}^2	1.9	7.5 (ν : 7.2) (+0.1 σ)
σ_8	0.8227	$0.825^{+0.025}_{-0.025}$ (+1.1 σ)	$100\theta_{\mathrm{eq}}$	0.8314	$0.831^{+0.016}_{-0.016}$ (+1.8 σ)	χ_{CMB}^2	1182.4	1196.5 (ν : 17.6) (+0.6 σ)
S_8	0.8102	$0.813^{+0.042}_{-0.041}$ (−1.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.4586	$0.4586^{+0.0083}_{-0.0083}$ (+1.8 σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4438	$0.445^{+0.023}_{-0.022}$ (−1.1 σ)	$H(0.15)$	76.31	$76.5^{+2.7}_{-2.7}$ (+2.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1186.27$; $\Delta\chi_{\mathrm{eff}}^2 = -5.30$; $\bar{\chi}_{\mathrm{eff}}^2 = 1206.39$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -5.69$; $R - 1 = 0.00670$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.30 (Δ 0.22) commander_dx12_v3.2_29: 20.96 (Δ -1.12) plik_rd12_HM_v22_TT: 765.11 (Δ 2.09) Hubble - H073p45: 1.99 (Δ -6.99)

7.74 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022516	$0.02251^{+0.00040}_{-0.00041}$ (+1.4 σ)	$\sigma_8/h^{0.5}$	0.9839	$0.984^{+0.023}_{-0.023}$ (−0.5 σ)	$D_{\text{M}}(0.38)$	1474.6	1472^{+43}_{-42} (−1.7 σ)
$\Omega_{\text{c}}h^2$	0.1243	$0.1254^{+0.0071}_{-0.0068}$ (+1.4 σ)	$r_{\text{drag}}h$	101.26	$101.1^{+1.8}_{-1.8}$ (+1.4 σ)	$H(0.51)$	92.51	$92.8^{+2.4}_{-2.4}$ (+1.8 σ)
$100\theta_{\text{MC}}$	1.04048	$1.0404^{+0.0010}_{-0.00099}$ (−0.8 σ)	$\langle d^2 \rangle^{1/2}$	2.407	$2.409^{+0.054}_{-0.051}$ (−1.1 σ)	$D_{\text{M}}(0.51)$	1912	1908^{+55}_{-54} (−1.7 σ)
τ	0.0565	$0.056^{+0.017}_{-0.015}$ (+0.6 σ)	z_{re}	7.99	$7.9^{+1.7}_{-1.6}$ (+0.6 σ)	$H(0.61)$	98.16	$98.4^{+2.5}_{-2.5}$ (+1.8 σ)
N_{eff}	3.442	$3.49^{+0.38}_{-0.37}$ (+1.8 σ)	$10^9 A_{\text{s}}$	2.135	$2.133^{+0.080}_{-0.075}$ (+1.1 σ)	$D_{\text{M}}(0.61)$	2227	2222^{+63}_{-62} (−1.7 σ)
$\ln(10^{10} A_{\text{s}})$	3.0612	$3.060^{+0.037}_{-0.036}$ (+1.1 σ)	$10^9 A_{\text{s}}e^{-2\tau}$	1.9072	$1.907^{+0.037}_{-0.036}$ (+1.2 σ)	$H(2.33)$	240.8	$241.6^{+5.8}_{-5.6}$ (+1.5 σ)
n_{s}	0.9825	$0.982^{+0.013}_{-0.013}$ (+1.6 σ)	D_{40}	1206.9	1207^{+27}_{-27} (−1.3 σ)	$D_{\text{M}}(2.33)$	5603	5588^{+140}_{-140} (−1.7 σ)
y_{cal}	1.00148	$1.0005^{+0.0048}_{-0.0049}$ (+0.0 σ)	D_{220}	5728	5719^{+81}_{-79} (+0.2 σ)	$f\sigma_8(0.15)$	0.4562	$0.458^{+0.017}_{-0.016}$ (−0.5 σ)
A_{217}^{CIB}	52.6	50^{+10}_{-10} (+0.3 σ)	D_{810}	2548.1	2542^{+28}_{-27} (+0.4 σ)	$\sigma_8(0.15)$	0.7641	$0.765^{+0.022}_{-0.022}$ (+1.4 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.27	—	D_{1420}	816.4	813^{+10}_{-10} (−0.3 σ)	$f\sigma_8(0.38)$	0.4780	$0.479^{+0.016}_{-0.015}$ (−0.0 σ)
A_{143}^{tSZ}	6.34	$4.6^{+4.0}_{-3.8}$ (−0.2 σ)	D_{2000}	228.87	$227.7^{+4.1}_{-4.2}$ (−1.0 σ)	$\sigma_8(0.38)$	0.6788	$0.680^{+0.020}_{-0.020}$ (+1.5 σ)
A_{100}^{PS}	264	273^{+60}_{-60} (+0.4 σ)	$n_{\text{s},0.002}$	0.9825	$0.982^{+0.013}_{-0.013}$ (+1.6 σ)	$f\sigma_8(0.51)$	0.4782	$0.479^{+0.015}_{-0.015}$ (+0.3 σ)
A_{143}^{PS}	52.0	54^{+20}_{-20} (+0.6 σ)	Y_{P}	0.25060	$0.2512^{+0.0048}_{-0.0048}$ (+1.7 σ)	$\sigma_8(0.51)$	0.6359	$0.637^{+0.019}_{-0.018}$ (+1.6 σ)
$A_{143 \times 217}^{\text{PS}}$	46.4	45^{+20}_{-20} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.25195	$0.2525^{+0.0048}_{-0.0048}$ (+1.7 σ)	$f\sigma_8(0.61)$	0.4742	$0.475^{+0.015}_{-0.014}$ (+0.6 σ)
A_{217}^{PS}	116.2	115^{+20}_{-20} (−0.0 σ)	$10^5 \text{D}/\text{H}$	2.694	$2.71^{+0.12}_{-0.12}$ (+1.2 σ)	$\sigma_8(0.61)$	0.6055	$0.606^{+0.018}_{-0.017}$ (+1.6 σ)
A^{kSZ}	1.2	—	Age/Gyr	13.417	$13.38^{+0.33}_{-0.33}$ (−1.7 σ)	$f\sigma_8(2.33)$	0.3058	$0.3061^{+0.0091}_{-0.0088}$ (+1.6 σ)
A_{100}^{dustTT}	9.07	$9.1^{+3.6}_{-3.6}$ (+0.1 σ)	z_*	1090.49	$1090.63^{+0.89}_{-0.89}$ (+0.8 σ)	$\sigma_8(2.33)$	0.3159	$0.3162^{+0.0095}_{-0.0094}$ (+1.7 σ)
A_{143}^{dustTT}	10.80	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	r_*	141.32	$140.9^{+3.5}_{-3.4}$ (−1.6 σ)	f_{2000}^{143}	32.6	34^{+7}_{-6} (+0.9 σ)
$A_{143 \times 217}^{\text{dustTT}}$	18.3	$18.5^{+6.5}_{-6.4}$ (+0.1 σ)	$100\theta_*$	1.04039	$1.0403^{+0.0012}_{-0.0011}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	35.15	36^{+5}_{-4} (+1.0 σ)
A_{217}^{dustTT}	91.0	93^{+10}_{-10} (−0.0 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.583	$13.54^{+0.32}_{-0.32}$ (−1.6 σ)	f_{2000}^{217}	109.36	$110.1^{+4.1}_{-4.3}$ (+0.9 σ)
c_{100}	0.99969	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1060.89	$1061.0^{+1.4}_{-1.4}$ (+1.6 σ)	χ_{small}^2	396.32	397.3 (ν : 2.0) (+0.3 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	143.90	$143.4^{+3.6}_{-3.6}$ (−1.6 σ)	χ_{lowl}^2	21.31	21.55 (ν : 0.3) (−1.3 σ)
H_0	70.37	$70.5^{+2.2}_{-2.2}$ (+1.7 σ)	k_{D}	0.14292	$0.1433^{+0.0028}_{-0.0027}$ (+1.6 σ)	χ_{plik}^2	763.9	776.3 (ν : 17.0) (+0.8 σ)
Ω_{Λ}	0.7022	$0.701^{+0.013}_{-0.014}$ (+1.4 σ)	$100\theta_{\text{D}}$	0.16183	$0.16195^{+0.00098}_{-0.00095}$ (+1.5 σ)	χ_{H073p45}^2	3.43	3.6 (ν : 3.1)
Ω_{m}	0.2978	$0.299^{+0.014}_{-0.013}$ (−1.4 σ)	z_{eq}	3332	3337^{+55}_{-54} (−1.3 σ)	$\chi_{6\text{DF}}^2$	0.025	0.052 (ν : 0.0)
$\Omega_{\text{m}}h^2$	0.1475	$0.1486^{+0.0072}_{-0.0070}$ (+1.4 σ)	k_{eq}	0.010438	$0.01048^{+0.00028}_{-0.00028}$ (+0.5 σ)	χ_{MGS}^2	2.19	2.16 (ν : 0.2)
$\Omega_{\text{m}}h^3$	0.1038	$0.1048^{+0.0079}_{-0.0074}$ (+1.8 σ)	$100\theta_{\text{eq}}$	0.8263	$0.826^{+0.010}_{-0.010}$ (+1.3 σ)	χ_{DR12BAO}^2	3.48	3.99 (ν : 0.3)
σ_8	0.8254	$0.827^{+0.024}_{-0.024}$ (+1.3 σ)	$100\theta_{\text{s,eq}}$	0.4561	$0.4557^{+0.0053}_{-0.0052}$ (+1.3 σ)	χ_{prior}^2	1.8	7.5 (ν : 7.0) (+0.0 σ)
S_8	0.8224	$0.825^{+0.031}_{-0.031}$ (−0.6 σ)	$H(0.15)$	75.64	$75.8^{+2.3}_{-2.2}$ (+1.7 σ)	χ_{BAO}^2	5.70	6.2 (ν : 0.8)
$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4504	$0.452^{+0.017}_{-0.017}$ (−0.6 σ)	$D_{\text{M}}(0.15)$	617.0	616^{+19}_{-19} (−1.7 σ)	χ_{CMB}^2	1181.6	1195.1 (ν : 16.4) (+0.4 σ)
$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6097	$0.611^{+0.020}_{-0.019}$ (+0.1 σ)	$H(0.38)$	85.76	$86.0^{+2.4}_{-2.3}$ (+1.8 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1192.50$; $\bar{\chi}_{\text{eff}}^2 = 1212.38$; $R - 1 = 0.01231$
 χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 2.19 DR12BAO: 3.48 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.32 commander_dx12_v3.2.29: 21.31 plik_rd12_HM_v22_TT: 763.94
Hubble - H073p45: 3.44

7.75 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022535	$0.02252^{+0.00040}_{-0.00041}$ (+1.4 σ)	$\sigma_8/h^{0.5}$	0.9831	$0.984^{+0.023}_{-0.023}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1472.7	1472^{+43}_{-42} (−1.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.1251	$0.1254^{+0.0071}_{-0.0068}$ (+1.4 σ)	$r_{\mathrm{drag}}h$	101.14	$101.1^{+1.7}_{-1.7}$ (+1.4 σ)	$H(0.51)$	92.67	$92.8^{+2.4}_{-2.4}$ (+1.8 σ)
$100\theta_{\mathrm{MC}}$	1.04041	$1.0404^{+0.0010}_{-0.00099}$ (−0.8 σ)	$\langle d^2 \rangle^{1/2}$	2.406	$2.409^{+0.053}_{-0.051}$ (−1.1 σ)	$D_{\mathrm{M}}(0.51)$	1910	1908^{+54}_{-53} (−1.7 σ)
τ	0.0551	$0.056^{+0.017}_{-0.015}$ (+0.6 σ)	z_{re}	7.86	$7.9^{+1.7}_{-1.6}$ (+0.6 σ)	$H(0.61)$	98.34	$98.4^{+2.5}_{-2.5}$ (+1.8 σ)
N_{eff}	3.471	$3.49^{+0.38}_{-0.37}$ (+1.8 σ)	$10^9 A_{\mathrm{s}}$	2.128	$2.133^{+0.080}_{-0.075}$ (+1.1 σ)	$D_{\mathrm{M}}(0.61)$	2224	2222^{+62}_{-61} (−1.7 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0579	$3.060^{+0.037}_{-0.036}$ (+1.1 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.9062	$1.907^{+0.037}_{-0.036}$ (+1.2 σ)	$H(2.33)$	241.4	$241.6^{+5.8}_{-5.6}$ (+1.5 σ)
n_{s}	0.9817	$0.982^{+0.013}_{-0.013}$ (+1.6 σ)	D_{40}	1207.0	1207^{+27}_{-26} (−1.3 σ)	$D_{\mathrm{M}}(2.33)$	5592	5588^{+140}_{-140} (−1.7 σ)
y_{cal}	1.00049	$1.0005^{+0.0048}_{-0.0049}$ (+0.0 σ)	D_{220}	5721	5719^{+81}_{-79} (+0.2 σ)	$f\sigma_8(0.15)$	0.4566	$0.458^{+0.016}_{-0.016}$ (−0.5 σ)
A_{217}^{CIB}	52.0	50^{+10}_{-10} (+0.3 σ)	D_{810}	2542.6	2542^{+28}_{-27} (+0.4 σ)	$\sigma_8(0.15)$	0.7638	$0.765^{+0.022}_{-0.022}$ (+1.4 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.01	—	D_{1420}	813.8	813^{+10}_{-10} (−0.3 σ)	$f\sigma_8(0.38)$	0.4782	$0.479^{+0.015}_{-0.015}$ (−0.0 σ)
A_{143}^{tSZ}	6.31	$4.6^{+4.0}_{-3.8}$ (−0.2 σ)	D_{2000}	227.92	$227.7^{+4.0}_{-4.2}$ (−1.0 σ)	$\sigma_8(0.38)$	0.6785	$0.680^{+0.020}_{-0.020}$ (+1.5 σ)
A_{100}^{PS}	267	273^{+60}_{-60} (+0.4 σ)	$n_{\mathrm{s},0.002}$	0.9817	$0.982^{+0.013}_{-0.013}$ (+1.6 σ)	$f\sigma_8(0.51)$	0.4783	$0.479^{+0.015}_{-0.015}$ (+0.3 σ)
A_{143}^{PS}	49.1	54^{+20}_{-20} (+0.6 σ)	Y_{P}	0.25098	$0.2512^{+0.0048}_{-0.0048}$ (+1.7 σ)	$\sigma_8(0.51)$	0.6355	$0.637^{+0.019}_{-0.018}$ (+1.6 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	39.3	45^{+20}_{-20} (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.25233	$0.2525^{+0.0048}_{-0.0048}$ (+1.7 σ)	$f\sigma_8(0.61)$	0.4743	$0.475^{+0.014}_{-0.014}$ (+0.6 σ)
A_{217}^{PS}	115.0	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.701	$2.71^{+0.12}_{-0.12}$ (+1.2 σ)	$\sigma_8(0.61)$	0.6051	$0.606^{+0.018}_{-0.017}$ (+1.6 σ)
A^{kSZ}	1.7	—	Age/Gyr	13.392	$13.38^{+0.33}_{-0.33}$ (−1.7 σ)	$f\sigma_8(2.33)$	0.3056	$0.3061^{+0.0091}_{-0.0088}$ (+1.6 σ)
$A_{100}^{\mathrm{dust}TT}$	9.05	$9.1^{+3.6}_{-3.6}$ (+0.1 σ)	z_*	1090.56	$1090.63^{+0.89}_{-0.88}$ (+0.8 σ)	$\sigma_8(2.33)$	0.3157	$0.3162^{+0.0095}_{-0.0094}$ (+1.7 σ)
$A_{143}^{\mathrm{dust}TT}$	10.91	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	r_*	140.99	$140.9^{+3.5}_{-3.4}$ (−1.6 σ)	f_{2000}^{143}	33.5	34^{+7}_{-6} (+0.9 σ)
$A_{143 \times 217}^{\mathrm{dust}TT}$	18.8	$18.5^{+6.5}_{-6.4}$ (+0.1 σ)	$100\theta_*$	1.04031	$1.0403^{+0.0012}_{-0.0011}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	35.48	36^{+5}_{-4} (+1.0 σ)
$A_{217}^{\mathrm{dust}TT}$	93.2	93^{+10}_{-10} (−0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.553	$13.54^{+0.32}_{-0.32}$ (−1.6 σ)	f_{2000}^{217}	109.85	$110.1^{+4.1}_{-4.3}$ (+0.9 σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1061.00	$1061.0^{+1.4}_{-1.4}$ (+1.7 σ)	χ_{small}^2	396.11	397.3 (ν : 2.0) (+0.3 σ)
c_{217}	0.99831	$0.9983^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	143.56	$143.4^{+3.6}_{-3.6}$ (−1.6 σ)	χ_{lowl}^2	21.44	21.54 (ν : 0.3) (−1.3 σ)
H_0	70.45	$70.5^{+2.2}_{-2.1}$ (+1.7 σ)	k_{D}	0.14320	$0.1433^{+0.0028}_{-0.0027}$ (+1.6 σ)	χ_{plik}^2	763.7	776.3 (ν : 16.9) (+0.8 σ)
Ω_{Λ}	0.7013	$0.701^{+0.013}_{-0.013}$ (+1.4 σ)	$100\theta_{\mathrm{D}}$	0.16187	$0.16195^{+0.00098}_{-0.00095}$ (+1.5 σ)	$\chi_{\mathrm{H073p45}}^2$	3.26	3.6 (ν : 3.0)
Ω_{m}	0.2987	$0.299^{+0.013}_{-0.013}$ (−1.4 σ)	z_{eq}	3337	3337^{+52}_{-52} (−1.3 σ)	χ_{JLA}^2	1034.734	1034.82 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.1483	$0.1486^{+0.0072}_{-0.0070}$ (+1.4 σ)	k_{eq}	0.010471	$0.01048^{+0.00028}_{-0.00028}$ (+0.5 σ)	χ_{6DF}^2	0.017	0.049 (ν : 0.0)
$\Omega_{\mathrm{m}}h^3$	0.1044	$0.1048^{+0.0078}_{-0.0074}$ (+1.8 σ)	$100\theta_{\mathrm{eq}}$	0.8255	$0.8256^{+0.0099}_{-0.0097}$ (+1.3 σ)	χ_{MGS}^2	2.12	2.16 (ν : 0.2)
σ_8	0.8252	$0.827^{+0.024}_{-0.024}$ (+1.3 σ)	$100\theta_{\mathrm{s,eq}}$	0.4556	$0.4557^{+0.0051}_{-0.0050}$ (+1.3 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.45	3.94 (ν : 0.3)
S_8	0.8234	$0.825^{+0.030}_{-0.030}$ (−0.6 σ)	$H(0.15)$	75.74	$75.8^{+2.2}_{-2.2}$ (+1.7 σ)	χ_{prior}^2	1.8	7.5 (ν : 7.0) (+0.0 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4510	$0.452^{+0.017}_{-0.017}$ (−0.6 σ)	$D_{\mathrm{M}}(0.15)$	616.2	616^{+19}_{-18} (−1.7 σ)	χ_{BAO}^2	5.58	6.2 (ν : 0.7)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6100	$0.611^{+0.020}_{-0.019}$ (+0.1 σ)	$H(0.38)$	85.90	$86.0^{+2.3}_{-2.3}$ (+1.8 σ)	χ_{CMB}^2	1181.2	1195.1 (ν : 16.4) (+0.4 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 2226.63$; $\bar{\chi}_{\mathrm{eff}}^2 = 2247.12$; $R - 1 = 0.01243$
 χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 2.12 DR12BAO: 3.45 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.11 commander_dx12_v3.2.29: 21.44 plik_rd12_HM_v22_TT: 763.69
Hubble - H073p45: 3.26 SN - JLA Pantheon18: 1034.73

7.76 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022573	$0.02258^{+0.00045}_{-0.00045}$ (+1.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6088	$0.609^{+0.016}_{-0.016}$ (−0.1 σ)	$D_{\mathrm{M}}(0.15)$	614.2	613^{+22}_{-22} (−1.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.1245	$0.1248^{+0.0065}_{-0.0064}$ (+1.2 σ)	$\sigma_8/h^{0.5}$	0.9820	$0.983^{+0.020}_{-0.020}$ (−0.6 σ)	$H(0.38)$	86.06	$86.3^{+2.6}_{-2.6}$ (+1.9 σ)
$100\theta_{\mathrm{MC}}$	1.04051	$1.0405^{+0.0010}_{-0.0010}$ (−0.7 σ)	$r_{\mathrm{drag}}h$	101.59	$101.7^{+2.5}_{-2.5}$ (+1.6 σ)	$D_{\mathrm{M}}(0.38)$	1468.5	1465^{+50}_{-49} (−1.8 σ)
τ	0.0581	$0.059^{+0.017}_{-0.015}$ (+1.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4033	$2.405^{+0.050}_{-0.049}$ (−1.2 σ)	$H(0.51)$	92.80	$93.0^{+2.7}_{-2.6}$ (+1.9 σ)
N_{eff}	3.471	$3.50^{+0.38}_{-0.37}$ (+1.8 σ)	z_{re}	8.15	$8.2^{+1.6}_{-1.5}$ (+1.0 σ)	$D_{\mathrm{M}}(0.51)$	1905	1901^{+63}_{-62} (−1.8 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0629	$3.066^{+0.035}_{-0.032}$ (+1.4 σ)	10^9A_{s}	2.139	$2.146^{+0.077}_{-0.068}$ (+1.4 σ)	$H(0.61)$	98.44	$98.6^{+2.7}_{-2.6}$ (+1.9 σ)
n_{s}	0.9834	$0.984^{+0.015}_{-0.015}$ (+1.8 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.9041	$1.906^{+0.033}_{-0.033}$ (+1.2 σ)	$D_{\mathrm{M}}(0.61)$	2219	2214^{+71}_{-70} (−1.8 σ)
y_{cal}	1.00032	$1.0008^{+0.0048}_{-0.0050}$ (+0.1 σ)	D_{40}	1204.4	1206^{+28}_{-28} (−1.4 σ)	$H(2.33)$	241.1	$241.4^{+5.4}_{-5.3}$ (+1.5 σ)
A_{217}^{CIB}	46.9	49^{+10}_{-10} (+0.3 σ)	D_{220}	5723	5729^{+81}_{-81} (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5588	5579^{+150}_{-140} (−1.8 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.72	—	D_{810}	2542.8	2544^{+27}_{-27} (+0.5 σ)	$f\sigma_8(0.15)$	0.4547	$0.455^{+0.015}_{-0.016}$ (−0.7 σ)
A_{143}^{tSZ}	5.07	$4.6^{+4.0}_{-3.8}$ (−0.2 σ)	D_{1420}	814.5	814^{+11}_{-11} (−0.1 σ)	$\sigma_8(0.15)$	0.7647	$0.766^{+0.020}_{-0.019}$ (+1.5 σ)
A_{100}^{PS}	265	272^{+60}_{-60} (+0.3 σ)	D_{2000}	228.22	$228.0^{+4.3}_{-4.2}$ (−0.8 σ)	$f\sigma_8(0.38)$	0.4771	$0.478^{+0.013}_{-0.013}$ (−0.2 σ)
A_{143}^{PS}	56.7	53^{+20}_{-20} (+0.5 σ)	$n_{\mathrm{s},0.002}$	0.9834	$0.984^{+0.015}_{-0.015}$ (+1.8 σ)	$\sigma_8(0.38)$	0.6797	$0.681^{+0.018}_{-0.018}$ (+1.6 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	52.4	45^{+20}_{-20} (+0.1 σ)	Y_{P}	0.25099	$0.2513^{+0.0048}_{-0.0048}$ (+1.7 σ)	$f\sigma_8(0.51)$	0.4776	$0.478^{+0.012}_{-0.012}$ (+0.2 σ)
A_{217}^{PS}	120.0	115^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.25234	$0.2527^{+0.0048}_{-0.0048}$ (+1.7 σ)	$\sigma_8(0.51)$	0.6368	$0.638^{+0.017}_{-0.017}$ (+1.7 σ)
A^{kSZ}	3.4	—	$10^5\mathrm{D}/\mathrm{H}$	2.693	$2.70^{+0.12}_{-0.12}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4739	$0.474^{+0.012}_{-0.012}$ (+0.5 σ)
$A_{100}^{\mathrm{dustTT}}$	9.07	$9.1^{+3.6}_{-3.6}$ (+0.1 σ)	Age/Gyr	13.383	$13.36^{+0.35}_{-0.34}$ (−1.8 σ)	$\sigma_8(0.61)$	0.6064	$0.608^{+0.017}_{-0.016}$ (+1.7 σ)
$A_{143}^{\mathrm{dustTT}}$	10.90	$10.9^{+3.5}_{-3.6}$ (+0.1 σ)	z_*	1090.46	$1090.51^{+0.86}_{-0.89}$ (+0.5 σ)	$f\sigma_8(2.33)$	0.3064	$0.3071^{+0.0088}_{-0.0085}$ (+1.8 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.4^{+6.5}_{-6.5}$ (+0.1 σ)	r_*	141.11	$140.9^{+3.4}_{-3.3}$ (−1.6 σ)	$\sigma_8(2.33)$	0.3167	$0.3175^{+0.0097}_{-0.0093}$ (+1.8 σ)
$A_{217}^{\mathrm{dustTT}}$	95.1	93^{+10}_{-10} (−0.0 σ)	$100\theta_*$	1.04041	$1.0403^{+0.0012}_{-0.0011}$ (−1.1 σ)	f_{2000}^{143}	33.0	34^{+7}_{-6} (+0.8 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.563	$13.55^{+0.31}_{-0.31}$ (−1.6 σ)	$f_{2000}^{143 \times 217}$	35.17	36^{+5}_{-4} (+0.9 σ)
c_{217}	0.99828	$0.9983^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1061.04	$1061.1^{+1.5}_{-1.4}$ (+1.8 σ)	f_{2000}^{217}	109.40	$109.9^{+4.2}_{-4.2}$ (+0.9 σ)
H_0	70.72	$70.9^{+2.7}_{-2.7}$ (+1.9 σ)	r_{drag}	143.66	$143.5^{+3.5}_{-3.4}$ (−1.6 σ)	$\chi^2_{\mathrm{lensing}}$	9.68	10.3 (ν : 0.6)
Ω_{Λ}	0.7046	$0.705^{+0.018}_{-0.019}$ (+1.6 σ)	k_{D}	0.14311	$0.1432^{+0.0026}_{-0.0026}$ (+1.6 σ)	χ^2_{small}	396.67	397.9 (ν : 3.1) (+0.6 σ)
Ω_{m}	0.2954	$0.295^{+0.019}_{-0.018}$ (−1.6 σ)	$100\theta_{\mathrm{D}}$	0.16185	$0.16193^{+0.00099}_{-0.00095}$ (+1.5 σ)	χ^2_{lowl}	21.30	21.43 (ν : 0.3) (−1.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.1477	$0.1481^{+0.0066}_{-0.0065}$ (+1.3 σ)	z_{eq}	3325	3321^{+70}_{-71} (−1.5 σ)	χ^2_{plik}	764.3	776.3 (ν : 17.1) (+0.8 σ)
$\Omega_{\mathrm{m}}h^3$	0.1045	$0.1050^{+0.0078}_{-0.0074}$ (+1.8 σ)	k_{eq}	0.010433	$0.01044^{+0.00026}_{-0.00026}$ (+0.3 σ)	$\chi^2_{\mathrm{H073p45}}$	2.71	3.0 (ν : 3.6)
σ_8	0.8258	$0.827^{+0.021}_{-0.020}$ (+1.3 σ)	$100\theta_{\mathrm{eq}}$	0.8280	$0.829^{+0.014}_{-0.014}$ (+1.6 σ)	χ^2_{prior}	1.6	7.5 (ν : 7.1) (+0.1 σ)
S_8	0.8194	$0.820^{+0.030}_{-0.030}$ (−0.8 σ)	$100\theta_{\mathrm{s,eq}}$	0.4569	$0.4572^{+0.0072}_{-0.0069}$ (+1.6 σ)	χ^2_{CMB}	1191.9	1205.9 (ν : 18.5) (+2.3 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4488	$0.449^{+0.017}_{-0.017}$ (−0.8 σ)	$H(0.15)$	75.97	$76.2^{+2.7}_{-2.6}$ (+1.9 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 1196.19$; $\Delta\chi^2_{\mathrm{eff}} = -4.86$; $\bar{\chi}^2_{\mathrm{eff}} = 1216.39$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -4.79$; $R - 1 = 0.01200$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.68 (Δ 0.70) small_100x143_offlike5_EE_Aplanck_B: 396.67 (Δ 0.10) commander_dx12_v3_2_29: 21.30 (Δ -1.38) plik_rd12_HM_v22_TT: 764.27 (Δ 3.38) Hubble - H073p45: 2.71 (Δ -7.96)

7.77 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02251^{+0.00040}_{-0.00041} \quad (+1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1475^{+42}_{-42} \quad (-1.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1250^{+0.0065}_{-0.0062} \quad (+1.2\sigma)$	$r_{\mathrm{drag}} h$	$101.0^{+1.7}_{-1.7} \quad (+1.3\sigma)$	$H(0.51)$	$92.6^{+2.4}_{-2.3} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04043^{+0.00099}_{-0.00098} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.414^{+0.043}_{-0.042} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1913^{+53}_{-53} \quad (-1.6\sigma)$
τ	$0.057^{+0.016}_{-0.014} \quad (+0.7\sigma)$	z_{re}	$8.0^{+1.5}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$98.2^{+2.5}_{-2.3} \quad (+1.7\sigma)$
N_{eff}	$3.46^{+0.37}_{-0.35} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.137^{+0.069}_{-0.064} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2227^{+61}_{-61} \quad (-1.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.062^{+0.032}_{-0.030} \quad (+1.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.906^{+0.034}_{-0.032} \quad (+1.1\sigma)$	$H(2.33)$	$241.2^{+5.4}_{-5.1} \quad (+1.4\sigma)$
n_{s}	$0.981^{+0.013}_{-0.013} \quad (+1.6\sigma)$	D_{40}	$1210^{+26}_{-26} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5599^{+130}_{-140} \quad (-1.6\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5724^{+81}_{-80} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (+0.3\sigma)$	D_{810}	$2543^{+27}_{-27} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.765^{+0.019}_{-0.019} \quad (+1.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$814^{+10}_{-10} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.012} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$4.7^{+4.0}_{-3.8} \quad (-0.2\sigma)$	D_{2000}	$227.9^{+4.0}_{-4.1} \quad (-0.9\sigma)$	$\sigma_8(0.38)$	$0.679^{+0.017}_{-0.017} \quad (+1.5\sigma)$
A_{100}^{PS}	$272^{+60}_{-60} \quad (+0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.981^{+0.013}_{-0.013} \quad (+1.6\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.012}_{-0.012} \quad (+0.3\sigma)$
A_{143}^{PS}	$53^{+20}_{-20} \quad (+0.5\sigma)$	Y_{P}	$0.2508^{+0.0046}_{-0.0045} \quad (+1.6\sigma)$	$\sigma_8(0.51)$	$0.636^{+0.016}_{-0.016} \quad (+1.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$45^{+20}_{-20} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2521^{+0.0047}_{-0.0045} \quad (+1.6\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.011}_{-0.011} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.70^{+0.12}_{-0.11} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.606^{+0.016}_{-0.016} \quad (+1.6\sigma)$
A^{kSZ}	—	Age/Gyr	$13.41^{+0.32}_{-0.32} \quad (-1.6\sigma)$	$f\sigma_8(2.33)$	$0.3059^{+0.0081}_{-0.0081} \quad (+1.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.7}_{-3.5} \quad (+0.1\sigma)$	z_*	$1090.57^{+0.85}_{-0.83} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3160^{+0.0087}_{-0.0086} \quad (+1.6\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	r_*	$141.1^{+3.2}_{-3.3} \quad (-1.5\sigma)$	f_{2000}^{143}	$34^{+7}_{-6} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.6}_{-6.4} \quad (+0.1\sigma)$	$100\theta_*$	$1.0403^{+0.0011}_{-0.0011} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$36^{+5}_{-4} \quad (+0.9\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.57^{+0.30}_{-0.30} \quad (-1.5\sigma)$	f_{2000}^{217}	$109.9^{+4.1}_{-4.2} \quad (+0.8\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1060.9^{+1.3}_{-1.4} \quad (+1.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.02 \quad (\nu: 0.3)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$143.7^{+3.4}_{-3.4} \quad (-1.5\sigma)$	χ_{simall}^2	$397.4 \quad (\nu: 2.1) \quad (+0.3\sigma)$
H_0	$70.3^{+2.2}_{-2.2} \quad (+1.6\sigma)$	k_{D}	$0.1431^{+0.0026}_{-0.0026} \quad (+1.5\sigma)$	χ_{lowl}^2	$21.70 \quad (\nu: 0.3) \quad (-1.2\sigma)$
Ω_{Λ}	$0.700^{+0.013}_{-0.013} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16187^{+0.00096}_{-0.00091} \quad (+1.4\sigma)$	χ_{plik}^2	$775.5 \quad (\nu: 16.1) \quad (+0.7\sigma)$
Ω_{m}	$0.300^{+0.013}_{-0.013} \quad (-1.3\sigma)$	z_{eq}	$3339^{+50}_{-50} \quad (-1.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$4.0 \quad (\nu: 3.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1481^{+0.0066}_{-0.0063} \quad (+1.3\sigma)$	k_{eq}	$0.01047^{+0.00025}_{-0.00024} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.1042^{+0.0075}_{-0.0070} \quad (+1.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8251^{+0.0096}_{-0.0094} \quad (+1.3\sigma)$	χ_{MGS}^2	$2.11 \quad (\nu: 0.2)$
σ_8	$0.826^{+0.020}_{-0.020} \quad (+1.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4554^{+0.0049}_{-0.0048} \quad (+1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.90 \quad (\nu: 0.2)$
S_8	$0.826^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$H(0.15)$	$75.6^{+2.2}_{-2.1} \quad (+1.7\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$617^{+19}_{-18} \quad (-1.6\sigma)$	χ_{CMB}^2	$1204.6 \quad (\nu: 16.7) \quad (+2.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$H(0.38)$	$85.8^{+2.3}_{-2.2} \quad (+1.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.5)$
$\bar{\chi}_{\mathrm{eff}}^2 = 1222.03; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -4.42; R - 1 = 0.01416$					

7.78 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_BAO_lensing_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022521	$0.02251^{+0.00040}_{-0.00041}$ $(+1.4\sigma)$	$r_{\mathrm{drag}}h$	101.03	$101.1^{+1.6}_{-1.6}$ $(+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	1915	1913^{+53}_{-52} (-1.6σ)
$\Omega_{\mathrm{c}}h^2$	0.1247	$0.1250^{+0.0065}_{-0.0062}$ $(+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4137	$2.414^{+0.043}_{-0.042}$ (-1.0σ)	$H(0.61)$	98.13	$98.2^{+2.4}_{-2.3}$ $(+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	1.04049	$1.04043^{+0.00099}_{-0.00098}$ (-0.7σ)	z_{re}	8.02	$8.0^{+1.5}_{-1.5}$ $(+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	2229	2227^{+60}_{-60} (-1.6σ)
τ	0.0568	$0.057^{+0.016}_{-0.014}$ $(+0.7\sigma)$	$10^9 A_{\mathrm{s}}$	2.135	$2.137^{+0.069}_{-0.064}$ $(+1.2\sigma)$	$H(2.33)$	241.0	$241.2^{+5.4}_{-5.1}$ $(+1.4\sigma)$
N_{eff}	3.440	$3.46^{+0.37}_{-0.35}$ $(+1.6\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.9058	$1.906^{+0.034}_{-0.032}$ $(+1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5604	5599^{+130}_{-130} (-1.6σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0610	$3.062^{+0.032}_{-0.030}$ $(+1.2\sigma)$	D_{40}	1210.1	1210^{+26}_{-26} (-1.2σ)	$f\sigma_8(0.15)$	0.4575	$0.458^{+0.013}_{-0.013}$ (-0.5σ)
n_{s}	0.9805	$0.981^{+0.013}_{-0.013}$ $(+1.6\sigma)$	D_{220}	5726	5724^{+81}_{-79} $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7643	$0.765^{+0.019}_{-0.019}$ $(+1.4\sigma)$
y_{cal}	1.00067	$1.0007^{+0.0047}_{-0.0049}$ $(+0.1\sigma)$	D_{810}	2543.7	2543^{+27}_{-27} $(+0.5\sigma)$	$f\sigma_8(0.38)$	0.4790	$0.479^{+0.012}_{-0.012}$ (-0.0σ)
A_{217}^{CIB}	52.1	49^{+10}_{-10} $(+0.3\sigma)$	D_{1420}	814.4	814^{+10}_{-10} (-0.2σ)	$\sigma_8(0.38)$	0.6788	$0.679^{+0.017}_{-0.017}$ $(+1.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.00	—	D_{2000}	228.25	$227.9^{+4.0}_{-4.1}$ (-0.8σ)	$f\sigma_8(0.51)$	0.4790	$0.479^{+0.012}_{-0.012}$ $(+0.3\sigma)$
A_{143}^{tSZ}	6.67	$4.7^{+4.0}_{-3.7}$ (-0.2σ)	$n_{\mathrm{s},0.002}$	0.9805	$0.981^{+0.013}_{-0.013}$ $(+1.6\sigma)$	$\sigma_8(0.51)$	0.6358	$0.636^{+0.016}_{-0.016}$ $(+1.5\sigma)$
A_{100}^{PS}	265	272^{+60}_{-60} $(+0.3\sigma)$	Y_{P}	0.25059	$0.2508^{+0.0046}_{-0.0045}$ $(+1.6\sigma)$	$f\sigma_8(0.61)$	0.4749	$0.475^{+0.011}_{-0.011}$ $(+0.6\sigma)$
A_{143}^{PS}	49.0	53^{+20}_{-20} $(+0.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.25193	$0.2521^{+0.0046}_{-0.0045}$ $(+1.6\sigma)$	$\sigma_8(0.61)$	0.6053	$0.606^{+0.016}_{-0.016}$ $(+1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	39.9	45^{+20}_{-20} $(+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.693	$2.70^{+0.12}_{-0.11}$ $(+1.1\sigma)$	$f\sigma_8(2.33)$	0.3056	$0.3059^{+0.0080}_{-0.0080}$ $(+1.6\sigma)$
A_{217}^{PS}	115.7	115^{+20}_{-20} (-0.0σ)	Age/Gyr	13.419	$13.41^{+0.32}_{-0.32}$ (-1.6σ)	$\sigma_8(2.33)$	0.3157	$0.3160^{+0.0086}_{-0.0085}$ $(+1.6\sigma)$
A^{kSZ}	1.0	—	z_{*}	1090.51	$1090.57^{+0.84}_{-0.83}$ $(+0.6\sigma)$	f_{2000}^{143}	33.2	34^{+7}_{-6} $(+0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	9.03	$9.1^{+3.7}_{-3.5}$ $(+0.1\sigma)$	r_{*}	141.24	$141.1^{+3.2}_{-3.2}$ (-1.5σ)	$f_{2000}^{143 \times 217}$	35.30	36^{+5}_{-4} $(+0.9\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.88	$10.9^{+3.6}_{-3.5}$ $(+0.1\sigma)$	$100\theta_{*}$	1.04041	$1.0403^{+0.0011}_{-0.0011}$ (-1.1σ)	f_{2000}^{217}	109.66	$109.9^{+4.1}_{-4.2}$ $(+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.0	$18.5^{+6.6}_{-6.4}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.576	$13.57^{+0.30}_{-0.30}$ (-1.5σ)	$\chi_{\mathrm{lensing}}^2$	9.51	10.01 (ν : 0.3)
$A_{217}^{\mathrm{dustTT}}$	93.4	93^{+10}_{-10} (-0.0σ)	z_{drag}	1060.92	$1060.9^{+1.3}_{-1.3}$ $(+1.6\sigma)$	χ_{simall}^2	396.47	397.4 (ν : 2.0) $(+0.3\sigma)$
c_{100}	0.99962	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	r_{drag}	143.81	$143.7^{+3.4}_{-3.3}$ (-1.5σ)	χ_{lowl}^2	21.61	21.69 (ν : 0.3) (-1.2σ)
c_{217}	0.99831	$0.9983^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	k_{D}	0.14302	$0.1431^{+0.0026}_{-0.0025}$ $(+1.5\sigma)$	χ_{plik}^2	763.0	775.5 (ν : 16.1) $(+0.7\sigma)$
H_0	70.25	$70.3^{+2.2}_{-2.1}$ $(+1.6\sigma)$	$100\theta_{\mathrm{D}}$	0.16181	$0.16187^{+0.00096}_{-0.00091}$ $(+1.4\sigma)$	$\chi_{\mathrm{H073p45}}^2$	3.71	4.0 (ν : 3.2)
Ω_{Λ}	0.7004	$0.701^{+0.012}_{-0.013}$ $(+1.3\sigma)$	z_{eq}	3340.7	3339^{+49}_{-48} (-1.3σ)	χ_{JLA}^2	1034.735	1034.82 (ν : 0.0)
Ω_{m}	0.2996	$0.299^{+0.013}_{-0.012}$ (-1.3σ)	k_{eq}	0.010463	$0.01047^{+0.00025}_{-0.00024}$ $(+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.012	0.042 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.1478	$0.1481^{+0.0066}_{-0.0062}$ $(+1.3\sigma)$	$100\theta_{\mathrm{eq}}$	0.8248	$0.8251^{+0.0092}_{-0.0091}$ $(+1.3\sigma)$	χ_{MGS}^2	2.04	2.11 (ν : 0.1)
$\Omega_{\mathrm{m}}h^3$	0.1039	$0.1042^{+0.0075}_{-0.0070}$ $(+1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.45529	$0.4554^{+0.0047}_{-0.0047}$ $(+1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.42	3.87 (ν : 0.2)
σ_8	0.8257	$0.826^{+0.020}_{-0.020}$ $(+1.2\sigma)$	$H(0.15)$	75.54	$75.6^{+2.2}_{-2.1}$ $(+1.7\sigma)$	χ_{prior}^2	1.8	7.4 (ν : 6.8) $(+0.0\sigma)$
S_8	0.8252	$0.826^{+0.025}_{-0.024}$ (-0.6σ)	$D_{\mathrm{M}}(0.15)$	617.9	617^{+18}_{-18} (-1.6σ)	χ_{CMB}^2	1190.5	1204.6 (ν : 16.6) $(+2.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4520	$0.452^{+0.014}_{-0.013}$ (-0.6σ)	$H(0.38)$	85.69	$85.8^{+2.3}_{-2.2}$ $(+1.7\sigma)$	χ_{BAO}^2	5.47	6.02 (ν : 0.5)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6109	$0.611^{+0.015}_{-0.015}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1476.5	1475^{+41}_{-41} (-1.6σ)			
$\sigma_8/h^{0.5}$	0.9852	$0.985^{+0.018}_{-0.018}$ (-0.5σ)	$H(0.51)$	92.46	$92.6^{+2.4}_{-2.3}$ $(+1.7\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 2236.25$; $\Delta\chi_{\mathrm{eff}}^2 = -4.76$; $\bar{\chi}_{\mathrm{eff}}^2 = 2256.76$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -4.50$; $R - 1 = 0.01430$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ 0.01) MGS: 2.04 (Δ 0.29) DR12BAO: 3.42 (Δ -0.01) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.51 (Δ 0.51) simall_100x143_offlike5_EE_Aplanck: 396.47 (Δ -0.42) commander_dx12_v3.2_29: 21.61 (Δ -0.99) plik_rd12_HM_v22_TT: 762.95 (Δ 2.11) Hubble - H073p45: 3.71 (Δ -6.61) SN - JLA Pantheon18: 1034.73 (Δ -0.05)

7.79 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02261^{+0.00044}_{-0.00045} \quad (+1.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.023}_{-0.023} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$610^{+23}_{-22} \quad (-2.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1247^{+0.0071}_{-0.0070} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.978^{+0.029}_{-0.029} \quad (-0.9\sigma)$	$H(0.38)$	$86.6^{+2.6}_{-2.6} \quad (+2.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0405^{+0.0011}_{-0.0010} \quad (-0.6\sigma)$	$r_{\mathrm{drag}} h$	$102.2^{+2.9}_{-2.9} \quad (+1.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1459^{+52}_{-48} \quad (-2.0\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.392^{+0.068}_{-0.065} \quad (-1.5\sigma)$	$H(0.51)$	$93.3^{+2.6}_{-2.6} \quad (+2.0\sigma)$
N_{eff}	$3.53^{+0.39}_{-0.38} \quad (+1.9\sigma)$	z_{re}	$8.1^{+1.4}_{-1.5} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1893^{+64}_{-61} \quad (-2.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.063^{+0.035}_{-0.034} \quad (+1.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.139^{+0.076}_{-0.072} \quad (+1.3\sigma)$	$H(0.61)$	$98.9^{+2.7}_{-2.7} \quad (+2.0\sigma)$
n_{s}	$0.986^{+0.015}_{-0.015} \quad (+2.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.905^{+0.036}_{-0.037} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2205^{+73}_{-69} \quad (-2.0\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	D_{40}	$1201^{+30}_{-30} \quad (-1.6\sigma)$	$H(2.33)$	$241.4^{+5.8}_{-5.7} \quad (+1.5\sigma)$
A_{217}^{CIB}	$50^{+10}_{-10} \quad (+0.3\sigma)$	D_{220}	$5724^{+80}_{-80} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5566^{+150}_{-140} \quad (-1.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2542^{+28}_{-28} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.022}_{-0.021} \quad (-1.0\sigma)$
A_{143}^{tSZ}	$4.6^{+3.8}_{-3.9} \quad (-0.2\sigma)$	D_{1420}	$814^{+11}_{-11} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.765^{+0.023}_{-0.022} \quad (+1.4\sigma)$
A_{100}^{PS}	$272^{+60}_{-60} \quad (+0.4\sigma)$	D_{2000}	$227.7^{+4.3}_{-4.1} \quad (-0.9\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.019}_{-0.019} \quad (-0.5\sigma)$
A_{143}^{PS}	$53^{+20}_{-20} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.986^{+0.015}_{-0.015} \quad (+2.0\sigma)$	$\sigma_8(0.38)$	$0.680^{+0.020}_{-0.019} \quad (+1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$45^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.2517^{+0.0049}_{-0.0049} \quad (+1.8\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.017}_{-0.017} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2530^{+0.0049}_{-0.0049} \quad (+1.8\sigma)$	$\sigma_8(0.51)$	$0.638^{+0.019}_{-0.018} \quad (+1.6\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.71^{+0.12}_{-0.12} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.016}_{-0.016} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.33^{+0.35}_{-0.34} \quad (-1.9\sigma)$	$\sigma_8(0.61)$	$0.607^{+0.018}_{-0.017} \quad (+1.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	z_*	$1090.49^{+0.94}_{-0.97} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.3070^{+0.0092}_{-0.0087} \quad (+1.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.5}_{-6.5} \quad (+0.1\sigma)$	r_*	$140.8^{+3.5}_{-3.4} \quad (-1.7\sigma)$	$\sigma_8(2.33)$	$0.3175^{+0.0099}_{-0.0093} \quad (+1.9\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.0403^{+0.0012}_{-0.0012} \quad (-1.1\sigma)$	f_{2000}^{143}	$34^{+6}_{-6} \quad (+0.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.53^{+0.33}_{-0.32} \quad (-1.7\sigma)$	$f_{2000}^{143 \times 217}$	$36^{+5}_{-5} \quad (+1.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1061.2^{+1.4}_{-1.4} \quad (+1.8\sigma)$	f_{2000}^{217}	$110.1^{+4.2}_{-4.3} \quad (+0.9\sigma)$
H_0	$71.3^{+2.7}_{-2.8} \quad (+2.1\sigma)$	r_{drag}	$143.3^{+3.6}_{-3.5} \quad (-1.7\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.5) \quad (+0.4\sigma)$
Ω_{Λ}	$0.709^{+0.020}_{-0.022} \quad (+1.8\sigma)$	k_{D}	$0.1433^{+0.0027}_{-0.0027} \quad (+1.7\sigma)$	χ_{lowl}^2	$21.17 \quad (\nu: 0.3) \quad (-1.4\sigma)$
Ω_{m}	$0.291^{+0.022}_{-0.020} \quad (-1.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16200^{+0.00099}_{-0.00099} \quad (+1.6\sigma)$	χ_{plik}^2	$777.7 \quad (\nu: 18.4) \quad (+1.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1480^{+0.0073}_{-0.0071} \quad (+1.3\sigma)$	z_{eq}	$3308^{+84}_{-81} \quad (-1.8\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$2.4 \quad (\nu: 3.0)$
$\Omega_{\mathrm{m}} h^3$	$0.1055^{+0.0080}_{-0.0076} \quad (+1.9\sigma)$	k_{eq}	$0.01042^{+0.00032}_{-0.00032} \quad (+0.1\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 7.2) \quad (+0.1\sigma)$
σ_8	$0.825^{+0.025}_{-0.024} \quad (+1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.831^{+0.016}_{-0.016} \quad (+1.8\sigma)$	χ_{CMB}^2	$1196.4 \quad (\nu: 17.4) \quad (+0.6\sigma)$
S_8	$0.813^{+0.042}_{-0.041} \quad (-1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4586^{+0.0083}_{-0.0084} \quad (+1.8\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.446^{+0.023}_{-0.022} \quad (-1.1\sigma)$	$H(0.15)$	$76.5^{+2.6}_{-2.7} \quad (+2.1\sigma)$		

 $\bar{\chi}_{\mathrm{eff}}^2 = 1206.27; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -5.54; R - 1 = 0.00718$

7.80 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02252^{+0.00041}_{-0.00041} \quad (+1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1472^{+43}_{-42} \quad (-1.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1254^{+0.0071}_{-0.0068} \quad (+1.4\sigma)$	$r_{\mathrm{drag}} h$	$101.1^{+1.8}_{-1.8} \quad (+1.4\sigma)$	$H(0.51)$	$92.8^{+2.5}_{-2.4} \quad (+1.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0404^{+0.0010}_{-0.00099} \quad (-0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.411^{+0.053}_{-0.049} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1908^{+55}_{-54} \quad (-1.7\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	z_{re}	$8.0^{+1.3}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$98.4^{+2.5}_{-2.5} \quad (+1.8\sigma)$
N_{eff}	$3.49^{+0.38}_{-0.37} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.136^{+0.073}_{-0.069} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2222^{+63}_{-62} \quad (-1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.061^{+0.034}_{-0.032} \quad (+1.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.907^{+0.037}_{-0.036} \quad (+1.2\sigma)$	$H(2.33)$	$241.7^{+5.8}_{-5.6} \quad (+1.5\sigma)$
n_{s}	$0.982^{+0.013}_{-0.013} \quad (+1.7\sigma)$	D_{40}	$1207^{+27}_{-27} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5587^{+140}_{-140} \quad (-1.7\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5719^{+80}_{-78} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.016}_{-0.016} \quad (-0.5\sigma)$
A_{217}^{CIB}	$50^{+10}_{-10} \quad (+0.3\sigma)$	D_{810}	$2542^{+28}_{-27} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.766^{+0.022}_{-0.021} \quad (+1.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$813^{+10}_{-10} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.015}_{-0.015} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$4.6^{+3.9}_{-3.8} \quad (-0.2\sigma)$	D_{2000}	$227.7^{+4.0}_{-4.1} \quad (-1.0\sigma)$	$\sigma_8(0.38)$	$0.680^{+0.020}_{-0.019} \quad (+1.6\sigma)$
A_{100}^{PS}	$273^{+60}_{-60} \quad (+0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.982^{+0.013}_{-0.013} \quad (+1.7\sigma)$	$f\sigma_8(0.51)$	$0.480^{+0.015}_{-0.014} \quad (+0.4\sigma)$
A_{143}^{PS}	$54^{+20}_{-20} \quad (+0.6\sigma)$	Y_{P}	$0.2512^{+0.0048}_{-0.0048} \quad (+1.7\sigma)$	$\sigma_8(0.51)$	$0.637^{+0.018}_{-0.018} \quad (+1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$45^{+20}_{-20} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2525^{+0.0048}_{-0.0048} \quad (+1.7\sigma)$	$f\sigma_8(0.61)$	$0.476^{+0.014}_{-0.014} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.71^{+0.12}_{-0.12} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.607^{+0.018}_{-0.017} \quad (+1.6\sigma)$
A^{kSZ}	—	Age/Gyr	$13.38^{+0.33}_{-0.33} \quad (-1.7\sigma)$	$f\sigma_8(2.33)$	$0.3063^{+0.0089}_{-0.0087} \quad (+1.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.6}_{-3.5} \quad (+0.1\sigma)$	z_*	$1090.63^{+0.89}_{-0.88} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3165^{+0.0094}_{-0.0091} \quad (+1.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	r_*	$140.9^{+3.5}_{-3.4} \quad (-1.6\sigma)$	f_{2000}^{143}	$34^{+7}_{-6} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$100\theta_*$	$1.0403^{+0.0012}_{-0.0011} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$36^{+5}_{-4} \quad (+1.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.54^{+0.32}_{-0.32} \quad (-1.6\sigma)$	f_{2000}^{217}	$110.0^{+4.2}_{-4.3} \quad (+0.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1061.0^{+1.4}_{-1.4} \quad (+1.7\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.1) \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$143.4^{+3.6}_{-3.6} \quad (-1.6\sigma)$	χ_{lowl}^2	$21.55 \quad (\nu: 0.3) \quad (-1.3\sigma)$
H_0	$70.5^{+2.2}_{-2.2} \quad (+1.7\sigma)$	k_{D}	$0.1433^{+0.0028}_{-0.0027} \quad (+1.6\sigma)$	χ_{plik}^2	$776.2 \quad (\nu: 16.8) \quad (+0.8\sigma)$
Ω_{Λ}	$0.701^{+0.013}_{-0.014} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16195^{+0.00098}_{-0.00095} \quad (+1.5\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$3.6 \quad (\nu: 3.1)$
Ω_{m}	$0.299^{+0.014}_{-0.013} \quad (-1.4\sigma)$	z_{eq}	$3337^{+55}_{-54} \quad (-1.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1486^{+0.0072}_{-0.0069} \quad (+1.4\sigma)$	k_{eq}	$0.01048^{+0.00028}_{-0.00028} \quad (+0.5\sigma)$	χ_{MGS}^2	$2.17 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.1048^{+0.0079}_{-0.0074} \quad (+1.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.010}_{-0.010} \quad (+1.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.00 \quad (\nu: 0.3)$
σ_8	$0.827^{+0.024}_{-0.023} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4557^{+0.0053}_{-0.0052} \quad (+1.3\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 7.0) \quad (+0.0\sigma)$
S_8	$0.826^{+0.031}_{-0.030} \quad (-0.6\sigma)$	$H(0.15)$	$75.8^{+2.3}_{-2.2} \quad (+1.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$616^{+19}_{-19} \quad (-1.7\sigma)$	χ_{CMB}^2	$1195.0 \quad (\nu: 16.1) \quad (+0.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.019}_{-0.019} \quad (+0.1\sigma)$	$H(0.38)$	$86.0^{+2.4}_{-2.3} \quad (+1.8\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1212.22; R - 1 = 0.01139$

7.81 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_BAO_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02252^{+0.00040}_{-0.00041} \quad (+1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1472^{+43}_{-42} \quad (-1.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1254^{+0.0071}_{-0.0068} \quad (+1.4\sigma)$	$r_{\mathrm{drag}} h$	$101.1^{+1.7}_{-1.7} \quad (+1.4\sigma)$	$H(0.51)$	$92.8^{+2.4}_{-2.4} \quad (+1.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0404^{+0.0010}_{-0.00099} \quad (-0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.411^{+0.052}_{-0.048} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1908^{+54}_{-53} \quad (-1.7\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	z_{re}	$8.0^{+1.3}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$98.4^{+2.5}_{-2.5} \quad (+1.8\sigma)$
N_{eff}	$3.49^{+0.38}_{-0.37} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.136^{+0.073}_{-0.069} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2222^{+62}_{-61} \quad (-1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.061^{+0.034}_{-0.032} \quad (+1.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.907^{+0.037}_{-0.036} \quad (+1.2\sigma)$	$H(2.33)$	$241.7^{+5.8}_{-5.6} \quad (+1.5\sigma)$
n_{s}	$0.982^{+0.013}_{-0.013} \quad (+1.7\sigma)$	D_{40}	$1207^{+27}_{-26} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5587^{+140}_{-140} \quad (-1.7\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5719^{+80}_{-78} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.016}_{-0.016} \quad (-0.5\sigma)$
A_{217}^{CIB}	$50^{+10}_{-10} \quad (+0.3\sigma)$	D_{810}	$2542^{+28}_{-27} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.766^{+0.022}_{-0.021} \quad (+1.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$813^{+10}_{-10} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.015}_{-0.015} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$4.6^{+3.9}_{-3.8} \quad (-0.2\sigma)$	D_{2000}	$227.7^{+4.0}_{-4.1} \quad (-1.0\sigma)$	$\sigma_8(0.38)$	$0.680^{+0.020}_{-0.019} \quad (+1.6\sigma)$
A_{100}^{PS}	$273^{+60}_{-60} \quad (+0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.982^{+0.013}_{-0.013} \quad (+1.7\sigma)$	$f\sigma_8(0.51)$	$0.480^{+0.015}_{-0.014} \quad (+0.4\sigma)$
A_{143}^{PS}	$54^{+20}_{-20} \quad (+0.6\sigma)$	Y_{P}	$0.2512^{+0.0048}_{-0.0048} \quad (+1.7\sigma)$	$\sigma_8(0.51)$	$0.637^{+0.018}_{-0.018} \quad (+1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$45^{+20}_{-20} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2525^{+0.0048}_{-0.0048} \quad (+1.7\sigma)$	$f\sigma_8(0.61)$	$0.476^{+0.014}_{-0.014} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.71^{+0.12}_{-0.12} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.607^{+0.018}_{-0.017} \quad (+1.6\sigma)$
A^{kSZ}	—	Age/Gyr	$13.38^{+0.33}_{-0.33} \quad (-1.7\sigma)$	$f\sigma_8(2.33)$	$0.3063^{+0.0089}_{-0.0087} \quad (+1.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.6}_{-3.5} \quad (+0.1\sigma)$	z_*	$1090.63^{+0.89}_{-0.88} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3165^{+0.0093}_{-0.0090} \quad (+1.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	r_*	$140.9^{+3.5}_{-3.4} \quad (-1.6\sigma)$	f_{2000}^{143}	$34^{+7}_{-6} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$100\theta_*$	$1.0403^{+0.0012}_{-0.0011} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$36^{+5}_{-4} \quad (+1.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.54^{+0.32}_{-0.32} \quad (-1.6\sigma)$	f_{2000}^{217}	$110.0^{+4.2}_{-4.3} \quad (+0.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1061.0^{+1.4}_{-1.4} \quad (+1.7\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.1) \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$143.4^{+3.6}_{-3.6} \quad (-1.6\sigma)$	χ_{lowl}^2	$21.55 \quad (\nu: 0.3) \quad (-1.3\sigma)$
H_0	$70.5^{+2.2}_{-2.2} \quad (+1.7\sigma)$	k_{D}	$0.1433^{+0.0028}_{-0.0027} \quad (+1.6\sigma)$	χ_{plik}^2	$776.2 \quad (\nu: 16.7) \quad (+0.8\sigma)$
Ω_{Λ}	$0.701^{+0.013}_{-0.013} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16195^{+0.00098}_{-0.00095} \quad (+1.5\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$3.6 \quad (\nu: 3.0)$
Ω_{m}	$0.299^{+0.013}_{-0.013} \quad (-1.4\sigma)$	z_{eq}	$3337^{+52}_{-52} \quad (-1.3\sigma)$	χ_{JLA}^2	$1034.82 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1486^{+0.0072}_{-0.0069} \quad (+1.4\sigma)$	k_{eq}	$0.01048^{+0.00028}_{-0.00027} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.050 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.1048^{+0.0078}_{-0.0074} \quad (+1.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8256^{+0.0099}_{-0.0097} \quad (+1.4\sigma)$	χ_{MGS}^2	$2.16 \quad (\nu: 0.2)$
σ_8	$0.827^{+0.024}_{-0.023} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4557^{+0.0051}_{-0.0050} \quad (+1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.95 \quad (\nu: 0.3)$
S_8	$0.826^{+0.030}_{-0.030} \quad (-0.6\sigma)$	$H(0.15)$	$75.8^{+2.2}_{-2.2} \quad (+1.7\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 7.0) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.017}_{-0.016} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$616^{+19}_{-18} \quad (-1.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.019}_{-0.018} \quad (+0.1\sigma)$	$H(0.38)$	$86.0^{+2.3}_{-2.3} \quad (+1.8\sigma)$	χ_{CMB}^2	$1195.0 \quad (\nu: 16.1) \quad (+0.4\sigma)$
$\bar{\chi}_{\mathrm{eff}}^2 = 2246.95; R - 1 = 0.01150$					

7.82 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02258^{+0.00045}_{-0.00045} \quad (+1.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$613^{+22}_{-22} \quad (-1.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1248^{+0.0065}_{-0.0064} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.020}_{-0.020} \quad (-0.6\sigma)$	$H(0.38)$	$86.3^{+2.6}_{-2.6} \quad (+1.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0405^{+0.0010}_{-0.00099} \quad (-0.7\sigma)$	$r_{\mathrm{drag}} h$	$101.7^{+2.5}_{-2.5} \quad (+1.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1465^{+50}_{-49} \quad (-1.8\sigma)$
τ	$0.059^{+0.016}_{-0.015} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.406^{+0.050}_{-0.049} \quad (-1.2\sigma)$	$H(0.51)$	$93.0^{+2.7}_{-2.6} \quad (+1.9\sigma)$
N_{eff}	$3.50^{+0.38}_{-0.37} \quad (+1.8\sigma)$	z_{re}	$8.3^{+1.5}_{-1.5} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1901^{+63}_{-62} \quad (-1.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.066^{+0.033}_{-0.032} \quad (+1.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.147^{+0.071}_{-0.068} \quad (+1.4\sigma)$	$H(0.61)$	$98.6^{+2.7}_{-2.6} \quad (+1.9\sigma)$
n_{s}	$0.984^{+0.015}_{-0.015} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.906^{+0.033}_{-0.033} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2214^{+71}_{-70} \quad (-1.8\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0050} \quad (+0.1\sigma)$	D_{40}	$1206^{+28}_{-28} \quad (-1.4\sigma)$	$H(2.33)$	$241.4^{+5.4}_{-5.2} \quad (+1.5\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (+0.3\sigma)$	D_{220}	$5729^{+81}_{-80} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5579^{+150}_{-140} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2544^{+27}_{-27} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.015}_{-0.016} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$4.6^{+3.9}_{-3.8} \quad (-0.2\sigma)$	D_{1420}	$814^{+11}_{-11} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.766^{+0.020}_{-0.019} \quad (+1.5\sigma)$
A_{100}^{PS}	$272^{+60}_{-60} \quad (+0.3\sigma)$	D_{2000}	$228.0^{+4.3}_{-4.2} \quad (-0.8\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{PS}	$53^{+20}_{-20} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.984^{+0.015}_{-0.015} \quad (+1.8\sigma)$	$\sigma_8(0.38)$	$0.681^{+0.018}_{-0.017} \quad (+1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$45^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.2513^{+0.0048}_{-0.0048} \quad (+1.7\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.012}_{-0.012} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2527^{+0.0048}_{-0.0048} \quad (+1.7\sigma)$	$\sigma_8(0.51)$	$0.638^{+0.017}_{-0.017} \quad (+1.7\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.70^{+0.12}_{-0.12} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.012}_{-0.012} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.36^{+0.35}_{-0.34} \quad (-1.8\sigma)$	$\sigma_8(0.61)$	$0.608^{+0.017}_{-0.016} \quad (+1.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	z_*	$1090.50^{+0.86}_{-0.89} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.3072^{+0.0087}_{-0.0084} \quad (+1.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+6.5}_{-6.5} \quad (+0.1\sigma)$	r_*	$140.9^{+3.3}_{-3.3} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.3175^{+0.0096}_{-0.0091} \quad (+1.9\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.0404^{+0.0012}_{-0.0011} \quad (-1.0\sigma)$	f_{2000}^{143}	$34^{+7}_{-6} \quad (+0.8\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.55^{+0.31}_{-0.31} \quad (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	$36^{+5}_{-4} \quad (+0.9\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1061.1^{+1.5}_{-1.4} \quad (+1.8\sigma)$	f_{2000}^{217}	$109.9^{+4.2}_{-4.2} \quad (+0.9\sigma)$
H_0	$70.9^{+2.7}_{-2.7} \quad (+1.9\sigma)$	r_{drag}	$143.5^{+3.5}_{-3.4} \quad (-1.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.2 \quad (\nu: 0.6)$
Ω_{Λ}	$0.705^{+0.018}_{-0.019} \quad (+1.6\sigma)$	k_{D}	$0.1432^{+0.0026}_{-0.0026} \quad (+1.6\sigma)$	χ_{small}^2	$397.9 \quad (\nu: 3.1) \quad (+0.6\sigma)$
Ω_{m}	$0.295^{+0.019}_{-0.018} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16193^{+0.00099}_{-0.00095} \quad (+1.5\sigma)$	χ_{lowl}^2	$21.43 \quad (\nu: 0.3) \quad (-1.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1480^{+0.0066}_{-0.0064} \quad (+1.3\sigma)$	z_{eq}	$3321^{+71}_{-71} \quad (-1.6\sigma)$	χ_{plik}^2	$776.3 \quad (\nu: 17.1) \quad (+0.8\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.1050^{+0.0078}_{-0.0074} \quad (+1.8\sigma)$	k_{eq}	$0.01044^{+0.00026}_{-0.00026} \quad (+0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$3.0 \quad (\nu: 3.6)$
σ_8	$0.827^{+0.021}_{-0.020} \quad (+1.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.829^{+0.014}_{-0.014} \quad (+1.6\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 7.1) \quad (+0.1\sigma)$
S_8	$0.820^{+0.031}_{-0.030} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4573^{+0.0072}_{-0.0069} \quad (+1.6\sigma)$	χ_{CMB}^2	$1205.8 \quad (\nu: 18.4) \quad (+2.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$H(0.15)$	$76.2^{+2.7}_{-2.6} \quad (+1.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1216.31; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -4.76; R - 1 = 0.01206$$

7.83 base_nnu_plikHM_TT_lowl_lowE_Riess18_post_BAO_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02251^{+0.00040}_{-0.00041} \quad (+1.4\sigma)$	$r_{\mathrm{drag}}h$	$101.1^{+1.6}_{-1.6} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1913^{+53}_{-52} \quad (-1.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1249^{+0.0065}_{-0.0062} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.415^{+0.043}_{-0.041} \quad (-1.0\sigma)$	$H(0.61)$	$98.2^{+2.4}_{-2.3} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04043^{+0.00098}_{-0.00097} \quad (-0.7\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2227^{+60}_{-60} \quad (-1.6\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.138^{+0.068}_{-0.060} \quad (+1.2\sigma)$	$H(2.33)$	$241.2^{+5.4}_{-5.1} \quad (+1.4\sigma)$
N_{eff}	$3.46^{+0.37}_{-0.35} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.906^{+0.034}_{-0.032} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5599^{+130}_{-130} \quad (-1.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.062^{+0.031}_{-0.028} \quad (+1.2\sigma)$	D_{40}	$1210^{+26}_{-26} \quad (-1.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.5\sigma)$
n_{s}	$0.981^{+0.013}_{-0.013} \quad (+1.6\sigma)$	D_{220}	$5724^{+80}_{-79} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.765^{+0.019}_{-0.018} \quad (+1.4\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0049} \quad (+0.1\sigma)$	D_{810}	$2543^{+27}_{-27} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.012} \quad (+0.0\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (+0.3\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.680^{+0.017}_{-0.016} \quad (+1.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$227.9^{+4.0}_{-4.1} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.012}_{-0.012} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$4.7^{+3.9}_{-3.8} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.981^{+0.013}_{-0.013} \quad (+1.6\sigma)$	$\sigma_8(0.51)$	$0.637^{+0.016}_{-0.016} \quad (+1.5\sigma)$
A_{100}^{PS}	$272^{+60}_{-60} \quad (+0.3\sigma)$	Y_{P}	$0.2508^{+0.0046}_{-0.0045} \quad (+1.6\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.011}_{-0.011} \quad (+0.6\sigma)$
A_{143}^{PS}	$53^{+20}_{-20} \quad (+0.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2521^{+0.0046}_{-0.0045} \quad (+1.6\sigma)$	$\sigma_8(0.61)$	$0.606^{+0.015}_{-0.015} \quad (+1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$45^{+20}_{-20} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.70^{+0.12}_{-0.11} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3060^{+0.0080}_{-0.0078} \quad (+1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.41^{+0.32}_{-0.32} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.3161^{+0.0085}_{-0.0083} \quad (+1.7\sigma)$
A^{kSZ}	—	z_*	$1090.56^{+0.84}_{-0.83} \quad (+0.6\sigma)$	f_{2000}^{143}	$34^{+7}_{-6} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.7}_{-3.5} \quad (+0.1\sigma)$	r_*	$141.1^{+3.2}_{-3.3} \quad (-1.5\sigma)$	$f_{2000}^{143 \times 217}$	$36^{+5}_{-4} \quad (+0.9\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$100\theta_*$	$1.0403^{+0.0011}_{-0.0011} \quad (-1.1\sigma)$	f_{2000}^{217}	$109.8^{+4.1}_{-4.2} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.6}_{-6.4} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.57^{+0.30}_{-0.30} \quad (-1.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.99 \quad (\nu: 0.3)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1060.9^{+1.3}_{-1.4} \quad (+1.6\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.1) \quad (+0.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$143.7^{+3.4}_{-3.4} \quad (-1.5\sigma)$	χ_{lowl}^2	$21.69 \quad (\nu: 0.3) \quad (-1.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1431^{+0.0026}_{-0.0025} \quad (+1.5\sigma)$	χ_{plik}^2	$775.4 \quad (\nu: 16.0) \quad (+0.6\sigma)$
H_0	$70.3^{+2.2}_{-2.1} \quad (+1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16187^{+0.00096}_{-0.00091} \quad (+1.4\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$4.0 \quad (\nu: 3.2)$
Ω_{Λ}	$0.701^{+0.012}_{-0.013} \quad (+1.3\sigma)$	z_{eq}	$3339^{+49}_{-48} \quad (-1.3\sigma)$	χ_{JLA}^2	$1034.82 \quad (\nu: 0.0)$
Ω_{m}	$0.299^{+0.013}_{-0.012} \quad (-1.3\sigma)$	k_{eq}	$0.01047^{+0.00025}_{-0.00024} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.042 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1481^{+0.0066}_{-0.0062} \quad (+1.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8252^{+0.0092}_{-0.0092} \quad (+1.3\sigma)$	χ_{MGS}^2	$2.12 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}}h^3$	$0.1042^{+0.0075}_{-0.0069} \quad (+1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4555^{+0.0047}_{-0.0047} \quad (+1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.87 \quad (\nu: 0.2)$
σ_8	$0.827^{+0.020}_{-0.020} \quad (+1.3\sigma)$	$H(0.15)$	$75.6^{+2.2}_{-2.1} \quad (+1.7\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
S_8	$0.826^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$617^{+18}_{-18} \quad (-1.6\sigma)$	χ_{CMB}^2	$1204.5 \quad (\nu: 16.3) \quad (+2.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$85.8^{+2.3}_{-2.2} \quad (+1.7\sigma)$	χ_{BAO}^2	$6.03 \quad (\nu: 0.5)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1475^{+42}_{-41} \quad (-1.6\sigma)$		
$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.017} \quad (-0.4\sigma)$	$H(0.51)$	$92.6^{+2.4}_{-2.3} \quad (+1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2256.66; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -4.51; R - 1 = 0.01360$$

7.84 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022649	$0.02266^{+0.00037}_{-0.00036}$ (+1.9 σ)	$\Omega_{\mathrm{m}}h^3$	0.1006	$0.1014^{+0.0066}_{-0.0062}$ (+1.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.4538	$0.4539^{+0.0061}_{-0.0060}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.1218	$0.1225^{+0.0056}_{-0.0055}$ (+0.6 σ)	σ_8	0.8177	$0.820^{+0.021}_{-0.021}$ (+0.8 σ)	$H(0.15)$	74.59	$74.8^{+2.2}_{-2.2}$ (+1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04076	$1.04068^{+0.00077}_{-0.00077}$ (−0.3 σ)	S_8	0.8203	$0.822^{+0.031}_{-0.030}$ (−0.7 σ)	$D_{\mathrm{M}}(0.15)$	626.0	624^{+20}_{-19} (−1.3 σ)
τ	0.0578	$0.058^{+0.017}_{-0.015}$ (+0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4493	$0.450^{+0.017}_{-0.017}$ (−0.7 σ)	$H(0.38)$	84.68	$84.9^{+2.2}_{-2.2}$ (+1.3 σ)
N_{eff}	3.256	$3.30^{+0.32}_{-0.31}$ (+1.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6061	$0.608^{+0.018}_{-0.017}$ (−0.2 σ)	$D_{\mathrm{M}}(0.38)$	1495.1	1491^{+44}_{-43} (−1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0551	$3.058^{+0.037}_{-0.034}$ (+1.0 σ)	$\sigma_8/h^{0.5}$	0.9820	$0.983^{+0.022}_{-0.023}$ (−0.6 σ)	$H(0.51)$	91.40	$91.7^{+2.2}_{-2.2}$ (+1.3 σ)
n_{s}	0.9765	$0.977^{+0.013}_{-0.013}$ (+1.3 σ)	$r_{\mathrm{drag}}h$	100.72	$100.8^{+2.2}_{-2.1}$ (+1.2 σ)	$D_{\mathrm{M}}(0.51)$	1938	1933^{+55}_{-54} (−1.3 σ)
y_{cal}	1.00002	$1.0008^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.416	$2.419^{+0.054}_{-0.054}$ (−0.9 σ)	$H(0.61)$	97.03	$97.3^{+2.3}_{-2.2}$ (+1.2 σ)
A_{217}^{CIB}	47.3	48^{+10}_{-10} (+0.0 σ)	z_{re}	8.03	$8.0^{+1.6}_{-1.6}$ (+0.7 σ)	$D_{\mathrm{M}}(0.61)$	2257	2251^{+62}_{-61} (−1.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.66	—	$10^9 A_{\mathrm{s}}$	2.122	$2.129^{+0.079}_{-0.072}$ (+1.0 σ)	$H(2.33)$	238.72	$239.3^{+4.7}_{-4.6}$ (+0.9 σ)
A_{143}^{tSZ}	6.26	$5.3^{+3.7}_{-4.0}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8906	$1.896^{+0.032}_{-0.031}$ (+0.7 σ)	$D_{\mathrm{M}}(2.33)$	5666	5651^{+130}_{-130} (−1.2 σ)
A_{100}^{PS}	256	263^{+50}_{-50} (+0.0 σ)	D_{40}	1212.9	1215^{+27}_{-27} (−1.0 σ)	$f\sigma_8(0.15)$	0.4547	$0.456^{+0.016}_{-0.016}$ (−0.7 σ)
A_{143}^{PS}	51.3	48^{+20}_{-20} (−0.1 σ)	D_{220}	5731	5739^{+78}_{-75} (+0.6 σ)	$\sigma_8(0.15)$	0.7566	$0.759^{+0.020}_{-0.019}$ (+0.9 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	51.0	43^{+20}_{-20} (−0.1 σ)	D_{810}	2540.0	2543^{+27}_{-27} (+0.5 σ)	$f\sigma_8(0.38)$	0.4753	$0.477^{+0.014}_{-0.014}$ (−0.3 σ)
A_{217}^{PS}	118.6	114^{+20}_{-20} (−0.1 σ)	D_{1420}	817.1	$817.1^{+9.4}_{-9.6}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6717	$0.674^{+0.018}_{-0.017}$ (+1.0 σ)
A^{kSZ}	1.7	—	D_{2000}	230.29	$230.1^{+3.5}_{-3.5}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4751	$0.476^{+0.013}_{-0.013}$ (−0.0 σ)
$A_{100}^{\mathrm{dustTT}}$	8.94	$9.1^{+3.6}_{-3.6}$ (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9765	$0.977^{+0.013}_{-0.013}$ (+1.3 σ)	$\sigma_8(0.51)$	0.6291	$0.631^{+0.017}_{-0.017}$ (+1.1 σ)
$A_{143}^{\mathrm{dustTT}}$	11.11	$11.1^{+3.5}_{-3.5}$ (+0.2 σ)	Y_{P}	0.24827	$0.2488^{+0.0041}_{-0.0041}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4708	$0.472^{+0.013}_{-0.013}$ (+0.2 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.6	$18.8^{+6.5}_{-6.5}$ (+0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24961	$0.2501^{+0.0042}_{-0.0041}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5988	$0.601^{+0.016}_{-0.016}$ (+1.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94.1	94^{+10}_{-10} (+0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.607	$2.618^{+0.085}_{-0.083}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.3023	$0.3032^{+0.0083}_{-0.0082}$ (+1.2 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.115^{+0.074}_{-0.074}$	Age/Gyr	13.568	$13.53^{+0.30}_{-0.30}$ (−1.2 σ)	$\sigma_8(2.33)$	0.3121	$0.3131^{+0.0089}_{-0.0088}$ (+1.2 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.059}_{-0.059}$	z_*	1089.93	$1090.02^{+0.68}_{-0.68}$ (−0.5 σ)	f_{2000}^{143}	30.0	31^{+6}_{-6} (−0.0 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.478	$0.48^{+0.17}_{-0.17}$	r_*	142.73	$142.4^{+2.9}_{-2.9}$ (−1.0 σ)	$f_{2000}^{143 \times 217}$	32.90	33^{+4}_{-4} (−0.1 σ)
$A_{143}^{\mathrm{dustTE}}$	0.222	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04078	$1.04068^{+0.00092}_{-0.00092}$ (−0.6 σ)	f_{2000}^{217}	107.20	$107.9^{+3.8}_{-3.7}$ (−0.0 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.713	$13.68^{+0.27}_{-0.27}$ (−1.0 σ)	χ_{simall}^2	396.61	397.6 (ν : 2.8) (+0.5 σ)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.07^{+0.52}_{-0.52}$	z_{drag}	1060.89	$1061.0^{+1.2}_{-1.2}$ (+1.6 σ)	χ_{lowl}^2	21.93	22.03 (ν : 0.4) (−1.0 σ)
c_{100}	0.99968	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	145.27	$144.9^{+3.0}_{-3.0}$ (−1.1 σ)	χ_{plik}^2	2349.8	2365.3 (ν : 24.5) (+272.6 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	k_{D}	0.14222	$0.1425^{+0.0023}_{-0.0023}$ (+1.2 σ)	$\chi_{\mathrm{H073p45}}^2$	6.1	6.0 (ν : 5.5)
H_0	69.33	$69.5^{+2.3}_{-2.2}$ (+1.3 σ)	$100\theta_{\mathrm{D}}$	0.16108	$0.16119^{+0.00072}_{-0.00071}$ (+0.3 σ)	χ_{prior}^2	1.8	11.9 (ν : 10.9) (+1.3 σ)
Ω_{Λ}	0.6981	$0.698^{+0.016}_{-0.017}$ (+1.2 σ)	z_{eq}	3358	3356^{+61}_{-61} (−1.0 σ)	χ_{CMB}^2	2768.3	2785.0 (ν : 22.2) (+285.2 σ)
Ω_{m}	0.3019	$0.302^{+0.017}_{-0.016}$ (−1.2 σ)	k_{eq}	0.010391	$0.01042^{+0.00023}_{-0.00023}$ (+0.1 σ)			
$\Omega_{\mathrm{m}}h^2$	0.1451	$0.1458^{+0.0057}_{-0.0056}$ (+0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8222	$0.822^{+0.012}_{-0.012}$ (+1.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2776.34$; $\Delta\chi_{\mathrm{eff}}^2 = -1.60$; $\bar{\chi}_{\mathrm{eff}}^2 = 2802.87$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.30$; $R - 1 = 0.00770$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.62 (Δ 0.14) commander_dx12_v3.2.29: 21.93 (Δ -0.61) plik_rd12_HM_v22b_TTTEEE: 2349.80 (Δ 3.04) Hubble - H073p45: 6.15 (Δ -4.44)

7.85 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022656	$0.02264^{+0.00032}_{-0.00032}$ (+1.8 σ)	σ_8	0.8205	$0.820^{+0.021}_{-0.021}$ (+0.8 σ)	$D_{\mathrm{M}}(0.15)$	626.2	625^{+17}_{-16} (−1.2 σ)
$\Omega_{\mathrm{c}}h^2$	0.1222	$0.1226^{+0.0056}_{-0.0054}$ (+0.6 σ)	S_8	0.8245	$0.824^{+0.026}_{-0.026}$ (−0.7 σ)	$H(0.38)$	84.69	$84.8^{+2.0}_{-1.9}$ (+1.2 σ)
$100\theta_{\mathrm{MC}}$	1.04068	$1.04068^{+0.00076}_{-0.00076}$ (−0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4516	$0.451^{+0.014}_{-0.014}$ (−0.7 σ)	$D_{\mathrm{M}}(0.38)$	1495.4	1493^{+38}_{-37} (−1.2 σ)
τ	0.0587	$0.058^{+0.016}_{-0.015}$ (+0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6087	$0.608^{+0.016}_{-0.016}$ (−0.2 σ)	$H(0.51)$	91.42	$91.6^{+2.1}_{-2.0}$ (+1.2 σ)
N_{eff}	3.266	$3.29^{+0.31}_{-0.29}$ (+1.0 σ)	$\sigma_8/h^{0.5}$	0.9856	$0.984^{+0.020}_{-0.021}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1938.5	1935^{+48}_{-47} (−1.2 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0601	$3.057^{+0.036}_{-0.034}$ (+1.0 σ)	$r_{\mathrm{drag}}h$	100.57	$100.6^{+1.6}_{-1.6}$ (+1.1 σ)	$H(0.61)$	97.06	$97.2^{+2.1}_{-2.1}$ (+1.2 σ)
n_{s}	0.9763	$0.976^{+0.012}_{-0.012}$ (+1.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4243	$2.421^{+0.049}_{-0.047}$ (−0.8 σ)	$D_{\mathrm{M}}(0.61)$	2257	2253^{+55}_{-54} (−1.2 σ)
y_{cal}	1.00108	$1.0007^{+0.0049}_{-0.0048}$ (+0.1 σ)	z_{re}	8.12	$8.0^{+1.6}_{-1.6}$ (+0.7 σ)	$H(2.33)$	238.98	$239.3^{+4.7}_{-4.5}$ (+0.9 σ)
A_{217}^{CIB}	49.5	48^{+10}_{-10} (+0.0 σ)	$10^9 A_{\mathrm{s}}$	2.133	$2.127^{+0.077}_{-0.071}$ (+1.0 σ)	$D_{\mathrm{M}}(2.33)$	5664	5655^{+120}_{-120} (−1.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.30	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8968	$1.896^{+0.031}_{-0.031}$ (+0.7 σ)	$f\sigma_8(0.15)$	0.4569	$0.456^{+0.014}_{-0.014}$ (−0.6 σ)
A_{143}^{tSZ}	7.10	$5.3^{+3.7}_{-4.0}$ (+0.1 σ)	D_{40}	1216.8	1216^{+25}_{-24} (−0.9 σ)	$\sigma_8(0.15)$	0.7590	$0.759^{+0.020}_{-0.019}$ (+0.9 σ)
A_{100}^{PS}	254	263^{+50}_{-50} (+0.0 σ)	D_{220}	5745	5739^{+76}_{-73} (+0.6 σ)	$f\sigma_8(0.38)$	0.4774	$0.477^{+0.013}_{-0.013}$ (−0.3 σ)
A_{143}^{PS}	47.2	48^{+20}_{-20} (−0.1 σ)	D_{810}	2546.1	2543^{+27}_{-27} (+0.5 σ)	$\sigma_8(0.38)$	0.6738	$0.673^{+0.018}_{-0.017}$ (+1.0 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	45.2	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.8	$817.0^{+9.4}_{-9.7}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4770	$0.477^{+0.013}_{-0.012}$ (+0.0 σ)
A_{217}^{PS}	118.0	114^{+20}_{-20} (−0.1 σ)	D_{2000}	230.79	$230.1^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6309	$0.631^{+0.017}_{-0.016}$ (+1.1 σ)
A^{kSZ}	0.1	—	$n_{\mathrm{s},0.002}$	0.9763	$0.976^{+0.012}_{-0.012}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4727	$0.472^{+0.012}_{-0.012}$ (+0.2 σ)
$A_{100}^{\mathrm{dustTT}}$	8.84	$9.1^{+3.6}_{-3.6}$ (+0.1 σ)	Y_{P}	0.24840	$0.2487^{+0.0040}_{-0.0039}$ (+1.1 σ)	$\sigma_8(0.61)$	0.6006	$0.600^{+0.016}_{-0.016}$ (+1.1 σ)
$A_{143}^{\mathrm{dustTT}}$	10.97	$11.1^{+3.4}_{-3.5}$ (+0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24974	$0.2500^{+0.0040}_{-0.0040}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3031	$0.3030^{+0.0081}_{-0.0080}$ (+1.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.0	$18.8^{+6.5}_{-6.6}$ (+0.2 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.609	$2.619^{+0.086}_{-0.082}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3129	$0.3128^{+0.0085}_{-0.0084}$ (+1.2 σ)
$A_{217}^{\mathrm{dustTT}}$	93.0	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.561	$13.54^{+0.28}_{-0.29}$ (−1.2 σ)	f_{2000}^{143}	29.7	31^{+6}_{-6} (−0.0 σ)
$A_{100}^{\mathrm{dustTE}}$	0.112	$0.115^{+0.074}_{-0.074}$	z_*	1089.96	$1090.03^{+0.66}_{-0.65}$ (−0.4 σ)	$f_{2000}^{143 \times 217}$	32.75	33^{+4}_{-4} (−0.1 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.059}_{-0.060}$	r_*	142.59	$142.4^{+2.9}_{-2.9}$ (−1.0 σ)	f_{2000}^{217}	107.37	$107.9^{+3.7}_{-3.7}$ (−0.0 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	1.04069	$1.04068^{+0.00091}_{-0.00091}$ (−0.6 σ)	χ_{simall}^2	396.87	397.6 (ν : 2.7) (+0.5 σ)
$A_{143}^{\mathrm{dustTE}}$	0.219	$0.22^{+0.10}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.701	$13.68^{+0.27}_{-0.27}$ (−1.0 σ)	χ_{lowl}^2	22.03	22.08 (ν : 0.3) (−1.0 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.92	$1060.9^{+1.2}_{-1.2}$ (+1.6 σ)	χ_{plik}^2	2349.0	2364.6 (ν : 22.2) (+272.5 σ)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.51}_{-0.53}$	r_{drag}	145.13	$144.9^{+3.0}_{-3.0}$ (−1.1 σ)	$\chi_{\mathrm{H073p45}}^2$	6.3	6.2 (ν : 4.1)
c_{100}	0.99965	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.14234	$0.1425^{+0.0023}_{-0.0023}$ (+1.2 σ)	χ_{6DF}^2	0.000	0.027 (ν : 0.0)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_{\mathrm{D}}$	0.16109	$0.16118^{+0.00070}_{-0.00070}$ (+0.3 σ)	χ_{MGS}^2	1.75	1.84 (ν : 0.1)
H_0	69.30	$69.4^{+1.9}_{-1.9}$ (+1.3 σ)	z_{eq}	3361.7	3360^{+45}_{-45} (−0.9 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.52	3.90 (ν : 0.2)
Ω_{Λ}	0.6971	$0.697^{+0.012}_{-0.012}$ (+1.1 σ)	k_{eq}	0.010411	$0.01042^{+0.00022}_{-0.00022}$ (+0.1 σ)	χ_{prior}^2	2.1	11.9 (ν : 10.9) (+1.3 σ)
Ω_{m}	0.3029	$0.303^{+0.012}_{-0.012}$ (−1.1 σ)	$100\theta_{\mathrm{eq}}$	0.8214	$0.8217^{+0.0087}_{-0.0085}$ (+1.0 σ)	χ_{BAO}^2	5.26	5.76 (ν : 0.2)
$\Omega_{\mathrm{m}}h^2$	0.1455	$0.1459^{+0.0057}_{-0.0055}$ (+0.8 σ)	$100\theta_{\mathrm{s,eq}}$	0.45338	$0.4536^{+0.0044}_{-0.0044}$ (+1.0 σ)	χ_{CMB}^2	2767.9	2784.3 (ν : 20.3) (+285.1 σ)
$\Omega_{\mathrm{m}}h^3$	0.1008	$0.1013^{+0.0064}_{-0.0059}$ (+1.1 σ)	$H(0.15)$	74.57	$74.7^{+1.9}_{-1.9}$ (+1.3 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2781.50$; $\bar{\chi}_{\mathrm{eff}}^2 = 2808.11$; $R - 1 = 0.00961$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.52 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.87 commander_dx12_v3_2_29: 22.03 plik_rd12_HM_v22b_TTTEEE: 2349.01 Hubble - H073p45: 6.25

7.86 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022654	$0.02265^{+0.00031}_{-0.00031}$ (+1.9 σ)	σ_8	0.8186	$0.820^{+0.021}_{-0.021}$ (+0.8 σ)	$D_M(0.15)$	625.3	625^{+16}_{-16} (−1.2 σ)
$\Omega_c h^2$	0.1222	$0.1226^{+0.0056}_{-0.0054}$ (+0.6 σ)	S_8	0.8214	$0.823^{+0.025}_{-0.025}$ (−0.7 σ)	$H(0.38)$	84.78	$84.9^{+2.0}_{-1.9}$ (+1.2 σ)
$100\theta_{MC}$	1.04071	$1.04068^{+0.00076}_{-0.00077}$ (−0.3 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4499	$0.451^{+0.014}_{-0.014}$ (−0.7 σ)	$D_M(0.38)$	1493.5	1492^{+37}_{-37} (−1.2 σ)
τ	0.0569	$0.058^{+0.016}_{-0.015}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6069	$0.608^{+0.016}_{-0.016}$ (−0.2 σ)	$H(0.51)$	91.51	$91.6^{+2.0}_{-2.0}$ (+1.2 σ)
N_{eff}	3.276	$3.29^{+0.31}_{-0.29}$ (+1.0 σ)	$\sigma_8/h^{0.5}$	0.9825	$0.984^{+0.020}_{-0.020}$ (−0.6 σ)	$D_M(0.51)$	1936.1	1935^{+47}_{-46} (−1.2 σ)
$\ln(10^{10} A_s)$	3.0556	$3.058^{+0.035}_{-0.034}$ (+1.0 σ)	$r_{\text{drag}} h$	100.69	$100.7^{+1.5}_{-1.5}$ (+1.1 σ)	$H(0.61)$	97.15	$97.2^{+2.1}_{-2.1}$ (+1.2 σ)
n_s	0.9764	$0.977^{+0.012}_{-0.011}$ (+1.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4175	$2.420^{+0.049}_{-0.047}$ (−0.8 σ)	$D_M(0.61)$	2254	2253^{+54}_{-53} (−1.2 σ)
y_{cal}	1.00066	$1.0007^{+0.0049}_{-0.0048}$ (+0.1 σ)	z_{re}	7.95	$8.0^{+1.6}_{-1.6}$ (+0.7 σ)	$H(2.33)$	239.05	$239.3^{+4.7}_{-4.6}$ (+0.9 σ)
A_{217}^{CIB}	50.2	48^{+10}_{-10} (+0.0 σ)	$10^9 A_s$	2.123	$2.128^{+0.076}_{-0.071}$ (+1.0 σ)	$D_M(2.33)$	5659	5654^{+120}_{-120} (−1.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.11	—	$10^9 A_s e^{-2\tau}$	1.8948	$1.896^{+0.031}_{-0.031}$ (+0.7 σ)	$f\sigma_8(0.15)$	0.4553	$0.456^{+0.014}_{-0.013}$ (−0.6 σ)
A_{143}^{tSZ}	7.42	$5.3^{+3.7}_{-4.0}$ (+0.1 σ)	D_{40}	1215.1	1216^{+25}_{-24} (−1.0 σ)	$\sigma_8(0.15)$	0.7574	$0.759^{+0.020}_{-0.019}$ (+0.9 σ)
A_{100}^{PS}	256	263^{+50}_{-50} (+0.0 σ)	D_{220}	5740	5739^{+77}_{-73} (+0.6 σ)	$f\sigma_8(0.38)$	0.4759	$0.477^{+0.013}_{-0.013}$ (−0.3 σ)
A_{143}^{PS}	45.0	48^{+20}_{-20} (−0.1 σ)	D_{810}	2543.1	2543^{+27}_{-27} (+0.5 σ)	$\sigma_8(0.38)$	0.6724	$0.674^{+0.018}_{-0.017}$ (+1.0 σ)
$A_{143 \times 217}^{\text{PS}}$	40.4	42^{+20}_{-20} (−0.1 σ)	D_{1420}	817.6	$817.1^{+9.4}_{-9.7}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4756	$0.477^{+0.013}_{-0.012}$ (−0.0 σ)
A_{217}^{PS}	116.3	114^{+20}_{-20} (−0.1 σ)	D_{2000}	230.29	$230.1^{+3.5}_{-3.5}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6297	$0.631^{+0.017}_{-0.016}$ (+1.1 σ)
A^{kSZ}	0.0	—	$n_{s,0.002}$	0.9764	$0.977^{+0.012}_{-0.011}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4714	$0.472^{+0.012}_{-0.012}$ (+0.2 σ)
A_{100}^{dustTT}	8.91	$9.1^{+3.6}_{-3.6}$ (+0.1 σ)	Y_P	0.24853	$0.2487^{+0.0040}_{-0.0039}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5994	$0.600^{+0.016}_{-0.016}$ (+1.1 σ)
A_{143}^{dustTT}	11.15	$11.1^{+3.4}_{-3.5}$ (+0.2 σ)	Y_P^{BBN}	0.24987	$0.2501^{+0.0041}_{-0.0040}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3026	$0.3031^{+0.0081}_{-0.0080}$ (+1.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.6	$18.8^{+6.5}_{-6.6}$ (+0.2 σ)	10^5D/H	2.613	$2.619^{+0.086}_{-0.082}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3124	$0.3129^{+0.0085}_{-0.0084}$ (+1.2 σ)
A_{217}^{dustTT}	94.3	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.551	$13.54^{+0.28}_{-0.28}$ (−1.2 σ)	f_{2000}^{143}	30.3	31^{+6}_{-6} (−0.0 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.073}_{-0.074}$	z_*	1089.98	$1090.03^{+0.66}_{-0.65}$ (−0.4 σ)	$f_{2000}^{143 \times 217}$	33.04	33^{+4}_{-4} (−0.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.059}_{-0.060}$	r_*	142.53	$142.4^{+2.9}_{-2.9}$ (−1.0 σ)	f_{2000}^{217}	107.66	$107.9^{+3.7}_{-3.7}$ (−0.0 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	1.04072	$1.04068^{+0.00091}_{-0.00091}$ (−0.6 σ)	χ_{simall}^2	396.44	397.6 (ν : 2.7) (+0.5 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.10}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	13.695	$13.68^{+0.27}_{-0.27}$ (−1.0 σ)	χ_{lowl}^2	21.97	22.06 (ν : 0.3) (−1.0 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.92	$1060.9^{+1.2}_{-1.2}$ (+1.6 σ)	χ_{plik}^2	2349.6	2364.7 (ν : 22.1) (+272.5 σ)
A_{217}^{dustTE}	2.07	$2.08^{+0.51}_{-0.53}$	r_{drag}	145.07	$144.9^{+3.0}_{-3.0}$ (−1.1 σ)	χ_{H073p45}^2	5.9	6.1 (ν : 3.9)
c_{100}	0.99968	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14237	$0.1425^{+0.0023}_{-0.0023}$ (+1.2 σ)	χ_{JLA}^2	1034.755	1034.83 (ν : 0.0)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_D$	0.16113	$0.16118^{+0.00070}_{-0.00071}$ (+0.3 σ)	χ_{6DF}^2	0.0016	0.025 (ν : 0.0)
H_0	69.41	$69.5^{+1.9}_{-1.8}$ (+1.3 σ)	z_{eq}	3358.4	3359^{+43}_{-44} (−0.9 σ)	χ_{MGS}^2	1.82	1.86 (ν : 0.1)
Ω_Λ	0.6979	$0.698^{+0.011}_{-0.012}$ (+1.2 σ)	k_{eq}	0.010407	$0.01042^{+0.00022}_{-0.00022}$ (+0.1 σ)	χ_{DR12BAO}^2	3.46	3.85 (ν : 0.2)
Ω_m	0.3021	$0.302^{+0.012}_{-0.011}$ (−1.2 σ)	$100\theta_{\text{eq}}$	0.8220	$0.8219^{+0.0084}_{-0.0082}$ (+1.0 σ)	χ_{prior}^2	2.1	11.9 (ν : 10.9) (+1.3 σ)
$\Omega_m h^2$	0.1455	$0.1459^{+0.0057}_{-0.0055}$ (+0.8 σ)	$100\theta_{s,\text{eq}}$	0.45371	$0.4536^{+0.0043}_{-0.0042}$ (+1.0 σ)	χ_{BAO}^2	5.28	5.73 (ν : 0.2)
$\Omega_m h^3$	0.1010	$0.1013^{+0.0063}_{-0.0059}$ (+1.1 σ)	$H(0.15)$	74.67	$74.7^{+1.9}_{-1.8}$ (+1.3 σ)	χ_{CMB}^2	2768.0	2784.3 (ν : 20.1) (+285.1 σ)

Best-fit $\chi_{\text{eff}}^2 = 3816.05$; $\bar{\chi}_{\text{eff}}^2 = 3842.86$; $R - 1 = 0.00994$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.46 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.44 commander_dx12_v3_2_29: 21.97 plik_rd12_HM_v22b_TTTEEE: 2349.59 Hubble - H073p45: 5.93 SN - JLA Pantheon18: 1034.76

7.87 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022643	$0.02265^{+0.00037}_{-0.00036}$ (+1.9 σ)	$\Omega_{\mathrm{m}}h^3$	0.1003	$0.1011^{+0.0063}_{-0.0060}$ (+1.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.4534	$0.4536^{+0.0055}_{-0.0054}$ (+1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.1217	$0.1223^{+0.0052}_{-0.0052}$ (+0.6 σ)	σ_8	0.8189	$0.820^{+0.019}_{-0.018}$ (+0.8 σ)	$H(0.15)$	74.44	$74.7^{+2.2}_{-2.2}$ (+1.2 σ)
$100\theta_{\mathrm{MC}}$	1.04074	$1.04070^{+0.00075}_{-0.00075}$ (−0.3 σ)	S_8	0.8229	$0.823^{+0.024}_{-0.025}$ (−0.7 σ)	$D_{\mathrm{M}}(0.15)$	627.2	625^{+19}_{-19} (−1.2 σ)
τ	0.0587	$0.059^{+0.016}_{-0.015}$ (+0.9 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4507	$0.451^{+0.013}_{-0.014}$ (−0.7 σ)	$H(0.38)$	84.55	$84.8^{+2.2}_{-2.1}$ (+1.2 σ)
N_{eff}	3.241	$3.28^{+0.31}_{-0.30}$ (+1.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6075	$0.608^{+0.014}_{-0.014}$ (−0.2 σ)	$D_{\mathrm{M}}(0.38)$	1498.0	1494^{+43}_{-42} (−1.2 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0583	$3.059^{+0.033}_{-0.032}$ (+1.1 σ)	$\sigma_8/h^{0.5}$	0.9846	$0.985^{+0.017}_{-0.018}$ (−0.5 σ)	$H(0.51)$	91.27	$91.5^{+2.2}_{-2.2}$ (+1.2 σ)
n_{s}	0.9759	$0.976^{+0.013}_{-0.013}$ (+1.2 σ)	$r_{\mathrm{drag}}h$	100.58	$100.7^{+2.0}_{-2.0}$ (+1.1 σ)	$D_{\mathrm{M}}(0.51)$	1942	1937^{+55}_{-53} (−1.2 σ)
y_{cal}	1.00070	$1.0009^{+0.0049}_{-0.0048}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4227	$2.423^{+0.043}_{-0.044}$ (−0.8 σ)	$H(0.61)$	96.90	$97.2^{+2.2}_{-2.2}$ (+1.2 σ)
A_{217}^{CIB}	46.5	48^{+10}_{-10} (+0.0 σ)	z_{re}	8.12	$8.1^{+1.5}_{-1.5}$ (+0.8 σ)	$D_{\mathrm{M}}(0.61)$	2261	2255^{+62}_{-60} (−1.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.53	—	$10^9 A_{\mathrm{s}}$	2.129	$2.131^{+0.071}_{-0.067}$ (+1.1 σ)	$H(2.33)$	238.59	$239.1^{+4.4}_{-4.5}$ (+0.8 σ)
A_{143}^{tSZ}	7.30	$5.3^{+3.7}_{-4.0}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8931	$1.895^{+0.030}_{-0.030}$ (+0.7 σ)	$D_{\mathrm{M}}(2.33)$	5673	5659^{+130}_{-120} (−1.1 σ)
A_{100}^{PS}	251	263^{+50}_{-50} (+0.0 σ)	D_{40}	1215.9	1217^{+26}_{-26} (−0.9 σ)	$f\sigma_8(0.15)$	0.4560	$0.456^{+0.013}_{-0.013}$ (−0.6 σ)
A_{143}^{PS}	50.5	47^{+20}_{-20} (−0.1 σ)	D_{220}	5740	5743^{+79}_{-74} (+0.7 σ)	$\sigma_8(0.15)$	0.7576	$0.759^{+0.017}_{-0.017}$ (+0.9 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	51.3	42^{+20}_{-20} (−0.1 σ)	D_{810}	2543.9	2543^{+27}_{-26} (+0.5 σ)	$f\sigma_8(0.38)$	0.4765	$0.477^{+0.011}_{-0.011}$ (−0.3 σ)
A_{217}^{PS}	121.6	114^{+20}_{-20} (−0.1 σ)	D_{1420}	818.5	$817.4^{+9.5}_{-9.5}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6725	$0.674^{+0.016}_{-0.016}$ (+1.0 σ)
A^{kSZ}	0.0	—	D_{2000}	230.81	$230.2^{+3.5}_{-3.5}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4761	$0.477^{+0.011}_{-0.011}$ (+0.0 σ)
$A_{100}^{\mathrm{dustTT}}$	9.03	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	$n_{\mathrm{s},0.002}$	0.9759	$0.976^{+0.013}_{-0.013}$ (+1.2 σ)	$\sigma_8(0.51)$	0.6297	$0.631^{+0.015}_{-0.015}$ (+1.1 σ)
$A_{143}^{\mathrm{dustTT}}$	11.37	$11.0^{+3.4}_{-3.5}$ (+0.2 σ)	Y_{P}	0.24807	$0.2485^{+0.0041}_{-0.0040}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4718	$0.472^{+0.010}_{-0.010}$ (+0.2 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.9	$18.8^{+6.5}_{-6.5}$ (+0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24940	$0.2499^{+0.0041}_{-0.0040}$ (+1.0 σ)	$\sigma_8(0.61)$	0.5994	$0.601^{+0.015}_{-0.014}$ (+1.1 σ)
$A_{217}^{\mathrm{dustTT}}$	96.8	94^{+10}_{-10} (+0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.603	$2.614^{+0.081}_{-0.081}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.3026	$0.3031^{+0.0077}_{-0.0076}$ (+1.2 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.115^{+0.073}_{-0.073}$	Age/Gyr	13.584	$13.55^{+0.30}_{-0.30}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3123	$0.3130^{+0.0084}_{-0.0083}$ (+1.2 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.059}_{-0.060}$	z_*	1089.91	$1089.99^{+0.63}_{-0.65}$ (−0.5 σ)	f_{2000}^{143}	29.6	31^{+6}_{-6} (−0.1 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	r_*	142.83	$142.5^{+2.8}_{-2.8}$ (−1.0 σ)	$f_{2000}^{143 \times 217}$	32.66	33^{+4}_{-4} (−0.1 σ)
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	1.04078	$1.04071^{+0.00090}_{-0.00089}$ (−0.5 σ)	f_{2000}^{217}	107.19	$107.8^{+3.7}_{-3.7}$ (−0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.724	$13.69^{+0.26}_{-0.26}$ (−1.0 σ)	$\chi^2_{\mathrm{lensing}}$	9.02	9.54 (ν : 0.3)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.08^{+0.51}_{-0.52}$	z_{drag}	1060.85	$1060.9^{+1.2}_{-1.3}$ (+1.6 σ)	χ^2_{simall}	396.87	397.8 (ν : 2.8) (+0.6 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	145.38	$145.1^{+3.0}_{-2.9}$ (−1.0 σ)	χ^2_{lowl}	22.04	22.16 (ν : 0.4) (−1.0 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.14215	$0.1424^{+0.0022}_{-0.0023}$ (+1.2 σ)	χ^2_{plik}	2348.8	2364.2 (ν : 22.5) (+272.4 σ)
H_0	69.18	$69.4^{+2.2}_{-2.2}$ (+1.2 σ)	$100\theta_{\mathrm{D}}$	0.16103	$0.16114^{+0.00069}_{-0.00069}$ (+0.3 σ)	$\chi^2_{\mathrm{H073p45}}$	6.6	6.4 (ν : 5.8)
Ω_{Λ}	0.6970	$0.698^{+0.015}_{-0.015}$ (+1.2 σ)	z_{eq}	3362	3359^{+56}_{-55} (−0.9 σ)	χ^2_{prior}	1.9	11.8 (ν : 11.1) (+1.3 σ)
Ω_{m}	0.3030	$0.302^{+0.015}_{-0.015}$ (−1.2 σ)	k_{eq}	0.010394	$0.01041^{+0.00021}_{-0.00022}$ (+0.1 σ)	χ^2_{CMB}	2776.8	2793.7 (ν : 22.6) (+286.8 σ)
$\Omega_{\mathrm{m}}h^2$	0.1450	$0.1456^{+0.0054}_{-0.0054}$ (+0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8214	$0.822^{+0.011}_{-0.011}$ (+1.0 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 2785.24$; $\Delta\chi^2_{\mathrm{eff}} = -1.49$; $\bar{\chi}^2_{\mathrm{eff}} = 2811.92$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -1.05$; $R - 1 = 0.01134$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 9.02 (Δ 0.30) simall_100x143_offlike5_EE_Aplanck_B: 396.87 (Δ -0.07) commander_dx12.v3.2.29: 22.04 (Δ -0.68) plik_rd12_HM_v22b_TTTEEE: 2348.83 (Δ 2.88) Hubble - H073p45: 6.61 (Δ -4.16)

7.88 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022622	$0.02264^{+0.00032}_{-0.00032}$ (+1.8 σ)	σ_8	0.8183	$0.820^{+0.018}_{-0.018}$ (+0.8 σ)	$D_{\mathrm{M}}(0.15)$	628.1	626^{+17}_{-16} (−1.2 σ)
$\Omega_{\mathrm{c}}h^2$	0.1217	$0.1223^{+0.0052}_{-0.0052}$ (+0.6 σ)	S_8	0.8236	$0.824^{+0.022}_{-0.022}$ (−0.7 σ)	$H(0.38)$	84.46	$84.7^{+2.0}_{-1.9}$ (+1.2 σ)
$100\theta_{\mathrm{MC}}$	1.04073	$1.04070^{+0.00075}_{-0.00075}$ (−0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4511	$0.451^{+0.012}_{-0.012}$ (−0.7 σ)	$D_{\mathrm{M}}(0.38)$	1499.9	1495^{+38}_{-37} (−1.2 σ)
τ	0.0577	$0.058^{+0.015}_{-0.014}$ (+0.9 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6075	$0.608^{+0.014}_{-0.014}$ (−0.2 σ)	$H(0.51)$	91.19	$91.5^{+2.0}_{-2.0}$ (+1.2 σ)
N_{eff}	3.234	$3.27^{+0.30}_{-0.29}$ (+1.0 σ)	$\sigma_8/h^{0.5}$	0.9845	$0.985^{+0.017}_{-0.017}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1944.2	1938^{+48}_{-47} (−1.2 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0565	$3.059^{+0.032}_{-0.031}$ (+1.1 σ)	$r_{\mathrm{drag}}h$	100.46	$100.6^{+1.5}_{-1.5}$ (+1.1 σ)	$H(0.61)$	96.82	$97.1^{+2.1}_{-2.0}$ (+1.1 σ)
n_{s}	0.9751	$0.976^{+0.012}_{-0.012}$ (+1.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4235	$2.424^{+0.040}_{-0.040}$ (−0.7 σ)	$D_{\mathrm{M}}(0.61)$	2263	2256^{+55}_{-54} (−1.2 σ)
y_{cal}	1.00093	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	z_{re}	8.02	$8.1^{+1.5}_{-1.4}$ (+0.8 σ)	$H(2.33)$	238.56	$239.0^{+4.4}_{-4.4}$ (+0.8 σ)
A_{217}^{CIB}	48.9	48^{+10}_{-10} (+0.0 σ)	$10^9 A_{\mathrm{s}}$	2.125	$2.130^{+0.069}_{-0.064}$ (+1.1 σ)	$D_{\mathrm{M}}(2.33)$	5677	5663^{+120}_{-120} (−1.1 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.28	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8937	$1.895^{+0.030}_{-0.030}$ (+0.6 σ)	$f\sigma_8(0.15)$	0.4563	$0.457^{+0.011}_{-0.012}$ (−0.6 σ)
A_{143}^{tSZ}	7.32	$5.3^{+3.9}_{-3.9}$ (+0.1 σ)	D_{40}	1217.5	1218^{+24}_{-24} (−0.9 σ)	$\sigma_8(0.15)$	0.7569	$0.759^{+0.017}_{-0.017}$ (+0.9 σ)
A_{100}^{PS}	254	263^{+50}_{-50} (+0.0 σ)	D_{220}	5742	5742^{+77}_{-73} (+0.7 σ)	$f\sigma_8(0.38)$	0.4765	$0.477^{+0.011}_{-0.011}$ (−0.2 σ)
A_{143}^{PS}	46.9	47^{+20}_{-20} (−0.1 σ)	D_{810}	2544.4	2543^{+26}_{-26} (+0.5 σ)	$\sigma_8(0.38)$	0.6718	$0.673^{+0.016}_{-0.015}$ (+1.0 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	44.6	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.5	$817.3^{+9.4}_{-9.6}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4760	$0.477^{+0.010}_{-0.010}$ (+0.0 σ)
A_{217}^{PS}	118.0	114^{+20}_{-20} (−0.1 σ)	D_{2000}	230.78	$230.2^{+3.5}_{-3.5}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6290	$0.631^{+0.015}_{-0.015}$ (+1.0 σ)
A^{kSZ}	0.0	—	$n_{\mathrm{s},0.002}$	0.9751	$0.976^{+0.012}_{-0.012}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4716	$0.472^{+0.010}_{-0.010}$ (+0.2 σ)
$A_{100}^{\mathrm{dustTT}}$	8.93	$9.0^{+3.7}_{-3.6}$ (+0.1 σ)	Y_{P}	0.24797	$0.2485^{+0.0039}_{-0.0038}$ (+1.0 σ)	$\sigma_8(0.61)$	0.5987	$0.600^{+0.014}_{-0.014}$ (+1.1 σ)
$A_{143}^{\mathrm{dustTT}}$	11.10	$11.0^{+3.4}_{-3.5}$ (+0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24931	$0.2498^{+0.0039}_{-0.0038}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3022	$0.3030^{+0.0073}_{-0.0072}$ (+1.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.8	$18.8^{+6.4}_{-6.5}$ (+0.2 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.604	$2.614^{+0.081}_{-0.080}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3119	$0.3127^{+0.0078}_{-0.0077}$ (+1.2 σ)
$A_{217}^{\mathrm{dustTT}}$	94.8	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.593	$13.56^{+0.28}_{-0.28}$ (−1.1 σ)	f_{2000}^{143}	29.8	31^{+6}_{-6} (−0.1 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.115^{+0.072}_{-0.073}$	z_*	1089.94	$1090.00^{+0.62}_{-0.63}$ (−0.5 σ)	$f_{2000}^{143 \times 217}$	32.72	33^{+4}_{-4} (−0.1 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.059}_{-0.060}$	r_*	142.88	$142.6^{+2.8}_{-2.7}$ (−0.9 σ)	f_{2000}^{217}	107.31	$107.8^{+3.7}_{-3.7}$ (−0.1 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.479	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	1.04077	$1.04072^{+0.00090}_{-0.00090}$ (−0.5 σ)	$\chi_{\mathrm{lensing}}^2$	9.02	9.48 (ν : 0.2)
$A_{143}^{\mathrm{dustTE}}$	0.221	$0.22^{+0.10}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.728	$13.70^{+0.26}_{-0.26}$ (−1.0 σ)	χ_{small}^2	396.62	397.7 (ν : 2.5) (+0.5 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.77	$1060.9^{+1.1}_{-1.2}$ (+1.5 σ)	χ_{lowl}^2	22.11	22.20 (ν : 0.3) (−1.0 σ)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.08^{+0.51}_{-0.53}$	r_{drag}	145.44	$145.1^{+2.9}_{-2.9}$ (−1.0 σ)	χ_{plik}^2	2348.4	2363.8 (ν : 21.1) (+272.3 σ)
c_{100}	0.99969	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.14211	$0.1423^{+0.0022}_{-0.0022}$ (+1.1 σ)	$\chi_{\mathrm{H073p45}}^2$	6.9	6.5 (ν : 4.3)
c_{217}	0.99823	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16103	$0.16113^{+0.00069}_{-0.00069}$ (+0.2 σ)	$\chi_{6\mathrm{DF}}^2$	0.0000	0.024 (ν : 0.0)
H_0	69.08	$69.3^{+1.9}_{-1.9}$ (+1.2 σ)	z_{eq}	3364.7	3361^{+43}_{-42} (−0.9 σ)	χ_{MGS}^2	1.68	1.81 (ν : 0.1)
Ω_{Λ}	0.6961	$0.697^{+0.011}_{-0.012}$ (+1.1 σ)	k_{eq}	0.010398	$0.01041^{+0.00021}_{-0.00020}$ (+0.1 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.57	3.88 (ν : 0.2)
Ω_{m}	0.3039	$0.303^{+0.012}_{-0.011}$ (−1.1 σ)	$100\theta_{\mathrm{eq}}$	0.8208	$0.8214^{+0.0083}_{-0.0082}$ (+1.0 σ)	χ_{prior}^2	2.0	11.8 (ν : 10.9) (+1.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.1450	$0.1456^{+0.0053}_{-0.0053}$ (+0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.45309	$0.4534^{+0.0042}_{-0.0042}$ (+1.0 σ)	χ_{CMB}^2	2776.2	2793.1 (ν : 20.7) (+286.7 σ)
$\Omega_{\mathrm{m}}h^3$	0.1002	$0.1009^{+0.0061}_{-0.0058}$ (+1.1 σ)	$H(0.15)$	74.35	$74.6^{+1.9}_{-1.9}$ (+1.2 σ)	χ_{BAO}^2	5.25	5.71 (ν : 0.2)

Best-fit $\chi_{\mathrm{eff}}^2 = 2790.37$; $\Delta\chi_{\mathrm{eff}}^2 = -1.64$; $\bar{\chi}_{\mathrm{eff}}^2 = 2817.17$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.07$; $R - 1 = 0.01178$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.68 (Δ 0.14) DR12BAO: 3.57 (Δ -0.13) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 9.02 (Δ 0.23) small_100x143_offlike5_EE_Aplanck 396.62 (Δ 0.04) commander_dx12.v3.2.29: 22.11 (Δ -0.54) plik_rd12_HM.v22b.TTTEEE: 2348.44 (Δ 1.98) Hubble - H073p45: 6.95 (Δ -3.70)

7.89 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_BAO_lensing_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022634	$0.02264^{+0.00031}_{-0.00031}$ (+1.8 σ)	S_8	0.8219	$0.824^{+0.021}_{-0.021}$ (−0.7 σ)	$D_{\mathrm{M}}(0.38)$	1498.1	1495^{+37}_{-36} (−1.2 σ)
$\Omega_{\mathrm{c}}h^2$	0.1217	$0.1223^{+0.0052}_{-0.0052}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4501	$0.451^{+0.012}_{-0.012}$ (−0.7 σ)	$H(0.51)$	91.26	$91.5^{+2.0}_{-2.0}$ (+1.2 σ)
$100\theta_{\mathrm{MC}}$	1.04076	$1.04070^{+0.00075}_{-0.00075}$ (−0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6067	$0.608^{+0.014}_{-0.014}$ (−0.2 σ)	$D_{\mathrm{M}}(0.51)$	1942.0	1937^{+47}_{-46} (−1.2 σ)
τ	0.0576	$0.059^{+0.015}_{-0.014}$ (+0.9 σ)	$\sigma_8/h^{0.5}$	0.9832	$0.985^{+0.016}_{-0.017}$ (−0.5 σ)	$H(0.61)$	96.90	$97.1^{+2.1}_{-2.0}$ (+1.2 σ)
N_{eff}	3.240	$3.27^{+0.30}_{-0.28}$ (+1.0 σ)	$r_{\mathrm{drag}}h$	100.58	$100.6^{+1.4}_{-1.4}$ (+1.1 σ)	$D_{\mathrm{M}}(0.61)$	2261	2256^{+54}_{-53} (−1.2 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0557	$3.059^{+0.032}_{-0.031}$ (+1.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4209	$2.424^{+0.040}_{-0.039}$ (−0.8 σ)	$H(2.33)$	238.59	$239.1^{+4.4}_{-4.4}$ (+0.8 σ)
n_{s}	0.9753	$0.976^{+0.011}_{-0.011}$ (+1.2 σ)	z_{re}	8.01	$8.1^{+1.5}_{-1.4}$ (+0.8 σ)	$D_{\mathrm{M}}(2.33)$	5673	5661^{+120}_{-120} (−1.1 σ)
y_{cal}	1.00059	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}$	2.124	$2.131^{+0.068}_{-0.064}$ (+1.1 σ)	$f\sigma_8(0.15)$	0.4554	$0.456^{+0.011}_{-0.011}$ (−0.6 σ)
A_{217}^{CIB}	49.8	48^{+10}_{-10} (+0.0 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8924	$1.895^{+0.030}_{-0.030}$ (+0.6 σ)	$\sigma_8(0.15)$	0.7565	$0.759^{+0.017}_{-0.017}$ (+0.9 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.11	—	D_{40}	1216.6	1217^{+24}_{-23} (−0.9 σ)	$f\sigma_8(0.38)$	0.4759	$0.477^{+0.011}_{-0.011}$ (−0.2 σ)
A_{143}^{tSZ}	7.38	$5.3^{+3.9}_{-3.9}$ (+0.1 σ)	D_{220}	5740	5742^{+77}_{-72} (+0.7 σ)	$\sigma_8(0.38)$	0.6715	$0.673^{+0.015}_{-0.015}$ (+1.0 σ)
A_{100}^{PS}	255	263^{+50}_{-50} (+0.0 σ)	D_{810}	2542.5	2543^{+26}_{-26} (+0.5 σ)	$f\sigma_8(0.51)$	0.4755	$0.477^{+0.010}_{-0.010}$ (+0.0 σ)
A_{143}^{PS}	44.2	47^{+20}_{-20} (−0.1 σ)	D_{1420}	817.8	$817.3^{+9.4}_{-9.6}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6288	$0.631^{+0.015}_{-0.015}$ (+1.1 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	39.9	42^{+20}_{-20} (−0.1 σ)	D_{2000}	230.52	$230.2^{+3.5}_{-3.5}$ (+0.2 σ)	$f\sigma_8(0.61)$	0.4711	$0.472^{+0.010}_{-0.010}$ (+0.2 σ)
A_{217}^{PS}	116.4	114^{+20}_{-20} (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9753	$0.976^{+0.011}_{-0.011}$ (+1.2 σ)	$\sigma_8(0.61)$	0.5986	$0.600^{+0.014}_{-0.014}$ (+1.1 σ)
A^{kSZ}	0.0	—	Y_{P}	0.24806	$0.2485^{+0.0039}_{-0.0038}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3021	$0.3030^{+0.0073}_{-0.0072}$ (+1.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.93	$9.0^{+3.7}_{-3.6}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24940	$0.2498^{+0.0039}_{-0.0039}$ (+1.0 σ)	$\sigma_8(2.33)$	0.3119	$0.3128^{+0.0078}_{-0.0076}$ (+1.2 σ)
$A_{143}^{\mathrm{dustTT}}$	11.09	$11.0^{+3.4}_{-3.5}$ (+0.2 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.604	$2.614^{+0.081}_{-0.080}$ (−0.2 σ)	f_{2000}^{143}	29.9	31^{+6}_{-6} (−0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.8^{+6.4}_{-6.6}$ (+0.2 σ)	Age/Gyr	13.584	$13.56^{+0.28}_{-0.28}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	32.71	33^{+4}_{-4} (−0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94.3	94^{+10}_{-10} (+0.0 σ)	z_*	1089.93	$1090.00^{+0.62}_{-0.63}$ (−0.5 σ)	f_{2000}^{217}	107.43	$107.8^{+3.7}_{-3.7}$ (−0.1 σ)
$A_{100}^{\mathrm{dustTE}}$	0.115	$0.115^{+0.072}_{-0.073}$	r_*	142.84	$142.5^{+2.8}_{-2.7}$ (−1.0 σ)	$\chi_{\mathrm{lensing}}^2$	9.06	9.48 (ν : 0.2)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.059}_{-0.060}$	$100\theta_*$	1.04079	$1.04071^{+0.00089}_{-0.00090}$ (−0.5 σ)	χ_{small}^2	396.60	397.7 (ν : 2.6) (+0.5 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.724	$13.70^{+0.26}_{-0.25}$ (−1.0 σ)	χ_{lowl}^2	22.11	22.17 (ν : 0.3) (−1.0 σ)
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.22^{+0.10}_{-0.10}$	z_{drag}	1060.81	$1060.9^{+1.1}_{-1.2}$ (+1.6 σ)	χ_{plik}^2	2348.7	2363.9 (ν : 21.1) (+272.3 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	r_{drag}	145.39	$145.1^{+2.9}_{-2.8}$ (−1.0 σ)	$\chi_{\mathrm{H073p45}}^2$	6.6	6.4 (ν : 4.1)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.08^{+0.51}_{-0.53}$	k_{D}	0.14214	$0.1424^{+0.0022}_{-0.0022}$ (+1.1 σ)	χ_{JLA}^2	1034.769	1034.83 (ν : 0.0)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{\mathrm{D}}$	0.16105	$0.16114^{+0.00068}_{-0.00069}$ (+0.3 σ)	$\chi_{6\mathrm{DF}}^2$	0.0003	0.023 (ν : 0.0)
c_{217}	0.99822	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3361.8	3360^{+42}_{-41} (−0.9 σ)	χ_{MGS}^2	1.75	1.83 (ν : 0.1)
H_0	69.17	$69.4^{+1.9}_{-1.8}$ (+1.2 σ)	k_{eq}	0.010394	$0.01041^{+0.00020}_{-0.00020}$ (+0.1 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.50	3.84 (ν : 0.2)
Ω_{Λ}	0.6970	$0.697^{+0.011}_{-0.011}$ (+1.1 σ)	$100\theta_{\mathrm{eq}}$	0.8213	$0.8216^{+0.0080}_{-0.0079}$ (+1.0 σ)	χ_{prior}^2	2.0	11.8 (ν : 10.9) (+1.3 σ)
Ω_{m}	0.3030	$0.303^{+0.011}_{-0.011}$ (−1.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.45338	$0.4535^{+0.0041}_{-0.0040}$ (+1.0 σ)	χ_{CMB}^2	2776.5	2793.2 (ν : 20.6) (+286.7 σ)
$\Omega_{\mathrm{m}}h^2$	0.1450	$0.1456^{+0.0053}_{-0.0053}$ (+0.7 σ)	$H(0.15)$	74.44	$74.6^{+1.9}_{-1.9}$ (+1.2 σ)	χ_{BAO}^2	5.25	5.69 (ν : 0.2)
$\Omega_{\mathrm{m}}h^3$	0.1003	$0.1010^{+0.0061}_{-0.0057}$ (+1.1 σ)	$D_{\mathrm{M}}(0.15)$	627.3	626^{+16}_{-16} (−1.2 σ)			
σ_8	0.8177	$0.820^{+0.018}_{-0.018}$ (+0.8 σ)	$H(0.38)$	84.54	$84.7^{+1.9}_{-1.9}$ (+1.2 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 3825.12$; $\Delta\chi_{\mathrm{eff}}^2 = -1.71$; $\bar{\chi}_{\mathrm{eff}}^2 = 3851.93$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.16$; $R - 1 = 0.01182$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.75 (Δ 0.21) DR12BAO: 3.50 (Δ -0.19) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.06 (Δ 0.32) small_100x143_offlike5_EE_Aplanck
396.60 (Δ -0.32) commander_dx12_v3_2.29: 22.11 (Δ -0.57) plik_rd12_HM_v22b_TTTEEE: 2348.72 (Δ 2.54) Hubble - H073p45: 6.63 (Δ -4.01) SN - JLA Pantheon18: 1034.77
(Δ -0.07)

7.90 base_nnu_plikHM_TTTEE_lowl_lowE_Riess18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02266^{+0.00037}_{-0.00036} \quad (+1.9\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.1015^{+0.0066}_{-0.0062} \quad (+1.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4540^{+0.0061}_{-0.0059} \quad (+1.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1225^{+0.0056}_{-0.0055} \quad (+0.6\sigma)$	σ_8	$0.820^{+0.021}_{-0.020} \quad (+0.8\sigma)$	$H(0.15)$	$74.8^{+2.2}_{-2.2} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04068^{+0.00078}_{-0.00077} \quad (-0.3\sigma)$	S_8	$0.823^{+0.030}_{-0.030} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$624^{+20}_{-19} \quad (-1.3\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.017}_{-0.017} \quad (-0.7\sigma)$	$H(0.38)$	$84.9^{+2.2}_{-2.2} \quad (+1.3\sigma)$
N_{eff}	$3.30^{+0.32}_{-0.31} \quad (+1.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1491^{+44}_{-43} \quad (-1.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.059^{+0.034}_{-0.032} \quad (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.022}_{-0.022} \quad (-0.6\sigma)$	$H(0.51)$	$91.7^{+2.2}_{-2.2} \quad (+1.3\sigma)$
n_{s}	$0.977^{+0.013}_{-0.013} \quad (+1.3\sigma)$	$r_{\mathrm{drag}}h$	$100.8^{+2.2}_{-2.1} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1933^{+55}_{-54} \quad (-1.3\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.420^{+0.054}_{-0.053} \quad (-0.8\sigma)$	$H(0.61)$	$97.3^{+2.3}_{-2.2} \quad (+1.2\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	z_{re}	$8.1^{+1.4}_{-1.5} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2250^{+62}_{-61} \quad (-1.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.131^{+0.073}_{-0.068} \quad (+1.1\sigma)$	$H(2.33)$	$239.3^{+4.7}_{-4.6} \quad (+0.9\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.896^{+0.032}_{-0.031} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5651^{+130}_{-130} \quad (-1.2\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	D_{40}	$1215^{+27}_{-27} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.016}_{-0.016} \quad (-0.6\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5739^{+78}_{-76} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.020}_{-0.019} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2543^{+27}_{-27} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.014}_{-0.014} \quad (-0.3\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.1^{+9.4}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.018}_{-0.017} \quad (+1.1\sigma)$
A^{kSZ}	—	D_{2000}	$230.1^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.013}_{-0.013} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.977^{+0.013}_{-0.013} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.017}_{-0.016} \quad (+1.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.1^{+3.5}_{-3.5} \quad (+0.2\sigma)$	Y_{P}	$0.2488^{+0.0041}_{-0.0041} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.8^{+6.5}_{-6.5} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2502^{+0.0042}_{-0.0041} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.016}_{-0.015} \quad (+1.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.619^{+0.085}_{-0.084} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.3034^{+0.0082}_{-0.0078} \quad (+1.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.074}_{-0.074}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.53^{+0.30}_{-0.30} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3133^{+0.0088}_{-0.0083} \quad (+1.2\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.059}_{-0.059}$	z_*	$1090.02^{+0.68}_{-0.68} \quad (-0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$142.4^{+2.9}_{-2.9} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04068^{+0.00092}_{-0.00092} \quad (-0.6\sigma)$	f_{2000}^{217}	$107.9^{+3.8}_{-3.7} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.68^{+0.27}_{-0.27} \quad (-1.0\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 2.9) \quad (+0.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.52}_{-0.52}$	z_{drag}	$1061.0^{+1.2}_{-1.2} \quad (+1.6\sigma)$	χ_{lowl}^2	$22.03 \quad (\nu: 0.4) \quad (-1.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$144.9^{+3.0}_{-3.0} \quad (-1.1\sigma)$	χ_{plik}^2	$2365.2 \quad (\nu: 24.4) \quad (+272.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{D}	$0.1425^{+0.0023}_{-0.0023} \quad (+1.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.0 \quad (\nu: 5.4)$
H_0	$69.6^{+2.3}_{-2.2} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16119^{+0.00072}_{-0.00072} \quad (+0.3\sigma)$	χ_{prior}^2	$11.9 \quad (\nu: 10.9) \quad (+1.3\sigma)$
Ω_{Λ}	$0.698^{+0.016}_{-0.017} \quad (+1.2\sigma)$	z_{eq}	$3356^{+61}_{-61} \quad (-1.0\sigma)$	χ_{CMB}^2	$2784.9 \quad (\nu: 22.1) \quad (+285.2\sigma)$
Ω_{m}	$0.302^{+0.017}_{-0.016} \quad (-1.2\sigma)$	k_{eq}	$0.01041^{+0.00023}_{-0.00023} \quad (+0.1\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1459^{+0.0057}_{-0.0056} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.012}_{-0.012} \quad (+1.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2802.74$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.14$; $R - 1 = 0.00708$

7.91 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02265^{+0.00032}_{-0.00031} \quad (+1.9\sigma)$	σ_8	$0.821^{+0.021}_{-0.020} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$625^{+17}_{-16} \quad (-1.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1226^{+0.0056}_{-0.0054} \quad (+0.6\sigma)$	S_8	$0.824^{+0.026}_{-0.026} \quad (-0.7\sigma)$	$H(0.38)$	$84.8^{+2.0}_{-1.9} \quad (+1.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04068^{+0.00077}_{-0.00077} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1493^{+38}_{-37} \quad (-1.2\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$H(0.51)$	$91.6^{+2.1}_{-2.0} \quad (+1.2\sigma)$
N_{eff}	$3.29^{+0.31}_{-0.29} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.020}_{-0.020} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1935^{+48}_{-47} \quad (-1.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.058^{+0.035}_{-0.031} \quad (+1.0\sigma)$	$r_{\mathrm{drag}}h$	$100.6^{+1.6}_{-1.5} \quad (+1.1\sigma)$	$H(0.61)$	$97.2^{+2.1}_{-2.1} \quad (+1.2\sigma)$
n_{s}	$0.976^{+0.012}_{-0.012} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.049}_{-0.046} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2253^{+54}_{-54} \quad (-1.2\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$8.1^{+1.4}_{-1.4} \quad (+0.8\sigma)$	$H(2.33)$	$239.3^{+4.7}_{-4.6} \quad (+0.9\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.130^{+0.072}_{-0.067} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5655^{+120}_{-120} \quad (-1.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.896^{+0.032}_{-0.031} \quad (+0.7\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.014}_{-0.014} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0} \quad (+0.1\sigma)$	D_{40}	$1216^{+25}_{-24} \quad (-0.9\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.019}_{-0.019} \quad (+0.9\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	D_{220}	$5738^{+77}_{-73} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2543^{+27}_{-26} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.017}_{-0.016} \quad (+1.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.0^{+9.4}_{-9.6} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.013}_{-0.012} \quad (+0.0\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$230.1^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A^{kSZ}	—	$n_{\mathrm{s},0.002}$	$0.976^{+0.012}_{-0.012} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.7}_{-3.6} \quad (+0.1\sigma)$	Y_{P}	$0.2487^{+0.0041}_{-0.0040} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.016}_{-0.015} \quad (+1.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.1^{+3.4}_{-3.5} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2500^{+0.0041}_{-0.0040} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3032^{+0.0080}_{-0.0075} \quad (+1.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.8^{+6.5}_{-6.6} \quad (+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.619^{+0.086}_{-0.082} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3130^{+0.0083}_{-0.0080} \quad (+1.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.54^{+0.28}_{-0.29} \quad (-1.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.074}_{-0.074}$	z_*	$1090.03^{+0.66}_{-0.65} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.059}_{-0.060}$	r_*	$142.4^{+2.9}_{-2.9} \quad (-1.0\sigma)$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	$1.04068^{+0.00091}_{-0.00091} \quad (-0.6\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 2.7) \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.68^{+0.27}_{-0.27} \quad (-1.0\sigma)$	χ_{lowl}^2	$22.09 \quad (\nu: 0.3) \quad (-1.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1060.9^{+1.2}_{-1.2} \quad (+1.6\sigma)$	χ_{plik}^2	$2364.5 \quad (\nu: 22.1) \quad (+272.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.51}_{-0.53}$	r_{drag}	$144.9^{+3.0}_{-3.0} \quad (-1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.2 \quad (\nu: 4.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1425^{+0.0023}_{-0.0023} \quad (+1.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.027 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16118^{+0.00070}_{-0.00071} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.84 \quad (\nu: 0.1)$
H_0	$69.4^{+1.9}_{-1.9} \quad (+1.3\sigma)$	z_{eq}	$3360^{+45}_{-45} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.89 \quad (\nu: 0.2)$
Ω_{Λ}	$0.697^{+0.012}_{-0.012} \quad (+1.2\sigma)$	k_{eq}	$0.01042^{+0.00022}_{-0.00022} \quad (+0.1\sigma)$	χ_{prior}^2	$11.9 \quad (\nu: 10.9) \quad (+1.3\sigma)$
Ω_{m}	$0.303^{+0.012}_{-0.012} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8217^{+0.0087}_{-0.0085} \quad (+1.0\sigma)$	χ_{BAO}^2	$5.76 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^2$	$0.1459^{+0.0057}_{-0.0055} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4536^{+0.0044}_{-0.0043} \quad (+1.0\sigma)$	χ_{CMB}^2	$2784.2 \quad (\nu: 20.1) \quad (+285.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.1013^{+0.0064}_{-0.0059} \quad (+1.1\sigma)$	$H(0.15)$	$74.7^{+1.9}_{-1.9} \quad (+1.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.99; R - 1 = 0.00955$$

7.92 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_BAO_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02265^{+0.00031}_{-0.00031} \quad (+1.9\sigma)$	σ_8	$0.821^{+0.021}_{-0.020} \quad (+0.8\sigma)$	$D_M(0.15)$	$625^{+16}_{-16} \quad (-1.2\sigma)$
$\Omega_c h^2$	$0.1226^{+0.0056}_{-0.0054} \quad (+0.6\sigma)$	S_8	$0.824^{+0.025}_{-0.025} \quad (-0.7\sigma)$	$H(0.38)$	$84.9^{+2.0}_{-1.9} \quad (+1.2\sigma)$
$100\theta_{MC}$	$1.04068^{+0.00077}_{-0.00077} \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_M(0.38)$	$1492^{+37}_{-37} \quad (-1.2\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.9\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.608^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$H(0.51)$	$91.6^{+2.0}_{-2.0} \quad (+1.2\sigma)$
N_{eff}	$3.29^{+0.31}_{-0.30} \quad (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.020}_{-0.020} \quad (-0.5\sigma)$	$D_M(0.51)$	$1934^{+47}_{-46} \quad (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.059^{+0.034}_{-0.031} \quad (+1.1\sigma)$	$r_{\text{drag}} h$	$100.7^{+1.5}_{-1.5} \quad (+1.1\sigma)$	$H(0.61)$	$97.2^{+2.1}_{-2.1} \quad (+1.2\sigma)$
n_s	$0.977^{+0.011}_{-0.011} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.421^{+0.048}_{-0.045} \quad (-0.8\sigma)$	$D_M(0.61)$	$2252^{+54}_{-53} \quad (-1.2\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$8.1^{+1.4}_{-1.4} \quad (+0.8\sigma)$	$H(2.33)$	$239.3^{+4.7}_{-4.6} \quad (+0.9\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	$10^9 A_s$	$2.130^{+0.072}_{-0.067} \quad (+1.1\sigma)$	$D_M(2.33)$	$5654^{+120}_{-120} \quad (-1.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.896^{+0.032}_{-0.031} \quad (+0.7\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0} \quad (+0.1\sigma)$	D_{40}	$1216^{+25}_{-24} \quad (-1.0\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.019}_{-0.019} \quad (+0.9\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	D_{220}	$5739^{+77}_{-73} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2543^{+27}_{-26} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.017}_{-0.017} \quad (+1.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.0^{+9.4}_{-9.6} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.012}_{-0.012} \quad (+0.0\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$230.1^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A^{kSZ}	—	$n_{s,0.002}$	$0.977^{+0.011}_{-0.011} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.012}_{-0.012} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$9.1^{+3.7}_{-3.6} \quad (+0.1\sigma)$	Y_P	$0.2487^{+0.0040}_{-0.0039} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.016}_{-0.015} \quad (+1.1\sigma)$
A_{143}^{dustTT}	$11.1^{+3.4}_{-3.5} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.2501^{+0.0041}_{-0.0039} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3033^{+0.0079}_{-0.0075} \quad (+1.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.8^{+6.5}_{-6.6} \quad (+0.2\sigma)$	$10^5 D/H$	$2.619^{+0.086}_{-0.082} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3131^{+0.0083}_{-0.0080} \quad (+1.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.54^{+0.28}_{-0.28} \quad (-1.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
A_{100}^{dustTE}	$0.115^{+0.074}_{-0.074}$	z_*	$1090.03^{+0.66}_{-0.65} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.060}$	r_*	$142.4^{+2.9}_{-2.9} \quad (-1.0\sigma)$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	$1.04068^{+0.00091}_{-0.00091} \quad (-0.6\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 2.7) \quad (+0.5\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	$13.68^{+0.27}_{-0.27} \quad (-1.0\sigma)$	χ_{lowl}^2	$22.06 \quad (\nu: 0.3) \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1061.0^{+1.2}_{-1.2} \quad (+1.6\sigma)$	χ_{plik}^2	$2364.6 \quad (\nu: 22.0) \quad (+272.5\sigma)$
A_{217}^{dustTE}	$2.08^{+0.51}_{-0.53}$	r_{drag}	$144.9^{+3.0}_{-3.0} \quad (-1.1\sigma)$	χ_{H073p45}^2	$6.1 \quad (\nu: 3.9)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.1425^{+0.0023}_{-0.0023} \quad (+1.2\sigma)$	χ_{JLA}^2	$1034.83 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_D$	$0.16118^{+0.00070}_{-0.00071} \quad (+0.3\sigma)$	χ_{6DF}^2	$0.025 \quad (\nu: 0.0)$
H_0	$69.5^{+1.9}_{-1.8} \quad (+1.3\sigma)$	z_{eq}	$3359^{+43}_{-44} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.86 \quad (\nu: 0.1)$
Ω_Λ	$0.698^{+0.011}_{-0.012} \quad (+1.2\sigma)$	k_{eq}	$0.01042^{+0.00022}_{-0.00022} \quad (+0.1\sigma)$	χ_{DR12BAO}^2	$3.85 \quad (\nu: 0.2)$
Ω_m	$0.302^{+0.012}_{-0.011} \quad (-1.2\sigma)$	$100\theta_{\text{eq}}$	$0.8219^{+0.0084}_{-0.0082} \quad (+1.0\sigma)$	χ_{prior}^2	$11.9 \quad (\nu: 10.9) \quad (+1.3\sigma)$
$\Omega_m h^2$	$0.1459^{+0.0057}_{-0.0055} \quad (+0.8\sigma)$	$100\theta_{s,\text{eq}}$	$0.4537^{+0.0043}_{-0.0042} \quad (+1.0\sigma)$	χ_{BAO}^2	$5.73 \quad (\nu: 0.2)$
$\Omega_m h^3$	$0.1014^{+0.0064}_{-0.0059} \quad (+1.2\sigma)$	$H(0.15)$	$74.7^{+1.9}_{-1.8} \quad (+1.3\sigma)$	χ_{CMB}^2	$2784.3 \quad (\nu: 20.0) \quad (+285.1\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 3842.74; R - 1 = 0.00993$$

7.93 base_nnu_plikHM_TTTEE_lowl_lowE_Riess18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02265^{+0.00037}_{-0.00036} \quad (+1.9\sigma)$	$\Omega_m h^3$	$0.1011^{+0.0063}_{-0.0060} \quad (+1.1\sigma)$	$100\theta_{s,eq}$	$0.4537^{+0.0055}_{-0.0054} \quad (+1.0\sigma)$
$\Omega_c h^2$	$0.1223^{+0.0052}_{-0.0052} \quad (+0.6\sigma)$	σ_8	$0.820^{+0.018}_{-0.018} \quad (+0.8\sigma)$	$H(0.15)$	$74.7^{+2.2}_{-2.1} \quad (+1.2\sigma)$
$100\theta_{MC}$	$1.04070^{+0.00075}_{-0.00075} \quad (-0.3\sigma)$	S_8	$0.823^{+0.024}_{-0.025} \quad (-0.7\sigma)$	$D_M(0.15)$	$625^{+19}_{-19} \quad (-1.2\sigma)$
τ	$0.059^{+0.014}_{-0.014} \quad (+1.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.013}_{-0.014} \quad (-0.7\sigma)$	$H(0.38)$	$84.8^{+2.2}_{-2.1} \quad (+1.2\sigma)$
N_{eff}	$3.28^{+0.31}_{-0.30} \quad (+1.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.608^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$D_M(0.38)$	$1494^{+43}_{-42} \quad (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.060^{+0.032}_{-0.029} \quad (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.018} \quad (-0.5\sigma)$	$H(0.51)$	$91.5^{+2.2}_{-2.2} \quad (+1.2\sigma)$
n_s	$0.976^{+0.013}_{-0.013} \quad (+1.2\sigma)$	$r_{drag} h$	$100.7^{+2.0}_{-1.9} \quad (+1.2\sigma)$	$D_M(0.51)$	$1936^{+53}_{-53} \quad (-1.2\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0047} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.043}_{-0.043} \quad (-0.8\sigma)$	$H(0.61)$	$97.2^{+2.2}_{-2.2} \quad (+1.2\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	z_{re}	$8.1^{+1.4}_{-1.4} \quad (+0.9\sigma)$	$D_M(0.61)$	$2254^{+61}_{-60} \quad (-1.2\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.133^{+0.070}_{-0.062} \quad (+1.1\sigma)$	$H(2.33)$	$239.1^{+4.5}_{-4.5} \quad (+0.8\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.895^{+0.030}_{-0.030} \quad (+0.6\sigma)$	$D_M(2.33)$	$5659^{+130}_{-120} \quad (-1.1\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	D_{40}	$1217^{+26}_{-26} \quad (-0.9\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5742^{+79}_{-73} \quad (+0.7\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.017}_{-0.017} \quad (+0.9\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2543^{+27}_{-26} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.3^{+9.5}_{-9.5} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.016}_{-0.015} \quad (+1.0\sigma)$
A^{kSZ}	—	D_{2000}	$230.2^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.010}_{-0.011} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.976^{+0.013}_{-0.013} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.015}_{-0.015} \quad (+1.1\sigma)$
A_{143}^{dustTT}	$11.0^{+3.4}_{-3.5} \quad (+0.2\sigma)$	Y_P	$0.2486^{+0.0040}_{-0.0040} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.010}_{-0.010} \quad (+0.2\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.8^{+6.5}_{-6.5} \quad (+0.2\sigma)$	Y_P^{BBN}	$0.2499^{+0.0041}_{-0.0040} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.015}_{-0.014} \quad (+1.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 D/H$	$2.614^{+0.081}_{-0.081} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.3033^{+0.0076}_{-0.0074} \quad (+1.2\sigma)$
A_{100}^{dustTE}	$0.115^{+0.073}_{-0.074}$	Age/Gyr	$13.55^{+0.30}_{-0.30} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3131^{+0.0083}_{-0.0080} \quad (+1.2\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.059}_{-0.060}$	z_*	$1089.99^{+0.63}_{-0.65} \quad (-0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.16}$	r_*	$142.5^{+2.8}_{-2.8} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	$1.04071^{+0.00091}_{-0.00089} \quad (-0.5\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.7} \quad (-0.1\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$13.69^{+0.26}_{-0.26} \quad (-1.0\sigma)$	$\chi_{lensing}^2$	$9.53 \quad (\nu: 0.2)$
A_{217}^{dustTE}	$2.08^{+0.51}_{-0.52}$	z_{drag}	$1060.9^{+1.2}_{-1.3} \quad (+1.6\sigma)$	χ_{small}^2	$397.8 \quad (\nu: 2.9) \quad (+0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$145.1^{+3.0}_{-2.9} \quad (-1.0\sigma)$	χ_{lowl}^2	$22.16 \quad (\nu: 0.4) \quad (-1.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_D	$0.1424^{+0.0022}_{-0.0023} \quad (+1.2\sigma)$	χ_{plik}^2	$2364.2 \quad (\nu: 22.4) \quad (+272.4\sigma)$
H_0	$69.4^{+2.2}_{-2.2} \quad (+1.2\sigma)$	$100\theta_D$	$0.16114^{+0.00069}_{-0.00070} \quad (+0.3\sigma)$	$\chi_{H073p45}^2$	$6.4 \quad (\nu: 5.6)$
Ω_Λ	$0.698^{+0.015}_{-0.015} \quad (+1.2\sigma)$	z_{eq}	$3359^{+55}_{-55} \quad (-1.0\sigma)$	χ_{prior}^2	$11.8 \quad (\nu: 11.0) \quad (+1.3\sigma)$
Ω_m	$0.302^{+0.015}_{-0.015} \quad (-1.2\sigma)$	k_{eq}	$0.01041^{+0.00021}_{-0.00021} \quad (+0.1\sigma)$	χ_{CMB}^2	$2793.6 \quad (\nu: 22.5) \quad (+286.8\sigma)$
$\Omega_m h^2$	$0.1456^{+0.0054}_{-0.0054} \quad (+0.7\sigma)$	$100\theta_{eq}$	$0.822^{+0.011}_{-0.011} \quad (+1.0\sigma)$		

$$\bar{\chi}_{eff}^2 = 2811.83; \Delta \bar{\chi}_{eff}^2 = -1.04; R - 1 = 0.01079$$

7.94 base_nnu_plikHM_TTTEEE_lowl_lowE_Riess18_post_BAO_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02264^{+0.00031}_{-0.00031} \quad (+1.8\sigma)$	S_8	$0.824^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$D_M(0.38)$	$1494^{+37}_{-36} \quad (-1.2\sigma)$
$\Omega_c h^2$	$0.1223^{+0.0052}_{-0.0052} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$H(0.51)$	$91.5^{+2.0}_{-1.9} \quad (+1.2\sigma)$
$100\theta_{MC}$	$1.04070^{+0.00075}_{-0.00075} \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.608^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$D_M(0.51)$	$1937^{+47}_{-46} \quad (-1.2\sigma)$
τ	$0.059^{+0.014}_{-0.013} \quad (+0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$97.1^{+2.1}_{-2.0} \quad (+1.2\sigma)$
N_{eff}	$3.28^{+0.30}_{-0.28} \quad (+1.0\sigma)$	$r_{\text{drag}} h$	$100.6^{+1.5}_{-1.4} \quad (+1.1\sigma)$	$D_M(0.61)$	$2255^{+54}_{-53} \quad (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.059^{+0.031}_{-0.028} \quad (+1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.040}_{-0.039} \quad (-0.7\sigma)$	$H(2.33)$	$239.1^{+4.4}_{-4.4} \quad (+0.8\sigma)$
n_s	$0.976^{+0.011}_{-0.012} \quad (+1.2\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.8\sigma)$	$D_M(2.33)$	$5661^{+120}_{-120} \quad (-1.1\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_s$	$2.132^{+0.067}_{-0.060} \quad (+1.1\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.895^{+0.030}_{-0.030} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.017}_{-0.016} \quad (+0.9\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	$1217^{+25}_{-23} \quad (-0.9\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.3^{+3.9}_{-3.9} \quad (+0.1\sigma)$	D_{220}	$5742^{+78}_{-72} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.015}_{-0.015} \quad (+1.0\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	D_{810}	$2543^{+26}_{-26} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.010}_{-0.010} \quad (+0.0\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.3^{+9.3}_{-9.6} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.015}_{-0.014} \quad (+1.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$230.2^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.010}_{-0.010} \quad (+0.2\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.976^{+0.011}_{-0.012} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.014}_{-0.014} \quad (+1.1\sigma)$
A^{kSZ}	—	Y_P	$0.2485^{+0.0039}_{-0.0038} \quad (+1.0\sigma)$	$f\sigma_8(2.33)$	$0.3031^{+0.0072}_{-0.0070} \quad (+1.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2498^{+0.0039}_{-0.0039} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3129^{+0.0077}_{-0.0075} \quad (+1.2\sigma)$
A_{143}^{dustTT}	$11.0^{+3.4}_{-3.4} \quad (+0.2\sigma)$	10^5D/H	$2.614^{+0.081}_{-0.081} \quad (-0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.8^{+6.4}_{-6.6} \quad (+0.2\sigma)$	Age/Gyr	$13.55^{+0.28}_{-0.27} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1090.00^{+0.62}_{-0.63} \quad (-0.5\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.7} \quad (-0.1\sigma)$
A_{100}^{dustTE}	$0.115^{+0.072}_{-0.073}$	r_*	$142.5^{+2.8}_{-2.7} \quad (-1.0\sigma)$	χ_{lensing}^2	$9.47 \quad (\nu: 0.2)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.060}$	$100\theta_*$	$1.04071^{+0.00089}_{-0.00090} \quad (-0.5\sigma)$	χ_{simall}^2	$397.7 \quad (\nu: 2.6) \quad (+0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$13.70^{+0.26}_{-0.26} \quad (-1.0\sigma)$	χ_{lowl}^2	$22.17 \quad (\nu: 0.3) \quad (-1.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.10}$	z_{drag}	$1060.9^{+1.1}_{-1.2} \quad (+1.6\sigma)$	χ_{plik}^2	$2363.8 \quad (\nu: 21.0) \quad (+272.3\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	r_{drag}	$145.1^{+2.9}_{-2.8} \quad (-1.0\sigma)$	χ_{H073p45}^2	$6.4 \quad (\nu: 4.1)$
A_{217}^{dustTE}	$2.08^{+0.51}_{-0.53}$	k_D	$0.1424^{+0.0022}_{-0.0022} \quad (+1.1\sigma)$	χ_{JLA}^2	$1034.83 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	$0.16114^{+0.00068}_{-0.00069} \quad (+0.3\sigma)$	$\chi_{6\text{DF}}^2$	$0.023 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3360^{+41}_{-41} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.83 \quad (\nu: 0.1)$
H_0	$69.4^{+1.9}_{-1.8} \quad (+1.2\sigma)$	k_{eq}	$0.01041^{+0.00021}_{-0.00021} \quad (+0.1\sigma)$	χ_{DR12BAO}^2	$3.83 \quad (\nu: 0.2)$
Ω_Λ	$0.697^{+0.011}_{-0.011} \quad (+1.1\sigma)$	$100\theta_{\text{eq}}$	$0.8217^{+0.0080}_{-0.0079} \quad (+1.0\sigma)$	χ_{prior}^2	$11.8 \quad (\nu: 10.8) \quad (+1.3\sigma)$
Ω_m	$0.303^{+0.011}_{-0.011} \quad (-1.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.4536^{+0.0041}_{-0.0040} \quad (+1.0\sigma)$	χ_{CMB}^2	$2793.1 \quad (\nu: 20.5) \quad (+286.7\sigma)$
$\Omega_m h^2$	$0.1456^{+0.0053}_{-0.0053} \quad (+0.7\sigma)$	$H(0.15)$	$74.6^{+1.9}_{-1.8} \quad (+1.2\sigma)$	χ_{BAO}^2	$5.69 \quad (\nu: 0.2)$
$\Omega_m h^3$	$0.1010^{+0.0061}_{-0.0057} \quad (+1.1\sigma)$	$D_M(0.15)$	$626^{+16}_{-16} \quad (-1.2\sigma)$		
σ_8	$0.820^{+0.018}_{-0.018} \quad (+0.8\sigma)$	$H(0.38)$	$84.8^{+1.9}_{-1.9} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 3851.85; \Delta\bar{\chi}_{\text{eff}}^2 = -1.16; R - 1 = 0.01150$$

7.95 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022599	$0.02261^{+0.00037}_{-0.00036}$ (+1.7 σ)	S_8	0.8140	$0.815^{+0.031}_{-0.030}$ (−1.0 σ)	$H(0.15)$	75.40	$75.5^{+2.4}_{-2.4}$ (+1.6 σ)
$\Omega_c h^2$	0.1230	$0.1231^{+0.0061}_{-0.0061}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4459	$0.446^{+0.017}_{-0.017}$ (−1.0 σ)	$D_M(0.15)$	618.8	619^{+21}_{-20} (−1.5 σ)
$100\theta_{MC}$	1.04053	$1.04053^{+0.00083}_{-0.00080}$ (−0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6040	$0.604^{+0.018}_{-0.018}$ (−0.5 σ)	$H(0.38)$	85.47	$85.5^{+2.4}_{-2.4}$ (+1.6 σ)
τ	0.0553	$0.056^{+0.016}_{-0.016}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9767	$0.977^{+0.023}_{-0.023}$ (−1.0 σ)	$D_M(0.38)$	1479.3	1479^{+48}_{-45} (−1.5 σ)
N_{eff}	3.374	$3.38^{+0.35}_{-0.36}$ (+1.4 σ)	$r_{\text{drag}} h$	101.37	$101.4^{+2.2}_{-2.1}$ (+1.5 σ)	$H(0.51)$	92.18	$92.2^{+2.4}_{-2.5}$ (+1.5 σ)
$\ln(10^{10} A_s)$	3.0526	$3.053^{+0.036}_{-0.035}$ (+0.8 σ)	$\langle d^2 \rangle^{1/2}$	2.399	$2.399^{+0.054}_{-0.055}$ (−1.3 σ)	$D_M(0.51)$	1919	1918^{+60}_{-57} (−1.5 σ)
n_s	0.9799	$0.980^{+0.013}_{-0.014}$ (+1.5 σ)	z_{re}	7.82	$7.8^{+1.6}_{-1.7}$ (+0.5 σ)	$H(0.61)$	97.81	$97.9^{+2.5}_{-2.5}$ (+1.5 σ)
y_{cal}	1.00057	$1.0005^{+0.0050}_{-0.0049}$ (+0.0 σ)	$10^9 A_s$	2.117	$2.119^{+0.077}_{-0.074}$ (+0.8 σ)	$D_M(0.61)$	2234	2233^{+68}_{-65} (−1.5 σ)
A_{100}^{PS}	246.6	247^{+50}_{-50} (−0.5 σ)	$10^9 A_s e^{-2\tau}$	1.8953	$1.896^{+0.033}_{-0.034}$ (+0.7 σ)	$H(2.33)$	239.8	$239.9^{+5.1}_{-5.2}$ (+1.1 σ)
A_{143}^{PS}	40.2	43^{+20}_{-20} (−0.6 σ)	D_{40}	1207.3	1207^{+28}_{-26} (−1.3 σ)	$D_M(2.33)$	5624	5621^{+140}_{-140} (−1.4 σ)
A_{217}^{PS}	98.5	101^{+30}_{-30} (−1.4 σ)	D_{220}	5726	5726^{+79}_{-76} (+0.3 σ)	$f\sigma_8(0.15)$	0.4516	$0.452^{+0.016}_{-0.016}$ (−1.0 σ)
A_{217}^{CIB}	45.2	42^{+10}_{-10} (−0.9 σ)	D_{810}	2538.5	2539^{+28}_{-27} (+0.2 σ)	$\sigma_8(0.15)$	0.7575	$0.758^{+0.020}_{-0.020}$ (+0.8 σ)
A_{143}^{tSZ}	4.90	< 7.37 (−0.7 σ)	D_{1420}	814.4	$815^{+10}_{-9.9}$ (−0.1 σ)	$f\sigma_8(0.38)$	0.4734	$0.474^{+0.014}_{-0.014}$ (−0.6 σ)
$r_{143 \times 217}^{\text{PS}}$	0.548	$0.65^{+0.25}_{-0.24}$	D_{2000}	228.62	$228.7^{+3.9}_{-3.9}$ (−0.5 σ)	$\sigma_8(0.38)$	0.6731	$0.674^{+0.018}_{-0.018}$ (+1.0 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.72	—	$n_{s,0.002}$	0.9799	$0.980^{+0.013}_{-0.014}$ (+1.5 σ)	$f\sigma_8(0.51)$	0.4737	$0.474^{+0.013}_{-0.013}$ (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.00	—	Y_P	0.24977	$0.2499^{+0.0045}_{-0.0047}$ (+1.4 σ)	$\sigma_8(0.51)$	0.6306	$0.631^{+0.017}_{-0.017}$ (+1.1 σ)
A^{KSZ}	3.0	—	Y_P^{BBN}	0.25111	$0.2512^{+0.0045}_{-0.0048}$ (+1.4 σ)	$f\sigma_8(0.61)$	0.4699	$0.470^{+0.013}_{-0.013}$ (−0.1 σ)
A_{100}^{dust}	1.017	$1.02^{+0.38}_{-0.39}$	10^5D/H	2.656	$2.66^{+0.10}_{-0.10}$ (+0.5 σ)	$\sigma_8(0.61)$	0.6004	$0.601^{+0.016}_{-0.017}$ (+1.1 σ)
A_{143}^{dust}	0.980	$0.98^{+0.34}_{-0.34}$	Age/Gyr	13.468	$13.46^{+0.34}_{-0.32}$ (−1.4 σ)	$f\sigma_8(2.33)$	0.3033	$0.3036^{+0.0085}_{-0.0086}$ (+1.2 σ)
A_{217}^{dust}	0.960	$0.97^{+0.20}_{-0.20}$	z_*	1090.20	$1090.22^{+0.76}_{-0.77}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3134	$0.3137^{+0.0091}_{-0.0093}$ (+1.3 σ)
$A_{143 \times 217}^{\text{dust}}$	1.004	$1.03^{+0.32}_{-0.32}$	r_*	141.92	$141.9^{+3.3}_{-3.1}$ (−1.2 σ)	f_{2000}^{143}	32.3	32^{+6}_{-6} (+0.3 σ)
c_{100}	0.99752	$0.9975^{+0.0021}_{-0.0021}$ (−3.3 σ)	$100\theta_*$	1.04050	$1.0405^{+0.0010}_{-0.00096}$ (−0.9 σ)	f_{2000}^{217}	108.57	$108.4^{+4.2}_{-4.2}$ (+0.2 σ)
c_{217}	1.00146	$1.0013^{+0.0031}_{-0.0031}$ (+4.9 σ)	$D_M(z_*)/\text{Gpc}$	13.639	$13.63^{+0.31}_{-0.29}$ (−1.2 σ)	$f_{2000}^{143 \times 217}$	33.94	34^{+5}_{-5} (+0.2 σ)
c_{TE}	0.9988	$0.9990^{+0.0098}_{-0.0098}$	z_{drag}	1060.92	$1061.0^{+1.3}_{-1.3}$ (+1.6 σ)	χ_{simall}^2	396.09	397.2 (ν : 1.7) (+0.2 σ)
c_{EE}	0.9965	$0.997^{+0.011}_{-0.011}$	r_{drag}	144.47	$144.4^{+3.5}_{-3.2}$ (−1.3 σ)	χ_{lowl}^2	21.47	21.54 (ν : 0.3) (−1.3 σ)
H_0	70.17	$70.2^{+2.4}_{-2.4}$ (+1.6 σ)	k_D	0.14261	$0.1427^{+0.0024}_{-0.0025}$ (+1.3 σ)	χ_{CamSpec}^2	11505.1	11520.7 (ν : 21.9)
Ω_Λ	0.7030	$0.703^{+0.016}_{-0.016}$ (+1.5 σ)	$100\theta_D$	0.16152	$0.16153^{+0.00084}_{-0.00087}$ (+0.9 σ)	χ_{H073p45}^2	3.9	4.3 (ν : 4.5)
Ω_m	0.2970	$0.297^{+0.016}_{-0.016}$ (−1.5 σ)	z_{eq}	3332	3332^{+62}_{-61} (−1.4 σ)	χ_{prior}^2	2.4	7.9 (ν : 6.2) (+0.2 σ)
$\Omega_m h^2$	0.1462	$0.1464^{+0.0062}_{-0.0062}$ (+0.9 σ)	k_{eq}	0.010391	$0.01040^{+0.00025}_{-0.00024}$ (−0.0 σ)	χ_{CMB}^2	11922.6	11939.4 (ν : 20.9) (+1925.4 σ)
$\Omega_m h^3$	0.1026	$0.1028^{+0.0072}_{-0.0071}$ (+1.4 σ)	$100\theta_{\text{eq}}$	0.8266	$0.827^{+0.012}_{-0.012}$ (+1.4 σ)			
σ_8	0.8182	$0.819^{+0.022}_{-0.022}$ (+0.7 σ)	$100\theta_{s,\text{eq}}$	0.4562	$0.4562^{+0.0061}_{-0.0061}$ (+1.4 σ)			

Best-fit $\chi_{\text{eff}}^2 = 11928.99$; $\bar{\chi}_{\text{eff}}^2 = 11951.65$; $\Delta\chi_{\text{eff}}^2 = -2.61$; $R - 1 = 0.01475$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.09 commander_dx12_v3.2_29: 21.47 CamSpec like_10.7HM_1400_unified: 11505.09 Hubble - H073p45: 3.91

7.96 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02256^{+0.00033}_{-0.00032} \quad (+1.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.015}_{-0.014} \quad (-0.9\sigma)$	$H(0.38)$	$85.2^{+2.2}_{-2.2} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1232^{+0.0062}_{-0.0062} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.017}_{-0.017} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1485^{+43}_{-40} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04052^{+0.00086}_{-0.00079} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.021}_{-0.021} \quad (-0.8\sigma)$	$H(0.51)$	$91.9^{+2.3}_{-2.3} \quad (+1.4\sigma)$
τ	$0.055^{+0.016}_{-0.015} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$101.0^{+1.6}_{-1.6} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1926^{+54}_{-51} \quad (-1.4\sigma)$
N_{eff}	$3.35^{+0.35}_{-0.35} \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.407^{+0.048}_{-0.047} \quad (-1.1\sigma)$	$H(0.61)$	$97.6^{+2.3}_{-2.4} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.052^{+0.035}_{-0.035} \quad (+0.7\sigma)$	z_{re}	$7.8^{+1.5}_{-1.6} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2243^{+62}_{-58} \quad (-1.4\sigma)$
n_{s}	$0.978^{+0.012}_{-0.012} \quad (+1.4\sigma)$	10^9A_{s}	$2.116^{+0.076}_{-0.073} \quad (+0.7\sigma)$	$H(2.33)$	$239.8^{+5.2}_{-5.3} \quad (+1.0\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0048} \quad (-0.0\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.896^{+0.033}_{-0.035} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5635^{+140}_{-130} \quad (-1.3\sigma)$
A_{100}^{PS}	$246^{+50}_{-50} \quad (-0.6\sigma)$	D_{40}	$1210^{+26}_{-24} \quad (-1.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.014}_{-0.014} \quad (-0.8\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5723^{+80}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.020}_{-0.020} \quad (+0.8\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2539^{+28}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{CIB}	$42^{+20}_{-10} \quad (-0.9\sigma)$	D_{1420}	$814^{+10}_{-9.8} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.018}_{-0.018} \quad (+1.0\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.7\sigma)$	D_{2000}	$228.7^{+4.0}_{-4.0} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	$n_{\mathrm{s},0.002}$	$0.978^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.017}_{-0.017} \quad (+1.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2495^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.013}_{-0.013} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2508^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.600^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A^{kSZ}	—	$10^5\mathrm{D}/\mathrm{H}$	$2.66^{+0.10}_{-0.10} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.3030^{+0.0083}_{-0.0084} \quad (+1.1\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.49^{+0.33}_{-0.31} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3129^{+0.0088}_{-0.0089} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.25^{+0.75}_{-0.77} \quad (-0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$142.0^{+3.4}_{-3.2} \quad (-1.2\sigma)$	f_{2000}^{217}	$108.3^{+4.2}_{-4.4} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00096} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-4} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.65^{+0.31}_{-0.29} \quad (-1.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.9\sigma)$	z_{drag}	$1060.8^{+1.2}_{-1.2} \quad (+1.5\sigma)$	χ_{lowl}^2	$21.73 \quad (\nu: 0.3) \quad (-1.2\sigma)$
c_{TE}	$0.9987^{+0.0095}_{-0.0098}$	r_{drag}	$144.6^{+3.5}_{-3.3} \quad (-1.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11519.5 \quad (\nu: 20.0)$
c_{EE}	$0.996^{+0.011}_{-0.010}$	k_{D}	$0.1426^{+0.0025}_{-0.0025} \quad (+1.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.2 \quad (\nu: 4.1)$
H_0	$69.8^{+2.1}_{-2.1} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16148^{+0.00085}_{-0.00086} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.036 \quad (\nu: 0.0)$
Ω_{Λ}	$0.700^{+0.012}_{-0.012} \quad (+1.3\sigma)$	z_{eq}	$3344^{+46}_{-46} \quad (-1.2\sigma)$	χ_{MGS}^2	$2.04 \quad (\nu: 0.1)$
Ω_{m}	$0.300^{+0.012}_{-0.012} \quad (-1.3\sigma)$	k_{eq}	$0.01042^{+0.00024}_{-0.00024} \quad (+0.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.84 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^2$	$0.1464^{+0.0063}_{-0.0063} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8243^{+0.0090}_{-0.0088} \quad (+1.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.1022^{+0.0071}_{-0.0070} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4550^{+0.0046}_{-0.0045} \quad (+1.2\sigma)$	χ_{BAO}^2	$5.92 \quad (\nu: 0.4)$
σ_8	$0.819^{+0.022}_{-0.022} \quad (+0.7\sigma)$	$H(0.15)$	$75.1^{+2.1}_{-2.1} \quad (+1.4\sigma)$	χ_{CMB}^2	$11938.4 \quad (\nu: 19.5) \quad (+1925.2\sigma)$
S_8	$0.819^{+0.027}_{-0.026} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$622^{+19}_{-18} \quad (-1.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.32; R - 1 = 0.01940$$

7.97 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_BAO_Pantheon18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02256^{+0.00032}_{-0.00032} \quad (+1.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.014}_{-0.014} \quad (-0.9\sigma)$	$H(0.38)$	$85.2^{+2.2}_{-2.2} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1232^{+0.0062}_{-0.0062} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.017}_{-0.017} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1485^{+42}_{-40} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04052^{+0.00086}_{-0.00079} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.021}_{-0.021} \quad (-0.8\sigma)$	$H(0.51)$	$92.0^{+2.2}_{-2.3} \quad (+1.4\sigma)$
τ	$0.055^{+0.016}_{-0.015} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$101.0^{+1.5}_{-1.5} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1926^{+53}_{-50} \quad (-1.4\sigma)$
N_{eff}	$3.36^{+0.35}_{-0.35} \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.406^{+0.047}_{-0.047} \quad (-1.1\sigma)$	$H(0.61)$	$97.6^{+2.3}_{-2.4} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.052^{+0.035}_{-0.035} \quad (+0.7\sigma)$	z_{re}	$7.8^{+1.5}_{-1.6} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2242^{+61}_{-58} \quad (-1.4\sigma)$
n_{s}	$0.979^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.116^{+0.075}_{-0.073} \quad (+0.7\sigma)$	$H(2.33)$	$239.8^{+5.2}_{-5.3} \quad (+1.0\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.896^{+0.033}_{-0.035} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5635^{+140}_{-130} \quad (-1.3\sigma)$
A_{100}^{PS}	$246^{+50}_{-50} \quad (-0.6\sigma)$	D_{40}	$1210^{+26}_{-24} \quad (-1.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.014}_{-0.014} \quad (-0.8\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5723^{+80}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.020}_{-0.020} \quad (+0.8\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2539^{+28}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{CIB}	$42^{+20}_{-10} \quad (-0.9\sigma)$	D_{1420}	$814^{+10}_{-9.8} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.018}_{-0.018} \quad (+1.0\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.7\sigma)$	D_{2000}	$228.7^{+4.0}_{-4.0} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	$n_{\mathrm{s},0.002}$	$0.979^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.017}_{-0.017} \quad (+1.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2495^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.013}_{-0.013} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2508^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.600^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.66^{+0.10}_{-0.10} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.3030^{+0.0083}_{-0.0084} \quad (+1.1\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.49^{+0.33}_{-0.31} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3129^{+0.0088}_{-0.0089} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.25^{+0.75}_{-0.77} \quad (-0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$142.0^{+3.4}_{-3.2} \quad (-1.2\sigma)$	f_{2000}^{217}	$108.3^{+4.2}_{-4.4} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00096} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-4} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.65^{+0.31}_{-0.29} \quad (-1.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.9\sigma)$	z_{drag}	$1060.8^{+1.2}_{-1.2} \quad (+1.5\sigma)$	χ_{lowl}^2	$21.73 \quad (\nu: 0.3) \quad (-1.2\sigma)$
c_{TE}	$0.9987^{+0.0095}_{-0.0098}$	r_{drag}	$144.6^{+3.5}_{-3.3} \quad (-1.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11519.6 \quad (\nu: 19.9)$
c_{EE}	$0.996^{+0.011}_{-0.011}$	k_{D}	$0.1426^{+0.0025}_{-0.0025} \quad (+1.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.1 \quad (\nu: 4.0)$
H_0	$69.8^{+2.0}_{-2.1} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16149^{+0.00085}_{-0.00086} \quad (+0.8\sigma)$	χ_{JLA}^2	$1034.81 \quad (\nu: 0.0)$
Ω_{Λ}	$0.700^{+0.012}_{-0.012} \quad (+1.3\sigma)$	z_{eq}	$3344^{+45}_{-45} \quad (-1.2\sigma)$	χ_{6DF}^2	$0.035 \quad (\nu: 0.0)$
Ω_{m}	$0.300^{+0.012}_{-0.012} \quad (-1.3\sigma)$	k_{eq}	$0.01041^{+0.00024}_{-0.00024} \quad (+0.1\sigma)$	χ_{MGS}^2	$2.05 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1464^{+0.0063}_{-0.0063} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8243^{+0.0087}_{-0.0086} \quad (+1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.81 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.1023^{+0.0070}_{-0.0070} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4550^{+0.0044}_{-0.0044} \quad (+1.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
σ_8	$0.819^{+0.022}_{-0.022} \quad (+0.7\sigma)$	$H(0.15)$	$75.1^{+2.1}_{-2.1} \quad (+1.4\sigma)$	χ_{BAO}^2	$5.90 \quad (\nu: 0.3)$
S_8	$0.819^{+0.026}_{-0.026} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$622^{+18}_{-17} \quad (-1.4\sigma)$	χ_{CMB}^2	$11938.4 \quad (\nu: 19.4) \quad (+1925.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12992.06; R - 1 = 0.01918$$

7.98 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02259^{+0.00037}_{-0.00035} \quad (+1.7\sigma)$	S_8	$0.820^{+0.025}_{-0.024} \quad (-0.8\sigma)$	$H(0.15)$	$75.2^{+2.4}_{-2.4} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1231^{+0.0059}_{-0.0058} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.013}_{-0.013} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$621^{+21}_{-20} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04053^{+0.00083}_{-0.00078} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$H(0.38)$	$85.3^{+2.4}_{-2.4} \quad (+1.5\sigma)$
τ	$0.058^{+0.016}_{-0.015} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.018}_{-0.018} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1483^{+48}_{-45} \quad (-1.4\sigma)$
N_{eff}	$3.36^{+0.35}_{-0.36} \quad (+1.3\sigma)$	$r_{\mathrm{drag}}h$	$101.1^{+2.0}_{-2.0} \quad (+1.3\sigma)$	$H(0.51)$	$92.0^{+2.4}_{-2.4} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.058^{+0.033}_{-0.031} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.411^{+0.043}_{-0.043} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1923^{+60}_{-57} \quad (-1.4\sigma)$
n_{s}	$0.979^{+0.013}_{-0.014} \quad (+1.4\sigma)$	z_{re}	$8.0^{+1.5}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$97.7^{+2.5}_{-2.5} \quad (+1.4\sigma)$
y_{cal}	$1.0008^{+0.0051}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.129^{+0.071}_{-0.066} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2240^{+68}_{-65} \quad (-1.4\sigma)$
A_{100}^{PS}	$247^{+50}_{-50} \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.897^{+0.031}_{-0.032} \quad (+0.7\sigma)$	$H(2.33)$	$239.8^{+5.0}_{-5.0} \quad (+1.0\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{40}	$1211^{+27}_{-25} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5631^{+140}_{-140} \quad (-1.4\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	$5731^{+80}_{-76} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-0.9\sigma)$	D_{810}	$2541^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.760^{+0.018}_{-0.018} \quad (+1.0\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.7\sigma)$	D_{1420}	$815^{+10}_{-9.6} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	D_{2000}	$228.9^{+4.0}_{-3.9} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.675^{+0.017}_{-0.017} \quad (+1.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.979^{+0.013}_{-0.014} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2496^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.632^{+0.016}_{-0.016} \quad (+1.2\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2509^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.011}_{-0.011} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.653^{+0.099}_{-0.10} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.602^{+0.015}_{-0.016} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.48^{+0.34}_{-0.32} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	$0.3040^{+0.0081}_{-0.0081} \quad (+1.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	z_*	$1090.22^{+0.73}_{-0.74} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3140^{+0.0088}_{-0.0088} \quad (+1.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	r_*	$142.0^{+3.2}_{-3.1} \quad (-1.2\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.3\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00095} \quad (-0.8\sigma)$	f_{2000}^{217}	$108.3^{+4.2}_{-4.3} \quad (+0.2\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.9\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.64^{+0.30}_{-0.29} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (+0.2\sigma)$
c_{TE}	$0.9986^{+0.0095}_{-0.0098}$	z_{drag}	$1060.9^{+1.2}_{-1.3} \quad (+1.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.92 \quad (\nu: 0.5)$
c_{EE}	$0.996^{+0.010}_{-0.011}$	r_{drag}	$144.5^{+3.3}_{-3.2} \quad (-1.2\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.3) \quad (+0.4\sigma)$
H_0	$70.0^{+2.4}_{-2.4} \quad (+1.5\sigma)$	k_{D}	$0.1426^{+0.0024}_{-0.0024} \quad (+1.3\sigma)$	χ_{lowl}^2	$21.79 \quad (\nu: 0.3) \quad (-1.2\sigma)$
Ω_{Λ}	$0.701^{+0.015}_{-0.016} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16148^{+0.00084}_{-0.00086} \quad (+0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11519.4 \quad (\nu: 20.4)$
Ω_{m}	$0.299^{+0.016}_{-0.015} \quad (-1.3\sigma)$	z_{eq}	$3341^{+58}_{-57} \quad (-1.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.0 \quad (\nu: 5.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1463^{+0.0060}_{-0.0060} \quad (+0.9\sigma)$	k_{eq}	$0.01041^{+0.00023}_{-0.00022} \quad (+0.1\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.3) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.1024^{+0.0071}_{-0.0070} \quad (+1.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.825^{+0.011}_{-0.011} \quad (+1.3\sigma)$	χ_{CMB}^2	$11948.6 \quad (\nu: 21.5) \quad (+1927.0\sigma)$
σ_8	$0.821^{+0.019}_{-0.019} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4553^{+0.0057}_{-0.0056} \quad (+1.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11961.40; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.22; R - 1 = 0.02109$$

7.99 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02255^{+0.00032}_{-0.00032} \quad (+1.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$H(0.38)$	$85.1^{+2.1}_{-2.2} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1230^{+0.0059}_{-0.0058} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1488^{+42}_{-40} \quad (-1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04053^{+0.00085}_{-0.00078} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$H(0.51)$	$91.8^{+2.2}_{-2.3} \quad (+1.3\sigma)$
τ	$0.057^{+0.015}_{-0.014} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$100.8^{+1.5}_{-1.5} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1929^{+54}_{-51} \quad (-1.3\sigma)$
N_{eff}	$3.34^{+0.34}_{-0.34} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.415^{+0.039}_{-0.040} \quad (-1.0\sigma)$	$H(0.61)$	$97.5^{+2.3}_{-2.3} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.056^{+0.031}_{-0.031} \quad (+0.9\sigma)$	z_{re}	$8.0^{+1.4}_{-1.4} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2246^{+61}_{-58} \quad (-1.3\sigma)$
n_{s}	$0.978^{+0.012}_{-0.012} \quad (+1.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.125^{+0.066}_{-0.064} \quad (+0.9\sigma)$	$H(2.33)$	$239.7^{+4.9}_{-5.0} \quad (+1.0\sigma)$
y_{cal}	$1.0007^{+0.0051}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.897^{+0.031}_{-0.032} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5642^{+130}_{-130} \quad (-1.3\sigma)$
A_{100}^{PS}	$246^{+50}_{-50} \quad (-0.6\sigma)$	D_{40}	$1213^{+26}_{-24} \quad (-1.1\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5729^{+80}_{-76} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.018}_{-0.018} \quad (+0.9\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2540^{+27}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-0.9\sigma)$	D_{1420}	$815^{+10}_{-9.6} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.7\sigma)$	D_{2000}	$229.0^{+4.0}_{-3.9} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	$n_{\mathrm{s},0.002}$	$0.978^{+0.012}_{-0.012} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.015}_{-0.016} \quad (+1.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2493^{+0.0043}_{-0.0046} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2506^{+0.0043}_{-0.0046} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.015}_{-0.015} \quad (+1.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.652^{+0.099}_{-0.10} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.3034^{+0.0076}_{-0.0077} \quad (+1.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.51^{+0.32}_{-0.31} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3133^{+0.0081}_{-0.0082} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1090.23^{+0.73}_{-0.75} \quad (-0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$142.1^{+3.2}_{-3.0} \quad (-1.1\sigma)$	f_{2000}^{217}	$108.2^{+4.2}_{-4.4} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00096} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-4} \quad (+0.2\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.66^{+0.30}_{-0.28} \quad (-1.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.80 \quad (\nu: 0.3)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	z_{drag}	$1060.8^{+1.2}_{-1.2} \quad (+1.5\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.8) \quad (+0.3\sigma)$
c_{TE}	$0.9985^{+0.0095}_{-0.0098}$	r_{drag}	$144.7^{+3.3}_{-3.2} \quad (-1.2\sigma)$	χ_{lowl}^2	$21.90 \quad (\nu: 0.3) \quad (-1.1\sigma)$
c_{EE}	$0.996^{+0.011}_{-0.011}$	k_{D}	$0.1425^{+0.0024}_{-0.0024} \quad (+1.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11518.7 \quad (\nu: 19.3)$
H_0	$69.7^{+2.1}_{-2.1} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16144^{+0.00082}_{-0.00085} \quad (+0.7\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.5 \quad (\nu: 4.3)$
Ω_{Λ}	$0.699^{+0.012}_{-0.012} \quad (+1.2\sigma)$	z_{eq}	$3348^{+45}_{-44} \quad (-1.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.030 \quad (\nu: 0.0)$
Ω_{m}	$0.301^{+0.012}_{-0.012} \quad (-1.2\sigma)$	k_{eq}	$0.01042^{+0.00022}_{-0.00022} \quad (+0.1\sigma)$	χ_{MGS}^2	$1.96 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1462^{+0.0059}_{-0.0060} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8235^{+0.0085}_{-0.0084} \quad (+1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.81 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.1019^{+0.0069}_{-0.0067} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4546^{+0.0044}_{-0.0043} \quad (+1.1\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.1) \quad (+0.1\sigma)$
σ_8	$0.820^{+0.019}_{-0.019} \quad (+0.8\sigma)$	$H(0.15)$	$75.0^{+2.1}_{-2.1} \quad (+1.4\sigma)$	χ_{CMB}^2	$11947.7 \quad (\nu: 19.8) \quad (+1926.9\sigma)$
S_8	$0.822^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$623^{+18}_{-18} \quad (-1.3\sigma)$	χ_{BAO}^2	$5.80 \quad (\nu: 0.3)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11966.84; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.97; R - 1 = 0.02276$$

7.100 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_BAO_lensing_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022562	$0.02256^{+0.00032}_{-0.00032}$ (+1.6 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6075	$0.608^{+0.014}_{-0.014}$ (−0.2 σ)	$H(0.51)$	91.85	$91.8^{+2.2}_{-2.2}$ (+1.3 σ)
$\Omega_{\mathrm{c}} h^2$	0.1232	$0.1231^{+0.0058}_{-0.0058}$ (+0.8 σ)	$\sigma_8/h^{0.5}$	0.9821	$0.983^{+0.017}_{-0.017}$ (−0.6 σ)	$D_{\mathrm{M}}(0.51)$	1928	1929^{+52}_{-50} (−1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04053	$1.04053^{+0.00085}_{-0.00078}$ (−0.6 σ)	$r_{\mathrm{drag}} h$	100.81	$100.8^{+1.5}_{-1.5}$ (+1.2 σ)	$H(0.61)$	97.50	$97.5^{+2.3}_{-2.3}$ (+1.3 σ)
τ	0.0560	$0.057^{+0.015}_{-0.014}$ (+0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4134	$2.415^{+0.038}_{-0.040}$ (−1.0 σ)	$D_{\mathrm{M}}(0.61)$	2245	2246^{+60}_{-57} (−1.3 σ)
N_{eff}	3.343	$3.34^{+0.33}_{-0.34}$ (+1.2 σ)	z_{re}	7.90	$8.0^{+1.4}_{-1.4}$ (+0.7 σ)	$H(2.33)$	239.78	$239.7^{+4.9}_{-5.0}$ (+1.0 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0548	$3.056^{+0.031}_{-0.030}$ (+0.9 σ)	$10^9 A_{\mathrm{s}}$	2.122	$2.125^{+0.066}_{-0.064}$ (+0.9 σ)	$D_{\mathrm{M}}(2.33)$	5639	5641^{+130}_{-130} (−1.3 σ)
n_{s}	0.9775	$0.978^{+0.011}_{-0.012}$ (+1.3 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8967	$1.897^{+0.031}_{-0.032}$ (+0.7 σ)	$f\sigma_8(0.15)$	0.4555	$0.455^{+0.012}_{-0.011}$ (−0.7 σ)
y_{cal}	1.00059	$1.0007^{+0.0051}_{-0.0049}$ (+0.1 σ)	D_{40}	1212.5	1213^{+26}_{-24} (−1.1 σ)	$\sigma_8(0.15)$	0.7587	$0.759^{+0.018}_{-0.018}$ (+0.9 σ)
A_{100}^{PS}	245.5	246^{+50}_{-50} (−0.6 σ)	D_{220}	5727	5729^{+81}_{-76} (+0.4 σ)	$f\sigma_8(0.38)$	0.4763	$0.476^{+0.011}_{-0.011}$ (−0.3 σ)
A_{143}^{PS}	40.5	43^{+20}_{-20} (−0.7 σ)	D_{810}	2539.4	2540^{+27}_{-26} (+0.3 σ)	$\sigma_8(0.38)$	0.6737	$0.674^{+0.016}_{-0.016}$ (+1.1 σ)
A_{217}^{PS}	99.2	101^{+30}_{-30} (−1.3 σ)	D_{1420}	814.6	$815^{+10}_{-9.6}$ (+0.0 σ)	$f\sigma_8(0.51)$	0.4762	$0.476^{+0.011}_{-0.011}$ (−0.0 σ)
A_{217}^{CIB}	45.0	41^{+20}_{-10} (−0.9 σ)	D_{2000}	228.83	$229.0^{+4.0}_{-3.9}$ (−0.4 σ)	$\sigma_8(0.51)$	0.6309	$0.631^{+0.015}_{-0.015}$ (+1.1 σ)
A_{143}^{tSZ}	5.07	< 7.36 (−0.7 σ)	$n_{\mathrm{s},0.002}$	0.9775	$0.978^{+0.011}_{-0.012}$ (+1.3 σ)	$f\sigma_8(0.61)$	0.4720	$0.472^{+0.010}_{-0.011}$ (+0.2 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.557	$0.65^{+0.24}_{-0.24}$	Y_{P}	0.24936	$0.2493^{+0.0043}_{-0.0045}$ (+1.2 σ)	$\sigma_8(0.61)$	0.6007	$0.601^{+0.015}_{-0.015}$ (+1.1 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.73	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.25070	$0.2506^{+0.0043}_{-0.0045}$ (+1.2 σ)	$f\sigma_8(2.33)$	0.3032	$0.3034^{+0.0075}_{-0.0076}$ (+1.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.02	—	$10^5 \mathrm{D}/\mathrm{H}$	2.652	$2.652^{+0.099}_{-0.10}$ (+0.4 σ)	$\sigma_8(2.33)$	0.3131	$0.3133^{+0.0080}_{-0.0082}$ (+1.3 σ)
A^{kSZ}	2.7	—	Age/Gyr	13.503	$13.51^{+0.32}_{-0.30}$ (−1.3 σ)	f_{2000}^{143}	32.1	32^{+6}_{-6} (+0.2 σ)
A_{100}^{dust}	1.018	$1.01^{+0.39}_{-0.39}$	z_*	1090.24	$1090.23^{+0.73}_{-0.75}$ (−0.0 σ)	f_{2000}^{217}	108.40	$108.2^{+4.2}_{-4.4}$ (+0.1 σ)
A_{143}^{dust}	0.976	$0.96^{+0.34}_{-0.34}$	r_*	142.04	$142.1^{+3.2}_{-3.0}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	33.80	34^{+5}_{-4} (+0.2 σ)
A_{217}^{dust}	0.965	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	1.04052	$1.0405^{+0.0010}_{-0.00095}$ (−0.8 σ)	$\chi_{\mathrm{lensing}}^2$	9.46	9.80 (ν : 0.3)
$A_{143 \times 217}^{\mathrm{dust}}$	1.004	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.651	$13.66^{+0.30}_{-0.28}$ (−1.1 σ)	χ_{small}^2	396.28	397.3 (ν : 1.9) (+0.3 σ)
c_{100}	0.99758	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	z_{drag}	1060.85	$1060.8^{+1.2}_{-1.2}$ (+1.5 σ)	χ_{lowl}^2	21.82	21.89 (ν : 0.3) (−1.1 σ)
c_{217}	1.00150	$1.0013^{+0.0031}_{-0.0030}$ (+4.8 σ)	r_{drag}	144.61	$144.7^{+3.3}_{-3.1}$ (−1.2 σ)	$\chi_{\mathrm{CamSpec}}^2$	11503.8	11518.7 (ν : 19.3)
c_{TE}	0.9983	$0.9985^{+0.0095}_{-0.0098}$	k_{D}	0.14254	$0.1425^{+0.0024}_{-0.0024}$ (+1.2 σ)	$\chi_{\mathrm{H073p45}}^2$	5.1	5.5 (ν : 4.1)
c_{EE}	0.9957	$0.996^{+0.011}_{-0.010}$	$100\theta_{\mathrm{D}}$	0.16145	$0.16144^{+0.00082}_{-0.00085}$ (+0.7 σ)	χ_{JLA}^2	1034.745	1034.81 (ν : 0.0)
H_0	69.71	$69.7^{+2.0}_{-2.0}$ (+1.4 σ)	z_{eq}	3349.1	3348^{+43}_{-43} (−1.1 σ)	χ_{6DF}^2	0.004	0.029 (ν : 0.0)
Ω_{Λ}	0.6988	$0.699^{+0.011}_{-0.011}$ (+1.2 σ)	k_{eq}	0.010423	$0.01042^{+0.00022}_{-0.00022}$ (+0.1 σ)	χ_{MGS}^2	1.89	1.97 (ν : 0.1)
Ω_{m}	0.3012	$0.301^{+0.011}_{-0.011}$ (−1.2 σ)	$100\theta_{\mathrm{eq}}$	0.8234	$0.8237^{+0.0083}_{-0.0082}$ (+1.2 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.43	3.79 (ν : 0.1)
$\Omega_{\mathrm{m}} h^2$	0.1464	$0.1463^{+0.0059}_{-0.0060}$ (+0.8 σ)	$100\theta_{\mathrm{s,eq}}$	0.45449	$0.4546^{+0.0042}_{-0.0042}$ (+1.2 σ)	χ_{prior}^2	2.4	7.8 (ν : 6.1) (+0.1 σ)
$\Omega_{\mathrm{m}} h^3$	0.1020	$0.1020^{+0.0069}_{-0.0067}$ (+1.3 σ)	$H(0.15)$	74.98	$75.0^{+2.1}_{-2.1}$ (+1.4 σ)	χ_{CMB}^2	11931.3	11947.7 (ν : 19.7) (+1926.9 σ)
σ_8	0.8200	$0.820^{+0.019}_{-0.019}$ (+0.8 σ)	$D_{\mathrm{M}}(0.15)$	622.6	623^{+18}_{-17} (−1.3 σ)	χ_{BAO}^2	5.33	5.79 (ν : 0.2)
S_8	0.8216	$0.822^{+0.022}_{-0.021}$ (−0.8 σ)	$H(0.38)$	85.11	$85.1^{+2.1}_{-2.1}$ (+1.4 σ)			
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4500	$0.450^{+0.012}_{-0.012}$ (−0.8 σ)	$D_{\mathrm{M}}(0.38)$	1487.3	1488^{+41}_{-39} (−1.3 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 12978.85$; $\bar{\chi}_{\mathrm{eff}}^2 = 13001.59$; $\Delta\chi_{\mathrm{eff}}^2 = -2.05$; $R - 1 = 0.02251$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.89 DR12BAO: 3.43 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.46 small_100x143.offlike5_EE_Aplanck_B: 396.28 commander_dx12_v3.2.29: 21.82 CamSpec like_10.7HM.1400_unified: 11503.77 Hubble - H073p45: 5.08 SN - JLA Pantheon18: 1034.74

7.101 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02261^{+0.00037}_{-0.00036} \quad (+1.7\sigma)$	S_8	$0.815^{+0.031}_{-0.030} \quad (-1.0\sigma)$	$H(0.15)$	$75.5^{+2.4}_{-2.4} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1231^{+0.0060}_{-0.0061} \quad (+0.8\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.446^{+0.017}_{-0.016} \quad (-1.0\sigma)$	$D_M(0.15)$	$618^{+21}_{-20} \quad (-1.5\sigma)$
$100\theta_{MC}$	$1.04054^{+0.00083}_{-0.00080} \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.38)$	$85.6^{+2.4}_{-2.4} \quad (+1.6\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.978^{+0.023}_{-0.022} \quad (-0.9\sigma)$	$D_M(0.38)$	$1478^{+47}_{-45} \quad (-1.5\sigma)$
N_{eff}	$3.38^{+0.35}_{-0.36} \quad (+1.4\sigma)$	$r_{\text{drag}} h$	$101.4^{+2.2}_{-2.1} \quad (+1.5\sigma)$	$H(0.51)$	$92.3^{+2.4}_{-2.5} \quad (+1.5\sigma)$
$\ln(10^{10} A_s)$	$3.055^{+0.033}_{-0.032} \quad (+0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.401^{+0.054}_{-0.053} \quad (-1.3\sigma)$	$D_M(0.51)$	$1917^{+59}_{-56} \quad (-1.5\sigma)$
n_s	$0.981^{+0.013}_{-0.014} \quad (+1.5\sigma)$	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.6\sigma)$	$H(0.61)$	$97.9^{+2.5}_{-2.5} \quad (+1.5\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s$	$2.123^{+0.070}_{-0.067} \quad (+0.9\sigma)$	$D_M(0.61)$	$2233^{+68}_{-64} \quad (-1.5\sigma)$
A_{100}^{PS}	$247^{+50}_{-50} \quad (-0.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.896^{+0.033}_{-0.034} \quad (+0.7\sigma)$	$H(2.33)$	$239.9^{+5.1}_{-5.2} \quad (+1.1\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{40}	$1207^{+28}_{-26} \quad (-1.4\sigma)$	$D_M(2.33)$	$5620^{+140}_{-140} \quad (-1.5\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{220}	$5726^{+80}_{-76} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.016}_{-0.016} \quad (-0.9\sigma)$
A_{217}^{CIB}	$42^{+10}_{-10} \quad (-0.9\sigma)$	D_{810}	$2539^{+28}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.020}_{-0.019} \quad (+0.9\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.7\sigma)$	D_{1420}	$815^{+10}_{-9.9} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.014}_{-0.014} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.24}$	D_{2000}	$228.7^{+3.9}_{-3.9} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.018}_{-0.018} \quad (+1.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$n_{s,0.002}$	$0.981^{+0.013}_{-0.014} \quad (+1.5\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.013}_{-0.013} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_{P}	$0.2499^{+0.0045}_{-0.0047} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.632^{+0.017}_{-0.017} \quad (+1.1\sigma)$
A^{kSZ}	—	$Y_{\text{P}}^{\text{BBN}}$	$0.2512^{+0.0045}_{-0.0048} \quad (+1.4\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.013}_{-0.013} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.39}$	10^5D/H	$2.66^{+0.10}_{-0.10} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.016}_{-0.016} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	Age/Gyr	$13.46^{+0.34}_{-0.32} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	$0.3038^{+0.0083}_{-0.0082} \quad (+1.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1090.21^{+0.76}_{-0.77} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3140^{+0.0089}_{-0.0088} \quad (+1.3\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$141.8^{+3.3}_{-3.1} \quad (-1.2\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00096} \quad (-0.9\sigma)$	f_{2000}^{217}	$108.4^{+4.2}_{-4.2} \quad (+0.2\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.9\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.63^{+0.31}_{-0.29} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.2\sigma)$
c_{TE}	$0.9989^{+0.0098}_{-0.0098}$	z_{drag}	$1061.0^{+1.2}_{-1.3} \quad (+1.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.2\sigma)$
c_{EE}	$0.997^{+0.011}_{-0.011}$	r_{drag}	$144.4^{+3.5}_{-3.2} \quad (-1.3\sigma)$	χ_{lowl}^2	$21.54 \quad (\nu: 0.3) \quad (-1.3\sigma)$
H_0	$70.2^{+2.4}_{-2.4} \quad (+1.6\sigma)$	k_{D}	$0.1427^{+0.0024}_{-0.0025} \quad (+1.3\sigma)$	χ_{CamSpec}^2	$11520.6 \quad (\nu: 21.8)$
Ω_Λ	$0.703^{+0.016}_{-0.016} \quad (+1.5\sigma)$	$100\theta_{\text{D}}$	$0.16153^{+0.00084}_{-0.00087} \quad (+0.9\sigma)$	χ_{H073p45}^2	$4.3 \quad (\nu: 4.5)$
Ω_m	$0.297^{+0.016}_{-0.016} \quad (-1.5\sigma)$	z_{eq}	$3332^{+61}_{-60} \quad (-1.4\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.3) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1464^{+0.0062}_{-0.0062} \quad (+0.9\sigma)$	k_{eq}	$0.01040^{+0.00025}_{-0.00024} \quad (-0.0\sigma)$	χ_{CMB}^2	$11939.3 \quad (\nu: 20.6) \quad (+1925.4\sigma)$
$\Omega_m h^3$	$0.1029^{+0.0072}_{-0.0071} \quad (+1.4\sigma)$	$100\theta_{\text{eq}}$	$0.827^{+0.012}_{-0.012} \quad (+1.5\sigma)$		
σ_8	$0.819^{+0.021}_{-0.021} \quad (+0.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4563^{+0.0061}_{-0.0061} \quad (+1.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11951.46; \Delta\bar{\chi}_{\text{eff}}^2 = -2.54; R - 1 = 0.01420$$

7.102 **base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_BAO_zre6p5**

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02256^{+0.00032}_{-0.00033} \quad (+1.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.015}_{-0.014} \quad (-0.8\sigma)$	$H(0.38)$	$85.2^{+2.2}_{-2.2} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1232^{+0.0062}_{-0.0062} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1485^{+43}_{-40} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04052^{+0.00086}_{-0.00079} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.021}_{-0.019} \quad (-0.8\sigma)$	$H(0.51)$	$92.0^{+2.3}_{-2.3} \quad (+1.4\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$101.0^{+1.6}_{-1.6} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1926^{+54}_{-51} \quad (-1.4\sigma)$
N_{eff}	$3.35^{+0.35}_{-0.35} \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.408^{+0.046}_{-0.044} \quad (-1.1\sigma)$	$H(0.61)$	$97.6^{+2.3}_{-2.4} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.054^{+0.032}_{-0.031} \quad (+0.8\sigma)$	z_{re}	$< 9.10 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2242^{+61}_{-58} \quad (-1.4\sigma)$
n_{s}	$0.979^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.120^{+0.068}_{-0.065} \quad (+0.8\sigma)$	$H(2.33)$	$239.8^{+5.2}_{-5.3} \quad (+1.0\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.896^{+0.033}_{-0.035} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5635^{+140}_{-130} \quad (-1.3\sigma)$
A_{100}^{PS}	$246^{+50}_{-50} \quad (-0.6\sigma)$	D_{40}	$1210^{+26}_{-25} \quad (-1.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.014}_{-0.014} \quad (-0.8\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5723^{+81}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.020}_{-0.019} \quad (+0.9\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2539^{+28}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{CIB}	$42^{+20}_{-10} \quad (-0.9\sigma)$	D_{1420}	$814^{+10}_{-9.7} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.018}_{-0.018} \quad (+1.0\sigma)$
A_{143}^{tSZ}	$< 7.35 \quad (-0.7\sigma)$	D_{2000}	$228.8^{+4.0}_{-4.0} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	$n_{\mathrm{s},0.002}$	$0.979^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.017}_{-0.017} \quad (+1.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2495^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2508^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.66^{+0.10}_{-0.10} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.3033^{+0.0081}_{-0.0081} \quad (+1.2\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.49^{+0.33}_{-0.31} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3132^{+0.0086}_{-0.0085} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.25^{+0.75}_{-0.77} \quad (-0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$142.0^{+3.4}_{-3.2} \quad (-1.2\sigma)$	f_{2000}^{217}	$108.3^{+4.2}_{-4.4} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00096} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-4} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.65^{+0.31}_{-0.29} \quad (-1.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.9\sigma)$	z_{drag}	$1060.8^{+1.2}_{-1.2} \quad (+1.5\sigma)$	χ_{lowl}^2	$21.74 \quad (\nu: 0.3) \quad (-1.2\sigma)$
c_{TE}	$0.9986^{+0.0094}_{-0.0098}$	r_{drag}	$144.6^{+3.5}_{-3.3} \quad (-1.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11519.4 \quad (\nu: 19.8)$
c_{EE}	$0.996^{+0.010}_{-0.011}$	k_{D}	$0.1426^{+0.0024}_{-0.0026} \quad (+1.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.1 \quad (\nu: 4.1)$
H_0	$69.8^{+2.1}_{-2.1} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16148^{+0.00085}_{-0.00086} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.037 \quad (\nu: 0.0)$
Ω_{Λ}	$0.700^{+0.012}_{-0.012} \quad (+1.3\sigma)$	z_{eq}	$3344^{+46}_{-46} \quad (-1.2\sigma)$	χ_{MGS}^2	$2.05 \quad (\nu: 0.1)$
Ω_{m}	$0.300^{+0.012}_{-0.012} \quad (-1.3\sigma)$	k_{eq}	$0.01041^{+0.00024}_{-0.00024} \quad (+0.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.84 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1464^{+0.0063}_{-0.0063} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8244^{+0.0089}_{-0.0087} \quad (+1.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.1023^{+0.0071}_{-0.0070} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4550^{+0.0046}_{-0.0045} \quad (+1.2\sigma)$	χ_{BAO}^2	$5.93 \quad (\nu: 0.4)$
σ_8	$0.820^{+0.021}_{-0.021} \quad (+0.7\sigma)$	$H(0.15)$	$75.1^{+2.1}_{-2.1} \quad (+1.4\sigma)$	χ_{CMB}^2	$11938.2 \quad (\nu: 19.1) \quad (+1925.2\sigma)$
S_8	$0.820^{+0.026}_{-0.026} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$622^{+19}_{-17} \quad (-1.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.12; R - 1 = 0.01923$$

7.103 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_BAO_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02257^{+0.00032}_{-0.00032} \quad (+1.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$H(0.38)$	$85.2^{+2.2}_{-2.2} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1232^{+0.0062}_{-0.0062} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.016}_{-0.016} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1485^{+42}_{-40} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04052^{+0.00086}_{-0.00079} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.021}_{-0.019} \quad (-0.8\sigma)$	$H(0.51)$	$92.0^{+2.2}_{-2.3} \quad (+1.4\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$101.0^{+1.5}_{-1.5} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1925^{+52}_{-50} \quad (-1.4\sigma)$
N_{eff}	$3.36^{+0.35}_{-0.35} \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.408^{+0.046}_{-0.044} \quad (-1.1\sigma)$	$H(0.61)$	$97.6^{+2.3}_{-2.4} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.054^{+0.032}_{-0.031} \quad (+0.8\sigma)$	z_{re}	$< 9.10 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2242^{+60}_{-57} \quad (-1.4\sigma)$
n_{s}	$0.979^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.120^{+0.068}_{-0.065} \quad (+0.8\sigma)$	$H(2.33)$	$239.8^{+5.2}_{-5.3} \quad (+1.0\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.896^{+0.033}_{-0.035} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5634^{+140}_{-130} \quad (-1.3\sigma)$
A_{100}^{PS}	$246^{+50}_{-50} \quad (-0.6\sigma)$	D_{40}	$1210^{+26}_{-24} \quad (-1.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.014}_{-0.014} \quad (-0.8\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5723^{+81}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.758^{+0.020}_{-0.020} \quad (+0.9\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2539^{+28}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{CIB}	$42^{+20}_{-10} \quad (-0.9\sigma)$	D_{1420}	$814^{+10}_{-9.7} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.018}_{-0.018} \quad (+1.0\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.7\sigma)$	D_{2000}	$228.8^{+4.0}_{-4.0} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.013}_{-0.012} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	$n_{\mathrm{s},0.002}$	$0.979^{+0.012}_{-0.012} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.631^{+0.017}_{-0.016} \quad (+1.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2495^{+0.0045}_{-0.0046} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2508^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.66^{+0.10}_{-0.10} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.3033^{+0.0081}_{-0.0081} \quad (+1.2\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.49^{+0.33}_{-0.31} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.3132^{+0.0086}_{-0.0085} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.24^{+0.75}_{-0.77} \quad (-0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$142.0^{+3.4}_{-3.2} \quad (-1.2\sigma)$	f_{2000}^{217}	$108.3^{+4.2}_{-4.4} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00096} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-4} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.65^{+0.31}_{-0.29} \quad (-1.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.9\sigma)$	z_{drag}	$1060.9^{+1.2}_{-1.2} \quad (+1.5\sigma)$	χ_{lowl}^2	$21.73 \quad (\nu: 0.3) \quad (-1.2\sigma)$
c_{TE}	$0.9986^{+0.0094}_{-0.0098}$	r_{drag}	$144.6^{+3.4}_{-3.3} \quad (-1.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11519.4 \quad (\nu: 19.8)$
c_{EE}	$0.996^{+0.010}_{-0.011}$	k_{D}	$0.1426^{+0.0024}_{-0.0026} \quad (+1.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.1 \quad (\nu: 3.9)$
H_0	$69.9^{+2.0}_{-2.1} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16148^{+0.00084}_{-0.00086} \quad (+0.8\sigma)$	χ_{JLA}^2	$1034.81 \quad (\nu: 0.0)$
Ω_{Λ}	$0.700^{+0.011}_{-0.012} \quad (+1.3\sigma)$	z_{eq}	$3344^{+45}_{-45} \quad (-1.2\sigma)$	χ_{6DF}^2	$0.035 \quad (\nu: 0.0)$
Ω_{m}	$0.300^{+0.012}_{-0.011} \quad (-1.3\sigma)$	k_{eq}	$0.01041^{+0.00023}_{-0.00024} \quad (+0.1\sigma)$	χ_{MGS}^2	$2.06 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1464^{+0.0063}_{-0.0063} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8244^{+0.0086}_{-0.0085} \quad (+1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.81 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.1023^{+0.0070}_{-0.0070} \quad (+1.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4550^{+0.0044}_{-0.0044} \quad (+1.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
σ_8	$0.820^{+0.021}_{-0.021} \quad (+0.7\sigma)$	$H(0.15)$	$75.1^{+2.1}_{-2.1} \quad (+1.4\sigma)$	χ_{BAO}^2	$5.90 \quad (\nu: 0.4)$
S_8	$0.820^{+0.026}_{-0.026} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$622^{+18}_{-17} \quad (-1.4\sigma)$	χ_{CMB}^2	$11938.2 \quad (\nu: 19.0) \quad (+1925.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12991.86; R - 1 = 0.01898$$

7.104 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02259^{+0.00037}_{-0.00035} \quad (+1.7\sigma)$	S_8	$0.820^{+0.025}_{-0.024} \quad (-0.8\sigma)$	$H(0.15)$	$75.2^{+2.4}_{-2.4} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1231^{+0.0059}_{-0.0058} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.013}_{-0.013} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$621^{+21}_{-20} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04053^{+0.00083}_{-0.00078} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$H(0.38)$	$85.3^{+2.4}_{-2.4} \quad (+1.5\sigma)$
τ	$0.058^{+0.014}_{-0.014} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.018}_{-0.017} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1483^{+47}_{-45} \quad (-1.4\sigma)$
N_{eff}	$3.36^{+0.35}_{-0.35} \quad (+1.3\sigma)$	$r_{\mathrm{drag}}h$	$101.1^{+2.0}_{-1.9} \quad (+1.4\sigma)$	$H(0.51)$	$92.1^{+2.4}_{-2.4} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.059^{+0.031}_{-0.030} \quad (+1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.412^{+0.043}_{-0.043} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1923^{+59}_{-56} \quad (-1.4\sigma)$
n_{s}	$0.979^{+0.013}_{-0.014} \quad (+1.4\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.8\sigma)$	$H(0.61)$	$97.7^{+2.5}_{-2.5} \quad (+1.4\sigma)$
y_{cal}	$1.0008^{+0.0051}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.131^{+0.066}_{-0.064} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2239^{+68}_{-64} \quad (-1.4\sigma)$
A_{100}^{PS}	$247^{+50}_{-50} \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.897^{+0.031}_{-0.032} \quad (+0.7\sigma)$	$H(2.33)$	$239.8^{+5.0}_{-5.0} \quad (+1.0\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{40}	$1211^{+27}_{-25} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5631^{+140}_{-140} \quad (-1.4\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	$5731^{+80}_{-76} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-0.9\sigma)$	D_{810}	$2541^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.760^{+0.018}_{-0.018} \quad (+1.0\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.7\sigma)$	D_{1420}	$815^{+10}_{-9.6} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	D_{2000}	$228.9^{+4.0}_{-3.9} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.675^{+0.016}_{-0.016} \quad (+1.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.979^{+0.013}_{-0.014} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2496^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.632^{+0.016}_{-0.015} \quad (+1.2\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2509^{+0.0045}_{-0.0047} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.011}_{-0.011} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.653^{+0.098}_{-0.10} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.602^{+0.015}_{-0.015} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.48^{+0.34}_{-0.32} \quad (-1.4\sigma)$	$f\sigma_8(2.33)$	$0.3041^{+0.0080}_{-0.0077} \quad (+1.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	z_*	$1090.21^{+0.72}_{-0.74} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3141^{+0.0087}_{-0.0084} \quad (+1.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$142.0^{+3.2}_{-3.1} \quad (-1.2\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.2\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00095} \quad (-0.8\sigma)$	f_{2000}^{217}	$108.3^{+4.2}_{-4.3} \quad (+0.2\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.9\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.64^{+0.30}_{-0.29} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (+0.2\sigma)$
c_{TE}	$0.9985^{+0.0095}_{-0.0098}$	z_{drag}	$1060.9^{+1.2}_{-1.2} \quad (+1.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.90 \quad (\nu: 0.4)$
c_{EE}	$0.996^{+0.010}_{-0.011}$	r_{drag}	$144.5^{+3.3}_{-3.2} \quad (-1.2\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.3) \quad (+0.4\sigma)$
H_0	$70.0^{+2.4}_{-2.4} \quad (+1.5\sigma)$	k_{D}	$0.1426^{+0.0024}_{-0.0024} \quad (+1.3\sigma)$	χ_{lowl}^2	$21.78 \quad (\nu: 0.3) \quad (-1.2\sigma)$
Ω_{Λ}	$0.701^{+0.015}_{-0.015} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16148^{+0.00084}_{-0.00085} \quad (+0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11519.4 \quad (\nu: 20.3)$
Ω_{m}	$0.299^{+0.015}_{-0.015} \quad (-1.3\sigma)$	z_{eq}	$3340^{+56}_{-57} \quad (-1.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$4.9 \quad (\nu: 5.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1463^{+0.0060}_{-0.0060} \quad (+0.9\sigma)$	k_{eq}	$0.01041^{+0.00022}_{-0.00022} \quad (+0.0\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.2) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.1024^{+0.0071}_{-0.0070} \quad (+1.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.825^{+0.011}_{-0.011} \quad (+1.3\sigma)$	χ_{CMB}^2	$11948.5 \quad (\nu: 21.3) \quad (+1927.0\sigma)$
σ_8	$0.821^{+0.019}_{-0.019} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4554^{+0.0057}_{-0.0055} \quad (+1.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11961.28; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.23; R - 1 = 0.02116$$

7.105 base_nnu_CamSpecHM_TTTEEE_lowl_lowE_Riess18_post_BAO_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02256^{+0.00032}_{-0.00032} \quad (+1.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$H(0.51)$	$91.8^{+2.2}_{-2.2} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1230^{+0.0058}_{-0.0058} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.017}_{-0.016} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1929^{+52}_{-49} \quad (-1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04053^{+0.00085}_{-0.00078} \quad (-0.6\sigma)$	$r_{\mathrm{drag}} h$	$100.9^{+1.5}_{-1.4} \quad (+1.2\sigma)$	$H(0.61)$	$97.5^{+2.3}_{-2.3} \quad (+1.3\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.415^{+0.038}_{-0.039} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2246^{+59}_{-57} \quad (-1.3\sigma)$
N_{eff}	$3.34^{+0.33}_{-0.34} \quad (+1.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.7\sigma)$	$H(2.33)$	$239.7^{+4.9}_{-5.0} \quad (+1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.057^{+0.029}_{-0.029} \quad (+1.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.127^{+0.062}_{-0.061} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5641^{+130}_{-130} \quad (-1.3\sigma)$
n_{s}	$0.978^{+0.011}_{-0.012} \quad (+1.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.896^{+0.031}_{-0.032} \quad (+0.7\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.011} \quad (-0.7\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	D_{40}	$1213^{+26}_{-24} \quad (-1.1\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.017}_{-0.017} \quad (+0.9\sigma)$
A_{100}^{PS}	$246^{+50}_{-50} \quad (-0.6\sigma)$	D_{220}	$5729^{+81}_{-76} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2540^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.674^{+0.016}_{-0.016} \quad (+1.1\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815^{+10}_{-9.6} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.0\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-0.9\sigma)$	D_{2000}	$229.0^{+4.0}_{-3.9} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.632^{+0.015}_{-0.015} \quad (+1.1\sigma)$
A_{143}^{tSZ}	$< 7.35 \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.978^{+0.011}_{-0.012} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.010}_{-0.010} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	Y_{P}	$0.2493^{+0.0043}_{-0.0045} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.601^{+0.014}_{-0.014} \quad (+1.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2506^{+0.0043}_{-0.0045} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.3035^{+0.0074}_{-0.0074} \quad (+1.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.652^{+0.099}_{-0.10} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3134^{+0.0079}_{-0.0078} \quad (+1.3\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.51^{+0.31}_{-0.30} \quad (-1.3\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1090.23^{+0.71}_{-0.75} \quad (-0.0\sigma)$	f_{2000}^{217}	$108.2^{+4.2}_{-4.4} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$142.1^{+3.2}_{-3.0} \quad (-1.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-4} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.0405^{+0.0010}_{-0.00095} \quad (-0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.77 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.66^{+0.30}_{-0.28} \quad (-1.1\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.9) \quad (+0.3\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1060.8^{+1.2}_{-1.2} \quad (+1.5\sigma)$	χ_{lowl}^2	$21.89 \quad (\nu: 0.3) \quad (-1.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	r_{drag}	$144.7^{+3.3}_{-3.1} \quad (-1.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11518.7 \quad (\nu: 19.2)$
c_{TE}	$0.9984^{+0.0094}_{-0.0098}$	k_{D}	$0.1425^{+0.0024}_{-0.0024} \quad (+1.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.5 \quad (\nu: 4.1)$
c_{EE}	$0.996^{+0.010}_{-0.011}$	$100\theta_{\mathrm{D}}$	$0.16144^{+0.00082}_{-0.00085} \quad (+0.7\sigma)$	χ_{JLA}^2	$1034.81 \quad (\nu: 0.0)$
H_0	$69.7^{+2.0}_{-2.0} \quad (+1.4\sigma)$	z_{eq}	$3347^{+42}_{-42} \quad (-1.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.029 \quad (\nu: 0.0)$
Ω_{Λ}	$0.699^{+0.011}_{-0.011} \quad (+1.2\sigma)$	k_{eq}	$0.01041^{+0.00022}_{-0.00022} \quad (+0.1\sigma)$	χ_{MGS}^2	$1.98 \quad (\nu: 0.1)$
Ω_{m}	$0.301^{+0.011}_{-0.011} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8237^{+0.0082}_{-0.0081} \quad (+1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.78 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1462^{+0.0059}_{-0.0060} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4547^{+0.0042}_{-0.0042} \quad (+1.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.1020^{+0.0069}_{-0.0067} \quad (+1.3\sigma)$	$H(0.15)$	$75.0^{+2.0}_{-2.0} \quad (+1.4\sigma)$	χ_{CMB}^2	$11947.6 \quad (\nu: 19.4) \quad (+1926.9\sigma)$
σ_8	$0.821^{+0.019}_{-0.019} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$623^{+18}_{-17} \quad (-1.3\sigma)$	χ_{BAO}^2	$5.79 \quad (\nu: 0.2)$
S_8	$0.822^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$85.1^{+2.1}_{-2.1} \quad (+1.4\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1488^{+41}_{-39} \quad (-1.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 13001.46; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.07; R - 1 = 0.02255$$

7.106 base_nnu_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02201	$0.02206^{+0.00064}_{-0.00063} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9910	$0.990^{+0.032}_{-0.033} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	653.0	$651^{+46}_{-44} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.1196	$0.1197^{+0.0082}_{-0.0078} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	98.12	$98.4^{+4.5}_{-4.3} \quad (+0.1\sigma)$	$H(0.38)$	81.93	$82.2^{+4.6}_{-4.4} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	1.04091	$1.0409^{+0.0012}_{-0.0011} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.455	$2.454^{+0.090}_{-0.089} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1554	$1551^{+100}_{-96} \quad (-0.0\sigma)$
τ	0.0503	$0.052^{+0.016}_{-0.016} \quad (+0.0\sigma)$	z_{re}	7.33	$7.4^{+1.6}_{-1.8} \quad (+0.0\sigma)$	$H(0.51)$	88.73	$88.9^{+4.6}_{-4.3} \quad (-0.0\sigma)$
N_{eff}	2.97	$2.99^{+0.59}_{-0.57} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	2.075	$2.080^{+0.087}_{-0.085} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	2012	$2007^{+120}_{-120} \quad (+0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0323	$3.035^{+0.041}_{-0.041} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8760	$1.876^{+0.043}_{-0.045} \quad (-0.2\sigma)$	$H(0.61)$	94.40	$94.6^{+4.5}_{-4.3} \quad (-0.0\sigma)$
n_{s}	0.9590	$0.960^{+0.027}_{-0.027} \quad (-0.1\sigma)$	D_{40}	1236.1	$1236^{+45}_{-43} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	2339	$2335^{+140}_{-140} \quad (+0.0\sigma)$
y_{cal}	1.00026	$1.0004^{+0.0048}_{-0.0050} \quad (-0.0\sigma)$	D_{220}	5703	$5707^{+80}_{-81} \quad (-0.2\sigma)$	$H(2.33)$	235.7	$235.8^{+7.3}_{-7.2} \quad (-0.1\sigma)$
A_{100}^{PS}	251	$255^{+50}_{-60} \quad (-0.3\sigma)$	D_{810}	2531.0	$2530^{+28}_{-28} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	5813	$5805^{+260}_{-250} \quad (+0.0\sigma)$
A_{143}^{tSZ}	5.91	$< 7.56 \quad (-0.7\sigma)$	D_{1420}	813.0	$813^{+10}_{-11} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	0.4625	$0.462^{+0.024}_{-0.025} \quad (-0.2\sigma)$
A^{kSZ}	0.8	—	D_{2000}	229.29	$229.2^{+4.5}_{-4.7} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.7444	$0.745^{+0.027}_{-0.026} \quad (-0.1\sigma)$
A_{100}^{dust}	0.998	$1.00^{+0.38}_{-0.38}$	$n_{\mathrm{s},0.002}$	0.9590	$0.960^{+0.027}_{-0.027} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4781	$0.478^{+0.019}_{-0.019} \quad (-0.2\sigma)$
A_{143}^{power}	11.8	$10.3^{+5.3}_{-5.1}$	Y_{P}	0.2442	$0.2444^{+0.0079}_{-0.0081} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	0.6586	$0.659^{+0.025}_{-0.025} \quad (-0.1\sigma)$
A_{217}^{power}	10.90	$8.2^{+5.5}_{-4.4}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2455	$0.2458^{+0.0080}_{-0.0081} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	0.4753	$0.475^{+0.017}_{-0.017} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{power}}$	7.21	< 9.03	$10^5 \mathrm{D}/\mathrm{H}$	2.626	$2.63^{+0.14}_{-0.14} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	0.6158	$0.617^{+0.025}_{-0.024} \quad (-0.1\sigma)$
$\gamma_{143}^{\mathrm{power}}$	1.31	$1.32^{+0.98}_{-0.84}$	Age/Gyr	13.91	$13.90^{+0.63}_{-0.60} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4694	$0.469^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\gamma_{217}^{\mathrm{power}}$	1.33	> 0.349	z_*	1090.26	$1090.2^{+1.0}_{-0.96} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	0.5856	$0.587^{+0.024}_{-0.023} \quad (-0.1\sigma)$
$\gamma_{143 \times 217}^{\mathrm{power}}$	1.24	$1.32^{+1.2}_{-0.98}$	r_*	145.2	$145.1^{+5.2}_{-5.0} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2948	$0.295^{+0.013}_{-0.012} \quad (-0.1\sigma)$
c_{100}	0.99804	$0.9978^{+0.0021}_{-0.0021} \quad (-2.9\sigma)$	$100\theta_*$	1.04117	$1.0411^{+0.0014}_{-0.0014} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	0.3034	$0.304^{+0.014}_{-0.014} \quad (-0.1\sigma)$
c_{217}	0.99899	$0.9994^{+0.0031}_{-0.0028} \quad (+1.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.947	$13.94^{+0.49}_{-0.47} \quad (+0.1\sigma)$	f_{2000}^{143}	23.1	$23^{+7}_{-7} \quad (-2.2\sigma)$
H_0	66.30	$66.6^{+4.9}_{-4.7} \quad (+0.0\sigma)$	z_{drag}	1059.02	$1059.1^{+2.2}_{-2.2} \quad (-0.1\sigma)$	f_{2000}^{217}	16.74	$16.7^{+5.0}_{-4.7} \quad (-39.0\sigma)$
Ω_{Λ}	0.6764	$0.678^{+0.036}_{-0.038} \quad (+0.1\sigma)$	r_{drag}	148.0	$147.9^{+5.5}_{-5.3} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	11.1	$10.9^{+5.6}_{-5.2} \quad (-8.8\sigma)$
Ω_{m}	0.3236	$0.322^{+0.038}_{-0.036} \quad (-0.1\sigma)$	k_{D}	0.13994	$0.1401^{+0.0038}_{-0.0038} \quad (-0.1\sigma)$	χ_{small}^2	395.69	$396.9 \quad (\nu: 1.3) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.1422	$0.1424^{+0.0084}_{-0.0082} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.16097	$0.1610^{+0.0013}_{-0.0013} \quad (+0.0\sigma)$	χ_{lowl}^2	24.16	$24.4 \quad (\nu: 2.8) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.0943	$0.095^{+0.012}_{-0.011} \quad (-0.0\sigma)$	z_{eq}	3419	$3414^{+130}_{-130} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	6703.8	$6716.4 \quad (\nu: 15.5)$
σ_8	0.8069	$0.808^{+0.027}_{-0.027} \quad (-0.2\sigma)$	k_{eq}	0.010381	$0.01038^{+0.00031}_{-0.00031} \quad (-0.1\sigma)$	χ_{prior}^2	1.3	$5.3 \quad (\nu: 4.2) \quad (-0.6\sigma)$
S_8	0.8380	$0.837^{+0.049}_{-0.049} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	0.8092	$0.810^{+0.025}_{-0.024} \quad (+0.1\sigma)$	χ_{CMB}^2	7123.7	$7137.7 \quad (\nu: 14.5) \quad (+1065.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4590	$0.458^{+0.027}_{-0.027} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4475	$0.448^{+0.013}_{-0.012} \quad (+0.1\sigma)$			
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6086	$0.608^{+0.023}_{-0.024} \quad (-0.2\sigma)$	$H(0.15)$	71.68	$71.9^{+4.8}_{-4.5} \quad (+0.0\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 7124.98$; $\Delta\chi_{\mathrm{eff}}^2 = -0.13$; $\bar{\chi}_{\mathrm{eff}}^2 = 7142.96$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.76$; $R - 1 = 0.00706$

χ_{eff}^2 : CMB - small_100x143_offlike5_EE_Aplanck_B: 395.69 (Δ -0.09) commander_dx12_v3_2_29: 24.16 (Δ 0.46) CamSpec like_10.7cleaned: 6703.83 (Δ -0.60)

7.107 base_nnu_lensing_lenspriors_BAO_Cooke17_Aver15

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\mathrm{b}} h^2$	0.02186	$0.0220^{+0.0013}_{-0.0013}$	(-0.2σ)	D_{1420}	859	843^{+200}_{-200}	$(+5.5\sigma)$	$D_{\mathrm{M}}(0.51)$	2011	1999^{+120}_{-110}	(-0.1σ)
$\Omega_{\mathrm{c}} h^2$	0.1127	$0.115^{+0.024}_{-0.021}$	(-1.2σ)	D_{2000}	242	240^{+60}_{-60}	$(+4.7\sigma)$	$H(0.61)$	93.6	$94.3^{+6.2}_{-6.0}$	(-0.2σ)
$100\theta_{\mathrm{MC}}$	1.0384	$1.040^{+0.030}_{-0.030}$	(-1.1σ)	$n_{\mathrm{s},0.002}$	0.9566	$0.956^{+0.038}_{-0.039}$	(-0.4σ)	$D_{\mathrm{M}}(0.61)$	2341	2328^{+140}_{-130}	(-0.1σ)
N_{eff}	2.88	$2.91^{+0.53}_{-0.51}$	(-0.3σ)	Y_{P}	0.2430	$0.2434^{+0.0074}_{-0.0076}$	(-0.3σ)	$H(2.33)$	230.4	232^{+19}_{-18}	(-1.1σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.092	$3.08^{+0.20}_{-0.20}$	$(+2.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2443	$0.2447^{+0.0074}_{-0.0076}$	(-0.3σ)	$D_{\mathrm{M}}(2.33)$	5875	5838^{+400}_{-380}	$(+0.3\sigma)$
n_{s}	0.9566	$0.956^{+0.038}_{-0.039}$	(-0.4σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.626	$2.61^{+0.18}_{-0.18}$	(-0.2σ)	$f\sigma_8(0.15)$	0.4495	$0.452^{+0.035}_{-0.035}$	(-1.0σ)
H_0	66.82	$67.2^{+3.8}_{-3.6}$	$(+0.3\sigma)$	Age/Gyr	14.07	$13.98^{+0.96}_{-0.91}$	$(+0.3\sigma)$	$\sigma_8(0.15)$	0.7470	$0.748^{+0.032}_{-0.033}$	$(+0.1\sigma)$
Ω_{Λ}	0.6973	$0.695^{+0.032}_{-0.035}$	$(+1.0\sigma)$	z_*	1089.75	$1089.8^{+2.3}_{-2.2}$	(-0.9σ)	$f\sigma_8(0.38)$	0.4698	$0.471^{+0.030}_{-0.030}$	(-0.8σ)
Ω_{m}	0.3027	$0.305^{+0.035}_{-0.032}$	(-1.0σ)	r_*	147.6	$146.8^{+8.2}_{-7.8}$	$(+0.8\sigma)$	$\sigma_8(0.38)$	0.6631	$0.664^{+0.028}_{-0.028}$	$(+0.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.1352	$0.138^{+0.025}_{-0.022}$	(-1.2σ)	$100\theta_*$	1.0387	$1.041^{+0.030}_{-0.030}$	(-0.8σ)	$f\sigma_8(0.51)$	0.4694	$0.471^{+0.027}_{-0.027}$	(-0.7σ)
$\Omega_{\mathrm{m}} h^3$	0.0903	$0.093^{+0.020}_{-0.019}$	(-0.4σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.21	$14.1^{+1.1}_{-1.0}$	$(+0.8\sigma)$	$\sigma_8(0.51)$	0.6210	$0.622^{+0.026}_{-0.026}$	$(+0.3\sigma)$
σ_8	0.8074	$0.809^{+0.036}_{-0.036}$	(-0.0σ)	z_{drag}	1058.06	$1058.6^{+4.1}_{-4.2}$	(-0.6σ)	$f\sigma_8(0.61)$	0.4652	$0.466^{+0.025}_{-0.025}$	(-0.5σ)
S_8	0.811	$0.815^{+0.070}_{-0.067}$	(-1.0σ)	r_{drag}	150.5	$149.7^{+8.7}_{-8.2}$	$(+0.8\sigma)$	$\sigma_8(0.61)$	0.5911	$0.592^{+0.024}_{-0.025}$	$(+0.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4442	$0.447^{+0.038}_{-0.036}$	(-1.0σ)	k_{D}	0.1376	$0.1385^{+0.0081}_{-0.0077}$	(-0.9σ)	$f\sigma_8(2.33)$	0.2984	$0.299^{+0.012}_{-0.012}$	$(+0.5\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.5989	$0.601^{+0.037}_{-0.037}$	(-0.8σ)	$100\theta_{\mathrm{D}}$	0.16070	$0.1608^{+0.0041}_{-0.0039}$	(-0.2σ)	$\sigma_8(2.33)$	0.3081	$0.308^{+0.013}_{-0.013}$	$(+0.5\sigma)$
$\sigma_8/h^{0.5}$	0.9878	$0.987^{+0.039}_{-0.039}$	(-0.4σ)	z_{eq}	3286	3337^{+600}_{-500}	(-1.3σ)	$\chi^2_{\mathrm{lensing}}$	7.84	$9.9 (\nu: 2.4)$	
$r_{\mathrm{drag}} h$	100.58	$100.5^{+2.4}_{-2.4}$	$(+1.1\sigma)$	k_{eq}	0.00992	$0.0101^{+0.0017}_{-0.0015}$	(-1.9σ)	χ^2_{Aver15}	0.02	$0.9 (\nu: 0.8)$	
$\langle d^2 \rangle^{1/2}$	2.487	$2.48^{+0.10}_{-0.10}$	$(+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	0.831	$0.826^{+0.077}_{-0.074}$	$(+1.4\sigma)$	$\chi^2_{\mathrm{Cooke17}}$	0.01	$0.9 (\nu: 1.0)$	
z_{re}	7.719	$7.73^{+0.47}_{-0.44}$	$(+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4590	$0.456^{+0.039}_{-0.038}$	$(+1.5\sigma)$	$\chi^2_{6\mathrm{DF}}$	0.000	$0.058 (\nu: 0.0)$	
$10^9 A_{\mathrm{s}}$	2.203	$2.19^{+0.45}_{-0.43}$	$(+2.5\sigma)$	$H(0.15)$	71.90	$72.3^{+4.2}_{-4.0}$	$(+0.2\sigma)$	χ^2_{MGS}	1.75	$1.81 (\nu: 0.2)$	
$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.973	$1.96^{+0.40}_{-0.39}$	$(+3.6\sigma)$	$D_{\mathrm{M}}(0.15)$	649.4	646^{+37}_{-35}	(-0.3σ)	$\chi^2_{\mathrm{DR12BAO}}$	3.53	$4.4 (\nu: 1.3)$	
D_{40}	1325	1318^{+300}_{-300}	$(+3.7\sigma)$	$H(0.38)$	81.65	$82.2^{+5.1}_{-4.9}$	$(+0.0\sigma)$	χ^2_{prior}	0.03	$1.0 (\nu: 1.0)$	(-1.7σ)
D_{220}	6159	6121^{+2000}_{-2000}	$(+10.0\sigma)$	$D_{\mathrm{M}}(0.38)$	1551	1543^{+90}_{-86}	(-0.2σ)	χ^2_{BAO}	5.28	$6.3 (\nu: 1.4)$	
D_{810}	2685	2648^{+600}_{-600}	$(+7.8\sigma)$	$H(0.51)$	88.1	$88.8^{+5.7}_{-5.4}$	(-0.1σ)	χ^2_{Abund}	0.03	$1.9 (\nu: 1.8)$	

Best-fit $\chi^2_{\mathrm{eff}} = 13.18$; $\bar{\chi}^2_{\mathrm{eff}} = 19.03$; $R - 1 = 0.01158$
 χ^2_{eff} : Abund - Yp_Aver2015: 0.02 D_Cooke2017: 0.01 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.53 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.84

7.108 base_nnu_lensing_lenspriors_BAO_Cooke17_Aver15_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02194	$0.0220^{+0.0013}_{-0.0013} \quad (-0.2\sigma)$	D_{2000}	243	$243^{+50}_{-50} \quad (+5.7\sigma)$	$D_{\mathrm{M}}(0.61)$	2337	$2331^{+140}_{-130} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.1124	$0.114^{+0.020}_{-0.020} \quad (-1.6\sigma)$	$n_{\mathrm{s},0.002}$	0.9561	$0.956^{+0.037}_{-0.038} \quad (-0.3\sigma)$	$H(2.33)$	230.3	$231^{+17}_{-17} \quad (-1.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.0376	$1.039^{+0.025}_{-0.025} \quad (-3.9\sigma)$	Y_{P}	0.2433	$0.2435^{+0.0074}_{-0.0074} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	5871	$5853^{+370}_{-350} \quad (+0.4\sigma)$
N_{eff}	2.90	$2.92^{+0.53}_{-0.50} \quad (-0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2446	$0.2448^{+0.0074}_{-0.0075} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.4487	$0.450^{+0.030}_{-0.030} \quad (-1.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.100	$3.09^{+0.17}_{-0.17} \quad (+2.7\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.617	$2.61^{+0.18}_{-0.18} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	0.7476	$0.748^{+0.032}_{-0.033} \quad (+0.1\sigma)$
n_{s}	0.9561	$0.956^{+0.037}_{-0.038} \quad (-0.3\sigma)$	Age/Gyr	14.06	$14.01^{+0.90}_{-0.84} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	0.4693	$0.470^{+0.026}_{-0.027} \quad (-1.0\sigma)$
H_0	66.96	$67.2^{+3.8}_{-3.5} \quad (+0.3\sigma)$	z_*	1089.65	$1089.7^{+2.0}_{-1.9} \quad (-1.1\sigma)$	$\sigma_8(0.38)$	0.6638	$0.664^{+0.028}_{-0.029} \quad (+0.2\sigma)$
Ω_{Λ}	0.6989	$0.698^{+0.026}_{-0.027} \quad (+1.2\sigma)$	r_*	147.5	$147.1^{+7.8}_{-7.4} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	0.4692	$0.470^{+0.024}_{-0.025} \quad (-0.8\sigma)$
Ω_{m}	0.3011	$0.302^{+0.027}_{-0.026} \quad (-1.2\sigma)$	$100\theta_*$	1.0380	$1.039^{+0.025}_{-0.025} \quad (-3.1\sigma)$	$\sigma_8(0.51)$	0.6217	$0.622^{+0.026}_{-0.027} \quad (+0.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.1350	$0.137^{+0.022}_{-0.020} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.21	$14.2^{+1.0}_{-0.93} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	0.4651	$0.466^{+0.023}_{-0.024} \quad (-0.7\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.0904	$0.092^{+0.019}_{-0.017} \quad (-0.6\sigma)$	z_{drag}	1058.25	$1058.5^{+4.2}_{-4.1} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	0.5919	$0.592^{+0.024}_{-0.025} \quad (+0.4\sigma)$
σ_8	0.8079	$0.808^{+0.035}_{-0.037} \quad (-0.1\sigma)$	r_{drag}	150.4	$150.0^{+8.3}_{-7.8} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	0.2989	$0.299^{+0.012}_{-0.013} \quad (+0.5\sigma)$
S_8	0.809	$0.811^{+0.058}_{-0.058} \quad (-1.2\sigma)$	k_{D}	0.1377	$0.1382^{+0.0075}_{-0.0073} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	0.3086	$0.309^{+0.013}_{-0.013} \quad (+0.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4433	$0.444^{+0.032}_{-0.032} \quad (-1.2\sigma)$	$100\theta_{\mathrm{D}}$	0.16055	$0.1606^{+0.0035}_{-0.0035} \quad (-0.5\sigma)$	$\chi^2_{\mathrm{lensing}}$	7.78	$9.6 \quad (\nu: 1.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.5984	$0.599^{+0.033}_{-0.034} \quad (-0.9\sigma)$	z_{eq}	3273	$3303^{+500}_{-400} \quad (-1.8\sigma)$	χ^2_{Aver15}	0.01	$0.9 \quad (\nu: 0.8)$
$\sigma_8/h^{0.5}$	0.9873	$0.986^{+0.039}_{-0.039} \quad (-0.4\sigma)$	k_{eq}	0.00989	$0.00999^{+0.0014}_{-0.0013} \quad (-2.5\sigma)$	$\chi^2_{\mathrm{Cooke17}}$	0.00	$0.95 \quad (\nu: 1.0)$
$r_{\mathrm{drag}} h$	100.71	$100.7^{+2.2}_{-2.1} \quad (+1.1\sigma)$	$100\theta_{\mathrm{eq}}$	0.833	$0.831^{+0.063}_{-0.061} \quad (+1.8\sigma)$	χ^2_{JLA}	1034.74	$1035.14 \quad (\nu: 0.2)$
$\langle d^2 \rangle^{1/2}$	2.493	$2.488^{+0.097}_{-0.096} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4600	$0.459^{+0.032}_{-0.031} \quad (+1.8\sigma)$	$\chi^2_{6\mathrm{DF}}$	0.002	$0.047 \quad (\nu: 0.0)$
z_{re}	7.698	$7.71^{+0.40}_{-0.38} \quad (+0.4\sigma)$	$H(0.15)$	72.03	$72.3^{+4.1}_{-3.9} \quad (+0.2\sigma)$	χ^2_{MGS}	1.82	$1.87 \quad (\nu: 0.2)$
$10^9 A_{\mathrm{s}}$	2.220	$2.21^{+0.38}_{-0.37} \quad (+3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	648.2	$647^{+36}_{-35} \quad (-0.2\sigma)$	$\chi^2_{\mathrm{DR12BAO}}$	3.54	$4.4 \quad (\nu: 1.1)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.989	$1.98^{+0.34}_{-0.33} \quad (+4.5\sigma)$	$H(0.38)$	81.75	$82.1^{+4.8}_{-4.6} \quad (-0.0\sigma)$	χ^2_{prior}	0.04	$0.96 \quad (\nu: 0.9) \quad (-1.7\sigma)$
D_{40}	1338	$1331^{+200}_{-200} \quad (+4.3\sigma)$	$D_{\mathrm{M}}(0.38)$	1548	$1544^{+87}_{-84} \quad (-0.1\sigma)$	χ^2_{BAO}	5.36	$6.3 \quad (\nu: 1.2)$
D_{220}	6230	$6202^{+1000}_{-1000} \quad (+11.9\sigma)$	$H(0.51)$	88.2	$88.6^{+5.3}_{-5.2} \quad (-0.2\sigma)$	χ^2_{Abund}	0.01	$1.8 \quad (\nu: 1.8)$
D_{810}	2704	$2680^{+500}_{-500} \quad (+10.1\sigma)$	$D_{\mathrm{M}}(0.51)$	2008	$2002^{+120}_{-110} \quad (-0.1\sigma)$			
D_{1420}	864	$854^{+200}_{-200} \quad (+7.6\sigma)$	$H(0.61)$	93.6	$94.0^{+5.7}_{-5.7} \quad (-0.3\sigma)$			

Best-fit $\chi^2_{\mathrm{eff}} = 1047.92$; $\bar{\chi}^2_{\mathrm{eff}} = 1053.81$; $R - 1 = 0.01510$
 χ^2_{eff} : Abund - Yp_Aver2015: 0.01 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.54 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd:
7.78 SN - JLA Pantheon18: 1034.74

7.109 base_nnu_lensing_lenspriors_BAO_Cooke17_Aver15_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.02189	$0.0220^{+0.0014}_{-0.0013} \quad (-0.3\sigma)$	D_{1420}	845	$843^{+88}_{-87} \quad (+5.4\sigma)$	$D_{\text{M}}(0.51)$	2003	$1999^{+96}_{-95} \quad (-0.1\sigma)$
$\Omega_{\text{c}}h^2$	0.1143	$0.115^{+0.012}_{-0.011} \quad (-1.2\sigma)$	D_{2000}	238.2	$237^{+30}_{-30} \quad (+3.3\sigma)$	$H(0.61)$	94.01	$94.3^{+4.5}_{-4.1} \quad (-0.2\sigma)$
$100\theta_{\text{MC}}$	1.04091	$1.0409^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	0.9551	$0.954^{+0.037}_{-0.037} \quad (-0.5\sigma)$	$D_{\text{M}}(0.61)$	2332	$2327^{+110}_{-110} \quad (-0.1\sigma)$
N_{eff}	2.88	$2.91^{+0.56}_{-0.50} \quad (-0.3\sigma)$	Y_{P}	0.2429	$0.2434^{+0.0078}_{-0.0075} \quad (-0.3\sigma)$	$H(2.33)$	231.8	$232^{+11}_{-9.8} \quad (-1.0\sigma)$
$\ln(10^{10}A_{\text{s}})$	3.077	$3.075^{+0.070}_{-0.074} \quad (+1.8\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	0.2442	$0.2447^{+0.0079}_{-0.0075} \quad (-0.3\sigma)$	$D_{\text{M}}(2.33)$	5847	$5832^{+260}_{-270} \quad (+0.2\sigma)$
n_{s}	0.9551	$0.954^{+0.037}_{-0.037} \quad (-0.5\sigma)$	$10^5\text{D}/\text{H}$	2.618	$2.62^{+0.18}_{-0.18} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	0.4518	$0.452^{+0.019}_{-0.019} \quad (-1.0\sigma)$
H_0	67.02	$67.2^{+3.5}_{-3.3} \quad (+0.3\sigma)$	Age/Gyr	14.00	$13.96^{+0.62}_{-0.63} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	0.7483	$0.749^{+0.029}_{-0.029} \quad (+0.1\sigma)$
Ω_{Λ}	0.6952	$0.695^{+0.017}_{-0.018} \quad (+1.0\sigma)$	z_*	1089.86	$1089.9^{+1.3}_{-1.2} \quad (-0.8\sigma)$	$f\sigma_8(0.38)$	0.4716	$0.472^{+0.019}_{-0.018} \quad (-0.8\sigma)$
Ω_{m}	0.3048	$0.305^{+0.018}_{-0.017} \quad (-1.0\sigma)$	r_*	147.2	$146.8^{+6.4}_{-6.6} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	0.6640	$0.664^{+0.027}_{-0.026} \quad (+0.3\sigma)$
$\Omega_{\text{m}}h^2$	0.1369	$0.138^{+0.013}_{-0.011} \quad (-1.2\sigma)$	$100\theta_*$	1.04127	$1.0412^{+0.0013}_{-0.0013} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	0.4710	$0.471^{+0.018}_{-0.018} \quad (-0.6\sigma)$
$\Omega_{\text{m}}h^3$	0.0917	$0.093^{+0.013}_{-0.012} \quad (-0.4\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.13	$14.10^{+0.61}_{-0.63} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	0.6217	$0.622^{+0.025}_{-0.025} \quad (+0.3\sigma)$
σ_8	0.8090	$0.809^{+0.032}_{-0.031} \quad (-0.0\sigma)$	z_{drag}	1058.25	$1058.5^{+4.2}_{-4.1} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	0.4666	$0.467^{+0.018}_{-0.018} \quad (-0.5\sigma)$
S_8	0.8154	$0.816^{+0.036}_{-0.035} \quad (-1.0\sigma)$	r_{drag}	150.0	$149.6^{+6.9}_{-7.1} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	0.5918	$0.592^{+0.024}_{-0.024} \quad (+0.4\sigma)$
$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4466	$0.447^{+0.020}_{-0.019} \quad (-1.0\sigma)$	k_{D}	0.1381	$0.1385^{+0.0063}_{-0.0058} \quad (-0.9\sigma)$	$f\sigma_8(2.33)$	0.2987	$0.299^{+0.012}_{-0.012} \quad (+0.5\sigma)$
$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6011	$0.601^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$100\theta_{\text{D}}$	0.16097	$0.1610^{+0.0014}_{-0.0014} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	0.3082	$0.308^{+0.013}_{-0.013} \quad (+0.5\sigma)$
$\sigma_8/h^{0.5}$	0.9883	$0.987^{+0.038}_{-0.039} \quad (-0.3\sigma)$	z_{eq}	3330	$3336^{+96}_{-91} \quad (-1.3\sigma)$	χ^2_{lensing}	7.99	$9.2 \quad (\nu: 1.2)$
$r_{\text{drag}}h$	100.55	$100.5^{+2.3}_{-2.2} \quad (+1.1\sigma)$	k_{eq}	0.01005	$0.01009^{+0.00058}_{-0.00053} \quad (-1.9\sigma)$	χ^2_{Aver15}	0.03	$0.95 \quad (\nu: 0.9)$
$\langle d^2 \rangle^{1/2}$	2.482	$2.483^{+0.079}_{-0.079} \quad (+0.6\sigma)$	$100\theta_{\text{eq}}$	0.8249	$0.824^{+0.015}_{-0.015} \quad (+1.2\sigma)$	χ^2_{Cooke17}	0.00	$0.98 \quad (\nu: 1.0)$
z_{re}	7.747	$7.74^{+0.22}_{-0.22} \quad (+0.4\sigma)$	$100\theta_{\text{s,eq}}$	0.4558	$0.4553^{+0.0083}_{-0.0083} \quad (+1.3\sigma)$	$\chi^2_{6\text{DF}}$	0.000	$0.055 \quad (\nu: 0.0)$
10^9A_{s}	2.168	$2.17^{+0.15}_{-0.15} \quad (+1.9\sigma)$	$H(0.15)$	72.14	$72.4^{+3.6}_{-3.4} \quad (+0.2\sigma)$	χ^2_{MGS}	1.75	$1.80 \quad (\nu: 0.2)$
$10^9A_{\text{s}}e^{-2\tau}$	1.943	$1.94^{+0.14}_{-0.14} \quad (+2.7\sigma)$	$D_{\text{M}}(0.15)$	647.4	$646^{+32}_{-32} \quad (-0.3\sigma)$	χ^2_{DR12BAO}	3.37	$4.3 \quad (\nu: 0.9)$
D_{40}	1305	$1306^{+120}_{-110} \quad (+3.2\sigma)$	$H(0.38)$	81.98	$82.2^{+4.0}_{-3.7} \quad (+0.0\sigma)$	χ^2_{prior}	0.06	$2.0 \quad (\nu: 2.0) \quad (-1.5\sigma)$
D_{220}	6027	$6025^{+480}_{-470} \quad (+7.6\sigma)$	$D_{\text{M}}(0.38)$	1546	$1542^{+75}_{-74} \quad (-0.2\sigma)$	χ^2_{BAO}	5.12	$6.1 \quad (\nu: 1.0)$
D_{810}	2639	$2632^{+230}_{-230} \quad (+6.8\sigma)$	$H(0.51)$	88.53	$88.8^{+4.2}_{-3.9} \quad (-0.1\sigma)$	χ^2_{Abund}	0.03	$1.9 \quad (\nu: 1.9)$

Best-fit $\chi^2_{\text{eff}} = 13.20$; $\bar{\chi}^2_{\text{eff}} = 19.27$; $R - 1 = 0.00810$
 χ^2_{eff} : Abund - Yp_Aver2015: 0.03 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.37 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged:
7.99

7.110 base_nnu_lensing_lenspriors_BAO_Cooke17_Aver15_theta_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02187	$0.0220^{+0.0014}_{-0.0013} \quad (-0.3\sigma)$	D_{2000}	240.0	$238^{+30}_{-30} \quad (+3.5\sigma)$	$D_M(0.61)$	2334	$2324^{+110}_{-110} \quad (-0.1\sigma)$
$\Omega_c h^2$	0.1139	$0.115^{+0.012}_{-0.011} \quad (-1.2\sigma)$	$n_{s,0.002}$	0.9557	$0.954^{+0.037}_{-0.037} \quad (-0.5\sigma)$	$H(2.33)$	231.4	$232^{+11}_{-9.8} \quad (-1.0\sigma)$
$100\theta_{MC}$	1.04091	$1.0409^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	Y_P	0.2427	$0.2434^{+0.0077}_{-0.0076} \quad (-0.3\sigma)$	$D_M(2.33)$	5853	$5829^{+260}_{-260} \quad (+0.2\sigma)$
N_{eff}	2.86	$2.92^{+0.55}_{-0.51} \quad (-0.3\sigma)$	Y_P^{BBN}	0.2440	$0.2448^{+0.0078}_{-0.0076} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.4519	$0.452^{+0.019}_{-0.019} \quad (-1.0\sigma)$
$\ln(10^{10} A_s)$	3.082	$3.077^{+0.068}_{-0.072} \quad (+1.9\sigma)$	$10^5 D/H$	2.616	$2.61^{+0.18}_{-0.18} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	0.7495	$0.749^{+0.030}_{-0.029} \quad (+0.1\sigma)$
n_s	0.9557	$0.954^{+0.037}_{-0.037} \quad (-0.5\sigma)$	Age/Gyr	14.01	$13.96^{+0.63}_{-0.63} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	0.4719	$0.472^{+0.019}_{-0.018} \quad (-0.8\sigma)$
H_0	67.00	$67.3^{+3.4}_{-3.3} \quad (+0.3\sigma)$	z_*	1089.83	$1089.8^{+1.2}_{-1.2} \quad (-0.8\sigma)$	$\sigma_8(0.38)$	0.6652	$0.665^{+0.027}_{-0.026} \quad (+0.3\sigma)$
Ω_Λ	0.6961	$0.696^{+0.016}_{-0.016} \quad (+1.1\sigma)$	r_*	147.4	$146.8^{+6.4}_{-6.5} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	0.4714	$0.471^{+0.018}_{-0.018} \quad (-0.6\sigma)$
Ω_m	0.3039	$0.304^{+0.016}_{-0.016} \quad (-1.1\sigma)$	$100\theta_*$	1.04127	$1.0412^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	0.6229	$0.622^{+0.025}_{-0.024} \quad (+0.4\sigma)$
$\Omega_m h^2$	0.1364	$0.138^{+0.013}_{-0.011} \quad (-1.2\sigma)$	$D_M(z_*)/\text{Gpc}$	14.15	$14.09^{+0.61}_{-0.62} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	0.4671	$0.467^{+0.018}_{-0.017} \quad (-0.5\sigma)$
$\Omega_m h^3$	0.0914	$0.093^{+0.013}_{-0.012} \quad (-0.4\sigma)$	z_{drag}	1058.18	$1058.6^{+4.2}_{-4.2} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	0.5929	$0.592^{+0.024}_{-0.023} \quad (+0.4\sigma)$
σ_8	0.8102	$0.810^{+0.032}_{-0.031} \quad (+0.0\sigma)$	r_{drag}	150.3	$149.6^{+6.9}_{-7.0} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	0.2993	$0.299^{+0.012}_{-0.012} \quad (+0.5\sigma)$
S_8	0.8155	$0.815^{+0.035}_{-0.034} \quad (-1.0\sigma)$	k_D	0.1379	$0.1385^{+0.0063}_{-0.0059} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	0.3089	$0.309^{+0.013}_{-0.013} \quad (+0.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4467	$0.447^{+0.019}_{-0.019} \quad (-1.0\sigma)$	$100\theta_D$	0.16095	$0.1610^{+0.0014}_{-0.0014} \quad (-0.0\sigma)$	χ^2_{lensing}	7.96	9.2 (ν : 1.2)
$\sigma_8 \Omega_m^{0.25}$	0.6016	$0.601^{+0.024}_{-0.023} \quad (-0.8\sigma)$	z_{eq}	3326	$3333^{+96}_{-89} \quad (-1.4\sigma)$	χ^2_{Aver15}	0.05	0.9 (ν : 0.9)
$\sigma_8/h^{0.5}$	0.9899	$0.987^{+0.038}_{-0.039} \quad (-0.4\sigma)$	k_{eq}	0.01003	$0.01009^{+0.00057}_{-0.00053} \quad (-2.0\sigma)$	χ^2_{Cooke17}	0.00	0.98 (ν : 1.0)
$r_{\text{drag}} h$	100.66	$100.6^{+2.1}_{-2.1} \quad (+1.1\sigma)$	$100\theta_{\text{eq}}$	0.8257	$0.825^{+0.014}_{-0.015} \quad (+1.3\sigma)$	χ^2_{JLA}	1034.786	1034.93 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.485	$2.484^{+0.082}_{-0.079} \quad (+0.6\sigma)$	$100\theta_{s,\text{eq}}$	0.4562	$0.4557^{+0.0080}_{-0.0082} \quad (+1.3\sigma)$	$\chi^2_{6\text{DF}}$	0.001	0.049 (ν : 0.0)
z_{re}	7.741	$7.74^{+0.22}_{-0.21} \quad (+0.4\sigma)$	$H(0.15)$	72.11	$72.4^{+3.6}_{-3.4} \quad (+0.2\sigma)$	χ^2_{MGS}	1.82	1.86 (ν : 0.2)
$10^9 A_s$	2.180	$2.17^{+0.15}_{-0.15} \quad (+2.0\sigma)$	$D_M(0.15)$	647.6	$645^{+32}_{-31} \quad (-0.3\sigma)$	χ^2_{DR12BAO}	3.34	4.1 (ν : 0.6)
$10^9 A_s e^{-2\tau}$	1.953	$1.94^{+0.14}_{-0.14} \quad (+2.8\sigma)$	$H(0.38)$	81.92	$82.3^{+3.9}_{-3.8} \quad (+0.1\sigma)$	χ^2_{prior}	0.05	2.0 (ν : 2.0) (-1.5σ)
D_{40}	1311	$1308^{+110}_{-110} \quad (+3.3\sigma)$	$D_M(0.38)$	1546	$1540^{+75}_{-73} \quad (-0.2\sigma)$	χ^2_{BAO}	5.16	6.0 (ν : 0.8)
D_{220}	6063	$6038^{+460}_{-450} \quad (+7.9\sigma)$	$H(0.51)$	88.45	$88.9^{+4.2}_{-4.0} \quad (-0.1\sigma)$	χ^2_{Abund}	0.05	1.9 (ν : 1.9)
D_{810}	2656	$2637^{+230}_{-230} \quad (+7.1\sigma)$	$D_M(0.51)$	2005	$1997^{+97}_{-93} \quad (-0.2\sigma)$			
D_{1420}	851	$844^{+86}_{-85} \quad (+5.6\sigma)$	$H(0.61)$	93.91	$94.3^{+4.4}_{-4.2} \quad (-0.1\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 1048.00$; $\bar{\chi}^2_{\text{eff}} = 1054.11$; $R - 1 = 0.00939$
 χ^2_{eff} : Abund - Yp_Aver2015: 0.05 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.33 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd:
7.96 SN - JLA Pantheon18: 1034.79

7.111 base_nnu_BAO_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.02202	$0.0221^{+0.0015}_{-0.0014} (+0.0\sigma)$	r_*	134.9	$131^{+20}_{-20} (-5.7\sigma)$	$H(0.51)$	98.2	$103^{+20}_{-20} (+6.4\sigma)$
$\Omega_{\text{c}}h^2$	0.165	$0.192^{+0.10}_{-0.087} (+18.2\sigma)$	$100\theta_*$	1.096	$1.113^{+0.072}_{-0.070} (+100.9\sigma)$	$D_{\text{M}}(0.51)$	1844	$1787^{+200}_{-200} (-3.8\sigma)$
$100\theta_{\text{MC}}$	1.095	$1.113^{+0.072}_{-0.071} (+123.9\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	12.32	$11.8^{+2.3}_{-2.3} (-9.2\sigma)$	$H(0.61)$	105.0	$110^{+20}_{-20} (+7.2\sigma)$
N_{eff}	2.94	$2.96^{+0.57}_{-0.55} (-0.2\sigma)$	z_{drag}	1062.1	$1063.7^{+7.3}_{-7.3} (+4.1\sigma)$	$D_{\text{M}}(0.61)$	2139	$2071^{+300}_{-300} (-4.0\sigma)$
H_0	71.2	$73^{+8}_{-8} (+2.9\sigma)$	r_{drag}	137.5	$133^{+20}_{-20} (-5.6\sigma)$	$H(2.33)$	269	$286^{+70}_{-60} (+13.9\sigma)$
Ω_{Λ}	0.630	$0.604^{+0.093}_{-0.11} (-4.0\sigma)$	k_{D}	0.1516	$0.157^{+0.024}_{-0.021} (+9.3\sigma)$	$D_{\text{M}}(2.33)$	5213	$5009^{+900}_{-900} (-6.4\sigma)$
Ω_{m}	0.370	$0.396^{+0.11}_{-0.093} (+4.0\sigma)$	$100\theta_{\text{D}}$	0.1682	$0.171^{+0.011}_{-0.010} (+15.1\sigma)$	χ^2_{Aver15}	0.00	$1.0 (\nu: 1.0)$
$\Omega_{\text{m}}h^2$	0.187	$0.215^{+0.10}_{-0.087} (+17.6\sigma)$	z_{eq}	4527	$5183^{+2000}_{-2000} (+27.8\sigma)$	χ^2_{Cooke17}	0.00	$1.1 (\nu: 1.1)$
$\Omega_{\text{m}}h^3$	0.133	$0.159^{+0.094}_{-0.078} (+11.7\sigma)$	k_{eq}	0.0137	$0.0157^{+0.0074}_{-0.0063} (+33.5\sigma)$	$\chi^2_{6\text{DF}}$	0.18	$0.44 (\nu: 0.1)$
$r_{\text{drag}}h$	97.91	$97.1^{+4.1}_{-4.1} (-0.5\sigma)$	$100\theta_{\text{eq}}$	0.693	$0.66^{+0.16}_{-0.15} (-12.8\sigma)$	χ^2_{MGS}	0.72	$0.69 (\nu: 0.2)$
Y_{P}	0.2438	$0.2440^{+0.0079}_{-0.0082} (-0.2\sigma)$	$100\theta_{\text{s,eq}}$	0.387	$0.368^{+0.083}_{-0.083} (-13.2\sigma)$	χ^2_{DR12BAO}	2.10	$4.0 (\nu: 1.7)$
$Y_{\text{P}}^{\text{BBN}}$	0.2452	$0.2453^{+0.0079}_{-0.0082} (-0.2\sigma)$	$H(0.15)$	77.8	$80^{+10}_{-9} (+3.8\sigma)$	χ^2_{BAO}	3.00	$5.1 (\nu: 2.1)$
$10^5\text{D}/\text{H}$	2.614	$2.61^{+0.19}_{-0.19} (-0.2\sigma)$	$D_{\text{M}}(0.15)$	605	$589^{+70}_{-70} (-2.9\sigma)$	χ^2_{Abund}	0.01	$2.1 (\nu: 2.2)$
Age/Gyr	12.47	$12.0^{+2.0}_{-2.1} (-6.4\sigma)$	$H(0.38)$	90.1	$94^{+20}_{-10} (+5.5\sigma)$			
z_*	1093.9	$1095.7^{+7.2}_{-6.1} (+11.2\sigma)$	$D_{\text{M}}(0.38)$	1430	$1387^{+200}_{-200} (-3.5\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 3.01$; $\bar{\chi}^2_{\text{eff}} = 7.19$; $R - 1 = 0.02751$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.18 MGS: 0.72 DR12BAO: 2.10

7.112 base_nnu_BAO_Cooke17_Aver15_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.02197	$0.0221^{+0.0014}_{-0.0013} (+0.1\sigma)$	r_*	144.8	$144^{+10}_{-10} (-0.4\sigma)$	$H(0.51)$	90.3	$91.1^{+7.8}_{-7.4} (+1.0\sigma)$
$\Omega_{\text{c}}h^2$	0.1218	$0.125^{+0.034}_{-0.031} (+1.3\sigma)$	$100\theta_*$	1.0496	$1.052^{+0.038}_{-0.038} (+15.0\sigma)$	$D_{\text{M}}(0.51)$	1970	$1956^{+150}_{-150} (-0.9\sigma)$
$100\theta_{\text{MC}}$	1.0494	$1.052^{+0.038}_{-0.038} (+18.4\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.80	$13.7^{+1.4}_{-1.3} (-1.0\sigma)$	$H(0.61)$	95.9	$96.9^{+8.6}_{-8.1} (+1.0\sigma)$
N_{eff}	2.94	$2.98^{+0.55}_{-0.54} (-0.1\sigma)$	z_{drag}	1059.06	$1059.6^{+5.0}_{-4.7} (+0.4\sigma)$	$D_{\text{M}}(0.61)$	2292	$2276^{+170}_{-170} (-0.9\sigma)$
H_0	67.96	$68.5^{+5.0}_{-4.4} (+0.9\sigma)$	r_{drag}	147.6	$147^{+11}_{-11} (-0.4\sigma)$	$H(2.33)$	237.8	$240^{+30}_{-20} (+1.2\sigma)$
Ω_{Λ}	0.6874	$0.685^{+0.038}_{-0.040} (+0.5\sigma)$	k_{D}	0.1404	$0.142^{+0.011}_{-0.0098} (+0.7\sigma)$	$D_{\text{M}}(2.33)$	5726	$5682^{+500}_{-500} (-1.0\sigma)$
Ω_{m}	0.3126	$0.315^{+0.040}_{-0.038} (-0.5\sigma)$	$100\theta_{\text{D}}$	0.1622	$0.1624^{+0.0052}_{-0.0051} (+2.2\sigma)$	χ^2_{Aver15}	0.00	$1.0 (\nu: 1.0)$
$\Omega_{\text{m}}h^2$	0.1444	$0.148^{+0.034}_{-0.031} (+1.3\sigma)$	z_{eq}	3486	$3555^{+700}_{-700} (+2.1\sigma)$	χ^2_{Cooke17}	0.00	$1.1 (\nu: 1.1)$
$\Omega_{\text{m}}h^3$	0.0981	$0.102^{+0.030}_{-0.027} (+1.2\sigma)$	k_{eq}	0.01056	$0.0108^{+0.0023}_{-0.0022} (+2.5\sigma)$	χ^2_{JLA}	1035.11	$1036.0 (\nu: 1.4)$
$r_{\text{drag}}h$	100.32	$100.3^{+2.3}_{-2.2} (+1.0\sigma)$	$100\theta_{\text{eq}}$	0.804	$0.799^{+0.093}_{-0.088} (-0.9\sigma)$	$\chi^2_{6\text{DF}}$	0.000	$0.052 (\nu: 0.0)$
Y_{P}	0.2438	$0.2443^{+0.0077}_{-0.0079} (-0.1\sigma)$	$100\theta_{\text{s,eq}}$	0.4450	$0.442^{+0.048}_{-0.046} (-0.9\sigma)$	χ^2_{MGS}	1.68	$1.76 (\nu: 0.2)$
$Y_{\text{P}}^{\text{BBN}}$	0.2451	$0.2456^{+0.0077}_{-0.0079} (-0.1\sigma)$	$H(0.15)$	73.3	$73.9^{+5.5}_{-5.2} (+0.9\sigma)$	χ^2_{DR12BAO}	2.97	$4.0 (\nu: 1.1)$
$10^5\text{D}/\text{H}$	2.623	$2.61^{+0.19}_{-0.19} (-0.2\sigma)$	$D_{\text{M}}(0.15)$	637.8	$633^{+44}_{-45} (-0.8\sigma)$	χ^2_{BAO}	4.65	$5.8 (\nu: 1.6)$
Age/Gyr	13.71	$13.6^{+1.2}_{-1.2} (-1.0\sigma)$	$H(0.38)$	83.5	$84.3^{+7.1}_{-6.3} (+1.0\sigma)$	χ^2_{Abund}	0.01	$2.1 (\nu: 2.1)$
z_*	1090.48	$1090.6^{+3.0}_{-2.7} (+0.7\sigma)$	$D_{\text{M}}(0.38)$	1521	$1510^{+110}_{-110} (-0.9\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 1039.77$; $\bar{\chi}^2_{\text{eff}} = 1043.87$; $R - 1 = 0.00775$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 2.97 SN - JLA Pantheon18: 1035.11

7.113 base_nnu_BAO_Cooke17_Aver15_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02192	$0.0220^{+0.0014}_{-0.0013}$	(-0.2σ)	r_*	146.8	$146.5^{+6.8}_{-6.5}$	$(+0.6\sigma)$	$H(0.51)$	88.69	$89.0^{+4.3}_{-4.2}$	(-0.0σ)
$\Omega_{\text{c}}h^2$	0.1150	$0.116^{+0.012}_{-0.011}$	(-1.1σ)	$100\theta_*$	1.04123	$1.0412^{+0.0013}_{-0.0013}$	$(+0.1\sigma)$	$D_{\text{M}}(0.51)$	2000	1995^{+100}_{-98}	(-0.2σ)
$100\theta_{\text{MC}}$	1.04090	$1.0409^{+0.0012}_{-0.0012}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.10	$14.07^{+0.65}_{-0.62}$	$(+0.6\sigma)$	$H(0.61)$	94.19	$94.5^{+4.5}_{-4.4}$	(-0.1σ)
N_{eff}	2.91	$2.94^{+0.57}_{-0.54}$	(-0.2σ)	z_{drag}	1058.41	$1058.7^{+4.3}_{-4.1}$	(-0.5σ)	$D_{\text{M}}(0.61)$	2328	2323^{+120}_{-110}	(-0.2σ)
H_0	67.11	$67.3^{+3.6}_{-3.5}$	$(+0.3\sigma)$	r_{drag}	149.7	$149.3^{+7.3}_{-7.0}$	$(+0.6\sigma)$	$H(2.33)$	232.3	233^{+11}_{-10}	(-0.9σ)
Ω_{Λ}	0.6945	$0.694^{+0.018}_{-0.018}$	$(+1.0\sigma)$	k_{D}	0.1384	$0.1388^{+0.0063}_{-0.0060}$	(-0.8σ)	$D_{\text{M}}(2.33)$	5835	5821^{+280}_{-260}	$(+0.2\sigma)$
Ω_{m}	0.3055	$0.306^{+0.018}_{-0.018}$	(-1.0σ)	$100\theta_{\text{D}}$	0.16101	$0.1610^{+0.0014}_{-0.0015}$	$(+0.0\sigma)$	χ^2_{Aver15}	0.00	$1.0 (\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.1376	$0.138^{+0.013}_{-0.012}$	(-1.0σ)	z_{eq}	3336	3341^{+94}_{-95}	(-1.2σ)	χ^2_{Cooke17}	0.00	$1.0 (\nu: 1.0)$	
$\Omega_{\text{m}}h^3$	0.0923	$0.093^{+0.013}_{-0.012}$	(-0.3σ)	k_{eq}	0.01008	$0.01012^{+0.00056}_{-0.00055}$	(-1.7σ)	$\chi^2_{6\text{DF}}$	0.000	$0.059 (\nu: 0.0)$	
$r_{\text{drag}}h$	100.44	$100.4^{+2.4}_{-2.3}$	$(+1.0\sigma)$	$100\theta_{\text{eq}}$	0.8240	$0.823^{+0.016}_{-0.015}$	$(+1.2\sigma)$	χ^2_{MGS}	1.68	$1.75 (\nu: 0.3)$	
Y_{P}	0.2433	$0.2437^{+0.0079}_{-0.0080}$	(-0.2σ)	$100\theta_{\text{s,eq}}$	0.4553	$0.4550^{+0.0087}_{-0.0081}$	$(+1.2\sigma)$	χ^2_{DR12BAO}	3.43	$4.4 (\nu: 1.1)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2446	$0.2450^{+0.0080}_{-0.0080}$	(-0.2σ)	$H(0.15)$	72.25	$72.5^{+3.8}_{-3.6}$	$(+0.3\sigma)$	χ^2_{prior}	0.00	$0.98 (\nu: 1.0)$	(-1.7σ)
$10^5\text{D}/\text{H}$	2.621	$2.62^{+0.18}_{-0.18}$	(-0.1σ)	$D_{\text{M}}(0.15)$	646.5	645^{+34}_{-33}	(-0.3σ)	χ^2_{BAO}	5.11	$6.2 (\nu: 1.1)$	
Age/Gyr	13.97	$13.94^{+0.67}_{-0.63}$	$(+0.2\sigma)$	$H(0.38)$	82.13	$82.4^{+4.0}_{-3.9}$	$(+0.1\sigma)$	χ^2_{Abund}	0.01	$2.0 (\nu: 2.0)$	
z_*	1089.91	$1089.9^{+1.2}_{-1.3}$	(-0.7σ)	$D_{\text{M}}(0.38)$	1543	1540^{+80}_{-76}	(-0.2σ)				

Best-fit $\chi^2_{\text{eff}} = 5.12$; $\bar{\chi}^2_{\text{eff}} = 9.22$; $R - 1 = 0.01015$

χ^2_{eff} : Abund - Yp_Aver2015: 0.01 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.43

7.114 base_nnu_BAO_Cooke17_Aver15_Pantheon18_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02195	$0.0220^{+0.0014}_{-0.0013}$	(-0.1σ)	r_*	146.7	$146.4^{+6.6}_{-6.5}$	$(+0.6\sigma)$	$H(0.51)$	88.82	$89.1^{+4.2}_{-4.0}$	$(+0.0\sigma)$
$\Omega_{\text{c}}h^2$	0.1152	$0.116^{+0.012}_{-0.011}$	(-1.1σ)	$100\theta_*$	1.04125	$1.0412^{+0.0012}_{-0.0013}$	$(+0.1\sigma)$	$D_{\text{M}}(0.51)$	1997	1992^{+97}_{-93}	(-0.3σ)
$100\theta_{\text{MC}}$	1.04093	$1.0409^{+0.0011}_{-0.0012}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.09	$14.06^{+0.63}_{-0.62}$	$(+0.6\sigma)$	$H(0.61)$	94.32	$94.6^{+4.4}_{-4.2}$	(-0.0σ)
N_{eff}	2.92	$2.95^{+0.55}_{-0.52}$	(-0.2σ)	z_{drag}	1058.48	$1058.8^{+4.1}_{-4.0}$	(-0.4σ)	$D_{\text{M}}(0.61)$	2324	2319^{+110}_{-110}	(-0.2σ)
H_0	67.24	$67.4^{+3.4}_{-3.3}$	$(+0.4\sigma)$	r_{drag}	149.5	$149.2^{+7.1}_{-6.9}$	$(+0.6\sigma)$	$H(2.33)$	232.5	233^{+11}_{-10}	(-0.9σ)
Ω_{Λ}	0.6954	$0.696^{+0.016}_{-0.016}$	$(+1.1\sigma)$	k_{D}	0.1385	$0.1389^{+0.0062}_{-0.0059}$	(-0.7σ)	$D_{\text{M}}(2.33)$	5828	5816^{+260}_{-260}	$(+0.1\sigma)$
Ω_{m}	0.3046	$0.304^{+0.016}_{-0.016}$	(-1.1σ)	$100\theta_{\text{D}}$	0.16103	$0.1610^{+0.0014}_{-0.0014}$	$(+0.0\sigma)$	χ^2_{Aver15}	0.00	$0.96 (\nu: 0.9)$	
$\Omega_{\text{m}}h^2$	0.1378	$0.138^{+0.013}_{-0.012}$	(-1.1σ)	z_{eq}	3333	3336^{+91}_{-88}	(-1.3σ)	χ^2_{Cooke17}	0.00	$0.98 (\nu: 1.0)$	
$\Omega_{\text{m}}h^3$	0.0926	$0.093^{+0.013}_{-0.012}$	(-0.3σ)	k_{eq}	0.01009	$0.01011^{+0.00057}_{-0.00054}$	(-1.8σ)	χ^2_{JLA}	1034.802	$1034.93 (\nu: 0.0)$	
$r_{\text{drag}}h$	100.55	$100.6^{+2.2}_{-2.0}$	$(+1.1\sigma)$	$100\theta_{\text{eq}}$	0.8245	$0.824^{+0.014}_{-0.014}$	$(+1.2\sigma)$	$\chi^2_{6\text{DF}}$	0.000	$0.049 (\nu: 0.0)$	
Y_{P}	0.2435	$0.2438^{+0.0077}_{-0.0077}$	(-0.2σ)	$100\theta_{\text{s,eq}}$	0.4556	$0.4554^{+0.0079}_{-0.0079}$	$(+1.3\sigma)$	χ^2_{MGS}	1.75	$1.84 (\nu: 0.2)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2448	$0.2451^{+0.0078}_{-0.0077}$	(-0.2σ)	$H(0.15)$	72.39	$72.6^{+3.6}_{-3.5}$	$(+0.3\sigma)$	χ^2_{DR12BAO}	3.38	$4.1 (\nu: 0.6)$	
$10^5\text{D}/\text{H}$	2.622	$2.61^{+0.18}_{-0.18}$	(-0.2σ)	$D_{\text{M}}(0.15)$	645.2	644^{+33}_{-31}	(-0.4σ)	χ^2_{prior}	0.00	$0.96 (\nu: 0.9)$	(-1.7σ)
Age/Gyr	13.95	$13.93^{+0.63}_{-0.62}$	$(+0.1\sigma)$	$H(0.38)$	82.25	$82.5^{+3.9}_{-3.8}$	$(+0.1\sigma)$	χ^2_{BAO}	5.13	$6.0 (\nu: 0.8)$	
z_*	1089.90	$1089.9^{+1.2}_{-1.3}$	(-0.8σ)	$D_{\text{M}}(0.38)$	1540	1537^{+76}_{-72}	(-0.3σ)	χ^2_{Abund}	0.00	$1.9 (\nu: 1.9)$	

Best-fit $\chi^2_{\text{eff}} = 1039.94$; $\bar{\chi}^2_{\text{eff}} = 1043.87$; $R - 1 = 0.00476$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.38 SN - JLA Pantheon18: 1034.80

7.115 base_nnu_BAO_Cooke17Marc_Aver15

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02179	$0.0218^{+0.0011}_{-0.0011}$	(-0.7σ)	r_*	134.4	131^{+20}_{-20}	(-5.4σ)	$H(0.51)$	98.8	102^{+20}_{-20}	$(+6.1\sigma)$
$\Omega_{\text{c}}h^2$	0.168	$0.188^{+0.096}_{-0.084}$	$(+17.1\sigma)$	$100\theta_*$	1.099	$1.110^{+0.071}_{-0.075}$	$(+96.4\sigma)$	$D_{\text{M}}(0.51)$	1837	1798^{+200}_{-200}	(-3.6σ)
$100\theta_{\text{MC}}$	1.099	$1.110^{+0.071}_{-0.075}$	$(+118.3\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	12.23	$11.9^{+2.4}_{-2.2}$	(-8.7σ)	$H(0.61)$	105.6	109^{+20}_{-20}	$(+6.8\sigma)$
N_{eff}	2.94	$2.97^{+0.54}_{-0.52}$	(-0.1σ)	z_{drag}	1061.8	$1062.9^{+6.8}_{-6.2}$	$(+3.4\sigma)$	$D_{\text{M}}(0.61)$	2131	2084^{+300}_{-300}	(-3.8σ)
H_0	71.4	$72.8^{+7.7}_{-7.2}$	$(+2.7\sigma)$	r_{drag}	137.0	134^{+20}_{-20}	(-5.2σ)	$H(2.33)$	271	283^{+60}_{-60}	$(+13.1\sigma)$
Ω_{Λ}	0.626	$0.608^{+0.098}_{-0.10}$	(-3.8σ)	k_{D}	0.1519	$0.156^{+0.022}_{-0.021}$	$(+8.5\sigma)$	$D_{\text{M}}(2.33)$	5183	5048^{+900}_{-800}	(-6.0σ)
Ω_{m}	0.374	$0.392^{+0.10}_{-0.098}$	$(+3.8\sigma)$	$100\theta_{\text{D}}$	0.1691	$0.171^{+0.011}_{-0.010}$	$(+15.1\sigma)$	$\chi^2_{\text{Cooke17Marc}}$	0.00	$0.99 (\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.191	$0.211^{+0.097}_{-0.085}$	$(+16.5\sigma)$	z_{eq}	4604	5067^{+2000}_{-2000}	$(+26.0\sigma)$	χ^2_{Aver15}	0.00	$0.97 (\nu: 0.9)$	
$\Omega_{\text{m}}h^3$	0.136	$0.155^{+0.089}_{-0.074}$	$(+11.0\sigma)$	k_{eq}	0.0140	$0.0154^{+0.0070}_{-0.0062}$	$(+31.4\sigma)$	$\chi^2_{6\text{DF}}$	0.20	$0.42 (\nu: 0.1)$	
$r_{\text{drag}}h$	97.75	$97.2^{+4.1}_{-4.0}$	(-0.5σ)	$100\theta_{\text{eq}}$	0.687	$0.67^{+0.17}_{-0.15}$	(-12.1σ)	χ^2_{MGS}	0.67	$0.72 (\nu: 0.2)$	
Y_{P}	0.2438	$0.2441^{+0.0075}_{-0.0077}$	(-0.1σ)	$100\theta_{\text{s,eq}}$	0.384	$0.372^{+0.087}_{-0.082}$	(-12.5σ)	χ^2_{DR12BAO}	2.11	$3.8 (\nu: 1.5)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2451	$0.2454^{+0.0075}_{-0.0077}$	(-0.1σ)	$H(0.15)$	78.0	80^{+10}_{-9}	$(+3.6\sigma)$	χ^2_{BAO}	2.98	$5.0 (\nu: 1.8)$	
$10^5\text{D}/\text{H}$	2.661	$2.660^{+0.084}_{-0.083}$	$(+0.5\sigma)$	$D_{\text{M}}(0.15)$	603	592^{+65}_{-66}	(-2.8σ)	χ^2_{Abund}	0.00	$2.0 (\nu: 1.9)$	
Age/Gyr	12.40	$12.1^{+2.1}_{-1.9}$	(-6.1σ)	$H(0.38)$	90.5	93^{+10}_{-10}	$(+5.1\sigma)$				
z_*	1094.6	$1095.8^{+6.8}_{-6.4}$	$(+11.3\sigma)$	$D_{\text{M}}(0.38)$	1425	1396^{+200}_{-200}	(-3.3σ)				

Best-fit $\chi^2_{\text{eff}} = 2.98$; $\bar{\chi}^2_{\text{eff}} = 6.92$; $R - 1 = 0.01290$
 χ^2_{eff} : Abund - D.Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.20 MGS: 0.67 DR12BAO: 2.11

7.116 base_nnu_BAO_Cooke17Marc_Aver15_Pantheon18

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02178	$0.0218^{+0.0011}_{-0.0010}$	(-0.8σ)	r_*	145.1	144^{+11}_{-10}	(-0.3σ)	$H(0.51)$	90.0	$90.8^{+8.1}_{-7.4}$	$(+0.9\sigma)$
$\Omega_{\text{c}}h^2$	0.1211	$0.125^{+0.036}_{-0.031}$	$(+1.3\sigma)$	$100\theta_*$	1.0490	$1.052^{+0.038}_{-0.039}$	$(+15.2\sigma)$	$D_{\text{M}}(0.51)$	1975	1963^{+150}_{-150}	(-0.8σ)
$100\theta_{\text{MC}}$	1.0486	$1.052^{+0.038}_{-0.039}$	$(+18.6\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.84	$13.7^{+1.5}_{-1.3}$	(-0.8σ)	$H(0.61)$	95.7	$96.6^{+8.9}_{-8.1}$	$(+0.9\sigma)$
N_{eff}	2.94	$2.97^{+0.57}_{-0.52}$	(-0.1σ)	z_{drag}	1058.56	$1058.9^{+4.6}_{-4.4}$	(-0.3σ)	$D_{\text{M}}(0.61)$	2298	2283^{+180}_{-180}	(-0.8σ)
H_0	67.79	$68.2^{+4.9}_{-4.5}$	$(+0.7\sigma)$	r_{drag}	148.0	147^{+11}_{-11}	(-0.2σ)	$H(2.33)$	237.1	240^{+30}_{-30}	$(+1.0\sigma)$
Ω_{Λ}	0.6876	$0.684^{+0.039}_{-0.041}$	$(+0.4\sigma)$	k_{D}	0.1399	$0.141^{+0.011}_{-0.010}$	$(+0.4\sigma)$	$D_{\text{M}}(2.33)$	5741	5698^{+530}_{-500}	(-0.8σ)
Ω_{m}	0.3124	$0.316^{+0.041}_{-0.039}$	(-0.4σ)	$100\theta_{\text{D}}$	0.1623	$0.1628^{+0.0052}_{-0.0052}$	$(+2.8\sigma)$	$\chi^2_{\text{Cooke17Marc}}$	0.00	$1.0 (\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.1435	$0.148^{+0.035}_{-0.033}$	$(+1.2\sigma)$	z_{eq}	3465	3547^{+800}_{-700}	$(+2.0\sigma)$	χ^2_{Aver15}	0.00	$1.0 (\nu: 1.1)$	
$\Omega_{\text{m}}h^3$	0.0973	$0.101^{+0.030}_{-0.028}$	$(+1.1\sigma)$	k_{eq}	0.01050	$0.0108^{+0.0024}_{-0.0023}$	$(+2.3\sigma)$	χ^2_{JLA}	1035.10	$1036.1 (\nu: 1.6)$	
$r_{\text{drag}}h$	100.33	$100.2^{+2.3}_{-2.3}$	$(+1.0\sigma)$	$100\theta_{\text{eq}}$	0.807	$0.800^{+0.099}_{-0.089}$	(-0.8σ)	$\chi^2_{6\text{DF}}$	0.000	$0.053 (\nu: 0.0)$	
Y_{P}	0.2437	$0.2440^{+0.0079}_{-0.0077}$	(-0.1σ)	$100\theta_{\text{s,eq}}$	0.4464	$0.443^{+0.050}_{-0.046}$	(-0.8σ)	χ^2_{MGS}	1.68	$1.73 (\nu: 0.2)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2450	$0.2453^{+0.0080}_{-0.0077}$	(-0.1σ)	$H(0.15)$	73.1	$73.6^{+5.7}_{-5.2}$	$(+0.8\sigma)$	χ^2_{DR12BAO}	2.98	$3.9 (\nu: 1.2)$	
$10^5\text{D}/\text{H}$	2.661	$2.660^{+0.084}_{-0.085}$	$(+0.5\sigma)$	$D_{\text{M}}(0.15)$	639.5	636^{+46}_{-45}	(-0.7σ)	χ^2_{BAO}	4.66	$5.7 (\nu: 1.6)$	
Age/Gyr	13.74	$13.6^{+1.3}_{-1.2}$	(-0.8σ)	$H(0.38)$	83.3	$84.0^{+7.1}_{-6.5}$	$(+0.8\sigma)$	χ^2_{Abund}	0.00	$2.0 (\nu: 2.1)$	
z_*	1090.67	$1090.9^{+2.8}_{-2.6}$	$(+1.4\sigma)$	$D_{\text{M}}(0.38)$	1525	1516^{+110}_{-110}	(-0.8σ)				

Best-fit $\chi^2_{\text{eff}} = 1039.76$; $\bar{\chi}^2_{\text{eff}} = 1043.83$; $R - 1 = 0.00422$
 χ^2_{eff} : Abund - D.Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 2.98 SN - JLA Pantheon18: 1035.10

7.117 base_nnu_BAO_Cooke17Marc_Aver15_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02172	$0.0218^{+0.0011}_{-0.0010}$	(-0.9σ)	r_*	146.9	$146.5^{+6.5}_{-6.6}$	$(+0.6\sigma)$	$H(0.51)$	88.60	$88.9^{+4.2}_{-4.0}$	(-0.1σ)
$\Omega_{\text{c}}h^2$	0.1150	$0.116^{+0.012}_{-0.011}$	(-1.0σ)	$100\theta_*$	1.04128	$1.0412^{+0.0013}_{-0.0013}$	$(+0.2\sigma)$	$D_{\text{M}}(0.51)$	2003	1998^{+98}_{-94}	(-0.2σ)
$100\theta_{\text{MC}}$	1.04093	$1.0409^{+0.0012}_{-0.0012}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.11	$14.07^{+0.62}_{-0.63}$	$(+0.6\sigma)$	$H(0.61)$	94.09	$94.4^{+4.4}_{-4.2}$	(-0.1σ)
N_{eff}	2.91	$2.95^{+0.56}_{-0.52}$	(-0.2σ)	z_{drag}	1057.95	$1058.2^{+3.8}_{-3.6}$	(-0.9σ)	$D_{\text{M}}(0.61)$	2331	2326^{+110}_{-110}	(-0.1σ)
H_0	67.01	$67.2^{+3.5}_{-3.4}$	$(+0.3\sigma)$	r_{drag}	149.9	$149.4^{+7.0}_{-7.0}$	$(+0.7\sigma)$	$H(2.33)$	232.2	233^{+11}_{-10}	(-0.9σ)
Ω_{Λ}	0.6940	$0.693^{+0.017}_{-0.019}$	$(+0.9\sigma)$	k_{D}	0.1380	$0.1385^{+0.0062}_{-0.0057}$	(-1.0σ)	$D_{\text{M}}(2.33)$	5841	5826^{+260}_{-260}	$(+0.2\sigma)$
Ω_{m}	0.3060	$0.307^{+0.019}_{-0.017}$	(-0.9σ)	$100\theta_{\text{D}}$	0.16131	$0.16133^{+0.00072}_{-0.00075}$	$(+0.5\sigma)$	$\chi^2_{\text{Cooke17Marc}}$	0.00	$1.0 (\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.1374	$0.138^{+0.013}_{-0.012}$	(-1.1σ)	z_{eq}	3329	3335^{+94}_{-90}	(-1.3σ)	χ^2_{Aver15}	0.01	$0.98 (\nu: 1.0)$	
$\Omega_{\text{m}}h^3$	0.0921	$0.093^{+0.013}_{-0.012}$	(-0.4σ)	k_{eq}	0.01007	$0.01011^{+0.00058}_{-0.00054}$	(-1.8σ)	$\chi^2_{6\text{DF}}$	0.000	$0.061 (\nu: 0.0)$	
$r_{\text{drag}}h$	100.43	$100.3^{+2.3}_{-2.3}$	$(+1.0\sigma)$	$100\theta_{\text{eq}}$	0.8248	$0.824^{+0.016}_{-0.016}$	$(+1.2\sigma)$	χ^2_{MGS}	1.68	$1.71 (\nu: 0.3)$	
Y_{P}	0.2433	$0.2438^{+0.0078}_{-0.0077}$	(-0.2σ)	$100\theta_{\text{s,eq}}$	0.4559	$0.4553^{+0.0084}_{-0.0085}$	$(+1.3\sigma)$	χ^2_{DR12BAO}	3.40	$4.4 (\nu: 1.2)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2446	$0.2451^{+0.0079}_{-0.0077}$	(-0.2σ)	$H(0.15)$	72.16	$72.4^{+3.6}_{-3.5}$	$(+0.2\sigma)$	χ^2_{prior}	0.00	$0.98 (\nu: 1.1)$	(-1.7σ)
$10^5\text{D}/\text{H}$	2.661	$2.662^{+0.083}_{-0.084}$	$(+0.5\sigma)$	$D_{\text{M}}(0.15)$	647.3	646^{+33}_{-32}	(-0.3σ)	χ^2_{BAO}	5.08	$6.2 (\nu: 1.2)$	
Age/Gyr	13.98	$13.95^{+0.63}_{-0.63}$	$(+0.2\sigma)$	$H(0.38)$	82.03	$82.3^{+4.0}_{-3.8}$	$(+0.0\sigma)$	χ^2_{Abund}	0.01	$2.0 (\nu: 2.0)$	
z_*	1090.17	$1090.20^{+0.69}_{-0.68}$	(-0.1σ)	$D_{\text{M}}(0.38)$	1545	1542^{+76}_{-73}	(-0.2σ)				

Best-fit $\chi^2_{\text{eff}} = 5.09$; $\bar{\chi}^2_{\text{eff}} = 9.16$; $R - 1 = 0.00593$

χ^2_{eff} : Abund - D.Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.01 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.40

7.118 base_nnu_BAO_Cooke17Marc_Aver15_Pantheon18_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02177	$0.0218^{+0.0011}_{-0.0011}$	(-0.9σ)	r_*	146.6	$146.5^{+6.8}_{-6.3}$	$(+0.6\sigma)$	$H(0.51)$	88.78	$88.9^{+4.1}_{-4.1}$	(-0.0σ)
$\Omega_{\text{c}}h^2$	0.1155	$0.116^{+0.012}_{-0.011}$	(-1.0σ)	$100\theta_*$	1.04122	$1.0412^{+0.0013}_{-0.0013}$	$(+0.2\sigma)$	$D_{\text{M}}(0.51)$	1998	1996^{+100}_{-93}	(-0.2σ)
$100\theta_{\text{MC}}$	1.04089	$1.0409^{+0.0012}_{-0.0012}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.08	$14.07^{+0.65}_{-0.60}$	$(+0.6\sigma)$	$H(0.61)$	94.29	$94.4^{+4.3}_{-4.3}$	(-0.1σ)
N_{eff}	2.94	$2.95^{+0.54}_{-0.54}$	(-0.2σ)	z_{drag}	1058.10	$1058.2^{+3.7}_{-3.8}$	(-0.9σ)	$D_{\text{M}}(0.61)$	2326	2323^{+120}_{-110}	(-0.2σ)
H_0	67.16	$67.3^{+3.4}_{-3.4}$	$(+0.3\sigma)$	r_{drag}	149.5	$149.4^{+7.3}_{-6.8}$	$(+0.7\sigma)$	$H(2.33)$	232.6	233^{+10}_{-10}	(-0.9σ)
Ω_{Λ}	0.6941	$0.695^{+0.017}_{-0.016}$	$(+1.0\sigma)$	k_{D}	0.1383	$0.1385^{+0.0059}_{-0.0059}$	(-0.9σ)	$D_{\text{M}}(2.33)$	5829	5823^{+270}_{-250}	$(+0.2\sigma)$
Ω_{m}	0.3059	$0.305^{+0.016}_{-0.017}$	(-1.0σ)	$100\theta_{\text{D}}$	0.16133	$0.16133^{+0.00072}_{-0.00076}$	$(+0.5\sigma)$	$\chi^2_{\text{Cooke17Marc}}$	0.00	$0.98 (\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.1380	$0.138^{+0.012}_{-0.012}$	(-1.1σ)	z_{eq}	3330	3331^{+85}_{-88}	(-1.4σ)	χ^2_{Aver15}	0.00	$0.99 (\nu: 0.9)$	
$\Omega_{\text{m}}h^3$	0.0927	$0.093^{+0.013}_{-0.012}$	(-0.3σ)	k_{eq}	0.01009	$0.01010^{+0.00056}_{-0.00055}$	(-1.9σ)	χ^2_{JLA}	1034.833	$1034.96 (\nu: 0.0)$	
$r_{\text{drag}}h$	100.43	$100.5^{+2.2}_{-2.0}$	$(+1.1\sigma)$	$100\theta_{\text{eq}}$	0.8246	$0.825^{+0.015}_{-0.013}$	$(+1.3\sigma)$	χ^2_{6DF}	0.000	$0.050 (\nu: 0.0)$	
Y_{P}	0.2436	$0.2438^{+0.0075}_{-0.0080}$	(-0.2σ)	$100\theta_{\text{s,eq}}$	0.4557	$0.4558^{+0.0080}_{-0.0074}$	$(+1.3\sigma)$	χ^2_{MGS}	1.68	$1.79 (\nu: 0.2)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2450	$0.2452^{+0.0076}_{-0.0080}$	(-0.2σ)	$H(0.15)$	72.32	$72.5^{+3.5}_{-3.6}$	$(+0.2\sigma)$	χ^2_{DR12BAO}	3.41	$4.2 (\nu: 0.7)$	
$10^5\text{D}/\text{H}$	2.662	$2.660^{+0.083}_{-0.085}$	$(+0.5\sigma)$	$D_{\text{M}}(0.15)$	645.9	645^{+33}_{-31}	(-0.3σ)	χ^2_{prior}	0.00	$1.0 (\nu: 1.0)$	(-1.7σ)
Age/Gyr	13.96	$13.94^{+0.66}_{-0.61}$	$(+0.2\sigma)$	$H(0.38)$	82.21	$82.4^{+3.9}_{-3.9}$	$(+0.1\sigma)$	χ^2_{BAO}	5.09	$6.0 (\nu: 0.8)$	
z_*	1090.19	$1090.17^{+0.64}_{-0.68}$	(-0.2σ)	$D_{\text{M}}(0.38)$	1542	1540^{+78}_{-72}	(-0.2σ)	χ^2_{Abund}	0.00	$2.0 (\nu: 1.9)$	

Best-fit $\chi^2_{\text{eff}} = 1039.92$; $\bar{\chi}^2_{\text{eff}} = 1043.97$; $R - 1 = 0.00670$

χ^2_{eff} : Abund - D.Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.41 SN - JLA Pantheon18: 1034.83

7.119 base_nnu_BAO_Cooke17Adel_Aver15

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02246	$0.0225^{+0.0013}_{-0.0012}$	$(+1.5\sigma)$	r_*	136.5	131^{+20}_{-20}	(-5.7σ)	$H(0.51)$	96.8	103^{+20}_{-20}	$(+6.5\sigma)$
$\Omega_{\text{c}}h^2$	0.156	$0.191^{+0.10}_{-0.087}$	$(+17.9\sigma)$	$100\theta_*$	1.087	$1.112^{+0.071}_{-0.074}$	$(+98.9\sigma)$	$D_{\text{M}}(0.51)$	1864	1784^{+200}_{-200}	(-3.8σ)
$100\theta_{\text{MC}}$	1.087	$1.112^{+0.071}_{-0.074}$	$(+121.5\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	12.56	$11.8^{+2.4}_{-2.2}$	(-9.1σ)	$H(0.61)$	103.4	110^{+20}_{-20}	$(+7.2\sigma)$
N_{eff}	2.92	$2.95^{+0.56}_{-0.55}$	(-0.2σ)	z_{drag}	1062.5	$1064.6^{+7.2}_{-6.8}$	$(+5.0\sigma)$	$D_{\text{M}}(0.61)$	2164	2068^{+300}_{-300}	(-4.0σ)
H_0	70.7	73^{+8}_{-8}	$(+3.0\sigma)$	r_{drag}	139.0	133^{+20}_{-20}	(-5.6σ)	$H(2.33)$	264	285^{+60}_{-60}	$(+13.7\sigma)$
Ω_{Λ}	0.641	$0.608^{+0.096}_{-0.10}$	(-3.8σ)	k_{D}	0.1504	$0.158^{+0.023}_{-0.021}$	$(+9.6\sigma)$	$D_{\text{M}}(2.33)$	5296	5009^{+900}_{-800}	(-6.4σ)
Ω_{m}	0.359	$0.392^{+0.10}_{-0.096}$	$(+3.8\sigma)$	$100\theta_{\text{D}}$	0.1664	$0.170^{+0.011}_{-0.010}$	$(+13.7\sigma)$	$\chi^2_{\text{Cooke17Adel}}$	0.00	$1.0\,(\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.179	$0.214^{+0.10}_{-0.087}$	$(+17.4\sigma)$	z_{eq}	4342	5170^{+2000}_{-2000}	$(+27.6\sigma)$	χ^2_{Aver15}	0.00	$1.0\,(\nu: 1.1)$	
$\Omega_{\text{m}}h^3$	0.127	$0.159^{+0.095}_{-0.078}$	$(+11.7\sigma)$	k_{eq}	0.0131	$0.0157^{+0.0074}_{-0.0063}$	$(+33.2\sigma)$	$\chi^2_{6\text{DF}}$	0.14	$0.42\,(\nu: 0.1)$	
$r_{\text{drag}}h$	98.26	$97.2^{+4.0}_{-4.1}$	(-0.5σ)	$100\theta_{\text{eq}}$	0.710	$0.66^{+0.16}_{-0.15}$	(-12.7σ)	χ^2_{MGS}	0.82	$0.72\,(\nu: 0.2)$	
Y_{P}	0.2437	$0.2441^{+0.0078}_{-0.0081}$	(-0.1σ)	$100\theta_{\text{s,eq}}$	0.396	$0.368^{+0.086}_{-0.082}$	(-13.1σ)	χ^2_{DR12BAO}	2.18	$3.9\,(\nu: 1.5)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2450	$0.2454^{+0.0078}_{-0.0082}$	(-0.1σ)	$H(0.15)$	77.0	81^{+10}_{-10}	$(+3.9\sigma)$	χ^2_{BAO}	3.14	$5.0\,(\nu: 1.8)$	
$10^5\text{D}/\text{H}$	2.526	$2.52^{+0.13}_{-0.13}$	(-1.5σ)	$D_{\text{M}}(0.15)$	610	587^{+70}_{-70}	(-3.0σ)	χ^2_{Abund}	0.00	$2.0\,(\nu: 2.1)$	
Age/Gyr	12.67	$12.0^{+2.1}_{-2.0}$	(-6.4σ)	$H(0.38)$	89.0	94^{+10}_{-10}	$(+5.5\sigma)$				
z_*	1092.7	$1095.0^{+6.8}_{-6.3}$	$(+9.6\sigma)$	$D_{\text{M}}(0.38)$	1444	1385^{+200}_{-200}	(-3.5σ)				

Best-fit $\chi^2_{\text{eff}} = 3.14$; $\bar{\chi}^2_{\text{eff}} = 7.04$; $R - 1 = 0.00760$
 χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.14 MGS: 0.82 DR12BAO: 2.18

7.120 base_nnu_BAO_Cooke17Adel_Aver15_Pantheon18

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02245	$0.0225^{+0.0013}_{-0.0012}$	$(+1.5\sigma)$	r_*	144.4	$143.9^{+9.7}_{-9.4}$	(-0.4σ)	$H(0.51)$	90.6	$91.1^{+7.3}_{-7.0}$	$(+1.0\sigma)$
$\Omega_{\text{c}}h^2$	0.1223	$0.125^{+0.031}_{-0.030}$	$(+1.2\sigma)$	$100\theta_*$	1.0505	$1.052^{+0.035}_{-0.038}$	$(+15.1\sigma)$	$D_{\text{M}}(0.51)$	1962	1954^{+140}_{-140}	(-0.9σ)
$100\theta_{\text{MC}}$	1.0503	$1.052^{+0.035}_{-0.038}$	$(+18.6\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.75	$13.7^{+1.4}_{-1.2}$	(-1.0σ)	$H(0.61)$	96.3	$96.9^{+8.1}_{-7.7}$	$(+1.0\sigma)$
N_{eff}	2.92	$2.94^{+0.55}_{-0.51}$	(-0.2σ)	z_{drag}	1060.20	$1060.5^{+4.6}_{-4.3}$	$(+1.2\sigma)$	$D_{\text{M}}(0.61)$	2283	2274^{+170}_{-160}	(-0.9σ)
H_0	68.23	$68.6^{+4.4}_{-4.4}$	$(+0.9\sigma)$	r_{drag}	147.0	$147^{+10}_{-9.9}$	(-0.5σ)	$H(2.33)$	238.6	240^{+25}_{-24}	$(+1.2\sigma)$
Ω_{Λ}	0.6877	$0.686^{+0.038}_{-0.037}$	$(+0.5\sigma)$	k_{D}	0.1415	$0.142^{+0.010}_{-0.0097}$	$(+1.1\sigma)$	$D_{\text{M}}(2.33)$	5704	5680^{+490}_{-460}	(-1.0σ)
Ω_{m}	0.3123	$0.314^{+0.037}_{-0.038}$	(-0.5σ)	$100\theta_{\text{D}}$	0.16152	$0.1617^{+0.0048}_{-0.0049}$	$(+1.1\sigma)$	$\chi^2_{\text{Cooke17Adel}}$	0.00	$0.96 (\nu: 0.9)$	
$\Omega_{\text{m}}h^2$	0.1454	$0.148^{+0.031}_{-0.031}$	$(+1.2\sigma)$	z_{eq}	3521	3570^{+700}_{-700}	$(+2.4\sigma)$	χ^2_{Aver15}	0.00	$0.97 (\nu: 1.0)$	
$\Omega_{\text{m}}h^3$	0.0992	$0.102^{+0.027}_{-0.026}$	$(+1.2\sigma)$	k_{eq}	0.01065	$0.0108^{+0.0022}_{-0.0020}$	$(+2.6\sigma)$	χ^2_{JLA}	1035.10	$1035.9 (\nu: 1.1)$	
$r_{\text{drag}}h$	100.33	$100.3^{+2.2}_{-2.2}$	$(+1.0\sigma)$	$100\theta_{\text{eq}}$	0.800	$0.798^{+0.095}_{-0.082}$	(-1.0σ)	$\chi^2_{6\text{DF}}$	0.000	$0.049 (\nu: 0.0)$	
Y_{P}	0.2437	$0.2439^{+0.0078}_{-0.0076}$	(-0.2σ)	$100\theta_{\text{s,eq}}$	0.4426	$0.441^{+0.048}_{-0.043}$	(-1.1σ)	χ^2_{MGS}	1.68	$1.77 (\nu: 0.2)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2450	$0.2452^{+0.0078}_{-0.0077}$	(-0.2σ)	$H(0.15)$	73.6	$74.0^{+5.0}_{-5.0}$	$(+0.9\sigma)$	χ^2_{DR12BAO}	2.98	$3.9 (\nu: 1.1)$	
$10^5\text{D}/\text{H}$	2.526	$2.52^{+0.13}_{-0.13}$	(-1.5σ)	$D_{\text{M}}(0.15)$	635.3	633^{+41}_{-42}	(-0.9σ)	χ^2_{BAO}	4.66	$5.8 (\nu: 1.5)$	
Age/Gyr	13.66	$13.6^{+1.2}_{-1.1}$	(-1.0σ)	$H(0.38)$	83.8	$84.3^{+6.5}_{-6.1}$	$(+1.0\sigma)$	χ^2_{Abund}	0.00	$1.9 (\nu: 1.9)$	
z_*	1089.90	$1090.0^{+2.6}_{-2.5}$	(-0.5σ)	$D_{\text{M}}(0.38)$	1515	1509^{+110}_{-100}	(-0.9σ)				

Best-fit $\chi^2_{\text{eff}} = 1039.76$; $\bar{\chi}^2_{\text{eff}} = 1043.57$; $R - 1 = 0.00588$
 χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 2.98 SN - JLA Pantheon18: 1035.10

7.121 base_nnu_BAO_Cooke17Adel_Aver15_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02242	$0.0225^{+0.0013}_{-0.0012}$	$(+1.4\sigma)$	r_*	146.4	$146.1^{+7.0}_{-6.8}$	$(+0.5\sigma)$	$H(0.51)$	89.01	$89.2^{+4.5}_{-4.2}$	$(+0.1\sigma)$
$\Omega_{\text{c}}h^2$	0.1152	$0.116^{+0.013}_{-0.012}$	(-1.0σ)	$100\theta_*$	1.04121	$1.0411^{+0.0013}_{-0.0013}$	$(+0.1\sigma)$	$D_{\text{M}}(0.51)$	1992	1988^{+100}_{-100}	(-0.3σ)
$100\theta_{\text{MC}}$	1.04094	$1.0409^{+0.0012}_{-0.0012}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.06	$14.03^{+0.67}_{-0.65}$	$(+0.5\sigma)$	$H(0.61)$	94.51	$94.8^{+4.7}_{-4.5}$	$(+0.1\sigma)$
N_{eff}	2.90	$2.93^{+0.59}_{-0.55}$	(-0.2σ)	z_{drag}	1059.59	$1059.8^{+4.1}_{-4.0}$	$(+0.6\sigma)$	$D_{\text{M}}(0.61)$	2319	2315^{+120}_{-120}	(-0.3σ)
H_0	67.39	$67.6^{+3.8}_{-3.5}$	$(+0.5\sigma)$	r_{drag}	149.1	$148.7^{+7.4}_{-7.3}$	$(+0.4\sigma)$	$H(2.33)$	233.0	234^{+11}_{-11}	(-0.7σ)
Ω_{Λ}	0.6954	$0.695^{+0.018}_{-0.017}$	$(+1.0\sigma)$	k_{D}	0.1394	$0.1398^{+0.0066}_{-0.0062}$	(-0.2σ)	$D_{\text{M}}(2.33)$	5815	5804^{+280}_{-280}	$(+0.0\sigma)$
Ω_{m}	0.3046	$0.305^{+0.017}_{-0.018}$	(-1.0σ)	$100\theta_{\text{D}}$	0.16029	$0.1603^{+0.0010}_{-0.0011}$	(-1.1σ)	$\chi^2_{\text{Cooke17Adel}}$	0.00	$0.99 (\nu: 0.9)$	
$\Omega_{\text{m}}h^2$	0.1383	$0.139^{+0.014}_{-0.013}$	(-0.9σ)	z_{eq}	3355	3358^{+95}_{-95}	(-1.0σ)	χ^2_{Aver15}	0.00	$1.1 (\nu: 1.2)$	
$\Omega_{\text{m}}h^3$	0.0932	$0.094^{+0.014}_{-0.013}$	(-0.2σ)	k_{eq}	0.01014	$0.01017^{+0.00059}_{-0.00058}$	(-1.4σ)	$\chi^2_{6\text{DF}}$	0.000	$0.056 (\nu: 0.0)$	
$r_{\text{drag}}h$	100.45	$100.5^{+2.3}_{-2.2}$	$(+1.0\sigma)$	$100\theta_{\text{eq}}$	0.8219	$0.822^{+0.016}_{-0.015}$	$(+1.0\sigma)$	χ^2_{MGS}	1.68	$1.76 (\nu: 0.3)$	
Y_{P}	0.2435	$0.2438^{+0.0082}_{-0.0082}$	(-0.2σ)	$100\theta_{\text{s,eq}}$	0.4538	$0.4536^{+0.0086}_{-0.0081}$	$(+1.0\sigma)$	χ^2_{DR12BAO}	3.51	$4.4 (\nu: 1.0)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2448	$0.2451^{+0.0083}_{-0.0082}$	(-0.2σ)	$H(0.15)$	72.54	$72.7^{+3.9}_{-3.6}$	$(+0.4\sigma)$	χ^2_{prior}	0.00	$1.0 (\nu: 1.2)$	(-1.7σ)
$10^5\text{D}/\text{H}$	2.526	$2.52^{+0.13}_{-0.13}$	(-1.5σ)	$D_{\text{M}}(0.15)$	643.8	643^{+34}_{-34}	(-0.4σ)	χ^2_{BAO}	5.19	$6.2 (\nu: 1.0)$	
Age/Gyr	13.92	$13.90^{+0.67}_{-0.66}$	$(+0.0\sigma)$	$H(0.38)$	82.43	$82.6^{+4.3}_{-4.0}$	$(+0.2\sigma)$	χ^2_{Abund}	0.00	$2.1 (\nu: 2.1)$	
z_*	1089.30	$1089.28^{+0.91}_{-0.95}$	(-2.0σ)	$D_{\text{M}}(0.38)$	1537	1534^{+80}_{-79}	(-0.4σ)				

Best-fit $\chi^2_{\text{eff}} = 5.19$; $\bar{\chi}^2_{\text{eff}} = 9.33$; $R - 1 = 0.00415$
 χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.51

7.122 base_nnu_BAO_Cooke17Adel_Aver15_Pantheon18_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02241	$0.0225^{+0.0013}_{-0.0013}$	$(+1.4\sigma)$	r_*	146.6	$146.0^{+6.9}_{-6.3}$	$(+0.4\sigma)$	$H(0.51)$	88.94	$89.3^{+4.1}_{-4.2}$	$(+0.2\sigma)$
$\Omega_{\text{c}}h^2$	0.1148	$0.116^{+0.012}_{-0.011}$	(-1.0σ)	$100\theta_*$	1.04119	$1.0411^{+0.0013}_{-0.0013}$	$(+0.1\sigma)$	$D_{\text{M}}(0.51)$	1993	1986^{+100}_{-93}	(-0.4σ)
$100\theta_{\text{MC}}$	1.04090	$1.0409^{+0.0012}_{-0.0011}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.08	$14.03^{+0.65}_{-0.60}$	$(+0.5\sigma)$	$H(0.61)$	94.43	$94.8^{+4.3}_{-4.3}$	$(+0.1\sigma)$
N_{eff}	2.89	$2.94^{+0.53}_{-0.54}$	(-0.2σ)	z_{drag}	1059.51	$1059.9^{+4.0}_{-4.1}$	$(+0.6\sigma)$	$D_{\text{M}}(0.61)$	2320	2313^{+110}_{-110}	(-0.3σ)
H_0	67.38	$67.6^{+3.5}_{-3.4}$	$(+0.5\sigma)$	r_{drag}	149.2	$148.7^{+7.4}_{-6.7}$	$(+0.4\sigma)$	$H(2.33)$	232.6	234^{+10}_{-11}	(-0.7σ)
Ω_{Λ}	0.6963	$0.696^{+0.016}_{-0.016}$	$(+1.1\sigma)$	k_{D}	0.1393	$0.1398^{+0.0061}_{-0.0062}$	(-0.2σ)	$D_{\text{M}}(2.33)$	5821	5801^{+270}_{-250}	(-0.0σ)
Ω_{m}	0.3037	$0.304^{+0.016}_{-0.016}$	(-1.1σ)	$100\theta_{\text{D}}$	0.16027	$0.1603^{+0.0011}_{-0.0011}$	(-1.1σ)	$\chi^2_{\text{Cooke17Adel}}$	0.00	$0.98 (\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.1379	$0.139^{+0.013}_{-0.013}$	(-0.9σ)	z_{eq}	3350	3357^{+91}_{-92}	(-1.0σ)	χ^2_{Aver15}	0.01	$0.99 (\nu: 1.0)$	
$\Omega_{\text{m}}h^3$	0.0929	$0.094^{+0.013}_{-0.012}$	(-0.2σ)	k_{eq}	0.01012	$0.01017^{+0.00057}_{-0.00057}$	(-1.4σ)	χ^2_{JLA}	1034.781	$1034.92 (\nu: 0.0)$	
$r_{\text{drag}}h$	100.56	$100.5^{+2.1}_{-2.0}$	$(+1.1\sigma)$	$100\theta_{\text{eq}}$	0.8227	$0.822^{+0.015}_{-0.014}$	$(+1.0\sigma)$	$\chi^2_{6\text{DF}}$	0.000	$0.047 (\nu: 0.0)$	
Y_{P}	0.2433	$0.2439^{+0.0075}_{-0.0080}$	(-0.2σ)	$100\theta_{\text{s,eq}}$	0.4543	$0.4538^{+0.0081}_{-0.0078}$	$(+1.0\sigma)$	χ^2_{MGS}	1.75	$1.80 (\nu: 0.2)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2446	$0.2452^{+0.0075}_{-0.0080}$	(-0.2σ)	$H(0.15)$	72.52	$72.8^{+3.6}_{-3.6}$	$(+0.4\sigma)$	χ^2_{DR12BAO}	3.45	$4.2 (\nu: 0.7)$	
$10^5\text{D}/\text{H}$	2.525	$2.52^{+0.13}_{-0.13}$	(-1.5σ)	$D_{\text{M}}(0.15)$	644.0	642^{+33}_{-31}	(-0.5σ)	χ^2_{prior}	0.00	$0.99 (\nu: 0.9)$	(-1.7σ)
Age/Gyr	13.94	$13.89^{+0.66}_{-0.61}$	$(+0.0\sigma)$	$H(0.38)$	82.38	$82.7^{+3.9}_{-3.9}$	$(+0.3\sigma)$	χ^2_{BAO}	5.20	$6.1 (\nu: 0.7)$	
z_*	1089.27	$1089.27^{+0.93}_{-0.94}$	(-2.0σ)	$D_{\text{M}}(0.38)$	1538	1533^{+78}_{-72}	(-0.4σ)	χ^2_{Abund}	0.01	$2.0 (\nu: 2.0)$	

Best-fit $\chi^2_{\text{eff}} = 1039.99$; $\bar{\chi}^2_{\text{eff}} = 1043.96$; $R - 1 = 0.00918$
 χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.00 Yp_Aver2015: 0.01 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.45 SN - JLA Pantheon18: 1034.78

8 nnu+meffsterile

8.1 base_nnu_meffsterile_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022161	$0.02223^{+0.00047}_{-0.00044}$	S_8	0.837	$0.816^{+0.053}_{-0.061}$	$100\theta_{s,eq}$	0.4490	$0.455^{+0.015}_{-0.013}$
$\Omega_c h^2$	0.1203	$0.1215^{+0.0079}_{-0.0081}$	$\sigma_8 \Omega_m^{0.5}$	0.4587	$0.447^{+0.029}_{-0.033}$	$H(0.15)$	72.33	$72.5^{+2.7}_{-2.3}$
$100\theta_{MC}$	1.04072	$1.04053^{+0.00099}_{-0.0010}$	$\sigma_8 \Omega_m^{0.25}$	0.6101	$0.591^{+0.037}_{-0.042}$	$D_M(0.15)$	646.8	646^{+24}_{-26}
τ	0.0529	$0.053^{+0.016}_{-0.016}$	$\sigma_8/h^{0.5}$	0.992	$0.953^{+0.058}_{-0.069}$	$H(0.38)$	82.57	$83.0^{+2.4}_{-1.8}$
$m_{\nu, sterile}^{eff} [eV]$	0.011	< 0.846	$r_{drag} h$	98.58	$97.5^{+4.1}_{-4.4}$	$D_M(0.38)$	1541	1537^{+48}_{-55}
N_{eff}	3.046	< 3.51	$\langle d^2 \rangle^{1/2}$	2.451	$2.448^{+0.080}_{-0.082}$	$H(0.51)$	89.36	$90.0^{+2.2}_{-1.6}$
$\ln(10^{10} A_s)$	3.0415	$3.047^{+0.035}_{-0.035}$	z_{re}	7.59	$7.6^{+1.6}_{-1.7}$	$D_M(0.51)$	1995	1988^{+56}_{-66}
n_s	0.9637	$0.966^{+0.018}_{-0.017}$	$10^9 A_s$	2.094	$2.105^{+0.076}_{-0.072}$	$H(0.61)$	95.04	$95.8^{+2.2}_{-1.4}$
y_{cal}	1.0003	$1.0005^{+0.0050}_{-0.0050}$	$10^9 A_s e^{-2\tau}$	1.8833	$1.895^{+0.033}_{-0.030}$	$D_M(0.61)$	2320	2311^{+61}_{-73}
A_{217}^{CIB}	48.9	49^{+10}_{-10}	D_{40}	1231.0	1228^{+35}_{-37}	$H(2.33)$	236.62	$239.8^{+5.3}_{-4.5}$
$\xi^{tSZ \times CIB}$	0.30	—	D_{220}	5712	5712^{+82}_{-79}	$D_M(2.33)$	5776	5729^{+78}_{-120}
A_{143}^{tSZ}	7.00	$4.8^{+3.9}_{-3.9}$	D_{810}	2537.4	2539^{+28}_{-27}	$f\sigma_8(0.15)$	0.4626	$0.451^{+0.030}_{-0.031}$
A_{100}^{PS}	254	269^{+60}_{-60}	D_{1420}	815.1	813^{+10}_{-10}	$\sigma_8(0.15)$	0.749	$0.719^{+0.048}_{-0.059}$
A_{143}^{PS}	49.4	52^{+20}_{-20}	D_{2000}	229.95	$228.2^{+3.9}_{-4.1}$	$f\sigma_8(0.38)$	0.4792	$0.465^{+0.029}_{-0.033}$
$A_{143 \times 217}^{PS}$	46.5	45^{+20}_{-20}	$n_{s,0.002}$	0.9637	$0.966^{+0.018}_{-0.017}$	$\sigma_8(0.38)$	0.6632	$0.636^{+0.044}_{-0.054}$
A_{217}^{PS}	119.0	116^{+20}_{-20}	Y_P	0.24531	$0.2477^{+0.0039}_{-0.0025}$	$f\sigma_8(0.51)$	0.4769	$0.461^{+0.028}_{-0.033}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.24664	$0.2490^{+0.0039}_{-0.0025}$	$\sigma_8(0.51)$	0.6203	$0.595^{+0.042}_{-0.051}$
A_{100}^{dustTT}	8.78	$9.0^{+3.6}_{-3.6}$	$10^5 D/H$	2.625	$2.67^{+0.11}_{-0.097}$	$f\sigma_8(0.61)$	0.4712	$0.455^{+0.028}_{-0.033}$
A_{143}^{dustTT}	10.77	$10.8^{+3.5}_{-3.5}$	Age/Gyr	13.826	$13.71^{+0.18}_{-0.28}$	$\sigma_8(0.61)$	0.5900	$0.565^{+0.040}_{-0.049}$
$A_{143 \times 217}^{dustTT}$	19.3	$18.4^{+6.4}_{-6.5}$	z_*	1090.22	$1090.63^{+0.95}_{-0.89}$	$f\sigma_8(2.33)$	0.2972	$0.285^{+0.021}_{-0.025}$
A_{217}^{dustTT}	94.4	93^{+10}_{-10}	r_*	144.48	$142.8^{+2.2}_{-2.8}$	$\sigma_8(2.33)$	0.3060	$0.293^{+0.022}_{-0.027}$
c_{100}	0.99962	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04093	$1.0406^{+0.0010}_{-0.0011}$	f_{2000}^{143}	30.4	33^{+6}_{-6}
c_{217}	0.99823	$0.9983^{+0.0012}_{-0.0012}$	$D_M(z_*)/Gpc$	13.880	$13.72^{+0.21}_{-0.26}$	$f_{2000}^{143 \times 217}$	33.22	35^{+5}_{-4}
H_0	66.97	$67.0^{+3.0}_{-2.7}$	z_{drag}	1059.47	$1060.0^{+1.3}_{-1.2}$	f_{2000}^{217}	107.62	$109.5^{+4.2}_{-4.0}$
Ω_Λ	0.6806	$0.671^{+0.035}_{-0.037}$	r_{drag}	147.21	$145.5^{+2.3}_{-2.9}$	χ_{simall}^2	395.94	$397.0 (\nu: 1.6)$
Ω_m	0.3194	$0.329^{+0.037}_{-0.035}$	k_D	0.14058	$0.1419^{+0.0023}_{-0.0020}$	χ_{lowl}^2	23.58	$23.5 (\nu: 1.2)$
$\Omega_m h^2$	0.1432	$0.1474^{+0.0073}_{-0.0064}$	$100\theta_D$	0.16101	$0.16135^{+0.00084}_{-0.00074}$	χ_{plik}^2	758.8	$774.5 (\nu: 17.4)$
$\Omega_\nu h^2$	0.00077	$0.0037^{+0.0060}_{-0.0032}$	z_{eq}	3405	3355^{+130}_{-140}	χ_{prior}^2	1.4	$7.4 (\nu: 6.9)$
$\Omega_m h^3$	0.09592	$0.0988^{+0.0056}_{-0.0036}$	k_{eq}	0.010393	$0.01039^{+0.00039}_{-0.00041}$	χ_{CMB}^2	1178.3	$1195.0 (\nu: 17.6)$
σ_8	0.812	$0.780^{+0.051}_{-0.062}$	$100\theta_{eq}$	0.8122	$0.823^{+0.029}_{-0.026}$			

Best-fit $\chi_{eff}^2 = 1179.66$; $\Delta\chi_{eff}^2 = 0.08$; $\bar{\chi}_{eff}^2 = 1202.36$; $\Delta\bar{\chi}_{eff}^2 = 2.79$; $R - 1 = 0.01778$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.94 (Δ 0.06) commander_dx12_v3.2.29: 23.58 (Δ -0.02) plik_rd12_HM_v22_TT: 758.77 (Δ 0.03)

8.2 base_nnu_meffsterile_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022210	$0.02221^{+0.00044}_{-0.00042} \quad (-0.1\sigma)$	S_8	0.8311	$0.819^{+0.041}_{-0.044} \quad (+0.1\sigma)$	$100\theta_{s,eq}$	0.4600	$0.454^{+0.013}_{-0.011} \quad (-0.1\sigma)$
$\Omega_c h^2$	0.1160	$0.1216^{+0.0075}_{-0.0078} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4552	$0.448^{+0.023}_{-0.024} \quad (+0.1\sigma)$	$H(0.15)$	72.55	$72.4^{+2.2}_{-2.0} \quad (-0.1\sigma)$
$100\theta_{MC}$	1.04082	$1.04053^{+0.00097}_{-0.00099} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6073	$0.592^{+0.028}_{-0.033} \quad (+0.1\sigma)$	$D_M(0.15)$	644.5	$647^{+20}_{-22} \quad (+0.1\sigma)$
τ	0.0541	$0.053^{+0.016}_{-0.015} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	0.988	$0.955^{+0.046}_{-0.056} \quad (+0.1\sigma)$	$H(0.38)$	82.74	$82.9^{+1.9}_{-1.5} \quad (-0.1\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	0.361	$< 0.773 \quad (-0.0\sigma)$	$r_{drag} h$	99.03	$97.3^{+3.5}_{-3.9} \quad (-0.1\sigma)$	$D_M(0.38)$	1536.1	$1539^{+40}_{-45} \quad (+0.1\sigma)$
N_{eff}	3.047	$< 3.47 \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.444	$2.453^{+0.055}_{-0.056} \quad (+0.1\sigma)$	$H(0.51)$	89.49	$89.8^{+1.8}_{-1.3} \quad (-0.1\sigma)$
$\ln(10^{10} A_s)$	3.0425	$3.048^{+0.033}_{-0.031} \quad (+0.0\sigma)$	z_{re}	7.70	$7.6^{+1.6}_{-1.6} \quad (+0.0\sigma)$	$D_M(0.51)$	1989	$1991^{+47}_{-55} \quad (+0.1\sigma)$
n_s	0.9653	$0.965^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$10^9 A_s$	2.096	$2.107^{+0.071}_{-0.065} \quad (+0.0\sigma)$	$H(0.61)$	95.14	$95.7^{+1.8}_{-1.2} \quad (-0.1\sigma)$
y_{cal}	1.0002	$1.0005^{+0.0050}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8808	$1.895^{+0.031}_{-0.027} \quad (+0.0\sigma)$	$D_M(0.61)$	2314	$2315^{+51}_{-61} \quad (+0.1\sigma)$
A_{217}^{CIB}	48.4	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	1227.7	$1230^{+30}_{-30} \quad (+0.1\sigma)$	$H(2.33)$	236.32	$239.7^{+5.0}_{-4.2} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	0.34	—	D_{220}	5713	$5714^{+82}_{-79} \quad (+0.0\sigma)$	$D_M(2.33)$	5771	$5735^{+67}_{-100} \quad (+0.1\sigma)$
A_{143}^{tSZ}	7.00	$4.8^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{810}	2536.9	$2539^{+28}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	0.4595	$0.452^{+0.022}_{-0.024} \quad (+0.1\sigma)$
A_{100}^{PS}	253	$269^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	815.6	$813^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	0.7481	$0.720^{+0.042}_{-0.051} \quad (+0.0\sigma)$
A_{143}^{PS}	49.0	$52^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	230.21	$228.3^{+3.9}_{-3.9} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4768	$0.465^{+0.022}_{-0.026} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	47.0	$45^{+20}_{-20} \quad (+0.0\sigma)$	$n_{s,0.002}$	0.9653	$0.965^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6627	$0.636^{+0.039}_{-0.047} \quad (+0.0\sigma)$
A_{217}^{PS}	119.3	$116^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	0.24535	$0.2475^{+0.0035}_{-0.0023} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4749	$0.462^{+0.023}_{-0.027} \quad (+0.0\sigma)$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.24667	$0.2488^{+0.0035}_{-0.0023} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6200	$0.595^{+0.038}_{-0.045} \quad (+0.0\sigma)$
A_{100}^{dustTT}	8.90	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$10^5 D/H$	2.616	$2.67^{+0.11}_{-0.095} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	0.4696	$0.456^{+0.023}_{-0.027} \quad (+0.0\sigma)$
A_{143}^{dustTT}	10.87	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	13.816	$13.73^{+0.16}_{-0.24} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	0.5898	$0.565^{+0.036}_{-0.043} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	19.4	$18.4^{+6.4}_{-6.5} \quad (+0.0\sigma)$	z_*	1090.11	$1090.63^{+0.92}_{-0.82} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	0.2972	$0.285^{+0.019}_{-0.022} \quad (-0.0\sigma)$
A_{217}^{dustTT}	94.5	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	144.58	$142.9^{+2.1}_{-2.6} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.3062	$0.293^{+0.020}_{-0.024} \quad (-0.0\sigma)$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	1.04102	$1.0406^{+0.0010}_{-0.0011} \quad (+0.0\sigma)$	f_{2000}^{143}	30.0	$33^{+6}_{-6} \quad (-0.0\sigma)$
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	13.888	$13.73^{+0.19}_{-0.25} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	32.94	$35^{+4}_{-4} \quad (-0.0\sigma)$
H_0	67.23	$66.8^{+2.5}_{-2.3} \quad (-0.1\sigma)$	z_{drag}	1059.55	$1060.0^{+1.2}_{-1.2} \quad (-0.1\sigma)$	f_{2000}^{217}	107.36	$109.5^{+4.2}_{-4.1} \quad (-0.0\sigma)$
Ω_Λ	0.6842	$0.670^{+0.029}_{-0.034} \quad (-0.1\sigma)$	r_{drag}	147.30	$145.5^{+2.1}_{-2.7} \quad (+0.1\sigma)$	$\chi^2_{lensing}$	8.88	$9.27 \quad (\nu: 0.4)$
Ω_m	0.3158	$0.330^{+0.034}_{-0.029} \quad (+0.1\sigma)$	k_D	0.14052	$0.1419^{+0.0022}_{-0.0018} \quad (-0.0\sigma)$	χ^2_{small}	396	$502 \quad (\nu: 14302.6) \quad (+59.5\sigma)$
$\Omega_m h^2$	0.1427	$0.1474^{+0.0070}_{-0.0059} \quad (-0.0\sigma)$	$100\theta_D$	0.16097	$0.16132^{+0.00080}_{-0.00072} \quad (-0.1\sigma)$	χ^2_{lowl}	23.29	$23.6 \quad (\nu: 0.9) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	0.00449	$0.0037^{+0.0054}_{-0.0032} \quad (-0.0\sigma)$	z_{eq}	3303	$3362^{+110}_{-120} \quad (+0.1\sigma)$	χ^2_{plik}	759	$668 \quad (\nu: 14315.7) \quad (-18.0\sigma)$
$\Omega_m h^3$	0.09597	$0.0985^{+0.0049}_{-0.0033} \quad (-0.1\sigma)$	k_{eq}	0.010152	$0.01041^{+0.00036}_{-0.00039} \quad (+0.0\sigma)$	χ^2_{prior}	1.3	$7.3 \quad (\nu: 6.8) \quad (-0.0\sigma)$
σ_8	0.8101	$0.781^{+0.044}_{-0.053} \quad (+0.0\sigma)$	$100\theta_{eq}$	0.8333	$0.822^{+0.026}_{-0.021} \quad (-0.1\sigma)$	χ^2_{CMB}	1187.2	$1203.6 \quad (\nu: 17.4) \quad (+1.4\sigma)$

Best-fit $\chi^2_{eff} = 1188.51$; $\Delta\chi^2_{eff} = -0.06$; $\bar{\chi}^2_{eff} = 1210.94$; $\Delta\bar{\chi}^2_{eff} = 2.53$; $R - 1 = 0.01963$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consect8: 8.88 (Δ -0.02) small_100x143_offlike5_EE_Aplanck_B: 396.04 (Δ 0.18) commander_dx12.v3.2.29: 23.29 (Δ 0.06) plik_rd12_HM.v22.TT: 758.94 (Δ -0.38)

8.3 base_nnu_meffsterile_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02223^{+0.00047}_{-0.00044} \quad (+0.0\sigma)$	S_8	$0.817^{+0.054}_{-0.061} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.455^{+0.015}_{-0.013} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1215^{+0.0080}_{-0.0081} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.447^{+0.029}_{-0.033} \quad (+0.0\sigma)$	$H(0.15)$	$72.6^{+2.7}_{-2.4} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.0405^{+0.0010}_{-0.0010} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.591^{+0.037}_{-0.041} \quad (+0.0\sigma)$	$D_M(0.15)$	$646^{+24}_{-26} \quad (-0.0\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.954^{+0.057}_{-0.069} \quad (+0.0\sigma)$	$H(0.38)$	$83.1^{+2.4}_{-1.8} \quad (+0.0\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.839 \quad (-0.0\sigma)$	$r_{drag} h$	$97.5^{+4.1}_{-4.5} \quad (+0.0\sigma)$	$D_M(0.38)$	$1536^{+48}_{-55} \quad (-0.0\sigma)$
N_{eff}	$< 3.51 \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.080}_{-0.081} \quad (+0.0\sigma)$	$H(0.51)$	$90.0^{+2.3}_{-1.6} \quad (+0.0\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.031}_{-0.029} \quad (+0.2\sigma)$	z_{re}	$< 8.97 \quad (+0.2\sigma)$	$D_M(0.51)$	$1987^{+57}_{-67} \quad (-0.0\sigma)$
n_s	$0.966^{+0.018}_{-0.016} \quad (+0.0\sigma)$	$10^9 A_s$	$2.111^{+0.066}_{-0.060} \quad (+0.2\sigma)$	$H(0.61)$	$95.8^{+2.2}_{-1.4} \quad (+0.0\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.895^{+0.033}_{-0.030} \quad (-0.0\sigma)$	$D_M(0.61)$	$2310^{+62}_{-74} \quad (-0.0\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1227^{+35}_{-38} \quad (-0.0\sigma)$	$H(2.33)$	$239.8^{+5.3}_{-4.5} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5712^{+82}_{-79} \quad (+0.0\sigma)$	$D_M(2.33)$	$5728^{+78}_{-120} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$4.8^{+3.9}_{-3.9} \quad (+0.0\sigma)$	D_{810}	$2539^{+28}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.451^{+0.030}_{-0.031} \quad (+0.0\sigma)$
A_{100}^{PS}	$268^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$813^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.721^{+0.048}_{-0.058} \quad (+0.0\sigma)$
A_{143}^{PS}	$52^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$228.2^{+3.9}_{-4.1} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.029}_{-0.032} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$45^{+20}_{-20} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.966^{+0.018}_{-0.016} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.637^{+0.044}_{-0.054} \quad (+0.0\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.2477^{+0.0039}_{-0.0025} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.028}_{-0.033} \quad (+0.0\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.2490^{+0.0039}_{-0.0025} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.596^{+0.042}_{-0.051} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$10^5 D/H$	$2.67^{+0.11}_{-0.098} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.028}_{-0.033} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.71^{+0.18}_{-0.29} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.566^{+0.040}_{-0.049} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	z_*	$1090.62^{+0.95}_{-0.89} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.286^{+0.021}_{-0.025} \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	r_*	$142.8^{+2.2}_{-2.8} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.293^{+0.022}_{-0.027} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.0406^{+0.0010}_{-0.0011} \quad (+0.0\sigma)$	f_{2000}^{143}	$33^{+6}_{-6} \quad (-0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.72^{+0.21}_{-0.26} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$35^{+5}_{-4} \quad (-0.0\sigma)$
H_0	$67.1^{+3.0}_{-2.7} \quad (+0.0\sigma)$	z_{drag}	$1060.0^{+1.3}_{-1.2} \quad (+0.0\sigma)$	f_{2000}^{217}	$109.5^{+4.2}_{-4.0} \quad (-0.0\sigma)$
Ω_Λ	$0.672^{+0.035}_{-0.037} \quad (+0.0\sigma)$	r_{drag}	$145.5^{+2.3}_{-2.9} \quad (-0.0\sigma)$	χ_{small}^2	$396.9 (\nu: 1.6) \quad (-0.0\sigma)$
Ω_m	$0.328^{+0.037}_{-0.035} \quad (-0.0\sigma)$	k_D	$0.1419^{+0.0023}_{-0.0020} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.4 (\nu: 1.2) \quad (-0.0\sigma)$
$\Omega_m h^2$	$0.1474^{+0.0073}_{-0.0064} \quad (-0.0\sigma)$	$100\theta_D$	$0.16136^{+0.00085}_{-0.00075} \quad (+0.0\sigma)$	χ_{plik}^2	$774.4 (\nu: 17.4) \quad (-0.0\sigma)$
$\Omega_\nu h^2$	$0.0037^{+0.0059}_{-0.0032} \quad (-0.0\sigma)$	z_{eq}	$3354^{+130}_{-140} \quad (-0.0\sigma)$	χ_{prior}^2	$7.4 (\nu: 6.9) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.0988^{+0.0057}_{-0.0037} \quad (+0.0\sigma)$	k_{eq}	$0.01039^{+0.00039}_{-0.00041} \quad (-0.0\sigma)$	χ_{CMB}^2	$1194.8 (\nu: 17.3) \quad (-0.0\sigma)$
σ_8	$0.781^{+0.050}_{-0.061} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.823^{+0.029}_{-0.026} \quad (+0.0\sigma)$		

$\bar{\chi}_{eff}^2 = 1202.13; \Delta\bar{\chi}_{eff}^2 = 2.81; R - 1 = 0.02055$

8.4 base_nnu_meffsterile_plikHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02222^{+0.00043}_{-0.00042} \quad (-0.0\sigma)$	S_8	$0.819^{+0.041}_{-0.043} \quad (+0.1\sigma)$	$100\theta_{s,eq}$	$0.454^{+0.013}_{-0.011} \quad (-0.1\sigma)$
$\Omega_c h^2$	$0.1215^{+0.0076}_{-0.0078} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.448^{+0.022}_{-0.024} \quad (+0.1\sigma)$	$H(0.15)$	$72.4^{+2.2}_{-1.9} \quad (-0.1\sigma)$
$100\theta_{MC}$	$1.04054^{+0.00097}_{-0.0010} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.028}_{-0.033} \quad (+0.1\sigma)$	$D_M(0.15)$	$647^{+20}_{-22} \quad (+0.1\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.955^{+0.046}_{-0.056} \quad (+0.1\sigma)$	$H(0.38)$	$82.9^{+2.0}_{-1.5} \quad (-0.1\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.767 \quad (-0.0\sigma)$	$r_{drag} h$	$97.4^{+3.5}_{-3.9} \quad (-0.0\sigma)$	$D_M(0.38)$	$1538^{+40}_{-45} \quad (+0.1\sigma)$
N_{eff}	$< 3.47 \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.454^{+0.055}_{-0.056} \quad (+0.1\sigma)$	$H(0.51)$	$89.9^{+1.9}_{-1.3} \quad (-0.1\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.029}_{-0.027} \quad (+0.2\sigma)$	z_{re}	$< 8.96 \quad (+0.2\sigma)$	$D_M(0.51)$	$1990^{+46}_{-55} \quad (+0.1\sigma)$
n_s	$0.965^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$10^9 A_s$	$2.111^{+0.062}_{-0.057} \quad (+0.2\sigma)$	$H(0.61)$	$95.7^{+1.8}_{-1.2} \quad (-0.1\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.895^{+0.031}_{-0.027} \quad (-0.0\sigma)$	$D_M(0.61)$	$2313^{+50}_{-61} \quad (+0.1\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1229^{+29}_{-30} \quad (+0.1\sigma)$	$H(2.33)$	$239.7^{+5.1}_{-4.2} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5714^{+82}_{-79} \quad (+0.0\sigma)$	$D_M(2.33)$	$5734^{+67}_{-100} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$4.8^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.022}_{-0.024} \quad (+0.1\sigma)$
A_{100}^{PS}	$268^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$813^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.720^{+0.042}_{-0.051} \quad (+0.0\sigma)$
A_{143}^{PS}	$52^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$228.3^{+3.9}_{-3.9} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.022}_{-0.026} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$45^{+20}_{-20} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.965^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.637^{+0.039}_{-0.047} \quad (+0.0\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.2475^{+0.0035}_{-0.0023} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.022}_{-0.027} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.2488^{+0.0035}_{-0.0023} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.595^{+0.038}_{-0.045} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$10^5 D/H$	$2.67^{+0.11}_{-0.095} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.023}_{-0.027} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.72^{+0.16}_{-0.24} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.566^{+0.036}_{-0.043} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.4^{+6.4}_{-6.5} \quad (+0.0\sigma)$	z_*	$1090.62^{+0.92}_{-0.82} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.285^{+0.019}_{-0.022} \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$142.9^{+2.1}_{-2.6} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.293^{+0.020}_{-0.024} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.0407^{+0.0010}_{-0.0011} \quad (+0.0\sigma)$	f_{2000}^{143}	$33^{+6}_{-6} \quad (-0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.73^{+0.19}_{-0.25} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$35^{+4}_{-4} \quad (-0.0\sigma)$
H_0	$66.9^{+2.4}_{-2.3} \quad (-0.1\sigma)$	z_{drag}	$1060.0^{+1.2}_{-1.2} \quad (-0.0\sigma)$	f_{2000}^{217}	$109.4^{+4.2}_{-4.0} \quad (-0.0\sigma)$
Ω_Λ	$0.670^{+0.029}_{-0.034} \quad (-0.0\sigma)$	r_{drag}	$145.5^{+2.1}_{-2.7} \quad (+0.1\sigma)$	$\chi_{lensing}^2$	$9.25 \quad (\nu: 0.4)$
Ω_m	$0.330^{+0.034}_{-0.029} \quad (+0.0\sigma)$	k_D	$0.1419^{+0.0022}_{-0.0018} \quad (-0.0\sigma)$	χ_{simall}^2	$501 \quad (\nu: 14225.2) \quad (+59.0\sigma)$
$\Omega_m h^2$	$0.1474^{+0.0070}_{-0.0059} \quad (-0.0\sigma)$	$100\theta_D$	$0.16132^{+0.00080}_{-0.00072} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.8) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$0.0036^{+0.0052}_{-0.0031} \quad (-0.0\sigma)$	z_{eq}	$3360^{+100}_{-120} \quad (+0.1\sigma)$	χ_{plik}^2	$669 \quad (\nu: 14236.6) \quad (-17.9\sigma)$
$\Omega_m h^3$	$0.0986^{+0.0050}_{-0.0033} \quad (-0.1\sigma)$	k_{eq}	$0.01040^{+0.00036}_{-0.00038} \quad (+0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (-0.0\sigma)$
σ_8	$0.781^{+0.044}_{-0.053} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.822^{+0.025}_{-0.021} \quad (-0.1\sigma)$	χ_{CMB}^2	$1203.4 \quad (\nu: 17.1) \quad (+1.4\sigma)$

$\bar{\chi}_{eff}^2 = 1210.72; \Delta\bar{\chi}_{eff}^2 = 2.56; R - 1 = 0.02178$

8.5 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022445	$0.02243^{+0.00033}_{-0.00030}$ (+0.9 σ)	$\Omega_m h^2$	0.14339	$0.1459^{+0.0051}_{-0.0044}$ (−0.4 σ)	k_{eq}	0.010384	$0.01035^{+0.00030}_{-0.00037}$ (−0.2 σ)
$\Omega_c h^2$	0.1203	$0.1199^{+0.0058}_{-0.0068}$ (−0.4 σ)	$\Omega_\nu h^2$	0.00065	$0.0035^{+0.0052}_{-0.0030}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8150	$0.824^{+0.028}_{-0.021}$ (+0.0 σ)
$100\theta_{\text{MC}}$	1.04088	$1.04074^{+0.00062}_{-0.00066}$ (+0.4 σ)	$\Omega_m h^3$	0.09713	$0.0979^{+0.0032}_{-0.0021}$ (−0.3 σ)	$100\theta_{\text{s,eq}}$	0.4502	$0.455^{+0.015}_{-0.011}$ (+0.0 σ)
τ	0.0602	$0.055^{+0.016}_{-0.015}$ (+0.3 σ)	σ_8	0.8174	$0.783^{+0.044}_{-0.054}$ (+0.1 σ)	$H(0.15)$	73.05	$72.6^{+1.5}_{-1.3}$ (+0.1 σ)
$m_{\nu, \text{sterile}}^{\text{eff}}$ [eV]	0.000	< 0.753 (−0.1 σ)	S_8	0.8342	$0.813^{+0.045}_{-0.050}$ (−0.1 σ)	$D_{\text{M}}(0.15)$	639.9	645^{+13}_{-15} (−0.1 σ)
N_{eff}	3.084	< 3.32 (−0.5 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4569	$0.445^{+0.024}_{-0.028}$ (−0.1 σ)	$H(0.38)$	83.21	$83.0^{+1.3}_{-1.0}$ (−0.0 σ)
$\ln(10^{10} A_{\text{s}})$	3.0581	$3.049^{+0.034}_{-0.032}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6111	$0.590^{+0.031}_{-0.037}$ (−0.0 σ)	$D_{\text{M}}(0.38)$	1525.9	1535^{+27}_{-30} (−0.1 σ)
n_{s}	0.9687	$0.966^{+0.011}_{-0.011}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.993	$0.955^{+0.050}_{-0.062}$ (+0.1 σ)	$H(0.51)$	89.97	$89.9^{+1.2}_{-0.86}$ (−0.1 σ)
y_{cal}	1.00100	$1.0008^{+0.0050}_{-0.0048}$ (+0.1 σ)	$r_{\text{drag}} h$	99.40	$98.0^{+2.6}_{-3.0}$ (+0.3 σ)	$D_{\text{M}}(0.51)$	1976.5	1987^{+31}_{-37} (−0.0 σ)
A_{217}^{CIB}	45.5	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.451	$2.448^{+0.056}_{-0.055}$ (+0.0 σ)	$H(0.61)$	95.61	$95.6^{+1.1}_{-0.79}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.74	—	z_{re}	8.27	$7.7^{+1.6}_{-1.6}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2299.8	2310^{+34}_{-40} (−0.0 σ)
A_{143}^{tSZ}	7.03	$5.3^{+3.7}_{-3.9}$ (+0.3 σ)	$10^9 A_{\text{s}}$	2.129	$2.110^{+0.073}_{-0.067}$ (+0.1 σ)	$H(2.33)$	236.96	$238.7^{+3.6}_{-3.0}$ (−0.4 σ)
A_{100}^{PS}	247	261^{+50}_{-50} (−0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8872	$1.891^{+0.025}_{-0.025}$ (−0.2 σ)	$D_{\text{M}}(2.33)$	5745	5740^{+43}_{-64} (+0.2 σ)
A_{143}^{PS}	51.8	48^{+20}_{-20} (−0.5 σ)	D_{40}	1227.2	1230^{+27}_{-27} (+0.1 σ)	$f\sigma_8(0.15)$	0.4615	$0.449^{+0.024}_{-0.028}$ (−0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	55.4	43^{+20}_{-20} (−0.2 σ)	D_{220}	5735	5733^{+76}_{-75} (+0.5 σ)	$\sigma_8(0.15)$	0.7552	$0.722^{+0.041}_{-0.050}$ (+0.1 σ)
A_{217}^{PS}	122.9	116^{+20}_{-20} (+0.0 σ)	D_{810}	2544.6	2542^{+27}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4797	$0.464^{+0.024}_{-0.029}$ (−0.0 σ)
A^{kSZ}	0.00	< 8.32 (−0.2 σ)	D_{1420}	819.3	$816.6^{+9.6}_{-9.4}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6694	$0.639^{+0.038}_{-0.046}$ (+0.1 σ)
A_{100}^{dustTT}	8.81	$9.0^{+3.6}_{-3.5}$ (−0.0 σ)	D_{2000}	231.71	$230.0^{+3.3}_{-3.3}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4782	$0.461^{+0.024}_{-0.029}$ (+0.0 σ)
A_{143}^{dustTT}	11.02	$11.0^{+3.5}_{-3.4}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9687	$0.966^{+0.011}_{-0.011}$ (−0.0 σ)	$\sigma_8(0.51)$	0.6264	$0.598^{+0.036}_{-0.043}$ (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.3	$18.8^{+6.3}_{-6.5}$ (+0.1 σ)	Y_{P}	0.24593	$0.2468^{+0.0023}_{-0.0015}$ (−0.4 σ)	$f\sigma_8(0.61)$	0.4731	$0.456^{+0.024}_{-0.029}$ (+0.0 σ)
A_{217}^{dustTT}	95.7	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.24726	$0.2481^{+0.0023}_{-0.0015}$ (−0.4 σ)	$\sigma_8(0.61)$	0.5960	$0.568^{+0.034}_{-0.041}$ (+0.1 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.074}$	10^5D/H	2.585	$2.612^{+0.068}_{-0.060}$ (−1.2 σ)	$f\sigma_8(2.33)$	0.3004	$0.286^{+0.017}_{-0.021}$ (+0.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.058}_{-0.057}$	Age/Gyr	13.753	$13.74^{+0.10}_{-0.15}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3097	$0.295^{+0.019}_{-0.022}$ (+0.1 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	z_*	1089.89	$1090.16^{+0.66}_{-0.58}$ (−1.0 σ)	f_{2000}^{143}	28.5	31^{+6}_{-5} (−0.7 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	r_*	144.11	$143.3^{+1.4}_{-1.9}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	31.89	33^{+4}_{-4} (−0.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	1.04103	$1.04087^{+0.00064}_{-0.00071}$ (+0.4 σ)	f_{2000}^{217}	106.43	$108.0^{+3.7}_{-3.7}$ (−0.7 σ)
A_{217}^{dustTE}	2.08	$2.09^{+0.52}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.843	$13.77^{+0.13}_{-0.17}$ (+0.4 σ)	χ_{simall}^2	397.59	$397.2 (\nu: 2.0)$ (+0.1 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.16	$1060.33^{+0.89}_{-0.81}$ (+0.5 σ)	χ_{lowl}^2	23.02	$23.4 (\nu: 0.6)$ (−0.0 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	146.74	$146.0^{+1.5}_{-1.9}$ (+0.4 σ)	χ_{plik}^2	2344.4	$2362.4 (\nu: 19.5)$ (+269.3 σ)
H_0	67.74	$67.1^{+1.8}_{-1.5}$ (+0.1 σ)	k_{D}	0.14115	$0.1418^{+0.0016}_{-0.0013}$ (−0.1 σ)	χ_{prior}^2	1.6	$11.7 (\nu: 11.0)$ (+1.2 σ)
Ω_{Λ}	0.6875	$0.676^{+0.022}_{-0.024}$ (+0.3 σ)	$100\theta_{\text{D}}$	0.160784	$0.16090^{+0.00047}_{-0.00043}$ (−1.1 σ)	χ_{CMB}^2	2765.0	$2783.1 (\nu: 19.7)$ (+267.7 σ)
Ω_{m}	0.3125	$0.324^{+0.024}_{-0.022}$ (−0.3 σ)	z_{eq}	3394	3355^{+100}_{-130} (−0.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2766.68$; $\Delta\chi_{\text{eff}}^2 = 0.91$; $\bar{\chi}_{\text{eff}}^2 = 2794.77$; $\Delta\bar{\chi}_{\text{eff}}^2 = 3.00$; $R - 1 = 0.01444$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 397.59 (Δ 1.54) commander_dx12_v3.2.29: 23.02 (Δ -0.24) plik_rd12_HM_v22b_TTTEEE: 2344.43 (Δ -0.22)

8.6 base_nnu_meffsterile_plikHM_TTTEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022389	$0.02242^{+0.00031}_{-0.00030}$ (+0.8 σ)	$\Omega_m h^2$	0.14291	$0.1459^{+0.0049}_{-0.0042}$ (-0.4 σ)	k_{eq}	0.009249	$0.01035^{+0.00027}_{-0.00033}$ (-0.2 σ)
$\Omega_c h^2$	0.0995	$0.1200^{+0.0053}_{-0.0062}$ (-0.4 σ)	$\Omega_\nu h^2$	0.02100	$0.0034^{+0.0045}_{-0.0029}$ (-0.1 σ)	$100\theta_{\text{eq}}$	0.9283	$0.823^{+0.024}_{-0.018}$ (-0.0 σ)
$100\theta_{\text{MC}}$	1.04094	$1.04074^{+0.00060}_{-0.00066}$ (+0.4 σ)	$\Omega_m h^3$	0.09635	$0.0979^{+0.0030}_{-0.0020}$ (-0.3 σ)	$100\theta_{\text{s,eq}}$	0.5095	$0.454^{+0.013}_{-0.0094}$ (-0.0 σ)
τ	0.0543	$0.055^{+0.015}_{-0.015}$ (+0.3 σ)	σ_8	0.8065	$0.784^{+0.038}_{-0.044}$ (+0.1 σ)	$H(0.15)$	72.74	$72.6^{+1.4}_{-1.3}$ (+0.0 σ)
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	1.915	< 0.670 (-0.1 σ)	S_8	0.8256	$0.815^{+0.036}_{-0.040}$ (-0.1 σ)	$D_{\text{M}}(0.15)$	642.8	645^{+12}_{-15} (-0.1 σ)
N_{eff}	3.054	< 3.31 (-0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4522	$0.446^{+0.019}_{-0.022}$ (-0.1 σ)	$H(0.38)$	82.91	$82.9^{+1.2}_{-0.94}$ (-0.1 σ)
$\ln(10^{10} A_s)$	3.0438	$3.050^{+0.032}_{-0.028}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6039	$0.591^{+0.025}_{-0.030}$ (+0.0 σ)	$D_{\text{M}}(0.38)$	1532.4	1536^{+26}_{-29} (-0.0 σ)
n_s	0.9660	$0.965^{+0.011}_{-0.010}$ (-0.1 σ)	$\sigma_8/h^{0.5}$	0.9822	$0.957^{+0.041}_{-0.050}$ (+0.1 σ)	$H(0.51)$	89.66	$89.8^{+1.1}_{-0.79}$ (-0.1 σ)
y_{cal}	1.0005	$1.0009^{+0.0050}_{-0.0050}$ (+0.2 σ)	$r_{\text{drag}} h$	99.18	$98.0^{+2.5}_{-2.9}$ (+0.2 σ)	$D_{\text{M}}(0.51)$	1984.6	1987^{+30}_{-34} (-0.0 σ)
A_{217}^{CIB}	47.7	47^{+10}_{-10} (-0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4444	$2.451^{+0.044}_{-0.045}$ (+0.1 σ)	$H(0.61)$	95.30	$95.6^{+1.1}_{-0.73}$ (-0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.33	—	z_{re}	7.68	$7.8^{+1.5}_{-1.5}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2309.0	2311^{+32}_{-38} (+0.0 σ)
A_{143}^{tSZ}	7.30	$5.3^{+3.7}_{-4.0}$ (+0.3 σ)	$10^9 A_s$	2.098	$2.112^{+0.066}_{-0.063}$ (+0.2 σ)	$H(2.33)$	236.50	$238.6^{+3.5}_{-2.9}$ (-0.5 σ)
A_{100}^{PS}	251	262^{+50}_{-50} (-0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8823	$1.891^{+0.024}_{-0.024}$ (-0.2 σ)	$D_{\text{M}}(2.33)$	5762	5742^{+40}_{-61} (+0.2 σ)
A_{143}^{PS}	45.9	48^{+20}_{-20} (-0.5 σ)	D_{40}	1228.4	1231^{+24}_{-24} (+0.2 σ)	$f\sigma_8(0.15)$	0.4565	$0.450^{+0.019}_{-0.022}$ (-0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	44.8	43^{+20}_{-20} (-0.1 σ)	D_{220}	5730	5734^{+75}_{-75} (+0.5 σ)	$\sigma_8(0.15)$	0.7449	$0.723^{+0.036}_{-0.042}$ (+0.1 σ)
A_{217}^{PS}	118.6	116^{+20}_{-20} (+0.0 σ)	D_{810}	2539.8	2542^{+27}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4741	$0.465^{+0.020}_{-0.023}$ (+0.0 σ)
A^{kSZ}	0.00	< 8.42 (-0.2 σ)	D_{1420}	817.6	$816.6^{+9.8}_{-9.5}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6600	$0.640^{+0.033}_{-0.038}$ (+0.2 σ)
A_{100}^{dustTT}	8.90	$9.0^{+3.5}_{-3.5}$ (-0.0 σ)	D_{2000}	231.22	$230.1^{+3.4}_{-3.4}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4724	$0.462^{+0.020}_{-0.024}$ (+0.1 σ)
A_{143}^{dustTT}	11.04	$11.0^{+3.5}_{-3.4}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9660	$0.965^{+0.011}_{-0.010}$ (-0.1 σ)	$\sigma_8(0.51)$	0.6175	$0.598^{+0.031}_{-0.036}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.8^{+6.2}_{-6.4}$ (+0.1 σ)	Y_{P}	0.24551	$0.2468^{+0.0022}_{-0.0014}$ (-0.5 σ)	$f\sigma_8(0.61)$	0.4672	$0.456^{+0.020}_{-0.024}$ (+0.1 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.24683	$0.2481^{+0.0022}_{-0.0014}$ (-0.5 σ)	$\sigma_8(0.61)$	0.5875	$0.569^{+0.030}_{-0.035}$ (+0.2 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.075}_{-0.074}$	10^5D/H	2.585	$2.611^{+0.068}_{-0.060}$ (-1.2 σ)	$f\sigma_8(2.33)$	0.2961	$0.287^{+0.016}_{-0.018}$ (+0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.057}_{-0.056}$	Age/Gyr	13.794	$13.744^{+0.095}_{-0.14}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3052	$0.295^{+0.017}_{-0.019}$ (+0.2 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.16}_{-0.16}$	z_*	1089.89	$1090.16^{+0.63}_{-0.58}$ (-1.0 σ)	f_{2000}^{143}	28.9	31^{+6}_{-5} (-0.7 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.10}_{-0.11}$	r_*	144.45	$143.4^{+1.4}_{-1.8}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	31.96	33^{+4}_{-4} (-0.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.66^{+0.15}_{-0.16}$	$100\theta_*$	1.04111	$1.04087^{+0.00063}_{-0.00070}$ (+0.4 σ)	f_{2000}^{217}	106.62	$108.0^{+3.8}_{-3.7}$ (-0.7 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.874	$13.78^{+0.13}_{-0.17}$ (+0.4 σ)	χ^2_{lensing}	8.96	9.03 ($\nu: 0.2$)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.97	$1060.31^{+0.84}_{-0.77}$ (+0.4 σ)	χ^2_{simall}	396	1646 ($\nu: 447059.2$) (+705.1 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (-0.1 σ)	r_{drag}	147.10	$146.0^{+1.4}_{-1.8}$ (+0.4 σ)	χ^2_{lowl}	23.22	23.5 ($\nu: 0.5$) (+0.0 σ)
H_0	67.42	$67.1^{+1.7}_{-1.4}$ (+0.1 σ)	k_{D}	0.14087	$0.1418^{+0.0015}_{-0.0012}$ (-0.1 σ)	χ^2_{plik}	2344	1113 ($\nu: 446893.7$) (+57.4 σ)
Ω_Λ	0.6856	$0.676^{+0.020}_{-0.025}$ (+0.3 σ)	$100\theta_{\text{D}}$	0.160743	$0.16089^{+0.00046}_{-0.00044}$ (-1.1 σ)	χ^2_{prior}	1.8	11.6 ($\nu: 10.9$) (+1.1 σ)
Ω_m	0.3144	$0.324^{+0.025}_{-0.020}$ (-0.3 σ)	z_{eq}	2910	3359^{+90}_{-110} (+0.1 σ)	χ^2_{CMB}	2772.3	2791.6 ($\nu: 19.6$) (+269.1 σ)

Best-fit $\chi^2_{\text{eff}} = 2774.15$; $\Delta\chi^2_{\text{eff}} = -0.49$; $\bar{\chi}^2_{\text{eff}} = 2803.21$; $\Delta\bar{\chi}^2_{\text{eff}} = 2.51$; $R - 1 = 0.04894$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.96 (Δ 0.09) simall_100x143_offlike5_EE_Aplanck.B: 396.02 (Δ -0.03) commander_dx12.v3.2.29: 23.22 (Δ -0.03) plik_rd12_HM_v22b_TTTEE: 2344.13 (Δ -0.80)

8.7 base_nnu_meffsterile_plikHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00033}_{-0.00030} \quad (+0.9\sigma)$	$\Omega_m h^2$	$0.1459^{+0.0052}_{-0.0044} \quad (-0.4\sigma)$	k_{eq}	$0.01035^{+0.00030}_{-0.00036} \quad (-0.2\sigma)$
$\Omega_c h^2$	$0.1200^{+0.0058}_{-0.0067} \quad (-0.4\sigma)$	$\Omega_\nu h^2$	$0.0035^{+0.0051}_{-0.0030} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.028}_{-0.021} \quad (+0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04074^{+0.00062}_{-0.00066} \quad (+0.4\sigma)$	$\Omega_m h^3$	$0.0980^{+0.0032}_{-0.0021} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.455^{+0.015}_{-0.011} \quad (+0.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.4\sigma)$	σ_8	$0.784^{+0.044}_{-0.054} \quad (+0.1\sigma)$	$H(0.15)$	$72.6^{+1.5}_{-1.3} \quad (+0.1\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.746 \quad (-0.1\sigma)$	S_8	$0.814^{+0.044}_{-0.050} \quad (-0.1\sigma)$	$D_{\text{M}}(0.15)$	$645^{+13}_{-15} \quad (-0.1\sigma)$
N_{eff}	$< 3.32 \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.446^{+0.024}_{-0.027} \quad (-0.1\sigma)$	$H(0.38)$	$83.0^{+1.3}_{-1.0} \quad (-0.0\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.051^{+0.030}_{-0.028} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.591^{+0.031}_{-0.037} \quad (+0.0\sigma)$	$D_{\text{M}}(0.38)$	$1535^{+27}_{-30} \quad (-0.1\sigma)$
n_{s}	$0.966^{+0.011}_{-0.011} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.956^{+0.049}_{-0.062} \quad (+0.1\sigma)$	$H(0.51)$	$89.9^{+1.2}_{-0.86} \quad (-0.1\sigma)$
y_{cal}	$1.0008^{+0.0050}_{-0.0048} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$98.0^{+2.6}_{-3.0} \quad (+0.3\sigma)$	$D_{\text{M}}(0.51)$	$1986^{+31}_{-37} \quad (-0.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.450^{+0.055}_{-0.053} \quad (+0.1\sigma)$	$H(0.61)$	$95.6^{+1.2}_{-0.80} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 9.06 \quad (+0.3\sigma)$	$D_{\text{M}}(0.61)$	$2310^{+34}_{-41} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-3.9} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.113^{+0.064}_{-0.059} \quad (+0.2\sigma)$	$H(2.33)$	$238.7^{+3.7}_{-3.0} \quad (-0.4\sigma)$
A_{100}^{PS}	$261^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.891^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$D_{\text{M}}(2.33)$	$5740^{+44}_{-65} \quad (+0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1230^{+27}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.024}_{-0.027} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5732^{+77}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.723^{+0.041}_{-0.050} \quad (+0.1\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2542^{+27}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.024}_{-0.029} \quad (-0.0\sigma)$
A^{kSZ}	$< 8.32 \quad (-0.2\sigma)$	D_{1420}	$816.6^{+9.6}_{-9.4} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.640^{+0.037}_{-0.046} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (-0.0\sigma)$	D_{2000}	$230.0^{+3.3}_{-3.3} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.024}_{-0.029} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$n_{\text{s}, 0.002}$	$0.966^{+0.011}_{-0.011} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.598^{+0.036}_{-0.043} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.7^{+6.3}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.2468^{+0.0024}_{-0.0015} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.024}_{-0.029} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2482^{+0.0024}_{-0.0015} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.569^{+0.034}_{-0.041} \quad (+0.1\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.074}$	10^5D/H	$2.611^{+0.067}_{-0.060} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.287^{+0.017}_{-0.021} \quad (+0.1\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.058}_{-0.058}$	Age/Gyr	$13.74^{+0.10}_{-0.15} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.019}_{-0.022} \quad (+0.2\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1090.16^{+0.66}_{-0.58} \quad (-1.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-5} \quad (-0.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_*	$143.3^{+1.4}_{-1.9} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	$1.04087^{+0.00064}_{-0.00071} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7} \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.09^{+0.52}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.77^{+0.13}_{-0.18} \quad (+0.4\sigma)$	χ_{simall}^2	$397.2 \quad (\nu: 2.0) \quad (+0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.33^{+0.89}_{-0.82} \quad (+0.5\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.6) \quad (-0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$146.0^{+1.5}_{-1.9} \quad (+0.4\sigma)$	χ_{plik}^2	$2362.2 \quad (\nu: 19.3) \quad (+269.2\sigma)$
H_0	$67.2^{+1.7}_{-1.5} \quad (+0.1\sigma)$	k_{D}	$0.1418^{+0.0016}_{-0.0013} \quad (-0.1\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 11.0) \quad (+1.2\sigma)$
Ω_{Λ}	$0.676^{+0.022}_{-0.024} \quad (+0.3\sigma)$	$100\theta_{\text{D}}$	$0.16089^{+0.00046}_{-0.00043} \quad (-1.1\sigma)$	χ_{CMB}^2	$2782.9 \quad (\nu: 19.3) \quad (+267.6\sigma)$
Ω_{m}	$0.324^{+0.024}_{-0.022} \quad (-0.3\sigma)$	z_{eq}	$3355^{+100}_{-130} \quad (-0.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2794.57; \Delta\bar{\chi}_{\text{eff}}^2 = 3.04; R - 1 = 0.01250$$

8.8 base_nnu_meffsterile_plikHM_TTTEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02243^{+0.00031}_{-0.00030} \quad (+0.8\sigma)$	$\Omega_{\text{m}}h^2$	$0.1458^{+0.0050}_{-0.0042} \quad (-0.5\sigma)$	k_{eq}	$0.01035^{+0.00027}_{-0.00033} \quad (-0.2\sigma)$
$\Omega_{\text{c}}h^2$	$0.1200^{+0.0053}_{-0.0062} \quad (-0.4\sigma)$	$\Omega_{\nu}h^2$	$0.0034^{+0.0044}_{-0.0029} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.823^{+0.024}_{-0.018} \quad (-0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04075^{+0.00060}_{-0.00066} \quad (+0.4\sigma)$	$\Omega_{\text{m}}h^3$	$0.0979^{+0.0030}_{-0.0020} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.455^{+0.013}_{-0.0094} \quad (-0.0\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.4\sigma)$	σ_8	$0.784^{+0.038}_{-0.044} \quad (+0.1\sigma)$	$H(0.15)$	$72.6^{+1.4}_{-1.3} \quad (+0.0\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.668 \quad (-0.1\sigma)$	S_8	$0.815^{+0.036}_{-0.040} \quad (-0.1\sigma)$	$D_{\text{M}}(0.15)$	$645^{+12}_{-15} \quad (-0.1\sigma)$
N_{eff}	$< 3.31 \quad (-0.5\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.446^{+0.019}_{-0.022} \quad (-0.1\sigma)$	$H(0.38)$	$83.0^{+1.2}_{-0.94} \quad (-0.1\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.051^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.592^{+0.025}_{-0.030} \quad (+0.0\sigma)$	$D_{\text{M}}(0.38)$	$1535^{+26}_{-29} \quad (-0.0\sigma)$
n_{s}	$0.965^{+0.011}_{-0.010} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.957^{+0.041}_{-0.050} \quad (+0.1\sigma)$	$H(0.51)$	$89.8^{+1.1}_{-0.79} \quad (-0.1\sigma)$
y_{cal}	$1.0009^{+0.0050}_{-0.0050} \quad (+0.2\sigma)$	$r_{\text{drag}}h$	$98.0^{+2.5}_{-2.9} \quad (+0.3\sigma)$	$D_{\text{M}}(0.51)$	$1987^{+30}_{-34} \quad (-0.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.043}_{-0.044} \quad (+0.1\sigma)$	$H(0.61)$	$95.6^{+1.1}_{-0.73} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 9.07 \quad (+0.3\sigma)$	$D_{\text{M}}(0.61)$	$2311^{+32}_{-38} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.115^{+0.061}_{-0.056} \quad (+0.3\sigma)$	$H(2.33)$	$238.6^{+3.5}_{-2.9} \quad (-0.5\sigma)$
A_{100}^{PS}	$262^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.891^{+0.025}_{-0.024} \quad (-0.2\sigma)$	$D_{\text{M}}(2.33)$	$5741^{+41}_{-61} \quad (+0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1231^{+24}_{-24} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.019}_{-0.022} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5734^{+76}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.724^{+0.036}_{-0.042} \quad (+0.1\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2542^{+27}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.020}_{-0.023} \quad (+0.0\sigma)$
A^{kSZ}	$< 8.44 \quad (-0.3\sigma)$	D_{1420}	$816.6^{+9.9}_{-9.6} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.640^{+0.033}_{-0.038} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.5}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$230.1^{+3.4}_{-3.4} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.020}_{-0.024} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$n_{\text{s}, 0.002}$	$0.965^{+0.011}_{-0.010} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.599^{+0.031}_{-0.036} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.8^{+6.3}_{-6.4} \quad (+0.1\sigma)$	Y_{P}	$0.2468^{+0.0022}_{-0.0014} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.020}_{-0.024} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2481^{+0.0022}_{-0.0015} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.569^{+0.030}_{-0.035} \quad (+0.2\sigma)$
A_{100}^{dustTE}	$0.115^{+0.073}_{-0.074}$	10^5D/H	$2.611^{+0.067}_{-0.061} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.287^{+0.016}_{-0.018} \quad (+0.2\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.056}$	Age/Gyr	$13.742^{+0.096}_{-0.14} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.017}_{-0.019} \quad (+0.2\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.16}$	z_*	$1090.16^{+0.63}_{-0.58} \quad (-1.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-5} \quad (-0.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	r_*	$143.4^{+1.4}_{-1.8} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	$1.04088^{+0.00063}_{-0.00070} \quad (+0.4\sigma)$	f_{2000}^{217}	$108.0^{+3.8}_{-3.7} \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.77^{+0.13}_{-0.17} \quad (+0.4\sigma)$	χ_{lensing}^2	$9.01 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.32^{+0.85}_{-0.78} \quad (+0.4\sigma)$	χ_{simall}^2	$1645 \quad (\nu: 447270.5) \quad (+704.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$146.0^{+1.4}_{-1.8} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.5) \quad (+0.0\sigma)$
H_0	$67.1^{+1.7}_{-1.4} \quad (+0.1\sigma)$	k_{D}	$0.1418^{+0.0015}_{-0.0012} \quad (-0.1\sigma)$	χ_{plik}^2	$1114 \quad (\nu: 447092.4) \quad (+57.6\sigma)$
Ω_{Λ}	$0.676^{+0.020}_{-0.025} \quad (+0.3\sigma)$	$100\theta_{\text{D}}$	$0.16089^{+0.00047}_{-0.00044} \quad (-1.1\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 11.0) \quad (+1.2\sigma)$
Ω_{m}	$0.324^{+0.025}_{-0.020} \quad (-0.3\sigma)$	z_{eq}	$3358^{+89}_{-110} \quad (+0.0\sigma)$	χ_{CMB}^2	$2791.5 \quad (\nu: 19.4) \quad (+269.1\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 2803.10; \Delta\bar{\chi}_{\text{eff}}^2 = 2.59; R - 1 = 0.04623$$

8.9 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022298	$0.02237^{+0.00034}_{-0.00032} (+0.6\sigma)$	$\Omega_m h^3$	0.09691	$0.0981^{+0.0041}_{-0.0025} (-0.2\sigma)$	$100\theta_{\text{eq}}$	0.8160	$0.827^{+0.028}_{-0.020} (+0.2\sigma)$
$\Omega_c h^2$	0.1202	$0.1198^{+0.0065}_{-0.0072} (-0.4\sigma)$	σ_8	0.8114	$0.778^{+0.045}_{-0.054} (-0.1\sigma)$	$100\theta_{\text{s,eq}}$	0.4508	$0.456^{+0.014}_{-0.011} (+0.2\sigma)$
$100\theta_{\text{MC}}$	1.04084	$1.04068^{+0.00066}_{-0.00073} (+0.3\sigma)$	S_8	0.8281	$0.805^{+0.045}_{-0.049} (-0.4\sigma)$	$H(0.15)$	73.00	$72.8^{+1.7}_{-1.5} (+0.2\sigma)$
τ	0.0547	$0.053^{+0.017}_{-0.015} (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4536	$0.441^{+0.025}_{-0.027} (-0.4\sigma)$	$D_{\text{M}}(0.15)$	640.4	$643^{+15}_{-16} (-0.3\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	0.001	$< 0.749 (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6067	$0.586^{+0.032}_{-0.037} (-0.2\sigma)$	$H(0.38)$	83.15	$83.1^{+1.5}_{-1.1} (+0.1\sigma)$
N_{eff}	3.089	$< 3.39 (-0.3\sigma)$	$\sigma_8/h^{0.5}$	0.986	$0.948^{+0.050}_{-0.061} (-0.2\sigma)$	$D_{\text{M}}(0.38)$	1527.0	$1531^{+29}_{-34} (-0.2\sigma)$
$\ln(10^{10} A_s)$	3.0445	$3.043^{+0.035}_{-0.033} (-0.2\sigma)$	$r_{\text{drag}} h$	99.44	$98.3^{+2.8}_{-3.0} (+0.4\sigma)$	$H(0.51)$	89.90	$90.0^{+1.5}_{-1.0} (+0.0\sigma)$
n_s	0.9671	$0.967^{+0.013}_{-0.011} (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.437	$2.430^{+0.058}_{-0.057} (-0.4\sigma)$	$D_{\text{M}}(0.51)$	1978.0	$1982^{+35}_{-42} (-0.2\sigma)$
y_{cal}	1.00062	$1.0005^{+0.0049}_{-0.0050} (+0.0\sigma)$	z_{re}	7.75	$7.6^{+1.6}_{-1.7} (-0.0\sigma)$	$H(0.61)$	95.54	$95.7^{+1.4}_{-0.95} (-0.0\sigma)$
A_{100}^{PS}	238.8	$244^{+50}_{-50} (-0.9\sigma)$	$10^9 A_s$	2.100	$2.096^{+0.075}_{-0.068} (-0.2\sigma)$	$D_{\text{M}}(0.61)$	2301.5	$2305^{+38}_{-46} (-0.2\sigma)$
A_{143}^{PS}	44.7	$42^{+20}_{-20} (-1.2\sigma)$	$10^9 A_s e^{-2\tau}$	1.8822	$1.886^{+0.029}_{-0.026} (-0.6\sigma)$	$H(2.33)$	236.77	$238.6^{+4.2}_{-3.4} (-0.5\sigma)$
A_{217}^{PS}	102.0	$101^{+30}_{-30} (-1.4\sigma)$	D_{40}	1225.7	$1222^{+29}_{-29} (-0.3\sigma)$	$D_{\text{M}}(2.33)$	5749	$5734^{+52}_{-81} (+0.1\sigma)$
A_{217}^{CIB}	42.1	$41^{+10}_{-10} (-1.1\sigma)$	D_{220}	5719	$5717^{+78}_{-80} (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4581	$0.445^{+0.024}_{-0.027} (-0.4\sigma)$
A_{143}^{tSZ}	4.79	$< 7.38 (-0.5\sigma)$	D_{810}	2536.7	$2536^{+27}_{-28} (-0.2\sigma)$	$\sigma_8(0.15)$	0.7497	$0.718^{+0.042}_{-0.050} (-0.0\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.682	$0.65^{+0.24}_{-0.24}$	D_{1420}	815.3	$814.4^{+9.7}_{-9.8} (+0.2\sigma)$	$f\sigma_8(0.38)$	0.4762	$0.460^{+0.025}_{-0.029} (-0.3\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.70	—	D_{2000}	229.99	$229.0^{+3.6}_{-3.6} (+0.4\sigma)$	$\sigma_8(0.38)$	0.6645	$0.636^{+0.038}_{-0.046} (-0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.55	—	$n_{\text{s}, 0.002}$	0.9671	$0.967^{+0.013}_{-0.011} (+0.2\sigma)$	$f\sigma_8(0.51)$	0.4747	$0.458^{+0.025}_{-0.029} (-0.2\sigma)$
A^{kSZ}	3.0	—	Y_{P}	0.24594	$0.2471^{+0.0029}_{-0.0018} (-0.3\sigma)$	$\sigma_8(0.51)$	0.6218	$0.595^{+0.036}_{-0.043} (+0.0\sigma)$
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.24727	$0.2484^{+0.0029}_{-0.0018} (-0.3\sigma)$	$f\sigma_8(0.61)$	0.4697	$0.453^{+0.025}_{-0.029} (-0.2\sigma)$
A_{143}^{dust}	0.969	$0.97^{+0.34}_{-0.35}$	10^5D/H	2.614	$2.632^{+0.084}_{-0.076} (-0.8\sigma)$	$\sigma_8(0.61)$	0.5916	$0.566^{+0.035}_{-0.042} (+0.0\sigma)$
A_{217}^{dust}	0.966	$0.97^{+0.20}_{-0.20}$	Age/Gyr	13.763	$13.73^{+0.12}_{-0.19} (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2983	$0.285^{+0.018}_{-0.021} (+0.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.021	$1.03^{+0.32}_{-0.32}$	z_*	1090.07	$1090.25^{+0.75}_{-0.65} (-0.8\sigma)$	$\sigma_8(2.33)$	0.3075	$0.293^{+0.019}_{-0.023} (+0.0\sigma)$
c_{100}	0.99762	$0.9975^{+0.0020}_{-0.0021} (-3.4\sigma)$	r_*	144.22	$143.3^{+1.7}_{-2.2} (+0.4\sigma)$	f_{2000}^{143}	30.6	$31^{+6}_{-6} (-0.5\sigma)$
c_{217}	1.00124	$1.0012^{+0.0031}_{-0.0031} (+4.7\sigma)$	$100\theta_*$	1.04101	$1.04080^{+0.00073}_{-0.00079} (+0.3\sigma)$	f_{2000}^{217}	107.24	$108.0^{+4.2}_{-3.9} (-0.7\sigma)$
c_{TE}	0.9969	$0.9975^{+0.010}_{-0.0097}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.853	$13.77^{+0.15}_{-0.21} (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	32.81	$34^{+4}_{-4} (-0.7\sigma)$
c_{EE}	0.9933	$0.993^{+0.010}_{-0.010}$	z_{drag}	1059.82	$1060.19^{+0.98}_{-0.89} (+0.2\sigma)$	χ_{small}^2	396.18	$397.0 (\nu: 1.6) (-0.0\sigma)$
H_0	67.69	$67.4^{+1.8}_{-1.7} (+0.3\sigma)$	r_{drag}	146.90	$146.0^{+1.7}_{-2.3} (+0.4\sigma)$	χ_{lowl}^2	23.00	$22.9 (\nu: 0.6) (-0.3\sigma)$
Ω_{Λ}	0.6876	$0.679^{+0.023}_{-0.024} (+0.4\sigma)$	k_{D}	0.14085	$0.1416^{+0.0018}_{-0.0015} (-0.3\sigma)$	χ_{CamSpec}^2	11500.0	$11517.5 (\nu: 18.9)$
Ω_{m}	0.3124	$0.321^{+0.024}_{-0.023} (-0.4\sigma)$	$100\theta_{\text{D}}$	0.16101	$0.16107^{+0.00065}_{-0.00055} (-0.7\sigma)$	χ_{prior}^2	2.2	$7.9 (\nu: 6.2) (+0.1\sigma)$
$\Omega_{\text{m}} h^2$	0.1432	$0.1457^{+0.0057}_{-0.0049} (-0.5\sigma)$	z_{eq}	3386	$3339^{+100}_{-130} (-0.2\sigma)$	χ_{CMB}^2	11919.1	$11937.4 (\nu: 19.1) (+1810.6\sigma)$
$\Omega_{\nu} h^2$	0.00065	$0.0035^{+0.0052}_{-0.0030} (-0.1\sigma)$	k_{eq}	0.010364	$0.01031^{+0.00031}_{-0.00037} (-0.4\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 11921.37$; $\Delta\chi_{\text{eff}}^2 = 0.61$; $\bar{\chi}_{\text{eff}}^2 = 11945.34$; $\Delta\bar{\chi}_{\text{eff}}^2 = 2.88$; $R - 1 = 0.02481$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.18 (Δ 0.28) commander_dx12_v3.2.29: 23.00 (Δ 0.00) CamSpec like_10.7HM_1400_unified: 11499.96 (Δ 0.31)

8.10 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02234^{+0.00033}_{-0.00031} \quad (+0.5\sigma)$	$\Omega_m h^3$	$0.0980^{+0.0038}_{-0.0024} \quad (-0.3\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.025}_{-0.018} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1201^{+0.0057}_{-0.0072} \quad (-0.3\sigma)$	σ_8	$0.783^{+0.038}_{-0.044} \quad (+0.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.455^{+0.013}_{-0.0092} \quad (+0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04066^{+0.00065}_{-0.00071} \quad (+0.3\sigma)$	S_8	$0.812^{+0.035}_{-0.039} \quad (-0.2\sigma)$	$H(0.15)$	$72.7^{+1.6}_{-1.4} \quad (+0.1\sigma)$
τ	$0.054^{+0.016}_{-0.014} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.019}_{-0.021} \quad (-0.2\sigma)$	$D_{\text{M}}(0.15)$	$644^{+14}_{-15} \quad (-0.1\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.681 \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.590^{+0.025}_{-0.029} \quad (-0.0\sigma)$	$H(0.38)$	$83.0^{+1.4}_{-1.1} \quad (+0.0\sigma)$
N_{eff}	$< 3.37 \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.955^{+0.040}_{-0.048} \quad (+0.1\sigma)$	$D_{\text{M}}(0.38)$	$1534^{+28}_{-32} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.047^{+0.032}_{-0.030} \quad (+0.0\sigma)$	$r_{\text{drag}} h$	$98.1^{+2.5}_{-2.9} \quad (+0.3\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-0.93} \quad (-0.1\sigma)$
n_{s}	$0.966^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.046}_{-0.046} \quad (-0.2\sigma)$	$D_{\text{M}}(0.51)$	$1985^{+33}_{-39} \quad (-0.1\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.6}_{-1.5} \quad (+0.2\sigma)$	$H(0.61)$	$95.6^{+1.3}_{-0.87} \quad (-0.1\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\text{s}}$	$2.105^{+0.069}_{-0.062} \quad (+0.0\sigma)$	$D_{\text{M}}(0.61)$	$2309^{+36}_{-43} \quad (-0.1\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.888^{+0.028}_{-0.025} \quad (-0.4\sigma)$	$H(2.33)$	$238.6^{+3.9}_{-3.2} \quad (-0.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{40}	$1226^{+26}_{-26} \quad (-0.1\sigma)$	$D_{\text{M}}(2.33)$	$5739^{+48}_{-77} \quad (+0.2\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5720^{+78}_{-79} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.019}_{-0.021} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.37 \quad (-0.5\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.723^{+0.036}_{-0.042} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.24}_{-0.25}$	D_{1420}	$814.7^{+9.9}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.023} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	D_{2000}	$229.2^{+3.5}_{-3.5} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.639^{+0.033}_{-0.038} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$n_{\text{s}, 0.002}$	$0.966^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.020}_{-0.023} \quad (+0.0\sigma)$
A^{kSZ}	—	Y_{P}	$0.2470^{+0.0028}_{-0.0017} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.598^{+0.031}_{-0.036} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.37}$	$Y_{\text{P}}^{\text{BBN}}$	$0.2483^{+0.0028}_{-0.0017} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.020}_{-0.023} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.97^{+0.33}_{-0.35}$	$10^5 \text{D}/\text{H}$	$2.632^{+0.081}_{-0.074} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.569^{+0.030}_{-0.035} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	Age/Gyr	$13.74^{+0.11}_{-0.18} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.287^{+0.016}_{-0.018} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	z_*	$1090.28^{+0.69}_{-0.65} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.017}_{-0.019} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	r_*	$143.4^{+1.5}_{-2.1} \quad (+0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.6\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	$100\theta_*$	$1.04079^{+0.00071}_{-0.00076} \quad (+0.3\sigma)$	f_{2000}^{217}	$108.0^{+4.2}_{-3.8} \quad (-0.7\sigma)$
c_{TE}	$0.9972^{+0.010}_{-0.0097}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.77^{+0.14}_{-0.19} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.8\sigma)$
c_{EE}	$0.993^{+0.010}_{-0.0099}$	z_{drag}	$1060.14^{+0.92}_{-0.84} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.25 \quad (\nu: 0.4)$
H_0	$67.2^{+1.7}_{-1.6} \quad (+0.1\sigma)$	r_{drag}	$146.0^{+1.6}_{-2.1} \quad (+0.4\sigma)$	χ_{simall}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
Ω_{Λ}	$0.677^{+0.021}_{-0.023} \quad (+0.3\sigma)$	k_{D}	$0.1416^{+0.0017}_{-0.0014} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 0.5) \quad (-0.2\sigma)$
Ω_{m}	$0.323^{+0.023}_{-0.021} \quad (-0.3\sigma)$	$100\theta_{\text{D}}$	$0.16106^{+0.00063}_{-0.00053} \quad (-0.7\sigma)$	χ_{CamSpec}^2	$11516.6 \quad (\nu: 17.1)$
$\Omega_{\text{m}} h^2$	$0.1458^{+0.0054}_{-0.0045} \quad (-0.5\sigma)$	z_{eq}	$3351^{+87}_{-120} \quad (-0.1\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\nu} h^2$	$0.0033^{+0.0049}_{-0.0028} \quad (-0.1\sigma)$	k_{eq}	$0.01034^{+0.00028}_{-0.00034} \quad (-0.3\sigma)$	χ_{CMB}^2	$11946.1 \quad (\nu: 18.6) \quad (+1812.0\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 11954.00; \Delta\bar{\chi}_{\text{eff}}^2 = 2.56; R - 1 = 0.02353$$

8.11 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02237^{+0.00034}_{-0.00032} \quad (+0.6\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.0982^{+0.0041}_{-0.0025} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.827^{+0.027}_{-0.020} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1198^{+0.0065}_{-0.0072} \quad (-0.4\sigma)$	σ_8	$0.779^{+0.044}_{-0.053} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.014}_{-0.011} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04068^{+0.00066}_{-0.00073} \quad (+0.3\sigma)$	S_8	$0.806^{+0.045}_{-0.049} \quad (-0.4\sigma)$	$H(0.15)$	$72.8^{+1.7}_{-1.5} \quad (+0.2\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.024}_{-0.027} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+15}_{-16} \quad (-0.3\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.746 \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.586^{+0.031}_{-0.037} \quad (-0.2\sigma)$	$H(0.38)$	$83.2^{+1.5}_{-1.1} \quad (+0.1\sigma)$
N_{eff}	$< 3.39 \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.949^{+0.050}_{-0.061} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+30}_{-34} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.030}_{-0.028} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.4^{+2.9}_{-3.0} \quad (+0.4\sigma)$	$H(0.51)$	$90.0^{+1.5}_{-1.0} \quad (+0.0\sigma)$
n_{s}	$0.968^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.056}_{-0.056} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+35}_{-42} \quad (-0.2\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0051} \quad (+0.0\sigma)$	z_{re}	$< 8.94 \quad (+0.1\sigma)$	$H(0.61)$	$95.7^{+1.4}_{-0.95} \quad (-0.0\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.064}_{-0.058} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+38}_{-46} \quad (-0.2\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.886^{+0.029}_{-0.026} \quad (-0.6\sigma)$	$H(2.33)$	$238.6^{+4.2}_{-3.5} \quad (-0.5\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{40}	$1222^{+29}_{-29} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5733^{+53}_{-81} \quad (+0.1\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{220}	$5717^{+78}_{-79} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.445^{+0.024}_{-0.027} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.5\sigma)$	D_{810}	$2536^{+27}_{-28} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.719^{+0.042}_{-0.050} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.24}$	D_{1420}	$814.4^{+9.9}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.024}_{-0.029} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$229.1^{+3.6}_{-3.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.637^{+0.038}_{-0.046} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s}, 0.002}$	$0.968^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.024}_{-0.029} \quad (-0.2\sigma)$
A^{kSZ}	—	Y_{P}	$0.2471^{+0.0029}_{-0.0019} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.595^{+0.036}_{-0.043} \quad (+0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2485^{+0.0030}_{-0.0019} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.453^{+0.024}_{-0.029} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.632^{+0.084}_{-0.076} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.566^{+0.035}_{-0.041} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.72^{+0.12}_{-0.19} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.286^{+0.018}_{-0.021} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_*	$1090.24^{+0.75}_{-0.66} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.294^{+0.019}_{-0.022} \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	r_*	$143.3^{+1.7}_{-2.2} \quad (+0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.5\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	$100\theta_*$	$1.04080^{+0.00073}_{-0.00079} \quad (+0.3\sigma)$	f_{2000}^{217}	$108.0^{+4.2}_{-3.9} \quad (-0.7\sigma)$
c_{TE}	$0.9974^{+0.010}_{-0.0097}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.77^{+0.16}_{-0.21} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.7\sigma)$
c_{EE}	$0.993^{+0.010}_{-0.010}$	z_{drag}	$1060.20^{+0.98}_{-0.89} \quad (+0.3\sigma)$	χ_{simall}^2	$396.9 \quad (\nu: 1.7) \quad (-0.1\sigma)$
H_0	$67.4^{+1.8}_{-1.7} \quad (+0.3\sigma)$	r_{drag}	$146.0^{+1.7}_{-2.3} \quad (+0.4\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 0.6) \quad (-0.3\sigma)$
Ω_{Λ}	$0.679^{+0.023}_{-0.024} \quad (+0.4\sigma)$	k_{D}	$0.1416^{+0.0018}_{-0.0015} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11517.4 \quad (\nu: 18.8)$
Ω_{m}	$0.321^{+0.024}_{-0.023} \quad (-0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16107^{+0.00065}_{-0.00055} \quad (-0.7\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.2) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1457^{+0.0057}_{-0.0049} \quad (-0.5\sigma)$	z_{eq}	$3339^{+100}_{-130} \quad (-0.2\sigma)$	χ_{CMB}^2	$11937.2 \quad (\nu: 18.7) \quad (+1810.5\sigma)$
$\Omega_{\nu} h^2$	$0.0035^{+0.0052}_{-0.0030} \quad (-0.1\sigma)$	k_{eq}	$0.01031^{+0.00031}_{-0.00037} \quad (-0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11945.16; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.97; R - 1 = 0.02558$

8.12 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02235^{+0.00032}_{-0.00031} \quad (+0.5\sigma)$	$\Omega_m h^3$	$0.0980^{+0.0039}_{-0.0024} \quad (-0.3\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.025}_{-0.018} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1201^{+0.0060}_{-0.0068} \quad (-0.3\sigma)$	σ_8	$0.784^{+0.038}_{-0.044} \quad (+0.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.455^{+0.013}_{-0.0092} \quad (+0.1\sigma)$
$100\theta_{\text{MC}}$	$1.04066^{+0.00064}_{-0.00072} \quad (+0.3\sigma)$	S_8	$0.812^{+0.035}_{-0.039} \quad (-0.1\sigma)$	$H(0.15)$	$72.7^{+1.6}_{-1.4} \quad (+0.1\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.019}_{-0.021} \quad (-0.1\sigma)$	$D_{\text{M}}(0.15)$	$644^{+14}_{-15} \quad (-0.2\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.682 \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.590^{+0.025}_{-0.029} \quad (-0.0\sigma)$	$H(0.38)$	$83.0^{+1.4}_{-1.1} \quad (+0.0\sigma)$
N_{eff}	$< 3.37 \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.955^{+0.040}_{-0.049} \quad (+0.1\sigma)$	$D_{\text{M}}(0.38)$	$1533^{+28}_{-32} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.049^{+0.029}_{-0.027} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$98.2^{+2.6}_{-2.8} \quad (+0.3\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-0.92} \quad (-0.1\sigma)$
n_{s}	$0.967^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.442^{+0.045}_{-0.046} \quad (-0.1\sigma)$	$D_{\text{M}}(0.51)$	$1985^{+33}_{-39} \quad (-0.1\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 9.03 \quad (+0.3\sigma)$	$H(0.61)$	$95.6^{+1.3}_{-0.86} \quad (-0.1\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\text{s}}$	$2.109^{+0.061}_{-0.056} \quad (+0.1\sigma)$	$D_{\text{M}}(0.61)$	$2308^{+35}_{-43} \quad (-0.1\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.888^{+0.028}_{-0.025} \quad (-0.4\sigma)$	$H(2.33)$	$238.6^{+3.9}_{-3.2} \quad (-0.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{40}	$1226^{+26}_{-26} \quad (-0.1\sigma)$	$D_{\text{M}}(2.33)$	$5738^{+48}_{-76} \quad (+0.2\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5720^{+79}_{-78} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.019}_{-0.021} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.39 \quad (-0.5\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.723^{+0.036}_{-0.042} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.24}_{-0.25}$	D_{1420}	$814.7^{+9.9}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.023} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	D_{2000}	$229.2^{+3.5}_{-3.5} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.640^{+0.033}_{-0.038} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$n_{\text{s}, 0.002}$	$0.967^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.020}_{-0.023} \quad (+0.0\sigma)$
A^{kSZ}	—	Y_{P}	$0.2470^{+0.0028}_{-0.0017} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.598^{+0.031}_{-0.037} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.37}$	$Y_{\text{P}}^{\text{BBN}}$	$0.2483^{+0.0028}_{-0.0017} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.020}_{-0.023} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.97^{+0.33}_{-0.35}$	$10^5 \text{D}/\text{H}$	$2.632^{+0.081}_{-0.074} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.569^{+0.030}_{-0.035} \quad (+0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	Age/Gyr	$13.74^{+0.11}_{-0.18} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.287^{+0.016}_{-0.018} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.31}$	z_*	$1090.27^{+0.70}_{-0.65} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.017}_{-0.019} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	r_*	$143.4^{+1.6}_{-2.1} \quad (+0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.6\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	$100\theta_*$	$1.04079^{+0.00071}_{-0.00076} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.9^{+4.2}_{-3.8} \quad (-0.7\sigma)$
c_{TE}	$0.9972^{+0.010}_{-0.0097}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.77^{+0.15}_{-0.19} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.8\sigma)$
c_{EE}	$0.993^{+0.010}_{-0.0099}$	z_{drag}	$1060.15^{+0.92}_{-0.84} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.21 \quad (\nu: 0.4)$
H_0	$67.2^{+1.7}_{-1.6} \quad (+0.2\sigma)$	r_{drag}	$146.0^{+1.6}_{-2.1} \quad (+0.4\sigma)$	χ_{simall}^2	$397.1 \quad (\nu: 1.9) \quad (+0.0\sigma)$
Ω_{Λ}	$0.677^{+0.021}_{-0.023} \quad (+0.4\sigma)$	k_{D}	$0.1416^{+0.0017}_{-0.0014} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 0.5) \quad (-0.2\sigma)$
Ω_{m}	$0.323^{+0.023}_{-0.021} \quad (-0.4\sigma)$	$100\theta_{\text{D}}$	$0.16106^{+0.00063}_{-0.00054} \quad (-0.7\sigma)$	χ_{CamSpec}^2	$11516.5 \quad (\nu: 17.1)$
$\Omega_{\text{m}} h^2$	$0.1457^{+0.0054}_{-0.0045} \quad (-0.5\sigma)$	z_{eq}	$3350^{+87}_{-120} \quad (-0.1\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\nu} h^2$	$0.0033^{+0.0049}_{-0.0028} \quad (-0.1\sigma)$	k_{eq}	$0.01034^{+0.00028}_{-0.00034} \quad (-0.3\sigma)$	χ_{CMB}^2	$11946.0 \quad (\nu: 18.3) \quad (+1812.0\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 11953.86; \Delta\bar{\chi}_{\text{eff}}^2 = 2.61; R - 1 = 0.02344$$

8.13 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022314	$0.02235^{+0.00044}_{-0.00041} (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4502	$0.441^{+0.024}_{-0.027} (-0.4\sigma)$	$D_M(0.15)$	636.1	$633^{+16}_{-20} (-1.0\sigma)$
$\Omega_c h^2$	0.1199	$0.1203^{+0.0081}_{-0.010} (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6047	$0.591^{+0.031}_{-0.036} (+0.0\sigma)$	$H(0.38)$	83.52	$84.0^{+2.3}_{-1.6} (+0.9\sigma)$
$100\theta_{MC}$	1.04093	$1.04074^{+0.00094}_{-0.0010} (+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9835	$0.957^{+0.044}_{-0.055} (+0.1\sigma)$	$D_M(0.38)$	1518.2	$1511^{+35}_{-46} (-1.0\sigma)$
τ	0.0557	$0.055^{+0.016}_{-0.016} (+0.3\sigma)$	$r_{drag}h$	100.10	$99.8^{+2.0}_{-1.9} (+1.1\sigma)$	$H(0.51)$	90.23	$90.7^{+2.4}_{-1.6} (+0.8\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	0.001	$< 0.687 (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.428	$2.412^{+0.058}_{-0.060} (-0.9\sigma)$	$D_M(0.51)$	1967	$1958^{+43}_{-58} (-1.0\sigma)$
N_{eff}	3.118	$< 3.59 (+0.1\sigma)$	z_{re}	7.85	$7.8^{+1.6}_{-1.7} (+0.2\sigma)$	$H(0.61)$	95.84	$96.4^{+2.4}_{-1.6} (+0.6\sigma)$
$\ln(10^{10} A_s)$	3.0484	$3.048^{+0.037}_{-0.035} (+0.0\sigma)$	$10^9 A_s$	2.108	$2.107^{+0.080}_{-0.073} (+0.0\sigma)$	$D_M(0.61)$	2290	$2279^{+49}_{-66} (-0.9\sigma)$
n_s	0.9701	$0.973^{+0.016}_{-0.014} (+0.8\sigma)$	$10^9 A_s e^{-2\tau}$	1.8858	$1.888^{+0.034}_{-0.031} (-0.4\sigma)$	$H(2.33)$	236.69	$238.5^{+5.3}_{-3.9} (-0.5\sigma)$
y_{cal}	1.00131	$1.0006^{+0.0048}_{-0.0049} (+0.0\sigma)$	D_{40}	1223.1	$1215^{+30}_{-31} (-0.7\sigma)$	$D_M(2.33)$	5734	$5699^{+88}_{-140} (-0.5\sigma)$
A_{217}^{CIB}	49.8	$49^{+10}_{-10} (-0.0\sigma)$	D_{220}	5731	$5720^{+78}_{-80} (+0.2\sigma)$	$f\sigma_8(0.15)$	0.4552	$0.446^{+0.024}_{-0.027} (-0.3\sigma)$
$\xi^{tSZ \times CIB}$	0.20	—	D_{810}	2543.0	$2538^{+27}_{-27} (-0.0\sigma)$	$\sigma_8(0.15)$	0.7509	$0.732^{+0.039}_{-0.046} (+0.4\sigma)$
A_{143}^{tSZ}	7.10	$4.9^{+3.9}_{-3.9} (+0.0\sigma)$	D_{1420}	817.5	$814.3^{+9.7}_{-9.8} (+0.2\sigma)$	$f\sigma_8(0.38)$	0.4745	$0.464^{+0.024}_{-0.028} (-0.0\sigma)$
A_{100}^{PS}	256	$267^{+60}_{-60} (-0.0\sigma)$	D_{2000}	230.48	$228.7^{+3.7}_{-3.9} (+0.2\sigma)$	$\sigma_8(0.38)$	0.6660	$0.649^{+0.035}_{-0.042} (+0.5\sigma)$
A_{143}^{PS}	48.0	$51^{+20}_{-20} (-0.1\sigma)$	$n_{s,0.002}$	0.9701	$0.973^{+0.016}_{-0.014} (+0.8\sigma)$	$f\sigma_8(0.51)$	0.4736	$0.463^{+0.024}_{-0.028} (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	43.9	$44^{+20}_{-20} (-0.1\sigma)$	Y_P	0.24634	$0.2480^{+0.0046}_{-0.0027} (+0.2\sigma)$	$\sigma_8(0.51)$	0.6235	$0.607^{+0.033}_{-0.039} (+0.5\sigma)$
A_{217}^{PS}	118.0	$115^{+20}_{-20} (-0.1\sigma)$	Y_P^{BBN}	0.24767	$0.2493^{+0.0046}_{-0.0028} (+0.2\sigma)$	$f\sigma_8(0.61)$	0.4689	$0.458^{+0.024}_{-0.028} (+0.2\sigma)$
A^{kSZ}	0.0	—	$10^5 D/H$	2.621	$2.66^{+0.11}_{-0.10} (-0.3\sigma)$	$\sigma_8(0.61)$	0.5934	$0.578^{+0.032}_{-0.037} (+0.5\sigma)$
A_{100}^{dustTT}	8.89	$9.1^{+3.7}_{-3.6} (+0.0\sigma)$	Age/Gyr	13.728	$13.64^{+0.21}_{-0.33} (-0.5\sigma)$	$f\sigma_8(2.33)$	0.2993	$0.292^{+0.016}_{-0.019} (+0.6\sigma)$
A_{143}^{dustTT}	10.79	$10.8^{+3.5}_{-3.5} (+0.0\sigma)$	z_*	1090.05	$1090.29^{+0.82}_{-0.76} (-0.7\sigma)$	$\sigma_8(2.33)$	0.3088	$0.301^{+0.017}_{-0.020} (+0.6\sigma)$
$A_{143 \times 217}^{dustTT}$	19.2	$18.4^{+6.5}_{-6.5} (+0.0\sigma)$	r_*	144.14	$143.1^{+2.2}_{-3.3} (+0.2\sigma)$	f_{2000}^{143}	30.6	$33^{+6}_{-6} (-0.2\sigma)$
A_{217}^{dustTT}	94.2	$93^{+10}_{-10} (+0.0\sigma)$	$100\theta_*$	1.04108	$1.0408^{+0.0011}_{-0.0011} (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	33.32	$35^{+4}_{-4} (-0.2\sigma)$
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012} (+0.0\sigma)$	$D_M(z_*)/Gpc$	13.845	$13.75^{+0.21}_{-0.31} (+0.2\sigma)$	f_{2000}^{217}	107.92	$109.1^{+4.1}_{-4.0} (-0.2\sigma)$
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012} (+0.0\sigma)$	z_{drag}	1059.86	$1060.2^{+1.4}_{-1.3} (+0.2\sigma)$	χ_{small}^2	396.28	$397.2 (\nu: 2.0) (+0.1\sigma)$
H_0	68.18	$68.5^{+2.3}_{-1.8} (+1.0\sigma)$	r_{drag}	146.82	$145.8^{+2.3}_{-3.4} (+0.2\sigma)$	χ_{lowl}^2	22.61	$22.3 (\nu: 0.6) (-0.7\sigma)$
Ω_Λ	0.6927	$0.690^{+0.015}_{-0.015} (+1.1\sigma)$	k_D	0.14084	$0.1416^{+0.0026}_{-0.0019} (-0.3\sigma)$	χ_{plik}^2	760.1	$775.2 (\nu: 17.7) (+0.1\sigma)$
Ω_m	0.3073	$0.310^{+0.015}_{-0.015} (-1.1\sigma)$	$100\theta_D$	0.16112	$0.16141^{+0.00099}_{-0.00085} (+0.1\sigma)$	χ_{6DF}^2	0.006	$0.063 (\nu: 0.0)$
$\Omega_m h^2$	0.1429	$0.1451^{+0.0066}_{-0.0050} (-0.6\sigma)$	z_{eq}	3366	$3321^{+98}_{-140} (-0.5\sigma)$	χ_{MGS}^2	1.47	$1.36 (\nu: 0.2)$
$\Omega_\nu h^2$	0.00065	$0.0025^{+0.0059}_{-0.0022} (-0.4\sigma)$	k_{eq}	0.010323	$0.01029^{+0.00037}_{-0.00045} (-0.5\sigma)$	$\chi_{DR12BAO}^2$	3.79	$4.9 (\nu: 1.5)$
$\Omega_m h^3$	0.0974	$0.0994^{+0.0071}_{-0.0043} (+0.2\sigma)$	$100\theta_{eq}$	0.8197	$0.829^{+0.030}_{-0.020} (+0.4\sigma)$	χ_{prior}^2	1.7	$7.4 (\nu: 6.9) (+0.0\sigma)$
σ_8	0.8121	$0.792^{+0.042}_{-0.050} (+0.4\sigma)$	$100\theta_{s,eq}$	0.4528	$0.458^{+0.016}_{-0.010} (+0.4\sigma)$	χ_{BAO}^2	5.27	$6.3 (\nu: 1.1)$
S_8	0.8220	$0.804^{+0.044}_{-0.050} (-0.4\sigma)$	$H(0.15)$	73.44	$73.8^{+2.3}_{-1.7} (+1.0\sigma)$	χ_{CMB}^2	1179.0	$1194.7 (\nu: 17.0) (-0.1\sigma)$

Best-fit $\chi_{eff}^2 = 1185.94$; $\Delta\chi_{eff}^2 = 0.20$; $\bar{\chi}_{eff}^2 = 1208.40$; $\Delta\bar{\chi}_{eff}^2 = 2.37$; $R - 1 = 0.03028$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.02) MGS: 1.47 (Δ 0.19) DR12BAO: 3.79 (Δ -0.40) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.28 (Δ 0.39) commander_dx12_v3_2_29: 22.61 (Δ -0.22) plik_rd12_HM_v22_TT: 760.13 (Δ 0.03)

8.14 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022246	$0.02236^{+0.00044}_{-0.00041} (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4472	$0.440^{+0.024}_{-0.027} (-0.4\sigma)$	$D_M(0.15)$	639.5	$632^{+16}_{-20} (-1.1\sigma)$
$\Omega_c h^2$	0.1189	$0.1204^{+0.0087}_{-0.0091} (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6002	$0.591^{+0.030}_{-0.035} (+0.0\sigma)$	$H(0.38)$	83.12	$84.1^{+2.3}_{-1.7} (+1.0\sigma)$
$100\theta_{MC}$	1.04093	$1.04074^{+0.00094}_{-0.0010} (+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9780	$0.957^{+0.043}_{-0.053} (+0.1\sigma)$	$D_M(0.38)$	1525.9	$1509^{+35}_{-45} (-1.1\sigma)$
τ	0.0525	$0.055^{+0.016}_{-0.016} (+0.3\sigma)$	$r_{drag}h$	99.98	$99.9^{+1.9}_{-1.8} (+1.2\sigma)$	$H(0.51)$	89.81	$90.8^{+2.4}_{-1.6} (+0.8\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	0.000	$< 0.623 (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	2.418	$2.409^{+0.057}_{-0.059} (-0.9\sigma)$	$D_M(0.51)$	1977	$1955^{+43}_{-57} (-1.0\sigma)$
N_{eff}	3.062	$< 3.60 (+0.2\sigma)$	z_{re}	7.51	$7.8^{+1.6}_{-1.6} (+0.2\sigma)$	$H(0.61)$	95.40	$96.5^{+2.4}_{-1.6} (+0.7\sigma)$
$\ln(10^{10} A_s)$	3.0364	$3.048^{+0.038}_{-0.035} (+0.1\sigma)$	$10^9 A_s$	2.083	$2.108^{+0.080}_{-0.073} (+0.1\sigma)$	$D_M(0.61)$	2301	$2275^{+49}_{-65} (-1.0\sigma)$
n_s	0.9679	$0.974^{+0.015}_{-0.014} (+0.9\sigma)$	$10^9 A_s e^{-2\tau}$	1.8754	$1.888^{+0.035}_{-0.031} (-0.4\sigma)$	$H(2.33)$	235.79	$238.5^{+5.4}_{-4.0} (-0.5\sigma)$
y_{cal}	1.00006	$1.0006^{+0.0048}_{-0.0049} (+0.1\sigma)$	D_{40}	1220.8	$1214^{+29}_{-30} (-0.7\sigma)$	$D_M(2.33)$	5759	$5694^{+92}_{-140} (-0.6\sigma)$
A_{217}^{CIB}	50.4	$49^{+10}_{-10} (-0.0\sigma)$	D_{220}	5713	$5721^{+78}_{-80} (+0.2\sigma)$	$f\sigma_8(0.15)$	0.4521	$0.445^{+0.023}_{-0.027} (-0.3\sigma)$
$\xi^{tSZ \times CIB}$	0.12	—	D_{810}	2534.2	$2538^{+27}_{-27} (-0.0\sigma)$	$\sigma_8(0.15)$	0.7445	$0.733^{+0.038}_{-0.045} (+0.5\sigma)$
A_{143}^{tSZ}	7.14	$4.9^{+3.9}_{-3.9} (+0.1\sigma)$	D_{1420}	815.0	$814.3^{+9.7}_{-9.8} (+0.2\sigma)$	$f\sigma_8(0.38)$	0.4710	$0.464^{+0.024}_{-0.028} (-0.0\sigma)$
A_{100}^{PS}	256	$267^{+60}_{-60} (-0.0\sigma)$	D_{2000}	229.83	$228.7^{+3.7}_{-4.0} (+0.3\sigma)$	$\sigma_8(0.38)$	0.6603	$0.650^{+0.034}_{-0.041} (+0.5\sigma)$
A_{143}^{PS}	46.1	$51^{+20}_{-20} (-0.1\sigma)$	$n_{s,0.002}$	0.9679	$0.974^{+0.015}_{-0.014} (+0.9\sigma)$	$f\sigma_8(0.51)$	0.4699	$0.463^{+0.023}_{-0.028} (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	41.3	$44^{+20}_{-20} (-0.1\sigma)$	Y_P	0.24556	$0.2481^{+0.0046}_{-0.0029} (+0.2\sigma)$	$\sigma_8(0.51)$	0.6180	$0.609^{+0.032}_{-0.038} (+0.6\sigma)$
A_{217}^{PS}	116.1	$115^{+20}_{-20} (-0.1\sigma)$	Y_P^{BBN}	0.24689	$0.2494^{+0.0047}_{-0.0029} (+0.2\sigma)$	$f\sigma_8(0.61)$	0.4652	$0.459^{+0.023}_{-0.028} (+0.2\sigma)$
A^{kSZ}	0.1	—	$10^5 D/H$	2.615	$2.66^{+0.12}_{-0.10} (-0.3\sigma)$	$\sigma_8(0.61)$	0.5882	$0.579^{+0.031}_{-0.037} (+0.6\sigma)$
A_{100}^{dustTT}	8.88	$9.1^{+3.7}_{-3.6} (+0.0\sigma)$	Age/Gyr	13.788	$13.63^{+0.22}_{-0.33} (-0.6\sigma)$	$f\sigma_8(2.33)$	0.2967	$0.293^{+0.016}_{-0.019} (+0.6\sigma)$
A_{143}^{dustTT}	10.81	$10.8^{+3.5}_{-3.5} (+0.0\sigma)$	z_*	1090.00	$1090.28^{+0.83}_{-0.76} (-0.7\sigma)$	$\sigma_8(2.33)$	0.3060	$0.302^{+0.017}_{-0.020} (+0.7\sigma)$
$A_{143 \times 217}^{dustTT}$	19.1	$18.4^{+6.5}_{-6.5} (+0.0\sigma)$	r_*	144.72	$143.1^{+2.3}_{-3.3} (+0.2\sigma)$	χ_{small}^2	396	$312 (\nu: 12353.2) (-48.0\sigma)$
A_{217}^{dustTT}	93.9	$93^{+10}_{-10} (+0.0\sigma)$	$100\theta_*$	1.04112	$1.0408^{+0.0011}_{-0.0012} (+0.3\sigma)$	χ_{lowl}^2	23	$107 (\nu: 12350.7) (+53.4\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012} (+0.0\sigma)$	$D_M(z_*)/Gpc$	13.900	$13.74^{+0.21}_{-0.31} (+0.2\sigma)$	χ_{plik}^2	760.5	$775.3 (\nu: 17.6) (+0.1\sigma)$
c_{217}	0.99829	$0.9983^{+0.0012}_{-0.0012} (+0.0\sigma)$	z_{drag}	1059.59	$1060.2^{+1.4}_{-1.3} (+0.3\sigma)$	χ_{JLA}^2	1034.92	$1035.04 (\nu: 0.1)$
H_0	67.81	$68.6^{+2.3}_{-1.8} (+1.1\sigma)$	r_{drag}	147.43	$145.7^{+2.4}_{-3.4} (+0.2\sigma)$	χ_{6DF}^2	0.01	$0.36 (\nu: 0.2)$
Ω_Λ	0.6916	$0.691^{+0.014}_{-0.015} (+1.1\sigma)$	k_D	0.14035	$0.1416^{+0.0026}_{-0.0020} (-0.3\sigma)$	χ_{MGS}^2	1.41	$1.13 (\nu: 0.3)$
Ω_m	0.3084	$0.309^{+0.015}_{-0.014} (-1.1\sigma)$	$100\theta_D$	0.16103	$0.16142^{+0.00099}_{-0.00086} (+0.2\sigma)$	$\chi_{DR12BAO}^2$	3.91	$4.6 (\nu: 1.1)$
$\Omega_m h^2$	0.1418	$0.1451^{+0.0066}_{-0.0051} (-0.6\sigma)$	z_{eq}	3367	$3320^{+94}_{-120} (-0.5\sigma)$	χ_{prior}^2	1.5	$7.4 (\nu: 6.9) (+0.0\sigma)$
$\Omega_\nu h^2$	0.00065	$0.0024^{+0.0060}_{-0.0021} (-0.5\sigma)$	k_{eq}	0.010286	$0.01029^{+0.00037}_{-0.00042} (-0.5\sigma)$	χ_{BAO}^2	5.33	$6.1 (\nu: 0.7)$
$\Omega_m h^3$	0.0962	$0.0996^{+0.0071}_{-0.0045} (+0.3\sigma)$	$100\theta_{eq}$	0.8194	$0.829^{+0.027}_{-0.019} (+0.4\sigma)$	χ_{CMB}^2	1179.0	$1194.7 (\nu: 16.8) (-0.0\sigma)$
σ_8	0.8053	$0.793^{+0.041}_{-0.049} (+0.4\sigma)$	$100\theta_{s,eq}$	0.4527	$0.458^{+0.014}_{-0.0098} (+0.4\sigma)$			
S_8	0.8166	$0.804^{+0.043}_{-0.049} (-0.4\sigma)$	$H(0.15)$	73.06	$73.9^{+2.3}_{-1.8} (+1.1\sigma)$			

Best-fit $\chi_{eff}^2 = 2220.73$; $\bar{\chi}_{eff}^2 = 2243.31$; $R - 1 = 0.02477$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.91 CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.81 commander_dx12_v3.2.29: 22.70 plik_rd12_HM_v22.TT: 760.48
SN - JLA Pantheon18: 1034.92

8.15 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00040}_{-0.00040} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.588^{+0.029}_{-0.035} \quad (-0.1\sigma)$	$D_M(0.38)$	$1520^{+27}_{-33} \quad (-0.6\sigma)$
$\Omega_c h^2$	$0.1187^{+0.0066}_{-0.0091} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.955^{+0.044}_{-0.055} \quad (+0.0\sigma)$	$H(0.51)$	$90.3^{+1.6}_{-1.1} \quad (+0.3\sigma)$
$100\theta_{MC}$	$1.04086^{+0.00087}_{-0.00094} \quad (+0.6\sigma)$	$r_{drag} h$	$99.7^{+1.9}_{-1.9} \quad (+1.0\sigma)$	$D_M(0.51)$	$1969^{+33}_{-41} \quad (-0.6\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.417^{+0.057}_{-0.057} \quad (-0.8\sigma)$	$H(0.61)$	$95.9^{+1.6}_{-1.1} \quad (+0.1\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.798 \quad (-0.3\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.1\sigma)$	$D_M(0.61)$	$2292^{+37}_{-46} \quad (-0.6\sigma)$
N_{eff}	$< 3.39 \quad (-0.4\sigma)$	$10^9 A_s$	$2.099^{+0.074}_{-0.069} \quad (-0.2\sigma)$	$H(2.33)$	$237.4^{+3.8}_{-2.9} \quad (-0.9\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.035}_{-0.033} \quad (-0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.028}_{-0.026} \quad (-0.8\sigma)$	$D_M(2.33)$	$5729^{+60}_{-94} \quad (-0.0\sigma)$
n_s	$0.970^{+0.012}_{-0.011} \quad (+0.5\sigma)$	D_{40}	$1219^{+27}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.023}_{-0.027} \quad (-0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5720^{+78}_{-79} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.728^{+0.036}_{-0.045} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.023}_{-0.028} \quad (-0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{1420}	$814.6^{+9.7}_{-9.7} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.645^{+0.032}_{-0.040} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.1^{+3.5}_{-3.6} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.023}_{-0.028} \quad (-0.0\sigma)$
A_{100}^{PS}	$265^{+50}_{-60} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.970^{+0.012}_{-0.011} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.604^{+0.030}_{-0.038} \quad (+0.4\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.2\sigma)$	Y_P	$0.2469^{+0.0031}_{-0.0017} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.022}_{-0.028} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	Y_P^{BBN}	$0.2483^{+0.0031}_{-0.0017} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.575^{+0.029}_{-0.036} \quad (+0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 D/H$	$2.640^{+0.094}_{-0.087} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.015}_{-0.018} \quad (+0.4\sigma)$
A^{kSZ}	—	Age/Gyr	$13.72^{+0.14}_{-0.22} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.015}_{-0.019} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.17^{+0.69}_{-0.67} \quad (-1.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.3\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.8^{+1.5}_{-2.3} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.4^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04099^{+0.00094}_{-0.00098} \quad (+0.6\sigma)$	f_{2000}^{217}	$108.7^{+3.9}_{-3.9} \quad (-0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.81^{+0.14}_{-0.21} \quad (+0.7\sigma)$	χ_{small}^2	$310 \quad (\nu: 12476.4) \quad (-48.9\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.2}_{-1.0} \quad (-0.2\sigma)$	χ_{lowl}^2	$109 \quad (\nu: 12480.4) \quad (+54.6\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$146.5^{+1.6}_{-2.4} \quad (+0.7\sigma)$	χ_{plik}^2	$774.3 \quad (\nu: 16.3) \quad (-0.0\sigma)$
H_0	$68.0^{+1.7}_{-1.4} \quad (+0.7\sigma)$	k_D	$0.1411^{+0.0018}_{-0.0015} \quad (-0.8\sigma)$	χ_{Aver15}^2	$0.84 \quad (\nu: 0.3)$
Ω_Λ	$0.689^{+0.014}_{-0.015} \quad (+1.0\sigma)$	$100\theta_D$	$0.16122^{+0.00078}_{-0.00069} \quad (-0.3\sigma)$	χ_{6DF}^2	$0.34 \quad (\nu: 0.2)$
Ω_m	$0.311^{+0.015}_{-0.014} \quad (-1.0\sigma)$	z_{eq}	$3317^{+100}_{-170} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.02 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.1439^{+0.0047}_{-0.0039} \quad (-1.0\sigma)$	k_{eq}	$0.01023^{+0.00033}_{-0.00044} \quad (-0.8\sigma)$	$\chi_{DR12BAO}^2$	$5.0 \quad (\nu: 1.7)$
$\Omega_\nu h^2$	$0.0028^{+0.0083}_{-0.0023} \quad (-0.3\sigma)$	$100\theta_{eq}$	$0.830^{+0.036}_{-0.021} \quad (+0.5\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\Omega_m h^3$	$0.0979^{+0.0047}_{-0.0028} \quad (-0.3\sigma)$	$100\theta_{s,eq}$	$0.458^{+0.020}_{-0.011} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 1.2)$
σ_8	$0.787^{+0.039}_{-0.048} \quad (+0.2\sigma)$	$H(0.15)$	$73.3^{+1.6}_{-1.3} \quad (+0.6\sigma)$	χ_{CMB}^2	$1194.1 \quad (\nu: 16.0) \quad (-0.2\sigma)$
S_8	$0.802^{+0.043}_{-0.050} \quad (-0.5\sigma)$	$D_M(0.15)$	$637^{+13}_{-15} \quad (-0.7\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.024}_{-0.027} \quad (-0.5\sigma)$	$H(0.38)$	$83.5^{+1.6}_{-1.2} \quad (+0.4\sigma)$		

$\bar{\chi}_{eff}^2 = 1208.67; R - 1 = 0.03995$

8.16 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02231^{+0.00038}_{-0.00038} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.587^{+0.029}_{-0.035} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+26}_{-31} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1185^{+0.0061}_{-0.0090} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.954^{+0.044}_{-0.056} \quad (+0.0\sigma)$	$H(0.51)$	$90.2^{+1.5}_{-1.0} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00084}_{-0.00090} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.9}_{-1.8} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+31}_{-39} \quad (-0.6\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.417^{+0.056}_{-0.056} \quad (-0.7\sigma)$	$H(0.61)$	$95.8^{+1.5}_{-1.0} \quad (+0.1\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.824 \quad (-0.3\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2293^{+35}_{-44} \quad (-0.5\sigma)$
N_{eff}	$< 3.36 \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.074}_{-0.069} \quad (-0.2\sigma)$	$H(2.33)$	$237.2^{+3.5}_{-2.7} \quad (-1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.035}_{-0.033} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.026}_{-0.026} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5732^{+56}_{-87} \quad (+0.1\sigma)$
n_{s}	$0.970^{+0.012}_{-0.011} \quad (+0.4\sigma)$	D_{40}	$1220^{+27}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.023}_{-0.027} \quad (-0.5\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5721^{+77}_{-78} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.727^{+0.036}_{-0.045} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.023}_{-0.028} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$814.8^{+9.6}_{-9.5} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.645^{+0.032}_{-0.040} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.2^{+3.3}_{-3.4} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.023}_{-0.028} \quad (-0.1\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} \quad (-0.1\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.970^{+0.012}_{-0.011} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.603^{+0.030}_{-0.038} \quad (+0.4\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.3\sigma)$	Y_{P}	$0.2468^{+0.0028}_{-0.0016} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.022}_{-0.028} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2481^{+0.0028}_{-0.0016} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.574^{+0.029}_{-0.036} \quad (+0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.634^{+0.082}_{-0.078} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.014}_{-0.018} \quad (+0.4\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.72^{+0.13}_{-0.21} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.015}_{-0.019} \quad (+0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.14^{+0.63}_{-0.58} \quad (-1.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.9^{+1.4}_{-2.1} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+6.4}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04102^{+0.00087}_{-0.00097} \quad (+0.7\sigma)$	f_{2000}^{217}	$108.6^{+3.7}_{-3.8} \quad (-0.4\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.82^{+0.14}_{-0.19} \quad (+0.8\sigma)$	χ_{small}^2	$313 \quad (\nu: 12224.8) \quad (-47.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.1}_{-1.0} \quad (-0.2\sigma)$	χ_{lowl}^2	$107 \quad (\nu: 12231.4) \quad (+53.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$146.6^{+1.5}_{-2.2} \quad (+0.8\sigma)$	χ_{plik}^2	$774.2 \quad (\nu: 16.0) \quad (-0.1\sigma)$
H_0	$68.0^{+1.6}_{-1.4} \quad (+0.7\sigma)$	k_{D}	$0.1410^{+0.0017}_{-0.0014} \quad (-0.8\sigma)$	χ_{Aver15}^2	$0.76 \quad (\nu: 0.3)$
Ω_{Λ}	$0.689^{+0.014}_{-0.015} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16118^{+0.00068}_{-0.00062} \quad (-0.4\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.22 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.015}_{-0.014} \quad (-1.0\sigma)$	z_{eq}	$3316^{+100}_{-170} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.33 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1437^{+0.0043}_{-0.0037} \quad (-1.1\sigma)$	k_{eq}	$0.01022^{+0.00032}_{-0.00044} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.03 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$0.0029^{+0.0083}_{-0.0023} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.831^{+0.039}_{-0.021} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.6)$
$\Omega_{\mathrm{m}} h^3$	$0.0977^{+0.0043}_{-0.0026} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.459^{+0.021}_{-0.011} \quad (+0.5\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (-0.0\sigma)$
σ_8	$0.787^{+0.038}_{-0.048} \quad (+0.2\sigma)$	$H(0.15)$	$73.3^{+1.5}_{-1.3} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 1.1)$
S_8	$0.801^{+0.043}_{-0.049} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$638^{+12}_{-14} \quad (-0.7\sigma)$	χ_{CMB}^2	$1194.0 \quad (\nu: 15.9) \quad (-0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.438^{+0.024}_{-0.027} \quad (-0.5\sigma)$	$H(0.38)$	$83.5^{+1.5}_{-1.1} \quad (+0.4\sigma)$	χ_{Abund}^2	$0.98 \quad (\nu: 0.4)$

$\bar{\chi}_{\mathrm{eff}}^2 = 1208.67$; $R - 1 = 0.03900$

8.17 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02235^{+0.00044}_{-0.00041} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.024}_{-0.027} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$633^{+16}_{-20} \quad (-1.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1203^{+0.0080}_{-0.010} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.031}_{-0.036} \quad (+0.0\sigma)$	$H(0.38)$	$84.0^{+2.3}_{-1.6} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04074^{+0.00094}_{-0.0010} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.958^{+0.044}_{-0.055} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+35}_{-46} \quad (-1.0\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+2.0}_{-1.9} \quad (+1.1\sigma)$	$H(0.51)$	$90.8^{+2.4}_{-1.6} \quad (+0.8\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.694 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.414^{+0.056}_{-0.058} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1957^{+43}_{-58} \quad (-1.0\sigma)$
N_{eff}	$< 3.59 \quad (+0.2\sigma)$	z_{re}	$< 9.15 \quad (+0.4\sigma)$	$H(0.61)$	$96.4^{+2.4}_{-1.6} \quad (+0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.050^{+0.033}_{-0.031} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.111^{+0.070}_{-0.065} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2278^{+49}_{-66} \quad (-1.0\sigma)$
n_{s}	$0.973^{+0.016}_{-0.014} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.888^{+0.035}_{-0.031} \quad (-0.4\sigma)$	$H(2.33)$	$238.5^{+5.3}_{-3.9} \quad (-0.5\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{40}	$1215^{+30}_{-31} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5698^{+89}_{-140} \quad (-0.6\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{220}	$5720^{+78}_{-80} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.024}_{-0.027} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2538^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.039}_{-0.046} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.0\sigma)$	D_{1420}	$814.3^{+9.7}_{-9.8} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.024}_{-0.028} \quad (-0.0\sigma)$
A_{100}^{PS}	$267^{+60}_{-60} \quad (-0.0\sigma)$	D_{2000}	$228.7^{+3.7}_{-3.9} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.035}_{-0.042} \quad (+0.5\sigma)$
A_{143}^{PS}	$51^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.973^{+0.016}_{-0.014} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.024}_{-0.028} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2480^{+0.0046}_{-0.0028} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.033}_{-0.039} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2493^{+0.0046}_{-0.0028} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.023}_{-0.028} \quad (+0.2\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.66^{+0.11}_{-0.10} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.579^{+0.031}_{-0.037} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.7}_{-3.6} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.64^{+0.21}_{-0.33} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.016}_{-0.019} \quad (+0.6\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	z_*	$1090.29^{+0.82}_{-0.77} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.017}_{-0.020} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+6.5}_{-6.5} \quad (+0.0\sigma)$	r_*	$143.1^{+2.2}_{-3.3} \quad (+0.2\sigma)$	f_{2000}^{143}	$33^{+6}_{-6} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.0408^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$35^{+4}_{-4} \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.75^{+0.21}_{-0.31} \quad (+0.2\sigma)$	f_{2000}^{217}	$109.1^{+4.1}_{-4.1} \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1060.2^{+1.4}_{-1.3} \quad (+0.2\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.0) \quad (+0.1\sigma)$
H_0	$68.5^{+2.3}_{-1.8} \quad (+1.0\sigma)$	r_{drag}	$145.7^{+2.3}_{-3.4} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.3 \quad (\nu: 0.6) \quad (-0.8\sigma)$
Ω_{Λ}	$0.690^{+0.015}_{-0.015} \quad (+1.1\sigma)$	k_{D}	$0.1416^{+0.0026}_{-0.0019} \quad (-0.3\sigma)$	χ_{plik}^2	$775.0 \quad (\nu: 17.6) \quad (+0.1\sigma)$
Ω_{m}	$0.310^{+0.015}_{-0.015} \quad (-1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16141^{+0.00099}_{-0.00085} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1452^{+0.0066}_{-0.0051} \quad (-0.6\sigma)$	z_{eq}	$3320^{+98}_{-140} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$0.0025^{+0.0060}_{-0.0022} \quad (-0.4\sigma)$	k_{eq}	$0.01029^{+0.00037}_{-0.00045} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0994^{+0.0071}_{-0.0043} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.829^{+0.030}_{-0.020} \quad (+0.4\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
σ_8	$0.793^{+0.042}_{-0.050} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.458^{+0.016}_{-0.010} \quad (+0.4\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.0)$
S_8	$0.805^{+0.044}_{-0.050} \quad (-0.4\sigma)$	$H(0.15)$	$73.8^{+2.3}_{-1.8} \quad (+1.0\sigma)$	χ_{CMB}^2	$1194.5 \quad (\nu: 16.6) \quad (-0.1\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1208.20; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.44; R - 1 = 0.02851$$

8.18 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02237^{+0.00044}_{-0.00041} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.030}_{-0.035} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1509^{+35}_{-45} \quad (-1.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1204^{+0.0087}_{-0.0091} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.958^{+0.043}_{-0.053} \quad (+0.1\sigma)$	$H(0.51)$	$90.9^{+2.4}_{-1.6} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04074^{+0.00094}_{-0.0010} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.8} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1955^{+44}_{-57} \quad (-1.1\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.411^{+0.055}_{-0.057} \quad (-0.9\sigma)$	$H(0.61)$	$96.5^{+2.4}_{-1.6} \quad (+0.8\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.626 \quad (-0.5\sigma)$	z_{re}	$< 9.17 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2275^{+49}_{-65} \quad (-1.0\sigma)$
N_{eff}	$< 3.60 \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.112^{+0.071}_{-0.066} \quad (+0.2\sigma)$	$H(2.33)$	$238.5^{+5.4}_{-4.0} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.050^{+0.033}_{-0.031} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.888^{+0.035}_{-0.031} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5693^{+92}_{-140} \quad (-0.6\sigma)$
n_{s}	$0.974^{+0.015}_{-0.014} \quad (+0.9\sigma)$	D_{40}	$1214^{+29}_{-30} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.023}_{-0.027} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5721^{+78}_{-80} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.038}_{-0.045} \quad (+0.5\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.024}_{-0.028} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$814.3^{+9.7}_{-9.8} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.651^{+0.034}_{-0.040} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$228.7^{+3.7}_{-4.0} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.023}_{-0.028} \quad (+0.1\sigma)$
A_{100}^{PS}	$267^{+60}_{-60} \quad (-0.0\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.974^{+0.015}_{-0.014} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.609^{+0.032}_{-0.038} \quad (+0.6\sigma)$
A_{143}^{PS}	$51^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2481^{+0.0047}_{-0.0029} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.023}_{-0.028} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2494^{+0.0047}_{-0.0029} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.580^{+0.031}_{-0.036} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.66^{+0.12}_{-0.10} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.016}_{-0.019} \quad (+0.7\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.63^{+0.22}_{-0.33} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.016}_{-0.019} \quad (+0.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.28^{+0.83}_{-0.76} \quad (-0.7\sigma)$	f_{2000}^{143}	$33^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.0^{+2.3}_{-3.3} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$35^{+5}_{-4} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0408^{+0.0011}_{-0.0012} \quad (+0.3\sigma)$	f_{2000}^{217}	$109.1^{+4.2}_{-4.1} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.74^{+0.21}_{-0.31} \quad (+0.2\sigma)$	χ_{small}^2	$312 \quad (\nu: 12352.2) \quad (-48.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1060.2^{+1.5}_{-1.2} \quad (+0.3\sigma)$	χ_{lowl}^2	$107 \quad (\nu: 12349.9) \quad (+53.5\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$145.7^{+2.4}_{-3.4} \quad (+0.2\sigma)$	χ_{plik}^2	$775.2 \quad (\nu: 17.4) \quad (+0.1\sigma)$
H_0	$68.6^{+2.3}_{-1.8} \quad (+1.1\sigma)$	k_{D}	$0.1416^{+0.0026}_{-0.0020} \quad (-0.3\sigma)$	χ_{JLA}^2	$1035.03 \quad (\nu: 0.1)$
Ω_{Λ}	$0.692^{+0.014}_{-0.015} \quad (+1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16142^{+0.00099}_{-0.00087} \quad (+0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.36 \quad (\nu: 0.2)$
Ω_{m}	$0.308^{+0.015}_{-0.014} \quad (-1.1\sigma)$	z_{eq}	$3320^{+94}_{-120} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.13 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1452^{+0.0067}_{-0.0051} \quad (-0.6\sigma)$	k_{eq}	$0.01029^{+0.00037}_{-0.00042} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.1)$
$\Omega_{\nu} h^2$	$0.0024^{+0.0060}_{-0.0021} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.829^{+0.027}_{-0.019} \quad (+0.4\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0996^{+0.0071}_{-0.0045} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.458^{+0.014}_{-0.0098} \quad (+0.4\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
σ_8	$0.794^{+0.041}_{-0.048} \quad (+0.5\sigma)$	$H(0.15)$	$73.9^{+2.3}_{-1.8} \quad (+1.1\sigma)$	χ_{CMB}^2	$1194.6 \quad (\nu: 16.4) \quad (-0.1\sigma)$
S_8	$0.805^{+0.043}_{-0.049} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$632^{+16}_{-20} \quad (-1.1\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.024}_{-0.027} \quad (-0.4\sigma)$	$H(0.38)$	$84.1^{+2.3}_{-1.7} \quad (+1.0\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2243.12; R - 1 = 0.02260$

8.19 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02231^{+0.00040}_{-0.00040} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.589^{+0.029}_{-0.036} \quad (-0.1\sigma)$	$D_M(0.38)$	$1520^{+27}_{-33} \quad (-0.6\sigma)$
$\Omega_c h^2$	$0.1187^{+0.0066}_{-0.0092} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.956^{+0.044}_{-0.055} \quad (+0.1\sigma)$	$H(0.51)$	$90.3^{+1.6}_{-1.1} \quad (+0.3\sigma)$
$100\theta_{MC}$	$1.04086^{+0.00086}_{-0.00094} \quad (+0.7\sigma)$	$r_{drag} h$	$99.7^{+1.9}_{-1.9} \quad (+1.0\sigma)$	$D_M(0.51)$	$1969^{+33}_{-41} \quad (-0.6\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.419^{+0.055}_{-0.054} \quad (-0.7\sigma)$	$H(0.61)$	$95.9^{+1.6}_{-1.1} \quad (+0.1\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.808 \quad (-0.3\sigma)$	z_{re}	$< 9.09 \quad (+0.3\sigma)$	$D_M(0.61)$	$2291^{+36}_{-46} \quad (-0.6\sigma)$
N_{eff}	$< 3.40 \quad (-0.4\sigma)$	$10^9 A_s$	$2.104^{+0.066}_{-0.060} \quad (-0.0\sigma)$	$H(2.33)$	$237.4^{+3.8}_{-2.9} \quad (-0.9\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.031}_{-0.029} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.028}_{-0.027} \quad (-0.8\sigma)$	$D_M(2.33)$	$5728^{+60}_{-94} \quad (-0.0\sigma)$
n_s	$0.970^{+0.012}_{-0.011} \quad (+0.5\sigma)$	D_{40}	$1219^{+27}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.023}_{-0.027} \quad (-0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5720^{+78}_{-79} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.729^{+0.036}_{-0.045} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.023}_{-0.028} \quad (-0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{1420}	$814.6^{+9.7}_{-9.8} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.646^{+0.032}_{-0.040} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.1^{+3.5}_{-3.6} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.023}_{-0.028} \quad (-0.0\sigma)$
A_{100}^{PS}	$265^{+50}_{-60} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.970^{+0.012}_{-0.011} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.605^{+0.030}_{-0.038} \quad (+0.4\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.2\sigma)$	Y_P	$0.2470^{+0.0031}_{-0.0017} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.022}_{-0.028} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	Y_P^{BBN}	$0.2483^{+0.0031}_{-0.0017} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.575^{+0.029}_{-0.036} \quad (+0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 D/H$	$2.639^{+0.094}_{-0.087} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.015}_{-0.018} \quad (+0.4\sigma)$
A^{kSZ}	—	Age/Gyr	$13.71^{+0.14}_{-0.22} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.015}_{-0.019} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.17^{+0.73}_{-0.64} \quad (-1.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.3\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.8^{+1.5}_{-2.3} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.4^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04099^{+0.00094}_{-0.00098} \quad (+0.6\sigma)$	f_{2000}^{217}	$108.7^{+3.9}_{-3.9} \quad (-0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.81^{+0.15}_{-0.21} \quad (+0.7\sigma)$	χ_{simall}^2	$311 \quad (\nu: 12436.7) \quad (-48.7\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.2}_{-1.0} \quad (-0.1\sigma)$	χ_{lowl}^2	$109 \quad (\nu: 12440.3) \quad (+54.4\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$146.5^{+1.6}_{-2.4} \quad (+0.7\sigma)$	χ_{plik}^2	$774.2 \quad (\nu: 16.1) \quad (-0.1\sigma)$
H_0	$68.1^{+1.7}_{-1.4} \quad (+0.7\sigma)$	k_D	$0.1411^{+0.0018}_{-0.0015} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.85 \quad (\nu: 0.4)$
Ω_Λ	$0.689^{+0.014}_{-0.015} \quad (+1.0\sigma)$	$100\theta_D$	$0.16122^{+0.00078}_{-0.00069} \quad (-0.3\sigma)$	χ_{6DF}^2	$0.35 \quad (\nu: 0.2)$
Ω_m	$0.311^{+0.015}_{-0.014} \quad (-1.0\sigma)$	z_{eq}	$3316^{+100}_{-170} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.02 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.1439^{+0.0047}_{-0.0039} \quad (-1.0\sigma)$	k_{eq}	$0.01023^{+0.00033}_{-0.00045} \quad (-0.8\sigma)$	$\chi_{DR12BAO}^2$	$5.0 \quad (\nu: 1.6)$
$\Omega_\nu h^2$	$0.0028^{+0.0083}_{-0.0023} \quad (-0.3\sigma)$	$100\theta_{eq}$	$0.830^{+0.038}_{-0.021} \quad (+0.5\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\Omega_m h^3$	$0.0979^{+0.0047}_{-0.0028} \quad (-0.3\sigma)$	$100\theta_{s,eq}$	$0.458^{+0.021}_{-0.011} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 1.1)$
σ_8	$0.788^{+0.038}_{-0.048} \quad (+0.3\sigma)$	$H(0.15)$	$73.4^{+1.6}_{-1.3} \quad (+0.7\sigma)$	χ_{CMB}^2	$1193.9 \quad (\nu: 15.7) \quad (-0.2\sigma)$
S_8	$0.802^{+0.043}_{-0.050} \quad (-0.5\sigma)$	$D_M(0.15)$	$637^{+13}_{-15} \quad (-0.7\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.024}_{-0.027} \quad (-0.5\sigma)$	$H(0.38)$	$83.5^{+1.6}_{-1.2} \quad (+0.5\sigma)$		

$\bar{\chi}_{eff}^2 = 1208.49; R - 1 = 0.03891$

8.20 base_nnu_meffsterile_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00038}_{-0.00038} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.588^{+0.029}_{-0.036} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+26}_{-31} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1185^{+0.0061}_{-0.0091} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.955^{+0.044}_{-0.056} \quad (+0.0\sigma)$	$H(0.51)$	$90.2^{+1.5}_{-1.0} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00084}_{-0.00090} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.9}_{-1.8} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+31}_{-39} \quad (-0.6\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.419^{+0.055}_{-0.054} \quad (-0.7\sigma)$	$H(0.61)$	$95.9^{+1.5}_{-1.0} \quad (+0.1\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.836 \quad (-0.3\sigma)$	z_{re}	$< 9.08 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2292^{+35}_{-44} \quad (-0.5\sigma)$
N_{eff}	$< 3.36 \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.065}_{-0.060} \quad (-0.0\sigma)$	$H(2.33)$	$237.2^{+3.5}_{-2.7} \quad (-1.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.031}_{-0.029} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.026}_{-0.026} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5731^{+56}_{-87} \quad (+0.0\sigma)$
n_{s}	$0.970^{+0.012}_{-0.011} \quad (+0.5\sigma)$	D_{40}	$1220^{+27}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.023}_{-0.027} \quad (-0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5721^{+77}_{-79} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.728^{+0.035}_{-0.045} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.023}_{-0.028} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$814.8^{+9.6}_{-9.6} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.645^{+0.032}_{-0.040} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.2^{+3.3}_{-3.4} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.022}_{-0.028} \quad (-0.1\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} \quad (-0.1\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.970^{+0.012}_{-0.011} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.604^{+0.030}_{-0.038} \quad (+0.4\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.3\sigma)$	Y_{P}	$0.2468^{+0.0028}_{-0.0016} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.022}_{-0.028} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2482^{+0.0028}_{-0.0016} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.575^{+0.028}_{-0.036} \quad (+0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.634^{+0.082}_{-0.078} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.014}_{-0.018} \quad (+0.4\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.72^{+0.13}_{-0.21} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.015}_{-0.019} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.13^{+0.63}_{-0.58} \quad (-1.1\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.9^{+1.4}_{-2.1} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+6.4}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04102^{+0.00087}_{-0.00097} \quad (+0.7\sigma)$	f_{2000}^{217}	$108.6^{+3.7}_{-3.8} \quad (-0.4\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.82^{+0.14}_{-0.20} \quad (+0.8\sigma)$	χ_{simall}^2	$313 \quad (\nu: 12200.8) \quad (-47.4\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.1}_{-0.99} \quad (-0.2\sigma)$	χ_{lowl}^2	$107 \quad (\nu: 12207.3) \quad (+53.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$146.6^{+1.5}_{-2.2} \quad (+0.8\sigma)$	χ_{plik}^2	$774.0 \quad (\nu: 15.9) \quad (-0.1\sigma)$
H_0	$68.0^{+1.6}_{-1.4} \quad (+0.7\sigma)$	k_{D}	$0.1410^{+0.0017}_{-0.0014} \quad (-0.8\sigma)$	χ_{Aver15}^2	$0.77 \quad (\nu: 0.3)$
Ω_{Λ}	$0.689^{+0.014}_{-0.015} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16118^{+0.00069}_{-0.00062} \quad (-0.4\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.22 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.015}_{-0.014} \quad (-1.0\sigma)$	z_{eq}	$3315^{+100}_{-180} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.34 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1437^{+0.0044}_{-0.0037} \quad (-1.1\sigma)$	k_{eq}	$0.01022^{+0.00032}_{-0.00045} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.03 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$0.0029^{+0.0083}_{-0.0023} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.831^{+0.039}_{-0.021} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.6)$
$\Omega_{\mathrm{m}} h^3$	$0.0977^{+0.0043}_{-0.0026} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.459^{+0.021}_{-0.011} \quad (+0.5\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
σ_8	$0.787^{+0.038}_{-0.048} \quad (+0.2\sigma)$	$H(0.15)$	$73.3^{+1.5}_{-1.3} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.1)$
S_8	$0.801^{+0.043}_{-0.050} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$638^{+12}_{-14} \quad (-0.7\sigma)$	χ_{CMB}^2	$1193.8 \quad (\nu: 15.5) \quad (-0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.439^{+0.024}_{-0.027} \quad (-0.5\sigma)$	$H(0.38)$	$83.5^{+1.5}_{-1.1} \quad (+0.4\sigma)$	χ_{Abund}^2	$0.99 \quad (\nu: 0.4)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1208.48; R - 1 = 0.03789$$

8.21 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022412	$0.02250^{+0.00031}_{-0.00028} (+1.2\sigma)$	$\Omega_\nu h^2$	0.00386	$0.0027^{+0.0050}_{-0.0025} (-0.3\sigma)$	$100\theta_{s,eq}$	0.4595	$0.456^{+0.015}_{-0.0093} (+0.2\sigma)$
$\Omega_c h^2$	0.1161	$0.1187^{+0.0055}_{-0.0072} (-0.7\sigma)$	$\Omega_m h^3$	0.09632	$0.0977^{+0.0036}_{-0.0020} (-0.4\sigma)$	$H(0.15)$	72.95	$73.2^{+1.3}_{-1.1} (+0.5\sigma)$
$100\theta_{MC}$	1.04101	$1.04091^{+0.00060}_{-0.00065} (+0.8\sigma)$	σ_8	0.8085	$0.792^{+0.034}_{-0.041} (+0.4\sigma)$	$D_M(0.15)$	640.7	$639^{+10}_{-12} (-0.6\sigma)$
τ	0.0546	$0.056^{+0.016}_{-0.014} (+0.5\sigma)$	S_8	0.8229	$0.808^{+0.037}_{-0.043} (-0.3\sigma)$	$H(0.38)$	83.06	$83.4^{+1.3}_{-0.94} (+0.3\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	0.302	$< 0.649 (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4507	$0.443^{+0.020}_{-0.023} (-0.3\sigma)$	$D_M(0.38)$	1528.1	$1523^{+22}_{-27} (-0.5\sigma)$
N_{eff}	3.047	$< 3.30 (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6037	$0.592^{+0.026}_{-0.030} (+0.1\sigma)$	$H(0.51)$	89.77	$90.2^{+1.3}_{-0.86} (+0.2\sigma)$
$\ln(10^{10} A_s)$	3.0434	$3.049^{+0.034}_{-0.032} (+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9828	$0.961^{+0.039}_{-0.048} (+0.2\sigma)$	$D_M(0.51)$	1979.7	$1972^{+27}_{-33} (-0.5\sigma)$
n_s	0.9678	$0.969^{+0.010}_{-0.0097} (+0.3\sigma)$	$r_{drag} h$	99.64	$99.4^{+1.6}_{-1.6} (+0.9\sigma)$	$H(0.61)$	95.39	$95.8^{+1.3}_{-0.81} (+0.0\sigma)$
y_{cal}	1.00074	$1.0008^{+0.0048}_{-0.0049} (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4324	$2.430^{+0.049}_{-0.050} (-0.4\sigma)$	$D_M(0.61)$	2303.7	$2295^{+29}_{-38} (-0.5\sigma)$
A_{217}^{CIB}	47.9	$47^{+10}_{-10} (-0.3\sigma)$	z_{re}	7.69	$7.9^{+1.6}_{-1.5} (+0.3\sigma)$	$H(2.33)$	236.13	$237.4^{+2.9}_{-2.2} (-0.9\sigma)$
$\xi^{tSZ \times CIB}$	0.33	—	$10^9 A_s$	2.098	$2.110^{+0.073}_{-0.066} (+0.1\sigma)$	$D_M(2.33)$	5759	$5733^{+44}_{-74} (+0.1\sigma)$
A_{143}^{tSZ}	7.17	$5.4^{+3.7}_{-3.9} (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	1.8806	$1.885^{+0.025}_{-0.023} (-0.6\sigma)$	$f\sigma_8(0.15)$	0.4554	$0.447^{+0.020}_{-0.023} (-0.2\sigma)$
A_{100}^{PS}	251	$260^{+60}_{-50} (-0.3\sigma)$	D_{40}	1225.0	$1225^{+25}_{-26} (-0.2\sigma)$	$\sigma_8(0.15)$	0.7472	$0.732^{+0.032}_{-0.038} (+0.4\sigma)$
A_{143}^{PS}	45.9	$47^{+20}_{-20} (-0.7\sigma)$	D_{220}	5732	$5738^{+77}_{-75} (+0.6\sigma)$	$f\sigma_8(0.38)$	0.4738	$0.465^{+0.020}_{-0.024} (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	44.5	$43^{+20}_{-20} (-0.2\sigma)$	D_{810}	2541.0	$2541^{+26}_{-27} (+0.1\sigma)$	$\sigma_8(0.38)$	0.6624	$0.648^{+0.029}_{-0.034} (+0.5\sigma)$
A_{217}^{PS}	118.3	$115^{+20}_{-20} (-0.0\sigma)$	D_{1420}	818.6	$817.3^{+9.4}_{-9.2} (+0.8\sigma)$	$f\sigma_8(0.51)$	0.4725	$0.463^{+0.020}_{-0.024} (+0.1\sigma)$
A^{kSZ}	0.00	$< 8.26 (-0.3\sigma)$	D_{2000}	231.47	$230.6^{+3.2}_{-3.1} (+1.2\sigma)$	$\sigma_8(0.51)$	0.6199	$0.607^{+0.027}_{-0.032} (+0.5\sigma)$
A_{100}^{dustTT}	8.91	$9.0^{+3.6}_{-3.5} (+0.0\sigma)$	$n_{s,0.002}$	0.9678	$0.969^{+0.010}_{-0.0097} (+0.3\sigma)$	$f\sigma_8(0.61)$	0.4676	$0.459^{+0.020}_{-0.023} (+0.2\sigma)$
A_{143}^{dustTT}	10.97	$11.0^{+3.5}_{-3.5} (+0.1\sigma)$	Y_P	0.24543	$0.2466^{+0.0023}_{-0.0012} (-0.6\sigma)$	$\sigma_8(0.61)$	0.5899	$0.577^{+0.026}_{-0.031} (+0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	19.5	$18.7^{+6.4}_{-6.4} (+0.1\sigma)$	Y_P^{BBN}	0.24675	$0.2479^{+0.0024}_{-0.0012} (-0.6\sigma)$	$f\sigma_8(2.33)$	0.2974	$0.291^{+0.013}_{-0.015} (+0.5\sigma)$
A_{217}^{dustTT}	94.6	$94^{+10}_{-10} (+0.1\sigma)$	$10^5 D/H$	2.578	$2.591^{+0.061}_{-0.056} (-1.6\sigma)$	$\sigma_8(2.33)$	0.3067	$0.300^{+0.014}_{-0.016} (+0.6\sigma)$
A_{100}^{dustTE}	0.112	$0.114^{+0.075}_{-0.073}$	Age/Gyr	13.787	$13.73^{+0.10}_{-0.17} (+0.1\sigma)$	f_{2000}^{143}	28.8	$30^{+6}_{-5} (-1.0\sigma)$
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.058}_{-0.058}$	z_*	1089.804	$1089.89^{+0.51}_{-0.46} (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	31.88	$33^{+4}_{-4} (-1.1\sigma)$
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	r_*	144.59	$143.8^{+1.1}_{-1.7} (+0.8\sigma)$	f_{2000}^{217}	106.57	$107.4^{+3.5}_{-3.5} (-1.0\sigma)$
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04119	$1.04104^{+0.00065}_{-0.00070} (+0.7\sigma)$	χ_{small}^2	396.05	$397.4 (\nu: 2.5) (+0.2\sigma)$
$A_{143 \times 217}^{dustTE}$	0.663	$0.66^{+0.16}_{-0.16}$	$D_M(z_*)/Gpc$	13.887	$13.82^{+0.11}_{-0.16} (+0.8\sigma)$	χ_{lowl}^2	22.87	$22.90 (\nu: 0.4) (-0.4\sigma)$
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.53}$	z_{drag}	1059.97	$1060.34^{+0.86}_{-0.78} (+0.5\sigma)$	χ_{plik}^2	2345.2	$2362.0 (\nu: 19.2) (+269.2\sigma)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012} (+0.1\sigma)$	r_{drag}	147.24	$146.4^{+1.2}_{-1.8} (+0.7\sigma)$	χ_{6DF}^2	0.030	$0.077 (\nu: 0.0)$
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012} (-0.1\sigma)$	k_D	0.14074	$0.1414^{+0.0014}_{-0.0011} (-0.5\sigma)$	χ_{MGS}^2	1.22	$1.15 (\nu: 0.1)$
H_0	67.67	$67.9^{+1.4}_{-1.2} (+0.6\sigma)$	$100\theta_D$	0.160740	$0.16084^{+0.00050}_{-0.00044} (-1.3\sigma)$	$\chi_{DR12BAO}^2$	4.44	$5.4 (\nu: 1.6)$
Ω_Λ	0.6892	$0.688^{+0.013}_{-0.013} (+0.9\sigma)$	z_{eq}	3309	$3337^{+87}_{-130} (-0.3\sigma)$	χ_{prior}^2	1.8	$11.7 (\nu: 10.5) (+1.2\sigma)$
Ω_m	0.3108	$0.312^{+0.013}_{-0.013} (-0.9\sigma)$	k_{eq}	0.010157	$0.01027^{+0.00028}_{-0.00036} (-0.6\sigma)$	χ_{BAO}^2	5.68	$6.6 (\nu: 1.1)$
$\Omega_m h^2$	0.14233	$0.1440^{+0.0037}_{-0.0031} (-1.0\sigma)$	$100\theta_{eq}$	0.8326	$0.827^{+0.028}_{-0.018} (+0.2\sigma)$	χ_{CMB}^2	2764.1	$2782.3 (\nu: 18.5) (+267.5\sigma)$

Best-fit $\chi_{eff}^2 = 2771.63$; $\Delta\chi_{eff}^2 = -0.28$; $\bar{\chi}_{eff}^2 = 2800.57$; $\Delta\bar{\chi}_{eff}^2 = 2.66$; $R - 1 = 0.01553$

χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.44 (Δ 0.02) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.05 (Δ -0.15) commander_dx12_v3_2_29: 22.87 (Δ 0.00) plik_rd12_HM_v22b_TTTEEE: 2345.20 (Δ -0.30)

8.22 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022440	$0.02251^{+0.00031}_{-0.00028}$ (+1.2 σ)	$\Omega_m h^3$	0.09635	$0.0978^{+0.0038}_{-0.0020}$ (−0.4 σ)	$D_M(0.15)$	640.0	638^{+10}_{-13} (−0.7 σ)
$\Omega_c h^2$	0.1189	$0.1187^{+0.0057}_{-0.0074}$ (−0.7 σ)	σ_8	0.8111	$0.792^{+0.034}_{-0.041}$ (+0.4 σ)	$H(0.38)$	83.11	$83.5^{+1.3}_{-0.94}$ (+0.4 σ)
$100\theta_{MC}$	1.04102	$1.04092^{+0.00061}_{-0.00065}$ (+0.8 σ)	S_8	0.8243	$0.807^{+0.037}_{-0.042}$ (−0.3 σ)	$D_M(0.38)$	1526.8	1521^{+22}_{-28} (−0.6 σ)
τ	0.0585	$0.057^{+0.016}_{-0.014}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4515	$0.442^{+0.020}_{-0.023}$ (−0.3 σ)	$H(0.51)$	89.81	$90.2^{+1.3}_{-0.87}$ (+0.2 σ)
$m_{\nu, \text{sterile}}^{\text{eff}}$ [eV]	0.025	< 0.644 (−0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6051	$0.592^{+0.025}_{-0.030}$ (+0.1 σ)	$D_M(0.51)$	1978.0	1970^{+27}_{-35} (−0.6 σ)
N_{eff}	3.046	< 3.31 (−0.6 σ)	$\sigma_8/h^{0.5}$	0.9854	$0.961^{+0.038}_{-0.047}$ (+0.2 σ)	$H(0.61)$	95.42	$95.9^{+1.4}_{-0.82}$ (+0.1 σ)
$\ln(10^{10} A_s)$	3.0505	$3.049^{+0.035}_{-0.032}$ (+0.1 σ)	$r_{\text{drag}} h$	99.76	$99.6^{+1.6}_{-1.6}$ (+1.0 σ)	$D_M(0.61)$	2301.9	2293^{+30}_{-39} (−0.5 σ)
n_s	0.9672	$0.969^{+0.010}_{-0.0096}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4400	$2.428^{+0.049}_{-0.049}$ (−0.5 σ)	$H(2.33)$	236.07	$237.4^{+3.1}_{-2.3}$ (−0.9 σ)
y_{cal}	1.00052	$1.0007^{+0.0049}_{-0.0050}$ (+0.1 σ)	z_{re}	8.07	$7.9^{+1.6}_{-1.5}$ (+0.3 σ)	$D_M(2.33)$	5757	5730^{+45}_{-78} (+0.0 σ)
A_{217}^{CIB}	48.2	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.113	$2.110^{+0.074}_{-0.066}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4562	$0.447^{+0.020}_{-0.023}$ (−0.3 σ)
$\xi^{\text{tSZ}} \times \text{CIB}$	0.34	—	$10^9 A_s e^{-2\tau}$	1.8796	$1.884^{+0.026}_{-0.024}$ (−0.7 σ)	$\sigma_8(0.15)$	0.7497	$0.732^{+0.032}_{-0.038}$ (+0.4 σ)
A_{143}^{tSZ}	7.23	$5.4^{+3.7}_{-3.9}$ (+0.3 σ)	D_{40}	1227.8	1224^{+25}_{-26} (−0.2 σ)	$f\sigma_8(0.38)$	0.4749	$0.465^{+0.020}_{-0.024}$ (+0.0 σ)
A_{100}^{PS}	251	260^{+60}_{-60} (−0.3 σ)	D_{220}	5738	5739^{+76}_{-75} (+0.7 σ)	$\sigma_8(0.38)$	0.6647	$0.649^{+0.029}_{-0.034}$ (+0.5 σ)
A_{143}^{PS}	46.4	47^{+20}_{-20} (−0.7 σ)	D_{810}	2539.4	2540^{+26}_{-27} (+0.1 σ)	$f\sigma_8(0.51)$	0.4737	$0.463^{+0.020}_{-0.024}$ (+0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	44.9	43^{+20}_{-20} (−0.3 σ)	D_{1420}	817.8	$817.3^{+9.4}_{-9.3}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6221	$0.607^{+0.027}_{-0.032}$ (+0.5 σ)
A_{217}^{PS}	118.0	115^{+20}_{-20} (−0.1 σ)	D_{2000}	231.26	$230.6^{+3.2}_{-3.2}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.4689	$0.458^{+0.020}_{-0.023}$ (+0.2 σ)
A^{kSZ}	0.00	< 8.31 (−0.3 σ)	$n_{s,0.002}$	0.9672	$0.969^{+0.010}_{-0.0096}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5920	$0.578^{+0.026}_{-0.031}$ (+0.5 σ)
A_{100}^{dustTT}	8.79	$9.0^{+3.6}_{-3.5}$ (+0.0 σ)	Y_P	0.24542	$0.2466^{+0.0025}_{-0.0013}$ (−0.6 σ)	$f\sigma_8(2.33)$	0.2986	$0.292^{+0.013}_{-0.016}$ (+0.5 σ)
A_{143}^{dustTT}	11.04	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.24675	$0.2479^{+0.0025}_{-0.0013}$ (−0.6 σ)	$\sigma_8(2.33)$	0.3079	$0.301^{+0.014}_{-0.016}$ (+0.6 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	$10^5 D/H$	2.573	$2.590^{+0.062}_{-0.057}$ (−1.6 σ)	f_{2000}^{143}	29.0	30^{+6}_{-6} (−1.0 σ)
A_{217}^{dustTT}	94.7	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.784	$13.72^{+0.10}_{-0.19}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	32.04	33^{+4}_{-4} (−1.1 σ)
A_{100}^{dustTE}	0.114	$0.113^{+0.074}_{-0.073}$	z_*	1089.756	$1089.87^{+0.52}_{-0.46}$ (−1.6 σ)	f_{2000}^{217}	106.65	$107.4^{+3.6}_{-3.6}$ (−1.0 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.059}_{-0.057}$	r_*	144.60	$143.8^{+1.2}_{-1.9}$ (+0.8 σ)	χ_{small}^2	397	291 (ν : 14275.5) (−59.9 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04120	$1.04105^{+0.00067}_{-0.00071}$ (+0.7 σ)	χ_{lowl}^2	23	129 (ν : 14277.5) (+67.4 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.888	$13.82^{+0.11}_{-0.17}$ (+0.8 σ)	χ_{plik}^2	2344.6	2362.3 (ν : 19.5) (+269.3 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.05	$1060.36^{+0.89}_{-0.80}$ (+0.5 σ)	χ_{JLA}^2	1034.98	1035.12 (ν : 0.1)
A_{217}^{dustTE}	2.07	$2.07^{+0.53}_{-0.53}$	r_{drag}	147.24	$146.4^{+1.2}_{-1.9}$ (+0.7 σ)	$\chi_{6\text{DF}}^2$	0.02	0.40 (ν : 0.2)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14076	$0.1414^{+0.0015}_{-0.0011}$ (−0.5 σ)	χ_{MGS}^2	1.28	0.89 (ν : 0.2)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160706	$0.16084^{+0.00052}_{-0.00045}$ (−1.3 σ)	χ_{DR12BAO}^2	4.25	5.0 (ν : 1.2)
H_0	67.75	$68.0^{+1.4}_{-1.2}$ (+0.7 σ)	z_{eq}	3377	3335^{+84}_{-130} (−0.3 σ)	χ_{prior}^2	1.8	11.7 (ν : 10.6) (+1.2 σ)
Ω_Λ	0.6902	$0.689^{+0.012}_{-0.013}$ (+1.0 σ)	k_{eq}	0.010311	$0.01026^{+0.00028}_{-0.00037}$ (−0.6 σ)	χ_{BAO}^2	5.56	6.3 (ν : 0.8)
Ω_m	0.3098	$0.311^{+0.013}_{-0.012}$ (−1.0 σ)	$100\theta_{\text{eq}}$	0.8183	$0.827^{+0.028}_{-0.017}$ (+0.3 σ)	χ_{CMB}^2	2764.7	2782.5 (ν : 18.6) (+267.6 σ)
$\Omega_m h^2$	0.14222	$0.1438^{+0.0038}_{-0.0031}$ (−1.0 σ)	$100\theta_{s,\text{eq}}$	0.4520	$0.457^{+0.015}_{-0.0090}$ (+0.3 σ)			
$\Omega_\nu h^2$	0.00091	$0.0027^{+0.0050}_{-0.0024}$ (−0.4 σ)	$H(0.15)$	73.02	$73.3^{+1.4}_{-1.1}$ (+0.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3806.99$; $\bar{\chi}_{\text{eff}}^2 = 3835.68$; $R - 1 = 0.01641$
 χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.25 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.96 commander_dx12_v3_2_29: 23.15 plik_rd12_HM_v22b_TTTEEE: 2344.56 SN - JLA Pantheon18: 1034.98

8.23 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02249^{+0.00029}_{-0.00027} \quad (+1.1\sigma)$	$\Omega_{\text{m}}h^3$	$0.0974^{+0.0028}_{-0.0016} \quad (-0.5\sigma)$	$D_{\text{M}}(0.15)$	$639.2^{+9.5}_{-10} \quad (-0.5\sigma)$
$\Omega_{\text{c}}h^2$	$0.1183^{+0.0054}_{-0.0067} \quad (-0.8\sigma)$	σ_8	$0.790^{+0.033}_{-0.040} \quad (+0.3\sigma)$	$H(0.38)$	$83.3^{+1.0}_{-0.82} \quad (+0.3\sigma)$
$100\theta_{\text{MC}}$	$1.04094^{+0.00059}_{-0.00060} \quad (+0.8\sigma)$	S_8	$0.807^{+0.037}_{-0.042} \quad (-0.3\sigma)$	$D_{\text{M}}(0.38)$	$1524^{+20}_{-22} \quad (-0.5\sigma)$
τ	$0.056^{+0.016}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.442^{+0.020}_{-0.023} \quad (-0.3\sigma)$	$H(0.51)$	$90.1^{+1.0}_{-0.74} \quad (+0.1\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.664 \quad (-0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.591^{+0.025}_{-0.030} \quad (+0.0\sigma)$	$D_{\text{M}}(0.51)$	$1974^{+24}_{-27} \quad (-0.4\sigma)$
N_{eff}	$< 3.25 \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.960^{+0.039}_{-0.047} \quad (+0.2\sigma)$	$H(0.61)$	$95.7^{+1.0}_{-0.69} \quad (-0.1\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.048^{+0.034}_{-0.031} \quad (+0.1\sigma)$	$r_{\text{drag}}h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_{\text{M}}(0.61)$	$2297^{+26}_{-31} \quad (-0.4\sigma)$
n_{s}	$0.9681^{+0.0098}_{-0.0085} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.049}_{-0.049} \quad (-0.4\sigma)$	$H(2.33)$	$237.2^{+2.5}_{-2.0} \quad (-1.0\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.6}_{-1.5} \quad (+0.3\sigma)$	$D_{\text{M}}(2.33)$	$5739^{+37}_{-59} \quad (+0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\text{s}}$	$2.108^{+0.072}_{-0.065} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.020}_{-0.023} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}e^{-2\tau}$	$1.883^{+0.024}_{-0.023} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.730^{+0.031}_{-0.037} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1225^{+25}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.023} \quad (-0.0\sigma)$
A_{100}^{PS}	$259^{+60}_{-50} \quad (-0.3\sigma)$	D_{220}	$5738^{+75}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.647^{+0.028}_{-0.033} \quad (+0.4\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.020}_{-0.023} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.3^{+9.4}_{-9.3} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.606^{+0.026}_{-0.031} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.6^{+3.1}_{-3.1} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.019}_{-0.023} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.23 \quad (-0.3\sigma)$	$n_{\text{s}, 0.002}$	$0.9681^{+0.0098}_{-0.0085} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.576^{+0.025}_{-0.030} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	Y_{P}	$0.2463^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.013}_{-0.015} \quad (+0.5\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2477^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.013}_{-0.016} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	10^5D/H	$2.588^{+0.059}_{-0.051} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-1.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.739^{+0.086}_{-0.14} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.074}$	z_*	$1089.87^{+0.48}_{-0.45} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.6} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.060}_{-0.057}$	r_*	$144.0^{+1.0}_{-1.4} \quad (+0.9\sigma)$	χ_{simall}^2	$292 \quad (\nu: 14191.0) \quad (-59.4\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04108^{+0.00060}_{-0.00065} \quad (+0.8\sigma)$	χ_{lowl}^2	$129 \quad (\nu: 14191.3) \quad (+66.9\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.830^{+0.094}_{-0.13} \quad (+0.9\sigma)$	χ_{plik}^2	$2361.8 \quad (\nu: 18.8) \quad (+269.2\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.28^{+0.76}_{-0.72} \quad (+0.4\sigma)$	χ_{Aver15}^2	$0.53 \quad (\nu: 0.1)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.53}$	r_{drag}	$146.6^{+1.0}_{-1.5} \quad (+0.8\sigma)$	$\chi_{6\text{DF}}^2$	$0.39 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1413^{+0.0012}_{-0.00096} \quad (-0.6\sigma)$	χ_{MGS}^2	$0.84 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\text{D}}$	$0.16081^{+0.00045}_{-0.00041} \quad (-1.3\sigma)$	χ_{DR12BAO}^2	$5.3 \quad (\nu: 1.6)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.6\sigma)$	z_{eq}	$3334^{+89}_{-140} \quad (-0.3\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.5) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.012}_{-0.013} \quad (+0.9\sigma)$	k_{eq}	$0.01025^{+0.00027}_{-0.00036} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.6 \quad (\nu: 1.1)$
Ω_{m}	$0.312^{+0.013}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.828^{+0.029}_{-0.018} \quad (+0.3\sigma)$	χ_{CMB}^2	$2782.1 \quad (\nu: 18.1) \quad (+267.5\sigma)$
$\Omega_{\text{m}}h^2$	$0.1437^{+0.0032}_{-0.0028} \quad (-1.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.457^{+0.015}_{-0.0095} \quad (+0.3\sigma)$		
$\Omega_{\nu}h^2$	$0.0029^{+0.0051}_{-0.0026} \quad (-0.3\sigma)$	$H(0.15)$	$73.1^{+1.1}_{-0.99} \quad (+0.5\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2800.91; R - 1 = 0.01503$$

8.24 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02248^{+0.00029}_{-0.00027} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.0974^{+0.0028}_{-0.0016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.4^{+9.6}_{-10} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1184^{+0.0053}_{-0.0066} \quad (-0.8\sigma)$	σ_8	$0.791^{+0.033}_{-0.040} \quad (+0.3\sigma)$	$H(0.38)$	$83.3^{+1.1}_{-0.83} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00059}_{-0.00060} \quad (+0.8\sigma)$	S_8	$0.807^{+0.037}_{-0.042} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+20}_{-23} \quad (-0.5\sigma)$
τ	$0.056^{+0.016}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.020}_{-0.023} \quad (-0.3\sigma)$	$H(0.51)$	$90.1^{+1.0}_{-0.74} \quad (+0.1\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.664 \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.025}_{-0.030} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1975^{+24}_{-28} \quad (-0.4\sigma)$
N_{eff}	$< 3.25 \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.960^{+0.039}_{-0.047} \quad (+0.2\sigma)$	$H(0.61)$	$95.7^{+1.0}_{-0.69} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.048^{+0.034}_{-0.031} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+26}_{-31} \quad (-0.4\sigma)$
n_{s}	$0.9681^{+0.0098}_{-0.0086} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.050}_{-0.049} \quad (-0.4\sigma)$	$H(2.33)$	$237.2^{+2.5}_{-2.0} \quad (-1.0\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.6}_{-1.5} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5739^{+37}_{-59} \quad (+0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.107^{+0.072}_{-0.065} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.020}_{-0.023} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.883^{+0.024}_{-0.023} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.730^{+0.031}_{-0.037} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1225^{+25}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.023} \quad (-0.0\sigma)$
A_{100}^{PS}	$260^{+60}_{-50} \quad (-0.3\sigma)$	D_{220}	$5737^{+75}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.647^{+0.028}_{-0.033} \quad (+0.4\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.019}_{-0.023} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.2^{+9.3}_{-9.2} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.606^{+0.026}_{-0.031} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.5^{+3.1}_{-3.1} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.019}_{-0.023} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.26 \quad (-0.3\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.9681^{+0.0098}_{-0.0086} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.576^{+0.025}_{-0.030} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	Y_{P}	$0.2464^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.013}_{-0.015} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2477^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.013}_{-0.016} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.590^{+0.056}_{-0.049} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.739^{+0.087}_{-0.14} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.073}$	z_*	$1089.89^{+0.46}_{-0.44} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.5} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.060}_{-0.057}$	r_*	$144.0^{+1.0}_{-1.4} \quad (+0.9\sigma)$	χ_{simall}^2	$290 \quad (\nu: 14344.0) \quad (-60.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04107^{+0.00060}_{-0.00065} \quad (+0.8\sigma)$	χ_{lowl}^2	$130 \quad (\nu: 14345.4) \quad (+68.1\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.829^{+0.095}_{-0.13} \quad (+0.9\sigma)$	χ_{plik}^2	$2361.7 \quad (\nu: 18.7) \quad (+269.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.26^{+0.77}_{-0.72} \quad (+0.4\sigma)$	χ_{Aver15}^2	$0.54 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	r_{drag}	$146.6^{+1.0}_{-1.5} \quad (+0.8\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.17 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1413^{+0.0012}_{-0.00097} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.39 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16082^{+0.00044}_{-0.00040} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.82 \quad (\nu: 0.2)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.6\sigma)$	z_{eq}	$3335^{+88}_{-130} \quad (-0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.4 \quad (\nu: 1.6)$
Ω_{Λ}	$0.687^{+0.012}_{-0.013} \quad (+0.9\sigma)$	k_{eq}	$0.01026^{+0.00027}_{-0.00036} \quad (-0.7\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.5) \quad (+1.2\sigma)$
Ω_{m}	$0.313^{+0.013}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.828^{+0.029}_{-0.018} \quad (+0.3\sigma)$	χ_{BAO}^2	$6.6 \quad (\nu: 1.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1437^{+0.0032}_{-0.0028} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.457^{+0.015}_{-0.0095} \quad (+0.3\sigma)$	χ_{CMB}^2	$2782.0 \quad (\nu: 18.0) \quad (+267.5\sigma)$
$\Omega_{\nu} h^2$	$0.0029^{+0.0051}_{-0.0026} \quad (-0.3\sigma)$	$H(0.15)$	$73.1^{+1.1}_{-0.99} \quad (+0.5\sigma)$	χ_{Abund}^2	$0.70 \quad (\nu: 0.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.05; R - 1 = 0.01420$$

8.25 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02250^{+0.00030}_{-0.00028} \quad (+1.2\sigma)$	$\Omega_\nu h^2$	$0.0027^{+0.0050}_{-0.0025} \quad (-0.3\sigma)$	$100\theta_{s,eq}$	$0.456^{+0.015}_{-0.0093} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1187^{+0.0056}_{-0.0073} \quad (-0.7\sigma)$	$\Omega_m h^3$	$0.0977^{+0.0036}_{-0.0020} \quad (-0.4\sigma)$	$H(0.15)$	$73.2^{+1.3}_{-1.1} \quad (+0.5\sigma)$
$100\theta_{MC}$	$1.04091^{+0.00060}_{-0.00065} \quad (+0.8\sigma)$	σ_8	$0.792^{+0.034}_{-0.041} \quad (+0.4\sigma)$	$D_M(0.15)$	$638^{+10}_{-12} \quad (-0.6\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	S_8	$0.808^{+0.037}_{-0.043} \quad (-0.3\sigma)$	$H(0.38)$	$83.4^{+1.3}_{-0.94} \quad (+0.3\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.649 \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.020}_{-0.023} \quad (-0.3\sigma)$	$D_M(0.38)$	$1523^{+22}_{-27} \quad (-0.5\sigma)$
N_{eff}	$< 3.30 \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.025}_{-0.030} \quad (+0.1\sigma)$	$H(0.51)$	$90.2^{+1.3}_{-0.86} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.031}_{-0.029} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.961^{+0.038}_{-0.048} \quad (+0.3\sigma)$	$D_M(0.51)$	$1972^{+27}_{-33} \quad (-0.5\sigma)$
n_s	$0.969^{+0.010}_{-0.0097} \quad (+0.4\sigma)$	$r_{drag} h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$H(0.61)$	$95.8^{+1.3}_{-0.81} \quad (+0.0\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.048}_{-0.048} \quad (-0.4\sigma)$	$D_M(0.61)$	$2295^{+29}_{-38} \quad (-0.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$H(2.33)$	$237.4^{+2.9}_{-2.2} \quad (-0.9\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s$	$2.112^{+0.066}_{-0.061} \quad (+0.2\sigma)$	$D_M(2.33)$	$5733^{+44}_{-74} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.025}_{-0.023} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.020}_{-0.023} \quad (-0.2\sigma)$
A_{100}^{PS}	$260^{+60}_{-50} \quad (-0.3\sigma)$	D_{40}	$1225^{+25}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.032}_{-0.038} \quad (+0.4\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{220}	$5738^{+77}_{-76} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.020}_{-0.024} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2541^{+26}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.028}_{-0.034} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.3^{+9.4}_{-9.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.020}_{-0.024} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.24 \quad (-0.3\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.2} \quad (+1.2\sigma)$	$\sigma_8(0.51)$	$0.607^{+0.027}_{-0.032} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.969^{+0.010}_{-0.0097} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.019}_{-0.023} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P	$0.2466^{+0.0024}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.026}_{-0.031} \quad (+0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.7^{+6.4}_{-6.4} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2479^{+0.0024}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.013}_{-0.016} \quad (+0.5\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 D/H$	$2.591^{+0.061}_{-0.056} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.014}_{-0.016} \quad (+0.6\sigma)$
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.073}$	Age/Gyr	$13.72^{+0.10}_{-0.18} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-1.0\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.057}$	z_*	$1089.89^{+0.51}_{-0.46} \quad (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	r_*	$143.8^{+1.1}_{-1.8} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.5} \quad (-1.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04104^{+0.00065}_{-0.00070} \quad (+0.7\sigma)$	χ_{simall}^2	$397.4 \quad (\nu: 2.6) \quad (+0.2\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	$D_M(z_*)/Gpc$	$13.82^{+0.11}_{-0.16} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.90 \quad (\nu: 0.4) \quad (-0.4\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.53}$	z_{drag}	$1060.34^{+0.86}_{-0.79} \quad (+0.5\sigma)$	χ_{plik}^2	$2361.9 \quad (\nu: 19.2) \quad (+269.2\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$146.4^{+1.2}_{-1.8} \quad (+0.7\sigma)$	χ_{6DF}^2	$0.076 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_D	$0.1414^{+0.0014}_{-0.0011} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.15 \quad (\nu: 0.1)$
H_0	$67.9^{+1.4}_{-1.2} \quad (+0.6\sigma)$	$100\theta_D$	$0.16084^{+0.00051}_{-0.00044} \quad (-1.3\sigma)$	$\chi_{DR12BAO}^2$	$5.3 \quad (\nu: 1.6)$
Ω_Λ	$0.688^{+0.013}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3337^{+87}_{-130} \quad (-0.3\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.6) \quad (+1.2\sigma)$
Ω_m	$0.312^{+0.013}_{-0.013} \quad (-0.9\sigma)$	k_{eq}	$0.01027^{+0.00028}_{-0.00036} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.6 \quad (\nu: 1.1)$
$\Omega_m h^2$	$0.1440^{+0.0037}_{-0.0031} \quad (-1.0\sigma)$	$100\theta_{eq}$	$0.827^{+0.028}_{-0.018} \quad (+0.3\sigma)$	χ_{CMB}^2	$2782.2 \quad (\nu: 18.4) \quad (+267.5\sigma)$

$$\bar{\chi}_{eff}^2 = 2800.45; \Delta\bar{\chi}_{eff}^2 = 2.74; R - 1 = 0.01583$$

8.26 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02251^{+0.00031}_{-0.00028} \quad (+1.2\sigma)$	$\Omega_m h^3$	$0.0978^{+0.0038}_{-0.0020} \quad (-0.4\sigma)$	$D_M(0.15)$	$638^{+10}_{-13} \quad (-0.7\sigma)$
$\Omega_c h^2$	$0.1187^{+0.0057}_{-0.0074} \quad (-0.7\sigma)$	σ_8	$0.793^{+0.034}_{-0.041} \quad (+0.4\sigma)$	$H(0.38)$	$83.5^{+1.4}_{-0.95} \quad (+0.4\sigma)$
$100\theta_{MC}$	$1.04092^{+0.00061}_{-0.00065} \quad (+0.8\sigma)$	S_8	$0.807^{+0.036}_{-0.042} \quad (-0.3\sigma)$	$D_M(0.38)$	$1521^{+22}_{-28} \quad (-0.6\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.442^{+0.020}_{-0.023} \quad (-0.3\sigma)$	$H(0.51)$	$90.2^{+1.4}_{-0.87} \quad (+0.2\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.646 \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.025}_{-0.030} \quad (+0.1\sigma)$	$D_M(0.51)$	$1970^{+27}_{-35} \quad (-0.6\sigma)$
N_{eff}	$< 3.32 \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.961^{+0.038}_{-0.047} \quad (+0.2\sigma)$	$H(0.61)$	$95.9^{+1.4}_{-0.82} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.031}_{-0.029} \quad (+0.2\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$D_M(0.61)$	$2292^{+30}_{-39} \quad (-0.5\sigma)$
n_s	$0.969^{+0.010}_{-0.0096} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.048}_{-0.047} \quad (-0.5\sigma)$	$H(2.33)$	$237.4^{+3.1}_{-2.3} \quad (-0.9\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$D_M(2.33)$	$5730^{+45}_{-79} \quad (+0.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.112^{+0.067}_{-0.062} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.020}_{-0.023} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.884^{+0.026}_{-0.024} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.032}_{-0.038} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1224^{+25}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.020}_{-0.024} \quad (+0.0\sigma)$
A_{100}^{PS}	$260^{+60}_{-60} \quad (-0.3\sigma)$	D_{220}	$5739^{+76}_{-75} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.029}_{-0.034} \quad (+0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.020}_{-0.024} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.3\sigma)$	D_{1420}	$817.3^{+9.4}_{-9.3} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.027}_{-0.032} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.2} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.019}_{-0.024} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.28 \quad (-0.3\sigma)$	$n_{s,0.002}$	$0.969^{+0.010}_{-0.0096} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.026}_{-0.031} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	Y_P	$0.2466^{+0.0025}_{-0.0013} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.013}_{-0.016} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2479^{+0.0025}_{-0.0013} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.014}_{-0.016} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$10^5 D/H$	$2.590^{+0.062}_{-0.057} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-1.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.72^{+0.11}_{-0.19} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
A_{100}^{dustTE}	$0.113^{+0.074}_{-0.073}$	z_*	$1089.87^{+0.52}_{-0.46} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.6} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.057}$	r_*	$143.8^{+1.2}_{-1.9} \quad (+0.8\sigma)$	χ_{simall}^2	$291 \quad (\nu: 14232.5) \quad (-59.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04104^{+0.00067}_{-0.00071} \quad (+0.7\sigma)$	χ_{lowl}^2	$129 \quad (\nu: 14235.3) \quad (+67.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.82^{+0.11}_{-0.17} \quad (+0.7\sigma)$	χ_{plik}^2	$2362.2 \quad (\nu: 19.5) \quad (+269.2\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.37^{+0.89}_{-0.81} \quad (+0.5\sigma)$	χ_{JLA}^2	$1035.12 \quad (\nu: 0.1)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.53}$	r_{drag}	$146.4^{+1.2}_{-1.9} \quad (+0.7\sigma)$	χ_{6DF}^2	$0.40 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.1414^{+0.0015}_{-0.0011} \quad (-0.5\sigma)$	χ_{MGS}^2	$0.89 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16084^{+0.00053}_{-0.00045} \quad (-1.3\sigma)$	χ_{DR12BAO}^2	$5.0 \quad (\nu: 1.2)$
H_0	$68.0^{+1.4}_{-1.2} \quad (+0.7\sigma)$	z_{eq}	$3334^{+84}_{-130} \quad (-0.3\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.6) \quad (+1.2\sigma)$
Ω_Λ	$0.689^{+0.012}_{-0.013} \quad (+1.0\sigma)$	k_{eq}	$0.01026^{+0.00028}_{-0.00037} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
Ω_m	$0.311^{+0.013}_{-0.012} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.828^{+0.028}_{-0.017} \quad (+0.3\sigma)$	χ_{CMB}^2	$2782.4 \quad (\nu: 18.6) \quad (+267.5\sigma)$
$\Omega_m h^2$	$0.1439^{+0.0038}_{-0.0031} \quad (-1.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.457^{+0.015}_{-0.0090} \quad (+0.3\sigma)$		
$\Omega_\nu h^2$	$0.0027^{+0.0050}_{-0.0024} \quad (-0.4\sigma)$	$H(0.15)$	$73.3^{+1.4}_{-1.1} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 3835.56; R - 1 = 0.01701$$

8.27 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02249^{+0.00029}_{-0.00028} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0974^{+0.0028}_{-0.0016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.2^{+9.6}_{-10} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1183^{+0.0054}_{-0.0067} \quad (-0.8\sigma)$	σ_8	$0.791^{+0.033}_{-0.040} \quad (+0.4\sigma)$	$H(0.38)$	$83.3^{+1.0}_{-0.83} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00059}_{-0.00060} \quad (+0.8\sigma)$	S_8	$0.807^{+0.037}_{-0.042} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+20}_{-22} \quad (-0.5\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.020}_{-0.023} \quad (-0.3\sigma)$	$H(0.51)$	$90.1^{+1.0}_{-0.74} \quad (+0.1\sigma)$
$m_{\nu,\mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.673 \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.025}_{-0.030} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+24}_{-28} \quad (-0.4\sigma)$
N_{eff}	$< 3.25 \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.960^{+0.038}_{-0.047} \quad (+0.2\sigma)$	$H(0.61)$	$95.7^{+1.0}_{-0.69} \quad (-0.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.049^{+0.031}_{-0.029} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+26}_{-31} \quad (-0.4\sigma)$
n_{s}	$0.9682^{+0.0098}_{-0.0086} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.049}_{-0.047} \quad (-0.4\sigma)$	$H(2.33)$	$237.2^{+2.5}_{-2.0} \quad (-1.0\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5739^{+37}_{-59} \quad (+0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.110^{+0.065}_{-0.060} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.020}_{-0.023} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.024}_{-0.023} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.731^{+0.031}_{-0.037} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1225^{+25}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.024} \quad (-0.0\sigma)$
A_{100}^{PS}	$259^{+60}_{-50} \quad (-0.3\sigma)$	D_{220}	$5738^{+75}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.648^{+0.028}_{-0.033} \quad (+0.4\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.019}_{-0.023} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.3^{+9.4}_{-9.3} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.606^{+0.026}_{-0.031} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.6^{+3.1}_{-3.1} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.019}_{-0.023} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.18 \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9682^{+0.0098}_{-0.0086} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.577^{+0.025}_{-0.030} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2464^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.013}_{-0.015} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2477^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.013}_{-0.016} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.588^{+0.059}_{-0.051} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.739^{+0.087}_{-0.14} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.074}_{-0.073}$	z_*	$1089.87^{+0.48}_{-0.45} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.3^{+3.6}_{-3.6} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.060}_{-0.057}$	r_*	$144.0^{+1.0}_{-1.4} \quad (+0.9\sigma)$	χ_{simall}^2	$292 \quad (\nu: 14138.5) \quad (-59.1\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04108^{+0.00060}_{-0.00065} \quad (+0.8\sigma)$	χ_{lowl}^2	$128 \quad (\nu: 14139.9) \quad (+66.5\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.830^{+0.094}_{-0.13} \quad (+0.9\sigma)$	χ_{plik}^2	$2361.7 \quad (\nu: 18.7) \quad (+269.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.28^{+0.76}_{-0.73} \quad (+0.4\sigma)$	χ_{Aver15}^2	$0.53 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.53}_{-0.53}$	r_{drag}	$146.6^{+1.0}_{-1.5} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.39 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1413^{+0.0012}_{-0.00096} \quad (-0.6\sigma)$	χ_{MGS}^2	$0.84 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16080^{+0.00045}_{-0.00041} \quad (-1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.3 \quad (\nu: 1.6)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.6\sigma)$	z_{eq}	$3333^{+89}_{-140} \quad (-0.3\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.5) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.012}_{-0.013} \quad (+0.9\sigma)$	k_{eq}	$0.01025^{+0.00027}_{-0.00036} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.6 \quad (\nu: 1.1)$
Ω_{m}	$0.312^{+0.013}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.828^{+0.029}_{-0.018} \quad (+0.3\sigma)$	χ_{CMB}^2	$2782.0 \quad (\nu: 18.0) \quad (+267.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1437^{+0.0032}_{-0.0028} \quad (-1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.457^{+0.015}_{-0.0095} \quad (+0.3\sigma)$		
$\Omega_{\nu}h^2$	$0.0029^{+0.0051}_{-0.0026} \quad (-0.3\sigma)$	$H(0.15)$	$73.1^{+1.1}_{-0.99} \quad (+0.5\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2800.77; R - 1 = 0.01526$

8.28 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02248^{+0.00029}_{-0.00027} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.0974^{+0.0029}_{-0.0017} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.3^{+9.6}_{-10} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1184^{+0.0054}_{-0.0067} \quad (-0.8\sigma)$	σ_8	$0.791^{+0.033}_{-0.040} \quad (+0.4\sigma)$	$H(0.38)$	$83.3^{+1.1}_{-0.83} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00059}_{-0.00060} \quad (+0.8\sigma)$	S_8	$0.807^{+0.037}_{-0.042} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+20}_{-23} \quad (-0.5\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.020}_{-0.023} \quad (-0.3\sigma)$	$H(0.51)$	$90.1^{+1.0}_{-0.75} \quad (+0.1\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.672 \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.591^{+0.025}_{-0.030} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1975^{+24}_{-28} \quad (-0.4\sigma)$
N_{eff}	$< 3.25 \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.961^{+0.038}_{-0.047} \quad (+0.2\sigma)$	$H(0.61)$	$95.7^{+1.0}_{-0.69} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.049^{+0.031}_{-0.029} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+26}_{-31} \quad (-0.4\sigma)$
n_{s}	$0.9682^{+0.0098}_{-0.0086} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.049}_{-0.047} \quad (-0.4\sigma)$	$H(2.33)$	$237.2^{+2.5}_{-2.0} \quad (-1.0\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5739^{+37}_{-60} \quad (+0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.110^{+0.065}_{-0.060} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.020}_{-0.023} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.883^{+0.024}_{-0.023} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.731^{+0.031}_{-0.037} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1225^{+25}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.020}_{-0.024} \quad (-0.0\sigma)$
A_{100}^{PS}	$260^{+60}_{-50} \quad (-0.3\sigma)$	D_{220}	$5737^{+75}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.648^{+0.028}_{-0.033} \quad (+0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.019}_{-0.023} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.2^{+9.3}_{-9.3} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.606^{+0.026}_{-0.031} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.5^{+3.1}_{-3.1} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.019}_{-0.023} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.20 \quad (-0.3\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.9682^{+0.0098}_{-0.0086} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.577^{+0.025}_{-0.030} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2464^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.013}_{-0.015} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2477^{+0.0019}_{-0.0010} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.013}_{-0.016} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.590^{+0.057}_{-0.049} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.739^{+0.087}_{-0.14} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.074}_{-0.073}$	z_*	$1089.89^{+0.46}_{-0.44} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.5} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.060}_{-0.057}$	r_*	$144.0^{+1.0}_{-1.4} \quad (+0.9\sigma)$	χ_{simall}^2	$290 \quad (\nu: 14295.5) \quad (-60.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04107^{+0.00060}_{-0.00065} \quad (+0.8\sigma)$	χ_{lowl}^2	$130 \quad (\nu: 14298.0) \quad (+67.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.828^{+0.095}_{-0.13} \quad (+0.9\sigma)$	χ_{plik}^2	$2361.6 \quad (\nu: 18.7) \quad (+269.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.27^{+0.77}_{-0.72} \quad (+0.4\sigma)$	χ_{Aver15}^2	$0.54 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	r_{drag}	$146.6^{+1.0}_{-1.5} \quad (+0.8\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	$0.17 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1413^{+0.0012}_{-0.00097} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.39 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16082^{+0.00044}_{-0.00040} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.83 \quad (\nu: 0.2)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.6\sigma)$	z_{eq}	$3334^{+88}_{-140} \quad (-0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.4 \quad (\nu: 1.6)$
Ω_{Λ}	$0.687^{+0.012}_{-0.013} \quad (+0.9\sigma)$	k_{eq}	$0.01026^{+0.00027}_{-0.00036} \quad (-0.7\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.5) \quad (+1.2\sigma)$
Ω_{m}	$0.313^{+0.013}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.828^{+0.029}_{-0.018} \quad (+0.3\sigma)$	χ_{BAO}^2	$6.6 \quad (\nu: 1.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1437^{+0.0032}_{-0.0028} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.457^{+0.015}_{-0.0095} \quad (+0.3\sigma)$	χ_{CMB}^2	$2781.9 \quad (\nu: 17.9) \quad (+267.5\sigma)$
$\Omega_{\nu} h^2$	$0.0029^{+0.0051}_{-0.0026} \quad (-0.3\sigma)$	$H(0.15)$	$73.1^{+1.1}_{-0.99} \quad (+0.5\sigma)$	χ_{Abund}^2	$0.71 \quad (\nu: 0.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2800.91; R - 1 = 0.01453$$

8.29 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022350	$0.02243^{+0.00032}_{-0.00030}$ (+0.8 σ)	σ_8	0.8062	$0.788^{+0.039}_{-0.045}$ (+0.3 σ)	$H(0.15)$	73.00	$73.4^{+1.7}_{-1.2}$ (+0.7 σ)
$\Omega_c h^2$	0.1148	$0.1187^{+0.0072}_{-0.0079}$ (−0.7 σ)	S_8	0.8184	$0.801^{+0.041}_{-0.045}$ (−0.5 σ)	$D_M(0.15)$	640.1	637^{+12}_{-15} (−0.8 σ)
$100\theta_{MC}$	1.04097	$1.04082^{+0.00066}_{-0.00074}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4483	$0.439^{+0.022}_{-0.025}$ (−0.5 σ)	$H(0.38)$	83.07	$83.6^{+1.7}_{-1.1}$ (+0.5 σ)
τ	0.0538	$0.055^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6012	$0.588^{+0.028}_{-0.033}$ (−0.1 σ)	$D_M(0.38)$	1527.2	1519^{+25}_{-34} (−0.7 σ)
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	0.380	< 0.703 (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9795	$0.955^{+0.043}_{-0.051}$ (+0.0 σ)	$H(0.51)$	89.76	$90.3^{+1.7}_{-1.0}$ (+0.3 σ)
N_{eff}	3.047	< 3.40 (−0.4 σ)	$r_{\text{drag}} h$	99.86	$99.7^{+1.7}_{-1.7}$ (+1.0 σ)	$D_M(0.51)$	1978.7	1967^{+30}_{-42} (−0.7 σ)
$\ln(10^{10} A_s)$	3.0404	$3.044^{+0.035}_{-0.032}$ (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4251	$2.415^{+0.050}_{-0.050}$ (−0.8 σ)	$H(0.61)$	95.36	$96.0^{+1.7}_{-0.98}$ (+0.2 σ)
n_s	0.9680	$0.970^{+0.012}_{-0.011}$ (+0.5 σ)	z_{re}	7.62	$7.7^{+1.5}_{-1.6}$ (+0.1 σ)	$D_M(0.61)$	2302.8	2290^{+34}_{-48} (−0.6 σ)
y_{cal}	1.00091	$1.0006^{+0.0049}_{-0.0049}$ (+0.1 σ)	$10^9 A_s$	2.091	$2.098^{+0.073}_{-0.067}$ (−0.2 σ)	$H(2.33)$	235.81	$237.5^{+3.7}_{-2.6}$ (−0.9 σ)
A_{100}^{PS}	234.6	243^{+50}_{-50} (−0.9 σ)	$10^9 A_s e^{-2\tau}$	1.8778	$1.881^{+0.028}_{-0.026}$ (−0.8 σ)	$D_M(2.33)$	5761	5725^{+54}_{-97} (−0.1 σ)
A_{143}^{PS}	43.8	41^{+20}_{-20} (−1.3 σ)	D_{40}	1222.9	1218^{+26}_{-26} (−0.5 σ)	$f\sigma_8(0.15)$	0.4530	$0.444^{+0.022}_{-0.025}$ (−0.4 σ)
A_{217}^{PS}	104.5	102^{+30}_{-30} (−1.3 σ)	D_{220}	5726	5723^{+77}_{-76} (+0.3 σ)	$\sigma_8(0.15)$	0.7452	$0.728^{+0.036}_{-0.042}$ (+0.3 σ)
A_{217}^{CIB}	41.8	41^{+10}_{-10} (−1.2 σ)	D_{810}	2538.5	2536^{+27}_{-26} (−0.2 σ)	$f\sigma_8(0.38)$	0.4718	$0.462^{+0.022}_{-0.026}$ (−0.2 σ)
A_{143}^{tSZ}	5.70	< 7.43 (−0.5 σ)	D_{1420}	817.4	$815.2^{+9.5}_{-9.5}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6609	$0.646^{+0.032}_{-0.038}$ (+0.4 σ)
$r_{143 \times 217}^{\text{PS}}$	0.693	$0.65^{+0.25}_{-0.25}$	D_{2000}	230.94	$229.5^{+3.4}_{-3.4}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4707	$0.461^{+0.022}_{-0.026}$ (−0.0 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.71	—	$n_{s,0.002}$	0.9680	$0.970^{+0.012}_{-0.011}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6186	$0.604^{+0.030}_{-0.035}$ (+0.4 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.48	—	Y_P	0.24540	$0.2469^{+0.0032}_{-0.0017}$ (−0.4 σ)	$f\sigma_8(0.61)$	0.4659	$0.456^{+0.022}_{-0.026}$ (+0.0 σ)
A^{kSZ}	1.2	—	Y_P^{BBN}	0.24673	$0.2483^{+0.0032}_{-0.0017}$ (−0.4 σ)	$\sigma_8(0.61)$	0.5886	$0.575^{+0.029}_{-0.034}$ (+0.4 σ)
A_{100}^{dust}	1.010	$1.02^{+0.38}_{-0.38}$	$10^5 D/H$	2.590	$2.615^{+0.080}_{-0.071}$ (−1.1 σ)	$f\sigma_8(2.33)$	0.2969	$0.290^{+0.015}_{-0.017}$ (+0.4 σ)
A_{143}^{dust}	0.958	$0.97^{+0.34}_{-0.34}$	Age/Gyr	13.793	$13.71^{+0.13}_{-0.23}$ (−0.0 σ)	$\sigma_8(2.33)$	0.3062	$0.299^{+0.016}_{-0.018}$ (+0.5 σ)
A_{217}^{dust}	0.975	$0.97^{+0.20}_{-0.21}$	z_*	1089.85	$1090.01^{+0.60}_{-0.57}$ (−1.3 σ)	f_{2000}^{143}	29.4	31^{+6}_{-6} (−0.7 σ)
$A_{143 \times 217}^{\text{dust}}$	1.030	$1.03^{+0.32}_{-0.32}$	r_*	144.74	$143.7^{+1.4}_{-2.3}$ (+0.7 σ)	f_{2000}^{217}	106.55	$107.6^{+4.0}_{-3.9}$ (−0.9 σ)
c_{100}	0.99777	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	1.04116	$1.04094^{+0.00073}_{-0.00081}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	31.94	33^{+4}_{-4} (−0.9 σ)
c_{217}	1.00120	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	$D_M(z_*)/\text{Gpc}$	13.901	$13.81^{+0.13}_{-0.21}$ (+0.7 σ)	χ_{small}^2	395.95	397.1 (ν : 1.7) (+0.0 σ)
c_{TE}	0.9969	$0.9975^{+0.0098}_{-0.0098}$	z_{drag}	1059.82	$1060.20^{+0.97}_{-0.86}$ (+0.3 σ)	χ_{lowl}^2	22.71	22.47 (ν : 0.4) (−0.6 σ)
c_{EE}	0.9925	$0.994^{+0.010}_{-0.010}$	r_{drag}	147.41	$146.4^{+1.5}_{-2.4}$ (+0.6 σ)	χ_{CamSpec}^2	11500.3	11517.3 (ν : 18.6)
H_0	67.75	$68.1^{+1.7}_{-1.3}$ (+0.8 σ)	k_D	0.14051	$0.1413^{+0.0018}_{-0.0013}$ (−0.6 σ)	$\chi_{6\text{DF}}^2$	0.016	0.058 (ν : 0.0)
Ω_Λ	0.6909	$0.690^{+0.013}_{-0.013}$ (+1.0 σ)	$100\theta_D$	0.16083	$0.16104^{+0.00069}_{-0.00056}$ (−0.8 σ)	χ_{MGS}^2	1.34	1.30 (ν : 0.1)
Ω_m	0.3091	$0.310^{+0.013}_{-0.013}$ (−1.0 σ)	z_{eq}	3278	3321^{+91}_{-140} (−0.5 σ)	χ_{DR12BAO}^2	4.08	4.9 (ν : 1.2)
$\Omega_m h^2$	0.14188	$0.1439^{+0.0046}_{-0.0035}$ (−1.0 σ)	k_{eq}	0.010078	$0.01024^{+0.00032}_{-0.00040}$ (−0.7 σ)	χ_{prior}^2	2.1	7.9 (ν : 6.0) (+0.1 σ)
$\Omega_\nu h^2$	0.00469	$0.0028^{+0.0055}_{-0.0022}$ (−0.3 σ)	$100\theta_{\text{eq}}$	0.8388	$0.830^{+0.030}_{-0.019}$ (+0.4 σ)	χ_{BAO}^2	5.44	6.2 (ν : 0.8)
$\Omega_m h^3$	0.09612	$0.0980^{+0.0048}_{-0.0025}$ (−0.3 σ)	$100\theta_{s,\text{eq}}$	0.4628	$0.458^{+0.016}_{-0.0097}$ (+0.4 σ)	χ_{CMB}^2	11919.0	11936.9 (ν : 18.4) (+1810.5 σ)

Best-fit $\chi_{\text{eff}}^2 = 11926.47$; $\bar{\chi}_{\text{eff}}^2 = 11950.99$; $\Delta\chi_{\text{eff}}^2 = 2.71$; $R - 1 = 0.01562$
 χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.34 DR12BAO: 4.08 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.95 commander_dx12_v3.2.29: 22.71 CamSpec like_10.7HM_1400_unified: 11500.30

8.30 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00032}_{-0.00030} \quad (+0.9\sigma)$	S_8	$0.801^{+0.040}_{-0.045} \quad (-0.6\sigma)$	$H(0.38)$	$83.6^{+1.7}_{-1.1} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0073}_{-0.0079} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.022}_{-0.025} \quad (-0.6\sigma)$	$D_M(0.38)$	$1517^{+25}_{-34} \quad (-0.7\sigma)$
$100\theta_{MC}$	$1.04083^{+0.00067}_{-0.00074} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.588^{+0.028}_{-0.033} \quad (-0.1\sigma)$	$H(0.51)$	$90.4^{+1.7}_{-1.0} \quad (+0.4\sigma)$
τ	$0.055^{+0.016}_{-0.015} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.955^{+0.042}_{-0.051} \quad (+0.0\sigma)$	$D_M(0.51)$	$1966^{+30}_{-42} \quad (-0.7\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.695 \quad (-0.3\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.7}_{-1.6} \quad (+1.1\sigma)$	$H(0.61)$	$96.0^{+1.8}_{-1.0} \quad (+0.2\sigma)$
N_{eff}	$< 3.40 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.413^{+0.049}_{-0.049} \quad (-0.8\sigma)$	$D_M(0.61)$	$2288^{+34}_{-48} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.034}_{-0.032} \quad (-0.2\sigma)$	z_{re}	$7.7^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$H(2.33)$	$237.4^{+3.8}_{-2.6} \quad (-0.9\sigma)$
n_s	$0.971^{+0.012}_{-0.011} \quad (+0.6\sigma)$	$10^9 A_s$	$2.099^{+0.073}_{-0.067} \quad (-0.2\sigma)$	$D_M(2.33)$	$5723^{+55}_{-100} \quad (-0.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.028}_{-0.026} \quad (-0.9\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.022}_{-0.025} \quad (-0.5\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1218^{+26}_{-26} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.729^{+0.036}_{-0.042} \quad (+0.3\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5724^{+77}_{-76} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.022}_{-0.026} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.646^{+0.032}_{-0.037} \quad (+0.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$815.3^{+9.5}_{-9.6} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.022}_{-0.026} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.5\sigma)$	D_{2000}	$229.6^{+3.4}_{-3.5} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.605^{+0.030}_{-0.035} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.971^{+0.012}_{-0.011} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.022}_{-0.026} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2470^{+0.0033}_{-0.0017} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.576^{+0.029}_{-0.034} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2483^{+0.0033}_{-0.0017} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.015}_{-0.017} \quad (+0.5\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.615^{+0.080}_{-0.072} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.015}_{-0.018} \quad (+0.5\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.70^{+0.13}_{-0.24} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.7\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1090.00^{+0.60}_{-0.57} \quad (-1.3\sigma)$	f_{2000}^{217}	$107.6^{+4.0}_{-3.9} \quad (-0.9\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$143.7^{+1.4}_{-2.3} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04095^{+0.00074}_{-0.00082} \quad (+0.6\sigma)$	χ_{simall}^2	$397.1 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.81^{+0.13}_{-0.22} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.41 \quad (\nu: 0.4) \quad (-0.7\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.21^{+0.98}_{-0.86} \quad (+0.3\sigma)$	χ_{CamSpec}^2	$11517.4 \quad (\nu: 18.5)$
c_{TE}	$0.9975^{+0.0099}_{-0.0099}$	r_{drag}	$146.4^{+1.5}_{-2.4} \quad (+0.7\sigma)$	χ_{JLA}^2	$1035.04 \quad (\nu: 0.0)$
c_{EE}	$0.994^{+0.010}_{-0.010}$	k_D	$0.1413^{+0.0018}_{-0.0013} \quad (-0.6\sigma)$	$\chi_{6\text{DF}}^2$	$0.048 \quad (\nu: 0.0)$
H_0	$68.2^{+1.7}_{-1.3} \quad (+0.8\sigma)$	$100\theta_D$	$0.16104^{+0.00070}_{-0.00057} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
Ω_Λ	$0.691^{+0.013}_{-0.013} \quad (+1.1\sigma)$	z_{eq}	$3319^{+90}_{-140} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$4.6 \quad (\nu: 1.0)$
Ω_m	$0.309^{+0.013}_{-0.013} \quad (-1.1\sigma)$	k_{eq}	$0.01024^{+0.00032}_{-0.00040} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1438^{+0.0047}_{-0.0035} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.830^{+0.030}_{-0.018} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
$\Omega_\nu h^2$	$0.0027^{+0.0064}_{-0.0022} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.458^{+0.016}_{-0.0096} \quad (+0.4\sigma)$	χ_{CMB}^2	$11936.9 \quad (\nu: 18.4) \quad (+1810.5\sigma)$
$\Omega_m h^3$	$0.0981^{+0.0049}_{-0.0026} \quad (-0.3\sigma)$	$H(0.15)$	$73.5^{+1.7}_{-1.2} \quad (+0.8\sigma)$		
σ_8	$0.788^{+0.038}_{-0.045} \quad (+0.3\sigma)$	$D_M(0.15)$	$636^{+12}_{-15} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 12985.86; R - 1 = 0.01581$$

8.31 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00031}_{-0.00030} \quad (+0.8\sigma)$	S_8	$0.799^{+0.040}_{-0.046} \quad (-0.6\sigma)$	$H(0.38)$	$83.4^{+1.2}_{-0.90} \quad (+0.3\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0063}_{-0.0074} \quad (-0.9\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.022}_{-0.025} \quad (-0.6\sigma)$	$D_M(0.38)$	$1522^{+21}_{-26} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04087^{+0.00063}_{-0.00067} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.587^{+0.028}_{-0.033} \quad (-0.2\sigma)$	$H(0.51)$	$90.1^{+1.2}_{-0.82} \quad (+0.1\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.953^{+0.043}_{-0.052} \quad (+0.0\sigma)$	$D_M(0.51)$	$1972^{+26}_{-32} \quad (-0.5\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.739 \quad (-0.2\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.8^{+1.2}_{-0.77} \quad (-0.0\sigma)$
N_{eff}	$< 3.30 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.417^{+0.049}_{-0.049} \quad (-0.8\sigma)$	$D_M(0.61)$	$2295^{+28}_{-36} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.033}_{-0.032} \quad (-0.3\sigma)$	z_{re}	$7.7^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$H(2.33)$	$237.0^{+2.9}_{-2.2} \quad (-1.1\sigma)$
n_s	$0.969^{+0.010}_{-0.0096} \quad (+0.4\sigma)$	$10^9 A_s$	$2.095^{+0.071}_{-0.066} \quad (-0.3\sigma)$	$D_M(2.33)$	$5737^{+42}_{-71} \quad (+0.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.026}_{-0.023} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.022}_{-0.025} \quad (-0.5\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1220^{+25}_{-26} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.726^{+0.034}_{-0.041} \quad (+0.2\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5723^{+77}_{-77} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.022}_{-0.026} \quad (-0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.644^{+0.031}_{-0.037} \quad (+0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.3^{+9.6}_{-9.5} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.022}_{-0.026} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.5\sigma)$	D_{2000}	$229.7^{+3.3}_{-3.3} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.603^{+0.029}_{-0.034} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.969^{+0.010}_{-0.0096} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.021}_{-0.025} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2465^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.573^{+0.028}_{-0.033} \quad (+0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2478^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.289^{+0.014}_{-0.017} \quad (+0.4\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.608^{+0.068}_{-0.064} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.298^{+0.015}_{-0.017} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.735^{+0.098}_{-0.17} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.96^{+0.54}_{-0.51} \quad (-1.4\sigma)$	f_{2000}^{217}	$107.4^{+3.8}_{-3.8} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.0^{+1.1}_{-1.7} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04101^{+0.00064}_{-0.00074} \quad (+0.7\sigma)$	χ_{simall}^2	$397.1 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.84^{+0.10}_{-0.16} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.60 \quad (\nu: 0.4) \quad (-0.6\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.09^{+0.83}_{-0.77} \quad (+0.1\sigma)$	χ_{CamSpec}^2	$11516.9 \quad (\nu: 17.8)$
c_{TE}	$0.9973^{+0.0098}_{-0.0098}$	r_{drag}	$146.7^{+1.2}_{-1.8} \quad (+0.9\sigma)$	χ_{Aver15}^2	$0.61 \quad (\nu: 0.1)$
c_{EE}	$0.9932^{+0.0097}_{-0.0098}$	k_D	$0.1411^{+0.0014}_{-0.0011} \quad (-0.8\sigma)$	$\chi_{6\text{DF}}^2$	$0.058 \quad (\nu: 0.0)$
H_0	$68.0^{+1.3}_{-1.2} \quad (+0.7\sigma)$	$100\theta_D$	$0.16097^{+0.00056}_{-0.00049} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
Ω_Λ	$0.689^{+0.013}_{-0.013} \quad (+1.0\sigma)$	z_{eq}	$3316^{+97}_{-140} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$4.9 \quad (\nu: 1.2)$
Ω_m	$0.311^{+0.013}_{-0.013} \quad (-1.0\sigma)$	k_{eq}	$0.01021^{+0.00030}_{-0.00039} \quad (-0.9\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1434^{+0.0037}_{-0.0030} \quad (-1.1\sigma)$	$100\theta_{\text{eq}}$	$0.831^{+0.031}_{-0.020} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\Omega_\nu h^2$	$0.0030^{+0.0062}_{-0.0025} \quad (-0.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.459^{+0.016}_{-0.010} \quad (+0.5\sigma)$	χ_{CMB}^2	$11936.5 \quad (\nu: 17.9) \quad (+1810.4\sigma)$
$\Omega_m h^3$	$0.0974^{+0.0035}_{-0.0019} \quad (-0.5\sigma)$	$H(0.15)$	$73.2^{+1.3}_{-1.1} \quad (+0.6\sigma)$		
σ_8	$0.786^{+0.037}_{-0.044} \quad (+0.2\sigma)$	$D_M(0.15)$	$638^{+10}_{-12} \quad (-0.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11951.21; R - 1 = 0.01810$$

8.32 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00031}_{-0.00029} \quad (+0.7\sigma)$	S_8	$0.799^{+0.040}_{-0.045} \quad (-0.6\sigma)$	$H(0.38)$	$83.4^{+1.2}_{-0.89} \quad (+0.3\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0061}_{-0.0072} \quad (-0.9\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.022}_{-0.025} \quad (-0.6\sigma)$	$D_M(0.38)$	$1522^{+21}_{-25} \quad (-0.5\sigma)$
$100\theta_{MC}$	$1.04087^{+0.00062}_{-0.00065} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.587^{+0.028}_{-0.033} \quad (-0.2\sigma)$	$H(0.51)$	$90.1^{+1.2}_{-0.81} \quad (+0.1\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.953^{+0.042}_{-0.052} \quad (+0.0\sigma)$	$D_M(0.51)$	$1972^{+25}_{-32} \quad (-0.5\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.739 \quad (-0.2\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.7^{+1.2}_{-0.76} \quad (-0.0\sigma)$
N_{eff}	$< 3.29 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.417^{+0.049}_{-0.049} \quad (-0.8\sigma)$	$D_M(0.61)$	$2295^{+28}_{-36} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.033}_{-0.032} \quad (-0.3\sigma)$	z_{re}	$7.7^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$H(2.33)$	$237.0^{+2.8}_{-2.1} \quad (-1.1\sigma)$
n_s	$0.969^{+0.011}_{-0.0092} \quad (+0.4\sigma)$	$10^9 A_s$	$2.095^{+0.071}_{-0.066} \quad (-0.3\sigma)$	$D_M(2.33)$	$5738^{+41}_{-70} \quad (+0.2\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.026}_{-0.023} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.022}_{-0.025} \quad (-0.5\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1220^{+25}_{-26} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.726^{+0.034}_{-0.041} \quad (+0.2\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5722^{+77}_{-76} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.022}_{-0.026} \quad (-0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.644^{+0.031}_{-0.037} \quad (+0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.3^{+9.6}_{-9.4} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.459^{+0.022}_{-0.025} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.5\sigma)$	D_{2000}	$229.7^{+3.3}_{-3.3} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.603^{+0.029}_{-0.035} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.969^{+0.011}_{-0.0092} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.021}_{-0.025} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.2465^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.573^{+0.027}_{-0.033} \quad (+0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.2478^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.289^{+0.014}_{-0.017} \quad (+0.4\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.609^{+0.066}_{-0.058} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.298^{+0.015}_{-0.018} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.737^{+0.096}_{-0.16} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.97^{+0.51}_{-0.48} \quad (-1.4\sigma)$	f_{2000}^{217}	$107.5^{+3.8}_{-3.8} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.0^{+1.1}_{-1.7} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04102^{+0.00063}_{-0.00072} \quad (+0.7\sigma)$	χ_{simall}^2	$397.1 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.84^{+0.10}_{-0.16} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.61 \quad (\nu: 0.4) \quad (-0.5\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.08^{+0.83}_{-0.76} \quad (+0.1\sigma)$	χ_{CamSpec}^2	$11516.8 \quad (\nu: 17.6)$
c_{TE}	$0.9973^{+0.0099}_{-0.0098}$	r_{drag}	$146.7^{+1.1}_{-1.7} \quad (+0.9\sigma)$	χ_{Aver15}^2	$0.60 \quad (\nu: 0.1)$
c_{EE}	$0.9933^{+0.0096}_{-0.0097}$	k_{D}	$0.1411^{+0.0013}_{-0.0010} \quad (-0.8\sigma)$	χ_{Cooke17}^2	$0.12 \quad (\nu: 0.0)$
H_0	$67.9^{+1.3}_{-1.2} \quad (+0.7\sigma)$	$100\theta_{\text{D}}$	$0.16097^{+0.00053}_{-0.00046} \quad (-0.9\sigma)$	$\chi_{6\text{DF}}^2$	$0.058 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+1.0\sigma)$	z_{eq}	$3317^{+97}_{-140} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.28 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-1.0\sigma)$	k_{eq}	$0.01021^{+0.00030}_{-0.00038} \quad (-0.9\sigma)$	χ_{DR12BAO}^2	$4.9 \quad (\nu: 1.2)$
$\Omega_{\text{m}} h^2$	$0.1434^{+0.0035}_{-0.0029} \quad (-1.1\sigma)$	$100\theta_{\text{eq}}$	$0.831^{+0.031}_{-0.020} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\nu} h^2$	$0.0030^{+0.0062}_{-0.0025} \quad (-0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.459^{+0.016}_{-0.010} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\Omega_{\text{m}} h^3$	$0.0974^{+0.0034}_{-0.0018} \quad (-0.5\sigma)$	$H(0.15)$	$73.2^{+1.3}_{-1.1} \quad (+0.6\sigma)$	χ_{CMB}^2	$11936.5 \quad (\nu: 17.7) \quad (+1810.4\sigma)$
σ_8	$0.786^{+0.037}_{-0.044} \quad (+0.2\sigma)$	$D_M(0.15)$	$638^{+10}_{-12} \quad (-0.6\sigma)$	χ_{Abund}^2	$0.72 \quad (\nu: 0.2)$

$$\bar{\chi}_{\text{eff}}^2 = 11951.25; R - 1 = 0.01822$$

8.33 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00032}_{-0.00030} \quad (+0.9\sigma)$	σ_8	$0.789^{+0.038}_{-0.044} \quad (+0.3\sigma)$	$H(0.15)$	$73.4^{+1.7}_{-1.2} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1187^{+0.0071}_{-0.0079} \quad (-0.7\sigma)$	S_8	$0.802^{+0.040}_{-0.045} \quad (-0.5\sigma)$	$D_M(0.15)$	$637^{+12}_{-15} \quad (-0.8\sigma)$
$100\theta_{MC}$	$1.04082^{+0.00066}_{-0.00074} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.022}_{-0.024} \quad (-0.5\sigma)$	$H(0.38)$	$83.6^{+1.7}_{-1.1} \quad (+0.5\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.589^{+0.028}_{-0.032} \quad (-0.1\sigma)$	$D_M(0.38)$	$1518^{+25}_{-34} \quad (-0.7\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.695 \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.956^{+0.042}_{-0.050} \quad (+0.1\sigma)$	$H(0.51)$	$90.3^{+1.7}_{-1.0} \quad (+0.3\sigma)$
N_{eff}	$< 3.40 \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.7}_{-1.7} \quad (+1.0\sigma)$	$D_M(0.51)$	$1967^{+30}_{-42} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.030}_{-0.028} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.417^{+0.048}_{-0.047} \quad (-0.7\sigma)$	$H(0.61)$	$96.0^{+1.7}_{-0.98} \quad (+0.2\sigma)$
n_s	$0.971^{+0.012}_{-0.011} \quad (+0.5\sigma)$	z_{re}	$< 9.02 \quad (+0.3\sigma)$	$D_M(0.61)$	$2289^{+34}_{-48} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s$	$2.103^{+0.065}_{-0.058} \quad (-0.1\sigma)$	$H(2.33)$	$237.5^{+3.7}_{-2.7} \quad (-0.9\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.028}_{-0.026} \quad (-0.8\sigma)$	$D_M(2.33)$	$5725^{+54}_{-97} \quad (-0.1\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{40}	$1218^{+26}_{-26} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.022}_{-0.025} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	$5723^{+77}_{-76} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.729^{+0.035}_{-0.041} \quad (+0.3\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.022}_{-0.025} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.45 \quad (-0.5\sigma)$	D_{1420}	$815.2^{+9.4}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.646^{+0.032}_{-0.037} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	D_{2000}	$229.6^{+3.3}_{-3.5} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.022}_{-0.025} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$n_{s,0.002}$	$0.971^{+0.012}_{-0.011} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.605^{+0.030}_{-0.035} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P	$0.2470^{+0.0032}_{-0.0017} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.022}_{-0.025} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.2483^{+0.0032}_{-0.0017} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.576^{+0.029}_{-0.033} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	$10^5 \text{D}/\text{H}$	$2.615^{+0.080}_{-0.071} \quad (-1.1\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.015}_{-0.017} \quad (+0.5\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	Age/Gyr	$13.71^{+0.13}_{-0.23} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.015}_{-0.018} \quad (+0.5\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	z_*	$1090.01^{+0.60}_{-0.57} \quad (-1.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$143.7^{+1.4}_{-2.3} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.6^{+4.0}_{-3.9} \quad (-0.9\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04094^{+0.00073}_{-0.00081} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.81^{+0.13}_{-0.21} \quad (+0.7\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.7) \quad (+0.0\sigma)$
c_{TE}	$0.9974^{+0.0099}_{-0.0098}$	z_{drag}	$1060.20^{+0.97}_{-0.87} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.48 \quad (\nu: 0.4) \quad (-0.6\sigma)$
c_{EE}	$0.994^{+0.010}_{-0.010}$	r_{drag}	$146.4^{+1.5}_{-2.4} \quad (+0.6\sigma)$	χ_{CamSpec}^2	$11517.2 \quad (\nu: 18.1)$
H_0	$68.1^{+1.7}_{-1.3} \quad (+0.8\sigma)$	k_D	$0.1413^{+0.0018}_{-0.0013} \quad (-0.6\sigma)$	$\chi_{6\text{DF}}^2$	$0.057 \quad (\nu: 0.0)$
Ω_Λ	$0.690^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$100\theta_D$	$0.16104^{+0.00069}_{-0.00057} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.31 \quad (\nu: 0.1)$
Ω_m	$0.310^{+0.013}_{-0.013} \quad (-1.0\sigma)$	z_{eq}	$3321^{+90}_{-140} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$4.9 \quad (\nu: 1.2)$
$\Omega_m h^2$	$0.1439^{+0.0046}_{-0.0036} \quad (-1.0\sigma)$	k_{eq}	$0.01024^{+0.00032}_{-0.00040} \quad (-0.7\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$0.0028^{+0.0054}_{-0.0026} \quad (-0.3\sigma)$	$100\theta_{\text{eq}}$	$0.830^{+0.030}_{-0.019} \quad (+0.4\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\Omega_m h^3$	$0.0981^{+0.0048}_{-0.0025} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.458^{+0.016}_{-0.0096} \quad (+0.4\sigma)$	χ_{CMB}^2	$11936.7 \quad (\nu: 17.9) \quad (+1810.4\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 11950.77; \Delta\bar{\chi}_{\text{eff}}^2 = 2.78; R - 1 = 0.01713$$

8.34 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02244^{+0.00032}_{-0.00030} \quad (+0.9\sigma)$	S_8	$0.801^{+0.040}_{-0.045} \quad (-0.5\sigma)$	$H(0.38)$	$83.6^{+1.7}_{-1.1} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1187^{+0.0072}_{-0.0079} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.022}_{-0.024} \quad (-0.5\sigma)$	$D_M(0.38)$	$1517^{+25}_{-34} \quad (-0.8\sigma)$
$100\theta_{MC}$	$1.04083^{+0.00066}_{-0.00074} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.589^{+0.028}_{-0.032} \quad (-0.1\sigma)$	$H(0.51)$	$90.4^{+1.7}_{-1.0} \quad (+0.4\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.956^{+0.041}_{-0.050} \quad (+0.1\sigma)$	$D_M(0.51)$	$1965^{+30}_{-43} \quad (-0.7\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.689 \quad (-0.3\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.7}_{-1.6} \quad (+1.1\sigma)$	$H(0.61)$	$96.0^{+1.8}_{-1.0} \quad (+0.2\sigma)$
N_{eff}	$< 3.41 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.415^{+0.048}_{-0.046} \quad (-0.8\sigma)$	$D_M(0.61)$	$2287^{+33}_{-49} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.030}_{-0.028} \quad (-0.0\sigma)$	z_{re}	$< 9.03 \quad (+0.3\sigma)$	$H(2.33)$	$237.4^{+3.8}_{-2.7} \quad (-0.9\sigma)$
n_s	$0.971^{+0.012}_{-0.011} \quad (+0.6\sigma)$	$10^9 A_s$	$2.103^{+0.064}_{-0.058} \quad (-0.1\sigma)$	$D_M(2.33)$	$5723^{+55}_{-100} \quad (-0.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.028}_{-0.026} \quad (-0.9\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.022}_{-0.025} \quad (-0.4\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1218^{+26}_{-26} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.730^{+0.035}_{-0.041} \quad (+0.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5724^{+77}_{-76} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.022}_{-0.025} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.647^{+0.032}_{-0.037} \quad (+0.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$815.3^{+9.5}_{-9.6} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.022}_{-0.025} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.44 \quad (-0.5\sigma)$	D_{2000}	$229.6^{+3.3}_{-3.5} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.606^{+0.030}_{-0.034} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.24}$	$n_{s,0.002}$	$0.971^{+0.012}_{-0.011} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.456^{+0.021}_{-0.025} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2470^{+0.0039}_{-0.0017} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.576^{+0.028}_{-0.033} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2483^{+0.0039}_{-0.0017} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.014}_{-0.017} \quad (+0.5\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.614^{+0.081}_{-0.072} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.015}_{-0.017} \quad (+0.5\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.70^{+0.13}_{-0.24} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.7\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.99^{+0.60}_{-0.57} \quad (-1.4\sigma)$	f_{2000}^{217}	$107.6^{+4.0}_{-3.9} \quad (-0.9\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$143.7^{+1.4}_{-2.4} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04095^{+0.00074}_{-0.00083} \quad (+0.6\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.7) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.81^{+0.13}_{-0.22} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.42 \quad (\nu: 0.4) \quad (-0.7\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.21^{+0.98}_{-0.86} \quad (+0.3\sigma)$	χ_{CamSpec}^2	$11517.3 \quad (\nu: 18.1)$
c_{TE}	$0.9974^{+0.0099}_{-0.0099}$	r_{drag}	$146.4^{+1.5}_{-2.5} \quad (+0.6\sigma)$	χ_{JLA}^2	$1035.04 \quad (\nu: 0.0)$
c_{EE}	$0.994^{+0.010}_{-0.010}$	k_D	$0.1413^{+0.0018}_{-0.0013} \quad (-0.6\sigma)$	$\chi_{6\text{DF}}^2$	$0.047 \quad (\nu: 0.0)$
H_0	$68.2^{+1.7}_{-1.3} \quad (+0.8\sigma)$	$100\theta_D$	$0.16104^{+0.00070}_{-0.00058} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
Ω_Λ	$0.691^{+0.013}_{-0.013} \quad (+1.1\sigma)$	z_{eq}	$3319^{+89}_{-140} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$4.6 \quad (\nu: 0.9)$
Ω_m	$0.309^{+0.013}_{-0.013} \quad (-1.1\sigma)$	k_{eq}	$0.01024^{+0.00032}_{-0.00040} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1438^{+0.0047}_{-0.0035} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.830^{+0.030}_{-0.018} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
$\Omega_\nu h^2$	$0.0027^{+0.0054}_{-0.0025} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.458^{+0.016}_{-0.0095} \quad (+0.4\sigma)$	χ_{CMB}^2	$11936.7 \quad (\nu: 17.9) \quad (+1810.4\sigma)$
$\Omega_m h^3$	$0.0981^{+0.0054}_{-0.0026} \quad (-0.3\sigma)$	$H(0.15)$	$73.5^{+1.7}_{-1.2} \quad (+0.8\sigma)$		
σ_8	$0.789^{+0.038}_{-0.044} \quad (+0.3\sigma)$	$D_M(0.15)$	$636^{+11}_{-15} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 12985.64; R - 1 = 0.01787$$

8.35 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00031}_{-0.00029} \quad (+0.8\sigma)$	S_8	$0.800^{+0.040}_{-0.045} \quad (-0.6\sigma)$	$H(0.38)$	$83.4^{+1.2}_{-0.90} \quad (+0.3\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0062}_{-0.0074} \quad (-0.9\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.022}_{-0.025} \quad (-0.6\sigma)$	$D_M(0.38)$	$1522^{+21}_{-26} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04087^{+0.00063}_{-0.00067} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.587^{+0.028}_{-0.032} \quad (-0.2\sigma)$	$H(0.51)$	$90.1^{+1.2}_{-0.82} \quad (+0.2\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.954^{+0.042}_{-0.050} \quad (+0.0\sigma)$	$D_M(0.51)$	$1972^{+26}_{-32} \quad (-0.5\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.738 \quad (-0.2\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.8^{+1.3}_{-0.77} \quad (-0.0\sigma)$
N_{eff}	$< 3.30 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.419^{+0.047}_{-0.045} \quad (-0.7\sigma)$	$D_M(0.61)$	$2294^{+28}_{-36} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.029}_{-0.027} \quad (-0.1\sigma)$	z_{re}	$< 9.00 \quad (+0.2\sigma)$	$H(2.33)$	$237.0^{+2.9}_{-2.2} \quad (-1.1\sigma)$
n_s	$0.969^{+0.010}_{-0.0096} \quad (+0.4\sigma)$	$10^9 A_s$	$2.100^{+0.062}_{-0.056} \quad (-0.1\sigma)$	$D_M(2.33)$	$5737^{+42}_{-72} \quad (+0.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.022}_{-0.025} \quad (-0.5\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1220^{+25}_{-26} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.727^{+0.034}_{-0.040} \quad (+0.3\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5722^{+77}_{-76} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.022}_{-0.025} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.645^{+0.030}_{-0.036} \quad (+0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.3^{+9.5}_{-9.5} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.021}_{-0.025} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.46 \quad (-0.5\sigma)$	D_{2000}	$229.7^{+3.3}_{-3.3} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.603^{+0.028}_{-0.034} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.969^{+0.010}_{-0.0096} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.021}_{-0.025} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2465^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.574^{+0.027}_{-0.032} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2479^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.014}_{-0.016} \quad (+0.4\sigma)$
A^{kSZ}	—	10^5D/H	$2.608^{+0.067}_{-0.064} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.014}_{-0.017} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.734^{+0.098}_{-0.17} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.96^{+0.54}_{-0.51} \quad (-1.4\sigma)$	f_{2000}^{217}	$107.4^{+3.8}_{-3.8} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.0^{+1.1}_{-1.7} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04101^{+0.00064}_{-0.00074} \quad (+0.7\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.7) \quad (-0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.84^{+0.10}_{-0.16} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.61 \quad (\nu: 0.4) \quad (-0.5\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.10^{+0.82}_{-0.77} \quad (+0.1\sigma)$	χ_{CamSpec}^2	$11516.7 \quad (\nu: 17.4)$
c_{TE}	$0.9972^{+0.0099}_{-0.0098}$	r_{drag}	$146.7^{+1.2}_{-1.8} \quad (+0.9\sigma)$	χ_{Aver15}^2	$0.62 \quad (\nu: 0.1)$
c_{EE}	$0.9932^{+0.0097}_{-0.0098}$	k_D	$0.1411^{+0.0014}_{-0.0011} \quad (-0.8\sigma)$	$\chi_{6\text{DF}}^2$	$0.057 \quad (\nu: 0.0)$
H_0	$68.0^{+1.3}_{-1.2} \quad (+0.7\sigma)$	$100\theta_D$	$0.16097^{+0.00056}_{-0.00049} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
Ω_Λ	$0.690^{+0.013}_{-0.013} \quad (+1.0\sigma)$	z_{eq}	$3316^{+96}_{-140} \quad (-0.5\sigma)$	χ_{DR12BAO}^2	$4.9 \quad (\nu: 1.2)$
Ω_m	$0.310^{+0.013}_{-0.013} \quad (-1.0\sigma)$	k_{eq}	$0.01021^{+0.00030}_{-0.00039} \quad (-0.9\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1434^{+0.0037}_{-0.0030} \quad (-1.1\sigma)$	$100\theta_{\text{eq}}$	$0.831^{+0.031}_{-0.020} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\Omega_\nu h^2$	$0.0030^{+0.0062}_{-0.0025} \quad (-0.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.459^{+0.016}_{-0.010} \quad (+0.5\sigma)$	χ_{CMB}^2	$11936.3 \quad (\nu: 17.4) \quad (+1810.4\sigma)$
$\Omega_m h^3$	$0.0974^{+0.0035}_{-0.0019} \quad (-0.5\sigma)$	$H(0.15)$	$73.3^{+1.3}_{-1.1} \quad (+0.6\sigma)$		
σ_8	$0.787^{+0.036}_{-0.043} \quad (+0.2\sigma)$	$D_M(0.15)$	$638^{+10}_{-12} \quad (-0.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11950.98; R - 1 = 0.01936$$

8.36 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00030}_{-0.00029} \quad (+0.8\sigma)$	S_8	$0.800^{+0.040}_{-0.045} \quad (-0.6\sigma)$	$H(0.38)$	$83.4^{+1.2}_{-0.88} \quad (+0.3\sigma)$
$\Omega_c h^2$	$0.1179^{+0.0061}_{-0.0072} \quad (-0.9\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.438^{+0.022}_{-0.024} \quad (-0.6\sigma)$	$D_M(0.38)$	$1522^{+21}_{-26} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04087^{+0.00062}_{-0.00065} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.587^{+0.027}_{-0.032} \quad (-0.2\sigma)$	$H(0.51)$	$90.1^{+1.2}_{-0.80} \quad (+0.1\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.954^{+0.042}_{-0.050} \quad (+0.0\sigma)$	$D_M(0.51)$	$1972^{+25}_{-32} \quad (-0.5\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.737 \quad (-0.2\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.8^{+1.2}_{-0.75} \quad (-0.0\sigma)$
N_{eff}	$< 3.29 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.419^{+0.047}_{-0.045} \quad (-0.7\sigma)$	$D_M(0.61)$	$2295^{+28}_{-36} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.029}_{-0.027} \quad (-0.1\sigma)$	z_{re}	$< 9.00 \quad (+0.2\sigma)$	$H(2.33)$	$237.0^{+2.8}_{-2.1} \quad (-1.1\sigma)$
n_s	$0.969^{+0.011}_{-0.0092} \quad (+0.4\sigma)$	$10^9 A_s$	$2.100^{+0.062}_{-0.056} \quad (-0.1\sigma)$	$D_M(2.33)$	$5737^{+41}_{-70} \quad (+0.2\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.026}_{-0.023} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.022}_{-0.024} \quad (-0.5\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1220^{+25}_{-26} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.727^{+0.034}_{-0.040} \quad (+0.3\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5722^{+77}_{-76} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.022}_{-0.025} \quad (-0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.645^{+0.030}_{-0.036} \quad (+0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.3^{+9.5}_{-9.4} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.021}_{-0.025} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.45 \quad (-0.5\sigma)$	D_{2000}	$229.7^{+3.3}_{-3.2} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.603^{+0.028}_{-0.034} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.969^{+0.011}_{-0.0092} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.455^{+0.021}_{-0.025} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2465^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.574^{+0.027}_{-0.032} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2478^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.290^{+0.014}_{-0.016} \quad (+0.4\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.608^{+0.066}_{-0.058} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.299^{+0.014}_{-0.017} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.38}$	Age/Gyr	$13.736^{+0.096}_{-0.17} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.96^{+0.51}_{-0.48} \quad (-1.4\sigma)$	f_{2000}^{217}	$107.4^{+3.8}_{-3.8} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.0^{+1.1}_{-1.7} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04101^{+0.00063}_{-0.00072} \quad (+0.7\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.7) \quad (-0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.84^{+0.10}_{-0.16} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.62 \quad (\nu: 0.4) \quad (-0.5\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.08^{+0.82}_{-0.76} \quad (+0.1\sigma)$	χ_{CamSpec}^2	$11516.6 \quad (\nu: 17.3)$
c_{TE}	$0.9972^{+0.0099}_{-0.0098}$	r_{drag}	$146.7^{+1.1}_{-1.7} \quad (+0.9\sigma)$	χ_{Aver15}^2	$0.61 \quad (\nu: 0.1)$
c_{EE}	$0.9932^{+0.0096}_{-0.0097}$	k_D	$0.1411^{+0.0013}_{-0.0010} \quad (-0.8\sigma)$	χ_{Cooke17}^2	$0.12 \quad (\nu: 0.0)$
H_0	$67.9^{+1.3}_{-1.2} \quad (+0.7\sigma)$	$100\theta_D$	$0.16097^{+0.00053}_{-0.00047} \quad (-0.9\sigma)$	χ_{6DF}^2	$0.057 \quad (\nu: 0.0)$
Ω_Λ	$0.689^{+0.013}_{-0.013} \quad (+1.0\sigma)$	z_{eq}	$3317^{+95}_{-140} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
Ω_m	$0.311^{+0.013}_{-0.013} \quad (-1.0\sigma)$	k_{eq}	$0.01021^{+0.00030}_{-0.00038} \quad (-0.9\sigma)$	χ_{DR12BAO}^2	$4.9 \quad (\nu: 1.2)$
$\Omega_m h^2$	$0.1434^{+0.0036}_{-0.0029} \quad (-1.1\sigma)$	$100\theta_{\text{eq}}$	$0.831^{+0.031}_{-0.020} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$0.0030^{+0.0062}_{-0.0025} \quad (-0.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.459^{+0.016}_{-0.010} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\Omega_m h^3$	$0.0974^{+0.0034}_{-0.0019} \quad (-0.5\sigma)$	$H(0.15)$	$73.2^{+1.3}_{-1.1} \quad (+0.6\sigma)$	χ_{CMB}^2	$11936.2 \quad (\nu: 17.3) \quad (+1810.4\sigma)$
σ_8	$0.787^{+0.036}_{-0.043} \quad (+0.2\sigma)$	$D_M(0.15)$	$638^{+10}_{-12} \quad (-0.6\sigma)$	χ_{Abund}^2	$0.73 \quad (\nu: 0.2)$
$\chi_{\text{eff}}^2 = 11951.02; R - 1 = 0.01932$					

8.37 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022264	$0.02232^{+0.00041}_{-0.00040}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6054	$0.596^{+0.024}_{-0.028}$ (+0.3 σ)	$D_M(0.38)$	1526.2	1516^{+32}_{-42} (−0.8 σ)
$\Omega_c h^2$	0.1196	$0.1204^{+0.0073}_{-0.0081}$ (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9853	$0.966^{+0.034}_{-0.041}$ (+0.4 σ)	$H(0.51)$	89.86	$90.5^{+2.1}_{-1.4}$ (+0.5 σ)
$100\theta_{MC}$	1.04091	$1.04076^{+0.00092}_{-0.00099}$ (+0.5 σ)	$r_{drag}h$	99.73	$99.5^{+1.9}_{-1.8}$ (+1.0 σ)	$D_M(0.51)$	1977.3	1964^{+39}_{-53} (−0.8 σ)
τ	0.0558	$0.057^{+0.016}_{-0.015}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4345	$2.427^{+0.044}_{-0.045}$ (−0.5 σ)	$H(0.61)$	95.48	$96.2^{+2.2}_{-1.4}$ (+0.4 σ)
$m_{\nu, sterile}^{eff}$ [eV]	0.000	< 0.551 (−0.5 σ)	z_{re}	7.85	$8.0^{+1.6}_{-1.5}$ (+0.4 σ)	$D_M(0.61)$	2301	2285^{+44}_{-60} (−0.7 σ)
N_{eff}	3.077	< 3.52 (−0.1 σ)	$10^9 A_s$	2.105	$2.116^{+0.072}_{-0.064}$ (+0.3 σ)	$H(2.33)$	236.27	$238.3^{+4.8}_{-3.5}$ (−0.6 σ)
$\ln(10^{10} A_s)$	3.0467	$3.052^{+0.034}_{-0.031}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8825	$1.890^{+0.032}_{-0.029}$ (−0.3 σ)	$D_M(2.33)$	5754	5710^{+79}_{-120} (−0.3 σ)
n_s	0.9679	$0.971^{+0.014}_{-0.013}$ (+0.6 σ)	D_{40}	1225.4	1221^{+27}_{-27} (−0.4 σ)	$f\sigma_8(0.15)$	0.4565	$0.450^{+0.019}_{-0.021}$ (−0.0 σ)
y_{cal}	1.00095	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{220}	5725	5724^{+80}_{-77} (+0.3 σ)	$\sigma_8(0.15)$	0.7496	$0.737^{+0.031}_{-0.036}$ (+0.6 σ)
A_{217}^{CIB}	48.8	49^{+10}_{-10} (−0.1 σ)	D_{810}	2540.4	2540^{+27}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.4751	$0.468^{+0.019}_{-0.022}$ (+0.2 σ)
$\xi^{tSZ \times CIB}$	0.30	—	D_{1420}	816.8	$815^{+10}_{-9.9}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6646	$0.653^{+0.028}_{-0.033}$ (+0.7 σ)
A_{143}^{tSZ}	7.05	$4.9^{+3.9}_{-3.9}$ (+0.1 σ)	D_{2000}	230.43	$229.1^{+3.7}_{-3.8}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4739	$0.467^{+0.019}_{-0.022}$ (+0.3 σ)
A_{100}^{PS}	255	267^{+60}_{-50} (−0.1 σ)	$n_{s,0.002}$	0.9679	$0.971^{+0.014}_{-0.013}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6220	$0.612^{+0.027}_{-0.031}$ (+0.7 σ)
A_{143}^{PS}	49.2	51^{+20}_{-20} (−0.2 σ)	Y_P	0.24576	$0.2476^{+0.0041}_{-0.0024}$ (−0.0 σ)	$f\sigma_8(0.61)$	0.4690	$0.462^{+0.018}_{-0.022}$ (+0.4 σ)
$A_{143 \times 217}^{PS}$	46.2	44^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.24709	$0.2489^{+0.0041}_{-0.0024}$ (−0.0 σ)	$\sigma_8(0.61)$	0.5919	$0.582^{+0.026}_{-0.029}$ (+0.7 σ)
A_{217}^{PS}	119.1	115^{+20}_{-20} (−0.0 σ)	$10^5 D/H$	2.616	$2.65^{+0.11}_{-0.097}$ (−0.4 σ)	$f\sigma_8(2.33)$	0.2985	$0.294^{+0.013}_{-0.015}$ (+0.7 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.775	$13.67^{+0.19}_{-0.30}$ (−0.3 σ)	$\sigma_8(2.33)$	0.3078	$0.303^{+0.014}_{-0.016}$ (+0.8 σ)
A_{100}^{dustTT}	8.86	$9.0^{+3.6}_{-3.6}$ (−0.0 σ)	z_*	1090.05	$1090.30^{+0.75}_{-0.71}$ (−0.7 σ)	f_{2000}^{143}	30.4	32^{+6}_{-6} (−0.3 σ)
A_{143}^{dustTT}	10.78	$10.7^{+3.5}_{-3.5}$ (−0.0 σ)	r_*	144.47	$143.3^{+1.9}_{-2.9}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	33.18	34^{+4}_{-4} (−0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.5}_{-6.6}$ (−0.0 σ)	$100\theta_*$	1.04109	$1.0409^{+0.0010}_{-0.0011}$ (+0.4 σ)	f_{2000}^{217}	107.69	$108.9^{+4.1}_{-3.8}$ (−0.3 σ)
A_{217}^{dustTT}	94.7	93^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.877	$13.76^{+0.18}_{-0.27}$ (+0.3 σ)	$\chi^2_{lensing}$	8.84	9.5 (ν : 0.5)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.67	$1060.1^{+1.3}_{-1.2}$ (+0.1 σ)	χ^2_{small}	396.34	397.5 (ν : 2.4) (+0.3 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_{drag}	147.17	$145.9^{+2.0}_{-3.1}$ (+0.3 σ)	χ^2_{lowl}	22.91	22.6 (ν : 0.5) (−0.5 σ)
H_0	67.77	$68.2^{+2.1}_{-1.7}$ (+0.8 σ)	k_D	0.14059	$0.1415^{+0.0023}_{-0.0017}$ (−0.4 σ)	χ^2_{plik}	759.6	773.6 (ν : 15.5) (−0.1 σ)
Ω_Λ	0.6897	$0.688^{+0.015}_{-0.015}$ (+0.9 σ)	$100\theta_D$	0.16103	$0.16134^{+0.00090}_{-0.00078}$ (−0.0 σ)	χ^2_{6DF}	0.024	0.076 (ν : 0.0)
Ω_m	0.3103	$0.312^{+0.015}_{-0.015}$ (−0.9 σ)	z_{eq}	3376	3337^{+81}_{-110} (−0.3 σ)	χ^2_{MGS}	1.28	1.21 (ν : 0.1)
$\Omega_m h^2$	0.1425	$0.1450^{+0.0059}_{-0.0045}$ (−0.7 σ)	k_{eq}	0.010324	$0.01032^{+0.00032}_{-0.00036}$ (−0.4 σ)	$\chi^2_{DR12BAO}$	4.25	5.3 (ν : 1.8)
$\Omega_\nu h^2$	0.00065	$0.0022^{+0.0052}_{-0.0017}$ (−0.5 σ)	$100\theta_{eq}$	0.8178	$0.826^{+0.023}_{-0.016}$ (+0.2 σ)	χ^2_{prior}	1.5	7.3 (ν : 6.9) (−0.0 σ)
$\Omega_m h^3$	0.0966	$0.0989^{+0.0063}_{-0.0037}$ (+0.0 σ)	$100\theta_{s,eq}$	0.4518	$0.456^{+0.012}_{-0.0084}$ (+0.2 σ)	χ^2_{CMB}	1187.7	1203.3 (ν : 17.0) (+1.4 σ)
σ_8	0.8111	$0.798^{+0.033}_{-0.039}$ (+0.6 σ)	$H(0.15)$	73.04	$73.5^{+2.1}_{-1.6}$ (+0.8 σ)	χ^2_{BAO}	5.56	6.5 (ν : 1.3)
S_8	0.8249	$0.813^{+0.034}_{-0.038}$ (−0.1 σ)	$D_M(0.15)$	639.8	636^{+15}_{-19} (−0.8 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4518	$0.445^{+0.019}_{-0.021}$ (−0.1 σ)	$H(0.38)$	83.15	$83.7^{+2.1}_{-1.5}$ (+0.7 σ)			

Best-fit $\chi^2_{eff} = 1194.69$; $\Delta\chi^2_{eff} = 0.01$; $\bar{\chi}^2_{eff} = 1217.17$; $\Delta\bar{\chi}^2_{eff} = 2.44$; $R - 1 = 0.01959$
 χ^2_{eff} : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.28 (Δ 0.06) DR12BAO: 4.25 (Δ -0.12) CMB - smicadx12.Dec5.ftl.mv2.ndclpp-p.teb.consext8: 8.84 (Δ -0.04) small_100x143.offlike5.EE.Aplanc
396.34 (Δ 0.24) commander_dx12.v3.2.29: 22.91 (Δ -0.05) plik_rd12_HM.v22.TT: 759.57 (Δ -0.24)

8.38 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022239	$0.02234^{+0.00041}_{-0.00040}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6042	$0.596^{+0.024}_{-0.028}$ (+0.3 σ)	$D_M(0.38)$	1530.2	1514^{+32}_{-43} (−0.9 σ)
$\Omega_c h^2$	0.1171	$0.1205^{+0.0074}_{-0.0084}$ (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9842	$0.966^{+0.033}_{-0.042}$ (+0.4 σ)	$H(0.51)$	89.66	$90.6^{+2.2}_{-1.5}$ (+0.6 σ)
$100\theta_{MC}$	1.04102	$1.04076^{+0.00092}_{-0.0010}$ (+0.4 σ)	$r_{drag}h$	99.65	$99.7^{+1.8}_{-1.7}$ (+1.0 σ)	$D_M(0.51)$	1982.3	1961^{+40}_{-54} (−0.8 σ)
τ	0.0567	$0.057^{+0.016}_{-0.015}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.4382	$2.426^{+0.044}_{-0.044}$ (−0.5 σ)	$H(0.61)$	95.27	$96.3^{+2.3}_{-1.5}$ (+0.5 σ)
$m_{\nu, sterile}^{eff}$ [eV]	0.193	< 0.567 (−0.5 σ)	z_{re}	7.94	$8.0^{+1.5}_{-1.5}$ (+0.5 σ)	$D_M(0.61)$	2307	2282^{+45}_{-62} (−0.8 σ)
N_{eff}	3.047	< 3.54 (−0.0 σ)	$10^9 A_s$	2.102	$2.119^{+0.071}_{-0.066}$ (+0.4 σ)	$H(2.33)$	235.88	$238.3^{+4.9}_{-3.5}$ (−0.6 σ)
$\ln(10^{10} A_s)$	3.0456	$3.053^{+0.033}_{-0.032}$ (+0.4 σ)	$10^9 A_s e^{-2\tau}$	1.8768	$1.890^{+0.032}_{-0.029}$ (−0.3 σ)	$D_M(2.33)$	5766	5706^{+82}_{-130} (−0.4 σ)
n_s	0.9661	$0.972^{+0.014}_{-0.013}$ (+0.7 σ)	D_{40}	1226.6	1220^{+28}_{-28} (−0.4 σ)	$f\sigma_8(0.15)$	0.4558	$0.450^{+0.018}_{-0.021}$ (−0.0 σ)
y_{cal}	1.00006	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{220}	5717	5725^{+80}_{-78} (+0.3 σ)	$\sigma_8(0.15)$	0.7477	$0.738^{+0.031}_{-0.037}$ (+0.7 σ)
A_{217}^{CIB}	50.1	49^{+10}_{-10} (−0.1 σ)	D_{810}	2534.5	2540^{+27}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.4742	$0.468^{+0.019}_{-0.022}$ (+0.2 σ)
$\xi^{tSZ \times CIB}$	0.18	—	D_{1420}	814.9	$815^{+10}_{-9.9}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6628	$0.654^{+0.028}_{-0.033}$ (+0.7 σ)
A_{143}^{tSZ}	7.16	$4.9^{+3.9}_{-3.9}$ (+0.1 σ)	D_{2000}	229.97	$229.1^{+3.7}_{-3.8}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4729	$0.467^{+0.018}_{-0.022}$ (+0.4 σ)
A_{100}^{PS}	256	267^{+60}_{-50} (−0.1 σ)	$n_{s,0.002}$	0.9661	$0.972^{+0.014}_{-0.013}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6203	$0.613^{+0.027}_{-0.031}$ (+0.7 σ)
A_{143}^{PS}	47.4	51^{+20}_{-20} (−0.2 σ)	Y_P	0.24536	$0.2477^{+0.0042}_{-0.0025}$ (+0.0 σ)	$f\sigma_8(0.61)$	0.4680	$0.462^{+0.018}_{-0.022}$ (+0.4 σ)
$A_{143 \times 217}^{PS}$	42.9	44^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.24668	$0.2490^{+0.0042}_{-0.0025}$ (+0.0 σ)	$\sigma_8(0.61)$	0.5902	$0.583^{+0.026}_{-0.030}$ (+0.7 σ)
A_{217}^{PS}	116.7	115^{+20}_{-20} (−0.0 σ)	$10^5 D/H$	2.611	$2.65^{+0.11}_{-0.098}$ (−0.4 σ)	$f\sigma_8(2.33)$	0.2976	$0.294^{+0.013}_{-0.015}$ (+0.8 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.804	$13.66^{+0.20}_{-0.30}$ (−0.4 σ)	$\sigma_8(2.33)$	0.3068	$0.303^{+0.014}_{-0.016}$ (+0.8 σ)
A_{100}^{dustTT}	8.84	$9.0^{+3.6}_{-3.6}$ (−0.0 σ)	z_*	1090.01	$1090.28^{+0.75}_{-0.72}$ (−0.7 σ)	f_{2000}^{143}	30.6	32^{+6}_{-6} (−0.3 σ)
A_{143}^{dustTT}	10.87	$10.7^{+3.5}_{-3.5}$ (−0.0 σ)	r_*	144.75	$143.2^{+2.0}_{-3.0}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	33.29	34^{+4}_{-4} (−0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.3	$18.3^{+6.5}_{-6.6}$ (−0.0 σ)	$100\theta_*$	1.04122	$1.0409^{+0.0010}_{-0.0011}$ (+0.4 σ)	f_{2000}^{217}	107.63	$108.9^{+4.1}_{-3.9}$ (−0.3 σ)
A_{217}^{dustTT}	94.2	93^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.902	$13.76^{+0.19}_{-0.28}$ (+0.3 σ)	$\chi_{lensing}^2$	8.78	9.6 (ν : 0.5)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.59	$1060.1^{+1.3}_{-1.2}$ (+0.1 σ)	χ_{small}^2	397	290 (ν : 14417.7) (−60.7 σ)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_{drag}	147.46	$145.9^{+2.1}_{-3.1}$ (+0.3 σ)	χ_{lowl}^2	23	131 (ν : 14415.5) (+68.2 σ)
H_0	67.58	$68.3^{+2.2}_{-1.7}$ (+0.9 σ)	k_D	0.14038	$0.1415^{+0.0024}_{-0.0018}$ (−0.4 σ)	χ_{plik}^2	759.1	773.8 (ν : 15.6) (−0.1 σ)
Ω_Λ	0.6890	$0.689^{+0.014}_{-0.014}$ (+1.0 σ)	$100\theta_D$	0.16098	$0.16135^{+0.00092}_{-0.00080}$ (−0.0 σ)	χ_{JLA}^2	1035.03	1035.12 (ν : 0.1)
Ω_m	0.3110	$0.311^{+0.014}_{-0.014}$ (−1.0 σ)	z_{eq}	3329	3334^{+80}_{-110} (−0.3 σ)	χ_{6DF}^2	0.03	0.41 (ν : 0.2)
$\Omega_m h^2$	0.1420	$0.1450^{+0.0060}_{-0.0046}$ (−0.7 σ)	k_{eq}	0.010199	$0.01031^{+0.00032}_{-0.00037}$ (−0.4 σ)	χ_{MGS}^2	1.22	0.93 (ν : 0.2)
$\Omega_\nu h^2$	0.00269	$0.0022^{+0.0062}_{-0.0016}$ (−0.5 σ)	$100\theta_{eq}$	0.8275	$0.827^{+0.024}_{-0.016}$ (+0.2 σ)	$\chi_{DR12BAO}^2$	4.37	5.0 (ν : 1.4)
$\Omega_m h^3$	0.0960	$0.0991^{+0.0065}_{-0.0039}$ (+0.1 σ)	$100\theta_{s,eq}$	0.4570	$0.456^{+0.013}_{-0.0083}$ (+0.2 σ)	χ_{prior}^2	1.5	7.3 (ν : 7.0) (−0.0 σ)
σ_8	0.8091	$0.799^{+0.033}_{-0.040}$ (+0.6 σ)	$H(0.15)$	72.85	$73.6^{+2.2}_{-1.6}$ (+0.9 σ)	χ_{CMB}^2	1187.7	1203.5 (ν : 17.2) (+1.4 σ)
S_8	0.8238	$0.813^{+0.034}_{-0.038}$ (−0.1 σ)	$D_M(0.15)$	641.6	635^{+15}_{-19} (−0.9 σ)	χ_{BAO}^2	5.62	6.3 (ν : 0.9)
$\sigma_8 \Omega_m^{0.5}$	0.4512	$0.445^{+0.019}_{-0.021}$ (−0.1 σ)	$H(0.38)$	82.95	$83.8^{+2.2}_{-1.5}$ (+0.8 σ)			

Best-fit $\chi_{eff}^2 = 2229.80$; $\Delta\chi_{eff}^2 = 0.09$; $\bar{\chi}_{eff}^2 = 2252.23$; $\Delta\bar{\chi}_{eff}^2 = 2.45$; $R - 1 = 0.01841$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.01) MGS: 1.22 (Δ -0.13) DR12BAO: 4.37 (Δ 0.34) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p-teb_consext8: 8.78 (Δ -0.10) simall_100x143_offlike5_EE_Aplanck
396.58 (Δ 0.21) commander_dx12_v3_2.29: 23.22 (Δ 0.40) plik_rd12_HM_v22_TT: 759.08 (Δ -0.71) SN - JLA Pantheon18: 1035.03 (Δ 0.08)

8.39 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02229^{+0.00039}_{-0.00039} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.023}_{-0.028} \quad (+0.2\sigma)$	$D_M(0.38)$	$1524^{+26}_{-32} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0060}_{-0.0075} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.043} \quad (+0.3\sigma)$	$H(0.51)$	$90.1^{+1.6}_{-1.1} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.04086^{+0.00086}_{-0.00089} \quad (+0.6\sigma)$	$r_{drag} h$	$99.4^{+1.8}_{-1.8} \quad (+0.9\sigma)$	$D_M(0.51)$	$1973^{+31}_{-40} \quad (-0.5\sigma)$
τ	$0.056^{+0.016}_{-0.015} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.044}_{-0.043} \quad (-0.4\sigma)$	$H(0.61)$	$95.8^{+1.6}_{-1.0} \quad (+0.0\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.639 \quad (-0.4\sigma)$	z_{re}	$7.9^{+1.5}_{-1.5} \quad (+0.4\sigma)$	$D_M(0.61)$	$2296^{+35}_{-45} \quad (-0.4\sigma)$
N_{eff}	$< 3.37 \quad (-0.5\sigma)$	$10^9 A_s$	$2.111^{+0.067}_{-0.064} \quad (+0.2\sigma)$	$H(2.33)$	$237.5^{+3.5}_{-2.7} \quad (-0.9\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.031}_{-0.030} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.026}_{-0.025} \quad (-0.6\sigma)$	$D_M(2.33)$	$5734^{+57}_{-91} \quad (+0.1\sigma)$
n_s	$0.969^{+0.012}_{-0.011} \quad (+0.3\sigma)$	D_{40}	$1224^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.019}_{-0.022} \quad (-0.1\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5724^{+80}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.029}_{-0.035} \quad (+0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.022} \quad (+0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{1420}	$815^{+10}_{-9.8} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.027}_{-0.031} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.4^{+3.6}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.018}_{-0.022} \quad (+0.2\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.969^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.025}_{-0.030} \quad (+0.6\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.2\sigma)$	Y_P	$0.2468^{+0.0030}_{-0.0015} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.018}_{-0.022} \quad (+0.3\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	Y_P^{BBN}	$0.2481^{+0.0030}_{-0.0015} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.579^{+0.024}_{-0.028} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 D/H$	$2.639^{+0.089}_{-0.084} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.6\sigma)$
A^{kSZ}	—	Age/Gyr	$13.73^{+0.13}_{-0.22} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.013}_{-0.015} \quad (+0.6\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.20^{+0.67}_{-0.62} \quad (-0.9\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.4\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	r_*	$143.8^{+1.4}_{-2.1} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.04100^{+0.00088}_{-0.00097} \quad (+0.7\sigma)$	f_{2000}^{217}	$108.6^{+3.9}_{-3.7} \quad (-0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.82^{+0.13}_{-0.20} \quad (+0.7\sigma)$	$\chi^2_{lensing}$	$9.42 \quad (\nu: 0.5)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.1}_{-1.0} \quad (-0.2\sigma)$	χ^2_{simall}	$291 \quad (\nu: 14275.1) \quad (-59.9\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$146.5^{+1.5}_{-2.2} \quad (+0.7\sigma)$	χ^2_{lowl}	$129 \quad (\nu: 14271.6) \quad (+67.4\sigma)$
H_0	$67.8^{+1.6}_{-1.4} \quad (+0.6\sigma)$	k_D	$0.1411^{+0.0017}_{-0.0014} \quad (-0.7\sigma)$	χ^2_{plik}	$773.1 \quad (\nu: 14.9) \quad (-0.2\sigma)$
Ω_Λ	$0.687^{+0.014}_{-0.014} \quad (+0.9\sigma)$	$100\theta_D$	$0.16120^{+0.00074}_{-0.00066} \quad (-0.4\sigma)$	χ^2_{Aver15}	$0.75 \quad (\nu: 0.3)$
Ω_m	$0.313^{+0.014}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3332^{+86}_{-130} \quad (-0.3\sigma)$	χ^2_{6DF}	$0.39 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.1440^{+0.0044}_{-0.0036} \quad (-1.0\sigma)$	k_{eq}	$0.01027^{+0.00029}_{-0.00036} \quad (-0.6\sigma)$	χ^2_{MGS}	$0.84 \quad (\nu: 0.2)$
$\Omega_\nu h^2$	$0.0026^{+0.0058}_{-0.0020} \quad (-0.4\sigma)$	$100\theta_{eq}$	$0.827^{+0.027}_{-0.017} \quad (+0.3\sigma)$	$\chi^2_{DR12BAO}$	$5.4 \quad (\nu: 1.9)$
$\Omega_m h^3$	$0.0977^{+0.0045}_{-0.0026} \quad (-0.4\sigma)$	$100\theta_{s,eq}$	$0.457^{+0.014}_{-0.0090} \quad (+0.3\sigma)$	χ^2_{prior}	$7.3 \quad (\nu: 6.9) \quad (-0.0\sigma)$
σ_8	$0.794^{+0.031}_{-0.038} \quad (+0.5\sigma)$	$H(0.15)$	$73.2^{+1.6}_{-1.3} \quad (+0.5\sigma)$	χ^2_{CMB}	$1202.9 \quad (\nu: 16.7) \quad (+1.3\sigma)$
S_8	$0.811^{+0.034}_{-0.039} \quad (-0.2\sigma)$	$D_M(0.15)$	$639^{+12}_{-14} \quad (-0.6\sigma)$	χ^2_{BAO}	$6.7 \quad (\nu: 1.4)$
$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.019}_{-0.021} \quad (-0.2\sigma)$	$H(0.38)$	$83.4^{+1.5}_{-1.1} \quad (+0.3\sigma)$		

$\bar{\chi}^2_{eff} = 1217.61; R - 1 = 0.02031$

8.40 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02229^{+0.00038}_{-0.00037} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.963^{+0.034}_{-0.043} \quad (+0.3\sigma)$	$D_M(0.51)$	$1974^{+30}_{-38} \quad (-0.4\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0061}_{-0.0070} \quad (-0.6\sigma)$	$r_{\text{drag}} h$	$99.4^{+1.8}_{-1.7} \quad (+0.9\sigma)$	$H(0.61)$	$95.7^{+1.5}_{-0.96} \quad (-0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04088^{+0.00084}_{-0.00086} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.043}_{-0.043} \quad (-0.4\sigma)$	$D_M(0.61)$	$2297^{+33}_{-42} \quad (-0.4\sigma)$
τ	$0.056^{+0.016}_{-0.015} \quad (+0.5\sigma)$	z_{re}	$7.9^{+1.5}_{-1.5} \quad (+0.4\sigma)$	$H(2.33)$	$237.3^{+3.2}_{-2.5} \quad (-1.0\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.653 \quad (-0.3\sigma)$	$10^9 A_s$	$2.110^{+0.067}_{-0.063} \quad (+0.1\sigma)$	$D_M(2.33)$	$5737^{+53}_{-84} \quad (+0.1\sigma)$
N_{eff}	$< 3.34 \quad (-0.6\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.019}_{-0.022} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.031}_{-0.030} \quad (+0.1\sigma)$	D_{40}	$1225^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.029}_{-0.035} \quad (+0.5\sigma)$
n_s	$0.968^{+0.011}_{-0.010} \quad (+0.3\sigma)$	D_{220}	$5726^{+79}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.022} \quad (+0.1\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.026}_{-0.031} \quad (+0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{1420}	$815^{+10}_{-9.6} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.018}_{-0.022} \quad (+0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.5^{+3.5}_{-3.4} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.025}_{-0.029} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.968^{+0.011}_{-0.010} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.018}_{-0.022} \quad (+0.3\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (-0.1\sigma)$	Y_{P}	$0.2466^{+0.0027}_{-0.0014} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.024}_{-0.028} \quad (+0.5\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.3\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2480^{+0.0027}_{-0.0014} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.634^{+0.083}_{-0.074} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.013}_{-0.015} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.73^{+0.12}_{-0.20} \quad (+0.2\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.4\sigma)$
A^{kSZ}	—	z_*	$1090.17^{+0.60}_{-0.57} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_*	$143.9^{+1.3}_{-2.0} \quad (+0.8\sigma)$	f_{2000}^{217}	$108.5^{+3.8}_{-3.6} \quad (-0.5\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (-0.1\sigma)$	$100\theta_*$	$1.04102^{+0.00086}_{-0.00093} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.40 \quad (\nu: 0.5)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.82^{+0.13}_{-0.18} \quad (+0.8\sigma)$	χ_{simall}^2	$289 \quad (\nu: 14462.9) \quad (-61.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.0}_{-0.99} \quad (-0.2\sigma)$	χ_{lowl}^2	$132 \quad (\nu: 14458.1) \quad (+69.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.6^{+1.4}_{-2.0} \quad (+0.8\sigma)$	χ_{plik}^2	$772.9 \quad (\nu: 14.7) \quad (-0.3\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{D}	$0.1410^{+0.0016}_{-0.0013} \quad (-0.8\sigma)$	χ_{Aver15}^2	$0.68 \quad (\nu: 0.2)$
H_0	$67.8^{+1.5}_{-1.3} \quad (+0.6\sigma)$	$100\theta_{\text{D}}$	$0.16116^{+0.00065}_{-0.00060} \quad (-0.5\sigma)$	χ_{Cooke17}^2	$0.21 \quad (\nu: 0.0)$
Ω_{Λ}	$0.687^{+0.014}_{-0.014} \quad (+0.9\sigma)$	z_{eq}	$3331^{+87}_{-130} \quad (-0.3\sigma)$	$\chi_{6\text{DF}}^2$	$0.39 \quad (\nu: 0.2)$
Ω_{m}	$0.313^{+0.014}_{-0.014} \quad (-0.9\sigma)$	k_{eq}	$0.01026^{+0.00029}_{-0.00036} \quad (-0.7\sigma)$	χ_{MGS}^2	$0.83 \quad (\nu: 0.2)$
$\Omega_{\text{m}} h^2$	$0.1439^{+0.0041}_{-0.0034} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.827^{+0.028}_{-0.018} \quad (+0.3\sigma)$	χ_{DR12BAO}^2	$5.4 \quad (\nu: 1.9)$
$\Omega_{\nu} h^2$	$0.0027^{+0.0058}_{-0.0021} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.457^{+0.015}_{-0.0092} \quad (+0.3\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.0976^{+0.0041}_{-0.0024} \quad (-0.5\sigma)$	$H(0.15)$	$73.1^{+1.5}_{-1.2} \quad (+0.5\sigma)$	χ_{CMB}^2	$1202.7 \quad (\nu: 16.5) \quad (+1.3\sigma)$
σ_8	$0.793^{+0.031}_{-0.038} \quad (+0.4\sigma)$	$D_M(0.15)$	$639^{+12}_{-14} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.7 \quad (\nu: 1.4)$
S_8	$0.810^{+0.034}_{-0.039} \quad (-0.2\sigma)$	$H(0.38)$	$83.3^{+1.4}_{-1.1} \quad (+0.3\sigma)$	χ_{Abund}^2	$0.89 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.444^{+0.019}_{-0.022} \quad (-0.2\sigma)$	$D_M(0.38)$	$1524^{+25}_{-30} \quad (-0.5\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.593^{+0.023}_{-0.028} \quad (+0.1\sigma)$	$H(0.51)$	$90.1^{+1.5}_{-1.0} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1217.59; R - 1 = 0.02034$$

8.41 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02232^{+0.00041}_{-0.00040} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.596^{+0.024}_{-0.028} \quad (+0.3\sigma)$	$D_M(0.38)$	$1516^{+32}_{-42} \quad (-0.8\sigma)$
$\Omega_c h^2$	$0.1204^{+0.0073}_{-0.0081} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.966^{+0.034}_{-0.041} \quad (+0.4\sigma)$	$H(0.51)$	$90.5^{+2.1}_{-1.4} \quad (+0.6\sigma)$
$100\theta_{MC}$	$1.04076^{+0.00092}_{-0.00099} \quad (+0.5\sigma)$	$r_{drag} h$	$99.5^{+1.9}_{-1.8} \quad (+1.0\sigma)$	$D_M(0.51)$	$1964^{+39}_{-53} \quad (-0.8\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.044}_{-0.044} \quad (-0.5\sigma)$	$H(0.61)$	$96.2^{+2.2}_{-1.4} \quad (+0.4\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.555 \quad (-0.5\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$D_M(0.61)$	$2285^{+44}_{-60} \quad (-0.7\sigma)$
N_{eff}	$< 3.52 \quad (-0.1\sigma)$	$10^9 A_s$	$2.118^{+0.065}_{-0.062} \quad (+0.4\sigma)$	$H(2.33)$	$238.3^{+4.8}_{-3.5} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.053^{+0.031}_{-0.029} \quad (+0.4\sigma)$	$10^9 A_s e^{-2\tau}$	$1.890^{+0.032}_{-0.028} \quad (-0.3\sigma)$	$D_M(2.33)$	$5710^{+79}_{-120} \quad (-0.3\sigma)$
n_s	$0.971^{+0.014}_{-0.012} \quad (+0.6\sigma)$	D_{40}	$1221^{+27}_{-27} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.019}_{-0.021} \quad (-0.0\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5724^{+80}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.737^{+0.031}_{-0.036} \quad (+0.6\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2540^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.019}_{-0.022} \quad (+0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{1420}	$815^{+10}_{-9.9} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.654^{+0.028}_{-0.033} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.1^{+3.7}_{-3.8} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.019}_{-0.022} \quad (+0.4\sigma)$
A_{100}^{PS}	$267^{+60}_{-50} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.971^{+0.014}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.612^{+0.027}_{-0.031} \quad (+0.7\sigma)$
A_{143}^{PS}	$51^{+20}_{-20} \quad (-0.2\sigma)$	Y_P	$0.2476^{+0.0041}_{-0.0024} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.018}_{-0.022} \quad (+0.4\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	Y_P^{BBN}	$0.2489^{+0.0041}_{-0.0024} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.026}_{-0.029} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 D/H$	$2.65^{+0.11}_{-0.097} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.013}_{-0.015} \quad (+0.7\sigma)$
A^{kSZ}	—	Age/Gyr	$13.67^{+0.19}_{-0.30} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.014}_{-0.016} \quad (+0.8\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.29^{+0.75}_{-0.71} \quad (-0.7\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.3\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	r_*	$143.3^{+1.9}_{-2.9} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.3\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.0409^{+0.0010}_{-0.0011} \quad (+0.4\sigma)$	f_{2000}^{217}	$108.9^{+4.1}_{-3.8} \quad (-0.3\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.76^{+0.18}_{-0.27} \quad (+0.3\sigma)$	$\chi_{lensing}^2$	$9.52 \quad (\nu: 0.5)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1060.1^{+1.3}_{-1.2} \quad (+0.1\sigma)$	χ_{simall}^2	$397.5 \quad (\nu: 2.4) \quad (+0.3\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$145.9^{+2.0}_{-3.1} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.6 \quad (\nu: 0.5) \quad (-0.5\sigma)$
H_0	$68.2^{+2.1}_{-1.7} \quad (+0.8\sigma)$	k_D	$0.1415^{+0.0023}_{-0.0017} \quad (-0.4\sigma)$	χ_{plik}^2	$773.6 \quad (\nu: 15.4) \quad (-0.2\sigma)$
Ω_Λ	$0.688^{+0.015}_{-0.014} \quad (+1.0\sigma)$	$100\theta_D$	$0.16134^{+0.00091}_{-0.00078} \quad (-0.0\sigma)$	χ_{6DF}^2	$0.074 \quad (\nu: 0.0)$
Ω_m	$0.312^{+0.014}_{-0.015} \quad (-1.0\sigma)$	z_{eq}	$3336^{+80}_{-110} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.22 \quad (\nu: 0.1)$
$\Omega_m h^2$	$0.1450^{+0.0059}_{-0.0045} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00032}_{-0.00036} \quad (-0.4\sigma)$	$\chi_{DR12BAO}^2$	$5.2 \quad (\nu: 1.7)$
$\Omega_\nu h^2$	$0.0023^{+0.0052}_{-0.0017} \quad (-0.5\sigma)$	$100\theta_{eq}$	$0.826^{+0.023}_{-0.016} \quad (+0.2\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.0989^{+0.0063}_{-0.0038} \quad (+0.1\sigma)$	$100\theta_{s,eq}$	$0.456^{+0.012}_{-0.0084} \quad (+0.2\sigma)$	χ_{CMB}^2	$1203.2 \quad (\nu: 16.9) \quad (+1.4\sigma)$
σ_8	$0.798^{+0.033}_{-0.039} \quad (+0.6\sigma)$	$H(0.15)$	$73.5^{+2.1}_{-1.6} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.2)$
S_8	$0.813^{+0.034}_{-0.038} \quad (-0.1\sigma)$	$D_M(0.15)$	$636^{+15}_{-19} \quad (-0.8\sigma)$		
$\sigma_8 \Omega_m^{0.5}$	$0.445^{+0.019}_{-0.021} \quad (-0.1\sigma)$	$H(0.38)$	$83.8^{+2.1}_{-1.5} \quad (+0.7\sigma)$		

$$\bar{\chi}_{eff}^2 = 1217.05; \Delta \bar{\chi}_{eff}^2 = 2.48; R - 1 = 0.01947$$

8.42 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00041}_{-0.00040} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.596^{+0.024}_{-0.028} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1514^{+32}_{-43} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1205^{+0.0074}_{-0.0085} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.966^{+0.033}_{-0.042} \quad (+0.4\sigma)$	$H(0.51)$	$90.6^{+2.2}_{-1.5} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04076^{+0.00092}_{-0.0010} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.8}_{-1.7} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1961^{+40}_{-54} \quad (-0.9\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.044}_{-0.043} \quad (-0.5\sigma)$	$H(0.61)$	$96.3^{+2.3}_{-1.5} \quad (+0.5\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.570 \quad (-0.5\sigma)$	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2282^{+45}_{-61} \quad (-0.8\sigma)$
N_{eff}	$< 3.54 \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.121^{+0.065}_{-0.063} \quad (+0.4\sigma)$	$H(2.33)$	$238.3^{+4.9}_{-3.5} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.054^{+0.031}_{-0.030} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.890^{+0.032}_{-0.029} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5705^{+82}_{-130} \quad (-0.4\sigma)$
n_{s}	$0.972^{+0.014}_{-0.013} \quad (+0.7\sigma)$	D_{40}	$1220^{+27}_{-28} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.450^{+0.018}_{-0.021} \quad (-0.0\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5725^{+79}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.031}_{-0.037} \quad (+0.7\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2540^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.019}_{-0.022} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-9.9} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.028}_{-0.033} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.1^{+3.7}_{-3.8} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.018}_{-0.023} \quad (+0.4\sigma)$
A_{100}^{PS}	$267^{+60}_{-50} \quad (-0.1\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.972^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.027}_{-0.031} \quad (+0.7\sigma)$
A_{143}^{PS}	$51^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.2477^{+0.0042}_{-0.0025} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.018}_{-0.022} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2490^{+0.0042}_{-0.0025} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.026}_{-0.030} \quad (+0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.65^{+0.11}_{-0.098} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.013}_{-0.015} \quad (+0.8\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.66^{+0.19}_{-0.30} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.014}_{-0.016} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.28^{+0.75}_{-0.72} \quad (-0.7\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (-0.0\sigma)$	r_*	$143.2^{+2.0}_{-3.0} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.0409^{+0.0010}_{-0.0011} \quad (+0.4\sigma)$	f_{2000}^{217}	$108.9^{+4.1}_{-3.9} \quad (-0.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.76^{+0.19}_{-0.28} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.6 \quad (\nu: 0.5)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1060.1^{+1.3}_{-1.2} \quad (+0.1\sigma)$	χ_{simall}^2	$290 \quad (\nu: 14384.6) \quad (-60.4\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$145.9^{+2.1}_{-3.1} \quad (+0.3\sigma)$	χ_{lowl}^2	$130 \quad (\nu: 14382.1) \quad (+67.9\sigma)$
H_0	$68.3^{+2.2}_{-1.7} \quad (+0.9\sigma)$	k_{D}	$0.1415^{+0.0024}_{-0.0018} \quad (-0.3\sigma)$	χ_{plik}^2	$773.7 \quad (\nu: 15.5) \quad (-0.1\sigma)$
Ω_{Λ}	$0.689^{+0.014}_{-0.014} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16135^{+0.00092}_{-0.00080} \quad (-0.0\sigma)$	χ_{JLA}^2	$1035.11 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.014}_{-0.014} \quad (-1.0\sigma)$	z_{eq}	$3333^{+80}_{-110} \quad (-0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.41 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1450^{+0.0060}_{-0.0046} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00032}_{-0.00038} \quad (-0.4\sigma)$	χ_{MGS}^2	$0.94 \quad (\nu: 0.2)$
$\Omega_{\nu} h^2$	$0.0022^{+0.0062}_{-0.0016} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.827^{+0.024}_{-0.016} \quad (+0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^3$	$0.0991^{+0.0065}_{-0.0039} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.013}_{-0.0083} \quad (+0.2\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 7.0) \quad (-0.0\sigma)$
σ_8	$0.799^{+0.033}_{-0.040} \quad (+0.6\sigma)$	$H(0.15)$	$73.7^{+2.2}_{-1.6} \quad (+0.9\sigma)$	χ_{CMB}^2	$1203.4 \quad (\nu: 17.1) \quad (+1.4\sigma)$
S_8	$0.813^{+0.034}_{-0.038} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+15}_{-19} \quad (-0.9\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.445^{+0.019}_{-0.021} \quad (-0.1\sigma)$	$H(0.38)$	$83.9^{+2.2}_{-1.5} \quad (+0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2252.12; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.50; R - 1 = 0.01798$$

8.43 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02229^{+0.00039}_{-0.00039} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.023}_{-0.028} \quad (+0.2\sigma)$	$D_M(0.38)$	$1523^{+25}_{-32} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0060}_{-0.0075} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.043} \quad (+0.3\sigma)$	$H(0.51)$	$90.1^{+1.6}_{-1.1} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.04086^{+0.00085}_{-0.00090} \quad (+0.6\sigma)$	$r_{drag}h$	$99.4^{+1.8}_{-1.7} \quad (+0.9\sigma)$	$D_M(0.51)$	$1973^{+31}_{-39} \quad (-0.5\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.043}_{-0.042} \quad (-0.4\sigma)$	$H(0.61)$	$95.8^{+1.6}_{-1.0} \quad (+0.0\sigma)$
$m_{\nu, sterile}^{eff} [eV]$	$< 0.644 \quad (-0.4\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$D_M(0.61)$	$2296^{+34}_{-45} \quad (-0.4\sigma)$
N_{eff}	$< 3.37 \quad (-0.5\sigma)$	$10^9 A_s$	$2.113^{+0.062}_{-0.059} \quad (+0.2\sigma)$	$H(2.33)$	$237.5^{+3.5}_{-2.7} \quad (-0.9\sigma)$
$\ln(10^{10} A_s)$	$3.051^{+0.029}_{-0.028} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.026}_{-0.025} \quad (-0.6\sigma)$	$D_M(2.33)$	$5734^{+56}_{-91} \quad (+0.1\sigma)$
n_s	$0.969^{+0.011}_{-0.011} \quad (+0.3\sigma)$	D_{40}	$1224^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.019}_{-0.022} \quad (-0.1\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5724^{+80}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.029}_{-0.035} \quad (+0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.022} \quad (+0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{1420}	$815^{+10}_{-9.8} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.026}_{-0.032} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$229.4^{+3.6}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.018}_{-0.022} \quad (+0.2\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.969^{+0.011}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.025}_{-0.030} \quad (+0.6\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.3\sigma)$	Y_P	$0.2468^{+0.0030}_{-0.0015} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.018}_{-0.022} \quad (+0.3\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	Y_P^{BBN}	$0.2481^{+0.0030}_{-0.0016} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.579^{+0.024}_{-0.028} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 D/H$	$2.638^{+0.089}_{-0.084} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.015} \quad (+0.6\sigma)$
A^{kSZ}	—	Age/Gyr	$13.73^{+0.13}_{-0.22} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.013}_{-0.015} \quad (+0.6\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.20^{+0.67}_{-0.62} \quad (-0.9\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.4\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (-0.0\sigma)$	r_*	$143.8^{+1.4}_{-2.1} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.04100^{+0.00087}_{-0.00097} \quad (+0.7\sigma)$	f_{2000}^{217}	$108.6^{+3.9}_{-3.7} \quad (-0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.82^{+0.13}_{-0.20} \quad (+0.7\sigma)$	$\chi^2_{lensing}$	$9.38 \quad (\nu: 0.4)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.1}_{-0.99} \quad (-0.2\sigma)$	χ^2_{simall}	$292 \quad (\nu: 14223.4) \quad (-59.5\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$146.5^{+1.5}_{-2.2} \quad (+0.7\sigma)$	χ^2_{lowl}	$129 \quad (\nu: 14219.7) \quad (+67.0\sigma)$
H_0	$67.9^{+1.6}_{-1.4} \quad (+0.6\sigma)$	k_D	$0.1411^{+0.0017}_{-0.0014} \quad (-0.7\sigma)$	χ^2_{plik}	$773.1 \quad (\nu: 14.9) \quad (-0.2\sigma)$
Ω_Λ	$0.687^{+0.014}_{-0.014} \quad (+0.9\sigma)$	$100\theta_D$	$0.16120^{+0.00074}_{-0.00066} \quad (-0.4\sigma)$	χ^2_{Aver15}	$0.75 \quad (\nu: 0.3)$
Ω_m	$0.313^{+0.014}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3331^{+85}_{-130} \quad (-0.3\sigma)$	χ^2_{6DF}	$0.39 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.1440^{+0.0044}_{-0.0036} \quad (-1.0\sigma)$	k_{eq}	$0.01027^{+0.00029}_{-0.00036} \quad (-0.6\sigma)$	χ^2_{MGS}	$0.85 \quad (\nu: 0.2)$
$\Omega_\nu h^2$	$0.0026^{+0.0058}_{-0.0020} \quad (-0.4\sigma)$	$100\theta_{eq}$	$0.827^{+0.027}_{-0.017} \quad (+0.3\sigma)$	$\chi^2_{DR12BAO}$	$5.4 \quad (\nu: 1.8)$
$\Omega_m h^3$	$0.0977^{+0.0045}_{-0.0026} \quad (-0.4\sigma)$	$100\theta_{s,eq}$	$0.457^{+0.014}_{-0.0089} \quad (+0.3\sigma)$	χ^2_{prior}	$7.3 \quad (\nu: 6.9) \quad (-0.0\sigma)$
σ_8	$0.794^{+0.031}_{-0.038} \quad (+0.5\sigma)$	$H(0.15)$	$73.2^{+1.6}_{-1.3} \quad (+0.5\sigma)$	χ^2_{CMB}	$1202.8 \quad (\nu: 16.6) \quad (+1.3\sigma)$
S_8	$0.811^{+0.035}_{-0.039} \quad (-0.2\sigma)$	$D_M(0.15)$	$639^{+12}_{-14} \quad (-0.6\sigma)$	χ^2_{BAO}	$6.6 \quad (\nu: 1.3)$
$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.019}_{-0.022} \quad (-0.2\sigma)$	$H(0.38)$	$83.4^{+1.5}_{-1.1} \quad (+0.3\sigma)$		

$\bar{\chi}^2_{eff} = 1217.49; R - 1 = 0.01945$

8.44 base_nnu_meffsterile_plikHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00038}_{-0.00037} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.963^{+0.034}_{-0.044} \quad (+0.3\sigma)$	$D_M(0.51)$	$1974^{+30}_{-37} \quad (-0.4\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0061}_{-0.0070} \quad (-0.7\sigma)$	$r_{\text{drag}} h$	$99.4^{+1.8}_{-1.7} \quad (+0.9\sigma)$	$H(0.61)$	$95.7^{+1.5}_{-0.95} \quad (-0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04088^{+0.00083}_{-0.00087} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.043}_{-0.042} \quad (-0.4\sigma)$	$D_M(0.61)$	$2297^{+33}_{-42} \quad (-0.4\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$H(2.33)$	$237.3^{+3.3}_{-2.5} \quad (-1.0\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.657 \quad (-0.3\sigma)$	$10^9 A_s$	$2.113^{+0.061}_{-0.058} \quad (+0.2\sigma)$	$D_M(2.33)$	$5737^{+52}_{-84} \quad (+0.1\sigma)$
N_{eff}	$< 3.34 \quad (-0.6\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.019}_{-0.022} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.029}_{-0.028} \quad (+0.2\sigma)$	D_{40}	$1224^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.029}_{-0.035} \quad (+0.5\sigma)$
n_s	$0.968^{+0.011}_{-0.010} \quad (+0.3\sigma)$	D_{220}	$5725^{+79}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.022} \quad (+0.1\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.026}_{-0.031} \quad (+0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{1420}	$815.3^{+9.9}_{-9.7} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.018}_{-0.022} \quad (+0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.5^{+3.5}_{-3.4} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.025}_{-0.030} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.968^{+0.011}_{-0.010} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.018}_{-0.022} \quad (+0.3\sigma)$
A_{100}^{PS}	$265^{+60}_{-50} \quad (-0.1\sigma)$	Y_{P}	$0.2466^{+0.0027}_{-0.0014} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.024}_{-0.028} \quad (+0.5\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.3\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.2480^{+0.0027}_{-0.0014} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.633^{+0.083}_{-0.074} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.013}_{-0.015} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.73^{+0.12}_{-0.20} \quad (+0.2\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.4\sigma)$
A^{kSZ}	—	z_*	$1090.17^{+0.60}_{-0.57} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_*	$143.9^{+1.3}_{-2.0} \quad (+0.8\sigma)$	f_{2000}^{217}	$108.5^{+3.8}_{-3.6} \quad (-0.5\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (-0.1\sigma)$	$100\theta_*$	$1.04103^{+0.00085}_{-0.00093} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.36 \quad (\nu: 0.4)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.82^{+0.13}_{-0.18} \quad (+0.8\sigma)$	χ_{simall}^2	$289 \quad (\nu: 14410.8) \quad (-60.9\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.0}_{-0.99} \quad (-0.2\sigma)$	χ_{lowl}^2	$131 \quad (\nu: 14405.8) \quad (+68.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.6^{+1.4}_{-2.0} \quad (+0.8\sigma)$	χ_{plik}^2	$772.9 \quad (\nu: 14.7) \quad (-0.3\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{D}	$0.1410^{+0.0016}_{-0.0013} \quad (-0.8\sigma)$	χ_{Aver15}^2	$0.69 \quad (\nu: 0.2)$
H_0	$67.8^{+1.5}_{-1.3} \quad (+0.6\sigma)$	$100\theta_{\text{D}}$	$0.16116^{+0.00065}_{-0.00060} \quad (-0.5\sigma)$	χ_{Cooke17}^2	$0.21 \quad (\nu: 0.0)$
Ω_{Λ}	$0.687^{+0.014}_{-0.014} \quad (+0.9\sigma)$	z_{eq}	$3330^{+87}_{-130} \quad (-0.4\sigma)$	$\chi_{6\text{DF}}^2$	$0.39 \quad (\nu: 0.2)$
Ω_{m}	$0.313^{+0.014}_{-0.014} \quad (-0.9\sigma)$	k_{eq}	$0.01026^{+0.00029}_{-0.00036} \quad (-0.7\sigma)$	χ_{MGS}^2	$0.84 \quad (\nu: 0.2)$
$\Omega_{\text{m}} h^2$	$0.1439^{+0.0041}_{-0.0034} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.828^{+0.028}_{-0.017} \quad (+0.3\sigma)$	χ_{DR12BAO}^2	$5.4 \quad (\nu: 1.8)$
$\Omega_{\nu} h^2$	$0.0027^{+0.0058}_{-0.0021} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.457^{+0.015}_{-0.0091} \quad (+0.3\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.0976^{+0.0041}_{-0.0024} \quad (-0.5\sigma)$	$H(0.15)$	$73.1^{+1.5}_{-1.2} \quad (+0.5\sigma)$	χ_{CMB}^2	$1202.6 \quad (\nu: 16.5) \quad (+1.3\sigma)$
σ_8	$0.793^{+0.031}_{-0.038} \quad (+0.4\sigma)$	$D_M(0.15)$	$639^{+12}_{-14} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.6 \quad (\nu: 1.3)$
S_8	$0.810^{+0.034}_{-0.040} \quad (-0.2\sigma)$	$H(0.38)$	$83.3^{+1.4}_{-1.1} \quad (+0.3\sigma)$	χ_{Abund}^2	$0.89 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.444^{+0.019}_{-0.022} \quad (-0.2\sigma)$	$D_M(0.38)$	$1524^{+24}_{-30} \quad (-0.5\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.593^{+0.023}_{-0.028} \quad (+0.1\sigma)$	$H(0.51)$	$90.1^{+1.4}_{-0.99} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1217.47; R - 1 = 0.01988$$

8.45 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022461	$0.02249^{+0.00031}_{-0.00028} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	0.09644	$0.0976^{+0.0035}_{-0.0019} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	640.3	$639^{+10}_{-12} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.1134	$0.1187^{+0.0055}_{-0.0072} \quad (-0.7\sigma)$	σ_8	0.8100	$0.793^{+0.032}_{-0.037} \quad (+0.4\sigma)$	$H(0.38)$	83.10	$83.3^{+1.3}_{-0.90} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.04106	$1.04091^{+0.00059}_{-0.00064} \quad (+0.7\sigma)$	S_8	0.8242	$0.810^{+0.033}_{-0.037} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	1527.3	$1524^{+21}_{-26} \quad (-0.5\sigma)$
τ	0.0564	$0.058^{+0.016}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4514	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$H(0.51)$	89.81	$90.1^{+1.3}_{-0.81} \quad (+0.1\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	0.555	$< 0.654 \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6047	$0.593^{+0.023}_{-0.027} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	1978.6	$1974^{+26}_{-33} \quad (-0.4\sigma)$
N_{eff}	3.048	$< 3.29 \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	0.9843	$0.963^{+0.035}_{-0.041} \quad (+0.3\sigma)$	$H(0.61)$	95.43	$95.8^{+1.3}_{-0.77} \quad (-0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0481	$3.052^{+0.032}_{-0.029} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	99.65	$99.3^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	2302.5	$2297^{+29}_{-37} \quad (-0.4\sigma)$
n_{s}	0.9674	$0.968^{+0.011}_{-0.0097} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4392	$2.437^{+0.042}_{-0.042} \quad (-0.3\sigma)$	$H(2.33)$	236.22	$237.4^{+2.8}_{-2.2} \quad (-0.9\sigma)$
y_{cal}	1.00108	$1.0009^{+0.0049}_{-0.0047} \quad (+0.2\sigma)$	z_{re}	7.86	$8.0^{+1.5}_{-1.4} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	5756	$5735^{+42}_{-72} \quad (+0.1\sigma)$
A_{217}^{CIB}	47.2	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	2.107	$2.116^{+0.069}_{-0.060} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	0.4561	$0.448^{+0.018}_{-0.020} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ}} \times \mathrm{CIB}$	0.46	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8828	$1.886^{+0.025}_{-0.022} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	0.7485	$0.733^{+0.030}_{-0.034} \quad (+0.5\sigma)$
A_{143}^{tSZ}	7.20	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	1228.2	$1227^{+24}_{-24} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4746	$0.466^{+0.018}_{-0.021} \quad (+0.1\sigma)$
A_{100}^{PS}	250	$260^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	5743	$5741^{+74}_{-72} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	0.6636	$0.650^{+0.027}_{-0.031} \quad (+0.5\sigma)$
A_{143}^{PS}	47.6	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	2543.4	$2542^{+26}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	0.4733	$0.465^{+0.018}_{-0.021} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	48.0	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	819.4	$817.6^{+9.1}_{-9.0} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	0.6211	$0.608^{+0.026}_{-0.029} \quad (+0.5\sigma)$
A_{217}^{PS}	119.4	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	231.83	$230.7^{+3.0}_{-3.1} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	0.4684	$0.460^{+0.018}_{-0.021} \quad (+0.3\sigma)$
A^{kSZ}	0.00	$< 8.13 \quad (-0.3\sigma)$	$n_{\mathrm{s}, 0.002}$	0.9674	$0.968^{+0.011}_{-0.0097} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	0.5910	$0.578^{+0.024}_{-0.028} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	0.24546	$0.2465^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	0.2980	$0.292^{+0.013}_{-0.014} \quad (+0.6\sigma)$
$A_{143}^{\mathrm{dustTT}}$	11.04	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24678	$0.2478^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	0.3073	$0.301^{+0.013}_{-0.015} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.8	$18.7^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.569	$2.591^{+0.060}_{-0.057} \quad (-1.6\sigma)$	f_{2000}^{143}	28.6	$30^{+6}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	95.1	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	13.781	$13.731^{+0.097}_{-0.17} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	31.82	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.075}_{-0.074}$	z_*	1089.747	$1089.90^{+0.51}_{-0.46} \quad (-1.5\sigma)$	f_{2000}^{217}	106.47	$107.4^{+3.6}_{-3.6} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.057}_{-0.058}$	r_*	144.54	$143.8^{+1.1}_{-1.7} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.75	$9.14 \quad (\nu: 0.3)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.483	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04123	$1.04104^{+0.00065}_{-0.00068} \quad (+0.7\sigma)$	χ_{small}^2	396.42	$397.6 \quad (\nu: 2.7) \quad (+0.4\sigma)$
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.881	$13.82^{+0.10}_{-0.16} \quad (+0.8\sigma)$	χ_{lowl}^2	23.05	$23.03 \quad (\nu: 0.4) \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.665	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.09	$1060.32^{+0.85}_{-0.77} \quad (+0.4\sigma)$	χ_{plik}^2	2344.6	$2361.3 \quad (\nu: 18.3) \quad (+269.1\sigma)$
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.08^{+0.52}_{-0.53}$	r_{drag}	147.17	$146.5^{+1.1}_{-1.8} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.029	$0.084 \quad (\nu: 0.0)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	0.14085	$0.1414^{+0.0014}_{-0.0010} \quad (-0.5\sigma)$	χ_{MGS}^2	1.22	$1.10 \quad (\nu: 0.1)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.160677	$0.16083^{+0.00050}_{-0.00045} \quad (-1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.42	$5.5 \quad (\nu: 1.7)$
H_0	67.71	$67.8^{+1.3}_{-1.2} \quad (+0.6\sigma)$	z_{eq}	3246	$3339^{+84}_{-130} \quad (-0.2\sigma)$	χ_{prior}^2	1.9	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
Ω_{Λ}	0.6894	$0.687^{+0.013}_{-0.013} \quad (+0.9\sigma)$	k_{eq}	0.010016	$0.01027^{+0.00028}_{-0.00035} \quad (-0.6\sigma)$	χ_{CMB}^2	2772.9	$2791.1 \quad (\nu: 19.5) \quad (+269.0\sigma)$
Ω_{m}	0.3106	$0.313^{+0.013}_{-0.013} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	0.8464	$0.827^{+0.027}_{-0.017} \quad (+0.2\sigma)$	χ_{BAO}^2	5.67	$6.7 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^2$	0.14243	$0.1440^{+0.0036}_{-0.0030} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s}, \mathrm{eq}}$	0.4667	$0.456^{+0.014}_{-0.0090} \quad (+0.2\sigma)$			
$\Omega_{\nu} h^2$	0.00654	$0.0028^{+0.0050}_{-0.0022} \quad (-0.3\sigma)$	$H(0.15)$	72.99	$73.1^{+1.3}_{-1.1} \quad (+0.5\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 2780.39$; $\Delta\chi_{\mathrm{eff}}^2 = -0.30$; $\bar{\chi}_{\mathrm{eff}}^2 = 2809.48$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.64$; $R - 1 = 0.02379$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.42 (Δ 0.00) CMB - smicadx12_Dec5_ft1_mv2_ndclpp_p.teb_consext8: 8.75 (Δ 0.02) small_100x143_offlike5_EE_Aplanck.L
396.43 (Δ -0.10) commander_dx12_v3.2.29: 23.05 (Δ 0.16) plik_rd12_HM_v22b.TTTEEE: 2344.63 (Δ -0.69)

8.46 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02250^{+0.00030}_{-0.00028} \quad (+1.2\sigma)$	$\Omega_m h^3$	$0.0977^{+0.0038}_{-0.0019} \quad (-0.4\sigma)$	$D_M(0.15)$	$638.4^{+9.9}_{-13} \quad (-0.6\sigma)$
$\Omega_c h^2$	$0.1188^{+0.0055}_{-0.0070} \quad (-0.7\sigma)$	σ_8	$0.795^{+0.031}_{-0.036} \quad (+0.5\sigma)$	$H(0.38)$	$83.4^{+1.4}_{-0.89} \quad (+0.4\sigma)$
$100\theta_{MC}$	$1.04091^{+0.00059}_{-0.00065} \quad (+0.7\sigma)$	S_8	$0.811^{+0.033}_{-0.036} \quad (-0.2\sigma)$	$D_M(0.38)$	$1522^{+21}_{-29} \quad (-0.5\sigma)$
τ	$0.058^{+0.016}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$H(0.51)$	$90.2^{+1.4}_{-0.83} \quad (+0.2\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.607 \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.023}_{-0.026} \quad (+0.2\sigma)$	$D_M(0.51)$	$1972^{+25}_{-36} \quad (-0.5\sigma)$
N_{eff}	$< 3.31 \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.040} \quad (+0.3\sigma)$	$H(0.61)$	$95.8^{+1.4}_{-0.79} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.052^{+0.032}_{-0.029} \quad (+0.3\sigma)$	$r_{\text{drag}} h$	$99.5^{+1.5}_{-1.5} \quad (+0.9\sigma)$	$D_M(0.61)$	$2295^{+28}_{-41} \quad (-0.5\sigma)$
n_s	$0.969^{+0.011}_{-0.0096} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.042}_{-0.041} \quad (-0.3\sigma)$	$H(2.33)$	$237.4^{+3.0}_{-2.2} \quad (-0.9\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.5}_{-1.4} \quad (+0.5\sigma)$	$D_M(2.33)$	$5733^{+43}_{-79} \quad (+0.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_s$	$2.116^{+0.068}_{-0.062} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.018}_{-0.020} \quad (-0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.886^{+0.026}_{-0.022} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.029}_{-0.034} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1226^{+24}_{-24} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.020} \quad (+0.1\sigma)$
A_{100}^{PS}	$260^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5741^{+74}_{-72} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.651^{+0.026}_{-0.030} \quad (+0.6\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2542^{+25}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.018}_{-0.020} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.7^{+9.0}_{-8.9} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.609^{+0.025}_{-0.028} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.7^{+3.0}_{-3.0} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.018}_{-0.020} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.14 \quad (-0.3\sigma)$	$n_{s,0.002}$	$0.969^{+0.011}_{-0.0096} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.580^{+0.024}_{-0.027} \quad (+0.6\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_P	$0.2465^{+0.0025}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2479^{+0.0025}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.013}_{-0.015} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$10^5 D/H$	$2.590^{+0.061}_{-0.057} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-1.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.72^{+0.10}_{-0.19} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.074}$	z_*	$1089.89^{+0.48}_{-0.47} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.5} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.057}$	r_*	$143.8^{+1.1}_{-1.8} \quad (+0.8\sigma)$	χ_{lensing}^2	$9.18 \quad (\nu: 0.3)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.04104^{+0.00066}_{-0.00069} \quad (+0.7\sigma)$	χ_{simall}^2	$262 \quad (\nu: 16193.5) \quad (-76.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.82^{+0.10}_{-0.17} \quad (+0.8\sigma)$	χ_{lowl}^2	$158 \quad (\nu: 16184.7) \quad (+85.8\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.34^{+0.88}_{-0.77} \quad (+0.5\sigma)$	χ_{plik}^2	$2361.5 \quad (\nu: 18.3) \quad (+269.1\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.53}$	r_{drag}	$146.4^{+1.2}_{-1.9} \quad (+0.7\sigma)$	χ_{JLA}^2	$1035.16 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.1414^{+0.0015}_{-0.0011} \quad (-0.5\sigma)$	$\chi_{6\text{DF}}^2$	$0.47 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16083^{+0.00052}_{-0.00046} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.76 \quad (\nu: 0.2)$
H_0	$67.9^{+1.5}_{-1.1} \quad (+0.6\sigma)$	z_{eq}	$3340^{+80}_{-120} \quad (-0.2\sigma)$	χ_{DR12BAO}^2	$5.2 \quad (\nu: 1.3)$
Ω_Λ	$0.688^{+0.012}_{-0.012} \quad (+0.9\sigma)$	k_{eq}	$0.01028^{+0.00027}_{-0.00034} \quad (-0.6\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.3) \quad (+1.2\sigma)$
Ω_m	$0.312^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.826^{+0.025}_{-0.016} \quad (+0.2\sigma)$	χ_{CMB}^2	$2791.2 \quad (\nu: 19.0) \quad (+269.0\sigma)$
$\Omega_m h^2$	$0.1439^{+0.0037}_{-0.0029} \quad (-1.0\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.013}_{-0.0085} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.9)$
$\Omega_\nu h^2$	$0.0026^{+0.0047}_{-0.0020} \quad (-0.4\sigma)$	$H(0.15)$	$73.2^{+1.4}_{-1.0} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 3844.44; \Delta \bar{\chi}_{\text{eff}}^2 = 2.59; R - 1 = 0.02316$$

8.47 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02248^{+0.00028}_{-0.00027} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0974^{+0.0029}_{-0.0015} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.0^{+9.1}_{-10} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1185^{+0.0052}_{-0.0061} \quad (-0.7\sigma)$	σ_8	$0.793^{+0.030}_{-0.035} \quad (+0.4\sigma)$	$H(0.38)$	$83.2^{+1.0}_{-0.79} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00058}_{-0.00060} \quad (+0.8\sigma)$	S_8	$0.810^{+0.033}_{-0.036} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+19}_{-22} \quad (-0.4\sigma)$
τ	$0.057^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$H(0.51)$	$90.0^{+1.0}_{-0.71} \quad (+0.0\sigma)$
$m_{\nu,\mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.631 \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.593^{+0.022}_{-0.026} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+23}_{-27} \quad (-0.4\sigma)$
N_{eff}	$< 3.25 \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.963^{+0.034}_{-0.040} \quad (+0.3\sigma)$	$H(0.61)$	$95.7^{+1.0}_{-0.66} \quad (-0.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.051^{+0.031}_{-0.029} \quad (+0.2\sigma)$	$r_{\mathrm{drag}}h$	$99.3^{+1.6}_{-1.5} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+25}_{-30} \quad (-0.3\sigma)$
n_{s}	$0.9676^{+0.0093}_{-0.0090} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.042}_{-0.041} \quad (-0.3\sigma)$	$H(2.33)$	$237.2^{+2.4}_{-1.9} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	z_{re}	$7.9^{+1.5}_{-1.4} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5741^{+35}_{-59} \quad (+0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.113^{+0.067}_{-0.060} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.018}_{-0.020} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.885^{+0.023}_{-0.021} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.028}_{-0.032} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.8} \quad (+0.3\sigma)$	D_{40}	$1227^{+24}_{-23} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.020} \quad (+0.1\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5740^{+74}_{-71} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.025}_{-0.029} \quad (+0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2541^{+25}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.020} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.6^{+9.0}_{-8.9} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.607^{+0.024}_{-0.027} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.7^{+3.0}_{-3.0} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.020} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.11 \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9676^{+0.0093}_{-0.0090} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.026} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Y_{P}	$0.2463^{+0.0019}_{-0.00094} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.013} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2476^{+0.0019}_{-0.00095} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.012}_{-0.014} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.589^{+0.057}_{-0.050} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.745^{+0.083}_{-0.14} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.075}_{-0.074}$	z_*	$1089.89^{+0.46}_{-0.44} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.3^{+3.5}_{-3.5} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	r_*	$143.98^{+0.94}_{-1.4} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.13 \quad (\nu: 0.3)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04107^{+0.00059}_{-0.00065} \quad (+0.8\sigma)$	χ_{simall}^2	$269 \quad (\nu: 15818.2) \quad (-72.4\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.830^{+0.088}_{-0.13} \quad (+0.9\sigma)$	χ_{lowl}^2	$152 \quad (\nu: 15816.3) \quad (+81.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.26^{+0.82}_{-0.67} \quad (+0.4\sigma)$	χ_{plik}^2	$2361.0 \quad (\nu: 17.3) \quad (+269.0\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.53}_{-0.52}$	r_{drag}	$146.60^{+0.97}_{-1.5} \quad (+0.8\sigma)$	χ_{Aver15}^2	$0.50 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1413^{+0.0012}_{-0.00090} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.44 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16080^{+0.00044}_{-0.00040} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.73 \quad (\nu: 0.2)$
H_0	$67.7^{+1.2}_{-1.0} \quad (+0.5\sigma)$	z_{eq}	$3340^{+84}_{-120} \quad (-0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.5 \quad (\nu: 1.7)$
Ω_{Λ}	$0.687^{+0.012}_{-0.012} \quad (+0.9\sigma)$	k_{eq}	$0.01027^{+0.00026}_{-0.00032} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_{m}	$0.313^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.026}_{-0.017} \quad (+0.2\sigma)$	χ_{CMB}^2	$2790.7 \quad (\nu: 18.0) \quad (+268.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1437^{+0.0031}_{-0.0027} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.014}_{-0.0089} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.7 \quad (\nu: 1.2)$
$\Omega_{\nu}h^2$	$0.0028^{+0.0050}_{-0.0022} \quad (-0.3\sigma)$	$H(0.15)$	$73.1^{+1.1}_{-0.95} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2809.56; R - 1 = 0.02106$$

8.48 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02247^{+0.00028}_{-0.00026} \quad (+1.0\sigma)$	σ_8	$0.793^{+0.030}_{-0.035} \quad (+0.4\sigma)$	$D_M(0.38)$	$1526^{+19}_{-22} \quad (-0.4\sigma)$
$\Omega_c h^2$	$0.1185^{+0.0052}_{-0.0061} \quad (-0.7\sigma)$	S_8	$0.811^{+0.033}_{-0.036} \quad (-0.2\sigma)$	$H(0.51)$	$90.0^{+1.0}_{-0.71} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.04092^{+0.00057}_{-0.00060} \quad (+0.8\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$D_M(0.51)$	$1977^{+23}_{-27} \quad (-0.4\sigma)$
τ	$0.057^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.593^{+0.022}_{-0.026} \quad (+0.1\sigma)$	$H(0.61)$	$95.7^{+1.0}_{-0.66} \quad (-0.1\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.632 \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.040} \quad (+0.3\sigma)$	$D_M(0.61)$	$2300^{+25}_{-31} \quad (-0.3\sigma)$
N_{eff}	$< 3.25 \quad (-0.8\sigma)$	$r_{\text{drag}} h$	$99.3^{+1.5}_{-1.5} \quad (+0.8\sigma)$	$H(2.33)$	$237.2^{+2.4}_{-1.9} \quad (-1.0\sigma)$
$\ln(10^{10} A_s)$	$3.051^{+0.031}_{-0.029} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.041}_{-0.041} \quad (-0.3\sigma)$	$D_M(2.33)$	$5741^{+35}_{-60} \quad (+0.2\sigma)$
n_s	$0.9676^{+0.0094}_{-0.0090} \quad (+0.2\sigma)$	z_{re}	$7.9^{+1.5}_{-1.4} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.018}_{-0.020} \quad (-0.1\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	$10^9 A_s$	$2.113^{+0.067}_{-0.060} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.028}_{-0.033} \quad (+0.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.023}_{-0.021} \quad (-0.6\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.020} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	$1227^{+24}_{-23} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.025}_{-0.029} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.8} \quad (+0.3\sigma)$	D_{220}	$5739^{+74}_{-71} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.020} \quad (+0.2\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.3\sigma)$	D_{810}	$2541^{+25}_{-25} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.607^{+0.024}_{-0.028} \quad (+0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{1420}	$817.5^{+9.0}_{-8.9} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.020} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{2000}	$230.7^{+3.0}_{-2.9} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.026} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9676^{+0.0094}_{-0.0090} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.013} \quad (+0.5\sigma)$
A^{kSZ}	$< 8.14 \quad (-0.3\sigma)$	Y_P	$0.2463^{+0.0019}_{-0.00096} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.012}_{-0.014} \quad (+0.6\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.2476^{+0.0019}_{-0.00096} \quad (-0.7\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-1.0\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.590^{+0.054}_{-0.048} \quad (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.745^{+0.083}_{-0.14} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.4^{+3.5}_{-3.5} \quad (-1.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.90^{+0.44}_{-0.42} \quad (-1.5\sigma)$	χ_{lensing}^2	$9.14 \quad (\nu: 0.3)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.074}$	r_*	$143.97^{+0.94}_{-1.4} \quad (+0.9\sigma)$	χ_{simall}^2	$270 \quad (\nu: 15754.2) \quad (-71.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.04107^{+0.00059}_{-0.00065} \quad (+0.8\sigma)$	χ_{lowl}^2	$151 \quad (\nu: 15753.4) \quad (+81.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.829^{+0.089}_{-0.13} \quad (+0.9\sigma)$	χ_{plik}^2	$2360.9 \quad (\nu: 17.2) \quad (+269.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1060.24^{+0.77}_{-0.69} \quad (+0.3\sigma)$	χ_{Aver15}^2	$0.51 \quad (\nu: 0.1)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$146.60^{+0.98}_{-1.5} \quad (+0.8\sigma)$	χ_{Cooke17}^2	$0.16 \quad (\nu: 0.0)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	k_D	$0.1413^{+0.0012}_{-0.00091} \quad (-0.6\sigma)$	$\chi_{6\text{DF}}^2$	$0.43 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	$0.16081^{+0.00042}_{-0.00039} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.73 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3340^{+83}_{-120} \quad (-0.2\sigma)$	χ_{DR12BAO}^2	$5.6 \quad (\nu: 1.7)$
H_0	$67.7^{+1.2}_{-1.1} \quad (+0.5\sigma)$	k_{eq}	$0.01027^{+0.00026}_{-0.00032} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_Λ	$0.686^{+0.012}_{-0.012} \quad (+0.9\sigma)$	$100\theta_{\text{eq}}$	$0.826^{+0.026}_{-0.017} \quad (+0.2\sigma)$	χ_{CMB}^2	$2790.7 \quad (\nu: 18.0) \quad (+268.9\sigma)$
Ω_m	$0.314^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.014}_{-0.0089} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.8 \quad (\nu: 1.3)$
$\Omega_m h^2$	$0.1438^{+0.0031}_{-0.0026} \quad (-1.0\sigma)$	$H(0.15)$	$73.0^{+1.1}_{-0.95} \quad (+0.4\sigma)$	χ_{Abund}^2	$0.67 \quad (\nu: 0.1)$
$\Omega_\nu h^2$	$0.0028^{+0.0050}_{-0.0022} \quad (-0.3\sigma)$	$D_M(0.15)$	$640.1^{+9.2}_{-10} \quad (-0.5\sigma)$		
$\Omega_m h^3$	$0.0974^{+0.0029}_{-0.0016} \quad (-0.5\sigma)$	$H(0.38)$	$83.2^{+1.0}_{-0.79} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2809.72; R - 1 = 0.02079$$

8.49 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02249^{+0.00031}_{-0.00028} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0977^{+0.0035}_{-0.0019} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+10}_{-12} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1187^{+0.0055}_{-0.0072} \quad (-0.7\sigma)$	σ_8	$0.794^{+0.032}_{-0.037} \quad (+0.5\sigma)$	$H(0.38)$	$83.3^{+1.3}_{-0.90} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00059}_{-0.00064} \quad (+0.7\sigma)$	S_8	$0.811^{+0.033}_{-0.037} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+21}_{-26} \quad (-0.5\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$H(0.51)$	$90.1^{+1.3}_{-0.81} \quad (+0.1\sigma)$
$m_{\nu,\mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.652 \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.594^{+0.023}_{-0.027} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+26}_{-33} \quad (-0.4\sigma)$
N_{eff}	$< 3.30 \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.041} \quad (+0.3\sigma)$	$H(0.61)$	$95.8^{+1.3}_{-0.77} \quad (-0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.053^{+0.029}_{-0.028} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.3^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+29}_{-37} \quad (-0.4\sigma)$
n_{s}	$0.968^{+0.011}_{-0.0097} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.042}_{-0.040} \quad (-0.3\sigma)$	$H(2.33)$	$237.4^{+2.8}_{-2.2} \quad (-0.9\sigma)$
y_{cal}	$1.0009^{+0.0049}_{-0.0047} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5735^{+42}_{-73} \quad (+0.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.118^{+0.062}_{-0.058} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.018}_{-0.020} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.886^{+0.025}_{-0.022} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.030}_{-0.034} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1226^{+24}_{-24} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.021} \quad (+0.1\sigma)$
A_{100}^{PS}	$260^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5740^{+73}_{-72} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.027}_{-0.031} \quad (+0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2542^{+26}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.018}_{-0.021} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.6^{+9.0}_{-9.0} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.025}_{-0.029} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.7^{+3.0}_{-3.1} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.018}_{-0.021} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.12 \quad (-0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.011}_{-0.0097} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.579^{+0.024}_{-0.028} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2465^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.6\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2478^{+0.0023}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.013}_{-0.015} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.591^{+0.060}_{-0.057} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.730^{+0.098}_{-0.17} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.075}_{-0.074}$	z_*	$1089.90^{+0.51}_{-0.46} \quad (-1.5\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.6} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.057}_{-0.058}$	r_*	$143.8^{+1.1}_{-1.7} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.12 \quad (\nu: 0.3)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04104^{+0.00065}_{-0.00068} \quad (+0.7\sigma)$	χ_{simall}^2	$397.6 \quad (\nu: 2.7) \quad (+0.4\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.82^{+0.10}_{-0.16} \quad (+0.8\sigma)$	χ_{lowl}^2	$23.03 \quad (\nu: 0.4) \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.32^{+0.85}_{-0.77} \quad (+0.4\sigma)$	χ_{plik}^2	$2361.3 \quad (\nu: 18.3) \quad (+269.1\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.52}_{-0.53}$	r_{drag}	$146.5^{+1.2}_{-1.8} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.084 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1414^{+0.0014}_{-0.0011} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.10 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00050}_{-0.00045} \quad (-1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.5 \quad (\nu: 1.7)$
H_0	$67.8^{+1.3}_{-1.2} \quad (+0.6\sigma)$	z_{eq}	$3339^{+84}_{-130} \quad (-0.2\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
Ω_{Λ}	$0.687^{+0.013}_{-0.013} \quad (+0.9\sigma)$	k_{eq}	$0.01027^{+0.00028}_{-0.00035} \quad (-0.6\sigma)$	χ_{CMB}^2	$2791.1 \quad (\nu: 19.4) \quad (+269.0\sigma)$
Ω_{m}	$0.313^{+0.013}_{-0.013} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.827^{+0.027}_{-0.017} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.7 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}}h^2$	$0.1440^{+0.0036}_{-0.0030} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.014}_{-0.0089} \quad (+0.2\sigma)$		
$\Omega_{\nu}h^2$	$0.0028^{+0.0051}_{-0.0022} \quad (-0.3\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.1} \quad (+0.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2809.40; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.68; R - 1 = 0.02345$$

8.50 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02250^{+0.00030}_{-0.00028} \quad (+1.2\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.0978^{+0.0038}_{-0.0020} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$638.3^{+9.9}_{-13} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1188^{+0.0055}_{-0.0070} \quad (-0.7\sigma)$	σ_8	$0.795^{+0.031}_{-0.036} \quad (+0.5\sigma)$	$H(0.38)$	$83.4^{+1.4}_{-0.89} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00059}_{-0.00065} \quad (+0.7\sigma)$	S_8	$0.811^{+0.033}_{-0.036} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+21}_{-29} \quad (-0.6\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$H(0.51)$	$90.2^{+1.4}_{-0.83} \quad (+0.2\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.608 \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.594^{+0.023}_{-0.026} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+25}_{-36} \quad (-0.5\sigma)$
N_{eff}	$< 3.31 \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.965^{+0.034}_{-0.040} \quad (+0.3\sigma)$	$H(0.61)$	$95.8^{+1.4}_{-0.79} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.053^{+0.029}_{-0.028} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.5^{+1.5}_{-1.5} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2294^{+28}_{-41} \quad (-0.5\sigma)$
n_{s}	$0.969^{+0.011}_{-0.0096} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.041}_{-0.040} \quad (-0.3\sigma)$	$H(2.33)$	$237.4^{+3.0}_{-2.2} \quad (-0.9\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5732^{+43}_{-79} \quad (+0.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.117^{+0.063}_{-0.059} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.018}_{-0.020} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.886^{+0.026}_{-0.022} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.735^{+0.029}_{-0.034} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9} \quad (+0.3\sigma)$	D_{40}	$1226^{+24}_{-24} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.018}_{-0.021} \quad (+0.1\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5741^{+73}_{-71} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.651^{+0.026}_{-0.030} \quad (+0.6\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2542^{+25}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.018}_{-0.021} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.6^{+8.9}_{-8.9} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.609^{+0.025}_{-0.029} \quad (+0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.7^{+3.0}_{-3.0} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.018}_{-0.020} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.13 \quad (-0.3\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.969^{+0.011}_{-0.0096} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.580^{+0.024}_{-0.027} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$9.0^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2465^{+0.0025}_{-0.0012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.012}_{-0.014} \quad (+0.6\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2479^{+0.0025}_{-0.0012} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.013}_{-0.015} \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.590^{+0.061}_{-0.057} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.72^{+0.10}_{-0.19} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.076}_{-0.074}$	z_*	$1089.89^{+0.48}_{-0.47} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.4^{+3.6}_{-3.5} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.057}$	r_*	$143.8^{+1.1}_{-1.8} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.16 \quad (\nu: 0.3)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.04104^{+0.00066}_{-0.00069} \quad (+0.7\sigma)$	χ_{simall}^2	$262 \quad (\nu: 16204.5) \quad (-76.1\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.82^{+0.10}_{-0.17} \quad (+0.8\sigma)$	χ_{lowl}^2	$158 \quad (\nu: 16195.0) \quad (+85.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.34^{+0.88}_{-0.77} \quad (+0.5\sigma)$	χ_{plik}^2	$2361.4 \quad (\nu: 18.3) \quad (+269.1\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.52}_{-0.53}$	r_{drag}	$146.4^{+1.2}_{-1.9} \quad (+0.7\sigma)$	χ_{JLA}^2	$1035.16 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1414^{+0.0015}_{-0.0011} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.47 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00052}_{-0.00046} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.76 \quad (\nu: 0.2)$
H_0	$67.9^{+1.5}_{-1.1} \quad (+0.6\sigma)$	z_{eq}	$3340^{+80}_{-120} \quad (-0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.2 \quad (\nu: 1.3)$
Ω_{Λ}	$0.688^{+0.012}_{-0.012} \quad (+0.9\sigma)$	k_{eq}	$0.01028^{+0.00027}_{-0.00034} \quad (-0.6\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.3) \quad (+1.2\sigma)$
Ω_{m}	$0.312^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.026}_{-0.016} \quad (+0.2\sigma)$	χ_{CMB}^2	$2791.1 \quad (\nu: 18.9) \quad (+269.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1439^{+0.0037}_{-0.0029} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.013}_{-0.0085} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.9)$
$\Omega_{\nu} h^2$	$0.0026^{+0.0047}_{-0.0020} \quad (-0.4\sigma)$	$H(0.15)$	$73.2^{+1.4}_{-1.0} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 3844.37$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.63$; $R - 1 = 0.02468$

8.51 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02248^{+0.00028}_{-0.00027} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.0974^{+0.0029}_{-0.0016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.9^{+9.1}_{-10} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1185^{+0.0052}_{-0.0061} \quad (-0.7\sigma)$	σ_8	$0.793^{+0.030}_{-0.035} \quad (+0.4\sigma)$	$H(0.38)$	$83.2^{+1.0}_{-0.79} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00058}_{-0.00060} \quad (+0.8\sigma)$	S_8	$0.810^{+0.033}_{-0.036} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+19}_{-22} \quad (-0.4\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$H(0.51)$	$90.0^{+1.0}_{-0.71} \quad (+0.0\sigma)$
$m_{\nu, \mathrm{sterile}}^{\mathrm{eff}} [\mathrm{eV}]$	$< 0.631 \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.593^{+0.022}_{-0.025} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+23}_{-27} \quad (-0.4\sigma)$
N_{eff}	$< 3.25 \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.040} \quad (+0.3\sigma)$	$H(0.61)$	$95.7^{+1.0}_{-0.66} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.051^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.3^{+1.6}_{-1.5} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+25}_{-30} \quad (-0.3\sigma)$
n_{s}	$0.9677^{+0.0093}_{-0.0089} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.041}_{-0.040} \quad (-0.2\sigma)$	$H(2.33)$	$237.2^{+2.4}_{-1.9} \quad (-1.0\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5741^{+35}_{-60} \quad (+0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.115^{+0.061}_{-0.057} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.018}_{-0.020} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.885^{+0.023}_{-0.021} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.028}_{-0.032} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.8} \quad (+0.3\sigma)$	D_{40}	$1227^{+24}_{-23} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.020} \quad (+0.1\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5740^{+73}_{-71} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.025}_{-0.029} \quad (+0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{810}	$2541^{+25}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.020} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.6^{+8.9}_{-8.9} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.024}_{-0.027} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.7^{+3.0}_{-3.0} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.020} \quad (+0.3\sigma)$
A^{kSZ}	$< 8.10 \quad (-0.3\sigma)$	$n_{\mathrm{s}, 0.002}$	$0.9677^{+0.0093}_{-0.0089} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.026} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2463^{+0.0019}_{-0.00095} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.013} \quad (+0.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2476^{+0.0019}_{-0.00095} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.012}_{-0.014} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.588^{+0.057}_{-0.050} \quad (-1.6\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-1.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.744^{+0.083}_{-0.14} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.074}$	z_*	$1089.89^{+0.46}_{-0.43} \quad (-1.6\sigma)$	f_{2000}^{217}	$107.3^{+3.5}_{-3.5} \quad (-1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$143.98^{+0.94}_{-1.4} \quad (+0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.11 \quad (\nu: 0.3)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04107^{+0.00059}_{-0.00065} \quad (+0.8\sigma)$	χ_{simall}^2	$268 \quad (\nu: 15831.7) \quad (-72.6\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.830^{+0.089}_{-0.13} \quad (+0.9\sigma)$	χ_{lowl}^2	$152 \quad (\nu: 15829.2) \quad (+81.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.26^{+0.77}_{-0.70} \quad (+0.4\sigma)$	χ_{plik}^2	$2360.9 \quad (\nu: 17.2) \quad (+269.0\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	r_{drag}	$146.60^{+0.98}_{-1.5} \quad (+0.8\sigma)$	χ_{Aver15}^2	$0.51 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1413^{+0.0012}_{-0.00091} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.44 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16080^{+0.00044}_{-0.00041} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.73 \quad (\nu: 0.2)$
H_0	$67.7^{+1.2}_{-1.0} \quad (+0.5\sigma)$	z_{eq}	$3339^{+84}_{-120} \quad (-0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.5 \quad (\nu: 1.6)$
Ω_{Λ}	$0.687^{+0.012}_{-0.012} \quad (+0.9\sigma)$	k_{eq}	$0.01027^{+0.00026}_{-0.00032} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_{m}	$0.313^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.827^{+0.026}_{-0.017} \quad (+0.2\sigma)$	χ_{CMB}^2	$2790.6 \quad (\nu: 17.9) \quad (+268.9\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1437^{+0.0031}_{-0.0027} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.014}_{-0.0089} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.7 \quad (\nu: 1.2)$
$\Omega_{\nu} h^2$	$0.0028^{+0.0050}_{-0.0022} \quad (-0.3\sigma)$	$H(0.15)$	$73.1^{+1.1}_{-0.94} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2809.47; R - 1 = 0.02226$$

8.52 base_nnu_meffsterile_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02247^{+0.00028}_{-0.00026} \quad (+1.0\sigma)$	σ_8	$0.793^{+0.030}_{-0.035} \quad (+0.4\sigma)$	$D_M(0.38)$	$1526^{+19}_{-22} \quad (-0.4\sigma)$
$\Omega_c h^2$	$0.1185^{+0.0052}_{-0.0061} \quad (-0.7\sigma)$	S_8	$0.811^{+0.033}_{-0.036} \quad (-0.2\sigma)$	$H(0.51)$	$90.0^{+1.0}_{-0.71} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.04092^{+0.00058}_{-0.00060} \quad (+0.8\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.444^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$D_M(0.51)$	$1976^{+23}_{-27} \quad (-0.4\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.022}_{-0.026} \quad (+0.1\sigma)$	$H(0.61)$	$95.7^{+1.1}_{-0.66} \quad (-0.1\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.632 \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.034}_{-0.040} \quad (+0.3\sigma)$	$D_M(0.61)$	$2300^{+25}_{-31} \quad (-0.3\sigma)$
N_{eff}	$< 3.25 \quad (-0.8\sigma)$	$r_{\text{drag}} h$	$99.3^{+1.5}_{-1.5} \quad (+0.8\sigma)$	$H(2.33)$	$237.2^{+2.4}_{-1.9} \quad (-1.0\sigma)$
$\ln(10^{10} A_s)$	$3.051^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.041}_{-0.040} \quad (-0.2\sigma)$	$D_M(2.33)$	$5741^{+35}_{-60} \quad (+0.2\sigma)$
n_s	$0.9676^{+0.0093}_{-0.0090} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.018}_{-0.020} \quad (-0.1\sigma)$
y_{cal}	$1.0009^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	$10^9 A_s$	$2.114^{+0.061}_{-0.057} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.028}_{-0.033} \quad (+0.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.023}_{-0.021} \quad (-0.6\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.020} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	$1227^{+24}_{-23} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.025}_{-0.029} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.8} \quad (+0.3\sigma)$	D_{220}	$5739^{+73}_{-71} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.017}_{-0.020} \quad (+0.2\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.3\sigma)$	D_{810}	$2541^{+25}_{-25} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.608^{+0.024}_{-0.028} \quad (+0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.7\sigma)$	D_{1420}	$817.4^{+8.9}_{-8.8} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.017}_{-0.020} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.2\sigma)$	D_{2000}	$230.7^{+3.0}_{-2.9} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.026} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9676^{+0.0093}_{-0.0090} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.013} \quad (+0.5\sigma)$
A^{kSZ}	$< 8.12 \quad (-0.3\sigma)$	Y_P	$0.2463^{+0.0019}_{-0.00096} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.012}_{-0.014} \quad (+0.6\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.2476^{+0.0019}_{-0.00097} \quad (-0.7\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-1.0\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	10^5D/H	$2.590^{+0.054}_{-0.048} \quad (-1.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.744^{+0.083}_{-0.14} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.4^{+3.5}_{-3.5} \quad (-1.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.90^{+0.44}_{-0.42} \quad (-1.5\sigma)$	χ_{lensing}^2	$9.11 \quad (\nu: 0.3)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.074}$	r_*	$143.97^{+0.95}_{-1.4} \quad (+0.9\sigma)$	χ_{simall}^2	$270 \quad (\nu: 15765.9) \quad (-72.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.058}$	$100\theta_*$	$1.04107^{+0.00059}_{-0.00064} \quad (+0.8\sigma)$	χ_{lowl}^2	$151 \quad (\nu: 15764.5) \quad (+81.2\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.829^{+0.089}_{-0.13} \quad (+0.9\sigma)$	χ_{plik}^2	$2360.9 \quad (\nu: 17.2) \quad (+269.0\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1060.25^{+0.77}_{-0.69} \quad (+0.3\sigma)$	χ_{Aver15}^2	$0.51 \quad (\nu: 0.1)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$146.59^{+0.98}_{-1.5} \quad (+0.8\sigma)$	χ_{Cooke17}^2	$0.16 \quad (\nu: 0.0)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	k_D	$0.1413^{+0.0012}_{-0.00091} \quad (-0.6\sigma)$	$\chi_{6\text{DF}}^2$	$0.43 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	$0.16081^{+0.00042}_{-0.00039} \quad (-1.3\sigma)$	χ_{MGS}^2	$0.73 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3340^{+83}_{-120} \quad (-0.2\sigma)$	χ_{DR12BAO}^2	$5.6 \quad (\nu: 1.6)$
H_0	$67.7^{+1.2}_{-1.0} \quad (+0.5\sigma)$	k_{eq}	$0.01027^{+0.00026}_{-0.00032} \quad (-0.6\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_Λ	$0.686^{+0.012}_{-0.012} \quad (+0.9\sigma)$	$100\theta_{\text{eq}}$	$0.826^{+0.026}_{-0.017} \quad (+0.2\sigma)$	χ_{CMB}^2	$2790.6 \quad (\nu: 17.8) \quad (+268.9\sigma)$
Ω_m	$0.314^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.014}_{-0.0088} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.7 \quad (\nu: 1.2)$
$\Omega_m h^2$	$0.1438^{+0.0031}_{-0.0026} \quad (-1.0\sigma)$	$H(0.15)$	$73.0^{+1.1}_{-0.95} \quad (+0.4\sigma)$	χ_{Abund}^2	$0.67 \quad (\nu: 0.1)$
$\Omega_\nu h^2$	$0.0028^{+0.0050}_{-0.0022} \quad (-0.3\sigma)$	$D_M(0.15)$	$640.0^{+9.1}_{-10} \quad (-0.5\sigma)$		
$\Omega_m h^3$	$0.0974^{+0.0029}_{-0.0016} \quad (-0.5\sigma)$	$H(0.38)$	$83.2^{+1.0}_{-0.79} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2809.63; R - 1 = 0.02220$$

8.53 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022343	$0.02241^{+0.00031}_{-0.00029}$ (+0.8 σ)	S_8	0.8223	$0.809^{+0.032}_{-0.036}$ (−0.2 σ)	$H(0.38)$	83.00	$83.4^{+1.5}_{-1.0}$ (+0.4 σ)
$\Omega_c h^2$	0.1191	$0.1192^{+0.0064}_{-0.0066}$ (−0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4504	$0.443^{+0.018}_{-0.020}$ (−0.2 σ)	$D_M(0.38)$	1529.1	1522^{+23}_{-30} (−0.6 σ)
$100\theta_{MC}$	1.04094	$1.04081^{+0.00064}_{-0.00070}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6032	$0.593^{+0.023}_{-0.026}$ (+0.1 σ)	$H(0.51)$	89.71	$90.2^{+1.5}_{-0.95}$ (+0.2 σ)
τ	0.0546	$0.056^{+0.016}_{-0.014}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9824	$0.963^{+0.033}_{-0.041}$ (+0.3 σ)	$D_M(0.51)$	1980.9	1971^{+29}_{-38} (−0.5 σ)
$m_{\nu, \text{sterile}}^{\text{eff}}$ [eV]	0.011	< 0.561 (−0.4 σ)	$r_{\text{drag}} h$	99.64	$99.5^{+1.6}_{-1.6}$ (+0.9 σ)	$H(0.61)$	95.33	$95.9^{+1.5}_{-0.91}$ (+0.1 σ)
N_{eff}	3.046	< 3.36 (−0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4294	$2.427^{+0.040}_{-0.041}$ (−0.5 σ)	$D_M(0.61)$	2305.2	2294^{+32}_{-43} (−0.5 σ)
$\ln(10^{10} A_s)$	3.0410	$3.048^{+0.032}_{-0.029}$ (+0.1 σ)	z_{re}	7.70	$7.9^{+1.5}_{-1.4}$ (+0.4 σ)	$H(2.33)$	235.99	$237.5^{+3.5}_{-2.5}$ (−0.9 σ)
n_s	0.9673	$0.969^{+0.011}_{-0.010}$ (+0.4 σ)	$10^9 A_s$	2.093	$2.109^{+0.068}_{-0.061}$ (+0.1 σ)	$D_M(2.33)$	5763	5731^{+50}_{-87} (+0.0 σ)
y_{cal}	1.00024	$1.0008^{+0.0049}_{-0.0050}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8762	$1.883^{+0.027}_{-0.024}$ (−0.7 σ)	$f\sigma_8(0.15)$	0.4550	$0.448^{+0.018}_{-0.020}$ (−0.2 σ)
A_{100}^{PS}	235.8	243^{+50}_{-50} (−0.9 σ)	D_{40}	1223.1	1222^{+24}_{-26} (−0.3 σ)	$\sigma_8(0.15)$	0.7466	$0.733^{+0.030}_{-0.035}$ (+0.5 σ)
A_{143}^{PS}	47.5	41^{+20}_{-20} (−1.4 σ)	D_{220}	5717	5726^{+75}_{-78} (+0.3 σ)	$f\sigma_8(0.38)$	0.4735	$0.466^{+0.018}_{-0.021}$ (+0.1 σ)
A_{217}^{PS}	103.5	102^{+30}_{-30} (−1.3 σ)	D_{810}	2535.0	2538^{+26}_{-27} (−0.1 σ)	$\sigma_8(0.38)$	0.6619	$0.650^{+0.027}_{-0.031}$ (+0.5 σ)
A_{217}^{CIB}	39.8	40^{+10}_{-10} (−1.3 σ)	D_{1420}	816.1	$815.6^{+9.4}_{-9.2}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4722	$0.465^{+0.018}_{-0.021}$ (+0.2 σ)
A_{143}^{tSZ}	4.40	< 7.34 (−0.5 σ)	D_{2000}	230.54	$229.8^{+3.2}_{-3.4}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6194	$0.608^{+0.026}_{-0.030}$ (+0.6 σ)
$r_{143 \times 217}^{\text{PS}}$	0.725	$0.65^{+0.25}_{-0.24}$	$n_{s,0.002}$	0.9673	$0.969^{+0.011}_{-0.010}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4672	$0.460^{+0.018}_{-0.021}$ (+0.3 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.73	—	Y_P	0.24539	$0.2467^{+0.0029}_{-0.0015}$ (−0.5 σ)	$\sigma_8(0.61)$	0.5894	$0.579^{+0.024}_{-0.028}$ (+0.6 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.94	—	Y_P^{BBN}	0.24671	$0.2481^{+0.0029}_{-0.0015}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.2972	$0.292^{+0.013}_{-0.014}$ (+0.6 σ)
A^{kSZ}	3.4	—	$10^5 D/H$	2.591	$2.615^{+0.076}_{-0.068}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3064	$0.301^{+0.013}_{-0.015}$ (+0.6 σ)
A_{100}^{dust}	1.022	$1.01^{+0.38}_{-0.38}$	Age/Gyr	13.796	$13.72^{+0.12}_{-0.21}$ (+0.1 σ)	f_{2000}^{143}	29.7	31^{+6}_{-6} (−0.8 σ)
A_{143}^{dust}	0.975	$0.96^{+0.34}_{-0.34}$	z_*	1089.88	$1090.04^{+0.58}_{-0.54}$ (−1.3 σ)	f_{2000}^{217}	106.44	$107.5^{+4.0}_{-3.9}$ (−1.0 σ)
A_{217}^{dust}	0.982	$0.97^{+0.20}_{-0.20}$	r_*	144.66	$143.8^{+1.3}_{-2.1}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	31.97	33^{+4}_{-4} (−1.0 σ)
$A_{143 \times 217}^{\text{dust}}$	1.019	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04113	$1.04094^{+0.00071}_{-0.00076}$ (+0.5 σ)	χ^2_{lensing}	8.94	9.5 (ν : 0.5)
c_{100}	0.99765	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	$D_M(z_*)/\text{Gpc}$	13.895	$13.81^{+0.12}_{-0.19}$ (+0.7 σ)	χ^2_{small}	396.07	397.3 (ν : 2.1) (+0.2 σ)
c_{217}	1.00128	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	z_{drag}	1059.82	$1060.15^{+0.95}_{-0.85}$ (+0.2 σ)	χ^2_{lowl}	22.86	22.72 (ν : 0.4) (−0.5 σ)
c_{TE}	0.9964	$0.9971^{+0.0096}_{-0.0097}$	r_{drag}	147.34	$146.4^{+1.4}_{-2.1}$ (+0.7 σ)	χ^2_{CamSpec}	11500.0	11516.1 (ν : 16.9)
c_{EE}	0.9920	$0.9934^{+0.0099}_{-0.0099}$	k_D	0.14058	$0.1413^{+0.0016}_{-0.0012}$ (−0.6 σ)	$\chi^2_{6\text{DF}}$	0.030	0.073 (ν : 0.0)
H_0	67.63	$67.9^{+1.5}_{-1.3}$ (+0.7 σ)	$100\theta_D$	0.16083	$0.16102^{+0.00066}_{-0.00054}$ (−0.8 σ)	χ^2_{MGS}	1.22	1.18 (ν : 0.1)
Ω_Λ	0.6892	$0.688^{+0.013}_{-0.013}$ (+0.9 σ)	z_{eq}	3379	3338^{+80}_{-110} (−0.2 σ)	χ^2_{DR12BAO}	4.42	5.2 (ν : 1.5)
Ω_m	0.3108	$0.312^{+0.013}_{-0.013}$ (−0.9 σ)	k_{eq}	0.010315	$0.01028^{+0.00028}_{-0.00032}$ (−0.6 σ)	χ^2_{prior}	2.1	7.8 (ν : 5.9) (+0.1 σ)
$\Omega_m h^2$	0.14216	$0.1440^{+0.0043}_{-0.0033}$ (−1.0 σ)	$100\theta_{\text{eq}}$	0.8175	$0.826^{+0.023}_{-0.016}$ (+0.2 σ)	χ^2_{CMB}	11927.8	11945.6 (ν : 18.3) (+1811.9 σ)
$\Omega_\nu h^2$	0.00077	$0.0024^{+0.0044}_{-0.0021}$ (−0.4 σ)	$100\theta_{s,\text{eq}}$	0.4516	$0.456^{+0.012}_{-0.0084}$ (+0.2 σ)	χ^2_{BAO}	5.67	6.5 (ν : 1.1)
$\Omega_m h^3$	0.09614	$0.0978^{+0.0043}_{-0.0023}$ (−0.3 σ)	$H(0.15)$	72.90	$73.3^{+1.5}_{-1.2}$ (+0.6 σ)			
σ_8	0.8079	$0.794^{+0.032}_{-0.037}$ (+0.5 σ)	$D_M(0.15)$	641.1	638^{+11}_{-14} (−0.6 σ)			

Best-fit $\chi^2_{\text{eff}} = 11935.63$; $\bar{\chi}^2_{\text{eff}} = 11959.89$; $\Delta\chi^2_{\text{eff}} = 2.49$; $R - 1 = 0.03604$
 χ^2_{eff} : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.42 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.94 small_100x143.offlike5_EE_Aplanck_B: 396.07 comman-
der_dx12.v3.2.29: 22.86 CamSpec like_10.7HM.1400_unified: 11499.95

8.54 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022368	$0.02241^{+0.00032}_{-0.00029}$ (+0.8 σ)	S_8	0.8213	$0.809^{+0.032}_{-0.035}$ (−0.3 σ)	$H(0.38)$	83.34	$83.5^{+1.5}_{-1.0}$ (+0.4 σ)
$\Omega_{\mathrm{c}}h^2$	0.1197	$0.1192^{+0.0066}_{-0.0065}$ (−0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4499	$0.443^{+0.018}_{-0.019}$ (−0.3 σ)	$D_{\mathrm{M}}(0.38)$	1522.2	1520^{+24}_{-31} (−0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04086	$1.04082^{+0.00064}_{-0.00071}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6034	$0.593^{+0.023}_{-0.026}$ (+0.1 σ)	$H(0.51)$	90.05	$90.3^{+1.6}_{-0.97}$ (+0.3 σ)
τ	0.0548	$0.057^{+0.016}_{-0.014}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9816	$0.964^{+0.033}_{-0.040}$ (+0.3 σ)	$D_{\mathrm{M}}(0.51)$	1972.3	1969^{+29}_{-39} (−0.6 σ)
$m_{\nu,\mathrm{sterile}}^{\mathrm{eff}}$ [eV]	0.000	< 0.532 (−0.5 σ)	$r_{\mathrm{drag}}h$	99.87	$99.6^{+1.6}_{-1.6}$ (+1.0 σ)	$H(0.61)$	95.67	$95.9^{+1.6}_{-0.94}$ (+0.1 σ)
N_{eff}	3.093	< 3.37 (−0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4283	$2.426^{+0.041}_{-0.041}$ (−0.5 σ)	$D_{\mathrm{M}}(0.61)$	2295.3	2292^{+32}_{-44} (−0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0433	$3.049^{+0.032}_{-0.029}$ (+0.1 σ)	z_{re}	7.73	$7.9^{+1.5}_{-1.4}$ (+0.4 σ)	$H(2.33)$	236.54	$237.4^{+3.6}_{-2.5}$ (−0.9 σ)
n_{s}	0.9679	$0.970^{+0.011}_{-0.010}$ (+0.5 σ)	$10^9 A_{\mathrm{s}}$	2.097	$2.110^{+0.068}_{-0.061}$ (+0.1 σ)	$D_{\mathrm{M}}(2.33)$	5743	5729^{+52}_{-90} (−0.0 σ)
y_{cal}	1.00049	$1.0008^{+0.0049}_{-0.0050}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8796	$1.883^{+0.028}_{-0.024}$ (−0.7 σ)	$f\sigma_8(0.15)$	0.4547	$0.448^{+0.017}_{-0.020}$ (−0.2 σ)
A_{100}^{PS}	240.3	243^{+50}_{-50} (−0.9 σ)	D_{40}	1224.1	1221^{+24}_{-26} (−0.3 σ)	$\sigma_8(0.15)$	0.7481	$0.734^{+0.030}_{-0.034}$ (+0.5 σ)
A_{143}^{PS}	40.6	41^{+20}_{-20} (−1.4 σ)	D_{220}	5725	5727^{+76}_{-78} (+0.4 σ)	$f\sigma_8(0.38)$	0.4735	$0.466^{+0.018}_{-0.020}$ (+0.1 σ)
A_{217}^{PS}	100.4	102^{+30}_{-30} (−1.3 σ)	D_{810}	2535.3	2538^{+26}_{-26} (−0.1 σ)	$\sigma_8(0.38)$	0.6634	$0.651^{+0.027}_{-0.031}$ (+0.6 σ)
A_{217}^{CIB}	44.6	40^{+10}_{-10} (−1.3 σ)	D_{1420}	815.2	$815.7^{+9.4}_{-9.2}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4724	$0.465^{+0.018}_{-0.020}$ (+0.2 σ)
A_{143}^{tSZ}	5.93	< 7.29 (−0.5 σ)	D_{2000}	229.98	$229.8^{+3.2}_{-3.4}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6209	$0.609^{+0.025}_{-0.029}$ (+0.6 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.577	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9679	$0.970^{+0.011}_{-0.010}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4677	$0.460^{+0.018}_{-0.020}$ (+0.3 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.78	—	Y_{P}	0.24602	$0.2468^{+0.0030}_{-0.0015}$ (−0.5 σ)	$\sigma_8(0.61)$	0.5909	$0.580^{+0.024}_{-0.028}$ (+0.6 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.11	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24735	$0.2481^{+0.0030}_{-0.0015}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.2980	$0.293^{+0.012}_{-0.014}$ (+0.6 σ)
A^{kSZ}	1.1	—	$10^5\mathrm{D}/\mathrm{H}$	2.602	$2.614^{+0.078}_{-0.068}$ (−1.2 σ)	$\sigma_8(2.33)$	0.3074	$0.302^{+0.013}_{-0.015}$ (+0.7 σ)
A_{100}^{dust}	1.005	$1.01^{+0.38}_{-0.38}$	Age/Gyr	13.750	$13.71^{+0.12}_{-0.21}$ (+0.0 σ)	f_{2000}^{143}	30.9	31^{+6}_{-6} (−0.8 σ)
A_{143}^{dust}	0.980	$0.96^{+0.35}_{-0.34}$	z_*	1089.95	$1090.02^{+0.58}_{-0.54}$ (−1.3 σ)	f_{2000}^{217}	107.29	$107.5^{+4.0}_{-3.9}$ (−1.0 σ)
A_{217}^{dust}	0.974	$0.97^{+0.20}_{-0.20}$	r_*	144.27	$143.8^{+1.3}_{-2.2}$ (+0.7 σ)	$f_{2000}^{143\times 217}$	32.61	33^{+4}_{-4} (−1.0 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.006	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04102	$1.04094^{+0.00072}_{-0.00077}$ (+0.6 σ)	$\chi_{\mathrm{lensing}}^2$	9.02	9.5 (ν : 0.5)
c_{100}	0.99761	$0.9976^{+0.0020}_{-0.0021}$ (−3.3 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.858	$13.81^{+0.13}_{-0.20}$ (+0.7 σ)	χ_{small}^2	396.12	397.4 (ν : 2.2) (+0.2 σ)
c_{217}	1.00143	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	z_{drag}	1059.93	$1060.16^{+0.97}_{-0.86}$ (+0.2 σ)	χ_{lowl}^2	22.86	22.66 (ν : 0.4) (−0.5 σ)
c_{TE}	0.9965	$0.9972^{+0.0097}_{-0.0098}$	r_{drag}	146.93	$146.4^{+1.4}_{-2.2}$ (+0.7 σ)	$\chi_{\mathrm{CamSpec}}^2$	11500.0	11516.2 (ν : 17.0)
c_{EE}	0.9929	$0.9934^{+0.0099}_{-0.0099}$	k_{D}	0.14086	$0.1413^{+0.0017}_{-0.0013}$ (−0.6 σ)	χ_{JLA}^2	1034.94	1035.11 (ν : 0.1)
H_0	67.97	$68.0^{+1.6}_{-1.3}$ (+0.7 σ)	$100\theta_{\mathrm{D}}$	0.16094	$0.16102^{+0.00067}_{-0.00054}$ (−0.8 σ)	$\chi_{6\mathrm{DF}}^2$	0.016	0.060 (ν : 0.0)
Ω_{Λ}	0.6910	$0.689^{+0.012}_{-0.013}$ (+1.0 σ)	z_{eq}	3375	3337^{+77}_{-110} (−0.3 σ)	χ_{MGS}^2	1.34	1.25 (ν : 0.1)
Ω_{m}	0.3090	$0.311^{+0.013}_{-0.012}$ (−1.0 σ)	k_{eq}	0.010332	$0.01028^{+0.00028}_{-0.00032}$ (−0.6 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.09	5.0 (ν : 1.2)
$\Omega_{\mathrm{m}}h^2$	0.14275	$0.1439^{+0.0044}_{-0.0033}$ (−1.0 σ)	$100\theta_{\mathrm{eq}}$	0.8182	$0.826^{+0.022}_{-0.016}$ (+0.2 σ)	χ_{prior}^2	2.3	7.8 (ν : 6.0) (+0.1 σ)
$\Omega_{\nu}h^2$	0.00065	$0.0023^{+0.0042}_{-0.0020}$ (−0.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.4520	$0.456^{+0.012}_{-0.0081}$ (+0.2 σ)	χ_{CMB}^2	11928.1	11945.8 (ν : 18.5) (+1812.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.09703	$0.0979^{+0.0045}_{-0.0024}$ (−0.3 σ)	$H(0.15)$	73.24	$73.3^{+1.5}_{-1.2}$ (+0.6 σ)	χ_{BAO}^2	5.45	6.3 (ν : 0.8)
σ_8	0.8093	$0.795^{+0.032}_{-0.037}$ (+0.5 σ)	$D_{\mathrm{M}}(0.15)$	638.0	637^{+11}_{-14} (−0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 12970.74$; $\Delta\chi_{\mathrm{eff}}^2 = 0.26$; $\bar{\chi}_{\mathrm{eff}}^2 = 12994.91$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.52$; $R - 1 = 0.03797$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.34 (Δ 0.06) DR12BAO: 4.09 (Δ -0.14) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consect8: 9.02 (Δ 0.06) small_100x143_offlike5_EE_Aplanck 396.12 (Δ 0.07) commander_dx12.v3.2.29: 22.86 (Δ 0.09) CamSpec like_10.7HM_1400_unified: 11500.05 (Δ -0.12) SN - JLA Pantheon18: 1034.94 (Δ -0.04)

8.55 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00029}_{-0.00028} \quad (+0.7\sigma)$	S_8	$0.808^{+0.033}_{-0.036} \quad (-0.3\sigma)$	$H(0.38)$	$83.3^{+1.1}_{-0.85} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0057}_{-0.0060} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.018}_{-0.020} \quad (-0.3\sigma)$	$D_M(0.38)$	$1525^{+20}_{-24} \quad (-0.5\sigma)$
$100\theta_{MC}$	$1.04085^{+0.00061}_{-0.00064} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.022}_{-0.026} \quad (+0.1\sigma)$	$H(0.51)$	$90.0^{+1.1}_{-0.77} \quad (+0.1\sigma)$
τ	$0.056^{+0.016}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.962^{+0.034}_{-0.041} \quad (+0.3\sigma)$	$D_M(0.51)$	$1975^{+24}_{-30} \quad (-0.4\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.579 \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$H(0.61)$	$95.7^{+1.1}_{-0.73} \quad (-0.1\sigma)$
N_{eff}	$< 3.28 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.040}_{-0.040} \quad (-0.5\sigma)$	$D_M(0.61)$	$2298^{+27}_{-33} \quad (-0.4\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.031}_{-0.029} \quad (+0.0\sigma)$	z_{re}	$7.9^{+1.5}_{-1.4} \quad (+0.3\sigma)$	$H(2.33)$	$237.1^{+2.7}_{-2.1} \quad (-1.0\sigma)$
n_s	$0.9684^{+0.0099}_{-0.0095} \quad (+0.3\sigma)$	$10^9 A_s$	$2.106^{+0.067}_{-0.060} \quad (+0.0\sigma)$	$D_M(2.33)$	$5741^{+40}_{-66} \quad (+0.2\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0051} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.024}_{-0.023} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.018}_{-0.020} \quad (-0.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1223^{+24}_{-25} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.028}_{-0.033} \quad (+0.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5726^{+76}_{-78} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.018}_{-0.020} \quad (+0.0\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.026}_{-0.030} \quad (+0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.7^{+9.2}_{-9.3} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.020} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$< 7.30 \quad (-0.5\sigma)$	D_{2000}	$229.9^{+3.1}_{-3.2} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.607^{+0.024}_{-0.028} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.26}_{-0.25}$	$n_{s,0.002}$	$0.9684^{+0.0099}_{-0.0095} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.020} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2464^{+0.0021}_{-0.0011} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.027} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2477^{+0.0022}_{-0.0011} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.5\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.609^{+0.066}_{-0.062} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.013}_{-0.014} \quad (+0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.743^{+0.093}_{-0.16} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.9\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1090.00^{+0.54}_{-0.49} \quad (-1.3\sigma)$	f_{2000}^{217}	$107.3^{+3.9}_{-3.9} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.0^{+1.1}_{-1.6} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	$1.04100^{+0.00063}_{-0.00071} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.4 \quad (\nu: 0.5)$
c_{100}	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.83^{+0.10}_{-0.15} \quad (+0.9\sigma)$	χ_{simall}^2	$397.3 \quad (\nu: 2.0) \quad (+0.2\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.06^{+0.79}_{-0.76} \quad (+0.0\sigma)$	χ_{lowl}^2	$22.83 \quad (\nu: 0.4) \quad (-0.4\sigma)$
c_{TE}	$0.9970^{+0.0096}_{-0.0097}$	r_{drag}	$146.7^{+1.1}_{-1.7} \quad (+0.9\sigma)$	χ_{CamSpec}^2	$11515.7 \quad (\nu: 16.2)$
c_{EE}	$0.9930^{+0.0098}_{-0.0098}$	k_D	$0.1411^{+0.0013}_{-0.0010} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.56 \quad (\nu: 0.1)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.6\sigma)$	$100\theta_D$	$0.16096^{+0.00053}_{-0.00047} \quad (-1.0\sigma)$	χ_{6DF}^2	$0.074 \quad (\nu: 0.0)$
Ω_Λ	$0.688^{+0.012}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3336^{+83}_{-110} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.16 \quad (\nu: 0.1)$
Ω_m	$0.312^{+0.013}_{-0.012} \quad (-0.9\sigma)$	k_{eq}	$0.01026^{+0.00027}_{-0.00031} \quad (-0.7\sigma)$	χ_{DR12BAO}^2	$5.3 \quad (\nu: 1.5)$
$\Omega_m h^2$	$0.1436^{+0.0035}_{-0.0029} \quad (-1.1\sigma)$	$100\theta_{\text{eq}}$	$0.827^{+0.024}_{-0.017} \quad (+0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$0.0025^{+0.0045}_{-0.0020} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.013}_{-0.0087} \quad (+0.2\sigma)$	χ_{CMB}^2	$11945.3 \quad (\nu: 17.7) \quad (+1811.9\sigma)$
$\Omega_m h^3$	$0.0973^{+0.0032}_{-0.0018} \quad (-0.5\sigma)$	$H(0.15)$	$73.1^{+1.2}_{-1.0} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.1)$
σ_8	$0.792^{+0.030}_{-0.036} \quad (+0.4\sigma)$	$D_M(0.15)$	$639.4^{+9.6}_{-11} \quad (-0.5\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11960.11; R - 1 = 0.03672$$

8.56 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02238^{+0.00029}_{-0.00028} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.018}_{-0.020} \quad (-0.3\sigma)$	$H(0.51)$	$90.0^{+1.1}_{-0.76} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0055}_{-0.0059} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.022}_{-0.026} \quad (+0.1\sigma)$	$D_M(0.51)$	$1975^{+24}_{-29} \quad (-0.4\sigma)$
$100\theta_{MC}$	$1.04085^{+0.00061}_{-0.00063} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.962^{+0.033}_{-0.041} \quad (+0.3\sigma)$	$H(0.61)$	$95.7^{+1.1}_{-0.71} \quad (-0.1\sigma)$
τ	$0.056^{+0.015}_{-0.014} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_M(0.61)$	$2298^{+27}_{-33} \quad (-0.4\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.581 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.040}_{-0.041} \quad (-0.5\sigma)$	$H(2.33)$	$237.1^{+2.7}_{-2.1} \quad (-1.1\sigma)$
N_{eff}	$< 3.27 \quad (-0.7\sigma)$	z_{re}	$7.9^{+1.5}_{-1.4} \quad (+0.3\sigma)$	$D_M(2.33)$	$5741^{+39}_{-64} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.031}_{-0.029} \quad (+0.0\sigma)$	$10^9 A_s$	$2.105^{+0.066}_{-0.060} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.018}_{-0.020} \quad (-0.2\sigma)$
n_s	$0.9683^{+0.0098}_{-0.0095} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.024}_{-0.023} \quad (-0.8\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.028}_{-0.033} \quad (+0.4\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0051} \quad (+0.1\sigma)$	D_{40}	$1223^{+24}_{-25} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.017}_{-0.020} \quad (+0.0\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{220}	$5725^{+75}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.025}_{-0.030} \quad (+0.5\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.020} \quad (+0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815.7^{+9.2}_{-9.2} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.607^{+0.024}_{-0.028} \quad (+0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{2000}	$229.9^{+3.1}_{-3.2} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.020} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.30 \quad (-0.5\sigma)$	$n_{s,0.002}$	$0.9683^{+0.0098}_{-0.0095} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.027} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_P	$0.2464^{+0.0021}_{-0.0011} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.291^{+0.012}_{-0.014} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P^{BBN}	$0.2477^{+0.0021}_{-0.0011} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.012}_{-0.014} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.609^{+0.062}_{-0.059} \quad (-1.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.9\sigma)$
A^{kSZ}	—	Age/Gyr	$13.745^{+0.091}_{-0.15} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.4^{+3.9}_{-3.8} \quad (-1.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.00^{+0.51}_{-0.47} \quad (-1.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$144.0^{+1.1}_{-1.6} \quad (+0.9\sigma)$	χ_{lensing}^2	$9.4 \quad (\nu: 0.5)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04100^{+0.00063}_{-0.00069} \quad (+0.7\sigma)$	χ_{simall}^2	$397.3 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$13.84^{+0.10}_{-0.15} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.84 \quad (\nu: 0.4) \quad (-0.4\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1060.05^{+0.79}_{-0.75} \quad (+0.0\sigma)$	χ_{CamSpec}^2	$11515.6 \quad (\nu: 16.1)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$146.7^{+1.1}_{-1.6} \quad (+0.9\sigma)$	χ_{Aver15}^2	$0.55 \quad (\nu: 0.1)$
c_{TE}	$0.9970^{+0.0096}_{-0.0097}$	k_D	$0.1411^{+0.0013}_{-0.0010} \quad (-0.7\sigma)$	χ_{Cooke17}^2	$0.12 \quad (\nu: 0.0)$
c_{EE}	$0.9930^{+0.0097}_{-0.0097}$	$100\theta_D$	$0.16096^{+0.00050}_{-0.00045} \quad (-1.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.074 \quad (\nu: 0.0)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.5\sigma)$	z_{eq}	$3336^{+83}_{-110} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.16 \quad (\nu: 0.1)$
Ω_Λ	$0.688^{+0.012}_{-0.012} \quad (+0.9\sigma)$	k_{eq}	$0.01026^{+0.00026}_{-0.00031} \quad (-0.7\sigma)$	χ_{DR12BAO}^2	$5.3 \quad (\nu: 1.5)$
Ω_m	$0.312^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.827^{+0.024}_{-0.017} \quad (+0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1435^{+0.0034}_{-0.0029} \quad (-1.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.013}_{-0.0087} \quad (+0.2\sigma)$	χ_{CMB}^2	$11945.2 \quad (\nu: 17.6) \quad (+1811.9\sigma)$
$\Omega_\nu h^2$	$0.0025^{+0.0045}_{-0.0020} \quad (-0.4\sigma)$	$H(0.15)$	$73.1^{+1.2}_{-0.99} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.0)$
$\Omega_m h^3$	$0.0973^{+0.0031}_{-0.0018} \quad (-0.5\sigma)$	$D_M(0.15)$	$639.5^{+9.5}_{-11} \quad (-0.5\sigma)$	χ_{Abund}^2	$0.67 \quad (\nu: 0.1)$
σ_8	$0.792^{+0.030}_{-0.036} \quad (+0.4\sigma)$	$H(0.38)$	$83.3^{+1.1}_{-0.84} \quad (+0.2\sigma)$		
S_8	$0.808^{+0.032}_{-0.036} \quad (-0.3\sigma)$	$D_M(0.38)$	$1525^{+20}_{-24} \quad (-0.4\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11960.15; R - 1 = 0.03562$$

8.57 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00031}_{-0.00029} \quad (+0.8\sigma)$	S_8	$0.810^{+0.032}_{-0.036} \quad (-0.2\sigma)$	$H(0.38)$	$83.4^{+1.5}_{-1.0} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0065}_{-0.0066} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.018}_{-0.020} \quad (-0.2\sigma)$	$D_M(0.38)$	$1522^{+24}_{-30} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04081^{+0.00065}_{-0.00070} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.593^{+0.023}_{-0.026} \quad (+0.1\sigma)$	$H(0.51)$	$90.2^{+1.5}_{-0.96} \quad (+0.2\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.963^{+0.033}_{-0.041} \quad (+0.3\sigma)$	$D_M(0.51)$	$1971^{+29}_{-38} \quad (-0.5\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.562 \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$99.5^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$H(0.61)$	$95.9^{+1.5}_{-0.92} \quad (+0.1\sigma)$
N_{eff}	$< 3.36 \quad (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.040}_{-0.040} \quad (-0.5\sigma)$	$D_M(0.61)$	$2293^{+32}_{-43} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.029}_{-0.028} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$H(2.33)$	$237.5^{+3.5}_{-2.5} \quad (-0.9\sigma)$
n_s	$0.969^{+0.011}_{-0.010} \quad (+0.4\sigma)$	$10^9 A_s$	$2.110^{+0.062}_{-0.058} \quad (+0.1\sigma)$	$D_M(2.33)$	$5730^{+51}_{-88} \quad (+0.0\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.027}_{-0.024} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.018}_{-0.020} \quad (-0.2\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1222^{+24}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.030}_{-0.035} \quad (+0.5\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5726^{+76}_{-78} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.021} \quad (+0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.027}_{-0.031} \quad (+0.6\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.6^{+9.3}_{-9.2} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.018}_{-0.021} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.34 \quad (-0.5\sigma)$	D_{2000}	$229.8^{+3.2}_{-3.4} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.609^{+0.026}_{-0.029} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.24}$	$n_{s,0.002}$	$0.969^{+0.011}_{-0.010} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.018}_{-0.021} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2468^{+0.0029}_{-0.0015} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.579^{+0.024}_{-0.028} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2481^{+0.0029}_{-0.0015} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.013}_{-0.014} \quad (+0.6\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.614^{+0.077}_{-0.068} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.013}_{-0.015} \quad (+0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.72^{+0.12}_{-0.21} \quad (+0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1090.04^{+0.58}_{-0.54} \quad (-1.3\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-3.9} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$143.8^{+1.3}_{-2.1} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04094^{+0.00071}_{-0.00076} \quad (+0.5\sigma)$	χ_{lensing}^2	$9.46 \quad (\nu: 0.5)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.81^{+0.13}_{-0.19} \quad (+0.7\sigma)$	χ_{simall}^2	$397.3 \quad (\nu: 2.1) \quad (+0.2\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.15^{+0.95}_{-0.86} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.72 \quad (\nu: 0.4) \quad (-0.5\sigma)$
c_{TE}	$0.9971^{+0.0096}_{-0.0097}$	r_{drag}	$146.4^{+1.4}_{-2.2} \quad (+0.7\sigma)$	χ_{CamSpec}^2	$11516.0 \quad (\nu: 16.9)$
c_{EE}	$0.9933^{+0.0099}_{-0.0099}$	k_D	$0.1413^{+0.0016}_{-0.0012} \quad (-0.6\sigma)$	$\chi_{6\text{DF}}^2$	$0.071 \quad (\nu: 0.0)$
H_0	$67.9^{+1.5}_{-1.3} \quad (+0.7\sigma)$	$100\theta_D$	$0.16102^{+0.00066}_{-0.00054} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.19 \quad (\nu: 0.1)$
Ω_Λ	$0.688^{+0.013}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3338^{+80}_{-110} \quad (-0.2\sigma)$	χ_{DR12BAO}^2	$5.2 \quad (\nu: 1.5)$
Ω_m	$0.312^{+0.013}_{-0.013} \quad (-0.9\sigma)$	k_{eq}	$0.01028^{+0.00028}_{-0.00033} \quad (-0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1440^{+0.0043}_{-0.0034} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.826^{+0.023}_{-0.016} \quad (+0.2\sigma)$	χ_{CMB}^2	$11945.5 \quad (\nu: 18.3) \quad (+1811.9\sigma)$
$\Omega_\nu h^2$	$0.0024^{+0.0044}_{-0.0021} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.012}_{-0.0084} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.0)$
$\Omega_m h^3$	$0.0979^{+0.0043}_{-0.0024} \quad (-0.3\sigma)$	$H(0.15)$	$73.3^{+1.5}_{-1.2} \quad (+0.6\sigma)$		
σ_8	$0.794^{+0.032}_{-0.037} \quad (+0.5\sigma)$	$D_M(0.15)$	$638^{+11}_{-14} \quad (-0.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11959.80; \Delta\bar{\chi}_{\text{eff}}^2 = 2.54; R - 1 = 0.03599$$

8.58 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02242^{+0.00032}_{-0.00029} \quad (+0.8\sigma)$	S_8	$0.809^{+0.032}_{-0.035} \quad (-0.2\sigma)$	$H(0.38)$	$83.5^{+1.5}_{-1.0} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0066}_{-0.0066} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.018}_{-0.019} \quad (-0.2\sigma)$	$D_M(0.38)$	$1520^{+24}_{-31} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04082^{+0.00064}_{-0.00072} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.594^{+0.023}_{-0.026} \quad (+0.1\sigma)$	$H(0.51)$	$90.3^{+1.6}_{-0.97} \quad (+0.3\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.964^{+0.033}_{-0.040} \quad (+0.3\sigma)$	$D_M(0.51)$	$1969^{+29}_{-39} \quad (-0.6\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.534 \quad (-0.5\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.9^{+1.6}_{-0.94} \quad (+0.1\sigma)$
N_{eff}	$< 3.37 \quad (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.040}_{-0.041} \quad (-0.5\sigma)$	$D_M(0.61)$	$2291^{+32}_{-44} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.050^{+0.030}_{-0.028} \quad (+0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$H(2.33)$	$237.4^{+3.6}_{-2.5} \quad (-0.9\sigma)$
n_s	$0.970^{+0.011}_{-0.010} \quad (+0.5\sigma)$	$10^9 A_s$	$2.111^{+0.063}_{-0.058} \quad (+0.2\sigma)$	$D_M(2.33)$	$5728^{+52}_{-91} \quad (-0.0\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.028}_{-0.024} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.017}_{-0.020} \quad (-0.2\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1221^{+24}_{-26} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.735^{+0.030}_{-0.034} \quad (+0.5\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5727^{+76}_{-78} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.466^{+0.018}_{-0.020} \quad (+0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.651^{+0.027}_{-0.031} \quad (+0.6\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.7^{+9.2}_{-9.2} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.018}_{-0.020} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.29 \quad (-0.5\sigma)$	D_{2000}	$229.8^{+3.2}_{-3.4} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.610^{+0.025}_{-0.029} \quad (+0.6\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.970^{+0.011}_{-0.010} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.018}_{-0.020} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2468^{+0.0030}_{-0.0015} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.580^{+0.024}_{-0.028} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2481^{+0.0030}_{-0.0015} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.012}_{-0.014} \quad (+0.6\sigma)$
A^{kSZ}	—	10^5D/H	$2.614^{+0.079}_{-0.069} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.013}_{-0.015} \quad (+0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.71^{+0.12}_{-0.22} \quad (+0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	z_*	$1090.02^{+0.58}_{-0.54} \quad (-1.3\sigma)$	f_{2000}^{217}	$107.4^{+4.0}_{-3.9} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$143.8^{+1.4}_{-2.2} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04094^{+0.00072}_{-0.00077} \quad (+0.6\sigma)$	χ_{lensing}^2	$9.5 \quad (\nu: 0.5)$
c_{100}	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.81^{+0.13}_{-0.20} \quad (+0.7\sigma)$	χ_{simall}^2	$397.4 \quad (\nu: 2.2) \quad (+0.2\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.17^{+0.98}_{-0.86} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.66 \quad (\nu: 0.4) \quad (-0.5\sigma)$
c_{TE}	$0.9971^{+0.0097}_{-0.0097}$	r_{drag}	$146.4^{+1.4}_{-2.2} \quad (+0.7\sigma)$	χ_{CamSpec}^2	$11516.1 \quad (\nu: 17.0)$
c_{EE}	$0.993^{+0.010}_{-0.010}$	k_D	$0.1413^{+0.0017}_{-0.0013} \quad (-0.6\sigma)$	χ_{JLA}^2	$1035.11 \quad (\nu: 0.1)$
H_0	$68.0^{+1.6}_{-1.3} \quad (+0.7\sigma)$	$100\theta_D$	$0.16102^{+0.00067}_{-0.00054} \quad (-0.8\sigma)$	χ_{6DF}^2	$0.059 \quad (\nu: 0.0)$
Ω_Λ	$0.689^{+0.012}_{-0.013} \quad (+1.0\sigma)$	z_{eq}	$3337^{+77}_{-110} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.25 \quad (\nu: 0.1)$
Ω_m	$0.311^{+0.013}_{-0.012} \quad (-1.0\sigma)$	k_{eq}	$0.01028^{+0.00028}_{-0.00032} \quad (-0.6\sigma)$	χ_{DR12BAO}^2	$4.9 \quad (\nu: 1.2)$
$\Omega_m h^2$	$0.1439^{+0.0044}_{-0.0033} \quad (-1.0\sigma)$	$100\theta_{\text{eq}}$	$0.826^{+0.022}_{-0.016} \quad (+0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$0.0023^{+0.0042}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.012}_{-0.0081} \quad (+0.2\sigma)$	χ_{CMB}^2	$11945.7 \quad (\nu: 18.5) \quad (+1811.9\sigma)$
$\Omega_m h^3$	$0.0979^{+0.0045}_{-0.0024} \quad (-0.3\sigma)$	$H(0.15)$	$73.3^{+1.5}_{-1.2} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
σ_8	$0.795^{+0.031}_{-0.037} \quad (+0.5\sigma)$	$D_M(0.15)$	$637^{+11}_{-14} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 12994.82; \Delta\bar{\chi}_{\text{eff}}^2 = 2.57; R - 1 = 0.03782$$

8.59 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00029}_{-0.00029} \quad (+0.7\sigma)$	S_8	$0.809^{+0.033}_{-0.036} \quad (-0.3\sigma)$	$H(0.38)$	$83.3^{+1.1}_{-0.85} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0057}_{-0.0060} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.018}_{-0.020} \quad (-0.3\sigma)$	$D_M(0.38)$	$1525^{+20}_{-24} \quad (-0.5\sigma)$
$100\theta_{MC}$	$1.04085^{+0.00061}_{-0.00064} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.022}_{-0.026} \quad (+0.1\sigma)$	$H(0.51)$	$90.0^{+1.1}_{-0.78} \quad (+0.1\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.962^{+0.033}_{-0.041} \quad (+0.3\sigma)$	$D_M(0.51)$	$1975^{+24}_{-30} \quad (-0.4\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.581 \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$99.5^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$H(0.61)$	$95.7^{+1.2}_{-0.73} \quad (-0.1\sigma)$
N_{eff}	$< 3.28 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.040}_{-0.040} \quad (-0.4\sigma)$	$D_M(0.61)$	$2298^{+27}_{-34} \quad (-0.4\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.029}_{-0.027} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$H(2.33)$	$237.1^{+2.7}_{-2.1} \quad (-1.0\sigma)$
n_s	$0.9685^{+0.0099}_{-0.0095} \quad (+0.3\sigma)$	$10^9 A_s$	$2.108^{+0.060}_{-0.056} \quad (+0.1\sigma)$	$D_M(2.33)$	$5740^{+40}_{-66} \quad (+0.2\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0051} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.024}_{-0.023} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.018}_{-0.020} \quad (-0.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1223^{+24}_{-25} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.028}_{-0.033} \quad (+0.5\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{220}	$5726^{+76}_{-78} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.018}_{-0.020} \quad (+0.0\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.025}_{-0.030} \quad (+0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.7^{+9.2}_{-9.3} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.020} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.30 \quad (-0.5\sigma)$	D_{2000}	$229.9^{+3.1}_{-3.2} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.607^{+0.024}_{-0.028} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.26}_{-0.25}$	$n_{s,0.002}$	$0.9685^{+0.0099}_{-0.0095} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.020} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2464^{+0.0022}_{-0.0011} \quad (-0.7\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.027} \quad (+0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2477^{+0.0022}_{-0.0011} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.5\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.609^{+0.066}_{-0.062} \quad (-1.3\sigma)$	$\sigma_8(2.33)$	$0.301^{+0.012}_{-0.014} \quad (+0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.743^{+0.094}_{-0.16} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.9\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1090.00^{+0.54}_{-0.49} \quad (-1.3\sigma)$	f_{2000}^{217}	$107.3^{+3.9}_{-3.8} \quad (-1.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.0^{+1.1}_{-1.6} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	$100\theta_*$	$1.04099^{+0.00063}_{-0.00071} \quad (+0.7\sigma)$	χ_{lensing}^2	$9.41 \quad (\nu: 0.5)$
c_{100}	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.83^{+0.10}_{-0.15} \quad (+0.9\sigma)$	χ_{simall}^2	$397.3 \quad (\nu: 2.1) \quad (+0.2\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1060.07^{+0.79}_{-0.77} \quad (+0.1\sigma)$	χ_{lowl}^2	$22.83 \quad (\nu: 0.4) \quad (-0.4\sigma)$
c_{TE}	$0.9970^{+0.0096}_{-0.0097}$	r_{drag}	$146.7^{+1.1}_{-1.7} \quad (+0.9\sigma)$	χ_{CamSpec}^2	$11515.7 \quad (\nu: 16.2)$
c_{EE}	$0.9930^{+0.0098}_{-0.0098}$	k_D	$0.1411^{+0.0013}_{-0.0010} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.57 \quad (\nu: 0.1)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.6\sigma)$	$100\theta_D$	$0.16096^{+0.00054}_{-0.00047} \quad (-1.0\sigma)$	χ_{6DF}^2	$0.072 \quad (\nu: 0.0)$
Ω_Λ	$0.688^{+0.012}_{-0.013} \quad (+0.9\sigma)$	z_{eq}	$3336^{+83}_{-110} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.17 \quad (\nu: 0.1)$
Ω_m	$0.312^{+0.013}_{-0.012} \quad (-0.9\sigma)$	k_{eq}	$0.01026^{+0.00027}_{-0.00031} \quad (-0.7\sigma)$	χ_{DR12BAO}^2	$5.2 \quad (\nu: 1.5)$
$\Omega_m h^2$	$0.1436^{+0.0035}_{-0.0029} \quad (-1.1\sigma)$	$100\theta_{\text{eq}}$	$0.827^{+0.024}_{-0.017} \quad (+0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$0.0025^{+0.0044}_{-0.0020} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.013}_{-0.0087} \quad (+0.2\sigma)$	χ_{CMB}^2	$11945.2 \quad (\nu: 17.6) \quad (+1811.9\sigma)$
$\Omega_m h^3$	$0.0973^{+0.0032}_{-0.0018} \quad (-0.5\sigma)$	$H(0.15)$	$73.1^{+1.2}_{-1.0} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.0)$
σ_8	$0.793^{+0.030}_{-0.036} \quad (+0.4\sigma)$	$D_M(0.15)$	$639.3^{+9.7}_{-11} \quad (-0.5\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11960.01; R - 1 = 0.03614$$

8.60 base_nnu_meffsterile_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00029}_{-0.00028} \quad (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.443^{+0.018}_{-0.020} \quad (-0.3\sigma)$	$H(0.51)$	$90.0^{+1.1}_{-0.76} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1186^{+0.0055}_{-0.0060} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.022}_{-0.026} \quad (+0.1\sigma)$	$D_M(0.51)$	$1975^{+24}_{-29} \quad (-0.4\sigma)$
$100\theta_{MC}$	$1.04085^{+0.00061}_{-0.00063} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.962^{+0.033}_{-0.041} \quad (+0.3\sigma)$	$H(0.61)$	$95.7^{+1.1}_{-0.72} \quad (-0.1\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$99.4^{+1.6}_{-1.6} \quad (+0.9\sigma)$	$D_M(0.61)$	$2298^{+27}_{-33} \quad (-0.4\sigma)$
$m_{\nu, \text{sterile}}^{\text{eff}} [\text{eV}]$	$< 0.584 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.040}_{-0.040} \quad (-0.4\sigma)$	$H(2.33)$	$237.1^{+2.7}_{-2.1} \quad (-1.1\sigma)$
N_{eff}	$< 3.27 \quad (-0.7\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$D_M(2.33)$	$5741^{+39}_{-65} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.028}_{-0.027} \quad (+0.1\sigma)$	$10^9 A_s$	$2.107^{+0.060}_{-0.056} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.018}_{-0.020} \quad (-0.2\sigma)$
n_s	$0.9684^{+0.0098}_{-0.0094} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.024}_{-0.023} \quad (-0.8\sigma)$	$\sigma_8(0.15)$	$0.732^{+0.028}_{-0.033} \quad (+0.5\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0051} \quad (+0.1\sigma)$	D_{40}	$1223^{+24}_{-25} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.017}_{-0.020} \quad (+0.0\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{220}	$5725^{+75}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.649^{+0.025}_{-0.030} \quad (+0.5\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.4\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.017}_{-0.020} \quad (+0.2\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815.7^{+9.1}_{-9.2} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.607^{+0.024}_{-0.028} \quad (+0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{2000}	$229.9^{+3.1}_{-3.2} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.017}_{-0.020} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.30 \quad (-0.5\sigma)$	$n_{s,0.002}$	$0.9684^{+0.0098}_{-0.0094} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.578^{+0.023}_{-0.027} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_P	$0.2464^{+0.0021}_{-0.0011} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.292^{+0.012}_{-0.014} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P^{BBN}	$0.2477^{+0.0021}_{-0.0011} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.300^{+0.012}_{-0.014} \quad (+0.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.609^{+0.062}_{-0.059} \quad (-1.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.9\sigma)$
A^{kSZ}	—	Age/Gyr	$13.744^{+0.092}_{-0.15} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.3^{+3.9}_{-3.8} \quad (-1.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.00^{+0.51}_{-0.47} \quad (-1.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-1.1\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$144.0^{+1.1}_{-1.6} \quad (+0.9\sigma)$	χ_{lensing}^2	$9.40 \quad (\nu: 0.5)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04100^{+0.00063}_{-0.00069} \quad (+0.7\sigma)$	χ_{simall}^2	$397.3 \quad (\nu: 2.1) \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$13.84^{+0.10}_{-0.15} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.84 \quad (\nu: 0.4) \quad (-0.4\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1060.05^{+0.79}_{-0.76} \quad (+0.0\sigma)$	χ_{CamSpec}^2	$11515.6 \quad (\nu: 16.1)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$146.7^{+1.1}_{-1.6} \quad (+0.9\sigma)$	χ_{Aver15}^2	$0.56 \quad (\nu: 0.1)$
c_{TE}	$0.9970^{+0.0096}_{-0.0097}$	k_D	$0.1411^{+0.0013}_{-0.0010} \quad (-0.7\sigma)$	χ_{Cooke17}^2	$0.12 \quad (\nu: 0.0)$
c_{EE}	$0.9930^{+0.0097}_{-0.0097}$	$100\theta_D$	$0.16096^{+0.00050}_{-0.00045} \quad (-1.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.073 \quad (\nu: 0.0)$
H_0	$67.8^{+1.2}_{-1.1} \quad (+0.6\sigma)$	z_{eq}	$3336^{+83}_{-110} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.16 \quad (\nu: 0.1)$
Ω_Λ	$0.688^{+0.012}_{-0.012} \quad (+0.9\sigma)$	k_{eq}	$0.01026^{+0.00026}_{-0.00031} \quad (-0.7\sigma)$	χ_{DR12BAO}^2	$5.3 \quad (\nu: 1.5)$
Ω_m	$0.312^{+0.012}_{-0.012} \quad (-0.9\sigma)$	$100\theta_{\text{eq}}$	$0.827^{+0.024}_{-0.017} \quad (+0.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1435^{+0.0034}_{-0.0029} \quad (-1.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.456^{+0.013}_{-0.0087} \quad (+0.2\sigma)$	χ_{CMB}^2	$11945.1 \quad (\nu: 17.5) \quad (+1811.8\sigma)$
$\Omega_\nu h^2$	$0.0025^{+0.0044}_{-0.0020} \quad (-0.4\sigma)$	$H(0.15)$	$73.1^{+1.2}_{-1.0} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.0)$
$\Omega_m h^3$	$0.0973^{+0.0031}_{-0.0018} \quad (-0.5\sigma)$	$D_M(0.15)$	$639.4^{+9.5}_{-11} \quad (-0.5\sigma)$	χ_{Abund}^2	$0.67 \quad (\nu: 0.1)$
σ_8	$0.792^{+0.030}_{-0.036} \quad (+0.4\sigma)$	$H(0.38)$	$83.3^{+1.1}_{-0.84} \quad (+0.2\sigma)$		
S_8	$0.808^{+0.032}_{-0.036} \quad (-0.3\sigma)$	$D_M(0.38)$	$1525^{+20}_{-24} \quad (-0.5\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11960.05; R - 1 = 0.03510$$

9 nnu+mnu

9.1 base_nnu_mnu_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02201	$0.02193^{+0.00069}_{-0.00079}$	S_8	0.846	$0.836^{+0.051}_{-0.052}$	$100\theta_{s,eq}$	0.4461	$0.446^{+0.013}_{-0.013}$
$\Omega_c h^2$	0.1184	$0.1199^{+0.0081}_{-0.0079}$	$\sigma_8 \Omega_m^{0.5}$	0.4633	$0.458^{+0.028}_{-0.028}$	$H(0.15)$	71.5	$70.1^{+6.2}_{-7.2}$
$100\theta_{MC}$	1.04105	$1.0408^{+0.0012}_{-0.0012}$	$\sigma_8 \Omega_m^{0.25}$	0.6156	$0.597^{+0.040}_{-0.052}$	$D_M(0.15)$	655	672^{+80}_{-60}
τ	0.0504	$0.051^{+0.017}_{-0.016}$	$\sigma_8/h^{0.5}$	1.006	$0.969^{+0.063}_{-0.088}$	$H(0.38)$	81.6	$80.7^{+5.6}_{-6.2}$
Σm_ν [eV]	0.001	< 0.725	$r_{drag} h$	98.5	$95.5^{+7.5}_{-9.8}$	$D_M(0.38)$	1559	1592^{+160}_{-130}
N_{eff}	2.87	$2.93^{+0.58}_{-0.58}$	$\langle d^2 \rangle^{1/2}$	2.471	$2.461^{+0.095}_{-0.092}$	$H(0.51)$	88.4	$87.7^{+5.1}_{-5.9}$
$\ln(10^{10} A_s)$	3.0306	$3.035^{+0.042}_{-0.043}$	z_{re}	7.30	$7.4^{+1.7}_{-1.7}$	$D_M(0.51)$	2018	2056^{+200}_{-160}
n_s	0.9573	$0.956^{+0.028}_{-0.031}$	$10^9 A_s$	2.071	$2.080^{+0.089}_{-0.087}$	$H(0.61)$	94.0	$93.5^{+4.9}_{-5.6}$
y_{cal}	1.00012	$1.0005^{+0.0049}_{-0.0049}$	$10^9 A_s e^{-2\tau}$	1.8726	$1.878^{+0.044}_{-0.047}$	$D_M(0.61)$	2347	2388^{+220}_{-180}
A_{217}^{CIB}	46.7	48^{+10}_{-10}	D_{40}	1238.4	1240^{+46}_{-44}	$H(2.33)$	234.2	$236.5^{+7.4}_{-7.4}$
$\xi^{tSZ \times CIB}$	0.58	—	D_{220}	5704	5710^{+81}_{-82}	$D_M(2.33)$	5839	5869^{+330}_{-300}
A_{143}^{tSZ}	6.92	$5.1^{+3.8}_{-4.0}$	D_{810}	2534.3	2536^{+28}_{-28}	$f\sigma_8(0.15)$	0.4663	$0.460^{+0.026}_{-0.029}$
A_{100}^{PS}	249	263^{+60}_{-60}	D_{1420}	816.0	815^{+10}_{-10}	$\sigma_8(0.15)$	0.755	$0.716^{+0.066}_{-0.10}$
A_{143}^{PS}	50.6	49^{+20}_{-20}	D_{2000}	230.94	$229.6^{+4.6}_{-4.6}$	$f\sigma_8(0.38)$	0.4825	$0.470^{+0.030}_{-0.037}$
$A_{143 \times 217}^{PS}$	51.9	44^{+20}_{-20}	$n_{s,0.002}$	0.9573	$0.956^{+0.028}_{-0.031}$	$\sigma_8(0.38)$	0.668	$0.632^{+0.062}_{-0.099}$
A_{217}^{PS}	121.0	115^{+20}_{-20}	Y_P	0.2429	$0.2436^{+0.0079}_{-0.0084}$	$f\sigma_8(0.51)$	0.4799	$0.465^{+0.031}_{-0.043}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.2442	$0.2449^{+0.0079}_{-0.0085}$	$\sigma_8(0.51)$	0.624	$0.590^{+0.060}_{-0.095}$
A_{100}^{dustTT}	8.76	$8.9^{+3.6}_{-3.6}$	$10^5 D/H$	2.594	$2.63^{+0.14}_{-0.14}$	$f\sigma_8(0.61)$	0.4741	$0.458^{+0.032}_{-0.046}$
A_{143}^{dustTT}	10.72	$10.7^{+3.5}_{-3.5}$	Age/Gyr	13.98	$14.05^{+0.77}_{-0.70}$	$\sigma_8(0.61)$	0.594	$0.561^{+0.058}_{-0.092}$
$A_{143 \times 217}^{dustTT}$	19.6	$18.3^{+6.5}_{-6.4}$	z_*	1090.06	$1090.4^{+1.2}_{-1.0}$	$f\sigma_8(2.33)$	0.2981	$0.283^{+0.028}_{-0.045}$
A_{217}^{dustTT}	95.0	93^{+10}_{-10}	r_*	146.0	$145.4^{+5.3}_{-5.0}$	$\sigma_8(2.33)$	0.3073	$0.290^{+0.032}_{-0.050}$
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04134	$1.0411^{+0.0015}_{-0.0014}$	f_{2000}^{143}	28.9	31^{+7}_{-7}
c_{217}	0.99824	$0.9982^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	14.021	$13.96^{+0.50}_{-0.47}$	$f_{2000}^{143 \times 217}$	32.2	34^{+5}_{-5}
H_0	66.2	$64.5^{+6.7}_{-7.9}$	z_{drag}	1058.83	$1058.8^{+2.3}_{-2.5}$	f_{2000}^{217}	106.54	$108.2^{+4.8}_{-4.7}$
Ω_Λ	0.679	$0.650^{+0.069}_{-0.099}$	r_{drag}	148.8	$148.2^{+5.6}_{-5.2}$	χ_{simall}^2	395.70	$396.9 (\nu: 1.5)$
Ω_m	0.321	$0.350^{+0.099}_{-0.069}$	k_D	0.13945	$0.1399^{+0.0038}_{-0.0039}$	χ_{lowl}^2	24.55	$24.9 (\nu: 3.3)$
$\Omega_m h^2$	0.1404	$0.1440^{+0.0098}_{-0.0089}$	$100\theta_D$	0.16067	$0.1609^{+0.0013}_{-0.0013}$	χ_{plik}^2	757.2	$772.7 (\nu: 18.4)$
$\Omega_\nu h^2$	0.00001	< 0.00718	z_{eq}	3435	3442^{+150}_{-140}	χ_{prior}^2	1.3	$7.3 (\nu: 6.6)$
$\Omega_m h^3$	0.0929	$0.093^{+0.012}_{-0.012}$	k_{eq}	0.010361	$0.01042^{+0.00034}_{-0.00032}$	χ_{CMB}^2	1177.4	$1194.5 (\nu: 18.4)$
σ_8	0.818	$0.778^{+0.067}_{-0.11}$	$100\theta_{eq}$	0.8064	$0.805^{+0.026}_{-0.026}$			

Best-fit $\chi_{eff}^2 = 1178.71$; $\Delta\chi_{eff}^2 = -0.87$; $\bar{\chi}_{eff}^2 = 1201.83$; $\Delta\bar{\chi}_{eff}^2 = 2.25$; $R - 1 = 0.00661$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.70 (Δ -0.18) commander_dx12_v3_2_29: 24.55 (Δ 0.95) plik_rd12_HM_v22_TT: 757.19 (Δ -1.56)

9.2 base_nnu_mnu_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02208	$0.02190^{+0.00067}_{-0.00074}$ (-0.1σ)	S_8	0.8336	$0.839^{+0.034}_{-0.033}$ $(+0.1\sigma)$	$100\theta_{s,eq}$	0.4479	$0.445^{+0.012}_{-0.013}$ (-0.1σ)
$\Omega_c h^2$	0.1171	$0.1192^{+0.0079}_{-0.0075}$ (-0.2σ)	$\sigma_8 \Omega_m^{0.5}$	0.4566	$0.460^{+0.019}_{-0.018}$ $(+0.1\sigma)$	$H(0.15)$	71.7	$69.8^{+5.7}_{-6.3}$ (-0.1σ)
$100\theta_{MC}$	1.04119	$1.0408^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6093	$0.599^{+0.025}_{-0.031}$ $(+0.1\sigma)$	$D_M(0.15)$	652	674^{+70}_{-59} $(+0.1\sigma)$
τ	0.0507	$0.051^{+0.016}_{-0.015}$ $(+0.0\sigma)$	$\sigma_8/h^{0.5}$	0.9976	$0.973^{+0.040}_{-0.054}$ $(+0.1\sigma)$	$H(0.38)$	81.7	$80.4^{+5.1}_{-5.7}$ (-0.1σ)
Σm_ν [eV]	0.001	< 0.569 (-0.1σ)	$r_{drag} h$	99.2	$95.5^{+6.8}_{-8.5}$ (-0.0σ)	$D_M(0.38)$	1554	1597^{+150}_{-130} $(+0.1\sigma)$
N_{eff}	2.85	$2.88^{+0.57}_{-0.56}$ (-0.2σ)	$\langle d^2 \rangle^{1/2}$	2.456	$2.467^{+0.079}_{-0.069}$ $(+0.1\sigma)$	$H(0.51)$	88.4	$87.4^{+4.9}_{-5.3}$ (-0.1σ)
$\ln(10^{10} A_s)$	3.0280	$3.034^{+0.041}_{-0.041}$ (-0.0σ)	z_{re}	7.29	$7.4^{+1.6}_{-1.7}$ $(+0.0\sigma)$	$D_M(0.51)$	2013	2062^{+180}_{-150} $(+0.1\sigma)$
n_s	0.9580	$0.954^{+0.026}_{-0.028}$ (-0.1σ)	$10^9 A_s$	2.066	$2.078^{+0.086}_{-0.084}$ (-0.0σ)	$H(0.61)$	93.99	$93.2^{+4.8}_{-5.0}$ (-0.1σ)
y_{cal}	1.00009	$1.0005^{+0.0049}_{-0.0049}$ $(+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8664	$1.875^{+0.043}_{-0.045}$ (-0.1σ)	$D_M(0.61)$	2342	2395^{+190}_{-170} $(+0.1\sigma)$
A_{217}^{CIB}	47.1	47^{+10}_{-10} (-0.0σ)	D_{40}	1236.2	1245^{+42}_{-40} $(+0.2\sigma)$	$H(2.33)$	233.4	$235.8^{+7.4}_{-7.2}$ (-0.2σ)
$\xi^{tSZ \times CIB}$	0.47	—	D_{220}	5713	5711^{+82}_{-81} $(+0.0\sigma)$	$D_M(2.33)$	5842	5887^{+310}_{-270} $(+0.1\sigma)$
A_{143}^{tSZ}	7.05	$5.2^{+3.8}_{-4.0}$ $(+0.0\sigma)$	D_{810}	2532.6	2536^{+28}_{-28} (-0.0σ)	$f\sigma_8(0.15)$	0.4601	$0.462^{+0.016}_{-0.016}$ $(+0.1\sigma)$
A_{100}^{PS}	250	261^{+60}_{-60} (-0.1σ)	D_{1420}	816.3	815^{+10}_{-11} $(+0.1\sigma)$	$\sigma_8(0.15)$	0.751	$0.718^{+0.056}_{-0.077}$ $(+0.0\sigma)$
A_{143}^{PS}	48.0	48^{+20}_{-20} (-0.1σ)	D_{2000}	231.19	$230.0^{+4.5}_{-4.5}$ $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4775	$0.472^{+0.018}_{-0.021}$ $(+0.1\sigma)$
$A_{143 \times 217}^{PS}$	48.4	44^{+20}_{-20} (-0.0σ)	$n_{s,0.002}$	0.9580	$0.954^{+0.026}_{-0.028}$ (-0.1σ)	$\sigma_8(0.38)$	0.665	$0.633^{+0.054}_{-0.074}$ $(+0.0\sigma)$
A_{217}^{PS}	119.5	115^{+20}_{-20} $(+0.0\sigma)$	Y_P	0.2426	$0.2429^{+0.0078}_{-0.0081}$ (-0.2σ)	$f\sigma_8(0.51)$	0.4755	$0.467^{+0.021}_{-0.027}$ $(+0.1\sigma)$
A^{kSZ}	0.00	< 8.43 (-0.1σ)	Y_P^{BBN}	0.2439	$0.2442^{+0.0078}_{-0.0081}$ (-0.2σ)	$\sigma_8(0.51)$	0.622	$0.592^{+0.053}_{-0.072}$ $(+0.0\sigma)$
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	$10^5 D/H$	2.571	$2.62^{+0.14}_{-0.14}$ (-0.2σ)	$f\sigma_8(0.61)$	0.4702	$0.460^{+0.023}_{-0.031}$ $(+0.1\sigma)$
A_{143}^{dustTT}	10.81	$10.7^{+3.5}_{-3.5}$ (-0.0σ)	Age/Gyr	13.99	$14.09^{+0.74}_{-0.65}$ $(+0.1\sigma)$	$\sigma_8(0.61)$	0.592	$0.562^{+0.051}_{-0.069}$ $(+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	19.5	$18.2^{+6.5}_{-6.4}$ (-0.0σ)	z_*	1089.83	$1090.3^{+1.2}_{-1.0}$ (-0.1σ)	$f\sigma_8(2.33)$	0.2973	$0.284^{+0.025}_{-0.034}$ $(+0.0\sigma)$
A_{217}^{dustTT}	95.0	93^{+10}_{-10} $(+0.0\sigma)$	r_*	146.4	$145.8^{+5.1}_{-4.9}$ $(+0.2\sigma)$	$\sigma_8(2.33)$	0.3068	$0.291^{+0.029}_{-0.039}$ $(+0.0\sigma)$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$100\theta_*$	1.04150	$1.0412^{+0.0015}_{-0.0014}$ $(+0.1\sigma)$	f_{2000}^{143}	28.6	31^{+7}_{-7} (-0.1σ)
c_{217}	0.99824	$0.9982^{+0.0012}_{-0.0012}$ (-0.0σ)	$D_M(z_*)/\text{Gpc}$	14.059	$14.01^{+0.48}_{-0.46}$ $(+0.2\sigma)$	$f_{2000}^{143 \times 217}$	31.9	33^{+5}_{-5} (-0.1σ)
H_0	66.4	$64.3^{+6.1}_{-6.9}$ (-0.1σ)	z_{drag}	1058.90	$1058.7^{+2.2}_{-2.4}$ (-0.1σ)	f_{2000}^{217}	106.39	$107.8^{+4.8}_{-4.7}$ (-0.1σ)
Ω_Λ	0.685	$0.651^{+0.061}_{-0.085}$ $(+0.0\sigma)$	r_{drag}	149.2	$148.7^{+5.4}_{-5.1}$ $(+0.2\sigma)$	$\chi^2_{lensing}$	8.74	$9.2 (\nu: 0.6)$
Ω_m	0.315	$0.349^{+0.085}_{-0.061}$ (-0.0σ)	k_D	0.13919	$0.1395^{+0.0037}_{-0.0037}$ (-0.2σ)	χ^2_{small}	395.68	$396.9 (\nu: 1.4)$ (-0.0σ)
$\Omega_m h^2$	0.1392	$0.1432^{+0.0096}_{-0.0087}$ (-0.2σ)	$100\theta_D$	0.16054	$0.1608^{+0.0013}_{-0.0013}$ (-0.2σ)	χ^2_{lowl}	24.31	$25.3 (\nu: 3.0)$ $(+0.1\sigma)$
$\Omega_\nu h^2$	0.00001	< 0.00554 (-0.1σ)	z_{eq}	3416	3450^{+140}_{-120} $(+0.1\sigma)$	χ^2_{plik}	757.7	$771.6 (\nu: 15.5)$ (-0.2σ)
$\Omega_m h^3$	0.0925	$0.092^{+0.012}_{-0.011}$ (-0.1σ)	k_{eq}	0.010286	$0.01041^{+0.00033}_{-0.00029}$ (-0.1σ)	χ^2_{prior}	1.4	$7.3 (\nu: 6.6)$ (-0.0σ)
σ_8	0.813	$0.780^{+0.056}_{-0.077}$ $(+0.1\sigma)$	$100\theta_{eq}$	0.8101	$0.804^{+0.023}_{-0.026}$ (-0.1σ)	χ^2_{CMB}	1186.4	$1203.1 (\nu: 17.3)$ $(+1.4\sigma)$

Best-fit $\chi^2_{eff} = 1187.75$; $\Delta\chi^2_{eff} = -0.82$; $\bar{\chi}^2_{eff} = 1210.35$; $\Delta\bar{\chi}^2_{eff} = 1.93$; $R - 1 = 0.00978$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.74 (Δ -0.16) small.100x143_offlike5_EE_Aplanck_B: 395.68 (Δ -0.18) commander_dx12_v3.2.29: 24.31 (Δ 1.07) plik_rd12_HM_v22.TT: 757.67 (Δ -1.65)

9.3 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022244	$0.02222^{+0.00044}_{-0.00045}$ (+0.8 σ)	$\Omega_m h^2$	0.1394	$0.1416^{+0.0068}_{-0.0061}$ (−0.5 σ)	k_{eq}	0.010299	$0.01035^{+0.00024}_{-0.00023}$ (−0.5 σ)
$\Omega_c h^2$	0.1171	$0.1183^{+0.0061}_{-0.0057}$ (−0.4 σ)	$\Omega_\nu h^2$	0.00000	< 0.00311 (−0.5 σ)	$100\theta_{\text{eq}}$	0.8100	$0.809^{+0.014}_{-0.013}$ (+0.3 σ)
$100\theta_{\text{MC}}$	1.04128	$1.04111^{+0.00087}_{-0.00086}$ (+0.6 σ)	$\Omega_m h^3$	0.0928	$0.0934^{+0.0078}_{-0.0073}$ (+0.1 σ)	$100\theta_{\text{s,eq}}$	0.4477	$0.4475^{+0.0070}_{-0.0067}$ (+0.3 σ)
τ	0.0540	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	σ_8	0.8167	$0.799^{+0.040}_{-0.051}$ (+0.4 σ)	$H(0.15)$	71.87	$71.3^{+3.3}_{-3.4}$ (+0.4 σ)
Σm_ν [eV]	0.000	< 0.305 (−0.5 σ)	S_8	0.8355	$0.832^{+0.033}_{-0.034}$ (−0.2 σ)	$D_{\text{M}}(0.15)$	650.5	657^{+35}_{-33} (−0.4 σ)
N_{eff}	2.852	$2.91^{+0.38}_{-0.36}$ (−0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4576	$0.456^{+0.018}_{-0.019}$ (−0.2 σ)	$H(0.38)$	81.91	$81.6^{+3.0}_{-3.3}$ (+0.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.0369	$3.038^{+0.037}_{-0.036}$ (+0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6113	$0.603^{+0.025}_{-0.028}$ (+0.3 σ)	$D_{\text{M}}(0.38)$	1551	1562^{+74}_{-71} (−0.4 σ)
n_{s}	0.9593	$0.959^{+0.017}_{-0.017}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	1.0006	$0.983^{+0.037}_{-0.045}$ (+0.4 σ)	$H(0.51)$	88.57	$88.4^{+3.0}_{-3.1}$ (+0.3 σ)
y_{cal}	1.00060	$1.0006^{+0.0049}_{-0.0049}$ (+0.1 σ)	$r_{\text{drag}} h$	99.27	$97.9^{+3.7}_{-4.1}$ (+0.5 σ)	$D_{\text{M}}(0.51)$	2009	2022^{+91}_{-87} (−0.4 σ)
A_{217}^{CIB}	43.8	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.463	$2.454^{+0.060}_{-0.059}$ (−0.1 σ)	$H(0.61)$	94.15	$94.1^{+3.0}_{-3.1}$ (+0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.88	—	z_{re}	7.60	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2337	2351^{+100}_{-98} (−0.4 σ)
A_{143}^{tSZ}	6.91	$5.6^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_{\text{s}}$	2.084	$2.086^{+0.078}_{-0.074}$ (+0.2 σ)	$H(2.33)$	233.6	$235.0^{+5.5}_{-5.2}$ (−0.4 σ)
A_{100}^{PS}	244	256^{+50}_{-50} (−0.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8708	$1.874^{+0.035}_{-0.035}$ (−0.2 σ)	$D_{\text{M}}(2.33)$	5833	5835^{+180}_{-170} (−0.2 σ)
A_{143}^{PS}	50.8	45^{+20}_{-20} (−0.5 σ)	D_{40}	1238.0	1239^{+31}_{-31} (−0.1 σ)	$f\sigma_8(0.15)$	0.4613	$0.459^{+0.017}_{-0.018}$ (−0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	56.5	42^{+20}_{-20} (−0.2 σ)	D_{220}	5733	5732^{+78}_{-75} (+0.5 σ)	$\sigma_8(0.15)$	0.7543	$0.737^{+0.038}_{-0.049}$ (+0.4 σ)
A_{217}^{PS}	123.6	115^{+20}_{-20} (+0.0 σ)	D_{810}	2539.2	2538^{+27}_{-27} (+0.2 σ)	$f\sigma_8(0.38)$	0.4790	$0.474^{+0.018}_{-0.019}$ (+0.2 σ)
A^{kSZ}	0.00	< 7.82 (−0.2 σ)	D_{1420}	819.6	$817.9^{+9.6}_{-9.5}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6681	$0.652^{+0.036}_{-0.046}$ (+0.5 σ)
A_{100}^{dustTT}	8.70	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	232.57	$231.5^{+3.6}_{-3.6}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4772	$0.472^{+0.019}_{-0.021}$ (+0.3 σ)
A_{143}^{dustTT}	10.91	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9593	$0.959^{+0.017}_{-0.017}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6250	$0.609^{+0.034}_{-0.044}$ (+0.5 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.1	$18.5^{+6.4}_{-6.4}$ (+0.1 σ)	Y_{P}	0.2427	$0.2434^{+0.0052}_{-0.0051}$ (−0.0 σ)	$f\sigma_8(0.61)$	0.4719	$0.466^{+0.019}_{-0.022}$ (+0.4 σ)
A_{217}^{dustTT}	95.9	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2440	$0.2447^{+0.0053}_{-0.0052}$ (−0.0 σ)	$\sigma_8(0.61)$	0.5946	$0.580^{+0.033}_{-0.042}$ (+0.5 σ)
A_{100}^{dustTE}	0.113	$0.115^{+0.075}_{-0.074}$	10^5D/H	2.542	$2.565^{+0.091}_{-0.086}$ (−0.9 σ)	$f\sigma_8(2.33)$	0.2987	$0.292^{+0.016}_{-0.020}$ (+0.5 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	Age/Gyr	13.964	$13.97^{+0.44}_{-0.41}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3083	$0.300^{+0.018}_{-0.023}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.63	$1089.82^{+0.71}_{-0.69}$ (−1.0 σ)	f_{2000}^{143}	27.0	29^{+6}_{-6} (−0.7 σ)
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	r_*	146.28	$145.7^{+3.5}_{-3.6}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	30.74	32^{+4}_{-4} (−0.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	1.04157	$1.0414^{+0.0011}_{-0.0011}$ (+0.4 σ)	f_{2000}^{217}	105.38	$106.5^{+3.9}_{-3.8}$ (−0.7 σ)
A_{217}^{dustTE}	2.07	$2.09^{+0.53}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.044	$13.99^{+0.33}_{-0.34}$ (+0.1 σ)	χ_{small}^2	396.02	397.1 (ν : 1.7) (+0.1 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.28	$1059.4^{+1.6}_{-1.6}$ (+0.4 σ)	χ_{lowl}^2	24.29	24.4 (ν : 1.1) (−0.2 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	149.01	$148.4^{+3.7}_{-3.8}$ (+0.1 σ)	χ_{plik}^2	2342.0	2360.0 (ν : 20.3) (+261.4 σ)
H_0	66.62	$66.0^{+3.5}_{-3.7}$ (+0.4 σ)	k_{D}	0.13952	$0.1399^{+0.0028}_{-0.0026}$ (+0.0 σ)	χ_{prior}^2	1.4	11.6 (ν : 10.0) (+1.2 σ)
Ω_Λ	0.6860	$0.674^{+0.031}_{-0.036}$ (+0.5 σ)	$100\theta_{\text{D}}$	0.16033	$0.16051^{+0.00083}_{-0.00079}$ (−0.6 σ)	χ_{CMB}^2	2762.3	2781.4 (ν : 20.2) (+261.8 σ)
Ω_{m}	0.3140	$0.326^{+0.036}_{-0.031}$ (−0.5 σ)	z_{eq}	3419	3423^{+72}_{-72} (−0.3 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2763.73$; $\Delta\chi_{\text{eff}}^2 = -2.04$; $\bar{\chi}_{\text{eff}}^2 = 2792.98$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.21$; $R - 1 = 0.00589$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.02 (Δ -0.03) commander_dx12_v3.2.29: 24.29 (Δ 1.03) plik_rd12_HM_v22b_TTTEEE: 2341.98 (Δ -2.66)

9.4 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022236	$0.02221^{+0.00044}_{-0.00044}$ (+0.8 σ)	$\Omega_m h^2$	0.1386	$0.1411^{+0.0067}_{-0.0060}$ (−0.6 σ)	k_{eq}	0.010263	$0.01033^{+0.00023}_{-0.00022}$ (−0.6 σ)
$\Omega_c h^2$	0.1163	$0.1179^{+0.0059}_{-0.0055}$ (−0.5 σ)	$\Omega_\nu h^2$	0.00000	< 0.00278 (−0.5 σ)	$100\theta_{\text{eq}}$	0.8107	$0.809^{+0.013}_{-0.013}$ (+0.3 σ)
$100\theta_{\text{MC}}$	1.04134	$1.04116^{+0.00086}_{-0.00085}$ (+0.7 σ)	$\Omega_m h^3$	0.0922	$0.0930^{+0.0075}_{-0.0071}$ (+0.0 σ)	$100\theta_{\text{s,eq}}$	0.4481	$0.4474^{+0.0066}_{-0.0066}$ (+0.3 σ)
τ	0.0528	$0.054^{+0.015}_{-0.015}$ (+0.3 σ)	σ_8	0.8129	$0.798^{+0.034}_{-0.041}$ (+0.4 σ)	$H(0.15)$	71.76	$71.2^{+3.1}_{-3.4}$ (+0.3 σ)
Σm_ν [eV]	0.000	< 0.275 (−0.5 σ)	S_8	0.8303	$0.831^{+0.025}_{-0.025}$ (−0.2 σ)	$D_{\text{M}}(0.15)$	651.4	658^{+33}_{-31} (−0.4 σ)
N_{eff}	2.820	$2.88^{+0.37}_{-0.35}$ (−0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4548	$0.455^{+0.014}_{-0.014}$ (−0.2 σ)	$H(0.38)$	81.76	$81.5^{+3.0}_{-3.1}$ (+0.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.0318	$3.037^{+0.034}_{-0.034}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6080	$0.603^{+0.018}_{-0.020}$ (+0.3 σ)	$D_{\text{M}}(0.38)$	1553	1565^{+71}_{-68} (−0.4 σ)
n_{s}	0.9587	$0.958^{+0.017}_{-0.017}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9965	$0.983^{+0.028}_{-0.033}$ (+0.4 σ)	$H(0.51)$	88.40	$88.3^{+2.9}_{-3.0}$ (+0.2 σ)
y_{cal}	1.00043	$1.0006^{+0.0049}_{-0.0049}$ (+0.1 σ)	$r_{\text{drag}} h$	99.41	$97.9^{+3.5}_{-4.0}$ (+0.5 σ)	$D_{\text{M}}(0.51)$	2012	2025^{+88}_{-84} (−0.3 σ)
A_{217}^{CIB}	43.8	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4557	$2.454^{+0.047}_{-0.048}$ (−0.1 σ)	$H(0.61)$	93.95	$93.9^{+2.9}_{-2.9}$ (+0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.92	—	z_{re}	7.46	$7.6^{+1.5}_{-1.5}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2341	2354^{+98}_{-95} (−0.3 σ)
A_{143}^{tSZ}	7.00	$5.6^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_{\text{s}}$	2.073	$2.084^{+0.072}_{-0.069}$ (+0.1 σ)	$H(2.33)$	232.9	$234.6^{+5.4}_{-5.1}$ (−0.5 σ)
A_{100}^{PS}	243	255^{+50}_{-50} (−0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8658	$1.872^{+0.034}_{-0.034}$ (−0.2 σ)	$D_{\text{M}}(2.33)$	5846	5845^{+180}_{-170} (−0.2 σ)
A_{143}^{PS}	51.1	45^{+20}_{-20} (−0.5 σ)	D_{40}	1237.0	1240^{+31}_{-30} (−0.0 σ)	$f\sigma_8(0.15)$	0.4585	$0.459^{+0.013}_{-0.013}$ (−0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	57.4	42^{+20}_{-20} (−0.2 σ)	D_{220}	5731	5734^{+78}_{-76} (+0.6 σ)	$\sigma_8(0.15)$	0.7508	$0.736^{+0.033}_{-0.041}$ (+0.4 σ)
A_{217}^{PS}	123.5	115^{+20}_{-20} (+0.0 σ)	D_{810}	2537.0	2538^{+27}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.4763	$0.474^{+0.013}_{-0.014}$ (+0.2 σ)
A^{kSZ}	0.01	< 7.72 (−0.3 σ)	D_{1420}	819.4	$818.0^{+9.6}_{-9.4}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6652	$0.651^{+0.031}_{-0.038}$ (+0.4 σ)
A_{100}^{dustTT}	8.72	$8.8^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	232.61	$231.6^{+3.6}_{-3.6}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4747	$0.471^{+0.014}_{-0.015}$ (+0.3 σ)
A_{143}^{dustTT}	10.93	$10.8^{+3.5}_{-3.5}$ (+0.0 σ)	$n_{\text{s},0.002}$	0.9587	$0.958^{+0.017}_{-0.017}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6223	$0.609^{+0.030}_{-0.037}$ (+0.5 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.5^{+6.3}_{-6.4}$ (+0.1 σ)	Y_{P}	0.2423	$0.2431^{+0.0052}_{-0.0051}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4695	$0.465^{+0.015}_{-0.017}$ (+0.3 σ)
A_{217}^{dustTT}	95.8	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2436	$0.2444^{+0.0052}_{-0.0051}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5920	$0.579^{+0.029}_{-0.036}$ (+0.5 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.076}_{-0.074}$	10^5D/H	2.532	$2.559^{+0.090}_{-0.084}$ (−1.0 σ)	$f\sigma_8(2.33)$	0.2975	$0.292^{+0.014}_{-0.017}$ (+0.4 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.058}$	Age/Gyr	13.994	$13.99^{+0.42}_{-0.40}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3071	$0.300^{+0.016}_{-0.020}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.54	$1089.77^{+0.70}_{-0.66}$ (−1.1 σ)	f_{2000}^{143}	26.9	29^{+6}_{-6} (−0.7 σ)
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	r_*	146.67	$146.0^{+3.5}_{-3.5}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	30.65	31^{+4}_{-4} (−0.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.67^{+0.16}_{-0.15}$	$100\theta_*$	1.04166	$1.0415^{+0.0011}_{-0.0011}$ (+0.5 σ)	f_{2000}^{217}	105.23	$106.4^{+3.9}_{-3.8}$ (−0.7 σ)
A_{217}^{dustTE}	2.07	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.080	$14.02^{+0.32}_{-0.33}$ (+0.2 σ)	χ_{lensing}^2	8.66	9.09 (ν : 0.3)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.17	$1059.3^{+1.5}_{-1.5}$ (+0.4 σ)	χ_{small}^2	395.84	397.0 (ν : 1.5) (+0.0 σ)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	149.40	$148.7^{+3.7}_{-3.7}$ (+0.2 σ)	χ_{lowl}^2	24.25	24.5 (ν : 1.1) (−0.2 σ)
H_0	66.54	$65.9^{+3.2}_{-3.7}$ (+0.4 σ)	k_{D}	0.13923	$0.1397^{+0.0027}_{-0.0026}$ (−0.1 σ)	χ_{plik}^2	2342.4	2359.4 (ν : 18.1) (+261.3 σ)
Ω_Λ	0.6870	$0.674^{+0.029}_{-0.035}$ (+0.5 σ)	$100\theta_{\text{D}}$	0.16026	$0.16045^{+0.00081}_{-0.00078}$ (−0.6 σ)	χ_{prior}^2	1.4	11.5 (ν : 9.8) (+1.2 σ)
Ω_{m}	0.3130	$0.326^{+0.035}_{-0.029}$ (−0.5 σ)	z_{eq}	3415	3423^{+70}_{-69} (−0.3 σ)	χ_{CMB}^2	2771.2	2790.0 (ν : 19.4) (+263.2 σ)

Best-fit $\chi_{\text{eff}}^2 = 2772.59$; $\Delta\chi_{\text{eff}}^2 = -2.04$; $\bar{\chi}_{\text{eff}}^2 = 2801.54$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.85$; $R - 1 = 0.00830$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.66 (Δ -0.21) small_100x143_offlike5_EE_Aplanck_B: 395.84 (Δ -0.21) commander_dx12_v3_2_29: 24.25 (Δ 1.00) plik_rd12_HM_v22b_TTTEEE: 2342.41 (Δ -2.52)

9.5 base_nnu_mnu_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02206	$0.02190^{+0.00072}_{-0.00077} \quad (-0.1\sigma)$	σ_8	0.820	$0.776^{+0.066}_{-0.10} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	0.8085	$0.804^{+0.026}_{-0.026} \quad (-0.1\sigma)$
$\Omega_c h^2$	0.1191	$0.1190^{+0.0081}_{-0.0075} \quad (-0.2\sigma)$	S_8	0.843	$0.835^{+0.050}_{-0.052} \quad (-0.0\sigma)$	$100\theta_{\text{s,eq}}$	0.4471	$0.445^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$100\theta_{\text{MC}}$	1.04106	$1.0409^{+0.0012}_{-0.0012} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4619	$0.457^{+0.028}_{-0.029} \quad (-0.0\sigma)$	$H(0.15)$	72.0	$69.8^{+6.2}_{-6.9} \quad (-0.1\sigma)$
τ	0.0516	$0.051^{+0.016}_{-0.016} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6153	$0.596^{+0.039}_{-0.051} \quad (-0.0\sigma)$	$D_{\text{M}}(0.15)$	650	$675^{+80}_{-60} \quad (+0.1\sigma)$
$\Sigma m_\nu [\text{eV}]$	0.001	$< 0.708 \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	1.004	$0.969^{+0.061}_{-0.087} \quad (-0.0\sigma)$	$H(0.38)$	82.1	$80.3^{+5.4}_{-6.2} \quad (-0.1\sigma)$
N_{eff}	2.93	$2.88^{+0.60}_{-0.56} \quad (-0.2\sigma)$	$r_{\text{drag}} h$	98.8	$95.4^{+7.3}_{-9.6} \quad (-0.0\sigma)$	$D_{\text{M}}(0.38)$	1548	$1599^{+160}_{-140} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\text{s}})$	3.0333	$3.030^{+0.042}_{-0.042} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.466	$2.460^{+0.095}_{-0.095} \quad (-0.0\sigma)$	$H(0.51)$	88.8	$87.3^{+5.2}_{-5.6} \quad (-0.1\sigma)$
n_{s}	0.9589	$0.954^{+0.028}_{-0.030} \quad (-0.1\sigma)$	z_{re}	7.43	$7.4^{+1.7}_{-1.7} \quad (-0.0\sigma)$	$D_{\text{M}}(0.51)$	2005	$2065^{+190}_{-170} \quad (+0.1\sigma)$
y_{cal}	0.99999	$1.0004^{+0.0049}_{-0.0050} \quad (-0.0\sigma)$	$10^9 A_{\text{s}}$	2.077	$2.071^{+0.088}_{-0.085} \quad (-0.2\sigma)$	$H(0.61)$	94.5	$93.1^{+5.0}_{-5.3} \quad (-0.1\sigma)$
A_{100}^{PS}	238	$241^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8731	$1.871^{+0.046}_{-0.046} \quad (-0.3\sigma)$	$D_{\text{M}}(0.61)$	2332	$2398^{+210}_{-190} \quad (+0.1\sigma)$
A_{143}^{PS}	39.2	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	1235.8	$1240^{+45}_{-44} \quad (-0.0\sigma)$	$H(2.33)$	234.9	$235.7^{+7.5}_{-7.2} \quad (-0.2\sigma)$
A_{217}^{PS}	100.4	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	5701	$5700^{+82}_{-82} \quad (-0.2\sigma)$	$D_{\text{M}}(2.33)$	5811	$5892^{+320}_{-300} \quad (+0.1\sigma)$
A_{217}^{CIB}	43.8	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{810}	2530.1	$2532^{+29}_{-29} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.4652	$0.460^{+0.026}_{-0.028} \quad (-0.0\sigma)$
A_{143}^{tSZ}	5.44	$< 7.40 \quad (-0.7\sigma)$	D_{1420}	813.7	$815^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	0.757	$0.714^{+0.064}_{-0.10} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.593	$0.65^{+0.25}_{-0.25}$	D_{2000}	229.96	$229.9^{+4.6}_{-4.6} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	0.4822	$0.470^{+0.029}_{-0.036} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.72	—	$n_{\text{s},0.002}$	0.9589	$0.954^{+0.028}_{-0.030} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.670	$0.630^{+0.061}_{-0.096} \quad (-0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.13	—	Y_{P}	0.2438	$0.2428^{+0.0082}_{-0.0082} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	0.4800	$0.464^{+0.030}_{-0.042} \quad (-0.0\sigma)$
A^{kSZ}	1.9	—	$Y_{\text{P}}^{\text{BBN}}$	0.2451	$0.2441^{+0.0082}_{-0.0082} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	0.626	$0.588^{+0.059}_{-0.092} \quad (-0.0\sigma)$
A_{100}^{dust}	1.001	$1.01^{+0.39}_{-0.39}$	10^5D/H	2.605	$2.61^{+0.14}_{-0.14} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	0.4744	$0.457^{+0.031}_{-0.045} \quad (-0.0\sigma)$
A_{143}^{dust}	0.978	$0.97^{+0.34}_{-0.35}$	Age/Gyr	13.91	$14.10^{+0.75}_{-0.72} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	0.596	$0.559^{+0.057}_{-0.089} \quad (-0.0\sigma)$
A_{217}^{dust}	0.957	$0.97^{+0.20}_{-0.20}$	z_*	1090.12	$1090.3^{+1.1}_{-1.0} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	0.2992	$0.282^{+0.028}_{-0.043} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	0.996	$1.03^{+0.32}_{-0.31}$	r_*	145.5	$145.9^{+5.2}_{-5.2} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	0.3087	$0.289^{+0.032}_{-0.049} \quad (-0.0\sigma)$
c_{100}	0.99751	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$100\theta_*$	1.04130	$1.0413^{+0.0015}_{-0.0014} \quad (+0.2\sigma)$	f_{2000}^{143}	30.3	$30^{+7}_{-7} \quad (-0.2\sigma)$
c_{217}	1.00118	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.972	$14.01^{+0.48}_{-0.49} \quad (+0.2\sigma)$	f_{2000}^{217}	106.89	$107.3^{+5.0}_{-4.9} \quad (-0.4\sigma)$
H_0	66.7	$64.2^{+6.6}_{-7.6} \quad (-0.1\sigma)$	z_{drag}	1059.06	$1058.6^{+2.4}_{-2.5} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	32.3	$33^{+5}_{-5} \quad (-0.4\sigma)$
Ω_{Λ}	0.682	$0.649^{+0.067}_{-0.096} \quad (-0.0\sigma)$	r_{drag}	148.3	$148.8^{+5.4}_{-5.4} \quad (+0.2\sigma)$	χ_{simall}^2	395.79	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
Ω_{m}	0.318	$0.351^{+0.096}_{-0.067} \quad (+0.0\sigma)$	k_{D}	0.13982	$0.1395^{+0.0039}_{-0.0037} \quad (-0.2\sigma)$	χ_{lowl}^2	24.32	$25.0 \quad (\nu: 3.3) \quad (+0.0\sigma)$
$\Omega_{\text{m}} h^2$	0.1411	$0.1431^{+0.0092}_{-0.0089} \quad (-0.2\sigma)$	$100\theta_{\text{D}}$	0.16082	$0.1608^{+0.0014}_{-0.0013} \quad (-0.2\sigma)$	χ_{CamSpec}^2	7048.9	$7064.2 \quad (\nu: 18.1)$
$\Omega_{\nu} h^2$	0.00001	$< 0.00690 \quad (-0.0\sigma)$	z_{eq}	3424	$3447^{+150}_{-140} \quad (+0.1\sigma)$	χ_{prior}^2	2.1	$7.6 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\text{m}} h^3$	0.0941	$0.092^{+0.012}_{-0.012} \quad (-0.2\sigma)$	k_{eq}	0.010371	$0.01040^{+0.00033}_{-0.00032} \quad (-0.1\sigma)$	χ_{CMB}^2	7469.0	$7486.0 \quad (\nu: 18.0) \quad (+1038.1\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 7471.08$; $\Delta\chi_{\text{eff}}^2 = -0.66$; $\bar{\chi}_{\text{eff}}^2 = 7493.68$; $\Delta\bar{\chi}_{\text{eff}}^2 = 2.14$; $R - 1 = 0.00504$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.79 (Δ -0.04) commander_dx12_v3.2.29: 24.32 (Δ 0.92) CamSpec like_10.7HM: 7048.88 (Δ -1.46)

9.6 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02204	$0.02187^{+0.00069}_{-0.00076} \quad (-0.2\sigma)$	S_8	0.8351	$0.840^{+0.034}_{-0.033} \quad (+0.2\sigma)$	$H(0.15)$	71.8	$69.5^{+5.5}_{-6.5} \quad (-0.2\sigma)$
$\Omega_c h^2$	0.1176	$0.1184^{+0.0079}_{-0.0073} \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4574	$0.460^{+0.019}_{-0.018} \quad (+0.2\sigma)$	$D_M(0.15)$	651	$677^{+70}_{-60} \quad (+0.1\sigma)$
$100\theta_{MC}$	1.04112	$1.0410^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6103	$0.599^{+0.025}_{-0.030} \quad (+0.1\sigma)$	$H(0.38)$	81.9	$80.0^{+5.1}_{-5.6} \quad (-0.2\sigma)$
τ	0.0506	$0.051^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	0.9982	$0.975^{+0.039}_{-0.052} \quad (+0.2\sigma)$	$D_M(0.38)$	1552	$1605^{+140}_{-130} \quad (+0.2\sigma)$
Σm_ν [eV]	0.002	$< 0.555 \quad (-0.1\sigma)$	$r_{\text{drag}} h$	99.1	$95.4^{+6.6}_{-8.5} \quad (-0.0\sigma)$	$H(0.51)$	88.6	$87.0^{+4.9}_{-5.2} \quad (-0.2\sigma)$
N_{eff}	2.88	$2.82^{+0.58}_{-0.52} \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.457	$2.470^{+0.081}_{-0.070} \quad (+0.2\sigma)$	$D_M(0.51)$	2010	$2073^{+170}_{-160} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	3.0281	$3.030^{+0.041}_{-0.040} \quad (-0.2\sigma)$	z_{re}	7.30	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.61)$	94.14	$92.8^{+4.8}_{-4.9} \quad (-0.3\sigma)$
n_s	0.9579	$0.952^{+0.027}_{-0.028} \quad (-0.3\sigma)$	$10^9 A_s$	2.066	$2.070^{+0.086}_{-0.082} \quad (-0.2\sigma)$	$D_M(0.61)$	2339	$2407^{+190}_{-170} \quad (+0.2\sigma)$
y_{cal}	1.00019	$1.0004^{+0.0049}_{-0.0051} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8670	$1.869^{+0.045}_{-0.045} \quad (-0.4\sigma)$	$H(2.33)$	233.8	$234.9^{+7.4}_{-7.0} \quad (-0.4\sigma)$
A_{100}^{PS}	237	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	1235.9	$1245^{+42}_{-40} \quad (+0.2\sigma)$	$D_M(2.33)$	5833	$5912^{+310}_{-280} \quad (+0.3\sigma)$
A_{143}^{PS}	37.9	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	5706	$5700^{+81}_{-81} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4609	$0.462^{+0.016}_{-0.016} \quad (+0.2\sigma)$
A_{217}^{PS}	100.5	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	2529.6	$2532^{+29}_{-29} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.752	$0.717^{+0.056}_{-0.075} \quad (+0.0\sigma)$
A_{217}^{CIB}	43.8	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{1420}	814.3	$815^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4782	$0.472^{+0.018}_{-0.020} \quad (+0.1\sigma)$
A_{143}^{tSZ}	5.73	$< 7.45 \quad (-0.6\sigma)$	D_{2000}	230.32	$230.3^{+4.5}_{-4.4} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	0.666	$0.633^{+0.054}_{-0.072} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.594	$0.66^{+0.26}_{-0.25}$	$n_{s,0.002}$	0.9579	$0.952^{+0.027}_{-0.028} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	0.4763	$0.467^{+0.021}_{-0.026} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.70	—	Y_P	0.2430	$0.2420^{+0.0080}_{-0.0077} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	0.623	$0.591^{+0.052}_{-0.070} \quad (+0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.08	—	Y_P^{BBN}	0.2443	$0.2433^{+0.0080}_{-0.0077} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	0.4709	$0.459^{+0.023}_{-0.030} \quad (+0.1\sigma)$
A^{kSZ}	1.4	—	10^5D/H	2.589	$2.60^{+0.14}_{-0.13} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	0.592	$0.561^{+0.050}_{-0.068} \quad (+0.0\sigma)$
A_{100}^{dust}	1.009	$1.00^{+0.39}_{-0.39}$	Age/Gyr	13.96	$14.15^{+0.72}_{-0.66} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	0.2976	$0.283^{+0.025}_{-0.033} \quad (+0.0\sigma)$
A_{143}^{dust}	0.970	$0.97^{+0.34}_{-0.35}$	z_*	1089.96	$1090.2^{+1.1}_{-1.0} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	0.3071	$0.290^{+0.029}_{-0.038} \quad (+0.0\sigma)$
A_{217}^{dust}	0.962	$0.97^{+0.20}_{-0.20}$	r_*	146.2	$146.4^{+4.9}_{-5.1} \quad (+0.4\sigma)$	f_{2000}^{143}	29.9	$30^{+7}_{-7} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.011	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04142	$1.0414^{+0.0015}_{-0.0014} \quad (+0.4\sigma)$	f_{2000}^{217}	106.59	$106.9^{+4.9}_{-4.9} \quad (-0.5\sigma)$
c_{100}	0.99757	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$D_M(z_*)/\text{Gpc}$	14.035	$14.06^{+0.46}_{-0.48} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	32.0	$32^{+5}_{-5} \quad (-0.5\sigma)$
c_{217}	1.00119	$1.0011^{+0.0030}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	1058.87	$1058.5^{+2.3}_{-2.3} \quad (-0.3\sigma)$	χ_{lensing}^2	8.77	$9.2 \quad (\nu: 0.6)$
H_0	66.5	$63.9^{+6.1}_{-6.9} \quad (-0.2\sigma)$	r_{drag}	149.0	$149.3^{+5.2}_{-5.3} \quad (+0.4\sigma)$	χ_{small}^2	395.68	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
Ω_Λ	0.684	$0.649^{+0.061}_{-0.084} \quad (-0.0\sigma)$	k_D	0.13931	$0.1391^{+0.0039}_{-0.0036} \quad (-0.4\sigma)$	χ_{lowl}^2	24.30	$25.4 \quad (\nu: 3.1) \quad (+0.2\sigma)$
Ω_m	0.316	$0.351^{+0.084}_{-0.061} \quad (+0.0\sigma)$	$100\theta_D$	0.16068	$0.1606^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	χ_{CamSpec}^2	7049.2	$7063.1 \quad (\nu: 15.5)$
$\Omega_m h^2$	0.1397	$0.1422^{+0.0089}_{-0.0086} \quad (-0.4\sigma)$	z_{eq}	3415	$3459^{+140}_{-120} \quad (+0.2\sigma)$	χ_{prior}^2	2.0	$7.6 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	0.00002	$< 0.00539 \quad (-0.1\sigma)$	k_{eq}	0.010304	$0.01039^{+0.00032}_{-0.00029} \quad (-0.2\sigma)$	χ_{CMB}^2	7477.9	$7494.7 \quad (\nu: 17.9) \quad (+1039.5\sigma)$
$\Omega_m h^3$	0.0930	$0.091^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$100\theta_{\text{eq}}$	0.8102	$0.802^{+0.023}_{-0.025} \quad (-0.2\sigma)$			
σ_8	0.814	$0.780^{+0.056}_{-0.075} \quad (+0.0\sigma)$	$100\theta_{s,\text{eq}}$	0.4480	$0.444^{+0.012}_{-0.013} \quad (-0.2\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 7479.93$; $\Delta\chi_{\text{eff}}^2 = -0.75$; $\bar{\chi}_{\text{eff}}^2 = 7502.27$; $\Delta\bar{\chi}_{\text{eff}}^2 = 2.03$; $R - 1 = 0.00874$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.77 (Δ -0.14) small_100x143_offlike5_EE_Aplanck_B: 395.68 (Δ -0.19) commander_dx12_v3_2_29: 24.30 (Δ 0.88) CamSpec like_10.7HM: 7049.15 (Δ -1.03)

9.7 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022207	$0.02216^{+0.00046}_{-0.00046}$ (+0.6 σ)	$\Omega_m h^3$	0.0934	$0.0930^{+0.0092}_{-0.0085}$ (+0.0 σ)	$100\theta_{\text{eq}}$	0.8125	$0.811^{+0.015}_{-0.015}$ (+0.4 σ)
$\Omega_c h^2$	0.1173	$0.1178^{+0.0069}_{-0.0066}$ (−0.5 σ)	σ_8	0.815	$0.789^{+0.048}_{-0.063}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.4491	$0.4485^{+0.0077}_{-0.0076}$ (+0.4 σ)
$100\theta_{\text{MC}}$	1.04115	$1.04106^{+0.00095}_{-0.00095}$ (+0.5 σ)	S_8	0.8299	$0.823^{+0.035}_{-0.036}$ (−0.5 σ)	$H(0.15)$	72.19	$71.2^{+3.7}_{-4.2}$ (+0.3 σ)
τ	0.0522	$0.052^{+0.016}_{-0.015}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4546	$0.451^{+0.019}_{-0.020}$ (−0.5 σ)	$D_{\text{M}}(0.15)$	647.5	659^{+41}_{-38} (−0.4 σ)
Σm_ν [eV]	0.001	< 0.396 (−0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6086	$0.596^{+0.029}_{-0.033}$ (−0.0 σ)	$H(0.38)$	82.20	$81.4^{+3.6}_{-3.8}$ (+0.2 σ)
N_{eff}	2.893	$2.90^{+0.46}_{-0.44}$ (−0.1 σ)	$\sigma_8/h^{0.5}$	0.996	$0.972^{+0.044}_{-0.056}$ (+0.1 σ)	$D_{\text{M}}(0.38)$	1544	1567^{+88}_{-83} (−0.3 σ)
$\ln(10^{10} A_s)$	3.0320	$3.032^{+0.039}_{-0.038}$ (−0.1 σ)	$r_{\text{drag}} h$	99.62	$97.8^{+4.2}_{-5.0}$ (+0.5 σ)	$H(0.51)$	88.85	$88.2^{+3.5}_{-3.6}$ (+0.2 σ)
n_s	0.9615	$0.960^{+0.019}_{-0.019}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.448	$2.437^{+0.062}_{-0.062}$ (−0.5 σ)	$D_{\text{M}}(0.51)$	2000	2027^{+110}_{-100} (−0.3 σ)
y_{cal}	1.0005	$1.0005^{+0.0050}_{-0.0052}$ (−0.0 σ)	z_{re}	7.43	$7.4^{+1.6}_{-1.6}$ (+0.0 σ)	$H(0.61)$	94.42	$93.9^{+3.5}_{-3.5}$ (+0.2 σ)
A_{100}^{PS}	227.1	237^{+50}_{-50} (−0.9 σ)	$10^9 A_s$	2.074	$2.074^{+0.081}_{-0.077}$ (−0.1 σ)	$D_{\text{M}}(0.61)$	2328	2357^{+120}_{-120} (−0.3 σ)
A_{143}^{PS}	44.4	38^{+20}_{-20} (−1.3 σ)	$10^9 A_s e^{-2\tau}$	1.8684	$1.868^{+0.040}_{-0.039}$ (−0.4 σ)	$H(2.33)$	233.8	$234.8^{+6.3}_{-6.1}$ (−0.5 σ)
A_{217}^{PS}	105.7	103^{+30}_{-30} (−1.2 σ)	D_{40}	1230.8	1233^{+32}_{-32} (−0.3 σ)	$D_{\text{M}}(2.33)$	5818	5846^{+210}_{-200} (−0.1 σ)
A_{217}^{CIB}	41.2	39^{+10}_{-10} (−1.3 σ)	D_{220}	5717	5717^{+77}_{-81} (+0.2 σ)	$f\sigma_8(0.15)$	0.4584	$0.455^{+0.018}_{-0.019}$ (−0.4 σ)
A_{143}^{tSZ}	6.46	< 7.53 (−0.6 σ)	D_{810}	2534.3	2533^{+28}_{-29} (−0.2 σ)	$\sigma_8(0.15)$	0.753	$0.727^{+0.046}_{-0.061}$ (+0.2 σ)
$r_{143 \times 217}^{\text{PS}}$	0.695	$0.66^{+0.26}_{-0.26}$	D_{1420}	817.4	$816.5^{+9.9}_{-10}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4767	$0.469^{+0.021}_{-0.023}$ (−0.1 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.82	—	D_{2000}	231.57	$230.9^{+4.1}_{-4.3}$ (+0.5 σ)	$\sigma_8(0.38)$	0.667	$0.643^{+0.043}_{-0.057}$ (+0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.58	—	$n_{\text{s},0.002}$	0.9615	$0.960^{+0.019}_{-0.019}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4753	$0.466^{+0.022}_{-0.026}$ (+0.0 σ)
A^{kSZ}	0.0	—	Y_{P}	0.2433	$0.2433^{+0.0062}_{-0.0062}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6242	$0.602^{+0.041}_{-0.055}$ (+0.3 σ)
A_{100}^{dust}	1.002	$1.01^{+0.38}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.2446	$0.2446^{+0.0063}_{-0.0063}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4702	$0.460^{+0.022}_{-0.027}$ (+0.1 σ)
A_{143}^{dust}	0.970	$0.96^{+0.34}_{-0.34}$	10^5D/H	2.563	$2.57^{+0.12}_{-0.11}$ (−0.8 σ)	$\sigma_8(0.61)$	0.5939	$0.572^{+0.039}_{-0.053}$ (+0.3 σ)
A_{217}^{dust}	0.984	$0.98^{+0.20}_{-0.20}$	Age/Gyr	13.928	$13.99^{+0.51}_{-0.48}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2985	$0.289^{+0.019}_{-0.025}$ (+0.3 σ)
$A_{143 \times 217}^{\text{dust}}$	1.005	$1.02^{+0.32}_{-0.31}$	z_*	1089.73	$1089.85^{+0.86}_{-0.81}$ (−1.0 σ)	$\sigma_8(2.33)$	0.3082	$0.297^{+0.022}_{-0.029}$ (+0.3 σ)
c_{100}	0.99775	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_*	146.04	$145.9^{+4.2}_{-4.2}$ (+0.2 σ)	f_{2000}^{143}	28.4	29^{+7}_{-7} (−0.6 σ)
c_{217}	1.00114	$1.0010^{+0.0031}_{-0.0031}$ (+4.5 σ)	$100\theta_*$	1.04142	$1.0414^{+0.0012}_{-0.0012}$ (+0.4 σ)	f_{2000}^{217}	105.61	$106.3^{+4.6}_{-4.5}$ (−0.8 σ)
c_{TE}	0.9954	$0.996^{+0.010}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.023	$14.01^{+0.39}_{-0.39}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	30.84	31^{+5}_{-5} (−0.8 σ)
c_{EE}	0.9902	$0.990^{+0.011}_{-0.011}$	z_{drag}	1059.25	$1059.2^{+1.7}_{-1.7}$ (+0.3 σ)	χ_{simall}^2	395.79	396.9 (ν : 1.4) (−0.0 σ)
H_0	66.96	$65.8^{+4.1}_{-4.3}$ (+0.3 σ)	r_{drag}	148.78	$148.7^{+4.4}_{-4.4}$ (+0.2 σ)	χ_{lowl}^2	23.66	23.9 (ν : 1.2) (−0.4 σ)
Ω_Λ	0.6888	$0.672^{+0.036}_{-0.044}$ (+0.5 σ)	k_{D}	0.13956	$0.1396^{+0.0031}_{-0.0030}$ (−0.1 σ)	χ_{CamSpec}^2	11498.0	11515.4 (ν : 18.9)
Ω_{m}	0.3112	$0.328^{+0.044}_{-0.036}$ (−0.5 σ)	$100\theta_{\text{D}}$	0.16052	$0.1606^{+0.0011}_{-0.0010}$ (−0.5 σ)	χ_{prior}^2	2.0	8.0 (ν : 6.2) (+0.2 σ)
$\Omega_{\text{m}} h^2$	0.1395	$0.1413^{+0.0078}_{-0.0072}$ (−0.6 σ)	z_{eq}	3404	3411^{+81}_{-79} (−0.4 σ)	χ_{CMB}^2	11917.5	11936.2 (ν : 19.2) (+1772.3 σ)
$\Omega_\nu h^2$	0.00001	< 0.00402 (−0.4 σ)	k_{eq}	0.010283	$0.01031^{+0.00026}_{-0.00025}$ (−0.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 11919.53$; $\Delta\chi_{\text{eff}}^2 = -1.23$; $\bar{\chi}_{\text{eff}}^2 = 11944.15$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.69$; $R - 1 = 0.00883$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.79 (Δ -0.11) commander_dx12.v3.2.29: 23.66 (Δ 0.66) CamSpec like_10.7HM_1400_unified: 11498.05 (Δ -1.60)

9.8 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022166	$0.02215^{+0.00045}_{-0.00044}$ (+0.6 σ)	$\Omega_m h^3$	0.0921	$0.0926^{+0.0088}_{-0.0083}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8111	$0.810^{+0.014}_{-0.014}$ (+0.4 σ)
$\Omega_c h^2$	0.1163	$0.1175^{+0.0067}_{-0.0064}$ (−0.6 σ)	σ_8	0.8108	$0.795^{+0.036}_{-0.042}$ (+0.4 σ)	$100\theta_{\text{s,eq}}$	0.4484	$0.4479^{+0.0073}_{-0.0073}$ (+0.3 σ)
$100\theta_{\text{MC}}$	1.04128	$1.04111^{+0.00093}_{-0.00093}$ (+0.6 σ)	S_8	0.8283	$0.828^{+0.026}_{-0.025}$ (−0.3 σ)	$H(0.15)$	71.73	$71.1^{+3.5}_{-3.7}$ (+0.3 σ)
τ	0.0509	$0.053^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4537	$0.453^{+0.014}_{-0.014}$ (−0.3 σ)	$D_{\text{M}}(0.15)$	651.8	659^{+36}_{-35} (−0.4 σ)
Σm_ν [eV]	0.000	< 0.288 (−0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6065	$0.600^{+0.019}_{-0.020}$ (+0.2 σ)	$H(0.38)$	81.72	$81.4^{+3.4}_{-3.4}$ (+0.2 σ)
N_{eff}	2.823	$2.87^{+0.45}_{-0.43}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	0.9942	$0.980^{+0.028}_{-0.034}$ (+0.3 σ)	$D_{\text{M}}(0.38)$	1554	1567^{+82}_{-74} (−0.3 σ)
$\ln(10^{10} A_s)$	3.0266	$3.034^{+0.037}_{-0.035}$ (−0.0 σ)	$r_{\text{drag}} h$	99.40	$98.0^{+3.7}_{-4.3}$ (+0.5 σ)	$H(0.51)$	88.36	$88.1^{+3.4}_{-3.3}$ (+0.2 σ)
n_s	0.9585	$0.958^{+0.018}_{-0.018}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4498	$2.447^{+0.050}_{-0.050}$ (−0.3 σ)	$D_{\text{M}}(0.51)$	2013	2028^{+100}_{-91} (−0.3 σ)
y_{cal}	1.0005	$1.0006^{+0.0050}_{-0.0053}$ (+0.0 σ)	z_{re}	7.28	$7.5^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	93.91	$93.8^{+3.4}_{-3.3}$ (+0.1 σ)
A_{100}^{PS}	226.9	236^{+50}_{-50} (−0.9 σ)	$10^9 A_s$	2.063	$2.077^{+0.079}_{-0.073}$ (−0.0 σ)	$D_{\text{M}}(0.61)$	2342	2358^{+110}_{-100} (−0.3 σ)
A_{143}^{PS}	45.0	37^{+20}_{-20} (−1.4 σ)	$10^9 A_s e^{-2\tau}$	1.8630	$1.868^{+0.039}_{-0.038}$ (−0.5 σ)	$H(2.33)$	232.9	$234.3^{+6.1}_{-6.0}$ (−0.6 σ)
A_{217}^{PS}	105.5	103^{+30}_{-30} (−1.2 σ)	D_{40}	1234.8	1237^{+31}_{-30} (−0.2 σ)	$D_{\text{M}}(2.33)$	5848	5854^{+200}_{-200} (−0.1 σ)
A_{217}^{CIB}	41.1	39^{+10}_{-10} (−1.3 σ)	D_{220}	5720	5719^{+76}_{-82} (+0.2 σ)	$f\sigma_8(0.15)$	0.4574	$0.457^{+0.013}_{-0.013}$ (−0.2 σ)
A_{143}^{tSZ}	6.43	< 7.46 (−0.6 σ)	D_{810}	2532.9	2534^{+28}_{-29} (−0.1 σ)	$\sigma_8(0.15)$	0.7489	$0.733^{+0.035}_{-0.042}$ (+0.4 σ)
$r_{143 \times 217}^{\text{PS}}$	0.713	$0.67^{+0.26}_{-0.26}$	D_{1420}	817.6	817^{+10}_{-10} (+0.4 σ)	$f\sigma_8(0.38)$	0.4752	$0.472^{+0.013}_{-0.014}$ (+0.1 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.83	—	D_{2000}	231.86	$231.2^{+4.1}_{-4.2}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6635	$0.649^{+0.033}_{-0.040}$ (+0.4 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.66	—	$n_{\text{s},0.002}$	0.9585	$0.958^{+0.018}_{-0.018}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4735	$0.469^{+0.015}_{-0.015}$ (+0.2 σ)
A^{kSZ}	0.0	—	Y_{P}	0.2423	$0.2429^{+0.0061}_{-0.0061}$ (−0.2 σ)	$\sigma_8(0.51)$	0.6207	$0.607^{+0.032}_{-0.038}$ (+0.4 σ)
A_{100}^{dust}	1.006	$1.00^{+0.39}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.2436	$0.2442^{+0.0062}_{-0.0062}$ (−0.2 σ)	$f\sigma_8(0.61)$	0.4683	$0.463^{+0.015}_{-0.017}$ (+0.3 σ)
A_{143}^{dust}	0.977	$0.95^{+0.34}_{-0.34}$	10^5D/H	2.546	$2.57^{+0.11}_{-0.11}$ (−0.9 σ)	$\sigma_8(0.61)$	0.5905	$0.577^{+0.031}_{-0.037}$ (+0.4 σ)
A_{217}^{dust}	0.982	$0.98^{+0.20}_{-0.21}$	Age/Gyr	14.000	$14.01^{+0.48}_{-0.47}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2967	$0.291^{+0.015}_{-0.018}$ (+0.4 σ)
$A_{143 \times 217}^{\text{dust}}$	1.005	$1.02^{+0.31}_{-0.32}$	z_*	1089.63	$1089.81^{+0.82}_{-0.79}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3063	$0.299^{+0.018}_{-0.020}$ (+0.4 σ)
c_{100}	0.99776	$0.9976^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_*	146.71	$146.2^{+4.2}_{-4.1}$ (+0.3 σ)	f_{2000}^{143}	28.1	28^{+7}_{-7} (−0.7 σ)
c_{217}	1.00115	$1.0010^{+0.0031}_{-0.0031}$ (+4.4 σ)	$100\theta_*$	1.04160	$1.0415^{+0.0012}_{-0.0012}$ (+0.4 σ)	f_{2000}^{217}	105.39	$106.0^{+4.6}_{-4.5}$ (−0.9 σ)
c_{TE}	0.9951	$0.9957^{+0.010}_{-0.0099}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.085	$14.04^{+0.39}_{-0.38}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	30.63	31^{+5}_{-5} (−0.9 σ)
c_{EE}	0.9894	$0.990^{+0.011}_{-0.011}$	z_{drag}	1059.02	$1059.1^{+1.6}_{-1.6}$ (+0.2 σ)	χ_{lensing}^2	8.57	9.19 (ν : 0.4)
H_0	66.50	$65.8^{+3.6}_{-4.0}$ (+0.3 σ)	r_{drag}	149.47	$149.0^{+4.3}_{-4.3}$ (+0.3 σ)	χ_{small}^2	395.68	397.0 (ν : 1.5) (+0.0 σ)
Ω_Λ	0.6869	$0.674^{+0.031}_{-0.037}$ (+0.5 σ)	k_{D}	0.13909	$0.1395^{+0.0031}_{-0.0030}$ (−0.2 σ)	χ_{lowl}^2	24.10	24.2 (ν : 1.1) (−0.3 σ)
Ω_{m}	0.3131	$0.326^{+0.037}_{-0.031}$ (−0.5 σ)	$100\theta_{\text{D}}$	0.16036	$0.1605^{+0.0010}_{-0.0010}$ (−0.6 σ)	χ_{CamSpec}^2	11497.8	11514.2 (ν : 16.6)
$\Omega_{\text{m}} h^2$	0.1385	$0.1407^{+0.0075}_{-0.0070}$ (−0.7 σ)	z_{eq}	3412	3417^{+78}_{-75} (−0.3 σ)	χ_{prior}^2	2.1	8.0 (ν : 6.1) (+0.2 σ)
$\Omega_\nu h^2$	0.00000	< 0.00293 (−0.5 σ)	k_{eq}	0.010255	$0.01030^{+0.00024}_{-0.00023}$ (−0.7 σ)	χ_{CMB}^2	11926.1	11944.6 (ν : 18.9) (+1773.7 σ)

Best-fit $\chi_{\text{eff}}^2 = 11928.16$; $\Delta\chi_{\text{eff}}^2 = -1.50$; $\bar{\chi}_{\text{eff}}^2 = 11952.59$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.14$; $R - 1 = 0.01252$

χ_{eff}^2 : CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 8.57 (Δ -0.26) small.100x143_offlike5.EE.Aplanck.B: 395.68 (Δ -0.19) commander.dx12.v3.2.29: 24.10 (Δ 0.88) CamSpec like.10.7HM.1400.unified: 11497.75 (Δ -1.90)

9.9 base_nnu_mnu_plikHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022179	$0.02226^{+0.00046}_{-0.00046}$ (+0.9 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4562	$0.451^{+0.019}_{-0.021}$ (−0.5 σ)	$D_M(0.15)$	639.9	636^{+26}_{-25} (−1.0 σ)
$\Omega_c h^2$	0.1194	$0.1204^{+0.0077}_{-0.0076}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6122	$0.605^{+0.024}_{-0.026}$ (+0.4 σ)	$H(0.38)$	83.07	$83.6^{+3.0}_{-2.9}$ (+1.0 σ)
$100\theta_{MC}$	1.04094	$1.0408^{+0.0011}_{-0.0011}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9980	$0.983^{+0.034}_{-0.038}$ (+0.4 σ)	$D_M(0.38)$	1527	1519^{+59}_{-58} (−1.0 σ)
τ	0.0529	$0.054^{+0.016}_{-0.016}$ (+0.3 σ)	$r_{drag}h$	99.99	$99.96^{+2.1}_{-2.0}$ (+1.0 σ)	$H(0.51)$	89.75	$90.3^{+3.1}_{-3.0}$ (+0.9 σ)
Σm_ν [eV]	0.001	< 0.177 (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.446	$2.425^{+0.062}_{-0.067}$ (−0.8 σ)	$D_M(0.51)$	1978	1968^{+75}_{-73} (−0.9 σ)
N_{eff}	3.034	$3.14^{+0.47}_{-0.46}$ (+0.7 σ)	z_{re}	7.56	$7.6^{+1.6}_{-1.7}$ (+0.3 σ)	$H(0.61)$	95.34	$95.9^{+3.2}_{-3.1}$ (+0.9 σ)
$\ln(10^{10} A_s)$	3.0396	$3.043^{+0.040}_{-0.040}$ (+0.4 σ)	$10^9 A_s$	2.090	$2.098^{+0.085}_{-0.082}$ (+0.4 σ)	$D_M(0.61)$	2303	2290^{+86}_{-83} (−0.9 σ)
n_s	0.9653	$0.969^{+0.017}_{-0.017}$ (+0.9 σ)	$10^9 A_s e^{-2\tau}$	1.8799	$1.884^{+0.041}_{-0.042}$ (+0.3 σ)	$H(2.33)$	235.6	$237.0^{+6.7}_{-6.7}$ (+0.1 σ)
y_{cal}	1.00051	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{40}	1227.9	1223^{+31}_{-31} (−0.8 σ)	$D_M(2.33)$	5763	5730^{+190}_{-180} (−0.9 σ)
A_{217}^{CIB}	49.2	48^{+10}_{-10} (+0.1 σ)	D_{220}	5716	5719^{+78}_{-77} (+0.2 σ)	$f\sigma_8(0.15)$	0.4603	$0.456^{+0.018}_{-0.020}$ (−0.3 σ)
$\xi^{tSZ \times CIB}$	0.19	—	D_{810}	2536.7	2537^{+28}_{-28} (+0.1 σ)	$\sigma_8(0.15)$	0.7594	$0.750^{+0.031}_{-0.033}$ (+0.7 σ)
A_{143}^{tSZ}	7.19	$5.0^{+3.9}_{-4.0}$ (−0.1 σ)	D_{1420}	815.7	815^{+10}_{-10} (+0.0 σ)	$f\sigma_8(0.38)$	0.4795	$0.475^{+0.018}_{-0.020}$ (+0.3 σ)
A_{100}^{PS}	254	265^{+60}_{-60} (+0.1 σ)	D_{2000}	230.20	$229.4^{+4.3}_{-4.3}$ (−0.1 σ)	$\sigma_8(0.38)$	0.6733	$0.665^{+0.028}_{-0.030}$ (+0.8 σ)
A_{143}^{PS}	46.9	50^{+20}_{-20} (+0.1 σ)	$n_{s,0.002}$	0.9653	$0.969^{+0.017}_{-0.017}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4783	$0.474^{+0.017}_{-0.020}$ (+0.4 σ)
$A_{143 \times 217}^{PS}$	43.2	44^{+20}_{-20} (−0.0 σ)	Y_P	0.2452	$0.2465^{+0.0062}_{-0.0063}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6301	$0.623^{+0.026}_{-0.028}$ (+0.8 σ)
A_{217}^{PS}	118.1	115^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.2465	$0.2479^{+0.0062}_{-0.0063}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4735	$0.469^{+0.018}_{-0.019}$ (+0.5 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.618	$2.64^{+0.13}_{-0.13}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5996	$0.593^{+0.024}_{-0.028}$ (+0.8 σ)
A_{100}^{dustTT}	8.92	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	Age/Gyr	13.798	$13.72^{+0.45}_{-0.44}$ (−0.9 σ)	$f\sigma_8(2.33)$	0.3015	$0.299^{+0.012}_{-0.013}$ (+0.8 σ)
A_{143}^{dustTT}	10.74	$10.8^{+3.5}_{-3.5}$ (+0.0 σ)	z_*	1090.09	$1090.19^{+0.95}_{-0.97}$ (−0.4 σ)	$\sigma_8(2.33)$	0.3114	$0.308^{+0.013}_{-0.015}$ (+0.8 σ)
$A_{143 \times 217}^{dustTT}$	19.2	$18.3^{+6.5}_{-6.5}$ (+0.0 σ)	r_*	144.80	$144.0^{+4.4}_{-4.3}$ (−0.5 σ)	f_{2000}^{143}	30.2	32^{+7}_{-7} (+0.1 σ)
A_{217}^{dustTT}	94.4	93^{+10}_{-10} (−0.0 σ)	$100\theta_*$	1.04113	$1.0410^{+0.0014}_{-0.0013}$ (−0.2 σ)	$f_{2000}^{143 \times 217}$	33.04	34^{+5}_{-5} (+0.1 σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.908	$13.83^{+0.41}_{-0.40}$ (−0.5 σ)	f_{2000}^{217}	107.63	$108.4^{+4.4}_{-4.5}$ (+0.1 σ)
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.44	$1059.8^{+1.7}_{-1.7}$ (+0.8 σ)	χ_{small}^2	395.86	397.1 (ν : 1.7) (+0.1 σ)
H_0	67.78	$68.2^{+2.9}_{-2.8}$ (+1.0 σ)	r_{drag}	147.53	$146.7^{+4.6}_{-4.4}$ (−0.5 σ)	χ_{lowl}^2	23.31	22.8 (ν : 0.8) (−0.8 σ)
Ω_Λ	0.6917	$0.691^{+0.016}_{-0.016}$ (+0.9 σ)	k_D	0.14030	$0.1409^{+0.0033}_{-0.0033}$ (+0.5 σ)	χ_{plik}^2	758.4	773.3 (ν : 17.5) (+0.1 σ)
Ω_m	0.3083	$0.309^{+0.016}_{-0.016}$ (−0.9 σ)	$100\theta_D$	0.16100	$0.1612^{+0.0011}_{-0.0012}$ (+0.5 σ)	χ_{6DF}^2	0.010	0.057 (ν : 0.0)
$\Omega_m h^2$	0.1416	$0.1434^{+0.0081}_{-0.0080}$ (−0.1 σ)	z_{eq}	3389	3368^{+65}_{-69} (−1.0 σ)	χ_{MGS}^2	1.41	1.47 (ν : 0.2)
$\Omega_\nu h^2$	0.00002	< 0.00189 (−0.7 σ)	k_{eq}	0.010336	$0.01034^{+0.00029}_{-0.00029}$ (−0.5 σ)	$\chi_{DR12BAO}^2$	3.91	4.6 (ν : 1.3)
$\Omega_m h^3$	0.0960	$0.0978^{+0.0093}_{-0.0087}$ (+0.8 σ)	$100\theta_{eq}$	0.8150	$0.819^{+0.013}_{-0.012}$ (+1.0 σ)	χ_{prior}^2	1.5	7.4 (ν : 6.8) (+0.0 σ)
σ_8	0.8216	$0.812^{+0.033}_{-0.036}$ (+0.7 σ)	$100\theta_{s,eq}$	0.4504	$0.4525^{+0.0068}_{-0.0062}$ (+1.0 σ)	χ_{BAO}^2	5.32	6.2 (ν : 0.9)
S_8	0.8329	$0.823^{+0.035}_{-0.038}$ (−0.5 σ)	$H(0.15)$	73.02	$73.4^{+2.9}_{-2.8}$ (+1.0 σ)	χ_{CMB}^2	1177.6	1193.2 (ν : 16.7) (−0.2 σ)

Best-fit $\chi_{eff}^2 = 1184.40$; $\Delta\chi_{eff}^2 = -1.35$; $\bar{\chi}_{eff}^2 = 1206.70$; $\Delta\bar{\chi}_{eff}^2 = 0.68$; $R - 1 = 0.00673$

χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.01) MGS: 1.41 (Δ 0.13) DR12BAO: 3.91 (Δ -0.28) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ -0.02) commander_dx12_v3_2_29: 23.31 (Δ 0.49) plik_rd12_HM_v22_TT: 758.38 (Δ -1.72)

9.10 base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022208	$0.02227^{+0.00045}_{-0.00044}$ (+0.9 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6119	$0.605^{+0.024}_{-0.025}$ (+0.4 σ)	$D_{\mathrm{M}}(0.38)$	1524	1516^{+57}_{-56} (−1.0 σ)
$\Omega_{\mathrm{c}}h^2$	0.1195	$0.1205^{+0.0077}_{-0.0077}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9973	$0.983^{+0.033}_{-0.038}$ (+0.4 σ)	$H(0.51)$	89.87	$90.4^{+3.1}_{-3.0}$ (+1.0 σ)
$100\theta_{\mathrm{MC}}$	1.04097	$1.0408^{+0.0011}_{-0.0011}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	100.11	$100.1^{+2.0}_{-1.9}$ (+1.0 σ)	$D_{\mathrm{M}}(0.51)$	1975	1964^{+72}_{-71} (−1.0 σ)
τ	0.0530	$0.054^{+0.016}_{-0.016}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.444	$2.423^{+0.061}_{-0.066}$ (−0.8 σ)	$H(0.61)$	95.46	$96.0^{+3.2}_{-3.1}$ (+1.0 σ)
Σm_{ν} [eV]	0.002	< 0.173 (−0.7 σ)	z_{re}	7.57	$7.7^{+1.6}_{-1.7}$ (+0.3 σ)	$D_{\mathrm{M}}(0.61)$	2299	2286^{+83}_{-81} (−1.0 σ)
N_{eff}	3.046	$3.15^{+0.47}_{-0.45}$ (+0.7 σ)	$10^9 A_{\mathrm{s}}$	2.091	$2.099^{+0.085}_{-0.082}$ (+0.4 σ)	$H(2.33)$	235.8	$237.2^{+6.7}_{-6.8}$ (+0.2 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0401	$3.044^{+0.040}_{-0.040}$ (+0.4 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8806	$1.885^{+0.041}_{-0.042}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5756	5724^{+180}_{-180} (−0.9 σ)
n_{s}	0.9661	$0.970^{+0.017}_{-0.017}$ (+1.0 σ)	D_{40}	1226.8	1222^{+30}_{-30} (−0.8 σ)	$f\sigma_8(0.15)$	0.4598	$0.455^{+0.018}_{-0.019}$ (−0.4 σ)
y_{cal}	1.00045	$1.0006^{+0.0049}_{-0.0048}$ (+0.0 σ)	D_{220}	5717	5719^{+79}_{-77} (+0.2 σ)	$\sigma_8(0.15)$	0.7597	$0.751^{+0.030}_{-0.033}$ (+0.8 σ)
A_{217}^{CIB}	48.8	48^{+10}_{-10} (+0.1 σ)	D_{810}	2537.1	2537^{+28}_{-28} (+0.1 σ)	$f\sigma_8(0.38)$	0.4792	$0.475^{+0.018}_{-0.020}$ (+0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.31	—	D_{1420}	815.8	$815^{+10}_{-9.9}$ (+0.0 σ)	$\sigma_8(0.38)$	0.6737	$0.666^{+0.026}_{-0.031}$ (+0.8 σ)
A_{143}^{tSZ}	7.03	$5.0^{+3.9}_{-4.0}$ (−0.1 σ)	D_{2000}	230.24	$229.3^{+4.3}_{-4.3}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4782	$0.474^{+0.017}_{-0.019}$ (+0.4 σ)
A_{100}^{PS}	254	265^{+50}_{-60} (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9661	$0.970^{+0.017}_{-0.017}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6306	$0.624^{+0.024}_{-0.029}$ (+0.8 σ)
A_{143}^{PS}	49.0	50^{+20}_{-20} (+0.1 σ)	Y_{P}	0.2453	$0.2467^{+0.0061}_{-0.0062}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4734	$0.469^{+0.017}_{-0.019}$ (+0.5 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	46.5	44^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2467	$0.2481^{+0.0061}_{-0.0062}$ (+0.7 σ)	$\sigma_8(0.61)$	0.6000	$0.594^{+0.023}_{-0.028}$ (+0.8 σ)
A_{217}^{PS}	119.0	115^{+20}_{-20} (−0.1 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.616	$2.64^{+0.13}_{-0.13}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.3017	$0.300^{+0.011}_{-0.013}$ (+0.8 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.782	$13.70^{+0.44}_{-0.43}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3117	$0.309^{+0.012}_{-0.014}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.87	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	z_*	1090.08	$1090.19^{+0.96}_{-0.97}$ (−0.4 σ)	f_{2000}^{143}	30.2	32^{+7}_{-7} (+0.1 σ)
$A_{143}^{\mathrm{dustTT}}$	10.81	$10.8^{+3.4}_{-3.5}$ (+0.0 σ)	r_*	144.69	$143.9^{+4.4}_{-4.2}$ (−0.6 σ)	$f_{2000}^{143 \times 217}$	33.08	34^{+5}_{-5} (+0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.3	$18.3^{+6.5}_{-6.4}$ (+0.0 σ)	$100\theta_*$	1.04113	$1.0410^{+0.0014}_{-0.0013}$ (−0.2 σ)	f_{2000}^{217}	107.55	$108.5^{+4.4}_{-4.5}$ (+0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94.4	93^{+10}_{-10} (−0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.897	$13.82^{+0.41}_{-0.40}$ (−0.6 σ)	χ_{small}^2	395.88	397.1 (ν : 1.7) (+0.1 σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.51	$1059.8^{+1.7}_{-1.7}$ (+0.8 σ)	χ_{lowl}^2	23.21	22.7 (ν : 0.7) (−0.8 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.41	$146.6^{+4.6}_{-4.4}$ (−0.6 σ)	χ_{plik}^2	758.6	773.4 (ν : 17.4) (+0.1 σ)
H_0	67.91	$68.3^{+2.8}_{-2.7}$ (+1.0 σ)	k_{D}	0.14041	$0.1410^{+0.0032}_{-0.0033}$ (+0.6 σ)	χ_{JLA}^2	1034.88	1035.01 (ν : 0.1)
Ω_{Λ}	0.6927	$0.692^{+0.015}_{-0.015}$ (+0.9 σ)	$100\theta_{\mathrm{D}}$	0.16101	$0.1613^{+0.0012}_{-0.0012}$ (+0.5 σ)	$\chi_{6\mathrm{DF}}^2$	0.006	0.047 (ν : 0.0)
Ω_{m}	0.3073	$0.308^{+0.015}_{-0.015}$ (−0.9 σ)	z_{eq}	3387	3365^{+63}_{-67} (−1.1 σ)	χ_{MGS}^2	1.47	1.55 (ν : 0.2)
$\Omega_{\mathrm{m}}h^2$	0.1417	$0.1435^{+0.0081}_{-0.0080}$ (−0.1 σ)	k_{eq}	0.010336	$0.01034^{+0.00029}_{-0.00029}$ (−0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.78	4.4 (ν : 0.9)
$\Omega_{\nu}h^2$	0.00002	< 0.00185 (−0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8156	$0.820^{+0.013}_{-0.012}$ (+1.1 σ)	χ_{prior}^2	1.4	7.3 (ν : 6.7) (+0.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.0963	$0.0981^{+0.0093}_{-0.0087}$ (+0.8 σ)	$100\theta_{\mathrm{s,eq}}$	0.4507	$0.4529^{+0.0066}_{-0.0060}$ (+1.1 σ)	χ_{BAO}^2	5.26	6.0 (ν : 0.6)
σ_8	0.8219	$0.812^{+0.033}_{-0.035}$ (+0.7 σ)	$H(0.15)$	73.15	$73.6^{+2.8}_{-2.7}$ (+1.0 σ)	χ_{CMB}^2	1177.7	1193.2 (ν : 16.6) (−0.2 σ)
S_8	0.8318	$0.822^{+0.034}_{-0.037}$ (−0.5 σ)	$D_{\mathrm{M}}(0.15)$	638.7	635^{+25}_{-24} (−1.0 σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4556	$0.450^{+0.019}_{-0.021}$ (−0.5 σ)	$H(0.38)$	83.19	$83.7^{+2.9}_{-2.8}$ (+1.0 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2219.27$; $\bar{\chi}_{\mathrm{eff}}^2 = 2241.49$; $R - 1 = 0.00842$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.78 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 commander_dx12_v3.2.29: 23.21 plik_rd12_HM_v22.TT: 758.62
SN - JLA Pantheon18: 1034.88

9.11 base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022170	$0.02221^{+0.00042}_{-0.00043}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6093	$0.604^{+0.023}_{-0.025}$ (+0.3 σ)	$D_M(0.38)$	1531.3	1528^{+47}_{-46} (−0.8 σ)
$\Omega_c h^2$	0.1183	$0.1192^{+0.0063}_{-0.0062}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	0.9952	$0.983^{+0.033}_{-0.037}$ (+0.4 σ)	$H(0.51)$	89.46	$89.7^{+2.4}_{-2.4}$ (+0.7 σ)
$100\theta_{MC}$	1.04110	$1.0410^{+0.0010}_{-0.0010}$ (+0.3 σ)	$r_{drag}h$	100.10	$99.8^{+2.0}_{-2.0}$ (+1.0 σ)	$D_M(0.51)$	1984	1980^{+60}_{-58} (−0.8 σ)
τ	0.0530	$0.053^{+0.016}_{-0.016}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.442	$2.428^{+0.061}_{-0.065}$ (−0.7 σ)	$H(0.61)$	95.02	$95.3^{+2.5}_{-2.5}$ (+0.7 σ)
Σm_ν [eV]	0.002	< 0.165 (−0.7 σ)	z_{re}	7.55	$7.6^{+1.6}_{-1.7}$ (+0.2 σ)	$D_M(0.61)$	2310	2304^{+68}_{-67} (−0.8 σ)
N_{eff}	2.981	$3.06^{+0.36}_{-0.35}$ (+0.4 σ)	$10^9 A_s$	2.083	$2.090^{+0.077}_{-0.078}$ (+0.2 σ)	$H(2.33)$	234.7	$235.9^{+5.4}_{-5.4}$ (−0.2 σ)
$\ln(10^{10} A_s)$	3.0363	$3.039^{+0.036}_{-0.038}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8734	$1.878^{+0.036}_{-0.036}$ (+0.0 σ)	$D_M(2.33)$	5783	5763^{+150}_{-140} (−0.7 σ)
n_s	0.9646	$0.967^{+0.015}_{-0.014}$ (+0.7 σ)	D_{40}	1226.6	1226^{+28}_{-29} (−0.6 σ)	$f\sigma_8(0.15)$	0.4579	$0.455^{+0.018}_{-0.019}$ (−0.4 σ)
y_{cal}	1.00014	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{220}	5711	5720^{+79}_{-77} (+0.2 σ)	$\sigma_8(0.15)$	0.7563	$0.748^{+0.028}_{-0.031}$ (+0.7 σ)
A_{217}^{CIB}	48.0	48^{+10}_{-10} (+0.0 σ)	D_{810}	2534.3	2536^{+27}_{-27} (+0.0 σ)	$f\sigma_8(0.38)$	0.4771	$0.474^{+0.017}_{-0.019}$ (+0.2 σ)
$\xi^{tSZ \times CIB}$	0.38	—	D_{1420}	815.9	$815.3^{+9.9}_{-9.9}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6706	$0.663^{+0.025}_{-0.028}$ (+0.7 σ)
A_{143}^{tSZ}	7.00	$5.1^{+3.8}_{-4.0}$ (−0.0 σ)	D_{2000}	230.53	$229.9^{+3.9}_{-4.0}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4761	$0.472^{+0.017}_{-0.018}$ (+0.4 σ)
A_{100}^{PS}	253	263^{+50}_{-60} (−0.0 σ)	$n_{s,0.002}$	0.9646	$0.967^{+0.015}_{-0.014}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6276	$0.620^{+0.024}_{-0.026}$ (+0.7 σ)
A_{143}^{PS}	48.8	49^{+20}_{-20} (−0.1 σ)	Y_P	0.24444	$0.2454^{+0.0048}_{-0.0049}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4714	$0.468^{+0.017}_{-0.018}$ (+0.5 σ)
$A_{143 \times 217}^{PS}$	47.3	43^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.24576	$0.2468^{+0.0048}_{-0.0049}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5973	$0.590^{+0.023}_{-0.025}$ (+0.7 σ)
A_{217}^{PS}	119.3	115^{+20}_{-20} (−0.1 σ)	$10^5 D/H$	2.601	$2.62^{+0.11}_{-0.11}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.3003	$0.298^{+0.011}_{-0.011}$ (+0.7 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.845	$13.80^{+0.35}_{-0.34}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3102	$0.307^{+0.012}_{-0.013}$ (+0.8 σ)
A_{100}^{dustTT}	8.87	$9.0^{+3.5}_{-3.6}$ (+0.0 σ)	z_*	1089.95	$1090.05^{+0.85}_{-0.85}$ (−0.6 σ)	f_{2000}^{143}	29.6	31^{+6}_{-6} (−0.1 σ)
A_{143}^{dustTT}	10.77	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	145.36	$144.8^{+3.5}_{-3.4}$ (−0.2 σ)	$f_{2000}^{143 \times 217}$	32.61	33^{+4}_{-5} (−0.1 σ)
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.5}_{-6.4}$ (+0.0 σ)	$100\theta_*$	1.04131	$1.0412^{+0.0012}_{-0.0012}$ (+0.0 σ)	f_{2000}^{217}	107.08	$108.0^{+4.2}_{-4.2}$ (−0.1 σ)
A_{217}^{dustTT}	94.6	93^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.959	$13.90^{+0.33}_{-0.32}$ (−0.2 σ)	χ_{small}^2	395.85	397.0 (ν : 1.6) (+0.1 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.28	$1059.5^{+1.4}_{-1.4}$ (+0.6 σ)	χ_{lowl}^2	23.32	23.1 (ν : 0.7) (−0.7 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	148.10	$147.5^{+3.7}_{-3.5}$ (−0.3 σ)	χ_{plik}^2	758.7	772.5 (ν : 16.4) (−0.0 σ)
H_0	67.59	$67.7^{+2.3}_{-2.3}$ (+0.9 σ)	k_D	0.13990	$0.1403^{+0.0026}_{-0.0026}$ (+0.2 σ)	χ_{Aver15}^2	0.05	0.60 (ν : 0.3)
Ω_Λ	0.6924	$0.690^{+0.016}_{-0.016}$ (+0.9 σ)	$100\theta_D$	0.16087	$0.16105^{+0.00096}_{-0.00097}$ (+0.2 σ)	χ_{6DF}^2	0.006	0.061 (ν : 0.0)
Ω_m	0.3076	$0.310^{+0.016}_{-0.016}$ (−0.9 σ)	z_{eq}	3387	3374^{+62}_{-65} (−0.9 σ)	χ_{MGS}^2	1.47	1.39 (ν : 0.2)
$\Omega_m h^2$	0.1405	$0.1420^{+0.0066}_{-0.0065}$ (−0.4 σ)	k_{eq}	0.010291	$0.01030^{+0.00026}_{-0.00026}$ (−0.7 σ)	$\chi_{DR12BAO}^2$	3.76	4.8 (ν : 1.4)
$\Omega_\nu h^2$	0.00002	< 0.00175 (−0.7 σ)	$100\theta_{eq}$	0.8155	$0.818^{+0.012}_{-0.011}$ (+0.9 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.7) (−0.0 σ)
$\Omega_m h^3$	0.0950	$0.0962^{+0.0071}_{-0.0068}$ (+0.5 σ)	$100\theta_{s,eq}$	0.4507	$0.4520^{+0.0063}_{-0.0059}$ (+0.9 σ)	χ_{BAO}^2	5.24	6.2 (ν : 1.0)
σ_8	0.8182	$0.809^{+0.030}_{-0.033}$ (+0.6 σ)	$H(0.15)$	72.81	$73.0^{+2.3}_{-2.2}$ (+0.8 σ)	χ_{CMB}^2	1177.9	1192.6 (ν : 15.9) (−0.3 σ)
S_8	0.8284	$0.822^{+0.034}_{-0.037}$ (−0.5 σ)	$D_M(0.15)$	641.7	641^{+21}_{-20} (−0.8 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4537	$0.450^{+0.019}_{-0.020}$ (−0.5 σ)	$H(0.38)$	82.81	$83.0^{+2.3}_{-2.3}$ (+0.8 σ)			

Best-fit $\chi_{eff}^2 = 1184.46$; $\bar{\chi}_{eff}^2 = 1206.76$; $R - 1 = 0.00900$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.05 BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.76 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3.2.29: 23.32
plik_rd12_HM_v22_TT: 758.69

9.12 base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022182	$0.02221^{+0.00042}_{-0.00042}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6113	$0.604^{+0.023}_{-0.024}$ (+0.3 σ)	$D_M(0.38)$	1529.7	1528^{+45}_{-44} (−0.8 σ)
$\Omega_c h^2$	0.1189	$0.1191^{+0.0057}_{-0.0056}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	0.9974	$0.983^{+0.032}_{-0.037}$ (+0.4 σ)	$H(0.51)$	89.58	$89.7^{+2.3}_{-2.2}$ (+0.7 σ)
$100\theta_{MC}$	1.04103	$1.0410^{+0.0010}_{-0.00097}$ (+0.3 σ)	$r_{drag}h$	99.99	$99.8^{+2.0}_{-2.0}$ (+1.0 σ)	$D_M(0.51)$	1982	1980^{+57}_{-56} (−0.8 σ)
τ	0.0535	$0.053^{+0.016}_{-0.016}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.446	$2.428^{+0.061}_{-0.065}$ (−0.7 σ)	$H(0.61)$	95.16	$95.3^{+2.3}_{-2.3}$ (+0.7 σ)
Σm_ν [eV]	0.004	< 0.165 (−0.7 σ)	z_{re}	7.60	$7.6^{+1.6}_{-1.7}$ (+0.2 σ)	$D_M(0.61)$	2307	2304^{+65}_{-64} (−0.8 σ)
N_{eff}	3.005	$3.06^{+0.33}_{-0.33}$ (+0.4 σ)	$10^9 A_s$	2.089	$2.090^{+0.076}_{-0.077}$ (+0.2 σ)	$H(2.33)$	235.2	$235.8^{+5.0}_{-5.0}$ (−0.2 σ)
$\ln(10^{10} A_s)$	3.0393	$3.040^{+0.036}_{-0.037}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8772	$1.878^{+0.034}_{-0.034}$ (+0.0 σ)	$D_M(2.33)$	5774	5763^{+140}_{-140} (−0.7 σ)
n_s	0.9649	$0.967^{+0.014}_{-0.014}$ (+0.7 σ)	D_{40}	1227.7	1226^{+28}_{-29} (−0.6 σ)	$f\sigma_8(0.15)$	0.4597	$0.455^{+0.017}_{-0.019}$ (−0.4 σ)
y_{cal}	1.00049	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{220}	5715	5720^{+78}_{-76} (+0.2 σ)	$\sigma_8(0.15)$	0.7582	$0.748^{+0.027}_{-0.030}$ (+0.7 σ)
A_{217}^{CIB}	48.9	48^{+10}_{-10} (+0.0 σ)	D_{810}	2536.3	2536^{+27}_{-27} (+0.0 σ)	$f\sigma_8(0.38)$	0.4788	$0.474^{+0.016}_{-0.019}$ (+0.2 σ)
$\xi^{tSZ \times CIB}$	0.28	—	D_{1420}	816.1	$815.3^{+9.7}_{-9.7}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6722	$0.663^{+0.024}_{-0.027}$ (+0.7 σ)
A_{143}^{tSZ}	7.03	$5.1^{+3.8}_{-4.0}$ (+0.0 σ)	D_{2000}	230.52	$229.9^{+3.7}_{-3.7}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4776	$0.473^{+0.017}_{-0.017}$ (+0.4 σ)
A_{100}^{PS}	254	263^{+50}_{-60} (−0.0 σ)	$n_{s,0.002}$	0.9649	$0.967^{+0.014}_{-0.014}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6291	$0.621^{+0.023}_{-0.025}$ (+0.7 σ)
A_{143}^{PS}	47.6	49^{+20}_{-20} (−0.1 σ)	Y_P	0.24477	$0.2454^{+0.0045}_{-0.0045}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4728	$0.468^{+0.016}_{-0.017}$ (+0.5 σ)
$A_{143 \times 217}^{PS}$	44.9	43^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.24609	$0.2467^{+0.0045}_{-0.0046}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5987	$0.590^{+0.022}_{-0.024}$ (+0.7 σ)
A_{217}^{PS}	118.3	115^{+20}_{-20} (−0.1 σ)	$10^5 D/H$	2.607	$2.619^{+0.097}_{-0.098}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.3010	$0.298^{+0.010}_{-0.011}$ (+0.7 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.823	$13.80^{+0.33}_{-0.32}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3109	$0.307^{+0.011}_{-0.013}$ (+0.8 σ)
A_{100}^{dustTT}	8.89	$9.0^{+3.5}_{-3.6}$ (+0.0 σ)	z_*	1090.01	$1090.05^{+0.72}_{-0.74}$ (−0.6 σ)	f_{2000}^{143}	29.8	31^{+6}_{-6} (−0.1 σ)
A_{143}^{dustTT}	10.79	$10.7^{+3.4}_{-3.5}$ (+0.0 σ)	r_*	145.08	$144.8^{+3.3}_{-3.2}$ (−0.2 σ)	$f_{2000}^{143 \times 217}$	32.76	33^{+4}_{-4} (−0.1 σ)
$A_{143 \times 217}^{dustTT}$	19.2	$18.3^{+6.5}_{-6.4}$ (+0.0 σ)	$100\theta_*$	1.04123	$1.0412^{+0.0011}_{-0.0011}$ (+0.0 σ)	f_{2000}^{217}	107.32	$108.0^{+4.0}_{-4.0}$ (−0.1 σ)
A_{217}^{dustTT}	94.4	93^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.933	$13.90^{+0.30}_{-0.30}$ (−0.2 σ)	χ_{simall}^2	395.94	397.0 (ν : 1.6) (+0.0 σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.40	$1059.5^{+1.4}_{-1.4}$ (+0.6 σ)	χ_{lowl}^2	23.33	23.1 (ν : 0.7) (−0.7 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.81	$147.5^{+3.4}_{-3.3}$ (−0.3 σ)	χ_{plik}^2	758.4	772.3 (ν : 16.0) (−0.1 σ)
H_0	67.65	$67.7^{+2.2}_{-2.2}$ (+0.9 σ)	k_D	0.14012	$0.1403^{+0.0025}_{-0.0025}$ (+0.2 σ)	χ_{Aver15}^2	0.09	0.54 (ν : 0.2)
Ω_Λ	0.6917	$0.690^{+0.016}_{-0.016}$ (+0.9 σ)	$100\theta_D$	0.16092	$0.16105^{+0.00081}_{-0.00083}$ (+0.2 σ)	$\chi_{Cooke17}^2$	0.01	0.28 (ν : 0.1)
Ω_m	0.3083	$0.310^{+0.016}_{-0.016}$ (−0.9 σ)	z_{eq}	3390	3374^{+62}_{-64} (−0.9 σ)	χ_{6DF}^2	0.010	0.061 (ν : 0.0)
$\Omega_m h^2$	0.1411	$0.1420^{+0.0060}_{-0.0060}$ (−0.4 σ)	k_{eq}	0.010317	$0.01030^{+0.00024}_{-0.00024}$ (−0.7 σ)	χ_{MGS}^2	1.41	1.39 (ν : 0.2)
$\Omega_\nu h^2$	0.00004	< 0.00174 (−0.7 σ)	$100\theta_{eq}$	0.8150	$0.818^{+0.012}_{-0.011}$ (+0.9 σ)	$\chi_{DR12BAO}^2$	3.89	4.8 (ν : 1.4)
$\Omega_m h^3$	0.0955	$0.0961^{+0.0066}_{-0.0064}$ (+0.5 σ)	$100\theta_{s,eq}$	0.4504	$0.4520^{+0.0063}_{-0.0059}$ (+0.9 σ)	χ_{prior}^2	1.4	7.3 (ν : 6.7) (+0.0 σ)
σ_8	0.8203	$0.809^{+0.030}_{-0.033}$ (+0.6 σ)	$H(0.15)$	72.88	$73.0^{+2.2}_{-2.2}$ (+0.8 σ)	χ_{BAO}^2	5.31	6.2 (ν : 0.9)
S_8	0.8316	$0.822^{+0.033}_{-0.036}$ (−0.5 σ)	$D_M(0.15)$	641.1	641^{+20}_{-20} (−0.8 σ)	χ_{CMB}^2	1177.7	1192.4 (ν : 15.5) (−0.4 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4555	$0.450^{+0.018}_{-0.020}$ (−0.5 σ)	$H(0.38)$	82.91	$83.0^{+2.2}_{-2.2}$ (+0.8 σ)	χ_{Abund}^2	0.10	0.82 (ν : 0.4)

Best-fit $\chi_{eff}^2 = 1184.51$; $\bar{\chi}_{eff}^2 = 1206.75$; $R - 1 = 0.01022$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.09 D_Cooke2017: 0.01 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.89 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.94 coman-
der_dx12.v3.2.29: 23.33 plik_rd12_HM.v22_TT: 758.40

9.13 base_nnu_mnu_plikHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00045}_{-0.00044} \quad (+0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.024}_{-0.025} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1515^{+57}_{-55} \quad (-1.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1206^{+0.0076}_{-0.0077} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.033}_{-0.038} \quad (+0.4\sigma)$	$H(0.51)$	$90.4^{+3.1}_{-3.0} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$100.1^{+2.0}_{-1.9} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1963^{+73}_{-70} \quad (-1.0\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.060}_{-0.064} \quad (-0.7\sigma)$	$H(0.61)$	$96.1^{+3.2}_{-3.1} \quad (+1.0\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.176 \quad (-0.7\sigma)$	z_{re}	$< 9.04 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2285^{+83}_{-81} \quad (-1.0\sigma)$
N_{eff}	$3.16^{+0.47}_{-0.45} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.075}_{-0.071} \quad (+0.6\sigma)$	$H(2.33)$	$237.2^{+6.7}_{-6.8} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.036}_{-0.034} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.885^{+0.041}_{-0.042} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5721^{+180}_{-180} \quad (-0.9\sigma)$
n_{s}	$0.970^{+0.017}_{-0.017} \quad (+1.0\sigma)$	D_{40}	$1222^{+30}_{-30} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.018}_{-0.019} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	D_{220}	$5719^{+79}_{-77} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.030}_{-0.033} \quad (+0.8\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2537^{+28}_{-28} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.017}_{-0.020} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-9.9} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.027}_{-0.029} \quad (+0.8\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (-0.1\sigma)$	D_{2000}	$229.4^{+4.3}_{-4.3} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.018}_{-0.018} \quad (+0.5\sigma)$
A_{100}^{PS}	$265^{+50}_{-60} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.970^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.025}_{-0.027} \quad (+0.8\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.2468^{+0.0061}_{-0.0062} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.017}_{-0.019} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2481^{+0.0061}_{-0.0062} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.024}_{-0.026} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.64^{+0.13}_{-0.13} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.011}_{-0.013} \quad (+0.8\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.70^{+0.44}_{-0.43} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.012}_{-0.014} \quad (+0.9\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.19^{+0.96}_{-0.97} \quad (-0.4\sigma)$	f_{2000}^{143}	$32^{+7}_{-7} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.4}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.8^{+4.4}_{-4.2} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0410^{+0.0014}_{-0.0013} \quad (-0.2\sigma)$	f_{2000}^{217}	$108.5^{+4.4}_{-4.5} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.82^{+0.41}_{-0.40} \quad (-0.6\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.7) \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+1.7}_{-1.7} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 0.7) \quad (-0.8\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.5^{+4.6}_{-4.4} \quad (-0.6\sigma)$	χ_{plik}^2	$773.2 \quad (\nu: 17.2) \quad (+0.1\sigma)$
H_0	$68.4^{+2.8}_{-2.7} \quad (+1.0\sigma)$	k_{D}	$0.1410^{+0.0032}_{-0.0033} \quad (+0.6\sigma)$	χ_{JLA}^2	$1035.00 \quad (\nu: 0.1)$
Ω_{Λ}	$0.693^{+0.015}_{-0.015} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1613^{+0.0012}_{-0.0012} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
Ω_{m}	$0.307^{+0.015}_{-0.015} \quad (-0.9\sigma)$	z_{eq}	$3364^{+63}_{-67} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.56 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1436^{+0.0081}_{-0.0081} \quad (-0.1\sigma)$	k_{eq}	$0.01034^{+0.00029}_{-0.00029} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.9)$
$\Omega_{\nu} h^2$	$< 0.00188 \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.013}_{-0.012} \quad (+1.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0982^{+0.0093}_{-0.0087} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4529^{+0.0066}_{-0.0060} \quad (+1.1\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
σ_8	$0.814^{+0.032}_{-0.035} \quad (+0.7\sigma)$	$H(0.15)$	$73.6^{+2.8}_{-2.7} \quad (+1.0\sigma)$	χ_{CMB}^2	$1192.9 \quad (\nu: 16.2) \quad (-0.3\sigma)$
S_8	$0.823^{+0.034}_{-0.037} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+25}_{-24} \quad (-1.0\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.018}_{-0.020} \quad (-0.5\sigma)$	$H(0.38)$	$83.7^{+3.0}_{-2.9} \quad (+1.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2241.24; R - 1 = 0.00999$$

9.14 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022344	$0.02237^{+0.00038}_{-0.00036}$ (+1.2 σ)	$\Omega_{\nu}h^2$	0.00000	< 0.00135 (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.44971	$0.4503^{+0.0048}_{-0.0049}$ (+0.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.1178	$0.1184^{+0.0061}_{-0.0059}$ (−0.4 σ)	$\Omega_{\mathrm{m}}h^3$	0.0945	$0.0953^{+0.0072}_{-0.0068}$ (+0.4 σ)	$H(0.15)$	72.64	$72.7^{+2.3}_{-2.3}$ (+0.8 σ)
$100\theta_{\mathrm{MC}}$	1.04122	$1.04113^{+0.00087}_{-0.00084}$ (+0.6 σ)	σ_8	0.8179	$0.811^{+0.025}_{-0.029}$ (+0.7 σ)	$D_{\mathrm{M}}(0.15)$	643.2	643^{+21}_{-21} (−0.8 σ)
τ	0.0545	$0.055^{+0.016}_{-0.015}$ (+0.5 σ)	S_8	0.8290	$0.826^{+0.028}_{-0.028}$ (−0.4 σ)	$H(0.38)$	82.64	$82.7^{+2.4}_{-2.4}$ (+0.7 σ)
Σm_{ν} [eV]	0.000	< 0.128 (−0.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4541	$0.452^{+0.015}_{-0.015}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1534.7	1534^{+49}_{-47} (−0.7 σ)
N_{eff}	2.935	$2.98^{+0.36}_{-0.35}$ (+0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6094	$0.606^{+0.018}_{-0.020}$ (+0.4 σ)	$H(0.51)$	89.28	$89.4^{+2.5}_{-2.4}$ (+0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0394	$3.042^{+0.037}_{-0.036}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9961	$0.988^{+0.025}_{-0.029}$ (+0.5 σ)	$D_{\mathrm{M}}(0.51)$	1989	1988^{+61}_{-60} (−0.7 σ)
n_{s}	0.9629	$0.964^{+0.014}_{-0.014}$ (+0.6 σ)	$r_{\mathrm{drag}}h$	99.99	$99.7^{+1.8}_{-1.8}$ (+0.9 σ)	$H(0.61)$	94.84	$95.0^{+2.5}_{-2.5}$ (+0.6 σ)
y_{cal}	1.00058	$1.0006^{+0.0049}_{-0.0048}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.450	$2.441^{+0.051}_{-0.052}$ (−0.4 σ)	$D_{\mathrm{M}}(0.61)$	2314	2313^{+70}_{-68} (−0.7 σ)
A_{217}^{CIB}	46.9	46^{+10}_{-10} (−0.2 σ)	z_{re}	7.65	$7.7^{+1.6}_{-1.6}$ (+0.4 σ)	$H(2.33)$	234.4	$235.2^{+5.4}_{-5.3}$ (−0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.43	—	$10^9 A_{\mathrm{s}}$	2.089	$2.095^{+0.078}_{-0.074}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5793	5782^{+150}_{-150} (−0.5 σ)
A_{143}^{tSZ}	7.23	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8735	$1.876^{+0.035}_{-0.035}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4582	$0.457^{+0.015}_{-0.014}$ (−0.3 σ)
A_{100}^{PS}	248	257^{+60}_{-50} (−0.2 σ)	D_{40}	1232.7	1231^{+27}_{-27} (−0.4 σ)	$\sigma_8(0.15)$	0.7560	$0.750^{+0.024}_{-0.027}$ (+0.7 σ)
A_{143}^{PS}	45.5	45^{+20}_{-20} (−0.5 σ)	D_{220}	5737	5736^{+74}_{-73} (+0.6 σ)	$f\sigma_8(0.38)$	0.4773	$0.475^{+0.014}_{-0.014}$ (+0.3 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	46.0	42^{+20}_{-20} (−0.2 σ)	D_{810}	2538.3	2538^{+27}_{-26} (+0.1 σ)	$\sigma_8(0.38)$	0.6703	$0.665^{+0.022}_{-0.025}$ (+0.7 σ)
A_{217}^{PS}	118.9	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.6	$817.9^{+9.5}_{-9.3}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4762	$0.474^{+0.014}_{-0.014}$ (+0.4 σ)
A^{kSZ}	0.00	< 7.82 (−0.2 σ)	D_{2000}	231.94	$231.4^{+3.6}_{-3.6}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6273	$0.622^{+0.020}_{-0.023}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9629	$0.964^{+0.014}_{-0.014}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4714	$0.469^{+0.014}_{-0.015}$ (+0.5 σ)
$A_{143}^{\mathrm{dustTT}}$	10.98	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	Y_{P}	0.24388	$0.2445^{+0.0048}_{-0.0049}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5969	$0.592^{+0.020}_{-0.022}$ (+0.8 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.6	$18.6^{+6.5}_{-6.6}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24520	$0.2458^{+0.0049}_{-0.0049}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.3001	$0.2982^{+0.0097}_{-0.010}$ (+0.8 σ)
$A_{217}^{\mathrm{dustTT}}$	94.9	94^{+10}_{-10} (+0.1 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.552	$2.564^{+0.089}_{-0.090}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3100	$0.308^{+0.011}_{-0.012}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.075}_{-0.075}$	Age/Gyr	13.870	$13.84^{+0.36}_{-0.35}$ (−0.5 σ)	f_{2000}^{143}	28.0	29^{+6}_{-6} (−0.7 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.134^{+0.058}_{-0.057}$	z_{*}	1089.64	$1089.72^{+0.68}_{-0.68}$ (−1.2 σ)	$f_{2000}^{143 \times 217}$	31.26	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.481	$0.48^{+0.16}_{-0.16}$	r_{*}	145.60	$145.2^{+3.5}_{-3.5}$ (−0.1 σ)	f_{2000}^{217}	106.02	$106.5^{+3.9}_{-3.8}$ (−0.7 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.11}$	$100\theta_{*}$	1.04145	$1.0413^{+0.0011}_{-0.0010}$ (+0.3 σ)	χ_{small}^2	396.06	397.2 (ν : 2.1) (+0.2 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.981	$13.94^{+0.33}_{-0.32}$ (−0.1 σ)	χ_{lowl}^2	23.72	23.6 (ν : 0.7) (−0.5 σ)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.08^{+0.53}_{-0.53}$	z_{drag}	1059.63	$1059.8^{+1.4}_{-1.4}$ (+0.8 σ)	χ_{plik}^2	2342.8	2359.7 (ν : 19.6) (+261.3 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	148.29	$147.9^{+3.7}_{-3.6}$ (−0.1 σ)	$\chi_{6\mathrm{DF}}^2$	0.010	0.062 (ν : 0.0)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.14001	$0.1403^{+0.0027}_{-0.0026}$ (+0.2 σ)	χ_{MGS}^2	1.41	1.29 (ν : 0.1)
H_0	67.43	$67.4^{+2.3}_{-2.3}$ (+0.8 σ)	$100\theta_{\mathrm{D}}$	0.16049	$0.16060^{+0.00079}_{-0.00080}$ (−0.4 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.91	4.9 (ν : 1.3)
Ω_{Λ}	0.6918	$0.689^{+0.014}_{-0.015}$ (+0.9 σ)	z_{eq}	3399	3393^{+51}_{-50} (−0.7 σ)	χ_{prior}^2	1.8	11.5 (ν : 10.2) (+1.1 σ)
Ω_{m}	0.3082	$0.311^{+0.015}_{-0.014}$ (−0.9 σ)	k_{eq}	0.010296	$0.01031^{+0.00023}_{-0.00023}$ (−0.7 σ)	χ_{BAO}^2	5.33	6.2 (ν : 0.9)
$\Omega_{\mathrm{m}}h^2$	0.1401	$0.1413^{+0.0065}_{-0.0062}$ (−0.6 σ)	$100\theta_{\mathrm{eq}}$	0.8139	$0.8151^{+0.0096}_{-0.0096}$ (+0.7 σ)	χ_{CMB}^2	2762.6	2780.5 (ν : 18.6) (+261.7 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 2769.67$; $\Delta\chi_{\mathrm{eff}}^2 = -2.25$; $\bar{\chi}_{\mathrm{eff}}^2 = 2798.17$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.26$; $R - 1 = 0.00732$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.02) MGS: 1.41 (Δ 0.19) DR12BAO: 3.91 (Δ -0.50) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ -0.15) commander_dx12_v3_2_29: 23.72 (Δ 0.85) plik_rd12_HM_v22b_TTTEEE: 2342.81 (Δ -2.69)

9.15 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022340	$0.02239^{+0.00037}_{-0.00035}$ (+1.2 σ)	$\Omega_{\mathrm{m}}h^3$	0.0945	$0.0955^{+0.0072}_{-0.0068}$ (+0.4 σ)	$D_{\mathrm{M}}(0.15)$	643.0	642^{+21}_{-20} (−0.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.1178	$0.1185^{+0.0061}_{-0.0059}$ (−0.3 σ)	σ_8	0.8170	$0.812^{+0.025}_{-0.028}$ (+0.7 σ)	$H(0.38)$	82.66	$82.9^{+2.4}_{-2.3}$ (+0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04120	$1.04112^{+0.00087}_{-0.00084}$ (+0.6 σ)	S_8	0.8281	$0.825^{+0.027}_{-0.027}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1534.4	1532^{+48}_{-46} (−0.8 σ)
τ	0.0531	$0.055^{+0.016}_{-0.015}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4536	$0.452^{+0.015}_{-0.015}$ (−0.4 σ)	$H(0.51)$	89.30	$89.5^{+2.4}_{-2.4}$ (+0.7 σ)
Σm_{ν} [eV]	0.001	< 0.123 (−0.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6088	$0.606^{+0.018}_{-0.019}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1988	1984^{+60}_{-59} (−0.8 σ)
N_{eff}	2.939	$3.00^{+0.36}_{-0.35}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9949	$0.988^{+0.024}_{-0.028}$ (+0.5 σ)	$H(0.61)$	94.87	$95.1^{+2.5}_{-2.5}$ (+0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0367	$3.042^{+0.037}_{-0.036}$ (+0.4 σ)	$r_{\mathrm{drag}}h$	99.99	$99.8^{+1.7}_{-1.7}$ (+1.0 σ)	$D_{\mathrm{M}}(0.61)$	2314	2309^{+69}_{-67} (−0.8 σ)
n_{s}	0.9633	$0.965^{+0.014}_{-0.014}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.446	$2.439^{+0.051}_{-0.051}$ (−0.4 σ)	$H(2.33)$	234.4	$235.3^{+5.3}_{-5.3}$ (−0.3 σ)
y_{cal}	1.00042	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	z_{re}	7.51	$7.7^{+1.6}_{-1.6}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5792	5776^{+150}_{-150} (−0.6 σ)
A_{217}^{CIB}	46.0	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	2.084	$2.096^{+0.079}_{-0.074}$ (+0.4 σ)	$f\sigma_8(0.15)$	0.4577	$0.456^{+0.014}_{-0.014}$ (−0.3 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.55	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8736	$1.876^{+0.035}_{-0.034}$ (−0.1 σ)	$\sigma_8(0.15)$	0.7552	$0.750^{+0.024}_{-0.026}$ (+0.7 σ)
A_{143}^{tSZ}	7.17	$5.5^{+3.9}_{-3.8}$ (+0.2 σ)	D_{40}	1231.1	1230^{+26}_{-27} (−0.5 σ)	$f\sigma_8(0.38)$	0.4767	$0.475^{+0.014}_{-0.014}$ (+0.3 σ)
A_{100}^{PS}	247	257^{+60}_{-50} (−0.2 σ)	D_{220}	5734	5736^{+74}_{-73} (+0.6 σ)	$\sigma_8(0.38)$	0.6695	$0.665^{+0.021}_{-0.024}$ (+0.8 σ)
A_{143}^{PS}	47.4	45^{+20}_{-20} (−0.5 σ)	D_{810}	2538.1	2538^{+27}_{-26} (+0.1 σ)	$f\sigma_8(0.51)$	0.4756	$0.474^{+0.014}_{-0.014}$ (+0.4 σ)
$A_{143\times 217}^{\mathrm{PS}}$	49.5	42^{+20}_{-20} (−0.2 σ)	D_{1420}	818.6	$817.9^{+9.5}_{-9.4}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6266	$0.623^{+0.020}_{-0.022}$ (+0.8 σ)
A_{217}^{PS}	120.5	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.90	$231.4^{+3.6}_{-3.6}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4708	$0.469^{+0.014}_{-0.014}$ (+0.5 σ)
A^{kSZ}	0.00	< 7.81 (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9633	$0.965^{+0.014}_{-0.014}$ (+0.6 σ)	$\sigma_8(0.61)$	0.5963	$0.593^{+0.019}_{-0.021}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.78	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_{P}	0.24394	$0.2447^{+0.0048}_{-0.0049}$ (+0.3 σ)	$f\sigma_8(2.33)$	0.2998	$0.2986^{+0.0097}_{-0.010}$ (+0.8 σ)
$A_{143}^{\mathrm{dustTT}}$	10.96	$10.8^{+3.5}_{-3.6}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24526	$0.2460^{+0.0049}_{-0.0049}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3097	$0.308^{+0.011}_{-0.011}$ (+0.8 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.8	$18.6^{+6.5}_{-6.6}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.554	$2.565^{+0.089}_{-0.089}$ (−0.9 σ)	f_{2000}^{143}	27.9	29^{+6}_{-6} (−0.6 σ)
$A_{217}^{\mathrm{dustTT}}$	95.2	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.867	$13.83^{+0.36}_{-0.35}$ (−0.6 σ)	$f_{2000}^{143\times 217}$	31.27	32^{+4}_{-4} (−0.7 σ)
$A_{100}^{\mathrm{dustTE}}$	0.115	$0.114^{+0.074}_{-0.075}$	z_*	1089.66	$1089.71^{+0.67}_{-0.68}$ (−1.2 σ)	f_{2000}^{217}	105.93	$106.5^{+3.9}_{-3.8}$ (−0.7 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.058}_{-0.057}$	r_*	145.57	$145.1^{+3.5}_{-3.5}$ (−0.1 σ)	χ_{small}^2	395.86	397.2 (ν : 2.1) (+0.2 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04142	$1.0413^{+0.0011}_{-0.0010}$ (+0.3 σ)	χ_{lowl}^2	23.60	23.5 (ν : 0.7) (−0.6 σ)
$A_{143}^{\mathrm{dustTE}}$	0.226	$0.22^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.978	$13.93^{+0.33}_{-0.32}$ (−0.1 σ)	χ_{plik}^2	2343.2	2359.9 (ν : 19.6) (+261.4 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.663	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.63	$1059.8^{+1.4}_{-1.4}$ (+0.8 σ)	χ_{JLA}^2	1034.91	1035.07 (ν : 0.1)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.07^{+0.53}_{-0.53}$	r_{drag}	148.25	$147.8^{+3.7}_{-3.6}$ (−0.2 σ)	χ_{6DF}^2	0.010	0.049 (ν : 0.0)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.14003	$0.1404^{+0.0027}_{-0.0026}$ (+0.3 σ)	χ_{MGS}^2	1.41	1.36 (ν : 0.1)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16050	$0.16062^{+0.00078}_{-0.00079}$ (−0.4 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.92	4.6 (ν : 0.9)
H_0	67.44	$67.6^{+2.2}_{-2.2}$ (+0.8 σ)	z_{eq}	3398.6	3390^{+49}_{-48} (−0.7 σ)	χ_{prior}^2	1.6	11.4 (ν : 10.4) (+1.1 σ)
Ω_{Λ}	0.6918	$0.690^{+0.013}_{-0.014}$ (+0.9 σ)	k_{eq}	0.010298	$0.01031^{+0.00023}_{-0.00022}$ (−0.7 σ)	χ_{BAO}^2	5.34	6.0 (ν : 0.6)
Ω_{m}	0.3082	$0.310^{+0.014}_{-0.013}$ (−0.9 σ)	$100\theta_{\mathrm{eq}}$	0.8139	$0.8157^{+0.0093}_{-0.0091}$ (+0.8 σ)	χ_{CMB}^2	2762.7	2780.6 (ν : 18.7) (+261.7 σ)
$\Omega_{\mathrm{m}}h^2$	0.1402	$0.1413^{+0.0064}_{-0.0062}$ (−0.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.44974	$0.4506^{+0.0047}_{-0.0046}$ (+0.7 σ)			
$\Omega_{\nu}h^2$	0.00001	< 0.00129 (−0.8 σ)	$H(0.15)$	72.66	$72.8^{+2.3}_{-2.2}$ (+0.8 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 3804.54$; $\bar{\chi}_{\mathrm{eff}}^2 = 3833.11$; $R - 1 = 0.00833$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.92 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3_2_29: 23.60 plik_rd12_HM_v22b_TTTEEE: 2343.21 SN - JLA Pantheon18: 1034.91

9.16 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022317	$0.02236^{+0.00034}_{-0.00033}$ (+1.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.0940	$0.0949^{+0.0061}_{-0.0059}$ (+0.3 σ)	$D_{\mathrm{M}}(0.15)$	644.9	644^{+19}_{-18} (−0.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.1175	$0.1181^{+0.0052}_{-0.0051}$ (−0.4 σ)	σ_8	0.8174	$0.810^{+0.024}_{-0.028}$ (+0.7 σ)	$H(0.38)$	82.46	$82.6^{+2.1}_{-2.0}$ (+0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04129	$1.04116^{+0.00080}_{-0.00079}$ (+0.7 σ)	S_8	0.8298	$0.825^{+0.027}_{-0.027}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1538.6	1537^{+43}_{-41} (−0.7 σ)
τ	0.0545	$0.055^{+0.016}_{-0.015}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4545	$0.452^{+0.015}_{-0.015}$ (−0.4 σ)	$H(0.51)$	89.10	$89.3^{+2.1}_{-2.1}$ (+0.6 σ)
Σm_{ν} [eV]	0.001	< 0.125 (−0.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6095	$0.605^{+0.018}_{-0.019}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1993	1991^{+54}_{-52} (−0.7 σ)
N_{eff}	2.910	$2.96^{+0.30}_{-0.30}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9969	$0.988^{+0.026}_{-0.027}$ (+0.5 σ)	$H(0.61)$	94.66	$94.9^{+2.1}_{-2.1}$ (+0.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0384	$3.041^{+0.035}_{-0.035}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	99.88	$99.6^{+1.7}_{-1.7}$ (+0.9 σ)	$D_{\mathrm{M}}(0.61)$	2320	2316^{+61}_{-60} (−0.7 σ)
n_{s}	0.9630	$0.964^{+0.013}_{-0.013}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.450	$2.442^{+0.051}_{-0.052}$ (−0.4 σ)	$H(2.33)$	234.08	$234.9^{+4.6}_{-4.5}$ (−0.4 σ)
y_{cal}	1.00043	$1.0006^{+0.0049}_{-0.0048}$ (+0.0 σ)	z_{re}	7.65	$7.7^{+1.5}_{-1.6}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5804	5790^{+130}_{-130} (−0.5 σ)
A_{217}^{CIB}	44.7	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	2.087	$2.093^{+0.075}_{-0.071}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4586	$0.457^{+0.014}_{-0.014}$ (−0.3 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.73	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8718	$1.874^{+0.032}_{-0.031}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7554	$0.749^{+0.022}_{-0.026}$ (+0.7 σ)
A_{143}^{tSZ}	7.08	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	D_{40}	1231.1	1232^{+26}_{-26} (−0.4 σ)	$f\sigma_8(0.38)$	0.4774	$0.475^{+0.014}_{-0.014}$ (+0.3 σ)
A_{100}^{PS}	244	257^{+60}_{-50} (−0.2 σ)	D_{220}	5730	5736^{+74}_{-72} (+0.6 σ)	$\sigma_8(0.38)$	0.6697	$0.664^{+0.020}_{-0.023}$ (+0.7 σ)
A_{143}^{PS}	49.1	45^{+20}_{-20} (−0.5 σ)	D_{810}	2538.4	2538^{+27}_{-26} (+0.1 σ)	$f\sigma_8(0.51)$	0.4762	$0.474^{+0.013}_{-0.014}$ (+0.4 σ)
$A_{143\times 217}^{\mathrm{PS}}$	53.4	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.3	$818.0^{+9.4}_{-9.2}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6267	$0.621^{+0.019}_{-0.022}$ (+0.7 σ)
A_{217}^{PS}	122.3	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.29	$231.5^{+3.5}_{-3.4}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4713	$0.469^{+0.013}_{-0.014}$ (+0.5 σ)
A^{kSZ}	0.00	< 7.70 (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9630	$0.964^{+0.013}_{-0.013}$ (+0.5 σ)	$\sigma_8(0.61)$	0.5963	$0.591^{+0.018}_{-0.021}$ (+0.7 σ)
$A_{100}^{\mathrm{dustTT}}$	8.78	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_{P}	0.24354	$0.2443^{+0.0042}_{-0.0042}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2998	$0.2979^{+0.0089}_{-0.0098}$ (+0.7 σ)
$A_{143}^{\mathrm{dustTT}}$	10.93	$10.8^{+3.5}_{-3.6}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24486	$0.2456^{+0.0042}_{-0.0042}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3096	$0.3072^{+0.0097}_{-0.011}$ (+0.8 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	20.0	$18.5^{+6.5}_{-6.6}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.548	$2.560^{+0.080}_{-0.081}$ (−1.0 σ)	f_{2000}^{143}	27.3	29^{+6}_{-6} (−0.7 σ)
$A_{217}^{\mathrm{dustTT}}$	95.7	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.896	$13.86^{+0.31}_{-0.30}$ (−0.5 σ)	$f_{2000}^{143\times 217}$	30.92	32^{+4}_{-4} (−0.8 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.074}_{-0.075}$	z_{\ast}	1089.63	$1089.69^{+0.62}_{-0.62}$ (−1.3 σ)	f_{2000}^{217}	105.60	$106.4^{+3.8}_{-3.7}$ (−0.7 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.058}_{-0.057}$	r_{\ast}	145.83	$145.4^{+3.0}_{-3.0}$ (−0.0 σ)	χ_{small}^2	396.06	397.2 (ν : 2.0) (+0.2 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_{\ast}$	1.04153	$1.04139^{+0.00096}_{-0.00093}$ (+0.4 σ)	χ_{lowl}^2	23.64	23.6 (ν : 0.6) (−0.5 σ)
$A_{143}^{\mathrm{dustTE}}$	0.227	$0.22^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_{\ast})/\mathrm{Gpc}$	14.001	$13.96^{+0.28}_{-0.27}$ (−0.0 σ)	χ_{plik}^2	2342.9	2359.4 (ν : 18.9) (+261.3 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.666	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.51	$1059.7^{+1.2}_{-1.2}$ (+0.7 σ)	χ_{Aver15}^2	0.00	0.31 (ν : 0.1)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.07^{+0.53}_{-0.53}$	r_{drag}	148.53	$148.1^{+3.1}_{-3.1}$ (−0.1 σ)	χ_{6DF}^2	0.016	0.062 (ν : 0.0)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.13984	$0.1402^{+0.0023}_{-0.0022}$ (+0.2 σ)	χ_{MGS}^2	1.34	1.27 (ν : 0.1)
c_{217}	0.99814	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16045	$0.16056^{+0.00068}_{-0.00071}$ (−0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.05	4.9 (ν : 1.3)
H_0	67.24	$67.3^{+2.0}_{-2.0}$ (+0.8 σ)	z_{eq}	3402.5	3394^{+50}_{-49} (−0.7 σ)	χ_{prior}^2	1.6	11.4 (ν : 10.3) (+1.1 σ)
Ω_{Λ}	0.6908	$0.689^{+0.014}_{-0.014}$ (+0.9 σ)	k_{eq}	0.010289	$0.01030^{+0.00021}_{-0.00020}$ (−0.7 σ)	χ_{BAO}^2	5.40	6.2 (ν : 0.9)
Ω_{m}	0.3092	$0.311^{+0.014}_{-0.014}$ (−0.9 σ)	$100\theta_{\mathrm{eq}}$	0.8132	$0.8148^{+0.0093}_{-0.0093}$ (+0.7 σ)	χ_{CMB}^2	2762.5	2780.2 (ν : 18.3) (+261.6 σ)
$\Omega_{\mathrm{m}}h^2$	0.1398	$0.1410^{+0.0055}_{-0.0053}$ (−0.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.44938	$0.4502^{+0.0047}_{-0.0047}$ (+0.7 σ)			
$\Omega_{\nu}h^2$	0.00001	< 0.00132 (−0.8 σ)	$H(0.15)$	72.46	$72.6^{+2.0}_{-2.0}$ (+0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2769.50$; $\bar{\chi}_{\mathrm{eff}}^2 = 2798.18$; $R - 1 = 0.00755$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.00 BAO - 6DF: 0.02 MGS: 1.34 DR12BAO: 4.05 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 commander_dx12_v3.2.29: 23.64
plik_rd12_HM_v22b_TTTEEE: 2342.85

9.17 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022321	$0.02236^{+0.00035}_{-0.00033}$ (+1.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.0946	$0.0954^{+0.0058}_{-0.0055}$ (+0.4 σ)	$D_{\mathrm{M}}(0.15)$	643.4	643^{+18}_{-18} (−0.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.11806	$0.1186^{+0.0049}_{-0.0048}$ (−0.3 σ)	σ_8	0.8187	$0.812^{+0.025}_{-0.026}$ (+0.7 σ)	$H(0.38)$	82.64	$82.8^{+2.0}_{-1.9}$ (+0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04115	$1.04110^{+0.00077}_{-0.00076}$ (+0.6 σ)	S_8	0.8310	$0.827^{+0.027}_{-0.027}$ (−0.3 σ)	$D_{\mathrm{M}}(0.38)$	1535.0	1534^{+41}_{-40} (−0.8 σ)
τ	0.0543	$0.055^{+0.016}_{-0.015}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4552	$0.453^{+0.015}_{-0.015}$ (−0.3 σ)	$H(0.51)$	89.30	$89.5^{+2.0}_{-2.0}$ (+0.6 σ)
Σm_{ν} [eV]	0.002	< 0.126 (−0.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6104	$0.606^{+0.018}_{-0.019}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1989	1987^{+51}_{-50} (−0.7 σ)
N_{eff}	2.945	$2.99^{+0.29}_{-0.28}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9973	$0.989^{+0.026}_{-0.027}$ (+0.5 σ)	$H(0.61)$	94.87	$95.1^{+2.1}_{-2.0}$ (+0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0396	$3.042^{+0.036}_{-0.034}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	99.88	$99.6^{+1.7}_{-1.7}$ (+0.9 σ)	$D_{\mathrm{M}}(0.61)$	2315	2312^{+58}_{-57} (−0.7 σ)
n_{s}	0.9632	$0.965^{+0.013}_{-0.012}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.451	$2.442^{+0.051}_{-0.052}$ (−0.4 σ)	$H(2.33)$	234.58	$235.4^{+4.4}_{-4.2}$ (−0.3 σ)
y_{cal}	1.00048	$1.0006^{+0.0049}_{-0.0048}$ (+0.0 σ)	z_{re}	7.64	$7.7^{+1.6}_{-1.6}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5791	5779^{+120}_{-120} (−0.6 σ)
A_{217}^{CIB}	45.9	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	2.090	$2.095^{+0.076}_{-0.071}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4592	$0.457^{+0.014}_{-0.014}$ (−0.2 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.55	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8746	$1.876^{+0.031}_{-0.030}$ (−0.1 σ)	$\sigma_8(0.15)$	0.7566	$0.750^{+0.022}_{-0.026}$ (+0.7 σ)
A_{143}^{tSZ}	7.15	$5.5^{+3.7}_{-3.9}$ (+0.2 σ)	D_{40}	1232.0	1231^{+25}_{-26} (−0.4 σ)	$f\sigma_8(0.38)$	0.4781	$0.476^{+0.013}_{-0.014}$ (+0.3 σ)
A_{100}^{PS}	247	258^{+60}_{-50} (−0.2 σ)	D_{220}	5732	5734^{+74}_{-72} (+0.6 σ)	$\sigma_8(0.38)$	0.6708	$0.665^{+0.020}_{-0.023}$ (+0.8 σ)
A_{143}^{PS}	47.7	45^{+20}_{-20} (−0.5 σ)	D_{810}	2538.3	2538^{+26}_{-26} (+0.1 σ)	$f\sigma_8(0.51)$	0.4769	$0.474^{+0.013}_{-0.014}$ (+0.5 σ)
$A_{143\times 217}^{\mathrm{PS}}$	49.4	42^{+20}_{-20} (−0.2 σ)	D_{1420}	818.4	$817.7^{+9.3}_{-9.3}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6277	$0.622^{+0.019}_{-0.022}$ (+0.8 σ)
A_{217}^{PS}	120.7	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.81	$231.3^{+3.3}_{-3.4}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4720	$0.469^{+0.013}_{-0.014}$ (+0.5 σ)
A^{kSZ}	0.00	< 7.81 (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9632	$0.965^{+0.013}_{-0.012}$ (+0.6 σ)	$\sigma_8(0.61)$	0.5973	$0.592^{+0.018}_{-0.021}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_{P}	0.24401	$0.2446^{+0.0039}_{-0.0039}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.3003	$0.2984^{+0.0087}_{-0.0097}$ (+0.8 σ)
$A_{143}^{\mathrm{dustTT}}$	10.92	$10.8^{+3.5}_{-3.6}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24533	$0.2460^{+0.0039}_{-0.0039}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3101	$0.3077^{+0.0095}_{-0.011}$ (+0.8 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.9	$18.6^{+6.5}_{-6.6}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.560	$2.570^{+0.073}_{-0.074}$ (−0.8 σ)	f_{2000}^{143}	28.0	29^{+6}_{-6} (−0.6 σ)
$A_{217}^{\mathrm{dustTT}}$	95.5	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.865	$13.84^{+0.29}_{-0.29}$ (−0.6 σ)	$f_{2000}^{143\times 217}$	31.32	32^{+4}_{-4} (−0.7 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.074}_{-0.075}$	z_*	1089.70	$1089.76^{+0.57}_{-0.57}$ (−1.1 σ)	f_{2000}^{217}	106.04	$106.6^{+3.8}_{-3.7}$ (−0.6 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.058}_{-0.057}$	r_*	145.49	$145.1^{+2.8}_{-2.8}$ (−0.1 σ)	χ_{simall}^2	396.03	397.2 (ν : 2.0) (+0.2 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04138	$1.04131^{+0.00091}_{-0.00090}$ (+0.3 σ)	χ_{lowl}^2	23.67	23.5 (ν : 0.6) (−0.5 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.971	$13.93^{+0.26}_{-0.26}$ (−0.1 σ)	χ_{plik}^2	2342.9	2359.4 (ν : 18.9) (+261.3 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.666	$0.66^{+0.16}_{-0.15}$	z_{drag}	1059.59	$1059.8^{+1.2}_{-1.2}$ (+0.8 σ)	χ_{Aver15}^2	0.01	0.32 (ν : 0.1)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.53}_{-0.53}$	r_{drag}	148.19	$147.8^{+2.9}_{-2.9}$ (−0.2 σ)	$\chi_{\mathrm{Cooke17}}^2$	0.39	0.43 (ν : 0.1)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.14007	$0.1404^{+0.0022}_{-0.0021}$ (+0.3 σ)	$\chi_{6\mathrm{DF}}^2$	0.016	0.062 (ν : 0.0)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16054	$0.16064^{+0.00063}_{-0.00064}$ (−0.4 σ)	χ_{MGS}^2	1.34	1.27 (ν : 0.1)
H_0	67.40	$67.4^{+2.0}_{-2.0}$ (+0.8 σ)	z_{eq}	3400.9	3393^{+50}_{-48} (−0.7 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.06	4.9 (ν : 1.3)
Ω_{Λ}	0.6909	$0.689^{+0.013}_{-0.014}$ (+0.9 σ)	k_{eq}	0.010309	$0.01032^{+0.00020}_{-0.00020}$ (−0.6 σ)	χ_{prior}^2	1.6	11.4 (ν : 10.3) (+1.1 σ)
Ω_{m}	0.3091	$0.311^{+0.014}_{-0.013}$ (−0.9 σ)	$100\theta_{\mathrm{eq}}$	0.8134	$0.8149^{+0.0093}_{-0.0093}$ (+0.7 σ)	χ_{BAO}^2	5.42	6.2 (ν : 0.9)
$\Omega_{\mathrm{m}}h^2$	0.1404	$0.1415^{+0.0053}_{-0.0050}$ (−0.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.44949	$0.4502^{+0.0047}_{-0.0047}$ (+0.7 σ)	χ_{CMB}^2	2762.6	2780.1 (ν : 18.2) (+261.6 σ)
$\Omega_{\nu}h^2$	0.00002	< 0.00133 (−0.8 σ)	$H(0.15)$	72.63	$72.7^{+2.0}_{-1.9}$ (+0.8 σ)	χ_{Abund}^2	0.40	0.75 (ν : 0.2)

Best-fit $\chi_{\mathrm{eff}}^2 = 2770.02$; $\bar{\chi}_{\mathrm{eff}}^2 = 2798.56$; $R - 1 = 0.00801$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.01 D_Cooke2017: 0.39 BAO - 6DF: 0.02 MGS: 1.34 DR12BAO: 4.06 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.03 commander_dx12.v3.2.29: 23.67 plik_rd12_HM.v22b_TTTEEE: 2342.87

9.18 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00037}_{-0.00035} \quad (+1.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0956^{+0.0072}_{-0.0069} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$642^{+21}_{-20} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1185^{+0.0061}_{-0.0059} \quad (-0.3\sigma)$	σ_8	$0.813^{+0.025}_{-0.028} \quad (+0.7\sigma)$	$H(0.38)$	$82.9^{+2.4}_{-2.3} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04112^{+0.00086}_{-0.00085} \quad (+0.6\sigma)$	S_8	$0.826^{+0.027}_{-0.027} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+48}_{-46} \quad (-0.8\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$H(0.51)$	$89.6^{+2.4}_{-2.4} \quad (+0.7\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.123 \quad (-0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.018}_{-0.019} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1984^{+60}_{-59} \quad (-0.8\sigma)$
N_{eff}	$3.00^{+0.36}_{-0.35} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.025}_{-0.026} \quad (+0.5\sigma)$	$H(0.61)$	$95.2^{+2.5}_{-2.5} \quad (+0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.034}_{-0.031} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.7}_{-1.7} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2309^{+69}_{-67} \quad (-0.8\sigma)$
n_{s}	$0.965^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.050}_{-0.050} \quad (-0.4\sigma)$	$H(2.33)$	$235.3^{+5.4}_{-5.3} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0048} \quad (+0.0\sigma)$	z_{re}	$< 9.06 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5775^{+150}_{-150} \quad (-0.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.072}_{-0.066} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.014}_{-0.014} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.035}_{-0.034} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.023}_{-0.026} \quad (+0.8\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1230^{+26}_{-27} \quad (-0.5\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.014}_{-0.014} \quad (+0.3\sigma)$
A_{100}^{PS}	$257^{+60}_{-50} \quad (-0.2\sigma)$	D_{220}	$5737^{+74}_{-72} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.021}_{-0.023} \quad (+0.8\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.014}_{-0.014} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.9^{+9.5}_{-9.5} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.020}_{-0.022} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.6}_{-3.6} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.013}_{-0.014} \quad (+0.5\sigma)$
A^{kSZ}	$< 7.83 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.019}_{-0.021} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2447^{+0.0048}_{-0.0049} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2989^{+0.0095}_{-0.010} \quad (+0.8\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2460^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.308^{+0.010}_{-0.011} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.5}_{-6.7} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.565^{+0.089}_{-0.089} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.83^{+0.36}_{-0.35} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.074}_{-0.075}$	z_*	$1089.71^{+0.67}_{-0.68} \quad (-1.2\sigma)$	f_{2000}^{217}	$106.5^{+3.9}_{-3.8} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.134^{+0.058}_{-0.057}$	r_*	$145.1^{+3.5}_{-3.5} \quad (-0.1\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.2) \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0010} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.6) \quad (-0.6\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.93^{+0.33}_{-0.32} \quad (-0.1\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 19.5) \quad (+261.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.8^{+1.4}_{-1.3} \quad (+0.8\sigma)$	χ_{JLA}^2	$1035.06 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.53}_{-0.53}$	r_{drag}	$147.7^{+3.7}_{-3.6} \quad (-0.2\sigma)$	χ_{6DF}^2	$0.048 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1404^{+0.0027}_{-0.0026} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16062^{+0.00078}_{-0.00079} \quad (-0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.9)$
H_0	$67.6^{+2.3}_{-2.2} \quad (+0.8\sigma)$	z_{eq}	$3389^{+49}_{-48} \quad (-0.7\sigma)$	χ_{prior}^2	$11.4 \quad (\nu: 10.4) \quad (+1.1\sigma)$
Ω_{Λ}	$0.690^{+0.013}_{-0.014} \quad (+0.9\sigma)$	k_{eq}	$0.01031^{+0.00023}_{-0.00023} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
Ω_{m}	$0.310^{+0.014}_{-0.013} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8158^{+0.0093}_{-0.0091} \quad (+0.8\sigma)$	χ_{CMB}^2	$2780.4 \quad (\nu: 18.5) \quad (+261.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1414^{+0.0065}_{-0.0062} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0046}_{-0.0046} \quad (+0.7\sigma)$		
$\Omega_{\nu}h^2$	$< 0.00130 \quad (-0.8\sigma)$	$H(0.15)$	$72.8^{+2.3}_{-2.2} \quad (+0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3832.93; R - 1 = 0.00910$$

9.19 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022176	$0.02224^{+0.00046}_{-0.00047}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4540	$0.450^{+0.019}_{-0.020}$ (−0.6 σ)	$H(0.38)$	83.24	$83.2^{+3.0}_{-3.1}$ (+0.9 σ)
$\Omega_c h^2$	0.1195	$0.1196^{+0.0081}_{-0.0078}$ (−0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6101	$0.603^{+0.024}_{-0.026}$ (+0.3 σ)	$D_M(0.38)$	1523	1525^{+62}_{-58} (−0.9 σ)
$100\theta_{MC}$	1.04098	$1.0410^{+0.0012}_{-0.0011}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9945	$0.982^{+0.034}_{-0.038}$ (+0.3 σ)	$H(0.51)$	89.91	$90.0^{+3.2}_{-3.2}$ (+0.8 σ)
τ	0.0520	$0.054^{+0.016}_{-0.016}$ (+0.3 σ)	$r_{drag}h$	100.22	$99.9^{+2.0}_{-2.1}$ (+1.0 σ)	$D_M(0.51)$	1974	1975^{+79}_{-74} (−0.9 σ)
Σm_ν [eV]	0.000	< 0.177 (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.438	$2.422^{+0.063}_{-0.066}$ (−0.8 σ)	$H(0.61)$	95.49	$95.6^{+3.3}_{-3.3}$ (+0.8 σ)
N_{eff}	3.051	$3.09^{+0.49}_{-0.48}$ (+0.5 σ)	z_{re}	7.47	$7.6^{+1.6}_{-1.7}$ (+0.3 σ)	$D_M(0.61)$	2297	2299^{+90}_{-85} (−0.9 σ)
$\ln(10^{10} A_s)$	3.0359	$3.040^{+0.039}_{-0.040}$ (+0.2 σ)	$10^9 A_s$	2.082	$2.090^{+0.083}_{-0.081}$ (+0.2 σ)	$H(2.33)$	235.7	$236.3^{+7.1}_{-7.1}$ (−0.1 σ)
n_s	0.9659	$0.969^{+0.018}_{-0.018}$ (+0.9 σ)	$10^9 A_s e^{-2\tau}$	1.8764	$1.877^{+0.042}_{-0.045}$ (−0.0 σ)	$D_M(2.33)$	5755	5751^{+200}_{-190} (−0.7 σ)
y_{cal}	1.00023	$1.0005^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{40}	1224.3	1221^{+30}_{-30} (−0.9 σ)	$f\sigma_8(0.15)$	0.4582	$0.455^{+0.019}_{-0.019}$ (−0.4 σ)
A_{100}^{PS}	243	243^{+50}_{-50} (−0.7 σ)	D_{220}	5705	5709^{+80}_{-79} (−0.0 σ)	$\sigma_8(0.15)$	0.7581	$0.748^{+0.030}_{-0.035}$ (+0.7 σ)
A_{143}^{PS}	39.7	41^{+20}_{-20} (−1.0 σ)	D_{810}	2531.3	2534^{+28}_{-28} (−0.1 σ)	$f\sigma_8(0.38)$	0.4777	$0.473^{+0.018}_{-0.019}$ (+0.2 σ)
A_{217}^{PS}	98.0	101^{+30}_{-30} (−1.4 σ)	D_{1420}	813.6	815^{+11}_{-11} (+0.0 σ)	$\sigma_8(0.38)$	0.6723	$0.663^{+0.027}_{-0.031}$ (+0.7 σ)
A_{217}^{CIB}	45.0	41^{+20}_{-10} (−1.0 σ)	D_{2000}	229.42	$229.7^{+4.7}_{-4.5}$ (+0.0 σ)	$f\sigma_8(0.51)$	0.4768	$0.472^{+0.018}_{-0.019}$ (+0.4 σ)
A_{143}^{tSZ}	5.21	< 7.38 (−0.7 σ)	$n_{s,0.002}$	0.9659	$0.969^{+0.018}_{-0.018}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6293	$0.620^{+0.025}_{-0.029}$ (+0.7 σ)
$r_{143 \times 217}^{PS}$	0.582	$0.65^{+0.25}_{-0.25}$	Y_P	0.2454	$0.2458^{+0.0065}_{-0.0066}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4722	$0.467^{+0.017}_{-0.019}$ (+0.4 σ)
$r_{143 \times 217}^{CIB}$	0.71	—	Y_P^{BBN}	0.2467	$0.2472^{+0.0065}_{-0.0067}$ (+0.5 σ)	$\sigma_8(0.61)$	0.5988	$0.590^{+0.024}_{-0.028}$ (+0.7 σ)
$\xi^{tSZ \times CIB}$	0.09	—	$10^5 D/H$	2.624	$2.62^{+0.14}_{-0.14}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.3012	$0.298^{+0.012}_{-0.013}$ (+0.7 σ)
A^{kSZ}	2.3	—	Age/Gyr	13.779	$13.77^{+0.47}_{-0.45}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3111	$0.307^{+0.013}_{-0.014}$ (+0.8 σ)
A_{100}^{dust}	1.010	$1.01^{+0.39}_{-0.38}$	z_*	1090.12	$1090.1^{+1.0}_{-0.99}$ (−0.6 σ)	f_{2000}^{143}	31.1	31^{+7}_{-7} (−0.1 σ)
A_{143}^{dust}	0.979	$0.98^{+0.34}_{-0.35}$	r_*	144.70	$144.5^{+4.7}_{-4.5}$ (−0.3 σ)	f_{2000}^{217}	107.59	$107.6^{+4.8}_{-4.9}$ (−0.3 σ)
A_{217}^{dust}	0.966	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	1.04115	$1.0412^{+0.0014}_{-0.0014}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	33.1	33^{+5}_{-5} (−0.2 σ)
$A_{143 \times 217}^{dust}$	1.023	$1.03^{+0.32}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	13.898	$13.88^{+0.44}_{-0.42}$ (−0.3 σ)	χ_{simall}^2	395.81	397.0 (ν : 1.5) (+0.1 σ)
c_{100}	0.99757	$0.9975^{+0.0021}_{-0.0021}$ (−3.5 σ)	z_{drag}	1059.44	$1059.6^{+1.7}_{-1.8}$ (+0.7 σ)	χ_{lowl}^2	23.10	22.8 (ν : 0.8) (−0.8 σ)
c_{217}	1.00164	$1.0012^{+0.0031}_{-0.0031}$ (+4.8 σ)	r_{drag}	147.43	$147.2^{+4.9}_{-4.6}$ (−0.4 σ)	$\chi_{CamSpec}^2$	7050.2	7064.9 (ν : 17.1)
H_0	67.98	$67.9^{+2.9}_{-2.9}$ (+0.9 σ)	k_D	0.14033	$0.1405^{+0.0034}_{-0.0035}$ (+0.3 σ)	χ_{6DF}^2	0.003	0.060 (ν : 0.0)
Ω_Λ	0.6935	$0.691^{+0.016}_{-0.017}$ (+0.9 σ)	$100\theta_D$	0.16108	$0.1611^{+0.0012}_{-0.0012}$ (+0.3 σ)	χ_{MGS}^2	1.54	1.44 (ν : 0.2)
Ω_m	0.3065	$0.309^{+0.017}_{-0.016}$ (−0.9 σ)	z_{eq}	3382	3371^{+67}_{-68} (−1.0 σ)	$\chi_{DR12BAO}^2$	3.66	4.7 (ν : 1.4)
$\Omega_m h^2$	0.1416	$0.1425^{+0.0085}_{-0.0083}$ (−0.3 σ)	k_{eq}	0.010327	$0.01031^{+0.00030}_{-0.00030}$ (−0.7 σ)	χ_{prior}^2	2.4	7.7 (ν : 6.1) (+0.1 σ)
$\Omega_\nu h^2$	0.00000	< 0.00188 (−0.7 σ)	$100\theta_{eq}$	0.8163	$0.819^{+0.013}_{-0.012}$ (+1.0 σ)	χ_{BAO}^2	5.20	6.2 (ν : 1.0)
$\Omega_m h^3$	0.0963	$0.0968^{+0.0095}_{-0.0092}$ (+0.6 σ)	$100\theta_{s,eq}$	0.4511	$0.4523^{+0.0066}_{-0.0064}$ (+1.0 σ)	χ_{CMB}^2	7469.1	7484.7 (ν : 16.3) (+1037.8 σ)
σ_8	0.8200	$0.809^{+0.032}_{-0.037}$ (+0.6 σ)	$H(0.15)$	73.21	$73.2^{+2.9}_{-2.9}$ (+0.9 σ)			
S_8	0.8289	$0.821^{+0.035}_{-0.037}$ (−0.6 σ)	$D_M(0.15)$	638.1	639^{+27}_{-25} (−0.9 σ)			

Best-fit $\chi_{eff}^2 = 7476.70$; $\bar{\chi}_{eff}^2 = 7498.64$; $\Delta\bar{\chi}_{eff}^2 = 1.09$; $R - 1 = 0.00711$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 3.66 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.81 commander_dx12_v3.2.29: 23.10 CamSpec like_10.7HM: 7050.23

9.20 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022227	$0.02226^{+0.00045}_{-0.00046}$ (+0.9 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4538	$0.449^{+0.019}_{-0.020}$ (−0.6 σ)	$H(0.38)$	83.49	$83.4^{+3.0}_{-3.0}$ (+0.9 σ)
$\Omega_c h^2$	0.1197	$0.1197^{+0.0080}_{-0.0078}$ (−0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6107	$0.603^{+0.023}_{-0.026}$ (+0.3 σ)	$D_M(0.38)$	1518	1521^{+60}_{-56} (−0.9 σ)
$100\theta_{MC}$	1.04101	$1.0410^{+0.0012}_{-0.0011}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9950	$0.981^{+0.033}_{-0.038}$ (+0.3 σ)	$H(0.51)$	90.16	$90.1^{+3.1}_{-3.1}$ (+0.9 σ)
τ	0.0532	$0.054^{+0.016}_{-0.016}$ (+0.4 σ)	$r_{\text{drag}} h$	100.44	$100.1^{+1.9}_{-1.9}$ (+1.0 σ)	$D_M(0.51)$	1967	1971^{+76}_{-71} (−0.9 σ)
Σm_ν [eV]	0.000	< 0.172 (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.435	$2.420^{+0.061}_{-0.064}$ (−0.9 σ)	$H(0.61)$	95.74	$95.7^{+3.2}_{-3.2}$ (+0.8 σ)
N_{eff}	3.079	$3.10^{+0.49}_{-0.47}$ (+0.6 σ)	z_{re}	7.59	$7.6^{+1.6}_{-1.7}$ (+0.3 σ)	$D_M(0.61)$	2290	2294^{+87}_{-82} (−0.9 σ)
$\ln(10^{10} A_s)$	3.0394	$3.040^{+0.039}_{-0.039}$ (+0.3 σ)	$10^9 A_s$	2.089	$2.092^{+0.083}_{-0.081}$ (+0.3 σ)	$H(2.33)$	236.0	$236.4^{+7.1}_{-7.0}$ (−0.0 σ)
n_s	0.9682	$0.969^{+0.017}_{-0.018}$ (+0.9 σ)	$10^9 A_s e^{-2\tau}$	1.8785	$1.878^{+0.042}_{-0.044}$ (−0.0 σ)	$D_M(2.33)$	5741	5744^{+190}_{-190} (−0.8 σ)
y_{cal}	1.0004	$1.0005^{+0.0050}_{-0.0050}$ (+0.0 σ)	D_{40}	1220.8	1220^{+31}_{-29} (−0.9 σ)	$f\sigma_8(0.15)$	0.4582	$0.454^{+0.018}_{-0.019}$ (−0.5 σ)
A_{100}^{PS}	238	243^{+50}_{-50} (−0.7 σ)	D_{220}	5704	5709^{+81}_{-79} (−0.0 σ)	$\sigma_8(0.15)$	0.7601	$0.748^{+0.030}_{-0.034}$ (+0.7 σ)
A_{143}^{PS}	39.6	41^{+20}_{-20} (−0.9 σ)	D_{810}	2533.4	2534^{+28}_{-28} (−0.1 σ)	$f\sigma_8(0.38)$	0.4781	$0.473^{+0.018}_{-0.019}$ (+0.2 σ)
A_{217}^{PS}	100.6	101^{+30}_{-30} (−1.4 σ)	D_{1420}	814.6	815^{+11}_{-11} (+0.0 σ)	$\sigma_8(0.38)$	0.6743	$0.664^{+0.026}_{-0.031}$ (+0.7 σ)
A_{217}^{CIB}	45.5	41^{+20}_{-10} (−1.0 σ)	D_{2000}	229.76	$229.6^{+4.6}_{-4.5}$ (−0.0 σ)	$f\sigma_8(0.51)$	0.4774	$0.472^{+0.018}_{-0.019}$ (+0.3 σ)
A_{143}^{tSZ}	6.22	< 7.31 (−0.7 σ)	$n_{s,0.002}$	0.9682	$0.969^{+0.017}_{-0.018}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6312	$0.621^{+0.025}_{-0.029}$ (+0.7 σ)
$r_{143 \times 217}^{\text{PS}}$	0.571	$0.65^{+0.26}_{-0.25}$	Y_P	0.2458	$0.2460^{+0.0064}_{-0.0065}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4729	$0.468^{+0.017}_{-0.019}$ (+0.4 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.77	—	Y_P^{BBN}	0.2471	$0.2474^{+0.0064}_{-0.0065}$ (+0.6 σ)	$\sigma_8(0.61)$	0.6007	$0.591^{+0.024}_{-0.028}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.02	—	10^5D/H	2.624	$2.63^{+0.14}_{-0.13}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.3022	$0.298^{+0.012}_{-0.013}$ (+0.8 σ)
A^{kSZ}	0.5	—	Age/Gyr	13.746	$13.75^{+0.46}_{-0.44}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3123	$0.308^{+0.013}_{-0.014}$ (+0.8 σ)
A_{100}^{dust}	1.014	$1.01^{+0.38}_{-0.38}$	z_*	1090.10	$1090.1^{+1.0}_{-0.97}$ (−0.6 σ)	f_{2000}^{143}	30.9	31^{+7}_{-7} (−0.1 σ)
A_{143}^{dust}	0.990	$0.98^{+0.34}_{-0.35}$	r_*	144.45	$144.4^{+4.6}_{-4.4}$ (−0.4 σ)	f_{2000}^{217}	107.43	$107.6^{+4.8}_{-4.8}$ (−0.2 σ)
A_{217}^{dust}	0.963	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	1.04115	$1.0411^{+0.0014}_{-0.0014}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	32.8	33^{+5}_{-5} (−0.2 σ)
$A_{143 \times 217}^{\text{dust}}$	1.000	$1.03^{+0.32}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	13.875	$13.87^{+0.43}_{-0.41}$ (−0.4 σ)	χ_{small}^2	395.87	$397.0 (\nu: 1.5)$ (+0.1 σ)
c_{100}	0.99755	$0.9975^{+0.0021}_{-0.0021}$ (−3.5 σ)	z_{drag}	1059.59	$1059.7^{+1.7}_{-1.7}$ (+0.7 σ)	χ_{lowl}^2	22.77	$22.7 (\nu: 0.7)$ (−0.9 σ)
c_{217}	1.00139	$1.0012^{+0.0031}_{-0.0031}$ (+4.8 σ)	r_{drag}	147.17	$147.1^{+4.8}_{-4.6}$ (−0.4 σ)	χ_{CamSpec}^2	7050.7	$7065.1 (\nu: 16.9)$
H_0	68.25	$68.1^{+2.8}_{-2.8}$ (+1.0 σ)	k_D	0.14055	$0.1406^{+0.0034}_{-0.0034}$ (+0.4 σ)	χ_{JLA}^2	1034.80	$1035.02 (\nu: 0.1)$
Ω_Λ	0.6952	$0.692^{+0.015}_{-0.016}$ (+0.9 σ)	$100\theta_D$	0.16111	$0.1611^{+0.0012}_{-0.0012}$ (+0.3 σ)	$\chi_{6\text{DF}}^2$	0.000	$0.048 (\nu: 0.0)$
Ω_m	0.3048	$0.308^{+0.016}_{-0.015}$ (−0.9 σ)	z_{eq}	3377	3367^{+64}_{-64} (−1.0 σ)	χ_{MGS}^2	1.68	$1.52 (\nu: 0.2)$
$\Omega_m h^2$	0.1420	$0.1426^{+0.0085}_{-0.0082}$ (−0.3 σ)	k_{eq}	0.010331	$0.01031^{+0.00030}_{-0.00029}$ (−0.7 σ)	χ_{DR12BAO}^2	3.50	$4.4 (\nu: 1.0)$
$\Omega_\nu h^2$	0.00000	< 0.00183 (−0.7 σ)	$100\theta_{\text{eq}}$	0.8174	$0.819^{+0.012}_{-0.012}$ (+1.0 σ)	χ_{prior}^2	2.1	$7.7 (\nu: 6.1)$ (+0.1 σ)
$\Omega_m h^3$	0.0969	$0.0971^{+0.0094}_{-0.0090}$ (+0.7 σ)	$100\theta_{s,\text{eq}}$	0.4516	$0.4527^{+0.0063}_{-0.0061}$ (+1.0 σ)	χ_{BAO}^2	5.18	$6.0 (\nu: 0.6)$
σ_8	0.8220	$0.809^{+0.032}_{-0.037}$ (+0.7 σ)	$H(0.15)$	73.47	$73.3^{+2.8}_{-2.8}$ (+0.9 σ)	χ_{CMB}^2	7469.3	$7484.8 (\nu: 16.3)$ (+1037.8 σ)
S_8	0.8285	$0.820^{+0.035}_{-0.036}$ (−0.6 σ)	$D_M(0.15)$	635.7	638^{+26}_{-24} (−0.9 σ)			

Best-fit $\chi_{\text{eff}}^2 = 8511.44$; $\bar{\chi}_{\text{eff}}^2 = 8533.53$; $R - 1 = 0.00839$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.50 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3.2_29: 22.77 CamSpec like_10.7HM: 7050.67
SN - JLA Pantheon18: 1034.80

9.21 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022168	$0.02221^{+0.00043}_{-0.00044}$ $(+0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4537	$0.449^{+0.019}_{-0.020}$ (-0.6σ)	$H(0.38)$	82.82	$82.8^{+2.4}_{-2.4}$ $(+0.7\sigma)$
$\Omega_c h^2$	0.1184	$0.1185^{+0.0064}_{-0.0062}$ (-0.3σ)	$\sigma_8 \Omega_m^{0.25}$	0.6092	$0.602^{+0.022}_{-0.026}$ $(+0.2\sigma)$	$D_M(0.38)$	1531.1	1532^{+49}_{-47} (-0.8σ)
$100\theta_{MC}$	1.04116	$1.0411^{+0.0010}_{-0.0010}$ $(+0.5\sigma)$	$\sigma_8/h^{0.5}$	0.9949	$0.981^{+0.033}_{-0.037}$ $(+0.3\sigma)$	$H(0.51)$	89.47	$89.5^{+2.5}_{-2.5}$ $(+0.7\sigma)$
τ	0.0531	$0.054^{+0.016}_{-0.016}$ $(+0.3\sigma)$	$r_{\text{drag}} h$	100.10	$99.8^{+2.0}_{-2.0}$ $(+1.0\sigma)$	$D_M(0.51)$	1984	1985^{+62}_{-60} (-0.8σ)
Σm_ν [eV]	0.001	< 0.167 (-0.7σ)	$\langle d^2 \rangle^{1/2}$	2.441	$2.425^{+0.062}_{-0.065}$ (-0.8σ)	$H(0.61)$	95.04	$95.1^{+2.5}_{-2.5}$ $(+0.6\sigma)$
N_{eff}	2.982	$3.02^{+0.37}_{-0.36}$ $(+0.3\sigma)$	z_{re}	7.56	$7.6^{+1.6}_{-1.7}$ $(+0.2\sigma)$	$D_M(0.61)$	2309	2310^{+71}_{-68} (-0.8σ)
$\ln(10^{10} A_s)$	3.0354	$3.037^{+0.036}_{-0.037}$ $(+0.1\sigma)$	$10^9 A_s$	2.081	$2.084^{+0.077}_{-0.076}$ $(+0.1\sigma)$	$H(2.33)$	234.8	$235.3^{+5.5}_{-5.5}$ (-0.3σ)
n_s	0.9643	$0.966^{+0.014}_{-0.015}$ $(+0.7\sigma)$	$10^9 A_s e^{-2\tau}$	1.8713	$1.873^{+0.036}_{-0.037}$ (-0.2σ)	$D_M(2.33)$	5782	5777^{+150}_{-150} (-0.6σ)
y_{cal}	1.00029	$1.0005^{+0.0049}_{-0.0050}$ $(+0.0\sigma)$	D_{40}	1226.0	1223^{+28}_{-29} (-0.8σ)	$f\sigma_8(0.15)$	0.4578	$0.454^{+0.018}_{-0.019}$ (-0.5σ)
A_{100}^{PS}	238.2	241^{+50}_{-50} (-0.7σ)	D_{220}	5705	5709^{+80}_{-79} (-0.0σ)	$\sigma_8(0.15)$	0.7561	$0.745^{+0.028}_{-0.031}$ $(+0.6\sigma)$
A_{143}^{PS}	38.0	40^{+20}_{-20} (-1.1σ)	D_{810}	2531.0	2533^{+28}_{-28} (-0.2σ)	$f\sigma_8(0.38)$	0.4770	$0.472^{+0.017}_{-0.019}$ $(+0.1\sigma)$
A_{217}^{PS}	99.4	101^{+30}_{-30} (-1.4σ)	D_{1420}	814.7	815^{+10}_{-10} $(+0.1\sigma)$	$\sigma_8(0.38)$	0.6705	$0.661^{+0.025}_{-0.028}$ $(+0.7\sigma)$
A_{217}^{CIB}	44.4	41^{+20}_{-10} (-1.0σ)	D_{2000}	230.15	$230.1^{+4.2}_{-4.1}$ $(+0.2\sigma)$	$f\sigma_8(0.51)$	0.4760	$0.471^{+0.016}_{-0.019}$ $(+0.3\sigma)$
A_{143}^{tSZ}	5.35	< 7.35 (-0.6σ)	$n_{s,0.002}$	0.9643	$0.966^{+0.014}_{-0.015}$ $(+0.7\sigma)$	$\sigma_8(0.51)$	0.6275	$0.619^{+0.024}_{-0.026}$ $(+0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.573	$0.65^{+0.26}_{-0.25}$	Y_P	0.2445	$0.2449^{+0.0049}_{-0.0050}$ $(+0.3\sigma)$	$f\sigma_8(0.61)$	0.4713	$0.466^{+0.016}_{-0.018}$ $(+0.4\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.70	—	Y_P^{BBN}	0.2458	$0.2463^{+0.0050}_{-0.0051}$ $(+0.3\sigma)$	$\sigma_8(0.61)$	0.5971	$0.589^{+0.023}_{-0.025}$ $(+0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.05	—	10^5D/H	2.602	$2.61^{+0.12}_{-0.11}$ (-0.3σ)	$f\sigma_8(2.33)$	0.3002	$0.297^{+0.011}_{-0.011}$ $(+0.7\sigma)$
A^{kSZ}	1.8	—	Age/Gyr	13.842	$13.83^{+0.36}_{-0.35}$ (-0.6σ)	$\sigma_8(2.33)$	0.3102	$0.306^{+0.012}_{-0.013}$ $(+0.7\sigma)$
A_{100}^{dust}	1.006	$1.01^{+0.39}_{-0.38}$	z_*	1089.97	$1089.97^{+0.85}_{-0.84}$ (-0.8σ)	f_{2000}^{143}	30.3	30^{+7}_{-7} (-0.3σ)
A_{143}^{dust}	0.981	$0.98^{+0.35}_{-0.35}$	r_*	145.33	$145.1^{+3.7}_{-3.5}$ (-0.1σ)	f_{2000}^{217}	106.91	$107.2^{+4.5}_{-4.5}$ (-0.4σ)
A_{217}^{dust}	0.956	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	1.04137	$1.0413^{+0.0012}_{-0.0012}$ $(+0.3\sigma)$	$f_{2000}^{143 \times 217}$	32.24	33^{+5}_{-5} (-0.4σ)
$A_{143 \times 217}^{\text{dust}}$	1.003	$1.03^{+0.32}_{-0.33}$	$D_M(z_*)/\text{Gpc}$	13.956	$13.94^{+0.34}_{-0.33}$ (-0.1σ)	χ_{small}^2	395.88	$397.0 (\nu: 1.5)$ $(+0.0\sigma)$
c_{100}	0.99744	$0.9975^{+0.0021}_{-0.0021}$ (-3.5σ)	z_{drag}	1059.28	$1059.4^{+1.5}_{-1.5}$ $(+0.5\sigma)$	χ_{lowl}^2	23.28	$23.0 (\nu: 0.7)$ (-0.8σ)
c_{217}	1.00128	$1.0012^{+0.0031}_{-0.0031}$ $(+4.7\sigma)$	r_{drag}	148.08	$147.8^{+3.8}_{-3.6}$ (-0.1σ)	χ_{CamSpec}^2	7050.0	$7064.4 (\nu: 16.3)$
H_0	67.60	$67.5^{+2.3}_{-2.3}$ $(+0.8\sigma)$	k_D	0.13992	$0.1401^{+0.0027}_{-0.0027}$ $(+0.1\sigma)$	χ_{Aver15}^2	0.05	$0.52 (\nu: 0.3)$
Ω_Λ	0.6924	$0.690^{+0.016}_{-0.016}$ $(+0.9\sigma)$	$100\theta_D$	0.16089	$0.16096^{+0.00098}_{-0.00097}$ $(+0.1\sigma)$	$\chi_{6\text{DF}}^2$	0.006	$0.063 (\nu: 0.0)$
Ω_m	0.3076	$0.310^{+0.016}_{-0.016}$ (-0.9σ)	z_{eq}	3388	3375^{+64}_{-65} (-0.9σ)	χ_{MGS}^2	1.47	$1.38 (\nu: 0.2)$
$\Omega_m h^2$	0.1406	$0.1414^{+0.0067}_{-0.0065}$ (-0.6σ)	k_{eq}	0.010296	$0.01028^{+0.00026}_{-0.00026}$ (-0.9σ)	χ_{DR12BAO}^2	3.76	$4.8 (\nu: 1.5)$
$\Omega_\nu h^2$	0.00001	< 0.00176 (-0.7σ)	$100\theta_{\text{eq}}$	0.8154	$0.818^{+0.013}_{-0.012}$ $(+0.9\sigma)$	χ_{prior}^2	2.2	$7.7 (\nu: 6.0)$ $(+0.1\sigma)$
$\Omega_m h^3$	0.0950	$0.0955^{+0.0072}_{-0.0069}$ $(+0.4\sigma)$	$100\theta_{s,\text{eq}}$	0.4506	$0.4519^{+0.0064}_{-0.0061}$ $(+0.9\sigma)$	χ_{BAO}^2	5.23	$6.2 (\nu: 1.0)$
σ_8	0.8180	$0.806^{+0.031}_{-0.033}$ $(+0.6\sigma)$	$H(0.15)$	72.82	$72.8^{+2.3}_{-2.3}$ $(+0.8\sigma)$	χ_{CMB}^2	7469.2	$7484.4 (\nu: 15.7)$ $(+1037.8\sigma)$
S_8	0.8283	$0.820^{+0.034}_{-0.037}$ (-0.6σ)	$D_M(0.15)$	641.6	642^{+22}_{-21} (-0.8σ)			

Best-fit $\chi_{\text{eff}}^2 = 7476.67$; $\bar{\chi}_{\text{eff}}^2 = 7498.80$; $R - 1 = 0.00899$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.05 BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.76 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 commander_dx12_v3.2.29: 23.28
CamSpec like_10.7HM: 7050.02

9.22 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022178	$0.02220^{+0.00043}_{-0.00044} (+0.7\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6102	$0.602^{+0.023}_{-0.024} (+0.2\sigma)$	$H(0.51)$	89.46	$89.6^{+2.3}_{-2.3} (+0.7\sigma)$
$\Omega_c h^2$	0.1185	$0.1186^{+0.0058}_{-0.0057} (-0.3\sigma)$	$\sigma_8/h^{0.5}$	0.9962	$0.982^{+0.033}_{-0.037} (+0.3\sigma)$	$D_M(0.51)$	1985	$1984^{+59}_{-56} (-0.8\sigma)$
$100\theta_{MC}$	1.04111	$1.04107^{+0.00098}_{-0.00099} (+0.5\sigma)$	$r_{drag}h$	99.99	$99.8^{+2.0}_{-2.0} (+1.0\sigma)$	$H(0.61)$	95.03	$95.2^{+2.4}_{-2.4} (+0.6\sigma)$
τ	0.0530	$0.053^{+0.016}_{-0.016} (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.445	$2.425^{+0.062}_{-0.065} (-0.8\sigma)$	$D_M(0.61)$	2310	$2309^{+67}_{-64} (-0.8\sigma)$
Σm_ν [eV]	0.002	$< 0.166 (-0.7\sigma)$	z_{re}	7.55	$7.6^{+1.6}_{-1.7} (+0.2\sigma)$	$H(2.33)$	234.9	$235.4^{+5.1}_{-5.1} (-0.3\sigma)$
N_{eff}	2.983	$3.03^{+0.33}_{-0.33} (+0.3\sigma)$	$10^9 A_s$	2.084	$2.085^{+0.075}_{-0.075} (+0.1\sigma)$	$D_M(2.33)$	5782	$5774^{+140}_{-140} (-0.6\sigma)$
$\ln(10^{10} A_s)$	3.0367	$3.037^{+0.036}_{-0.036} (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8742	$1.873^{+0.034}_{-0.035} (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4588	$0.454^{+0.017}_{-0.019} (-0.5\sigma)$
n_s	0.9642	$0.967^{+0.014}_{-0.014} (+0.7\sigma)$	D_{40}	1227.8	$1223^{+28}_{-28} (-0.8\sigma)$	$\sigma_8(0.15)$	0.7568	$0.746^{+0.028}_{-0.030} (+0.6\sigma)$
y_{cal}	1.00061	$1.0005^{+0.0049}_{-0.0050} (+0.0\sigma)$	D_{220}	5712	$5709^{+80}_{-78} (-0.0\sigma)$	$f\sigma_8(0.38)$	0.4779	$0.473^{+0.016}_{-0.018} (+0.1\sigma)$
A_{100}^{PS}	233.9	$242^{+50}_{-50} (-0.7\sigma)$	D_{810}	2534.3	$2533^{+28}_{-28} (-0.2\sigma)$	$\sigma_8(0.38)$	0.6710	$0.661^{+0.025}_{-0.027} (+0.7\sigma)$
A_{143}^{PS}	45.4	$40^{+20}_{-20} (-1.0\sigma)$	D_{1420}	815.8	$815^{+10}_{-10} (+0.1\sigma)$	$f\sigma_8(0.51)$	0.4768	$0.471^{+0.016}_{-0.018} (+0.3\sigma)$
A_{217}^{PS}	103.4	$101^{+30}_{-30} (-1.4\sigma)$	D_{2000}	230.50	$230.0^{+4.0}_{-3.8} (+0.2\sigma)$	$\sigma_8(0.51)$	0.6280	$0.619^{+0.023}_{-0.025} (+0.7\sigma)$
A_{217}^{CIB}	41.7	$41^{+10}_{-10} (-1.0\sigma)$	$n_{s,0.002}$	0.9642	$0.967^{+0.014}_{-0.014} (+0.7\sigma)$	$f\sigma_8(0.61)$	0.4719	$0.467^{+0.015}_{-0.018} (+0.4\sigma)$
A_{143}^{tSZ}	5.45	$< 7.33 (-0.7\sigma)$	Y_P	0.24448	$0.2450^{+0.0045}_{-0.0046} (+0.3\sigma)$	$\sigma_8(0.61)$	0.5975	$0.589^{+0.022}_{-0.024} (+0.7\sigma)$
$r_{143 \times 217}^{PS}$	0.695	$0.65^{+0.26}_{-0.26}$	Y_P^{BBN}	0.24580	$0.2464^{+0.0045}_{-0.0046} (+0.3\sigma)$	$f\sigma_8(2.33)$	0.3004	$0.297^{+0.011}_{-0.011} (+0.7\sigma)$
$r_{143 \times 217}^{CIB}$	0.76	—	$10^5 D/H$	2.600	$2.610^{+0.098}_{-0.097} (-0.3\sigma)$	$\sigma_8(2.33)$	0.3103	$0.306^{+0.012}_{-0.012} (+0.7\sigma)$
$\xi^{tSZ \times CIB}$	0.63	—	Age/Gyr	13.842	$13.82^{+0.34}_{-0.33} (-0.6\sigma)$	f_{2000}^{143}	29.9	$30^{+6}_{-6} (-0.2\sigma)$
A^{kSZ}	2.1	—	z_*	1089.97	$1089.99^{+0.73}_{-0.73} (-0.7\sigma)$	f_{2000}^{217}	106.81	$107.3^{+4.3}_{-4.3} (-0.4\sigma)$
A_{100}^{dust}	1.006	$1.01^{+0.39}_{-0.38}$	r_*	145.28	$145.0^{+3.3}_{-3.2} (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	32.23	$33^{+5}_{-5} (-0.4\sigma)$
A_{143}^{dust}	0.984	$0.98^{+0.35}_{-0.35}$	$100\theta_*$	1.04132	$1.0413^{+0.0011}_{-0.0011} (+0.2\sigma)$	χ_{small}^2	395.86	$397.0 (\nu: 1.4) (+0.0\sigma)$
A_{217}^{dust}	0.975	$0.97^{+0.21}_{-0.20}$	$D_M(z_*)/Gpc$	13.952	$13.93^{+0.31}_{-0.30} (-0.1\sigma)$	χ_{lowl}^2	23.35	$23.0 (\nu: 0.7) (-0.8\sigma)$
$A_{143 \times 217}^{dust}$	1.017	$1.03^{+0.32}_{-0.33}$	z_{drag}	1059.32	$1059.4^{+1.4}_{-1.4} (+0.5\sigma)$	$\chi_{CamSpec}^2$	7050.2	$7064.2 (\nu: 15.9)$
c_{100}	0.99769	$0.9975^{+0.0021}_{-0.0021} (-3.5\sigma)$	r_{drag}	148.02	$147.8^{+3.5}_{-3.3} (-0.2\sigma)$	χ_{Aver15}^2	0.05	$0.47 (\nu: 0.2)$
c_{217}	1.00127	$1.0012^{+0.0031}_{-0.0031} (+4.7\sigma)$	k_D	0.13998	$0.1401^{+0.0025}_{-0.0026} (+0.1\sigma)$	$\chi_{Cooke17}^2$	0.04	$0.29 (\nu: 0.1)$
H_0	67.55	$67.6^{+2.3}_{-2.2} (+0.8\sigma)$	$100\theta_D$	0.16086	$0.16098^{+0.00082}_{-0.00083} (+0.1\sigma)$	χ_{6DF}^2	0.010	$0.063 (\nu: 0.0)$
Ω_Λ	0.6916	$0.690^{+0.016}_{-0.016} (+0.9\sigma)$	z_{eq}	3391	$3375^{+64}_{-65} (-0.9\sigma)$	χ_{MGS}^2	1.41	$1.39 (\nu: 0.2)$
Ω_m	0.3084	$0.310^{+0.016}_{-0.016} (-0.9\sigma)$	k_{eq}	0.010306	$0.01028^{+0.00025}_{-0.00024} (-0.8\sigma)$	$\chi_{DR12BAO}^2$	3.89	$4.8 (\nu: 1.5)$
$\Omega_m h^2$	0.1407	$0.1415^{+0.0061}_{-0.0061} (-0.5\sigma)$	$100\theta_{eq}$	0.8148	$0.818^{+0.012}_{-0.012} (+0.9\sigma)$	χ_{prior}^2	2.0	$7.7 (\nu: 5.9) (+0.1\sigma)$
$\Omega_\nu h^2$	0.00002	$< 0.00176 (-0.7\sigma)$	$100\theta_{s,eq}$	0.4503	$0.4519^{+0.0064}_{-0.0060} (+0.9\sigma)$	χ_{BAO}^2	5.30	$6.2 (\nu: 1.0)$
$\Omega_m h^3$	0.0951	$0.0956^{+0.0067}_{-0.0065} (+0.4\sigma)$	$H(0.15)$	72.78	$72.8^{+2.2}_{-2.2} (+0.8\sigma)$	χ_{CMB}^2	7469.4	$7484.2 (\nu: 15.3) (+1037.7\sigma)$
σ_8	0.8188	$0.807^{+0.030}_{-0.033} (+0.6\sigma)$	$D_M(0.15)$	642.0	$642^{+21}_{-20} (-0.8\sigma)$	χ_{Abund}^2	0.09	$0.76 (\nu: 0.4)$
S_8	0.8302	$0.820^{+0.034}_{-0.036} (-0.6\sigma)$	$H(0.38)$	82.80	$82.9^{+2.2}_{-2.3} (+0.7\sigma)$			
$\sigma_8 \Omega_m^{0.5}$	0.4547	$0.449^{+0.019}_{-0.020} (-0.6\sigma)$	$D_M(0.38)$	1531.9	$1531^{+47}_{-45} (-0.8\sigma)$			

Best-fit $\chi_{eff}^2 = 7476.77$; $\bar{\chi}_{eff}^2 = 7498.82$; $R - 1 = 0.00839$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.05 D_Cooke2017: 0.04 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.88 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.86 commander_dx12.v3.2.29: 23.35 CamSpec like_10.7HM: 7050.16

9.23 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02227^{+0.00044}_{-0.00046} \quad (+0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.019}_{-0.020} \quad (-0.6\sigma)$	$H(0.38)$	$83.4^{+3.0}_{-2.9} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1197^{+0.0080}_{-0.0077} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.023}_{-0.026} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+60}_{-56} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0012}_{-0.0011} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.033}_{-0.038} \quad (+0.3\sigma)$	$H(0.51)$	$90.1^{+3.1}_{-3.1} \quad (+0.9\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$100.1^{+1.9}_{-1.9} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1971^{+76}_{-71} \quad (-0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.174 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.060}_{-0.063} \quad (-0.8\sigma)$	$H(0.61)$	$95.7^{+3.2}_{-3.2} \quad (+0.8\sigma)$
N_{eff}	$3.10^{+0.48}_{-0.46} \quad (+0.6\sigma)$	z_{re}	$< 8.99 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2294^{+87}_{-81} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.037}_{-0.033} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.074}_{-0.071} \quad (+0.4\sigma)$	$H(2.33)$	$236.4^{+7.0}_{-7.0} \quad (-0.0\sigma)$
n_{s}	$0.970^{+0.017}_{-0.017} \quad (+0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.041}_{-0.044} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5742^{+190}_{-180} \quad (-0.8\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0050} \quad (+0.0\sigma)$	D_{40}	$1220^{+31}_{-30} \quad (-0.9\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.018}_{-0.019} \quad (-0.4\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5709^{+81}_{-78} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.029}_{-0.034} \quad (+0.7\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.9\sigma)$	D_{810}	$2534^{+28}_{-28} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.018}_{-0.019} \quad (+0.2\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-11} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.026}_{-0.030} \quad (+0.7\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.6^{+4.6}_{-4.5} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.017}_{-0.019} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$< 7.30 \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.970^{+0.017}_{-0.017} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.025}_{-0.029} \quad (+0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_{P}	$0.2461^{+0.0063}_{-0.0064} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.017}_{-0.018} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2474^{+0.0064}_{-0.0064} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.024}_{-0.027} \quad (+0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.63^{+0.14}_{-0.13} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.011}_{-0.012} \quad (+0.8\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.75^{+0.46}_{-0.44} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.308^{+0.012}_{-0.014} \quad (+0.8\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.1^{+1.0}_{-0.97} \quad (-0.6\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	r_*	$144.4^{+4.6}_{-4.4} \quad (-0.4\sigma)$	f_{2000}^{217}	$107.6^{+4.8}_{-4.8} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	$1.0411^{+0.0014}_{-0.0014} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.87^{+0.43}_{-0.41} \quad (-0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	z_{drag}	$1059.7^{+1.7}_{-1.8} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 0.7) \quad (-0.9\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	r_{drag}	$147.1^{+4.7}_{-4.6} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.9 \quad (\nu: 16.7)$
H_0	$68.1^{+2.7}_{-2.8} \quad (+1.0\sigma)$	k_{D}	$0.1406^{+0.0033}_{-0.0034} \quad (+0.4\sigma)$	χ_{JLA}^2	$1035.02 \quad (\nu: 0.1)$
Ω_{Λ}	$0.692^{+0.015}_{-0.016} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1611^{+0.0012}_{-0.0012} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
Ω_{m}	$0.308^{+0.016}_{-0.015} \quad (-0.9\sigma)$	z_{eq}	$3366^{+65}_{-64} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.54 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0084}_{-0.0082} \quad (-0.3\sigma)$	k_{eq}	$0.01031^{+0.00030}_{-0.00030} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.9)$
$\Omega_{\nu} h^2$	$< 0.00185 \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.012}_{-0.012} \quad (+1.1\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0972^{+0.0094}_{-0.0089} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4528^{+0.0063}_{-0.0061} \quad (+1.1\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
σ_8	$0.810^{+0.031}_{-0.036} \quad (+0.7\sigma)$	$H(0.15)$	$73.3^{+2.8}_{-2.8} \quad (+1.0\sigma)$	χ_{CMB}^2	$7484.6 \quad (\nu: 15.9) \quad (+1037.8\sigma)$
S_8	$0.821^{+0.034}_{-0.037} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+26}_{-24} \quad (-0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 8533.27$; $R - 1 = 0.00802$

9.24 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022242	$0.02230^{+0.00038}_{-0.00038}$ (+1.0 σ)	σ_8	0.8138	$0.806^{+0.028}_{-0.032}$ (+0.6 σ)	$H(0.15)$	72.47	$72.7^{+2.6}_{-2.5}$ (+0.8 σ)
$\Omega_c h^2$	0.1169	$0.1181^{+0.0068}_{-0.0065}$ (−0.4 σ)	S_8	0.8240	$0.819^{+0.029}_{-0.030}$ (−0.6 σ)	$D_M(0.15)$	644.7	643^{+24}_{-23} (−0.8 σ)
$100\theta_{MC}$	1.04122	$1.04106^{+0.00095}_{-0.00091}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4513	$0.449^{+0.016}_{-0.016}$ (−0.6 σ)	$H(0.38)$	82.42	$82.7^{+2.7}_{-2.6}$ (+0.7 σ)
τ	0.0531	$0.053^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6060	$0.601^{+0.020}_{-0.022}$ (+0.2 σ)	$D_M(0.38)$	1539	1534^{+54}_{-53} (−0.7 σ)
Σm_ν [eV]	0.002	< 0.155 (−0.7 σ)	$\sigma_8/h^{0.5}$	0.9922	$0.981^{+0.028}_{-0.031}$ (+0.3 σ)	$H(0.51)$	89.04	$89.4^{+2.8}_{-2.7}$ (+0.6 σ)
N_{eff}	2.904	$2.99^{+0.42}_{-0.40}$ (+0.2 σ)	$r_{\text{drag}} h$	100.10	$99.8^{+1.9}_{-1.9}$ (+1.0 σ)	$D_M(0.51)$	1994	1988^{+68}_{-67} (−0.7 σ)
$\ln(10^{10} A_s)$	3.0327	$3.036^{+0.038}_{-0.037}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.439	$2.426^{+0.055}_{-0.057}$ (−0.7 σ)	$H(0.61)$	94.58	$95.0^{+2.9}_{-2.8}$ (+0.6 σ)
n_s	0.9633	$0.966^{+0.015}_{-0.015}$ (+0.7 σ)	z_{re}	7.51	$7.5^{+1.6}_{-1.6}$ (+0.2 σ)	$D_M(0.61)$	2320	2313^{+77}_{-76} (−0.7 σ)
y_{cal}	1.00041	$1.0005^{+0.0048}_{-0.0049}$ (+0.0 σ)	$10^9 A_s$	2.075	$2.082^{+0.080}_{-0.075}$ (+0.1 σ)	$H(2.33)$	233.6	$235.1^{+6.1}_{-5.8}$ (−0.4 σ)
A_{100}^{PS}	226.8	238^{+50}_{-50} (−0.9 σ)	$10^9 A_s e^{-2\tau}$	1.8662	$1.872^{+0.038}_{-0.039}$ (−0.3 σ)	$D_M(2.33)$	5810	5784^{+170}_{-170} (−0.5 σ)
A_{143}^{PS}	47.3	38^{+20}_{-20} (−1.2 σ)	D_{40}	1227.0	1226^{+28}_{-28} (−0.7 σ)	$f\sigma_8(0.15)$	0.4555	$0.453^{+0.015}_{-0.016}$ (−0.5 σ)
A_{217}^{PS}	105.8	102^{+30}_{-30} (−1.3 σ)	D_{220}	5716	5721^{+77}_{-76} (+0.3 σ)	$\sigma_8(0.15)$	0.7522	$0.745^{+0.026}_{-0.030}$ (+0.6 σ)
A_{217}^{CIB}	40.9	39^{+10}_{-10} (−1.2 σ)	D_{810}	2533.4	2534^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.38)$	0.4746	$0.472^{+0.015}_{-0.016}$ (+0.1 σ)
A_{143}^{tSZ}	6.33	< 7.51 (−0.6 σ)	D_{1420}	817.5	$816.4^{+9.7}_{-9.9}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6670	$0.660^{+0.024}_{-0.027}$ (+0.6 σ)
$r_{143 \times 217}^{\text{PS}}$	0.725	$0.66^{+0.25}_{-0.26}$	D_{2000}	231.58	$230.7^{+4.1}_{-4.1}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4736	$0.471^{+0.015}_{-0.016}$ (+0.3 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.85	—	$n_{s,0.002}$	0.9633	$0.966^{+0.015}_{-0.015}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6243	$0.618^{+0.022}_{-0.025}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.76	—	Y_P	0.2434	$0.2446^{+0.0056}_{-0.0056}$ (+0.2 σ)	$f\sigma_8(0.61)$	0.4689	$0.466^{+0.015}_{-0.016}$ (+0.4 σ)
A^{kSZ}	0.2	—	Y_P^{BBN}	0.2447	$0.2459^{+0.0056}_{-0.0056}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5941	$0.588^{+0.021}_{-0.024}$ (+0.7 σ)
A_{100}^{dust}	1.019	$1.01^{+0.39}_{-0.38}$	10^5D/H	2.560	$2.58^{+0.11}_{-0.11}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.2987	$0.297^{+0.011}_{-0.011}$ (+0.7 σ)
A_{143}^{dust}	0.984	$0.96^{+0.35}_{-0.35}$	Age/Gyr	13.910	$13.85^{+0.40}_{-0.40}$ (−0.5 σ)	$\sigma_8(2.33)$	0.3086	$0.306^{+0.012}_{-0.013}$ (+0.7 σ)
A_{217}^{dust}	0.988	$0.98^{+0.20}_{-0.20}$	z_*	1089.67	$1089.79^{+0.81}_{-0.81}$ (−1.1 σ)	f_{2000}^{143}	28.5	29^{+7}_{-6} (−0.6 σ)
$A_{143 \times 217}^{\text{dust}}$	1.012	$1.02^{+0.32}_{-0.31}$	r_*	146.06	$145.3^{+3.9}_{-3.9}$ (−0.0 σ)	f_{2000}^{217}	105.56	$106.5^{+4.5}_{-4.4}$ (−0.7 σ)
c_{100}	0.99774	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	1.04148	$1.0413^{+0.0012}_{-0.0011}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	30.91	32^{+5}_{-5} (−0.7 σ)
c_{217}	1.00116	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	$D_M(z_*)/\text{Gpc}$	14.024	$13.95^{+0.36}_{-0.36}$ (−0.0 σ)	χ_{small}^2	395.84	$396.9 (\nu: 1.5)$ (+0.0 σ)
c_{TE}	0.9957	$0.997^{+0.010}_{-0.0098}$	z_{drag}	1059.28	$1059.6^{+1.5}_{-1.5}$ (+0.6 σ)	χ_{lowl}^2	23.33	$23.1 (\nu: 0.7)$ (−0.7 σ)
c_{EE}	0.9908	$0.992^{+0.011}_{-0.011}$	r_{drag}	148.79	$148.0^{+4.1}_{-4.0}$ (−0.1 σ)	χ_{CamSpec}^2	11498.5	$11515.1 (\nu: 18.1)$
H_0	67.27	$67.4^{+2.6}_{-2.5}$ (+0.8 σ)	k_D	0.13954	$0.1401^{+0.0029}_{-0.0029}$ (+0.1 σ)	$\chi_{6\text{DF}}^2$	0.006	$0.059 (\nu: 0.0)$
Ω_Λ	0.6924	$0.690^{+0.015}_{-0.015}$ (+0.9 σ)	$100\theta_D$	0.16054	$0.16073^{+0.00099}_{-0.00098}$ (−0.2 σ)	χ_{MGS}^2	1.47	$1.36 (\nu: 0.1)$
Ω_m	0.3076	$0.310^{+0.015}_{-0.015}$ (−0.9 σ)	z_{eq}	3391	3380^{+56}_{-56} (−0.8 σ)	χ_{DR12BAO}^2	3.77	$4.8 (\nu: 1.3)$
$\Omega_m h^2$	0.1392	$0.1411^{+0.0072}_{-0.0069}$ (−0.6 σ)	k_{eq}	0.010249	$0.01028^{+0.00025}_{-0.00024}$ (−0.9 σ)	χ_{prior}^2	2.0	$7.8 (\nu: 5.9)$ (+0.2 σ)
$\Omega_\nu h^2$	0.00002	< 0.00163 (−0.7 σ)	$100\theta_{\text{eq}}$	0.8151	$0.817^{+0.011}_{-0.011}$ (+0.9 σ)	χ_{BAO}^2	5.25	$6.2 (\nu: 0.9)$
$\Omega_m h^3$	0.0936	$0.0952^{+0.0081}_{-0.0076}$ (+0.4 σ)	$100\theta_{s,\text{eq}}$	0.4504	$0.4514^{+0.0055}_{-0.0053}$ (+0.9 σ)	χ_{CMB}^2	11917.7	$11935.2 (\nu: 17.8)$ (+1772.1 σ)

Best-fit $\chi_{\text{eff}}^2 = 11924.95$; $\bar{\chi}_{\text{eff}}^2 = 11949.25$; $\Delta\chi_{\text{eff}}^2 = 0.97$; $R - 1 = 0.00978$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.77 CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.84 commander_dx12_v3.2.29: 23.33 CamSpec like_10.7HM_1400_unified: 11498.54

9.25 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022281	$0.02232^{+0.00037}_{-0.00037}$ (+1.0 σ)	S_8	0.8234	$0.818^{+0.028}_{-0.029}$ (−0.7 σ)	$H(0.38)$	82.67	$82.9^{+2.6}_{-2.6}$ (+0.7 σ)
$\Omega_c h^2$	0.1174	$0.1183^{+0.0069}_{-0.0065}$ (−0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4510	$0.448^{+0.015}_{-0.016}$ (−0.7 σ)	$D_M(0.38)$	1533	1531^{+52}_{-51} (−0.8 σ)
$100\theta_{MC}$	1.04116	$1.04105^{+0.00096}_{-0.00090}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6061	$0.601^{+0.019}_{-0.021}$ (+0.2 σ)	$H(0.51)$	89.30	$89.6^{+2.8}_{-2.6}$ (+0.7 σ)
τ	0.0525	$0.053^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9914	$0.981^{+0.028}_{-0.030}$ (+0.3 σ)	$D_M(0.51)$	1987	1984^{+66}_{-65} (−0.8 σ)
Σm_ν [eV]	0.000	< 0.148 (−0.7 σ)	$r_{\text{drag}} h$	100.22	$99.9^{+1.8}_{-1.8}$ (+1.0 σ)	$H(0.61)$	94.84	$95.1^{+2.8}_{-2.7}$ (+0.6 σ)
N_{eff}	2.938	$3.01^{+0.42}_{-0.39}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.436	$2.424^{+0.054}_{-0.055}$ (−0.8 σ)	$D_M(0.61)$	2313	2309^{+76}_{-75} (−0.8 σ)
$\ln(10^{10} A_s)$	3.0329	$3.037^{+0.038}_{-0.036}$ (+0.1 σ)	z_{re}	7.45	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$H(2.33)$	234.1	$235.2^{+6.1}_{-5.8}$ (−0.3 σ)
n_s	0.9640	$0.966^{+0.015}_{-0.015}$ (+0.7 σ)	$10^9 A_s$	2.076	$2.084^{+0.080}_{-0.074}$ (+0.1 σ)	$D_M(2.33)$	5794	5776^{+170}_{-160} (−0.6 σ)
y_{cal}	1.00039	$1.0006^{+0.0048}_{-0.0049}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8689	$1.872^{+0.038}_{-0.038}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4552	$0.453^{+0.015}_{-0.015}$ (−0.5 σ)
A_{100}^{PS}	229.2	239^{+50}_{-50} (−0.8 σ)	D_{40}	1226.8	1225^{+28}_{-27} (−0.7 σ)	$\sigma_8(0.15)$	0.7531	$0.746^{+0.026}_{-0.029}$ (+0.6 σ)
A_{143}^{PS}	43.1	39^{+20}_{-20} (−1.2 σ)	D_{220}	5720	5722^{+77}_{-76} (+0.3 σ)	$f\sigma_8(0.38)$	0.4746	$0.472^{+0.015}_{-0.016}$ (+0.1 σ)
A_{217}^{PS}	104.4	102^{+30}_{-30} (−1.3 σ)	D_{810}	2533.7	2534^{+27}_{-27} (−0.1 σ)	$\sigma_8(0.38)$	0.6679	$0.661^{+0.023}_{-0.026}$ (+0.7 σ)
A_{217}^{CIB}	42.2	40^{+10}_{-10} (−1.2 σ)	D_{1420}	817.1	$816.3^{+9.6}_{-9.9}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4737	$0.471^{+0.015}_{-0.016}$ (+0.3 σ)
A_{143}^{tSZ}	6.53	< 7.50 (−0.6 σ)	D_{2000}	231.29	$230.7^{+4.1}_{-4.1}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6251	$0.619^{+0.022}_{-0.025}$ (+0.7 σ)
$r_{143 \times 217}^{\text{PS}}$	0.675	$0.66^{+0.25}_{-0.26}$	$n_{s,0.002}$	0.9640	$0.966^{+0.015}_{-0.015}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4691	$0.466^{+0.015}_{-0.015}$ (+0.4 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.80	—	Y_P	0.2439	$0.2448^{+0.0056}_{-0.0055}$ (+0.3 σ)	$\sigma_8(0.61)$	0.5949	$0.589^{+0.021}_{-0.024}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.45	—	Y_P^{BBN}	0.2452	$0.2461^{+0.0056}_{-0.0055}$ (+0.3 σ)	$f\sigma_8(2.33)$	0.2992	$0.297^{+0.010}_{-0.011}$ (+0.7 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.565	$2.58^{+0.11}_{-0.11}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3091	$0.306^{+0.011}_{-0.012}$ (+0.7 σ)
A_{100}^{dust}	1.009	$1.01^{+0.39}_{-0.39}$	Age/Gyr	13.873	$13.83^{+0.39}_{-0.39}$ (−0.6 σ)	f_{2000}^{143}	28.8	29^{+7}_{-7} (−0.5 σ)
A_{143}^{dust}	0.974	$0.96^{+0.34}_{-0.34}$	z_*	1089.70	$1089.79^{+0.81}_{-0.81}$ (−1.1 σ)	f_{2000}^{217}	105.86	$106.6^{+4.4}_{-4.4}$ (−0.7 σ)
A_{217}^{dust}	0.980	$0.98^{+0.20}_{-0.20}$	r_*	145.72	$145.2^{+3.9}_{-3.9}$ (−0.1 σ)	$f_{2000}^{143 \times 217}$	31.17	32^{+5}_{-5} (−0.7 σ)
$A_{143 \times 217}^{\text{dust}}$	1.011	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04140	$1.0413^{+0.0012}_{-0.0011}$ (+0.2 σ)	χ_{small}^2	395.79	397.0 (ν : 1.5) (+0.0 σ)
c_{100}	0.99775	$0.9975^{+0.0021}_{-0.0020}$ (−3.4 σ)	$D_M(z_*)/\text{Gpc}$	13.993	$13.94^{+0.36}_{-0.36}$ (−0.1 σ)	χ_{lowl}^2	23.28	23.0 (ν : 0.7) (−0.7 σ)
c_{217}	1.00120	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	z_{drag}	1059.44	$1059.6^{+1.5}_{-1.5}$ (+0.7 σ)	χ_{CamSpec}^2	11498.6	11515.2 (ν : 18.1)
c_{TE}	0.9957	$0.9966^{+0.010}_{-0.0098}$	r_{drag}	148.43	$147.9^{+4.0}_{-4.0}$ (−0.1 σ)	χ_{JLA}^2	1034.85	1035.05 (ν : 0.1)
c_{EE}	0.9909	$0.992^{+0.011}_{-0.011}$	k_D	0.13981	$0.1402^{+0.0030}_{-0.0028}$ (+0.2 σ)	$\chi_{6\text{DF}}^2$	0.003	0.047 (ν : 0.0)
H_0	67.52	$67.6^{+2.5}_{-2.4}$ (+0.8 σ)	$100\theta_D$	0.16059	$0.16076^{+0.00099}_{-0.00098}$ (−0.2 σ)	χ_{MGS}^2	1.54	1.44 (ν : 0.1)
Ω_Λ	0.6935	$0.691^{+0.014}_{-0.015}$ (+0.9 σ)	z_{eq}	3388	3377^{+54}_{-54} (−0.9 σ)	χ_{DR12BAO}^2	3.67	4.5 (ν : 0.9)
Ω_m	0.3065	$0.309^{+0.015}_{-0.014}$ (−0.9 σ)	k_{eq}	0.010265	$0.01028^{+0.00025}_{-0.00024}$ (−0.9 σ)	χ_{prior}^2	2.0	7.9 (ν : 6.0) (+0.2 σ)
$\Omega_m h^2$	0.1397	$0.1412^{+0.0072}_{-0.0068}$ (−0.6 σ)	$100\theta_{\text{eq}}$	0.8156	$0.818^{+0.010}_{-0.010}$ (+0.9 σ)	χ_{BAO}^2	5.21	6.0 (ν : 0.6)
$\Omega_\nu h^2$	0.00000	< 0.00156 (−0.7 σ)	$100\theta_{s,\text{eq}}$	0.4507	$0.4518^{+0.0053}_{-0.0052}$ (+0.9 σ)	χ_{CMB}^2	11917.7	11935.2 (ν : 17.9) (+1772.1 σ)
$\Omega_m h^3$	0.0943	$0.0955^{+0.0082}_{-0.0075}$ (+0.4 σ)	$H(0.15)$	72.71	$72.8^{+2.5}_{-2.5}$ (+0.8 σ)			
σ_8	0.8146	$0.807^{+0.027}_{-0.031}$ (+0.6 σ)	$D_M(0.15)$	642.5	642^{+23}_{-23} (−0.8 σ)			

Best-fit $\chi_{\text{eff}}^2 = 12959.81$; $\bar{\chi}_{\text{eff}}^2 = 12984.10$; $R - 1 = 0.01027$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 3.67 CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.79 commander_dx12_v3_2_29: 23.28 CamSpec like_10.7HM_1400_unified: 11498.65 SN - JLA Pantheon18: 1034.85

9.26 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022260	$0.02228^{+0.00035}_{-0.00036}$ $(+1.0\sigma)$	S_8	0.8258	$0.819^{+0.029}_{-0.029}$ (-0.7σ)	$H(0.38)$	82.46	$82.6^{+2.2}_{-2.1}$ $(+0.6\sigma)$
$\Omega_c h^2$	0.1173	$0.1177^{+0.0057}_{-0.0054}$ (-0.5σ)	$\sigma_8 \Omega_m^{0.5}$	0.4523	$0.448^{+0.016}_{-0.016}$ (-0.7σ)	$D_M(0.38)$	1538.1	1537^{+45}_{-45} (-0.7σ)
$100\theta_{MC}$	1.04116	$1.04111^{+0.00086}_{-0.00082}$ $(+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6070	$0.601^{+0.019}_{-0.021}$ $(+0.2\sigma)$	$H(0.51)$	89.09	$89.2^{+2.3}_{-2.2}$ $(+0.6\sigma)$
τ	0.0529	$0.053^{+0.016}_{-0.015}$ $(+0.3\sigma)$	$\sigma_8/h^{0.5}$	0.9931	$0.981^{+0.028}_{-0.031}$ $(+0.3\sigma)$	$D_M(0.51)$	1993	1991^{+56}_{-57} (-0.7σ)
Σm_ν [eV]	0.003	< 0.150 (-0.7σ)	$r_{drag} h$	99.99	$99.7^{+1.8}_{-1.8}$ $(+0.9\sigma)$	$H(0.61)$	94.64	$94.8^{+2.4}_{-2.3}$ $(+0.5\sigma)$
N_{eff}	2.915	$2.97^{+0.34}_{-0.32}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.442	$2.427^{+0.054}_{-0.055}$ (-0.7σ)	$D_M(0.61)$	2320	2317^{+64}_{-65} (-0.7σ)
$\ln(10^{10} A_s)$	3.0333	$3.035^{+0.036}_{-0.035}$ $(+0.0\sigma)$	z_{re}	7.49	$7.5^{+1.6}_{-1.6}$ $(+0.1\sigma)$	$H(2.33)$	233.90	$234.7^{+5.0}_{-4.9}$ (-0.5σ)
n_s	0.9630	$0.965^{+0.013}_{-0.013}$ $(+0.6\sigma)$	$10^9 A_s$	2.077	$2.080^{+0.075}_{-0.071}$ $(+0.0\sigma)$	$D_M(2.33)$	5806	5794^{+140}_{-140} (-0.5σ)
y_{cal}	1.00043	$1.0006^{+0.0048}_{-0.0049}$ $(+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8682	$1.870^{+0.033}_{-0.034}$ (-0.4σ)	$f\sigma_8(0.15)$	0.4564	$0.453^{+0.015}_{-0.015}$ (-0.5σ)
A_{100}^{PS}	227.9	238^{+50}_{-50} (-0.9σ)	D_{40}	1228.6	1226^{+27}_{-26} (-0.6σ)	$\sigma_8(0.15)$	0.7529	$0.744^{+0.025}_{-0.027}$ $(+0.6\sigma)$
A_{143}^{PS}	44.6	38^{+20}_{-20} (-1.3σ)	D_{220}	5720	5721^{+78}_{-77} $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4754	$0.471^{+0.014}_{-0.015}$ $(+0.1\sigma)$
A_{217}^{PS}	104.8	102^{+30}_{-30} (-1.3σ)	D_{810}	2534.0	2533^{+27}_{-27} (-0.2σ)	$\sigma_8(0.38)$	0.6675	$0.659^{+0.023}_{-0.024}$ $(+0.6\sigma)$
A_{217}^{CIB}	41.7	39^{+10}_{-10} (-1.2σ)	D_{1420}	817.4	$816.6^{+9.5}_{-9.8}$ $(+0.3\sigma)$	$f\sigma_8(0.51)$	0.4743	$0.470^{+0.014}_{-0.015}$ $(+0.2\sigma)$
A_{143}^{tSZ}	6.48	< 7.52 (-0.6σ)	D_{2000}	231.51	$230.9^{+3.8}_{-3.8}$ $(+0.5\sigma)$	$\sigma_8(0.51)$	0.6248	$0.617^{+0.022}_{-0.023}$ $(+0.6\sigma)$
$r_{143 \times 217}^{PS}$	0.700	$0.66^{+0.25}_{-0.26}$	$n_{s,0.002}$	0.9630	$0.965^{+0.013}_{-0.013}$ $(+0.6\sigma)$	$f\sigma_8(0.61)$	0.4695	$0.465^{+0.014}_{-0.015}$ $(+0.3\sigma)$
$r_{143 \times 217}^{CIB}$	0.82	—	Y_P	0.24358	$0.2443^{+0.0046}_{-0.0045}$ $(+0.2\sigma)$	$\sigma_8(0.61)$	0.5945	$0.587^{+0.021}_{-0.022}$ $(+0.6\sigma)$
$\xi^{tSZ \times CIB}$	0.59	—	Y_P^{BBN}	0.24490	$0.2456^{+0.0046}_{-0.0045}$ $(+0.2\sigma)$	$f\sigma_8(2.33)$	0.2989	$0.2961^{+0.0095}_{-0.011}$ $(+0.6\sigma)$
A^{kSZ}	0.0	—	$10^5 D/H$	2.561	$2.575^{+0.097}_{-0.096}$ (-0.8σ)	$\sigma_8(2.33)$	0.3087	$0.305^{+0.010}_{-0.012}$ $(+0.7\sigma)$
A_{100}^{dust}	1.007	$1.01^{+0.39}_{-0.39}$	Age/Gyr	13.899	$13.87^{+0.32}_{-0.33}$ (-0.5σ)	f_{2000}^{143}	28.5	29^{+6}_{-6} (-0.6σ)
A_{143}^{dust}	0.973	$0.96^{+0.34}_{-0.35}$	z_*	1089.68	$1089.75^{+0.72}_{-0.71}$ (-1.2σ)	f_{2000}^{217}	105.58	$106.4^{+4.3}_{-4.2}$ (-0.7σ)
A_{217}^{dust}	0.981	$0.98^{+0.21}_{-0.20}$	r_*	145.90	$145.5^{+3.2}_{-3.2}$ $(+0.1\sigma)$	$f_{2000}^{143 \times 217}$	30.92	32^{+5}_{-5} (-0.8σ)
$A_{143 \times 217}^{dust}$	1.006	$1.02^{+0.31}_{-0.31}$	$100\theta_*$	1.04141	$1.0414^{+0.0010}_{-0.00099}$ $(+0.3\sigma)$	χ_{small}^2	395.83	$396.9 (\nu: 1.5)$ (-0.0σ)
c_{100}	0.99779	$0.9975^{+0.0021}_{-0.0020}$ (-3.4σ)	$D_M(z_*)/Gpc$	14.010	$13.97^{+0.30}_{-0.30}$ $(+0.0\sigma)$	χ_{lowl}^2	23.45	$23.2 (\nu: 0.6)$ (-0.7σ)
c_{217}	1.00120	$1.0011^{+0.0031}_{-0.0031}$ $(+4.6\sigma)$	z_{drag}	1059.36	$1059.5^{+1.3}_{-1.3}$ $(+0.6\sigma)$	$\chi_{CamSpec}^2$	11498.3	$11514.7 (\nu: 17.3)$
c_{TE}	0.9955	$0.9963^{+0.010}_{-0.0097}$	r_{drag}	148.62	$148.2^{+3.4}_{-3.3}$ $(+0.0\sigma)$	χ_{Aver15}^2	0.00	$0.37 (\nu: 0.1)$
c_{EE}	0.9906	$0.992^{+0.011}_{-0.011}$	k_D	0.13968	$0.1399^{+0.0024}_{-0.0024}$ $(+0.0\sigma)$	χ_{6DF}^2	0.010	$0.060 (\nu: 0.0)$
H_0	67.28	$67.3^{+2.2}_{-2.1}$ $(+0.8\sigma)$	$100\theta_D$	0.16053	$0.16068^{+0.00084}_{-0.00083}$ (-0.3σ)	χ_{MGS}^2	1.41	$1.33 (\nu: 0.1)$
Ω_Λ	0.6917	$0.689^{+0.014}_{-0.015}$ $(+0.9\sigma)$	z_{eq}	3394	3382^{+53}_{-54} (-0.8σ)	$\chi_{DR12BAO}^2$	3.90	$4.8 (\nu: 1.3)$
Ω_m	0.3083	$0.311^{+0.015}_{-0.014}$ (-0.9σ)	k_{eq}	0.010268	$0.01027^{+0.00022}_{-0.00021}$ (-0.9σ)	χ_{prior}^2	2.0	$7.8 (\nu: 5.9)$ $(+0.2\sigma)$
$\Omega_m h^2$	0.1396	$0.1406^{+0.0060}_{-0.0057}$ (-0.7σ)	$100\theta_{eq}$	0.8144	$0.817^{+0.010}_{-0.010}$ $(+0.8\sigma)$	χ_{BAO}^2	5.31	$6.2 (\nu: 0.9)$
$\Omega_\nu h^2$	0.00003	< 0.00158 (-0.7σ)	$100\theta_{s,eq}$	0.4501	$0.4513^{+0.0052}_{-0.0051}$ $(+0.8\sigma)$	χ_{CMB}^2	11917.6	$11934.8 (\nu: 17.2)$ $(+1772.1\sigma)$
$\Omega_m h^3$	0.0939	$0.0947^{+0.0066}_{-0.0062}$ $(+0.3\sigma)$	$H(0.15)$	72.48	$72.5^{+2.2}_{-2.1}$ $(+0.7\sigma)$			
σ_8	0.8146	$0.805^{+0.027}_{-0.029}$ $(+0.6\sigma)$	$D_M(0.15)$	644.6	644^{+20}_{-20} (-0.7σ)			

Best-fit $\chi_{eff}^2 = 11924.93$; $\bar{\chi}_{eff}^2 = 11949.22$; $R - 1 = 0.01005$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.00 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.90 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.83 commander_dx12_v3.2.29: 23.45 CamSpec like_10.7HM.1400_unified: 11498.32

9.27 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022251	$0.02228^{+0.00035}_{-0.00036}$ (+0.9 σ)	S_8	0.8282	$0.820^{+0.028}_{-0.029}$ (−0.6 σ)	$H(0.38)$	82.70	$82.7^{+2.1}_{-2.1}$ (+0.7 σ)
$\Omega_c h^2$	0.1181	$0.1182^{+0.0053}_{-0.0051}$ (−0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4536	$0.449^{+0.015}_{-0.016}$ (−0.6 σ)	$D_M(0.38)$	1533.6	1535^{+44}_{-43} (−0.7 σ)
$100\theta_{MC}$	1.04108	$1.04105^{+0.00081}_{-0.00077}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6088	$0.601^{+0.019}_{-0.020}$ (+0.2 σ)	$H(0.51)$	89.35	$89.4^{+2.2}_{-2.1}$ (+0.6 σ)
τ	0.0531	$0.053^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9946	$0.981^{+0.028}_{-0.031}$ (+0.3 σ)	$D_M(0.51)$	1987	1988^{+55}_{-54} (−0.7 σ)
Σm_ν [eV]	0.003	< 0.151 (−0.7 σ)	$r_{drag} h$	99.99	$99.7^{+1.8}_{-1.8}$ (+0.9 σ)	$H(0.61)$	94.92	$95.0^{+2.2}_{-2.2}$ (+0.6 σ)
N_{eff}	2.959	$2.99^{+0.31}_{-0.30}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.442	$2.427^{+0.054}_{-0.056}$ (−0.7 σ)	$D_M(0.61)$	2313	2313^{+63}_{-62} (−0.7 σ)
$\ln(10^{10} A_s)$	3.0355	$3.036^{+0.036}_{-0.034}$ (+0.1 σ)	z_{re}	7.53	$7.5^{+1.6}_{-1.6}$ (+0.1 σ)	$H(2.33)$	234.58	$235.1^{+4.6}_{-4.5}$ (−0.4 σ)
n_s	0.9642	$0.965^{+0.013}_{-0.013}$ (+0.6 σ)	$10^9 A_s$	2.081	$2.082^{+0.075}_{-0.071}$ (+0.0 σ)	$D_M(2.33)$	5789	5784^{+130}_{-130} (−0.5 σ)
y_{cal}	1.00034	$1.0005^{+0.0048}_{-0.0049}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8715	$1.872^{+0.032}_{-0.032}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4578	$0.454^{+0.015}_{-0.015}$ (−0.5 σ)
A_{100}^{PS}	229.6	239^{+50}_{-50} (−0.8 σ)	D_{40}	1226.9	1226^{+27}_{-26} (−0.7 σ)	$\sigma_8(0.15)$	0.7552	$0.745^{+0.025}_{-0.027}$ (+0.6 σ)
A_{143}^{PS}	44.4	39^{+20}_{-20} (−1.2 σ)	D_{220}	5715	5720^{+78}_{-76} (+0.2 σ)	$f\sigma_8(0.38)$	0.4768	$0.472^{+0.014}_{-0.015}$ (+0.1 σ)
A_{217}^{PS}	103.9	102^{+30}_{-30} (−1.3 σ)	D_{810}	2533.7	2534^{+27}_{-27} (−0.2 σ)	$\sigma_8(0.38)$	0.6695	$0.660^{+0.023}_{-0.024}$ (+0.6 σ)
A_{217}^{CIB}	42.7	39^{+10}_{-10} (−1.2 σ)	D_{1420}	816.5	$816.2^{+9.4}_{-9.6}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4757	$0.471^{+0.014}_{-0.015}$ (+0.3 σ)
A_{143}^{tSZ}	6.51	< 7.49 (−0.6 σ)	D_{2000}	231.02	$230.6^{+3.6}_{-3.6}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6266	$0.618^{+0.021}_{-0.023}$ (+0.7 σ)
$r_{143 \times 217}^{PS}$	0.676	$0.66^{+0.25}_{-0.26}$	$n_{s,0.002}$	0.9642	$0.965^{+0.013}_{-0.013}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4709	$0.466^{+0.013}_{-0.015}$ (+0.4 σ)
$r_{143 \times 217}^{CIB}$	0.83	—	Y_P	0.24418	$0.2446^{+0.0043}_{-0.0043}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5963	$0.588^{+0.020}_{-0.022}$ (+0.7 σ)
$\xi^{tSZ \times CIB}$	0.49	—	Y_P^{BBN}	0.24550	$0.2459^{+0.0043}_{-0.0043}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2998	$0.2965^{+0.0097}_{-0.010}$ (+0.7 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.578	$2.584^{+0.087}_{-0.085}$ (−0.6 σ)	$\sigma_8(2.33)$	0.3097	$0.306^{+0.011}_{-0.011}$ (+0.7 σ)
A_{100}^{dust}	1.008	$1.01^{+0.39}_{-0.38}$	Age/Gyr	13.859	$13.85^{+0.31}_{-0.31}$ (−0.5 σ)	f_{2000}^{143}	29.1	29^{+6}_{-6} (−0.5 σ)
A_{143}^{dust}	0.974	$0.96^{+0.34}_{-0.35}$	z_*	1089.81	$1089.81^{+0.65}_{-0.64}$ (−1.0 σ)	f_{2000}^{217}	106.06	$106.6^{+4.2}_{-4.1}$ (−0.7 σ)
A_{217}^{dust}	0.978	$0.98^{+0.21}_{-0.20}$	r_*	145.46	$145.3^{+3.0}_{-3.0}$ (−0.0 σ)	$f_{2000}^{143 \times 217}$	31.41	32^{+4}_{-4} (−0.7 σ)
$A_{143 \times 217}^{dust}$	1.000	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04130	$1.04128^{+0.00097}_{-0.00092}$ (+0.2 σ)	χ_{simall}^2	395.85	$396.9 (\nu: 1.4)$ (−0.0 σ)
c_{100}	0.99775	$0.9975^{+0.0021}_{-0.0020}$ (−3.4 σ)	$D_M(z_*)/Gpc$	13.970	$13.95^{+0.28}_{-0.28}$ (−0.1 σ)	χ_{lowl}^2	23.31	$23.1 (\nu: 0.6)$ (−0.7 σ)
c_{217}	1.00127	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	z_{drag}	1059.44	$1059.6^{+1.3}_{-1.3}$ (+0.6 σ)	$\chi_{CamSpec}^2$	11498.5	$11514.7 (\nu: 17.2)$
c_{TE}	0.9960	$0.9966^{+0.010}_{-0.0097}$	r_{drag}	148.18	$148.0^{+3.1}_{-3.1}$ (−0.1 σ)	χ_{Aver15}^2	0.02	$0.36 (\nu: 0.1)$
c_{EE}	0.9914	$0.992^{+0.010}_{-0.010}$	k_D	0.13996	$0.1401^{+0.0023}_{-0.0023}$ (+0.1 σ)	$\chi_{Cooke17}^2$	0.18	$0.35 (\nu: 0.1)$
H_0	67.48	$67.4^{+2.1}_{-2.1}$ (+0.8 σ)	$100\theta_D$	0.16068	$0.16075^{+0.00075}_{-0.00073}$ (−0.2 σ)	χ_{6DF}^2	0.010	$0.059 (\nu: 0.0)$
Ω_Λ	0.6917	$0.689^{+0.014}_{-0.015}$ (+0.9 σ)	z_{eq}	3393	3381^{+54}_{-54} (−0.8 σ)	χ_{MGS}^2	1.41	$1.33 (\nu: 0.1)$
Ω_m	0.3083	$0.311^{+0.015}_{-0.014}$ (−0.9 σ)	k_{eq}	0.010295	$0.01028^{+0.00021}_{-0.00021}$ (−0.9 σ)	$\chi_{DR12BAO}^2$	3.90	$4.8 (\nu: 1.3)$
$\Omega_m h^2$	0.1404	$0.1411^{+0.0056}_{-0.0054}$ (−0.6 σ)	$100\theta_{eq}$	0.8146	$0.817^{+0.010}_{-0.010}$ (+0.9 σ)	χ_{prior}^2	2.0	$7.8 (\nu: 5.9)$ (+0.1 σ)
$\Omega_\nu h^2$	0.00004	< 0.00160 (−0.7 σ)	$100\theta_{s,eq}$	0.4502	$0.4514^{+0.0052}_{-0.0051}$ (+0.8 σ)	χ_{BAO}^2	5.32	$6.2 (\nu: 0.9)$
$\Omega_m h^3$	0.0947	$0.0951^{+0.0062}_{-0.0059}$ (+0.4 σ)	$H(0.15)$	72.70	$72.7^{+2.1}_{-2.1}$ (+0.8 σ)	χ_{CMB}^2	11917.6	$11934.7 (\nu: 17.0)$ (+1772.0 σ)
σ_8	0.8170	$0.806^{+0.027}_{-0.029}$ (+0.6 σ)	$D_M(0.15)$	642.7	643^{+19}_{-19} (−0.8 σ)	χ_{Abund}^2	0.20	$0.71 (\nu: 0.2)$

Best-fit $\chi_{eff}^2 = 11925.20$; $\bar{\chi}_{eff}^2 = 11949.45$; $R - 1 = 0.01051$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.02 D_Cooke2017: 0.18 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.90 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3.2.29: 23.31 CamSpec like_10.7HM_1400_unified: 11498.48

9.28 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02232^{+0.00037}_{-0.00037} \quad (+1.0\sigma)$	S_8	$0.819^{+0.028}_{-0.029} \quad (-0.6\sigma)$	$H(0.38)$	$82.9^{+2.6}_{-2.6} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1183^{+0.0069}_{-0.0066} \quad (-0.4\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.015}_{-0.016} \quad (-0.6\sigma)$	$D_M(0.38)$	$1531^{+53}_{-51} \quad (-0.8\sigma)$
$100\theta_{MC}$	$1.04105^{+0.00096}_{-0.00090} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.602^{+0.019}_{-0.021} \quad (+0.2\sigma)$	$H(0.51)$	$89.6^{+2.7}_{-2.7} \quad (+0.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.027}_{-0.030} \quad (+0.3\sigma)$	$D_M(0.51)$	$1983^{+67}_{-65} \quad (-0.8\sigma)$
$\Sigma m_\nu [\text{eV}]$	$< 0.149 \quad (-0.7\sigma)$	$r_{\text{drag}} h$	$99.9^{+1.8}_{-1.8} \quad (+1.0\sigma)$	$H(0.61)$	$95.2^{+2.8}_{-2.8} \quad (+0.6\sigma)$
N_{eff}	$3.01^{+0.42}_{-0.40} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.052}_{-0.053} \quad (-0.7\sigma)$	$D_M(0.61)$	$2308^{+76}_{-75} \quad (-0.8\sigma)$
$\ln(10^{10} A_s)$	$3.039^{+0.034}_{-0.032} \quad (+0.2\sigma)$	z_{re}	$< 8.92 \quad (+0.3\sigma)$	$H(2.33)$	$235.2^{+6.1}_{-5.8} \quad (-0.3\sigma)$
n_s	$0.966^{+0.015}_{-0.015} \quad (+0.7\sigma)$	$10^9 A_s$	$2.090^{+0.071}_{-0.067} \quad (+0.2\sigma)$	$D_M(2.33)$	$5775^{+170}_{-160} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.872^{+0.038}_{-0.039} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-0.5\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+28}_{-28} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.025}_{-0.029} \quad (+0.7\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5722^{+77}_{-77} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.015}_{-0.015} \quad (+0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.023}_{-0.026} \quad (+0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.3^{+9.7}_{-10} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.014}_{-0.015} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.6\sigma)$	D_{2000}	$230.7^{+4.1}_{-4.1} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.021}_{-0.024} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{s,0.002}$	$0.966^{+0.015}_{-0.015} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.014}_{-0.015} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2449^{+0.0056}_{-0.0055} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.021}_{-0.023} \quad (+0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2462^{+0.0056}_{-0.0055} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.297^{+0.010}_{-0.011} \quad (+0.7\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.58^{+0.11}_{-0.11} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.307^{+0.011}_{-0.012} \quad (+0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	Age/Gyr	$13.83^{+0.40}_{-0.39} \quad (-0.6\sigma)$	f_{2000}^{143}	$29^{+7}_{-6} \quad (-0.5\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	z_*	$1089.79^{+0.81}_{-0.81} \quad (-1.1\sigma)$	f_{2000}^{217}	$106.5^{+4.5}_{-4.4} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.1^{+3.9}_{-3.9} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.0413^{+0.0012}_{-0.0011} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 (\nu: 1.6) \quad (-0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.94^{+0.36}_{-0.36} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.0 (\nu: 0.7) \quad (-0.7\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.7^{+1.5}_{-1.5} \quad (+0.7\sigma)$	χ_{CamSpec}^2	$11515.1 (\nu: 17.9)$
c_{TE}	$0.9965^{+0.010}_{-0.0098}$	r_{drag}	$147.8^{+4.1}_{-4.0} \quad (-0.1\sigma)$	χ_{JLA}^2	$1035.04 (\nu: 0.1)$
c_{EE}	$0.992^{+0.011}_{-0.011}$	k_D	$0.1402^{+0.0029}_{-0.0029} \quad (+0.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.046 (\nu: 0.0)$
H_0	$67.6^{+2.5}_{-2.4} \quad (+0.8\sigma)$	$100\theta_D$	$0.1608^{+0.0010}_{-0.00099} \quad (-0.2\sigma)$	χ_{MGS}^2	$1.45 (\nu: 0.1)$
Ω_Λ	$0.691^{+0.014}_{-0.015} \quad (+0.9\sigma)$	z_{eq}	$3376^{+54}_{-54} \quad (-0.9\sigma)$	χ_{DR12BAO}^2	$4.5 (\nu: 0.9)$
Ω_m	$0.309^{+0.015}_{-0.014} \quad (-0.9\sigma)$	k_{eq}	$0.01028^{+0.00025}_{-0.00024} \quad (-0.9\sigma)$	χ_{prior}^2	$7.9 (\nu: 6.0) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1412^{+0.0072}_{-0.0069} \quad (-0.6\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.0 (\nu: 0.6)$
$\Omega_\nu h^2$	$< 0.00157 \quad (-0.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4518^{+0.0053}_{-0.0051} \quad (+0.9\sigma)$	χ_{CMB}^2	$11935.0 (\nu: 17.5) \quad (+1772.1\sigma)$
$\Omega_m h^3$	$0.0955^{+0.0082}_{-0.0076} \quad (+0.4\sigma)$	$H(0.15)$	$72.9^{+2.5}_{-2.5} \quad (+0.8\sigma)$		
σ_8	$0.808^{+0.027}_{-0.031} \quad (+0.6\sigma)$	$D_M(0.15)$	$641^{+23}_{-22} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 12983.89; R - 1 = 0.01046$$

9.29 base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022184	$0.02223^{+0.00048}_{-0.00046}$ (+0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6092	$0.606^{+0.017}_{-0.018}$ (+0.4 σ)	$D_{\mathrm{M}}(0.38)$	1531	1524^{+61}_{-58} (−0.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.1183	$0.1199^{+0.0075}_{-0.0073}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9952	$0.986^{+0.023}_{-0.024}$ (+0.4 σ)	$H(0.51)$	89.45	$90.0^{+3.1}_{-3.1}$ (+0.8 σ)
$100\theta_{\mathrm{MC}}$	1.04106	$1.0409^{+0.0011}_{-0.0011}$ (+0.2 σ)	$r_{\mathrm{drag}}h$	100.10	$99.9^{+2.1}_{-2.0}$ (+1.0 σ)	$D_{\mathrm{M}}(0.51)$	1985	1974^{+77}_{-73} (−0.9 σ)
τ	0.0530	$0.054^{+0.016}_{-0.015}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4418	$2.433^{+0.047}_{-0.048}$ (−0.6 σ)	$H(0.61)$	95.01	$95.6^{+3.2}_{-3.2}$ (+0.8 σ)
Σm_{ν} [eV]	0.000	< 0.146 (−0.7 σ)	z_{re}	7.55	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(0.61)$	2310	2298^{+87}_{-84} (−0.9 σ)
N_{eff}	2.978	$3.09^{+0.47}_{-0.46}$ (+0.5 σ)	$10^9 A_{\mathrm{s}}$	2.083	$2.098^{+0.078}_{-0.072}$ (+0.4 σ)	$H(2.33)$	234.7	$236.4^{+6.7}_{-6.7}$ (−0.0 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0366	$3.044^{+0.036}_{-0.035}$ (+0.4 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8739	$1.882^{+0.040}_{-0.041}$ (+0.2 σ)	$D_{\mathrm{M}}(2.33)$	5783	5748^{+190}_{-180} (−0.8 σ)
n_{s}	0.9646	$0.967^{+0.017}_{-0.017}$ (+0.8 σ)	D_{40}	1227.2	1226^{+29}_{-29} (−0.6 σ)	$f\sigma_8(0.15)$	0.4578	$0.457^{+0.013}_{-0.013}$ (−0.3 σ)
y_{cal}	1.00030	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{220}	5715	5722^{+80}_{-78} (+0.3 σ)	$\sigma_8(0.15)$	0.7563	$0.751^{+0.024}_{-0.025}$ (+0.8 σ)
A_{217}^{CIB}	47.4	48^{+10}_{-10} (+0.0 σ)	D_{810}	2535.4	2537^{+28}_{-27} (+0.1 σ)	$f\sigma_8(0.38)$	0.4771	$0.476^{+0.013}_{-0.013}$ (+0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.46	—	D_{1420}	816.3	815^{+10}_{-10} (+0.1 σ)	$\sigma_8(0.38)$	0.6706	$0.666^{+0.022}_{-0.023}$ (+0.8 σ)
A_{143}^{tSZ}	7.02	$5.0^{+3.8}_{-3.9}$ (−0.0 σ)	D_{2000}	230.71	$229.7^{+4.4}_{-4.4}$ (+0.0 σ)	$f\sigma_8(0.51)$	0.4761	$0.475^{+0.013}_{-0.013}$ (+0.5 σ)
A_{100}^{PS}	251	264^{+60}_{-60} (+0.0 σ)	$n_{\mathrm{s},0.002}$	0.9646	$0.967^{+0.017}_{-0.017}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6276	$0.624^{+0.021}_{-0.022}$ (+0.8 σ)
A_{143}^{PS}	49.7	49^{+20}_{-20} (−0.0 σ)	Y_{P}	0.2444	$0.2459^{+0.0062}_{-0.0063}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4713	$0.470^{+0.013}_{-0.013}$ (+0.5 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	49.4	43^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2457	$0.2472^{+0.0062}_{-0.0063}$ (+0.5 σ)	$\sigma_8(0.61)$	0.5972	$0.593^{+0.020}_{-0.021}$ (+0.8 σ)
A_{217}^{PS}	120.2	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.597	$2.63^{+0.13}_{-0.13}$ (−0.0 σ)	$f\sigma_8(2.33)$	0.3003	$0.299^{+0.010}_{-0.010}$ (+0.8 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.847	$13.76^{+0.45}_{-0.44}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3102	$0.309^{+0.011}_{-0.012}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.87	$8.9^{+3.6}_{-3.6}$ (+0.0 σ)	z_{*}	1089.93	$1090.12^{+0.93}_{-0.92}$ (−0.5 σ)	f_{2000}^{143}	29.4	31^{+7}_{-7} (+0.0 σ)
$A_{143}^{\mathrm{dustTT}}$	10.82	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_{*}	145.37	$144.4^{+4.5}_{-4.3}$ (−0.4 σ)	$f_{2000}^{143 \times 217}$	32.52	34^{+5}_{-5} (−0.0 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.6	$18.3^{+6.4}_{-6.5}$ (+0.0 σ)	$100\theta_{*}$	1.04128	$1.0411^{+0.0014}_{-0.0013}$ (−0.1 σ)	f_{2000}^{217}	106.94	$108.2^{+4.5}_{-4.4}$ (+0.0 σ)
$A_{217}^{\mathrm{dustTT}}$	95.1	93^{+10}_{-10} (−0.0 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.961	$13.87^{+0.41}_{-0.40}$ (−0.4 σ)	$\chi_{\mathrm{lensing}}^2$	8.81	9.52 (ν : 0.4)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.32	$1059.6^{+1.7}_{-1.7}$ (+0.7 σ)	χ_{small}^2	395.85	397.1 (ν : 1.6) (+0.1 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	148.11	$147.1^{+4.6}_{-4.4}$ (−0.4 σ)	χ_{lowl}^2	23.32	23.2 (ν : 0.8) (−0.7 σ)
H_0	67.58	$67.9^{+2.9}_{-2.8}$ (+0.9 σ)	k_{D}	0.13991	$0.1406^{+0.0033}_{-0.0033}$ (+0.4 σ)	χ_{plik}^2	758.7	772.4 (ν : 15.5) (−0.1 σ)
Ω_{Λ}	0.6925	$0.691^{+0.016}_{-0.017}$ (+0.9 σ)	$100\theta_{\mathrm{D}}$	0.16084	$0.1611^{+0.0011}_{-0.0011}$ (+0.3 σ)	$\chi_{6\mathrm{DF}}^2$	0.006	0.060 (ν : 0.0)
Ω_{m}	0.3075	$0.309^{+0.017}_{-0.016}$ (−0.9 σ)	z_{eq}	3387	3375^{+60}_{-61} (−0.9 σ)	χ_{MGS}^2	1.47	1.42 (ν : 0.2)
$\Omega_{\mathrm{m}}h^2$	0.1404	$0.1427^{+0.0081}_{-0.0078}$ (−0.3 σ)	k_{eq}	0.010290	$0.01033^{+0.00027}_{-0.00026}$ (−0.6 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.77	4.7 (ν : 1.4)
$\Omega_{\nu}h^2$	0.00000	< 0.00155 (−0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8155	$0.818^{+0.012}_{-0.011}$ (+0.9 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.6) (+0.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.0949	$0.0970^{+0.0092}_{-0.0087}$ (+0.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.4507	$0.4519^{+0.0059}_{-0.0057}$ (+0.9 σ)	χ_{CMB}^2	1186.6	1202.1 (ν : 16.5) (+1.3 σ)
σ_8	0.8181	$0.813^{+0.025}_{-0.027}$ (+0.7 σ)	$H(0.15)$	72.80	$73.2^{+2.9}_{-2.9}$ (+0.9 σ)	χ_{BAO}^2	5.24	6.2 (ν : 1.0)
S_8	0.8283	$0.825^{+0.026}_{-0.026}$ (−0.4 σ)	$D_{\mathrm{M}}(0.15)$	641.7	639^{+27}_{-26} (−0.9 σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4537	$0.452^{+0.014}_{-0.014}$ (−0.4 σ)	$H(0.38)$	82.80	$83.3^{+3.0}_{-3.0}$ (+0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1193.21$; $\Delta\chi_{\mathrm{eff}}^2 = -1.47$; $\bar{\chi}_{\mathrm{eff}}^2 = 1215.63$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.90$; $R - 1 = 0.00858$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.02) MGS: 1.47 (Δ 0.26) DR12BAO: 3.77 (Δ -0.61) CMB - smicadx12.Dec5.ftl.mv2.ndclpp-p.teb.consext8: 8.81 (Δ -0.06) small_100x143.offlike5.EE.Aplanc
395.85 (Δ -0.24) commander_dx12_v3.2.29: 23.32 (Δ 0.37) plik_rd12_HM_v22.TT: 758.66 (Δ -1.14)

9.30 base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022226	$0.02225^{+0.00047}_{-0.00045}$ (+0.9 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6090	$0.606^{+0.017}_{-0.018}$ (+0.4 σ)	$D_{\mathrm{M}}(0.38)$	1528	1521^{+58}_{-56} (−0.9 σ)
$\Omega_{\mathrm{c}} h^2$	0.1185	$0.1200^{+0.0075}_{-0.0072}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9943	$0.986^{+0.023}_{-0.024}$ (+0.4 σ)	$H(0.51)$	89.63	$90.1^{+3.0}_{-3.0}$ (+0.9 σ)
$100\theta_{\mathrm{MC}}$	1.04103	$1.0409^{+0.0011}_{-0.0011}$ (+0.2 σ)	$r_{\mathrm{drag}} h$	100.22	$100.0^{+1.9}_{-1.9}$ (+1.0 σ)	$D_{\mathrm{M}}(0.51)$	1980	1970^{+74}_{-70} (−0.9 σ)
τ	0.0531	$0.055^{+0.016}_{-0.015}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4407	$2.431^{+0.046}_{-0.047}$ (−0.6 σ)	$H(0.61)$	95.19	$95.8^{+3.1}_{-3.1}$ (+0.8 σ)
Σm_{ν} [eV]	0.001	< 0.141 (−0.7 σ)	z_{re}	7.55	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(0.61)$	2304	2293^{+85}_{-81} (−0.9 σ)
N_{eff}	3.000	$3.11^{+0.46}_{-0.45}$ (+0.6 σ)	$10^9 A_{\mathrm{s}}$	2.085	$2.101^{+0.077}_{-0.071}$ (+0.5 σ)	$H(2.33)$	235.0	$236.6^{+6.7}_{-6.6}$ (+0.0 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0373	$3.045^{+0.036}_{-0.034}$ (+0.5 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8749	$1.883^{+0.039}_{-0.041}$ (+0.2 σ)	$D_{\mathrm{M}}(2.33)$	5773	5740^{+190}_{-180} (−0.8 σ)
n_{s}	0.9649	$0.968^{+0.017}_{-0.017}$ (+0.8 σ)	D_{40}	1227.5	1225^{+29}_{-29} (−0.7 σ)	$f\sigma_8(0.15)$	0.4574	$0.457^{+0.013}_{-0.013}$ (−0.3 σ)
y_{cal}	1.00035	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{220}	5720	5723^{+81}_{-77} (+0.3 σ)	$\sigma_8(0.15)$	0.7567	$0.752^{+0.023}_{-0.025}$ (+0.8 σ)
A_{217}^{CIB}	49.4	48^{+10}_{-10} (+0.0 σ)	D_{810}	2534.8	2537^{+28}_{-27} (+0.1 σ)	$f\sigma_8(0.38)$	0.4769	$0.476^{+0.013}_{-0.013}$ (+0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.22	—	D_{1420}	815.8	815^{+10}_{-10} (+0.1 σ)	$\sigma_8(0.38)$	0.6711	$0.667^{+0.021}_{-0.023}$ (+0.8 σ)
A_{143}^{tSZ}	7.20	$5.0^{+3.8}_{-3.9}$ (−0.0 σ)	D_{2000}	230.47	$229.7^{+4.3}_{-4.3}$ (+0.0 σ)	$f\sigma_8(0.51)$	0.4760	$0.475^{+0.013}_{-0.013}$ (+0.5 σ)
A_{100}^{PS}	254	264^{+60}_{-60} (+0.0 σ)	$n_{\mathrm{s},0.002}$	0.9649	$0.968^{+0.017}_{-0.017}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6282	$0.625^{+0.021}_{-0.022}$ (+0.8 σ)
A_{143}^{PS}	46.4	49^{+20}_{-20} (+0.0 σ)	Y_{P}	0.2447	$0.2461^{+0.0060}_{-0.0062}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4713	$0.470^{+0.013}_{-0.013}$ (+0.6 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	43.2	43^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2460	$0.2475^{+0.0061}_{-0.0062}$ (+0.6 σ)	$\sigma_8(0.61)$	0.5978	$0.594^{+0.020}_{-0.021}$ (+0.8 σ)
A_{217}^{PS}	117.1	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.597	$2.63^{+0.13}_{-0.13}$ (−0.0 σ)	$f\sigma_8(2.33)$	0.3006	$0.300^{+0.010}_{-0.010}$ (+0.8 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.822	$13.74^{+0.44}_{-0.43}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3106	$0.309^{+0.011}_{-0.011}$ (+0.9 σ)
$A_{100}^{\mathrm{dustTT}}$	8.87	$8.9^{+3.6}_{-3.6}$ (+0.0 σ)	z_*	1089.92	$1090.12^{+0.93}_{-0.91}$ (−0.5 σ)	f_{2000}^{143}	29.8	31^{+7}_{-7} (+0.0 σ)
$A_{143}^{\mathrm{dustTT}}$	10.86	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	145.16	$144.3^{+4.4}_{-4.3}$ (−0.4 σ)	$f_{2000}^{143 \times 217}$	32.74	34^{+5}_{-5} (+0.0 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.3	$18.3^{+6.5}_{-6.5}$ (+0.0 σ)	$100\theta_*$	1.04123	$1.0410^{+0.0014}_{-0.0013}$ (−0.1 σ)	f_{2000}^{217}	107.23	$108.2^{+4.4}_{-4.4}$ (+0.0 σ)
$A_{217}^{\mathrm{dustTT}}$	94.4	93^{+10}_{-10} (−0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.941	$13.86^{+0.41}_{-0.40}$ (−0.4 σ)	$\chi_{\mathrm{lensing}}^2$	8.80	9.54 (ν : 0.4)
c_{100}	0.99961	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.44	$1059.7^{+1.7}_{-1.7}$ (+0.7 σ)	χ_{small}^2	395.86	397.1 (ν : 1.6) (+0.1 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.88	$147.0^{+4.5}_{-4.4}$ (−0.4 σ)	χ_{lowl}^2	23.32	23.1 (ν : 0.7) (−0.7 σ)
H_0	67.77	$68.1^{+2.8}_{-2.7}$ (+1.0 σ)	k_{D}	0.14010	$0.1407^{+0.0033}_{-0.0032}$ (+0.4 σ)	χ_{plik}^2	758.5	772.5 (ν : 15.4) (−0.0 σ)
Ω_{Λ}	0.6935	$0.692^{+0.015}_{-0.015}$ (+0.9 σ)	$100\theta_{\mathrm{D}}$	0.16085	$0.1612^{+0.0011}_{-0.0011}$ (+0.4 σ)	χ_{JLA}^2	1034.85	1035.03 (ν : 0.1)
Ω_{m}	0.3065	$0.308^{+0.015}_{-0.015}$ (−0.9 σ)	z_{eq}	3384	3371^{+58}_{-58} (−1.0 σ)	$\chi_{6\mathrm{DF}}^2$	0.003	0.048 (ν : 0.0)
$\Omega_{\mathrm{m}} h^2$	0.1408	$0.1428^{+0.0080}_{-0.0076}$ (−0.3 σ)	k_{eq}	0.010297	$0.01033^{+0.00027}_{-0.00026}$ (−0.6 σ)	χ_{MGS}^2	1.54	1.51 (ν : 0.2)
$\Omega_{\nu} h^2$	0.00001	< 0.00150 (−0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8161	$0.819^{+0.011}_{-0.011}$ (+1.0 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.67	4.5 (ν : 0.9)
$\Omega_{\mathrm{m}} h^3$	0.0954	$0.0973^{+0.0090}_{-0.0086}$ (+0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.4509	$0.4523^{+0.0057}_{-0.0055}$ (+1.0 σ)	χ_{prior}^2	1.6	7.3 (ν : 6.6) (+0.0 σ)
σ_8	0.8185	$0.814^{+0.025}_{-0.026}$ (+0.7 σ)	$H(0.15)$	72.98	$73.4^{+2.8}_{-2.8}$ (+1.0 σ)	χ_{CMB}^2	1186.5	1202.2 (ν : 16.4) (+1.3 σ)
S_8	0.8273	$0.825^{+0.025}_{-0.025}$ (−0.4 σ)	$D_{\mathrm{M}}(0.15)$	640.1	637^{+26}_{-24} (−0.9 σ)	χ_{BAO}^2	5.21	6.0 (ν : 0.6)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4531	$0.452^{+0.014}_{-0.014}$ (−0.4 σ)	$H(0.38)$	82.98	$83.4^{+2.9}_{-2.9}$ (+0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2228.14$; $\Delta\chi_{\mathrm{eff}}^2 = -1.57$; $\bar{\chi}_{\mathrm{eff}}^2 = 2250.50$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.73$; $R - 1 = 0.00908$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.54 (Δ 0.20) DR12BAO: 3.67 (Δ -0.37) CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.80 (Δ -0.08) small_100x143_offlike5_EE_Aplanc
395.86 (Δ -0.51) commander_dx12_v3.2_29: 23.32 (Δ 0.51) plik_rd12_HM_v22_TT: 758.53 (Δ -1.26) SN - JLA Pantheon18: 1034.85 (Δ -0.10)

9.31 base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022155	$0.02219^{+0.00044}_{-0.00042}$ (+0.7 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6078	$0.605^{+0.016}_{-0.017}$ (+0.4 σ)	$D_{\mathrm{M}}(0.38)$	1538.7	1532^{+49}_{-48} (−0.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.1174	$0.1188^{+0.0060}_{-0.0058}$ (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9945	$0.987^{+0.023}_{-0.024}$ (+0.4 σ)	$H(0.51)$	89.07	$89.6^{+2.5}_{-2.4}$ (+0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04116	$1.0410^{+0.0010}_{-0.0010}$ (+0.4 σ)	$r_{\mathrm{drag}}h$	99.99	$99.8^{+2.0}_{-2.0}$ (+1.0 σ)	$D_{\mathrm{M}}(0.51)$	1994	1984^{+62}_{-60} (−0.8 σ)
τ	0.0529	$0.054^{+0.015}_{-0.015}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4443	$2.436^{+0.045}_{-0.046}$ (−0.5 σ)	$H(0.61)$	94.62	$95.2^{+2.5}_{-2.5}$ (+0.6 σ)
Σm_{ν} [eV]	0.002	< 0.134 (−0.7 σ)	z_{re}	7.52	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$D_{\mathrm{M}}(0.61)$	2320	2309^{+70}_{-69} (−0.8 σ)
N_{eff}	2.922	$3.03^{+0.36}_{-0.35}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}$	2.079	$2.092^{+0.072}_{-0.067}$ (+0.3 σ)	$H(2.33)$	233.9	$235.5^{+5.3}_{-5.2}$ (−0.3 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0345	$3.041^{+0.034}_{-0.032}$ (+0.3 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8701	$1.877^{+0.034}_{-0.035}$ (−0.0 σ)	$D_{\mathrm{M}}(2.33)$	5807	5774^{+150}_{-150} (−0.6 σ)
n_{s}	0.9625	$0.965^{+0.015}_{-0.014}$ (+0.6 σ)	D_{40}	1230.2	1229^{+27}_{-27} (−0.5 σ)	$f\sigma_8(0.15)$	0.4571	$0.456^{+0.013}_{-0.013}$ (−0.3 σ)
y_{cal}	1.00032	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{220}	5719	5723^{+81}_{-77} (+0.3 σ)	$\sigma_8(0.15)$	0.7537	$0.749^{+0.021}_{-0.024}$ (+0.7 σ)
A_{217}^{CIB}	46.4	48^{+10}_{-10} (−0.0 σ)	D_{810}	2535.3	2536^{+27}_{-26} (+0.0 σ)	$f\sigma_8(0.38)$	0.4760	$0.475^{+0.012}_{-0.013}$ (+0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.63	—	D_{1420}	816.9	816^{+10}_{-10} (+0.1 σ)	$\sigma_8(0.38)$	0.6682	$0.664^{+0.020}_{-0.022}$ (+0.7 σ)
A_{143}^{tSZ}	6.92	$5.1^{+3.8}_{-3.9}$ (+0.0 σ)	D_{2000}	231.09	$230.1^{+4.0}_{-4.1}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4749	$0.474^{+0.012}_{-0.012}$ (+0.4 σ)
A_{100}^{PS}	249	262^{+60}_{-60} (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9625	$0.965^{+0.015}_{-0.014}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6254	$0.622^{+0.018}_{-0.020}$ (+0.7 σ)
A_{143}^{PS}	51.2	48^{+20}_{-20} (−0.1 σ)	Y_{P}	0.24363	$0.2450^{+0.0049}_{-0.0049}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4701	$0.469^{+0.012}_{-0.012}$ (+0.5 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	53.0	43^{+20}_{-20} (−0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24495	$0.2463^{+0.0049}_{-0.0050}$ (+0.3 σ)	$\sigma_8(0.61)$	0.5951	$0.592^{+0.018}_{-0.020}$ (+0.8 σ)
A_{217}^{PS}	121.6	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.583	$2.61^{+0.11}_{-0.11}$ (−0.3 σ)	$f\sigma_8(2.33)$	0.2992	$0.2982^{+0.0089}_{-0.0093}$ (+0.8 σ)
A^{kSZ}	0.01	< 8.46 (−0.0 σ)	Age/Gyr	13.903	$13.82^{+0.35}_{-0.35}$ (−0.6 σ)	$\sigma_8(2.33)$	0.3090	$0.3075^{+0.0098}_{-0.010}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.75	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	z_{*}	1089.83	$1090.02^{+0.82}_{-0.80}$ (−0.7 σ)	f_{2000}^{143}	28.9	31^{+6}_{-6} (−0.1 σ)
$A_{143}^{\mathrm{dustTT}}$	10.75	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_{*}	145.92	$145.0^{+3.5}_{-3.4}$ (−0.1 σ)	$f_{2000}^{143 \times 217}$	32.17	33^{+5}_{-5} (−0.2 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.6	$18.3^{+6.5}_{-6.6}$ (+0.0 σ)	$100\theta_{*}$	1.04142	$1.0412^{+0.0012}_{-0.0012}$ (+0.1 σ)	f_{2000}^{217}	106.57	$107.8^{+4.2}_{-4.1}$ (−0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	95.1	93^{+10}_{-10} (+0.0 σ)	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	14.012	$13.93^{+0.32}_{-0.32}$ (−0.2 σ)	$\chi_{\mathrm{lensing}}^2$	8.70	9.39 (ν : 0.4)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.13	$1059.4^{+1.5}_{-1.4}$ (+0.5 σ)	χ_{small}^2	395.86	397.0 (ν : 1.5) (+0.0 σ)
c_{217}	0.99823	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	148.68	$147.7^{+3.6}_{-3.5}$ (−0.2 σ)	χ_{lowl}^2	23.62	23.4 (ν : 0.7) (−0.6 σ)
H_0	67.25	$67.5^{+2.4}_{-2.3}$ (+0.8 σ)	k_{D}	0.13951	$0.1401^{+0.0026}_{-0.0026}$ (+0.1 σ)	χ_{plik}^2	758.6	771.8 (ν : 14.4) (−0.1 σ)
Ω_{Λ}	0.6914	$0.690^{+0.015}_{-0.016}$ (+0.9 σ)	$100\theta_{\mathrm{D}}$	0.16071	$0.16098^{+0.00096}_{-0.00094}$ (+0.1 σ)	χ_{Aver15}^2	0.00	0.52 (ν : 0.2)
Ω_{m}	0.3086	$0.310^{+0.016}_{-0.015}$ (−0.9 σ)	z_{eq}	3391	3379^{+57}_{-57} (−0.9 σ)	$\chi_{6\mathrm{DF}}^2$	0.010	0.063 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.1395	$0.1416^{+0.0064}_{-0.0062}$ (−0.5 σ)	k_{eq}	0.010261	$0.01030^{+0.00023}_{-0.00023}$ (−0.7 σ)	χ_{MGS}^2	1.41	1.35 (ν : 0.2)
$\Omega_{\nu}h^2$	0.00002	< 0.00142 (−0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8148	$0.817^{+0.011}_{-0.011}$ (+0.9 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.88	4.8 (ν : 1.5)
$\Omega_{\mathrm{m}}h^3$	0.0938	$0.0956^{+0.0071}_{-0.0068}$ (+0.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.4503	$0.4514^{+0.0055}_{-0.0054}$ (+0.9 σ)	χ_{prior}^2	1.2	7.3 (ν : 6.5) (−0.0 σ)
σ_8	0.8155	$0.811^{+0.022}_{-0.025}$ (+0.7 σ)	$H(0.15)$	72.45	$72.8^{+2.4}_{-2.3}$ (+0.8 σ)	χ_{CMB}^2	1186.8	1201.6 (ν : 15.5) (+1.2 σ)
S_8	0.8271	$0.825^{+0.025}_{-0.025}$ (−0.4 σ)	$D_{\mathrm{M}}(0.15)$	644.9	642^{+22}_{-21} (−0.8 σ)	χ_{BAO}^2	5.29	6.2 (ν : 1.0)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4530	$0.452^{+0.014}_{-0.014}$ (−0.4 σ)	$H(0.38)$	82.43	$82.9^{+2.4}_{-2.4}$ (+0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1193.28$; $\bar{\chi}_{\mathrm{eff}}^2 = 1215.62$; $R - 1 = 0.00900$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.00 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.88 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.70 small_100x143.offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3_2_29: 23.62 plik_rd12_HM_v22.TT: 758.65

9.32 base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022170	$0.02219^{+0.00044}_{-0.00042}$ $(+0.7\sigma)$	$\sigma_8/h^{0.5}$	0.9946	$0.987^{+0.022}_{-0.024}$ $(+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	1987	1984^{+58}_{-58} (-0.8σ)
$\Omega_{\mathrm{c}}h^2$	0.1179	$0.1189^{+0.0055}_{-0.0054}$ (-0.2σ)	$r_{\mathrm{drag}}h$	100.10	$99.8^{+2.0}_{-1.9}$ $(+1.0\sigma)$	$H(0.61)$	94.89	$95.2^{+2.4}_{-2.3}$ $(+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	1.04107	$1.04100^{+0.00096}_{-0.00096}$ $(+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4417	$2.436^{+0.045}_{-0.046}$ (-0.5σ)	$D_{\mathrm{M}}(0.61)$	2313	2309^{+67}_{-66} (-0.8σ)
τ	0.0530	$0.054^{+0.015}_{-0.014}$ $(+0.4\sigma)$	z_{re}	7.55	$7.7^{+1.5}_{-1.5}$ $(+0.3\sigma)$	$H(2.33)$	234.40	$235.5^{+4.9}_{-4.8}$ (-0.3σ)
Σm_{ν} [eV]	0.003	< 0.133 (-0.7σ)	$10^9 A_{\mathrm{s}}$	2.083	$2.092^{+0.072}_{-0.066}$ $(+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	5791	5773^{+140}_{-140} (-0.6σ)
N_{eff}	2.962	$3.03^{+0.33}_{-0.32}$ $(+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8734	$1.877^{+0.033}_{-0.033}$ (-0.0σ)	$f\sigma_8(0.15)$	0.4574	$0.456^{+0.013}_{-0.013}$ (-0.3σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0364	$3.041^{+0.034}_{-0.032}$ $(+0.3\sigma)$	D_{40}	1227.8	1229^{+27}_{-27} (-0.5σ)	$\sigma_8(0.15)$	0.7554	$0.749^{+0.020}_{-0.023}$ $(+0.7\sigma)$
n_{s}	0.9643	$0.965^{+0.014}_{-0.014}$ $(+0.6\sigma)$	D_{220}	5717	5722^{+80}_{-76} $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4766	$0.475^{+0.012}_{-0.012}$ $(+0.3\sigma)$
y_{cal}	1.00064	$1.0006^{+0.0049}_{-0.0048}$ $(+0.1\sigma)$	D_{810}	2536.5	2536^{+27}_{-27} $(+0.0\sigma)$	$\sigma_8(0.38)$	0.6698	$0.664^{+0.019}_{-0.021}$ $(+0.7\sigma)$
A_{217}^{CIB}	47.3	48^{+10}_{-10} (-0.0σ)	D_{1420}	816.9	$815.5^{+9.7}_{-9.8}$ $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4756	$0.474^{+0.012}_{-0.012}$ $(+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.47	—	D_{2000}	230.94	$230.0^{+3.7}_{-3.7}$ $(+0.2\sigma)$	$\sigma_8(0.51)$	0.6269	$0.622^{+0.018}_{-0.020}$ $(+0.8\sigma)$
A_{143}^{tSZ}	6.99	$5.1^{+3.8}_{-3.9}$ $(+0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9643	$0.965^{+0.014}_{-0.014}$ $(+0.6\sigma)$	$f\sigma_8(0.61)$	0.4708	$0.469^{+0.011}_{-0.012}$ $(+0.5\sigma)$
A_{100}^{PS}	251	263^{+60}_{-50} (-0.0σ)	Y_{P}	0.24418	$0.2451^{+0.0045}_{-0.0045}$ $(+0.3\sigma)$	$\sigma_8(0.61)$	0.5965	$0.592^{+0.017}_{-0.019}$ $(+0.8\sigma)$
A_{143}^{PS}	49.6	48^{+20}_{-20} (-0.1σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24550	$0.2464^{+0.0045}_{-0.0045}$ $(+0.3\sigma)$	$f\sigma_8(2.33)$	0.3000	$0.2983^{+0.0086}_{-0.0091}$ $(+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	49.5	43^{+20}_{-20} (-0.1σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.594	$2.613^{+0.097}_{-0.096}$ (-0.2σ)	$\sigma_8(2.33)$	0.3099	$0.3076^{+0.0096}_{-0.010}$ $(+0.8\sigma)$
A_{217}^{PS}	120.4	115^{+20}_{-20} (-0.0σ)	Age/Gyr	13.864	$13.82^{+0.33}_{-0.33}$ (-0.6σ)	f_{2000}^{143}	29.3	31^{+6}_{-6} (-0.1σ)
A^{kSZ}	0.00	< 8.45 (-0.0σ)	z_*	1089.90	$1090.03^{+0.70}_{-0.69}$ (-0.7σ)	$f_{2000}^{143 \times 217}$	32.43	33^{+4}_{-4} (-0.1σ)
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	r_*	145.56	$145.0^{+3.2}_{-3.2}$ (-0.2σ)	f_{2000}^{217}	106.94	$107.8^{+4.0}_{-3.9}$ (-0.1σ)
$A_{143}^{\mathrm{dustTT}}$	10.80	$10.7^{+3.5}_{-3.5}$ $(+0.0\sigma)$	$100\theta_*$	1.04131	$1.0412^{+0.0011}_{-0.0011}$ $(+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.77	9.39 ($\nu: 0.3$)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.3^{+6.5}_{-6.6}$ $(+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.978	$13.92^{+0.30}_{-0.29}$ (-0.2σ)	χ_{simall}^2	395.85	397.0 ($\nu: 1.5$) $(+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	95.0	93^{+10}_{-10} $(+0.0\sigma)$	z_{drag}	1059.25	$1059.4^{+1.5}_{-1.4}$ $(+0.5\sigma)$	χ_{lowl}^2	23.32	23.4 ($\nu: 0.6$) (-0.6σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	r_{drag}	148.30	$147.7^{+3.4}_{-3.3}$ (-0.2σ)	χ_{plik}^2	758.7	771.6 ($\nu: 14.1$) (-0.2σ)
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	k_{D}	0.13976	$0.1402^{+0.0025}_{-0.0025}$ $(+0.2\sigma)$	χ_{Aver15}^2	0.02	0.47 ($\nu: 0.2$)
H_0	67.50	$67.6^{+2.3}_{-2.2}$ $(+0.8\sigma)$	$100\theta_{\mathrm{D}}$	0.16081	$0.16099^{+0.00082}_{-0.00082}$ $(+0.1\sigma)$	$\chi_{\mathrm{Cooke17}}^2$	0.06	0.27 ($\nu: 0.1$)
Ω_{Λ}	0.6924	$0.690^{+0.015}_{-0.016}$ $(+0.9\sigma)$	z_{eq}	3386	3379^{+57}_{-56} (-0.9σ)	$\chi_{6\mathrm{DF}}^2$	0.006	0.063 ($\nu: 0.0$)
Ω_{m}	0.3076	$0.310^{+0.016}_{-0.015}$ (-0.9σ)	k_{eq}	0.010276	$0.01030^{+0.00022}_{-0.00021}$ (-0.7σ)	χ_{MGS}^2	1.47	1.36 ($\nu: 0.2$)
$\Omega_{\mathrm{m}}h^2$	0.1401	$0.1416^{+0.0059}_{-0.0057}$ (-0.5σ)	$100\theta_{\mathrm{eq}}$	0.8156	$0.817^{+0.011}_{-0.010}$ $(+0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.76	4.8 ($\nu: 1.5$)
$\Omega_{\nu}h^2$	0.00003	< 0.00141 (-0.7σ)	$100\theta_{\mathrm{s,eq}}$	0.4507	$0.4515^{+0.0054}_{-0.0054}$ $(+0.9\sigma)$	χ_{prior}^2	1.3	7.3 ($\nu: 6.5$) (-0.0σ)
$\Omega_{\mathrm{m}}h^3$	0.0946	$0.0957^{+0.0066}_{-0.0064}$ $(+0.4\sigma)$	$H(0.15)$	72.71	$72.8^{+2.3}_{-2.2}$ $(+0.8\sigma)$	χ_{CMB}^2	1186.7	1201.4 ($\nu: 15.1$) $(+1.1\sigma)$
σ_8	0.8172	$0.811^{+0.022}_{-0.024}$ $(+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	642.6	642^{+21}_{-20} (-0.8σ)	χ_{BAO}^2	5.24	6.2 ($\nu: 1.0$)
S_8	0.8274	$0.825^{+0.025}_{-0.025}$ (-0.4σ)	$H(0.38)$	82.69	$82.9^{+2.3}_{-2.2}$ $(+0.7\sigma)$	χ_{Abund}^2	0.09	0.74 ($\nu: 0.3$)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4532	$0.452^{+0.014}_{-0.014}$ (-0.4σ)	$D_{\mathrm{M}}(0.38)$	1533.5	1531^{+47}_{-46} (-0.8σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6086	$0.605^{+0.015}_{-0.017}$ $(+0.4\sigma)$	$H(0.51)$	89.34	$89.6^{+2.3}_{-2.3}$ $(+0.7\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 1193.33$; $\bar{\chi}_{\mathrm{eff}}^2 = 1215.63$; $R - 1 = 0.00841$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.02 D.Cooke2017: 0.06 BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.76 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.77
simall_100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12.v3.2_29: 23.32 plik_rd12_HM_v22_TT: 758.73

9.33 base_nnu_mnu_plikHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02226^{+0.00047}_{-0.00045} \quad (+0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.017}_{-0.018} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1520^{+58}_{-55} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0074}_{-0.0072} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.023}_{-0.024} \quad (+0.5\sigma)$	$H(0.51)$	$90.2^{+3.0}_{-3.0} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	$r_{\mathrm{drag}}h$	$100.1^{+1.9}_{-1.9} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+74}_{-70} \quad (-0.9\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.045}_{-0.046} \quad (-0.6\sigma)$	$H(0.61)$	$95.8^{+3.1}_{-3.1} \quad (+0.9\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.142 \quad (-0.7\sigma)$	z_{re}	$< 9.04 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2292^{+84}_{-80} \quad (-0.9\sigma)$
N_{eff}	$3.11^{+0.46}_{-0.45} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.071}_{-0.067} \quad (+0.6\sigma)$	$H(2.33)$	$236.6^{+6.7}_{-6.5} \quad (+0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.035}_{-0.031} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.883^{+0.039}_{-0.041} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5739^{+190}_{-180} \quad (-0.8\sigma)$
n_{s}	$0.968^{+0.017}_{-0.017} \quad (+0.8\sigma)$	D_{40}	$1225^{+29}_{-29} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.3\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5723^{+81}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.023}_{-0.025} \quad (+0.8\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2537^{+28}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.013}_{-0.013} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.021}_{-0.023} \quad (+0.8\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (-0.0\sigma)$	D_{2000}	$229.7^{+4.3}_{-4.3} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.013}_{-0.013} \quad (+0.5\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.017}_{-0.017} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.020}_{-0.022} \quad (+0.8\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.2462^{+0.0060}_{-0.0062} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.013}_{-0.013} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2475^{+0.0061}_{-0.0062} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.020}_{-0.021} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.63^{+0.13}_{-0.13} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.3000^{+0.0099}_{-0.010} \quad (+0.8\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.74^{+0.44}_{-0.43} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.011}_{-0.011} \quad (+0.9\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.12^{+0.92}_{-0.92} \quad (-0.5\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.3^{+4.4}_{-4.2} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0410^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	f_{2000}^{217}	$108.2^{+4.4}_{-4.4} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.86^{+0.41}_{-0.39} \quad (-0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.51 \quad (\nu: 0.4)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.7^{+1.7}_{-1.7} \quad (+0.7\sigma)$	χ_{simall}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.0^{+4.5}_{-4.4} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.7) \quad (-0.7\sigma)$
H_0	$68.1^{+2.8}_{-2.7} \quad (+1.0\sigma)$	k_{D}	$0.1407^{+0.0033}_{-0.0032} \quad (+0.4\sigma)$	χ_{plik}^2	$772.4 \quad (\nu: 15.3) \quad (-0.0\sigma)$
Ω_{Λ}	$0.692^{+0.015}_{-0.015} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0011}_{-0.0011} \quad (+0.4\sigma)$	χ_{JLA}^2	$1035.02 \quad (\nu: 0.1)$
Ω_{m}	$0.308^{+0.015}_{-0.015} \quad (-0.9\sigma)$	z_{eq}	$3370^{+57}_{-57} \quad (-1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0080}_{-0.0076} \quad (-0.3\sigma)$	k_{eq}	$0.01033^{+0.00027}_{-0.00026} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.52 \quad (\nu: 0.2)$
$\Omega_{\nu}h^2$	$< 0.00152 \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.011}_{-0.011} \quad (+1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}}h^3$	$0.0973^{+0.0090}_{-0.0086} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4524^{+0.0056}_{-0.0055} \quad (+1.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
σ_8	$0.814^{+0.024}_{-0.026} \quad (+0.8\sigma)$	$H(0.15)$	$73.4^{+2.8}_{-2.8} \quad (+1.0\sigma)$	χ_{CMB}^2	$1202.0 \quad (\nu: 16.2) \quad (+1.2\sigma)$
S_8	$0.825^{+0.025}_{-0.026} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+26}_{-24} \quad (-0.9\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$H(0.38)$	$83.5^{+2.9}_{-2.9} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2250.35; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.72; R - 1 = 0.00891$$

9.34 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022329	$0.02236^{+0.00036}_{-0.00037}$ (+1.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.0936	$0.0948^{+0.0070}_{-0.0066}$ (+0.3 σ)	$D_{\mathrm{M}}(0.15)$	645.3	644^{+21}_{-21} (−0.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.1169	$0.1180^{+0.0058}_{-0.0055}$ (−0.5 σ)	σ_8	0.8158	$0.811^{+0.022}_{-0.023}$ (+0.7 σ)	$H(0.38)$	82.38	$82.6^{+2.3}_{-2.3}$ (+0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04128	$1.04116^{+0.00086}_{-0.00086}$ (+0.7 σ)	S_8	0.8271	$0.825^{+0.022}_{-0.022}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1539.7	1537^{+48}_{-47} (−0.7 σ)
τ	0.0546	$0.055^{+0.015}_{-0.015}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4530	$0.452^{+0.012}_{-0.012}$ (−0.4 σ)	$H(0.51)$	89.00	$89.3^{+2.4}_{-2.4}$ (+0.6 σ)
Σm_{ν} [eV]	0.000	< 0.116 (−0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6079	$0.605^{+0.015}_{-0.015}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1995	1991^{+60}_{-59} (−0.7 σ)
N_{eff}	2.890	$2.96^{+0.35}_{-0.34}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9952	$0.988^{+0.020}_{-0.021}$ (+0.5 σ)	$H(0.61)$	94.55	$94.9^{+2.5}_{-2.4}$ (+0.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0376	$3.041^{+0.034}_{-0.032}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	99.98	$99.7^{+1.7}_{-1.8}$ (+0.9 σ)	$D_{\mathrm{M}}(0.61)$	2322	2317^{+69}_{-67} (−0.7 σ)
n_{s}	0.9627	$0.964^{+0.014}_{-0.014}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4478	$2.442^{+0.043}_{-0.043}$ (−0.4 σ)	$H(2.33)$	233.7	$234.8^{+5.2}_{-5.0}$ (−0.4 σ)
y_{cal}	1.00055	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.64	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5811	5791^{+150}_{-140} (−0.5 σ)
A_{217}^{CIB}	43.5	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	2.086	$2.093^{+0.071}_{-0.066}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4571	$0.457^{+0.012}_{-0.011}$ (−0.3 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.98	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8698	$1.874^{+0.033}_{-0.033}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7540	$0.749^{+0.021}_{-0.022}$ (+0.7 σ)
A_{143}^{tSZ}	7.02	$5.6^{+3.8}_{-3.8}$ (+0.2 σ)	D_{40}	1231.5	1232^{+26}_{-26} (−0.4 σ)	$f\sigma_8(0.38)$	0.4761	$0.475^{+0.011}_{-0.011}$ (+0.3 σ)
A_{100}^{PS}	242	256^{+60}_{-50} (−0.3 σ)	D_{220}	5734	5738^{+76}_{-71} (+0.7 σ)	$\sigma_8(0.38)$	0.6685	$0.664^{+0.019}_{-0.020}$ (+0.7 σ)
A_{143}^{PS}	52.2	44^{+20}_{-20} (−0.5 σ)	D_{810}	2538.6	2538^{+26}_{-26} (+0.1 σ)	$f\sigma_8(0.51)$	0.4750	$0.474^{+0.011}_{-0.011}$ (+0.4 σ)
$A_{143\times 217}^{\mathrm{PS}}$	59.1	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.8	$818.1^{+9.4}_{-9.2}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6257	$0.622^{+0.018}_{-0.019}$ (+0.7 σ)
A_{217}^{PS}	124.3	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.54	$231.6^{+3.6}_{-3.6}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4702	$0.469^{+0.011}_{-0.011}$ (+0.5 σ)
A^{kSZ}	0.01	< 7.76 (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9627	$0.964^{+0.014}_{-0.014}$ (+0.5 σ)	$\sigma_8(0.61)$	0.5954	$0.591^{+0.017}_{-0.018}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.77	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_{P}	0.24327	$0.2442^{+0.0048}_{-0.0048}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.2993	$0.2980^{+0.0087}_{-0.0087}$ (+0.7 σ)
$A_{143}^{\mathrm{dustTT}}$	10.97	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24459	$0.2455^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3092	$0.3073^{+0.0095}_{-0.0098}$ (+0.8 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	20.5	$18.5^{+6.4}_{-6.5}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.539	$2.558^{+0.090}_{-0.085}$ (−1.0 σ)	f_{2000}^{143}	27.1	29^{+6}_{-6} (−0.7 σ)
$A_{217}^{\mathrm{dustTT}}$	96.2	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.913	$13.87^{+0.35}_{-0.34}$ (−0.5 σ)	$f_{2000}^{143\times 217}$	30.84	31^{+4}_{-4} (−0.8 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.076}_{-0.074}$	z_{\ast}	1089.54	$1089.67^{+0.66}_{-0.64}$ (−1.3 σ)	f_{2000}^{217}	105.33	$106.4^{+3.9}_{-3.9}$ (−0.7 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	r_{\ast}	146.06	$145.4^{+3.4}_{-3.4}$ (+0.0 σ)	$\chi_{\mathrm{lensing}}^2$	8.66	9.11 (ν : 0.2)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_{\ast}$	1.04154	$1.0414^{+0.0010}_{-0.0010}$ (+0.4 σ)	χ_{small}^2	396.05	397.1 (ν : 1.8) (+0.1 σ)
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_{\ast})/\mathrm{Gpc}$	14.024	$13.97^{+0.31}_{-0.31}$ (+0.0 σ)	χ_{lowl}^2	23.64	23.7 (ν : 0.7) (−0.5 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.665	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.47	$1059.7^{+1.4}_{-1.4}$ (+0.7 σ)	χ_{plik}^2	2343.0	2359.2 (ν : 17.5) (+261.3 σ)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.08^{+0.52}_{-0.53}$	r_{drag}	148.76	$148.1^{+3.5}_{-3.5}$ (−0.0 σ)	$\chi_{6\mathrm{DF}}^2$	0.011	0.060 (ν : 0.0)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.13969	$0.1401^{+0.0026}_{-0.0025}$ (+0.1 σ)	χ_{MGS}^2	1.41	1.29 (ν : 0.1)
c_{217}	0.99814	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16037	$0.16054^{+0.00079}_{-0.00076}$ (−0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.91	4.9 (ν : 1.3)
H_0	67.21	$67.3^{+2.3}_{-2.2}$ (+0.8 σ)	z_{eq}	3399.3	3394^{+48}_{-47} (−0.7 σ)	χ_{prior}^2	1.5	11.5 (ν : 10.2) (+1.2 σ)
Ω_{Λ}	0.6917	$0.689^{+0.014}_{-0.015}$ (+0.9 σ)	k_{eq}	0.010266	$0.01030^{+0.00022}_{-0.00021}$ (−0.8 σ)	χ_{CMB}^2	2771.4	2789.1 (ν : 18.0) (+263.1 σ)
Ω_{m}	0.3083	$0.311^{+0.015}_{-0.014}$ (−0.9 σ)	$100\theta_{\mathrm{eq}}$	0.8138	$0.8149^{+0.0090}_{-0.0091}$ (+0.7 σ)	χ_{BAO}^2	5.33	6.2 (ν : 0.9)
$\Omega_{\mathrm{m}}h^2$	0.1393	$0.1408^{+0.0061}_{-0.0059}$ (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.44968	$0.4502^{+0.0045}_{-0.0046}$ (+0.7 σ)			
$\Omega_{\nu}h^2$	0.00000	< 0.00122 (−0.8 σ)	$H(0.15)$	72.41	$72.6^{+2.3}_{-2.2}$ (+0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2778.17$; $\Delta\chi_{\mathrm{eff}}^2 = -2.53$; $\bar{\chi}_{\mathrm{eff}}^2 = 2806.81$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.03$; $R - 1 = 0.00810$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.02) MGS: 1.41 (Δ 0.19) DR12BAO: 3.91 (Δ -0.51) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.66 (Δ -0.07) small_100x143_offlike5_EE_Aplanc
396.05 (Δ -0.47) commander_dx12_v3.2.29: 23.64 (Δ 0.74) plik_rd12_HM_v22b_TTTEEE: 2343.02 (Δ -2.29)

9.35 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022338	$0.02238^{+0.00036}_{-0.00036}$ (+1.2 σ)	$\Omega_{\mathrm{m}}h^3$	0.0936	$0.0951^{+0.0069}_{-0.0064}$ (+0.3 σ)	$D_{\mathrm{M}}(0.15)$	644.6	643^{+21}_{-20} (−0.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.1168	$0.1181^{+0.0058}_{-0.0055}$ (−0.4 σ)	σ_8	0.8146	$0.812^{+0.021}_{-0.022}$ (+0.7 σ)	$H(0.38)$	82.43	$82.7^{+2.3}_{-2.2}$ (+0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04130	$1.04116^{+0.00086}_{-0.00086}$ (+0.7 σ)	S_8	0.8245	$0.825^{+0.022}_{-0.022}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1538.4	1534^{+46}_{-45} (−0.8 σ)
τ	0.0537	$0.055^{+0.015}_{-0.014}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4516	$0.452^{+0.012}_{-0.012}$ (−0.4 σ)	$H(0.51)$	89.04	$89.4^{+2.4}_{-2.3}$ (+0.6 σ)
Σm_{ν} [eV]	0.001	< 0.111 (−0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6065	$0.605^{+0.015}_{-0.015}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1993	1987^{+58}_{-57} (−0.7 σ)
N_{eff}	2.891	$2.97^{+0.35}_{-0.33}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9930	$0.988^{+0.020}_{-0.020}$ (+0.5 σ)	$H(0.61)$	94.58	$95.0^{+2.4}_{-2.4}$ (+0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0354	$3.042^{+0.033}_{-0.032}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	100.11	$99.8^{+1.6}_{-1.7}$ (+1.0 σ)	$D_{\mathrm{M}}(0.61)$	2320	2313^{+67}_{-65} (−0.7 σ)
n_{s}	0.9631	$0.964^{+0.014}_{-0.014}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.4425	$2.441^{+0.042}_{-0.042}$ (−0.4 σ)	$H(2.33)$	233.6	$234.9^{+5.2}_{-4.9}$ (−0.4 σ)
y_{cal}	1.00048	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.55	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5810	5785^{+140}_{-140} (−0.5 σ)
A_{217}^{CIB}	43.5	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	2.081	$2.095^{+0.071}_{-0.066}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4558	$0.456^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.95	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8692	$1.875^{+0.033}_{-0.033}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7530	$0.750^{+0.020}_{-0.021}$ (+0.7 σ)
A_{143}^{tSZ}	6.93	$5.6^{+3.8}_{-3.8}$ (+0.2 σ)	D_{40}	1230.2	1231^{+26}_{-25} (−0.4 σ)	$f\sigma_8(0.38)$	0.4749	$0.475^{+0.011}_{-0.011}$ (+0.3 σ)
A_{100}^{PS}	243	256^{+60}_{-50} (−0.3 σ)	D_{220}	5734	5739^{+76}_{-72} (+0.7 σ)	$\sigma_8(0.38)$	0.6677	$0.665^{+0.019}_{-0.019}$ (+0.8 σ)
A_{143}^{PS}	51.6	44^{+20}_{-20} (−0.5 σ)	D_{810}	2538.6	2538^{+26}_{-26} (+0.2 σ)	$f\sigma_8(0.51)$	0.4739	$0.474^{+0.011}_{-0.011}$ (+0.4 σ)
$A_{143\times 217}^{\mathrm{PS}}$	58.1	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.9	$818.2^{+9.4}_{-9.2}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6249	$0.622^{+0.018}_{-0.018}$ (+0.8 σ)
A_{217}^{PS}	124.1	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.56	$231.6^{+3.6}_{-3.6}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4692	$0.469^{+0.011}_{-0.011}$ (+0.5 σ)
A^{kSZ}	0.01	< 7.82 (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9631	$0.964^{+0.014}_{-0.014}$ (+0.6 σ)	$\sigma_8(0.61)$	0.5947	$0.592^{+0.017}_{-0.018}$ (+0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.79	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	Y_{P}	0.24329	$0.2444^{+0.0047}_{-0.0046}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2990	$0.2984^{+0.0086}_{-0.0086}$ (+0.8 σ)
$A_{143}^{\mathrm{dustTT}}$	10.96	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24461	$0.2457^{+0.0047}_{-0.0046}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3089	$0.3079^{+0.0094}_{-0.0095}$ (+0.8 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	20.3	$18.5^{+6.4}_{-6.5}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.538	$2.559^{+0.091}_{-0.085}$ (−1.0 σ)	f_{2000}^{143}	26.9	29^{+6}_{-6} (−0.7 σ)
$A_{217}^{\mathrm{dustTT}}$	96.1	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.910	$13.85^{+0.34}_{-0.34}$ (−0.5 σ)	$f_{2000}^{143\times 217}$	30.72	31^{+4}_{-4} (−0.8 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.076}_{-0.074}$	z_{*}	1089.52	$1089.67^{+0.66}_{-0.64}$ (−1.3 σ)	f_{2000}^{217}	105.29	$106.4^{+3.9}_{-3.8}$ (−0.7 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.058}_{-0.058}$	r_{*}	146.09	$145.3^{+3.3}_{-3.3}$ (−0.0 σ)	$\chi_{\mathrm{lensing}}^2$	8.61	9.12 (ν : 0.2)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.481	$0.48^{+0.16}_{-0.17}$	$100\theta_{*}$	1.04156	$1.0414^{+0.0010}_{-0.0010}$ (+0.3 σ)	χ_{small}^2	395.92	397.2 (ν : 1.9) (+0.1 σ)
$A_{143}^{\mathrm{dustTE}}$	0.225	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	14.026	$13.96^{+0.31}_{-0.31}$ (−0.0 σ)	χ_{lowl}^2	23.52	23.6 (ν : 0.6) (−0.5 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.51	$1059.7^{+1.3}_{-1.3}$ (+0.8 σ)	χ_{plik}^2	2343.5	2359.3 (ν : 17.7) (+261.3 σ)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.08^{+0.52}_{-0.54}$	r_{drag}	148.78	$148.0^{+3.4}_{-3.5}$ (−0.1 σ)	χ_{JLA}^2	1034.88	1035.07 (ν : 0.1)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.13967	$0.1402^{+0.0026}_{-0.0025}$ (+0.2 σ)	$\chi_{6\mathrm{DF}}^2$	0.006	0.048 (ν : 0.0)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16037	$0.16056^{+0.00080}_{-0.00076}$ (−0.5 σ)	χ_{MGS}^2	1.47	1.37 (ν : 0.1)
H_0	67.28	$67.4^{+2.2}_{-2.2}$ (+0.8 σ)	z_{eq}	3395.7	3391^{+46}_{-46} (−0.7 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.77	4.6 (ν : 0.9)
Ω_{Λ}	0.6926	$0.690^{+0.013}_{-0.014}$ (+0.9 σ)	k_{eq}	0.010256	$0.01030^{+0.00022}_{-0.00021}$ (−0.8 σ)	χ_{prior}^2	1.4	11.5 (ν : 10.1) (+1.2 σ)
Ω_{m}	0.3074	$0.310^{+0.014}_{-0.013}$ (−0.9 σ)	$100\theta_{\mathrm{eq}}$	0.8145	$0.8155^{+0.0087}_{-0.0088}$ (+0.8 σ)	χ_{CMB}^2	2771.6	2789.2 (ν : 18.1) (+263.1 σ)
$\Omega_{\mathrm{m}}h^2$	0.1392	$0.1409^{+0.0062}_{-0.0058}$ (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.45004	$0.4505^{+0.0044}_{-0.0044}$ (+0.7 σ)	χ_{BAO}^2	5.25	6.0 (ν : 0.6)
$\Omega_{\nu}h^2$	0.00001	< 0.00117 (−0.8 σ)	$H(0.15)$	72.48	$72.7^{+2.2}_{-2.2}$ (+0.8 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 3813.11$; $\Delta\chi_{\mathrm{eff}}^2 = -2.56$; $\bar{\chi}_{\mathrm{eff}}^2 = 3841.73$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.12$; $R - 1 = 0.00935$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.02) MGS: 1.47 (Δ 0.19) DR12BAO: 3.77 (Δ -0.47) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.61 (Δ -0.11) small_100x143_offlike5_EE_Aplanc
395.92 (Δ -0.60) commander_dx12_v3.2.29: 23.52 (Δ 0.64) plik_rd12_HM_v22b_TTTEEE: 2343.54 (Δ -1.73) SN - JLA Pantheon18: 1034.88 (Δ -0.09)

9.36 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022306	$0.02235^{+0.00034}_{-0.00034}$ (+1.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.0935	$0.0946^{+0.0059}_{-0.0055}$ (+0.3 σ)	$D_{\mathrm{M}}(0.15)$	646.2	645^{+19}_{-18} (−0.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.11694	$0.1178^{+0.0050}_{-0.0048}$ (−0.5 σ)	σ_8	0.8147	$0.810^{+0.020}_{-0.022}$ (+0.7 σ)	$H(0.38)$	82.29	$82.5^{+2.0}_{-2.0}$ (+0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04130	$1.04119^{+0.00080}_{-0.00079}$ (+0.7 σ)	S_8	0.8271	$0.825^{+0.022}_{-0.022}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1541.6	1538^{+42}_{-41} (−0.7 σ)
τ	0.0531	$0.055^{+0.015}_{-0.015}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4530	$0.452^{+0.012}_{-0.012}$ (−0.4 σ)	$H(0.51)$	88.92	$89.2^{+2.1}_{-2.0}$ (+0.5 σ)
Σm_{ν} [eV]	0.001	< 0.115 (−0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6075	$0.605^{+0.014}_{-0.014}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1997	1993^{+52}_{-52} (−0.7 σ)
N_{eff}	2.883	$2.95^{+0.30}_{-0.28}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9945	$0.988^{+0.020}_{-0.021}$ (+0.5 σ)	$H(0.61)$	94.47	$94.8^{+2.1}_{-2.1}$ (+0.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0346	$3.041^{+0.033}_{-0.031}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	99.88	$99.7^{+1.7}_{-1.7}$ (+0.9 σ)	$D_{\mathrm{M}}(0.61)$	2325	2319^{+59}_{-59} (−0.7 σ)
n_{s}	0.9620	$0.963^{+0.012}_{-0.012}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4468	$2.443^{+0.042}_{-0.042}$ (−0.4 σ)	$H(2.33)$	233.62	$234.7^{+4.5}_{-4.3}$ (−0.5 σ)
y_{cal}	1.00057	$1.0006^{+0.0048}_{-0.0047}$ (+0.1 σ)	z_{re}	7.50	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5816	5796^{+120}_{-120} (−0.5 σ)
A_{217}^{CIB}	44.4	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	2.079	$2.092^{+0.069}_{-0.064}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4571	$0.456^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.84	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8698	$1.873^{+0.030}_{-0.031}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7529	$0.749^{+0.019}_{-0.021}$ (+0.7 σ)
A_{143}^{tSZ}	6.99	$5.6^{+3.8}_{-3.8}$ (+0.3 σ)	D_{40}	1232.3	1233^{+25}_{-25} (−0.3 σ)	$f\sigma_8(0.38)$	0.4758	$0.475^{+0.011}_{-0.011}$ (+0.3 σ)
A_{100}^{PS}	244	255^{+60}_{-50} (−0.3 σ)	D_{220}	5734	5738^{+76}_{-71} (+0.7 σ)	$\sigma_8(0.38)$	0.6675	$0.664^{+0.017}_{-0.019}$ (+0.7 σ)
A_{143}^{PS}	50.4	44^{+20}_{-20} (−0.6 σ)	D_{810}	2538.7	2538^{+26}_{-25} (+0.1 σ)	$f\sigma_8(0.51)$	0.4746	$0.473^{+0.011}_{-0.011}$ (+0.4 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	55.7	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.7	$818.2^{+9.3}_{-9.1}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6246	$0.621^{+0.017}_{-0.018}$ (+0.7 σ)
A_{217}^{PS}	122.9	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.49	$231.7^{+3.4}_{-3.4}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4698	$0.468^{+0.010}_{-0.011}$ (+0.5 σ)
A^{kSZ}	0.00	< 7.70 (−0.3 σ)	$n_{\mathrm{s},0.002}$	0.9620	$0.963^{+0.012}_{-0.012}$ (+0.5 σ)	$\sigma_8(0.61)$	0.5943	$0.591^{+0.016}_{-0.017}$ (+0.7 σ)
$A_{100}^{\mathrm{dustTT}}$	8.71	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	Y_{P}	0.24316	$0.2440^{+0.0041}_{-0.0040}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.2988	$0.2978^{+0.0079}_{-0.0082}$ (+0.7 σ)
$A_{143}^{\mathrm{dustTT}}$	10.92	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24447	$0.2453^{+0.0041}_{-0.0040}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3086	$0.3071^{+0.0088}_{-0.0093}$ (+0.8 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.1	$18.5^{+6.4}_{-6.4}$ (+0.1 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.541	$2.555^{+0.080}_{-0.077}$ (−1.0 σ)	f_{2000}^{143}	27.2	29^{+6}_{-6} (−0.7 σ)
$A_{217}^{\mathrm{dustTT}}$	95.5	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.923	$13.88^{+0.29}_{-0.30}$ (−0.4 σ)	$f_{2000}^{143 \times 217}$	30.85	31^{+4}_{-4} (−0.8 σ)
$A_{100}^{\mathrm{dustTE}}$	0.113	$0.114^{+0.076}_{-0.074}$	z_{*}	1089.56	$1089.65^{+0.61}_{-0.59}$ (−1.3 σ)	f_{2000}^{217}	105.48	$106.3^{+3.8}_{-3.7}$ (−0.8 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.058}_{-0.057}$	r_{*}	146.12	$145.6^{+2.9}_{-2.9}$ (+0.1 σ)	$\chi_{\mathrm{lensing}}^2$	8.65	9.09 (ν : 0.2)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.483	$0.48^{+0.16}_{-0.17}$	$100\theta_{*}$	1.04157	$1.04143^{+0.00094}_{-0.00094}$ (+0.4 σ)	χ_{small}^2	395.86	397.1 (ν : 1.8) (+0.1 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	14.029	$13.98^{+0.26}_{-0.27}$ (+0.0 σ)	χ_{lowl}^2	23.71	23.7 (ν : 0.6) (−0.5 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.665	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.44	$1059.6^{+1.2}_{-1.2}$ (+0.7 σ)	χ_{plik}^2	2343.0	2358.9 (ν : 17.0) (+261.2 σ)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.08^{+0.52}_{-0.54}$	r_{drag}	148.83	$148.2^{+3.0}_{-3.0}$ (+0.0 σ)	χ_{Aver15}^2	0.01	0.28 (ν : 0.1)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.13963	$0.1400^{+0.0022}_{-0.0022}$ (+0.1 σ)	$\chi_{6\mathrm{DF}}^2$	0.015	0.060 (ν : 0.0)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16038	$0.16052^{+0.00069}_{-0.00067}$ (−0.5 σ)	χ_{MGS}^2	1.34	1.28 (ν : 0.1)
H_0	67.11	$67.2^{+2.0}_{-2.0}$ (+0.7 σ)	z_{eq}	3402.1	3395^{+47}_{-46} (−0.6 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.04	4.9 (ν : 1.3)
Ω_{Λ}	0.6908	$0.689^{+0.013}_{-0.014}$ (+0.9 σ)	k_{eq}	0.010269	$0.01029^{+0.00020}_{-0.00019}$ (−0.8 σ)	χ_{prior}^2	1.5	11.4 (ν : 10.0) (+1.1 σ)
Ω_{m}	0.3092	$0.311^{+0.014}_{-0.013}$ (−0.9 σ)	$100\theta_{\mathrm{eq}}$	0.8133	$0.8147^{+0.0087}_{-0.0089}$ (+0.7 σ)	χ_{CMB}^2	2771.3	2788.8 (ν : 17.6) (+263.0 σ)
$\Omega_{\mathrm{m}}h^2$	0.1393	$0.1406^{+0.0053}_{-0.0050}$ (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.44941	$0.4501^{+0.0044}_{-0.0045}$ (+0.7 σ)	χ_{BAO}^2	5.40	6.2 (ν : 0.9)
$\Omega_{\nu}h^2$	0.00001	< 0.00120 (−0.8 σ)	$H(0.15)$	72.32	$72.5^{+2.0}_{-2.0}$ (+0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2778.19$; $\bar{\chi}_{\mathrm{eff}}^2 = 2806.77$; $R - 1 = 0.00843$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.01 BAO - 6DF: 0.01 MGS: 1.34 DR12BAO: 4.04 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.65 small_100x143.offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3.2.29: 23.71 plik_rd12_HM_v22b.TTTEEE: 2343.05

9.37 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022312	$0.02235^{+0.00034}_{-0.00034}$ $(+1.1\sigma)$	σ_8	0.8166	$0.812^{+0.020}_{-0.022}$ $(+0.7\sigma)$	$D_M(0.38)$	1536.7	1535^{+41}_{-40} (-0.7σ)
$\Omega_c h^2$	0.11778	$0.1183^{+0.0048}_{-0.0046}$ (-0.4σ)	S_8	0.8290	$0.826^{+0.022}_{-0.021}$ (-0.4σ)	$H(0.51)$	89.20	$89.4^{+2.0}_{-2.0}$ $(+0.6\sigma)$
$100\theta_{MC}$	1.04119	$1.04112^{+0.00078}_{-0.00077}$ $(+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4540	$0.453^{+0.012}_{-0.012}$ (-0.4σ)	$D_M(0.51)$	1991	1989^{+51}_{-50} (-0.7σ)
τ	0.0531	$0.055^{+0.015}_{-0.015}$ $(+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6089	$0.606^{+0.014}_{-0.014}$ $(+0.4\sigma)$	$H(0.61)$	94.77	$95.0^{+2.1}_{-2.0}$ $(+0.6\sigma)$
Σm_ν [eV]	0.003	< 0.116 (-0.8σ)	$\sigma_8/h^{0.5}$	0.9952	$0.989^{+0.020}_{-0.021}$ $(+0.5\sigma)$	$D_M(0.61)$	2317	2315^{+58}_{-57} (-0.7σ)
N_{eff}	2.930	$2.97^{+0.29}_{-0.28}$ $(+0.1\sigma)$	$r_{\text{drag}} h$	99.87	$99.7^{+1.7}_{-1.7}$ $(+0.9\sigma)$	$H(2.33)$	234.34	$235.1^{+4.3}_{-4.1}$ (-0.4σ)
$\ln(10^{10} A_s)$	3.0358	$3.041^{+0.032}_{-0.031}$ $(+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4465	$2.443^{+0.042}_{-0.042}$ (-0.4σ)	$D_M(2.33)$	5797	5786^{+120}_{-120} (-0.5σ)
n_s	0.9630	$0.964^{+0.012}_{-0.012}$ $(+0.5\sigma)$	z_{re}	7.51	$7.7^{+1.5}_{-1.5}$ $(+0.4\sigma)$	$f\sigma_8(0.15)$	0.4581	$0.457^{+0.011}_{-0.011}$ (-0.2σ)
y_{cal}	1.00019	$1.0006^{+0.0048}_{-0.0047}$ $(+0.1\sigma)$	$10^9 A_s$	2.082	$2.094^{+0.069}_{-0.065}$ $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7547	$0.750^{+0.019}_{-0.021}$ $(+0.7\sigma)$
A_{217}^{CIB}	45.5	46^{+10}_{-10} (-0.2σ)	$10^9 A_s e^{-2\tau}$	1.8720	$1.875^{+0.029}_{-0.029}$ (-0.1σ)	$f\sigma_8(0.38)$	0.4769	$0.475^{+0.011}_{-0.011}$ $(+0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.63	—	D_{40}	1230.6	1232^{+25}_{-24} (-0.4σ)	$\sigma_8(0.38)$	0.6690	$0.665^{+0.017}_{-0.019}$ $(+0.7\sigma)$
A_{143}^{tSZ}	7.08	$5.6^{+3.8}_{-3.8}$ $(+0.2\sigma)$	D_{220}	5727	5736^{+75}_{-70} $(+0.6\sigma)$	$f\sigma_8(0.51)$	0.4757	$0.474^{+0.010}_{-0.011}$ $(+0.4\sigma)$
A_{100}^{PS}	247	256^{+60}_{-50} (-0.2σ)	D_{810}	2536.6	2538^{+26}_{-25} $(+0.1\sigma)$	$\sigma_8(0.51)$	0.6261	$0.622^{+0.016}_{-0.018}$ $(+0.8\sigma)$
A_{143}^{PS}	48.9	45^{+20}_{-20} (-0.5σ)	D_{1420}	818.2	$817.9^{+9.3}_{-9.0}$ $(+0.6\sigma)$	$f\sigma_8(0.61)$	0.4708	$0.469^{+0.010}_{-0.011}$ $(+0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	51.3	42^{+20}_{-20} (-0.2σ)	D_{2000}	231.78	$231.4^{+3.3}_{-3.3}$ $(+0.8\sigma)$	$\sigma_8(0.61)$	0.5957	$0.592^{+0.016}_{-0.017}$ $(+0.8\sigma)$
A_{217}^{PS}	121.3	115^{+20}_{-20} (-0.0σ)	$n_{s,0.002}$	0.9630	$0.964^{+0.012}_{-0.012}$ $(+0.5\sigma)$	$f\sigma_8(2.33)$	0.2995	$0.2983^{+0.0078}_{-0.0082}$ $(+0.8\sigma)$
A^{kSZ}	0.00	< 7.83 (-0.2σ)	Y_P	0.24380	$0.2444^{+0.0039}_{-0.0039}$ $(+0.2\sigma)$	$\sigma_8(2.33)$	0.3093	$0.3076^{+0.0086}_{-0.0092}$ $(+0.8\sigma)$
A_{100}^{dustTT}	8.79	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	Y_P^{BBN}	0.24512	$0.2457^{+0.0039}_{-0.0039}$ $(+0.2\sigma)$	f_{2000}^{143}	28.0	29^{+6}_{-6} (-0.6σ)
A_{143}^{dustTT}	10.98	$10.8^{+3.5}_{-3.4}$ $(+0.1\sigma)$	10^5D/H	2.556	$2.565^{+0.073}_{-0.072}$ (-0.9σ)	$f_{2000}^{143 \times 217}$	31.32	32^{+4}_{-4} (-0.7σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.0	$18.6^{+6.4}_{-6.4}$ $(+0.1\sigma)$	Age/Gyr	13.879	$13.85^{+0.29}_{-0.28}$ (-0.5σ)	f_{2000}^{217}	105.90	$106.5^{+3.7}_{-3.7}$ (-0.7σ)
A_{217}^{dustTT}	95.6	94^{+10}_{-10} $(+0.1\sigma)$	z_*	1089.68	$1089.72^{+0.57}_{-0.55}$ (-1.2σ)	χ^2_{lensing}	8.75	9.14 $(\nu: 0.2)$
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.074}$	r_*	145.65	$145.3^{+2.8}_{-2.8}$ (-0.0σ)	χ^2_{small}	395.85	397.1 $(\nu: 1.7)$ $(+0.1\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.058}_{-0.057}$	$100\theta_*$	1.04143	$1.04135^{+0.00092}_{-0.00091}$ $(+0.3\sigma)$	χ^2_{lowl}	23.62	23.6 $(\nu: 0.6)$ (-0.5σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.16}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.986	$13.95^{+0.26}_{-0.26}$ (-0.1σ)	χ^2_{plik}	2343.2	2358.9 $(\nu: 16.9)$ $(+261.2\sigma)$
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	z_{drag}	1059.55	$1059.7^{+1.2}_{-1.2}$ $(+0.7\sigma)$	χ^2_{Aver15}	0.00	0.29 $(\nu: 0.1)$
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.67^{+0.16}_{-0.16}$	r_{drag}	148.35	$148.0^{+2.9}_{-2.9}$ (-0.1σ)	χ^2_{Cooke17}	0.43	0.48 $(\nu: 0.1)$
A_{217}^{dustTE}	2.07	$2.08^{+0.52}_{-0.54}$	k_D	0.13995	$0.1402^{+0.0022}_{-0.0021}$ $(+0.2\sigma)$	$\chi^2_{6\text{DF}}$	0.016	0.061 $(\nu: 0.0)$
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$100\theta_D$	0.16051	$0.16060^{+0.00064}_{-0.00063}$ (-0.4σ)	χ^2_{MGS}	1.34	1.28 $(\nu: 0.1)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	z_{eq}	3400.9	3394^{+47}_{-46} (-0.7σ)	χ^2_{DR12BAO}	4.06	4.9 $(\nu: 1.3)$
H_0	67.32	$67.4^{+2.0}_{-1.9}$ $(+0.8\sigma)$	k_{eq}	0.010298	$0.01031^{+0.00019}_{-0.00018}$ (-0.7σ)	χ^2_{prior}	1.6	11.5 $(\nu: 10.1)$ $(+1.1\sigma)$
Ω_Λ	0.6909	$0.689^{+0.013}_{-0.014}$ $(+0.9\sigma)$	$100\theta_{\text{eq}}$	0.8134	$0.8149^{+0.0087}_{-0.0088}$ $(+0.7\sigma)$	χ^2_{CMB}	2771.4	2788.8 $(\nu: 17.4)$ $(+263.0\sigma)$
Ω_m	0.3091	$0.311^{+0.014}_{-0.013}$ (-0.9σ)	$100\theta_{s,\text{eq}}$	0.44950	$0.4502^{+0.0044}_{-0.0045}$ $(+0.7\sigma)$	χ^2_{BAO}	5.41	6.2 $(\nu: 0.9)$
$\Omega_m h^2$	0.14012	$0.1411^{+0.0051}_{-0.0049}$ (-0.6σ)	$H(0.15)$	72.55	$72.6^{+2.0}_{-1.9}$ $(+0.7\sigma)$	χ^2_{Abund}	0.44	0.77 $(\nu: 0.2)$
$\Omega_\nu h^2$	0.00003	< 0.00123 (-0.8σ)	$D_M(0.15)$	644.1	644^{+18}_{-18} (-0.8σ)			
$\Omega_m h^3$	0.0943	$0.0951^{+0.0057}_{-0.0054}$ $(+0.3\sigma)$	$H(0.38)$	82.55	$82.7^{+2.0}_{-1.9}$ $(+0.7\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 2778.82$; $\bar{\chi}^2_{\text{eff}} = 2807.26$; $R - 1 = 0.00868$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D.Cooke2017: 0.43 BAO - 6DF: 0.02 MGS: 1.34 DR12BAO: 4.06 CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.75
small.100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12.v3.2_29: 23.62 plik_rd12_HM_v22b_TTTEEE: 2343.18

9.38 base_nnu_mnu_plikHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02238^{+0.00036}_{-0.00036} \quad (+1.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0951^{+0.0069}_{-0.0064} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+20}_{-20} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1181^{+0.0058}_{-0.0055} \quad (-0.4\sigma)$	σ_8	$0.812^{+0.021}_{-0.022} \quad (+0.7\sigma)$	$H(0.38)$	$82.7^{+2.3}_{-2.2} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04116^{+0.00086}_{-0.00086} \quad (+0.7\sigma)$	S_8	$0.825^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+46}_{-45} \quad (-0.8\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$H(0.51)$	$89.4^{+2.4}_{-2.3} \quad (+0.6\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	$< 0.112 \quad (-0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.014}_{-0.015} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+58}_{-57} \quad (-0.7\sigma)$
N_{eff}	$2.97^{+0.35}_{-0.33} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.020}_{-0.020} \quad (+0.5\sigma)$	$H(0.61)$	$95.0^{+2.4}_{-2.4} \quad (+0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.030}_{-0.029} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.6}_{-1.7} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+66}_{-66} \quad (-0.7\sigma)$
n_{s}	$0.964^{+0.013}_{-0.014} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.442^{+0.042}_{-0.041} \quad (-0.4\sigma)$	$H(2.33)$	$234.9^{+5.2}_{-4.9} \quad (-0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5784^{+140}_{-140} \quad (-0.5\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.064}_{-0.061} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.033}_{-0.033} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.020}_{-0.021} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1231^{+26}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (+0.3\sigma)$
A_{100}^{PS}	$256^{+60}_{-50} \quad (-0.3\sigma)$	D_{220}	$5738^{+76}_{-71} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.019}_{-0.019} \quad (+0.8\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.011}_{-0.011} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.1^{+9.4}_{-9.1} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.018}_{-0.018} \quad (+0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.6^{+3.6}_{-3.6} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.011}_{-0.011} \quad (+0.5\sigma)$
A^{kSZ}	$< 7.82 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.964^{+0.013}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.017}_{-0.018} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Y_{P}	$0.2444^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2987^{+0.0085}_{-0.0084} \quad (+0.8\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2457^{+0.0047}_{-0.0046} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3081^{+0.0093}_{-0.0095} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.559^{+0.091}_{-0.085} \quad (-1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.85^{+0.34}_{-0.34} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.074}$	z_*	$1089.66^{+0.67}_{-0.64} \quad (-1.3\sigma)$	f_{2000}^{217}	$106.4^{+3.9}_{-3.8} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$145.3^{+3.3}_{-3.3} \quad (-0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.10 \quad (\nu: 0.2)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.0414^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.31}_{-0.31} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 0.6) \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.8^{+1.4}_{-1.3} \quad (+0.8\sigma)$	χ_{plik}^2	$2359.2 \quad (\nu: 17.6) \quad (+261.3\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.54}$	r_{drag}	$148.0^{+3.4}_{-3.5} \quad (-0.1\sigma)$	χ_{JLA}^2	$1035.06 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1402^{+0.0026}_{-0.0025} \quad (+0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16056^{+0.00080}_{-0.00076} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.38 \quad (\nu: 0.1)$
H_0	$67.5^{+2.2}_{-2.2} \quad (+0.8\sigma)$	z_{eq}	$3390^{+46}_{-45} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.9)$
Ω_{Λ}	$0.690^{+0.013}_{-0.014} \quad (+0.9\sigma)$	k_{eq}	$0.01029^{+0.00022}_{-0.00021} \quad (-0.8\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.0) \quad (+1.1\sigma)$
Ω_{m}	$0.310^{+0.014}_{-0.013} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8156^{+0.0086}_{-0.0087} \quad (+0.8\sigma)$	χ_{CMB}^2	$2789.0 \quad (\nu: 17.9) \quad (+263.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1409^{+0.0062}_{-0.0058} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0043}_{-0.0044} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\Omega_{\nu}h^2$	$< 0.00118 \quad (-0.8\sigma)$	$H(0.15)$	$72.7^{+2.2}_{-2.2} \quad (+0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3841.56; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.18; R - 1 = 0.01012$$

9.39 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022197	$0.02221^{+0.00045}_{-0.00046}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4546	$0.452^{+0.014}_{-0.014}$ (−0.4 σ)	$H(0.38)$	83.07	$83.0^{+3.0}_{-2.9}$ (+0.8 σ)
$\Omega_c h^2$	0.1191	$0.1191^{+0.0076}_{-0.0072}$ (−0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6104	$0.606^{+0.017}_{-0.017}$ (+0.4 σ)	$D_M(0.38)$	1527	1530^{+60}_{-59} (−0.8 σ)
$100\theta_{MC}$	1.04103	$1.0410^{+0.0012}_{-0.0011}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9955	$0.987^{+0.021}_{-0.024}$ (+0.5 σ)	$H(0.51)$	89.74	$89.7^{+3.2}_{-3.0}$ (+0.7 σ)
τ	0.0530	$0.055^{+0.016}_{-0.014}$ (+0.5 σ)	$r_{drag}h$	100.10	$99.8^{+2.0}_{-2.0}$ (+1.0 σ)	$D_M(0.51)$	1978	1982^{+76}_{-75} (−0.8 σ)
Σm_ν [eV]	0.003	< 0.135 (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4429	$2.434^{+0.047}_{-0.047}$ (−0.6 σ)	$H(0.61)$	95.32	$95.3^{+3.2}_{-3.1}$ (+0.7 σ)
N_{eff}	3.024	$3.04^{+0.47}_{-0.45}$ (+0.4 σ)	z_{re}	7.56	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$D_M(0.61)$	2302	2306^{+87}_{-86} (−0.8 σ)
$\ln(10^{10} A_s)$	3.0373	$3.041^{+0.037}_{-0.035}$ (+0.3 σ)	$10^9 A_s$	2.085	$2.093^{+0.078}_{-0.072}$ (+0.3 σ)	$H(2.33)$	235.4	$235.7^{+6.8}_{-6.6}$ (−0.2 σ)
n_s	0.9647	$0.966^{+0.017}_{-0.017}$ (+0.7 σ)	$10^9 A_s e^{-2\tau}$	1.8752	$1.876^{+0.040}_{-0.041}$ (−0.1 σ)	$D_M(2.33)$	5765	5768^{+190}_{-190} (−0.6 σ)
y_{cal}	1.00039	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	D_{40}	1227.0	1225^{+29}_{-29} (−0.7 σ)	$f\sigma_8(0.15)$	0.4588	$0.457^{+0.013}_{-0.013}$ (−0.3 σ)
A_{100}^{PS}	243.8	242^{+50}_{-50} (−0.7 σ)	D_{220}	5710	5713^{+77}_{-79} (+0.1 σ)	$\sigma_8(0.15)$	0.7578	$0.750^{+0.024}_{-0.024}$ (+0.7 σ)
A_{143}^{PS}	37.1	40^{+20}_{-20} (−1.0 σ)	D_{810}	2531.6	2534^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.38)$	0.4781	$0.475^{+0.013}_{-0.013}$ (+0.3 σ)
A_{217}^{PS}	99.5	101^{+30}_{-30} (−1.4 σ)	D_{1420}	814.0	815^{+10}_{-10} (+0.1 σ)	$\sigma_8(0.38)$	0.6719	$0.665^{+0.022}_{-0.022}$ (+0.8 σ)
A_{217}^{CIB}	42.6	41^{+10}_{-10} (−1.0 σ)	D_{2000}	229.75	$230.0^{+4.5}_{-4.5}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4770	$0.474^{+0.013}_{-0.013}$ (+0.4 σ)
A_{143}^{tSZ}	4.28	< 7.39 (−0.6 σ)	$n_{s,0.002}$	0.9647	$0.966^{+0.017}_{-0.017}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6289	$0.623^{+0.021}_{-0.021}$ (+0.8 σ)
$r_{143 \times 217}^{PS}$	0.542	$0.65^{+0.26}_{-0.25}$	Y_P	0.2450	$0.2452^{+0.0063}_{-0.0062}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4723	$0.469^{+0.013}_{-0.013}$ (+0.5 σ)
$r_{143 \times 217}^{CIB}$	0.66	—	Y_P^{BBN}	0.2464	$0.2465^{+0.0063}_{-0.0063}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5984	$0.592^{+0.020}_{-0.020}$ (+0.8 σ)
$\xi^{tSZ \times CIB}$	0.00	—	$10^5 D/H$	2.611	$2.61^{+0.14}_{-0.13}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.3010	$0.299^{+0.010}_{-0.010}$ (+0.8 σ)
A^{kSZ}	3.7	—	Age/Gyr	13.802	$13.81^{+0.45}_{-0.44}$ (−0.6 σ)	$\sigma_8(2.33)$	0.3109	$0.308^{+0.011}_{-0.011}$ (+0.8 σ)
A_{100}^{dust}	0.999	$1.01^{+0.38}_{-0.38}$	z_*	1090.04	$1090.03^{+0.96}_{-0.92}$ (−0.7 σ)	f_{2000}^{143}	30.8	30^{+7}_{-7} (−0.2 σ)
A_{143}^{dust}	0.977	$0.97^{+0.34}_{-0.35}$	r_*	144.90	$144.9^{+4.4}_{-4.4}$ (−0.2 σ)	f_{2000}^{217}	107.42	$107.3^{+4.8}_{-4.6}$ (−0.4 σ)
A_{217}^{dust}	0.974	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	1.04122	$1.0412^{+0.0014}_{-0.0013}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	32.6	33^{+5}_{-5} (−0.3 σ)
$A_{143 \times 217}^{dust}$	1.009	$1.03^{+0.32}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	13.916	$13.91^{+0.41}_{-0.41}$ (−0.2 σ)	$\chi_{lensing}^2$	8.90	9.51 (ν : 0.4)
c_{100}	0.99736	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	z_{drag}	1059.44	$1059.5^{+1.7}_{-1.7}$ (+0.6 σ)	χ_{small}^2	395.85	397.1 (ν : 1.7) (+0.1 σ)
c_{217}	1.00127	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	r_{drag}	147.63	$147.6^{+4.6}_{-4.5}$ (−0.2 σ)	χ_{lowl}^2	23.31	23.2 (ν : 0.8) (−0.7 σ)
H_0	67.80	$67.6^{+2.9}_{-2.8}$ (+0.9 σ)	k_D	0.14025	$0.1403^{+0.0033}_{-0.0032}$ (+0.2 σ)	$\chi_{CamSpec}^2$	7049.9	7063.7 (ν : 14.8)
Ω_Λ	0.6925	$0.690^{+0.016}_{-0.016}$ (+0.9 σ)	$100\theta_D$	0.16096	$0.1610^{+0.0012}_{-0.0011}$ (+0.2 σ)	χ_{6DF}^2	0.006	0.062 (ν : 0.0)
Ω_m	0.3075	$0.310^{+0.016}_{-0.016}$ (−0.9 σ)	z_{eq}	3387	3380^{+60}_{-60} (−0.9 σ)	χ_{MGS}^2	1.47	1.38 (ν : 0.2)
$\Omega_m h^2$	0.1414	$0.1419^{+0.0082}_{-0.0077}$ (−0.5 σ)	k_{eq}	0.010324	$0.01031^{+0.00027}_{-0.00027}$ (−0.7 σ)	$\chi_{DR12BAO}^2$	3.77	4.8 (ν : 1.4)
$\Omega_\nu h^2$	0.00003	< 0.00144 (−0.7 σ)	$100\theta_{eq}$	0.8155	$0.817^{+0.011}_{-0.011}$ (+0.9 σ)	χ_{prior}^2	2.3	7.6 (ν : 5.9) (+0.1 σ)
$\Omega_m h^3$	0.0959	$0.0960^{+0.0093}_{-0.0086}$ (+0.5 σ)	$100\theta_{s,eq}$	0.4506	$0.4515^{+0.0058}_{-0.0057}$ (+0.9 σ)	χ_{CMB}^2	7478.0	7493.5 (ν : 16.0) (+1039.3 σ)
σ_8	0.8198	$0.812^{+0.025}_{-0.026}$ (+0.7 σ)	$H(0.15)$	73.04	$72.9^{+3.0}_{-2.8}$ (+0.8 σ)	χ_{BAO}^2	5.25	6.2 (ν : 1.0)
S_8	0.8299	$0.825^{+0.025}_{-0.025}$ (−0.4 σ)	$D_M(0.15)$	639.7	641^{+27}_{-26} (−0.8 σ)			

Best-fit $\chi_{eff}^2 = 7485.59$; $\bar{\chi}_{eff}^2 = 7507.28$; $\Delta\bar{\chi}_{eff}^2 = 0.80$; $R - 1 = 0.00494$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.77 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.90 small_100x143_offlike5_EE_Aplanck_B: 395.85 comman-
der_dx12_v3_2_29: 23.31 CamSpec like_10.7HM: 7049.94

9.40 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022187	$0.02223^{+0.00044}_{-0.00045} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4533	$0.451^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$H(0.38)$	83.01	$83.1^{+3.0}_{-2.9} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.1187	$0.1192^{+0.0076}_{-0.0073} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6092	$0.606^{+0.017}_{-0.017} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	1527	$1526^{+58}_{-57} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	1.04110	$1.0410^{+0.0011}_{-0.0011} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9944	$0.987^{+0.022}_{-0.023} \quad (+0.5\sigma)$	$H(0.51)$	89.66	$89.8^{+3.1}_{-3.0} \quad (+0.8\sigma)$
τ	0.0530	$0.055^{+0.016}_{-0.014} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	100.22	$99.97^{+1.9}_{-1.8} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	1979	$1977^{+73}_{-72} \quad (-0.8\sigma)$
$\Sigma m_{\nu} [\mathrm{eV}]$	0.001	$< 0.131 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4402	$2.432^{+0.046}_{-0.047} \quad (-0.6\sigma)$	$H(0.61)$	95.23	$95.4^{+3.2}_{-3.1} \quad (+0.7\sigma)$
N_{eff}	3.008	$3.06^{+0.47}_{-0.44} \quad (+0.4\sigma)$	z_{re}	7.56	$7.8^{+1.5}_{-1.5} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	2304	$2301^{+84}_{-83} \quad (-0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0365	$3.042^{+0.036}_{-0.034} \quad (+0.4\sigma)$	10^9A_{s}	2.083	$2.095^{+0.077}_{-0.071} \quad (+0.4\sigma)$	$H(2.33)$	235.1	$235.9^{+6.8}_{-6.5} \quad (-0.2\sigma)$
n_{s}	0.9648	$0.967^{+0.017}_{-0.017} \quad (+0.8\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8737	$1.877^{+0.040}_{-0.040} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5771	$5759^{+180}_{-180} \quad (-0.7\sigma)$
y_{cal}	1.00044	$1.0006^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{40}	1226.4	$1224^{+28}_{-28} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	0.4576	$0.456^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{PS}	238.6	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	5711	$5714^{+77}_{-79} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7569	$0.751^{+0.024}_{-0.024} \quad (+0.8\sigma)$
A_{143}^{PS}	38.8	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{810}	2532.1	$2534^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	0.4770	$0.475^{+0.013}_{-0.013} \quad (+0.3\sigma)$
A_{217}^{PS}	99.7	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	814.6	$815^{+10}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	0.6712	$0.666^{+0.022}_{-0.022} \quad (+0.8\sigma)$
A_{217}^{CIB}	45.3	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{2000}	229.98	$229.9^{+4.5}_{-4.4} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	0.4761	$0.474^{+0.013}_{-0.013} \quad (+0.4\sigma)$
A_{143}^{tSZ}	6.10	$< 7.38 \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	0.9648	$0.967^{+0.017}_{-0.017} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	0.6283	$0.623^{+0.021}_{-0.021} \quad (+0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.559	$0.65^{+0.25}_{-0.25}$	Y_{P}	0.2448	$0.2454^{+0.0062}_{-0.0062} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	0.4714	$0.469^{+0.013}_{-0.013} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.76	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2461	$0.2468^{+0.0062}_{-0.0062} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	0.5979	$0.593^{+0.020}_{-0.020} \quad (+0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.01	—	$10^5\mathrm{D}/\mathrm{H}$	2.607	$2.62^{+0.13}_{-0.13} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	0.3007	$0.299^{+0.010}_{-0.0097} \quad (+0.8\sigma)$
A^{kSZ}	0.9	—	Age/Gyr	13.817	$13.79^{+0.44}_{-0.44} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	0.3106	$0.309^{+0.011}_{-0.011} \quad (+0.8\sigma)$
A_{100}^{dust}	1.018	$1.01^{+0.38}_{-0.38}$	z_*	1089.99	$1090.03^{+0.95}_{-0.93} \quad (-0.7\sigma)$	f_{2000}^{143}	30.8	$31^{+7}_{-7} \quad (-0.2\sigma)$
A_{143}^{dust}	0.986	$0.97^{+0.35}_{-0.34}$	r_*	145.11	$144.7^{+4.4}_{-4.3} \quad (-0.2\sigma)$	f_{2000}^{217}	107.29	$107.4^{+4.7}_{-4.6} \quad (-0.3\sigma)$
A_{217}^{dust}	0.963	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	1.04129	$1.0412^{+0.0014}_{-0.0013} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	32.6	$33^{+5}_{-5} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.004	$1.03^{+0.33}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.936	$13.90^{+0.41}_{-0.40} \quad (-0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.87	$9.55 \quad (\nu: 0.4)$
c_{100}	0.99757	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	1059.40	$1059.6^{+1.7}_{-1.7} \quad (+0.6\sigma)$	χ_{small}^2	395.85	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	1.00137	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	147.84	$147.4^{+4.5}_{-4.5} \quad (-0.3\sigma)$	χ_{lowl}^2	23.25	$23.0 \quad (\nu: 0.7) \quad (-0.7\sigma)$
H_0	67.79	$67.8^{+2.8}_{-2.7} \quad (+0.9\sigma)$	k_{D}	0.14008	$0.1404^{+0.0033}_{-0.0032} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	7050.1	$7063.8 \quad (\nu: 14.9)$
Ω_{Λ}	0.6934	$0.691^{+0.015}_{-0.015} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	0.16094	$0.1610^{+0.0012}_{-0.0011} \quad (+0.2\sigma)$	χ_{JLA}^2	1034.86	$1035.05 \quad (\nu: 0.1)$
Ω_{m}	0.3066	$0.309^{+0.015}_{-0.015} \quad (-0.9\sigma)$	z_{eq}	3384	$3376^{+58}_{-57} \quad (-0.9\sigma)$	χ_{6DF}^2	0.003	$0.049 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	0.1409	$0.1420^{+0.0081}_{-0.0077} \quad (-0.4\sigma)$	k_{eq}	0.010301	$0.01031^{+0.00027}_{-0.00027} \quad (-0.7\sigma)$	χ_{MGS}^2	1.54	$1.47 \quad (\nu: 0.1)$
$\Omega_{\nu}h^2$	0.00001	$< 0.00139 \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	0.8161	$0.818^{+0.011}_{-0.011} \quad (+0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.65	$4.5 \quad (\nu: 1.0)$
$\Omega_{\mathrm{m}}h^3$	0.0955	$0.0964^{+0.0091}_{-0.0085} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4510	$0.4518^{+0.0056}_{-0.0054} \quad (+0.9\sigma)$	χ_{prior}^2	2.2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	0.8187	$0.813^{+0.025}_{-0.025} \quad (+0.7\sigma)$	$H(0.15)$	73.00	$73.1^{+2.8}_{-2.7} \quad (+0.9\sigma)$	χ_{CMB}^2	7478.0	$7493.5 \quad (\nu: 16.0) \quad (+1039.3\sigma)$
S_8	0.8277	$0.824^{+0.025}_{-0.025} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	639.9	$640^{+25}_{-25} \quad (-0.9\sigma)$	χ_{BAO}^2	5.20	$6.0 \quad (\nu: 0.6)$

Best-fit $\chi_{\mathrm{eff}}^2 = 8520.27$; $\Delta\chi_{\mathrm{eff}}^2 = -1.61$; $\bar{\chi}_{\mathrm{eff}}^2 = 8542.17$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.67$; $R - 1 = 0.00504$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.02) MGS: 1.54 (Δ 0.26) DR12BAO: 3.65 (Δ -0.53) CMB - smicadx12.Dec5.ftl.mv2.ndclpp-p.teb.consext8: 8.87 (Δ -0.15) small_100x143.offlike5_EE_Aplanc
395.85 (Δ -0.38) commander_dx12_v3.2.29: 23.25 (Δ 0.40) CamSpec like_10.7HM: 7050.07 (Δ -1.10) SN - JLA Pantheon18: 1034.86 (Δ -0.14)

9.41 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022135	$0.02219^{+0.00043}_{-0.00042}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4536	$0.452^{+0.014}_{-0.014}$ (−0.4 σ)	$H(0.38)$	82.61	$82.7^{+2.4}_{-2.3}$ (+0.7 σ)
$\Omega_c h^2$	0.1180	$0.1183^{+0.0061}_{-0.0059}$ (−0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6086	$0.605^{+0.016}_{-0.016}$ (+0.3 σ)	$D_M(0.38)$	1535.5	1536^{+48}_{-48} (−0.7 σ)
$100\theta_{MC}$	1.04120	$1.0411^{+0.0010}_{-0.0010}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9947	$0.987^{+0.021}_{-0.024}$ (+0.5 σ)	$H(0.51)$	89.25	$89.4^{+2.5}_{-2.4}$ (+0.6 σ)
τ	0.0529	$0.055^{+0.016}_{-0.014}$ (+0.5 σ)	$r_{\text{drag}} h$	99.98	$99.7^{+1.9}_{-1.9}$ (+0.9 σ)	$D_M(0.51)$	1990	1989^{+61}_{-61} (−0.7 σ)
Σm_ν [eV]	0.001	< 0.127 (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4437	$2.436^{+0.045}_{-0.045}$ (−0.5 σ)	$H(0.61)$	94.82	$94.9^{+2.6}_{-2.5}$ (+0.5 σ)
N_{eff}	2.953	$2.99^{+0.37}_{-0.35}$ (+0.2 σ)	z_{re}	7.54	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$D_M(0.61)$	2316	2315^{+70}_{-69} (−0.7 σ)
$\ln(10^{10} A_s)$	3.0338	$3.039^{+0.034}_{-0.032}$ (+0.2 σ)	$10^9 A_s$	2.078	$2.089^{+0.071}_{-0.066}$ (+0.2 σ)	$H(2.33)$	234.4	$235.0^{+5.4}_{-5.2}$ (−0.4 σ)
n_s	0.9628	$0.965^{+0.014}_{-0.014}$ (+0.6 σ)	$10^9 A_s e^{-2\tau}$	1.8690	$1.872^{+0.034}_{-0.034}$ (−0.2 σ)	$D_M(2.33)$	5795	5787^{+150}_{-150} (−0.5 σ)
y_{cal}	1.00022	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	D_{40}	1228.0	1227^{+27}_{-27} (−0.6 σ)	$f\sigma_8(0.15)$	0.4577	$0.456^{+0.013}_{-0.013}$ (−0.3 σ)
A_{100}^{PS}	239.2	241^{+50}_{-50} (−0.8 σ)	D_{220}	5705	5713^{+76}_{-79} (+0.1 σ)	$\sigma_8(0.15)$	0.7547	$0.749^{+0.021}_{-0.022}$ (+0.7 σ)
A_{143}^{PS}	38.0	40^{+20}_{-20} (−1.1 σ)	D_{810}	2529.9	2533^{+26}_{-27} (−0.2 σ)	$f\sigma_8(0.38)$	0.4766	$0.475^{+0.012}_{-0.012}$ (+0.2 σ)
A_{217}^{PS}	99.8	101^{+30}_{-30} (−1.4 σ)	D_{1420}	814.4	815^{+10}_{-10} (+0.1 σ)	$\sigma_8(0.38)$	0.6691	$0.664^{+0.019}_{-0.020}$ (+0.7 σ)
A_{217}^{CIB}	44.5	40^{+10}_{-10} (−1.1 σ)	D_{2000}	230.13	$230.3^{+4.1}_{-4.1}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4755	$0.473^{+0.012}_{-0.012}$ (+0.4 σ)
A_{143}^{tSZ}	5.75	< 7.40 (−0.6 σ)	$n_{s,0.002}$	0.9628	$0.965^{+0.014}_{-0.014}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6262	$0.621^{+0.018}_{-0.019}$ (+0.7 σ)
$r_{143 \times 217}^{\text{PS}}$	0.568	$0.65^{+0.25}_{-0.25}$	Y_P	0.24405	$0.2446^{+0.0049}_{-0.0049}$ (+0.2 σ)	$f\sigma_8(0.61)$	0.4707	$0.468^{+0.012}_{-0.012}$ (+0.5 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.74	—	Y_P^{BBN}	0.24537	$0.2459^{+0.0050}_{-0.0050}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5958	$0.591^{+0.018}_{-0.018}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.04	—	10^5D/H	2.598	$2.60^{+0.12}_{-0.11}$ (−0.4 σ)	$f\sigma_8(2.33)$	0.2996	$0.2979^{+0.0088}_{-0.0088}$ (+0.7 σ)
A^{kSZ}	1.4	—	Age/Gyr	13.873	$13.85^{+0.36}_{-0.35}$ (−0.5 σ)	$\sigma_8(2.33)$	0.3094	$0.3072^{+0.0097}_{-0.0098}$ (+0.8 σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	z_*	1089.94	$1089.95^{+0.82}_{-0.81}$ (−0.8 σ)	f_{2000}^{143}	30.4	30^{+7}_{-7} (−0.3 σ)
A_{143}^{dust}	0.992	$0.97^{+0.34}_{-0.34}$	r_*	145.61	$145.3^{+3.5}_{-3.5}$ (−0.0 σ)	f_{2000}^{217}	106.97	$107.0^{+4.5}_{-4.3}$ (−0.5 σ)
A_{217}^{dust}	0.961	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	1.04143	$1.0413^{+0.0012}_{-0.0012}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	32.31	32^{+5}_{-5} (−0.5 σ)
$A_{143 \times 217}^{\text{dust}}$	0.9998	$1.03^{+0.32}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	13.982	$13.95^{+0.32}_{-0.32}$ (−0.0 σ)	χ_{lensing}^2	8.80	9.41 (ν : 0.4)
c_{100}	0.99755	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	z_{drag}	1059.17	$1059.3^{+1.4}_{-1.4}$ (+0.4 σ)	χ_{small}^2	395.86	397.1 (ν : 1.7) (+0.1 σ)
c_{217}	1.00120	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	r_{drag}	148.37	$148.1^{+3.6}_{-3.6}$ (−0.1 σ)	χ_{lowl}^2	23.49	23.3 (ν : 0.7) (−0.6 σ)
H_0	67.39	$67.4^{+2.4}_{-2.3}$ (+0.8 σ)	k_D	0.13970	$0.1399^{+0.0026}_{-0.0026}$ (+0.0 σ)	χ_{CamSpec}^2	7050.0	7063.3 (ν : 14.2)
Ω_Λ	0.6914	$0.689^{+0.015}_{-0.016}$ (+0.9 σ)	$100\theta_D$	0.16084	$0.16089^{+0.00096}_{-0.00095}$ (−0.0 σ)	χ_{Aver15}^2	0.01	0.45 (ν : 0.2)
Ω_m	0.3086	$0.311^{+0.016}_{-0.015}$ (−0.9 σ)	z_{eq}	3391	3383^{+56}_{-55} (−0.8 σ)	χ_{6DF}^2	0.010	0.064 (ν : 0.0)
$\Omega_m h^2$	0.1401	$0.1410^{+0.0064}_{-0.0062}$ (−0.6 σ)	k_{eq}	0.010284	$0.01029^{+0.00023}_{-0.00023}$ (−0.8 σ)	χ_{MGS}^2	1.41	1.33 (ν : 0.1)
$\Omega_\nu h^2$	0.00001	< 0.00135 (−0.7 σ)	$100\theta_{\text{eq}}$	0.8148	$0.816^{+0.011}_{-0.010}$ (+0.8 σ)	χ_{DR12BAO}^2	3.87	4.8 (ν : 1.5)
$\Omega_m h^3$	0.0944	$0.0950^{+0.0072}_{-0.0067}$ (+0.3 σ)	$100\theta_{s,\text{eq}}$	0.4503	$0.4511^{+0.0054}_{-0.0053}$ (+0.8 σ)	χ_{prior}^2	2.1	7.5 (ν : 5.9) (+0.1 σ)
σ_8	0.8166	$0.810^{+0.022}_{-0.023}$ (+0.7 σ)	$H(0.15)$	72.61	$72.6^{+2.4}_{-2.3}$ (+0.7 σ)	χ_{CMB}^2	7478.1	7493.1 (ν : 15.4) (+1039.2 σ)
S_8	0.8282	$0.825^{+0.025}_{-0.025}$ (−0.4 σ)	$D_M(0.15)$	643.5	644^{+21}_{-21} (−0.8 σ)	χ_{BAO}^2	5.29	6.2 (ν : 1.0)

Best-fit $\chi_{\text{eff}}^2 = 7485.47$; $\bar{\chi}_{\text{eff}}^2 = 7507.32$; $R - 1 = 0.00578$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.01 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.88 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.80 small_100x143.offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3_2_29: 23.49 CamSpec like_10.7HM: 7049.95

9.42 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022159	$0.02218^{+0.00042}_{-0.00042}$ (+0.7 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6086	$0.605^{+0.015}_{-0.016}$ (+0.4 σ)	$H(0.51)$	89.40	$89.4^{+2.3}_{-2.3}$ (+0.6 σ)
$\Omega_c h^2$	0.1182	$0.1185^{+0.0055}_{-0.0053}$ (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9943	$0.987^{+0.021}_{-0.024}$ (+0.5 σ)	$D_M(0.51)$	1986	1988^{+58}_{-58} (−0.7 σ)
$100\theta_{MC}$	1.04111	$1.04109^{+0.00097}_{-0.00098}$ (+0.5 σ)	$r_{drag}h$	100.09	$99.7^{+1.9}_{-1.9}$ (+0.9 σ)	$H(0.61)$	94.97	$95.0^{+2.4}_{-2.3}$ (+0.6 σ)
τ	0.0530	$0.055^{+0.016}_{-0.014}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4415	$2.436^{+0.045}_{-0.045}$ (−0.5 σ)	$D_M(0.61)$	2311	2313^{+67}_{-66} (−0.7 σ)
Σm_ν [eV]	0.002	< 0.128 (−0.7 σ)	z_{re}	7.55	$7.7^{+1.5}_{-1.5}$ (+0.4 σ)	$H(2.33)$	234.59	$235.2^{+4.9}_{-4.9}$ (−0.4 σ)
N_{eff}	2.973	$3.00^{+0.34}_{-0.33}$ (+0.2 σ)	$10^9 A_s$	2.080	$2.090^{+0.071}_{-0.066}$ (+0.2 σ)	$D_M(2.33)$	5786	5783^{+140}_{-140} (−0.5 σ)
$\ln(10^{10} A_s)$	3.0351	$3.039^{+0.033}_{-0.032}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8711	$1.873^{+0.033}_{-0.033}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4574	$0.456^{+0.013}_{-0.013}$ (−0.3 σ)
n_s	0.9638	$0.965^{+0.014}_{-0.014}$ (+0.6 σ)	D_{40}	1227.1	1227^{+26}_{-27} (−0.6 σ)	$\sigma_8(0.15)$	0.7554	$0.749^{+0.020}_{-0.022}$ (+0.7 σ)
y_{cal}	1.00059	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	D_{220}	5709	5712^{+75}_{-78} (+0.1 σ)	$f\sigma_8(0.38)$	0.4766	$0.475^{+0.012}_{-0.012}$ (+0.3 σ)
A_{100}^{PS}	237.8	242^{+50}_{-50} (−0.7 σ)	D_{810}	2531.7	2533^{+26}_{-27} (−0.2 σ)	$\sigma_8(0.38)$	0.6698	$0.664^{+0.019}_{-0.020}$ (+0.7 σ)
A_{143}^{PS}	37.8	40^{+20}_{-20} (−1.1 σ)	D_{1420}	814.9	$815.2^{+9.7}_{-9.8}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4756	$0.473^{+0.011}_{-0.012}$ (+0.4 σ)
A_{217}^{PS}	99.2	101^{+30}_{-30} (−1.4 σ)	D_{2000}	230.21	$230.2^{+3.8}_{-3.8}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6269	$0.621^{+0.018}_{-0.019}$ (+0.7 σ)
A_{217}^{CIB}	45.2	40^{+10}_{-10} (−1.1 σ)	$n_{s,0.002}$	0.9638	$0.965^{+0.014}_{-0.014}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4708	$0.469^{+0.011}_{-0.012}$ (+0.5 σ)
A_{143}^{tSZ}	6.05	< 7.39 (−0.6 σ)	Y_P	0.24433	$0.2447^{+0.0046}_{-0.0046}$ (+0.3 σ)	$\sigma_8(0.61)$	0.5965	$0.591^{+0.017}_{-0.018}$ (+0.7 σ)
$r_{143 \times 217}^{PS}$	0.542	$0.65^{+0.25}_{-0.25}$	Y_P^{BBN}	0.24565	$0.2460^{+0.0046}_{-0.0046}$ (+0.3 σ)	$f\sigma_8(2.33)$	0.3000	$0.2980^{+0.0085}_{-0.0086}$ (+0.7 σ)
$r_{143 \times 217}^{CIB}$	0.79	—	$10^5 D/H$	2.600	$2.606^{+0.098}_{-0.097}$ (−0.3 σ)	$\sigma_8(2.33)$	0.3099	$0.3073^{+0.0094}_{-0.0097}$ (+0.8 σ)
$\xi^{tSZ \times CIB}$	0.01	—	Age/Gyr	13.853	$13.85^{+0.34}_{-0.33}$ (−0.5 σ)	f_{2000}^{143}	30.4	30^{+6}_{-6} (−0.3 σ)
A^{kSZ}	1.1	—	z_*	1089.95	$1089.98^{+0.71}_{-0.70}$ (−0.7 σ)	f_{2000}^{217}	107.02	$107.1^{+4.2}_{-4.2}$ (−0.4 σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	r_*	145.44	$145.2^{+3.3}_{-3.2}$ (−0.1 σ)	$f_{2000}^{143 \times 217}$	32.25	32^{+5}_{-4} (−0.4 σ)
A_{143}^{dust}	0.995	$0.97^{+0.34}_{-0.34}$	$100\theta_*$	1.04133	$1.0413^{+0.0011}_{-0.0011}$ (+0.3 σ)	$\chi^2_{lensing}$	8.82	9.42 (ν : 0.4)
A_{217}^{dust}	0.963	$0.97^{+0.20}_{-0.20}$	$D_M(z_*)/\text{Gpc}$	13.967	$13.95^{+0.30}_{-0.30}$ (−0.1 σ)	χ^2_{small}	395.85	397.0 (ν : 1.7) (+0.1 σ)
$A_{143 \times 217}^{dust}$	0.982	$1.03^{+0.32}_{-0.32}$	z_{drag}	1059.25	$1059.3^{+1.4}_{-1.4}$ (+0.4 σ)	χ^2_{lowl}	23.32	23.3 (ν : 0.6) (−0.6 σ)
c_{100}	0.99752	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_{drag}	148.19	$148.0^{+3.4}_{-3.3}$ (−0.1 σ)	$\chi^2_{CamSpec}$	7050.0	7063.1 (ν : 13.8)
c_{217}	1.00128	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	k_D	0.13983	$0.1400^{+0.0025}_{-0.0025}$ (+0.1 σ)	χ^2_{Aver15}	0.04	0.41 (ν : 0.2)
H_0	67.54	$67.4^{+2.3}_{-2.2}$ (+0.8 σ)	$100\theta_D$	0.16086	$0.16093^{+0.00083}_{-0.00083}$ (+0.0 σ)	$\chi^2_{Cooke17}$	0.04	0.29 (ν : 0.1)
Ω_Λ	0.6923	$0.689^{+0.015}_{-0.016}$ (+0.9 σ)	z_{eq}	3387	3382^{+56}_{-54} (−0.8 σ)	χ^2_{6DF}	0.006	0.064 (ν : 0.0)
Ω_m	0.3077	$0.311^{+0.016}_{-0.015}$ (−0.9 σ)	k_{eq}	0.010286	$0.01029^{+0.00022}_{-0.00022}$ (−0.8 σ)	χ^2_{MGS}	1.47	1.33 (ν : 0.1)
$\Omega_m h^2$	0.1404	$0.1412^{+0.0059}_{-0.0057}$ (−0.6 σ)	$100\theta_{eq}$	0.8155	$0.816^{+0.010}_{-0.010}$ (+0.8 σ)	$\chi^2_{DR12BAO}$	3.76	4.8 (ν : 1.5)
$\Omega_\nu h^2$	0.00003	< 0.00136 (−0.7 σ)	$100\theta_{s,eq}$	0.4507	$0.4512^{+0.0053}_{-0.0052}$ (+0.8 σ)	χ^2_{prior}	2.2	7.6 (ν : 5.9) (+0.1 σ)
$\Omega_m h^3$	0.0948	$0.0952^{+0.0067}_{-0.0064}$ (+0.4 σ)	$H(0.15)$	72.76	$72.7^{+2.2}_{-2.2}$ (+0.8 σ)	χ^2_{CMB}	7478.0	7492.9 (ν : 14.9) (+1039.2 σ)
σ_8	0.8172	$0.810^{+0.021}_{-0.023}$ (+0.7 σ)	$D_M(0.15)$	642.1	643^{+20}_{-20} (−0.8 σ)	χ^2_{BAO}	5.24	6.2 (ν : 1.0)
S_8	0.8276	$0.825^{+0.024}_{-0.024}$ (−0.4 σ)	$H(0.38)$	82.76	$82.7^{+2.3}_{-2.2}$ (+0.7 σ)	χ^2_{Abund}	0.07	0.70 (ν : 0.3)
$\sigma_8 \Omega_m^{0.5}$	0.4533	$0.452^{+0.013}_{-0.013}$ (−0.4 σ)	$D_M(0.38)$	1532.3	1534^{+46}_{-46} (−0.7 σ)			

Best-fit $\chi^2_{eff} = 7485.51$; $\bar{\chi}^2_{eff} = 7507.35$; $R - 1 = 0.00593$

χ^2_{eff} : Abund - Yp_Aver2015: 0.04 D.Cooke2017: 0.04 BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.76 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.82
small_100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12.v3.2_29: 23.32 CamSpec like_10.7HM: 7049.98

9.43 base_nnu_mnu_CamSpecHM_TT_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02224^{+0.00044}_{-0.00045} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$H(0.38)$	$83.2^{+3.0}_{-2.9} \quad (+0.8\sigma)$
$\Omega_{\text{c}} h^2$	$0.1192^{+0.0076}_{-0.0073} \quad (-0.2\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.606^{+0.017}_{-0.017} \quad (+0.4\sigma)$	$D_{\text{M}}(0.38)$	$1526^{+58}_{-57} \quad (-0.9\sigma)$
$100\theta_{\text{MC}}$	$1.0410^{+0.0011}_{-0.0011} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.022}_{-0.023} \quad (+0.5\sigma)$	$H(0.51)$	$89.9^{+3.1}_{-3.0} \quad (+0.8\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$r_{\text{drag}} h$	$100.0^{+1.9}_{-1.8} \quad (+1.0\sigma)$	$D_{\text{M}}(0.51)$	$1977^{+73}_{-72} \quad (-0.8\sigma)$
$\Sigma m_{\nu} [\text{eV}]$	$< 0.132 \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.046}_{-0.046} \quad (-0.6\sigma)$	$H(0.61)$	$95.5^{+3.2}_{-3.1} \quad (+0.7\sigma)$
N_{eff}	$3.06^{+0.47}_{-0.44} \quad (+0.4\sigma)$	z_{re}	$< 9.04 \quad (+0.5\sigma)$	$D_{\text{M}}(0.61)$	$2301^{+84}_{-83} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.044^{+0.035}_{-0.031} \quad (+0.4\sigma)$	$10^9 A_{\text{s}}$	$2.099^{+0.071}_{-0.067} \quad (+0.4\sigma)$	$H(2.33)$	$235.9^{+6.8}_{-6.6} \quad (-0.2\sigma)$
n_{s}	$0.967^{+0.017}_{-0.017} \quad (+0.8\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.877^{+0.040}_{-0.041} \quad (-0.1\sigma)$	$D_{\text{M}}(2.33)$	$5758^{+180}_{-180} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{40}	$1224^{+28}_{-28} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5713^{+76}_{-79} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.024}_{-0.024} \quad (+0.8\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (+0.3\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.022}_{-0.022} \quad (+0.8\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.9^{+4.5}_{-4.4} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.013}_{-0.013} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.7\sigma)$	$n_{\text{s},0.002}$	$0.967^{+0.017}_{-0.017} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.020}_{-0.021} \quad (+0.8\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	Y_{P}	$0.2455^{+0.0062}_{-0.0062} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.013}_{-0.013} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.2468^{+0.0062}_{-0.0062} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.020}_{-0.020} \quad (+0.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.62^{+0.13}_{-0.13} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2994^{+0.0099}_{-0.0097} \quad (+0.8\sigma)$
A^{kSZ}	—	Age/Gyr	$13.79^{+0.44}_{-0.43} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.011}_{-0.011} \quad (+0.8\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.03^{+0.95}_{-0.93} \quad (-0.7\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	r_*	$144.7^{+4.4}_{-4.3} \quad (-0.3\sigma)$	f_{2000}^{217}	$107.4^{+4.7}_{-4.6} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.0412^{+0.0014}_{-0.0013} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.33}_{-0.32}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.90^{+0.41}_{-0.40} \quad (-0.3\sigma)$	χ_{lensing}^2	$9.52 \quad (\nu: 0.4)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.6^{+1.7}_{-1.7} \quad (+0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.4^{+4.5}_{-4.5} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.7) \quad (-0.7\sigma)$
H_0	$67.8^{+2.8}_{-2.7} \quad (+0.9\sigma)$	k_{D}	$0.1404^{+0.0033}_{-0.0032} \quad (+0.3\sigma)$	χ_{CamSpec}^2	$7063.8 \quad (\nu: 14.9)$
Ω_{Λ}	$0.691^{+0.015}_{-0.015} \quad (+0.9\sigma)$	$100\theta_{\text{D}}$	$0.1610^{+0.0012}_{-0.0011} \quad (+0.2\sigma)$	χ_{JLA}^2	$1035.04 \quad (\nu: 0.1)$
Ω_{m}	$0.309^{+0.015}_{-0.015} \quad (-0.9\sigma)$	z_{eq}	$3374^{+57}_{-57} \quad (-0.9\sigma)$	$\chi_{6\text{DF}}^2$	$0.047 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0081}_{-0.0077} \quad (-0.4\sigma)$	k_{eq}	$0.01031^{+0.00027}_{-0.00027} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.48 \quad (\nu: 0.1)$
$\Omega_{\nu} h^2$	$< 0.00140 \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.011}_{-0.010} \quad (+0.9\sigma)$	χ_{DR12BAO}^2	$4.5 \quad (\nu: 0.9)$
$\Omega_{\text{m}} h^3$	$0.0964^{+0.0091}_{-0.0085} \quad (+0.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4520^{+0.0056}_{-0.0053} \quad (+0.9\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.813^{+0.025}_{-0.025} \quad (+0.7\sigma)$	$H(0.15)$	$73.1^{+2.8}_{-2.7} \quad (+0.9\sigma)$	χ_{CMB}^2	$7493.4 \quad (\nu: 15.9) \quad (+1039.3\sigma)$
S_8	$0.824^{+0.025}_{-0.025} \quad (-0.4\sigma)$	$D_{\text{M}}(0.15)$	$639^{+25}_{-25} \quad (-0.9\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$

$$\bar{\chi}_{\text{eff}}^2 = 8542.04; \Delta \bar{\chi}_{\text{eff}}^2 = 0.69; R - 1 = 0.00589$$

9.44 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022261	$0.02228^{+0.00038}_{-0.00037}$ (+0.9 σ)	S_8	0.8250	$0.822^{+0.022}_{-0.022}$ (−0.5 σ)	$H(0.38)$	82.32	$82.6^{+2.7}_{-2.5}$ (+0.6 σ)
$\Omega_c h^2$	0.1168	$0.1178^{+0.0065}_{-0.0061}$ (−0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4519	$0.450^{+0.012}_{-0.012}$ (−0.5 σ)	$D_M(0.38)$	1541	1537^{+53}_{-53} (−0.7 σ)
$100\theta_{MC}$	1.04121	$1.04111^{+0.00092}_{-0.00092}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6064	$0.603^{+0.015}_{-0.016}$ (+0.3 σ)	$H(0.51)$	88.94	$89.2^{+2.8}_{-2.6}$ (+0.6 σ)
τ	0.0531	$0.054^{+0.015}_{-0.014}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9929	$0.985^{+0.020}_{-0.023}$ (+0.4 σ)	$D_M(0.51)$	1996	1992^{+67}_{-67} (−0.7 σ)
Σm_ν [eV]	0.001	< 0.129 (−0.7 σ)	$r_{\text{drag}} h$	99.99	$99.7^{+1.8}_{-1.8}$ (+0.9 σ)	$H(0.61)$	94.48	$94.8^{+2.8}_{-2.7}$ (+0.5 σ)
N_{eff}	2.889	$2.96^{+0.41}_{-0.38}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4431	$2.435^{+0.043}_{-0.044}$ (−0.5 σ)	$D_M(0.61)$	2324	2318^{+76}_{-76} (−0.7 σ)
$\ln(10^{10} A_s)$	3.0331	$3.038^{+0.035}_{-0.033}$ (+0.2 σ)	z_{re}	7.51	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$H(2.33)$	233.5	$234.7^{+5.9}_{-5.6}$ (−0.5 σ)
n_s	0.9621	$0.964^{+0.015}_{-0.015}$ (+0.6 σ)	$10^9 A_s$	2.076	$2.087^{+0.073}_{-0.069}$ (+0.2 σ)	$D_M(2.33)$	5815	5794^{+160}_{-160} (−0.5 σ)
y_{cal}	1.00066	$1.0007^{+0.0048}_{-0.0047}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8669	$1.871^{+0.036}_{-0.036}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4559	$0.455^{+0.012}_{-0.012}$ (−0.4 σ)
A_{100}^{PS}	226.8	238^{+50}_{-50} (−0.9 σ)	D_{40}	1230.5	1229^{+26}_{-27} (−0.5 σ)	$\sigma_8(0.15)$	0.7521	$0.747^{+0.022}_{-0.023}$ (+0.7 σ)
A_{143}^{PS}	45.8	38^{+20}_{-20} (−1.3 σ)	D_{220}	5725	5725^{+74}_{-74} (+0.4 σ)	$f\sigma_8(0.38)$	0.4749	$0.473^{+0.012}_{-0.012}$ (+0.2 σ)
A_{217}^{PS}	105.8	103^{+30}_{-30} (−1.2 σ)	D_{810}	2534.8	2535^{+26}_{-26} (−0.1 σ)	$\sigma_8(0.38)$	0.6668	$0.662^{+0.020}_{-0.021}$ (+0.7 σ)
A_{217}^{CIB}	41.1	39^{+10}_{-10} (−1.3 σ)	D_{1420}	818.0	$816.8^{+9.7}_{-9.8}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4737	$0.472^{+0.012}_{-0.012}$ (+0.3 σ)
A_{143}^{tSZ}	6.50	< 7.52 (−0.6 σ)	D_{2000}	231.81	$231.0^{+4.0}_{-4.0}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6240	$0.620^{+0.019}_{-0.020}$ (+0.7 σ)
$r_{143 \times 217}^{\text{PS}}$	0.715	$0.66^{+0.25}_{-0.26}$	$n_{s,0.002}$	0.9621	$0.964^{+0.015}_{-0.015}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4690	$0.467^{+0.012}_{-0.012}$ (+0.4 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.84	—	Y_P	0.2432	$0.2442^{+0.0055}_{-0.0054}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5938	$0.590^{+0.018}_{-0.019}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.69	—	Y_P^{BBN}	0.2445	$0.2455^{+0.0055}_{-0.0054}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.2985	$0.2972^{+0.0093}_{-0.0093}$ (+0.7 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.552	$2.57^{+0.11}_{-0.10}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3084	$0.307^{+0.010}_{-0.010}$ (+0.7 σ)
A_{100}^{dust}	0.9995	$1.01^{+0.38}_{-0.39}$	Age/Gyr	13.923	$13.87^{+0.39}_{-0.39}$ (−0.5 σ)	f_{2000}^{143}	28.3	29^{+7}_{-6} (−0.6 σ)
A_{143}^{dust}	0.973	$0.96^{+0.34}_{-0.34}$	z_*	1089.62	$1089.75^{+0.78}_{-0.75}$ (−1.1 σ)	f_{2000}^{217}	105.51	$106.3^{+4.4}_{-4.3}$ (−0.8 σ)
A_{217}^{dust}	0.983	$0.98^{+0.20}_{-0.20}$	r_*	146.15	$145.5^{+3.8}_{-3.8}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	30.75	31^{+5}_{-5} (−0.8 σ)
$A_{143 \times 217}^{\text{dust}}$	1.001	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	1.04148	$1.0414^{+0.0011}_{-0.0011}$ (+0.3 σ)	χ_{lensing}^2	8.62	9.27 (ν : 0.3)
c_{100}	0.99780	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	$D_M(z_*)/\text{Gpc}$	14.033	$13.97^{+0.35}_{-0.35}$ (+0.0 σ)	χ_{small}^2	395.85	397.0 (ν : 1.4) (+0.0 σ)
c_{217}	1.00113	$1.0011^{+0.0031}_{-0.0031}$ (+4.5 σ)	z_{drag}	1059.32	$1059.5^{+1.5}_{-1.4}$ (+0.6 σ)	χ_{lowl}^2	23.58	23.4 (ν : 0.7) (−0.6 σ)
c_{TE}	0.9954	$0.996^{+0.010}_{-0.010}$	r_{drag}	148.88	$148.2^{+4.0}_{-4.0}$ (+0.0 σ)	χ_{CamSpec}^2	11498.2	11514.1 (ν : 16.3)
c_{EE}	0.9901	$0.991^{+0.011}_{-0.011}$	k_D	0.13952	$0.1400^{+0.0029}_{-0.0028}$ (+0.0 σ)	$\chi_{6\text{DF}}^2$	0.010	0.059 (ν : 0.0)
H_0	67.16	$67.3^{+2.6}_{-2.4}$ (+0.8 σ)	$100\theta_D$	0.16045	$0.16066^{+0.00098}_{-0.00093}$ (−0.3 σ)	χ_{MGS}^2	1.41	1.33 (ν : 0.1)
Ω_Λ	0.6916	$0.689^{+0.014}_{-0.015}$ (+0.9 σ)	z_{eq}	3395	3386^{+51}_{-52} (−0.8 σ)	χ_{DR12BAO}^2	3.90	4.8 (ν : 1.3)
Ω_m	0.3084	$0.311^{+0.015}_{-0.014}$ (−0.9 σ)	k_{eq}	0.010252	$0.01028^{+0.00023}_{-0.00022}$ (−0.9 σ)	χ_{prior}^2	2.0	7.8 (ν : 5.7) (+0.1 σ)
$\Omega_m h^2$	0.1391	$0.1406^{+0.0069}_{-0.0065}$ (−0.7 σ)	$100\theta_{\text{eq}}$	0.8143	$0.816^{+0.010}_{-0.0096}$ (+0.8 σ)	χ_{CMB}^2	11926.3	11943.7 (ν : 17.3) (+1773.5 σ)
$\Omega_\nu h^2$	0.00001	< 0.00136 (−0.7 σ)	$100\theta_{s,\text{eq}}$	0.44999	$0.4509^{+0.0051}_{-0.0049}$ (+0.8 σ)	χ_{BAO}^2	5.31	6.2 (ν : 0.9)
$\Omega_m h^3$	0.0934	$0.0947^{+0.0079}_{-0.0073}$ (+0.3 σ)	$H(0.15)$	72.36	$72.5^{+2.6}_{-2.5}$ (+0.7 σ)			
σ_8	0.8137	$0.808^{+0.023}_{-0.024}$ (+0.6 σ)	$D_M(0.15)$	645.7	645^{+23}_{-23} (−0.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 11933.58$; $\bar{\chi}_{\text{eff}}^2 = 11957.66$; $\Delta\chi_{\text{eff}}^2 = 0.26$; $R - 1 = 0.00614$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.90 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.62 small_100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3.2.29: 23.58 CamSpec like_10.7HM_1400_unified: 11498.22

9.45 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022256	$0.02230^{+0.00037}_{-0.00037}$ $(+1.0\sigma)$	S_8	0.8240	$0.822^{+0.022}_{-0.022}$ (-0.5σ)	$H(0.38)$	82.43	$82.7^{+2.6}_{-2.5}$ $(+0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.1169	$0.1180^{+0.0065}_{-0.0062}$ (-0.5σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4513	$0.450^{+0.012}_{-0.012}$ (-0.5σ)	$D_{\mathrm{M}}(0.38)$	1538	1534^{+51}_{-51} (-0.7σ)
$100\theta_{\mathrm{MC}}$	1.04122	$1.04109^{+0.00091}_{-0.00091}$ $(+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6061	$0.603^{+0.015}_{-0.015}$ $(+0.3\sigma)$	$H(0.51)$	89.05	$89.4^{+2.7}_{-2.6}$ $(+0.6\sigma)$
τ	0.0532	$0.055^{+0.015}_{-0.014}$ $(+0.5\sigma)$	$\sigma_8/h^{0.5}$	0.9922	$0.985^{+0.020}_{-0.023}$ $(+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	1993	1988^{+65}_{-65} (-0.7σ)
Σm_{ν} [eV]	0.001	< 0.122 (-0.7σ)	$r_{\mathrm{drag}}h$	100.10	$99.9^{+1.7}_{-1.7}$ $(+1.0\sigma)$	$H(0.61)$	94.58	$95.0^{+2.8}_{-2.7}$ $(+0.6\sigma)$
N_{eff}	2.903	$2.98^{+0.40}_{-0.38}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4400	$2.434^{+0.042}_{-0.044}$ (-0.6σ)	$D_{\mathrm{M}}(0.61)$	2320	2313^{+74}_{-75} (-0.7σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0331	$3.039^{+0.034}_{-0.033}$ $(+0.2\sigma)$	z_{re}	7.52	$7.7^{+1.5}_{-1.5}$ $(+0.3\sigma)$	$H(2.33)$	233.6	$234.8^{+5.8}_{-5.6}$ (-0.4σ)
n_{s}	0.9629	$0.965^{+0.015}_{-0.014}$ $(+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	2.076	$2.088^{+0.072}_{-0.069}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	5810	5787^{+160}_{-160} (-0.5σ)
y_{cal}	1.00048	$1.0007^{+0.0048}_{-0.0047}$ $(+0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8665	$1.872^{+0.036}_{-0.036}$ (-0.3σ)	$f\sigma_8(0.15)$	0.4554	$0.455^{+0.012}_{-0.011}$ (-0.4σ)
A_{100}^{PS}	228.2	238^{+50}_{-50} (-0.9σ)	D_{40}	1228.3	1228^{+26}_{-26} (-0.6σ)	$\sigma_8(0.15)$	0.7523	$0.748^{+0.021}_{-0.022}$ $(+0.7\sigma)$
A_{143}^{PS}	42.6	38^{+20}_{-20} (-1.3σ)	D_{220}	5720	5726^{+74}_{-74} $(+0.4\sigma)$	$f\sigma_8(0.38)$	0.4746	$0.473^{+0.012}_{-0.012}$ $(+0.2\sigma)$
A_{217}^{PS}	104.7	103^{+30}_{-30} (-1.2σ)	D_{810}	2533.7	2535^{+26}_{-26} (-0.1σ)	$\sigma_8(0.38)$	0.6671	$0.663^{+0.020}_{-0.020}$ $(+0.7\sigma)$
A_{217}^{CIB}	41.7	39^{+10}_{-10} (-1.3σ)	D_{1420}	817.5	$816.7^{+9.8}_{-9.8}$ $(+0.4\sigma)$	$f\sigma_8(0.51)$	0.4736	$0.472^{+0.012}_{-0.012}$ $(+0.4\sigma)$
A_{143}^{tSZ}	6.47	< 7.52 (-0.6σ)	D_{2000}	231.58	$231.0^{+4.0}_{-4.0}$ $(+0.6\sigma)$	$\sigma_8(0.51)$	0.6244	$0.621^{+0.019}_{-0.019}$ $(+0.7\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	0.680	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9629	$0.965^{+0.015}_{-0.014}$ $(+0.6\sigma)$	$f\sigma_8(0.61)$	0.4689	$0.467^{+0.011}_{-0.012}$ $(+0.4\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	0.79	—	Y_{P}	0.2434	$0.2444^{+0.0055}_{-0.0053}$ $(+0.2\sigma)$	$\sigma_8(0.61)$	0.5941	$0.591^{+0.018}_{-0.019}$ $(+0.7\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.47	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2447	$0.2457^{+0.0055}_{-0.0053}$ $(+0.2\sigma)$	$f\sigma_8(2.33)$	0.2988	$0.2977^{+0.0091}_{-0.0090}$ $(+0.7\sigma)$
A^{kSZ}	0.0	—	$10^5\mathrm{D}/\mathrm{H}$	2.557	$2.58^{+0.11}_{-0.10}$ (-0.8σ)	$\sigma_8(2.33)$	0.3086	$0.3071^{+0.0099}_{-0.010}$ $(+0.8\sigma)$
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.39}$	Age/Gyr	13.909	$13.86^{+0.38}_{-0.39}$ (-0.5σ)	f_{2000}^{143}	28.4	29^{+7}_{-6} (-0.6σ)
A_{143}^{dust}	0.967	$0.96^{+0.35}_{-0.34}$	z_*	1089.65	$1089.76^{+0.78}_{-0.75}$ (-1.1σ)	f_{2000}^{217}	105.61	$106.4^{+4.4}_{-4.3}$ (-0.7σ)
A_{217}^{dust}	0.982	$0.98^{+0.20}_{-0.20}$	r_*	146.06	$145.4^{+3.8}_{-3.8}$ $(+0.0\sigma)$	$f_{2000}^{143\times 217}$	30.84	31^{+5}_{-5} (-0.8σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.011	$1.03^{+0.33}_{-0.32}$	$100\theta_*$	1.04147	$1.0413^{+0.0011}_{-0.0011}$ $(+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.66	9.30 (ν : 0.3)
c_{100}	0.99774	$0.9976^{+0.0021}_{-0.0021}$ (-3.3σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.024	$13.96^{+0.35}_{-0.35}$ (-0.0σ)	χ_{small}^2	395.86	397.0 (ν : 1.5) $(+0.0\sigma)$
c_{217}	1.00119	$1.0011^{+0.0031}_{-0.0030}$ $(+4.5\sigma)$	z_{drag}	1059.32	$1059.6^{+1.5}_{-1.4}$ $(+0.6\sigma)$	χ_{lowl}^2	23.43	23.3 (ν : 0.6) (-0.6σ)
c_{TE}	0.9954	$0.996^{+0.010}_{-0.010}$	r_{drag}	148.78	$148.1^{+3.9}_{-3.9}$ (-0.0σ)	$\chi_{\mathrm{CamSpec}}^2$	11498.3	11514.2 (ν : 16.2)
c_{EE}	0.9904	$0.992^{+0.011}_{-0.010}$	k_{D}	0.13956	$0.1400^{+0.0028}_{-0.0028}$ $(+0.1\sigma)$	χ_{JLA}^2	1034.88	1035.06 (ν : 0.1)
H_0	67.28	$67.5^{+2.5}_{-2.4}$ $(+0.8\sigma)$	$100\theta_{\mathrm{D}}$	0.16051	$0.16069^{+0.00098}_{-0.00093}$ (-0.3σ)	$\chi_{6\mathrm{DF}}^2$	0.006	0.047 (ν : 0.0)
Ω_{Λ}	0.6925	$0.691^{+0.013}_{-0.014}$ $(+0.9\sigma)$	z_{eq}	3391	3383^{+49}_{-51} (-0.8σ)	χ_{MGS}^2	1.47	1.40 (ν : 0.1)
Ω_{m}	0.3075	$0.309^{+0.014}_{-0.013}$ (-0.9σ)	k_{eq}	0.010250	$0.01028^{+0.00023}_{-0.00022}$ (-0.9σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.77	4.5 (ν : 0.9)
$\Omega_{\mathrm{m}}h^2$	0.1392	$0.1407^{+0.0069}_{-0.0065}$ (-0.7σ)	$100\theta_{\mathrm{eq}}$	0.8150	$0.8167^{+0.0097}_{-0.0093}$ $(+0.8\sigma)$	χ_{prior}^2	2.1	7.8 (ν : 5.8) $(+0.1\sigma)$
$\Omega_{\nu}h^2$	0.00001	< 0.00129 (-0.8σ)	$100\theta_{\mathrm{s,eq}}$	0.45036	$0.4512^{+0.0050}_{-0.0047}$ $(+0.8\sigma)$	χ_{CMB}^2	11926.3	11943.8 (ν : 17.3) $(+1773.5\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.0936	$0.0950^{+0.0079}_{-0.0072}$ $(+0.3\sigma)$	$H(0.15)$	72.47	$72.7^{+2.5}_{-2.4}$ $(+0.8\sigma)$	χ_{BAO}^2	5.25	6.0 (ν : 0.6)
σ_8	0.8139	$0.809^{+0.022}_{-0.023}$ $(+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	644.6	643^{+23}_{-23} (-0.8σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 12968.49$; $\Delta\chi_{\mathrm{eff}}^2 = -2.00$; $\bar{\chi}_{\mathrm{eff}}^2 = 12992.58$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.19$; $R - 1 = 0.00612$
 χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.02) MGS: 1.47 (Δ 0.19) DR12BAO: 3.77 (Δ -0.46) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consect8: 8.66 (Δ -0.31) small_100x143_offlike5_EE_Aplanc
395.86 (Δ -0.19) commander_dx12_v3.2_29: 23.43 (Δ 0.66) CamSpec like_10.7HM_1400_unified: 11498.34 (Δ -1.83) SN - JLA Pantheon18: 1034.88 (Δ -0.10)

9.46 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022234	$0.02227^{+0.00035}_{-0.00035}$ (+0.9 σ)	S_8	0.8245	$0.822^{+0.023}_{-0.022}$ (−0.5 σ)	$H(0.38)$	82.26	$82.5^{+2.2}_{-2.1}$ (+0.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.1167	$0.1176^{+0.0054}_{-0.0052}$ (−0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4516	$0.450^{+0.012}_{-0.012}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1542.0	1539^{+45}_{-44} (−0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04126	$1.04113^{+0.00082}_{-0.00083}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6059	$0.603^{+0.015}_{-0.015}$ (+0.3 σ)	$H(0.51)$	88.88	$89.1^{+2.3}_{-2.2}$ (+0.5 σ)
τ	0.0531	$0.054^{+0.015}_{-0.014}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9925	$0.985^{+0.021}_{-0.022}$ (+0.4 σ)	$D_{\mathrm{M}}(0.51)$	1998	1994^{+56}_{-56} (−0.7 σ)
Σm_{ν} [eV]	0.002	< 0.127 (−0.7 σ)	$r_{\mathrm{drag}}h$	99.99	$99.7^{+1.7}_{-1.8}$ (+0.9 σ)	$H(0.61)$	94.41	$94.7^{+2.3}_{-2.3}$ (+0.5 σ)
N_{eff}	2.881	$2.95^{+0.33}_{-0.32}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4419	$2.436^{+0.042}_{-0.043}$ (−0.5 σ)	$D_{\mathrm{M}}(0.61)$	2325	2320^{+64}_{-64} (−0.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0323	$3.037^{+0.033}_{-0.032}$ (+0.1 σ)	z_{re}	7.51	$7.6^{+1.4}_{-1.5}$ (+0.3 σ)	$H(2.33)$	233.35	$234.5^{+4.9}_{-4.7}$ (−0.5 σ)
n_{s}	0.9621	$0.964^{+0.013}_{-0.013}$ (+0.5 σ)	$10^9 A_{\mathrm{s}}$	2.074	$2.085^{+0.070}_{-0.065}$ (+0.1 σ)	$D_{\mathrm{M}}(2.33)$	5820	5801^{+140}_{-130} (−0.4 σ)
y_{cal}	1.00037	$1.0007^{+0.0048}_{-0.0047}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8653	$1.870^{+0.032}_{-0.032}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4557	$0.455^{+0.012}_{-0.011}$ (−0.4 σ)
A_{100}^{PS}	224.9	237^{+50}_{-50} (−0.9 σ)	D_{40}	1229.3	1229^{+25}_{-25} (−0.5 σ)	$\sigma_8(0.15)$	0.7515	$0.746^{+0.020}_{-0.022}$ (+0.7 σ)
A_{143}^{PS}	49.7	38^{+20}_{-20} (−1.3 σ)	D_{220}	5720	5725^{+74}_{-74} (+0.4 σ)	$f\sigma_8(0.38)$	0.4746	$0.473^{+0.011}_{-0.011}$ (+0.2 σ)
A_{217}^{PS}	106.4	103^{+30}_{-30} (−1.2 σ)	D_{810}	2533.7	2534^{+26}_{-26} (−0.1 σ)	$\sigma_8(0.38)$	0.6663	$0.662^{+0.018}_{-0.020}$ (+0.7 σ)
A_{217}^{CIB}	40.5	39^{+10}_{-10} (−1.3 σ)	D_{1420}	817.7	$816.9^{+9.7}_{-9.6}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4734	$0.472^{+0.011}_{-0.011}$ (+0.3 σ)
A_{143}^{tSZ}	6.50	< 7.53 (−0.6 σ)	D_{2000}	231.74	$231.1^{+3.8}_{-3.8}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6236	$0.619^{+0.017}_{-0.019}$ (+0.7 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.752	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9621	$0.964^{+0.013}_{-0.013}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4686	$0.467^{+0.011}_{-0.011}$ (+0.4 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.89	—	Y_{P}	0.24310	$0.2440^{+0.0045}_{-0.0045}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5933	$0.589^{+0.017}_{-0.018}$ (+0.7 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.93	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24441	$0.2453^{+0.0045}_{-0.0045}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.2983	$0.2970^{+0.0083}_{-0.0086}$ (+0.7 σ)
A^{kSZ}	0.0	—	$10^5\mathrm{D}/\mathrm{H}$	2.554	$2.570^{+0.097}_{-0.091}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3081	$0.3063^{+0.0091}_{-0.0097}$ (+0.7 σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.39}$	Age/Gyr	13.933	$13.89^{+0.33}_{-0.32}$ (−0.4 σ)	f_{2000}^{143}	28.4	29^{+6}_{-6} (−0.7 σ)
A_{143}^{dust}	0.979	$0.96^{+0.35}_{-0.34}$	z_*	1089.63	$1089.73^{+0.70}_{-0.67}$ (−1.2 σ)	f_{2000}^{217}	105.40	$106.2^{+4.1}_{-4.1}$ (−0.8 σ)
A_{217}^{dust}	0.991	$0.98^{+0.20}_{-0.20}$	r_*	146.26	$145.7^{+3.2}_{-3.1}$ (+0.1 σ)	$f_{2000}^{143\times 217}$	30.79	31^{+4}_{-4} (−0.9 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.005	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04153	$1.04139^{+0.00099}_{-0.0010}$ (+0.4 σ)	$\chi_{\mathrm{lensing}}^2$	8.62	9.24 (ν : 0.3)
c_{100}	0.99787	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.043	$13.99^{+0.29}_{-0.29}$ (+0.1 σ)	χ_{small}^2	395.85	397.0 (ν : 1.4) (+0.0 σ)
c_{217}	1.00123	$1.0011^{+0.0031}_{-0.0030}$ (+4.5 σ)	z_{drag}	1059.25	$1059.4^{+1.2}_{-1.2}$ (+0.5 σ)	χ_{lowl}^2	23.55	23.5 (ν : 0.6) (−0.6 σ)
c_{TE}	0.9956	$0.9960^{+0.0099}_{-0.0099}$	r_{drag}	149.00	$148.4^{+3.3}_{-3.3}$ (+0.1 σ)	$\chi_{\mathrm{CamSpec}}^2$	11498.3	11513.7 (ν : 15.6)
c_{EE}	0.9905	$0.991^{+0.010}_{-0.010}$	k_{D}	0.13941	$0.1398^{+0.0024}_{-0.0023}$ (−0.0 σ)	χ_{Aver15}^2	0.01	0.35 (ν : 0.1)
H_0	67.11	$67.2^{+2.2}_{-2.1}$ (+0.7 σ)	$100\theta_{\mathrm{D}}$	0.16047	$0.16062^{+0.00083}_{-0.00081}$ (−0.4 σ)	$\chi_{6\mathrm{DF}}^2$	0.010	0.058 (ν : 0.0)
Ω_{Λ}	0.6916	$0.689^{+0.013}_{-0.015}$ (+0.9 σ)	z_{eq}	3394.4	3387^{+49}_{-49} (−0.7 σ)	χ_{MGS}^2	1.41	1.31 (ν : 0.1)
Ω_{m}	0.3084	$0.311^{+0.015}_{-0.013}$ (−0.9 σ)	k_{eq}	0.010244	$0.01027^{+0.00020}_{-0.00020}$ (−0.9 σ)	$\chi_{\mathrm{DR12BAO}}^2$	3.88	4.8 (ν : 1.2)
$\Omega_{\mathrm{m}}h^2$	0.1389	$0.1404^{+0.0058}_{-0.0055}$ (−0.8 σ)	$100\theta_{\mathrm{eq}}$	0.8144	$0.8158^{+0.0093}_{-0.0091}$ (+0.8 σ)	χ_{prior}^2	1.9	7.8 (ν : 5.8) (+0.1 σ)
$\Omega_{\nu}h^2$	0.00002	< 0.00133 (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.45006	$0.4507^{+0.0047}_{-0.0046}$ (+0.8 σ)	χ_{CMB}^2	11926.4	11943.4 (ν : 16.8) (+1773.5 σ)
$\Omega_{\mathrm{m}}h^3$	0.0932	$0.0943^{+0.0065}_{-0.0061}$ (+0.2 σ)	$H(0.15)$	72.30	$72.4^{+2.2}_{-2.1}$ (+0.7 σ)	χ_{BAO}^2	5.30	6.1 (ν : 0.8)
σ_8	0.8131	$0.808^{+0.021}_{-0.023}$ (+0.6 σ)	$D_{\mathrm{M}}(0.15)$	646.2	645^{+20}_{-20} (−0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11933.58$; $\bar{\chi}_{\mathrm{eff}}^2 = 11957.68$; $R - 1 = 0.00718$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.01 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.88 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.62 small_100x143.offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3.2.29: 23.55 CamSpec like_10.7HM.1400.unified: 11498.33

9.47 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022234	$0.02227^{+0.00035}_{-0.00035}$ (+0.9 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4525	$0.451^{+0.012}_{-0.012}$ (−0.5 σ)	$H(0.51)$	89.13	$89.3^{+2.1}_{-2.1}$ (+0.6 σ)
$\Omega_c h^2$	0.11744	$0.1181^{+0.0050}_{-0.0049}$ (−0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6073	$0.604^{+0.014}_{-0.015}$ (+0.3 σ)	$D_M(0.51)$	1992	1990^{+54}_{-53} (−0.7 σ)
$100\theta_{MC}$	1.04113	$1.04107^{+0.00079}_{-0.00079}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9934	$0.986^{+0.020}_{-0.023}$ (+0.4 σ)	$H(0.61)$	94.69	$94.9^{+2.2}_{-2.1}$ (+0.5 σ)
τ	0.0531	$0.054^{+0.015}_{-0.014}$ (+0.4 σ)	$r_{\text{drag}} h$	99.99	$99.7^{+1.7}_{-1.8}$ (+0.9 σ)	$D_M(0.61)$	2318	2316^{+62}_{-61} (−0.7 σ)
Σm_ν [eV]	0.001	< 0.128 (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.4418	$2.435^{+0.042}_{-0.043}$ (−0.5 σ)	$H(2.33)$	234.01	$234.9^{+4.5}_{-4.5}$ (−0.4 σ)
N_{eff}	2.925	$2.98^{+0.31}_{-0.30}$ (+0.1 σ)	z_{re}	7.52	$7.6^{+1.4}_{-1.5}$ (+0.3 σ)	$D_M(2.33)$	5803	5790^{+130}_{-130} (−0.5 σ)
$\ln(10^{10} A_s)$	3.0332	$3.038^{+0.033}_{-0.032}$ (+0.2 σ)	$10^9 A_s$	2.076	$2.087^{+0.069}_{-0.065}$ (+0.2 σ)	$f\sigma_8(0.15)$	0.4566	$0.455^{+0.012}_{-0.011}$ (−0.4 σ)
n_s	0.9629	$0.964^{+0.013}_{-0.012}$ (+0.6 σ)	$10^9 A_s e^{-2\tau}$	1.8672	$1.872^{+0.031}_{-0.031}$ (−0.3 σ)	$\sigma_8(0.15)$	0.7533	$0.748^{+0.019}_{-0.022}$ (+0.7 σ)
y_{cal}	1.00013	$1.0006^{+0.0048}_{-0.0047}$ (+0.1 σ)	D_{40}	1227.8	1228^{+25}_{-25} (−0.5 σ)	$f\sigma_8(0.38)$	0.4756	$0.474^{+0.011}_{-0.011}$ (+0.2 σ)
A_{100}^{PS}	230.5	238^{+50}_{-50} (−0.9 σ)	D_{220}	5714	5723^{+73}_{-73} (+0.3 σ)	$\sigma_8(0.38)$	0.6679	$0.663^{+0.018}_{-0.020}$ (+0.7 σ)
A_{143}^{PS}	42.3	38^{+20}_{-20} (−1.2 σ)	D_{810}	2531.4	2534^{+26}_{-26} (−0.1 σ)	$f\sigma_8(0.51)$	0.4745	$0.473^{+0.011}_{-0.011}$ (+0.4 σ)
A_{217}^{PS}	103.4	103^{+30}_{-30} (−1.2 σ)	D_{1420}	816.1	$816.5^{+9.5}_{-9.6}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6250	$0.620^{+0.017}_{-0.019}$ (+0.7 σ)
A_{217}^{CIB}	42.8	39^{+10}_{-10} (−1.3 σ)	D_{2000}	231.02	$230.8^{+3.6}_{-3.6}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4697	$0.468^{+0.011}_{-0.011}$ (+0.4 σ)
A_{143}^{tSZ}	6.50	< 7.51 (−0.6 σ)	$n_{s,0.002}$	0.9629	$0.964^{+0.013}_{-0.012}$ (+0.6 σ)	$\sigma_8(0.61)$	0.5947	$0.590^{+0.016}_{-0.018}$ (+0.7 σ)
$r_{143 \times 217}^{\text{PS}}$	0.661	$0.66^{+0.25}_{-0.25}$	Y_P	0.24370	$0.2444^{+0.0042}_{-0.0042}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2990	$0.2974^{+0.0080}_{-0.0084}$ (+0.7 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.79	—	Y_P^{BBN}	0.24502	$0.2457^{+0.0042}_{-0.0043}$ (+0.2 σ)	$\sigma_8(2.33)$	0.3089	$0.3067^{+0.0088}_{-0.0097}$ (+0.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.38	—	$10^5 \text{D}/\text{H}$	2.569	$2.580^{+0.086}_{-0.084}$ (−0.7 σ)	f_{2000}^{143}	29.0	29^{+6}_{-6} (−0.6 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.893	$13.86^{+0.31}_{-0.30}$ (−0.5 σ)	f_{2000}^{217}	105.93	$106.4^{+4.0}_{-4.0}$ (−0.7 σ)
A_{100}^{dust}	0.998	$1.01^{+0.38}_{-0.39}$	z_*	1089.74	$1089.80^{+0.63}_{-0.62}$ (−1.1 σ)	$f_{2000}^{143 \times 217}$	31.29	32^{+4}_{-4} (−0.7 σ)
A_{143}^{dust}	0.972	$0.96^{+0.35}_{-0.34}$	r_*	145.83	$145.4^{+3.0}_{-2.9}$ (+0.0 σ)	χ_{lensing}^2	8.70	9.28 (ν : 0.3)
A_{217}^{dust}	0.974	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	1.04138	$1.04131^{+0.00094}_{-0.00094}$ (+0.2 σ)	χ_{small}^2	395.85	396.9 (ν : 1.4) (+0.0 σ)
$A_{143 \times 217}^{\text{dust}}$	1.008	$1.03^{+0.32}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	14.003	$13.96^{+0.28}_{-0.27}$ (−0.0 σ)	χ_{lowl}^2	23.46	23.4 (ν : 0.5) (−0.6 σ)
c_{100}	0.99768	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	z_{drag}	1059.32	$1059.5^{+1.2}_{-1.3}$ (+0.6 σ)	χ_{CamSpec}^2	11498.3	11513.7 (ν : 15.5)
c_{217}	1.00121	$1.0011^{+0.0031}_{-0.0030}$ (+4.5 σ)	r_{drag}	148.55	$148.1^{+3.1}_{-3.0}$ (−0.0 σ)	χ_{Aver15}^2	0.00	0.33 (ν : 0.1)
c_{TE}	0.9958	$0.9963^{+0.0099}_{-0.0099}$	k_D	0.13969	$0.1400^{+0.0022}_{-0.0022}$ (+0.1 σ)	χ_{Cooke17}^2	0.27	0.38 (ν : 0.1)
c_{EE}	0.9910	$0.992^{+0.010}_{-0.010}$	$100\theta_D$	0.16060	$0.16071^{+0.00074}_{-0.00075}$ (−0.3 σ)	$\chi_{6\text{DF}}^2$	0.010	0.057 (ν : 0.0)
H_0	67.31	$67.3^{+2.1}_{-2.0}$ (+0.8 σ)	z_{eq}	3392.9	3386^{+48}_{-48} (−0.8 σ)	χ_{MGS}^2	1.41	1.32 (ν : 0.1)
Ω_Λ	0.6917	$0.689^{+0.013}_{-0.015}$ (+0.9 σ)	k_{eq}	0.010271	$0.01028^{+0.00019}_{-0.00019}$ (−0.8 σ)	χ_{DR12BAO}^2	3.89	4.8 (ν : 1.2)
Ω_m	0.3083	$0.311^{+0.015}_{-0.013}$ (−0.9 σ)	$100\theta_{\text{eq}}$	0.8146	$0.8160^{+0.0093}_{-0.0090}$ (+0.8 σ)	χ_{prior}^2	2.1	7.8 (ν : 5.8) (+0.1 σ)
$\Omega_m h^2$	0.1397	$0.1408^{+0.0054}_{-0.0052}$ (−0.7 σ)	$100\theta_{s,\text{eq}}$	0.45016	$0.4509^{+0.0047}_{-0.0046}$ (+0.8 σ)	χ_{CMB}^2	11926.3	11943.3 (ν : 16.7) (+1773.5 σ)
$\Omega_\nu h^2$	0.00001	< 0.00135 (−0.7 σ)	$H(0.15)$	72.52	$72.6^{+2.1}_{-2.0}$ (+0.7 σ)	χ_{BAO}^2	5.31	6.1 (ν : 0.8)
$\Omega_m h^3$	0.0940	$0.0949^{+0.0061}_{-0.0059}$ (+0.3 σ)	$D_M(0.15)$	644.3	644^{+19}_{-19} (−0.7 σ)	χ_{Abund}^2	0.27	0.72 (ν : 0.2)
σ_8	0.8150	$0.809^{+0.020}_{-0.023}$ (+0.6 σ)	$H(0.38)$	82.50	$82.6^{+2.1}_{-2.1}$ (+0.7 σ)			
S_8	0.8262	$0.823^{+0.022}_{-0.022}$ (−0.5 σ)	$D_M(0.38)$	1537.4	1536^{+43}_{-42} (−0.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 11933.95$; $\bar{\chi}_{\text{eff}}^2 = 11957.95$; $R - 1 = 0.00786$
 χ_{eff}^2 : Abund - Yp_Aver2015: 0.00 D.Cooke2017: 0.27 BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.89 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.70
simall.100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3.2_29: 23.46 CamSpec like_10.7HM_1400_unified: 11498.26

9.48 base_nnu_mnu_CamSpecHM_TTTEEE_lowl_lowE_lensing_BAO_post_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00037}_{-0.00037} \quad (+1.0\sigma)$	S_8	$0.822^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$H(0.38)$	$82.7^{+2.6}_{-2.5} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1180^{+0.0065}_{-0.0062} \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.450^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$D_M(0.38)$	$1534^{+51}_{-51} \quad (-0.8\sigma)$
$100\theta_{MC}$	$1.04109^{+0.00091}_{-0.00091} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.604^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$H(0.51)$	$89.4^{+2.7}_{-2.6} \quad (+0.6\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.020}_{-0.022} \quad (+0.4\sigma)$	$D_M(0.51)$	$1987^{+65}_{-65} \quad (-0.7\sigma)$
Σm_ν [eV]	$< 0.124 \quad (-0.7\sigma)$	$r_{\text{drag}} h$	$99.9^{+1.7}_{-1.7} \quad (+1.0\sigma)$	$H(0.61)$	$95.0^{+2.8}_{-2.7} \quad (+0.6\sigma)$
N_{eff}	$2.98^{+0.40}_{-0.38} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.042}_{-0.043} \quad (-0.5\sigma)$	$D_M(0.61)$	$2313^{+74}_{-74} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.032}_{-0.030} \quad (+0.3\sigma)$	z_{re}	$< 8.88 \quad (+0.4\sigma)$	$H(2.33)$	$234.8^{+5.8}_{-5.6} \quad (-0.4\sigma)$
n_s	$0.965^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$10^9 A_s$	$2.092^{+0.067}_{-0.063} \quad (+0.3\sigma)$	$D_M(2.33)$	$5786^{+160}_{-160} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.872^{+0.036}_{-0.036} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.012}_{-0.011} \quad (-0.4\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1228^{+26}_{-26} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.021}_{-0.022} \quad (+0.7\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5725^{+74}_{-74} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (+0.2\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.019}_{-0.020} \quad (+0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.7^{+9.7}_{-9.8} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.012} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.6\sigma)$	D_{2000}	$231.0^{+4.0}_{-4.0} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.019}_{-0.019} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.965^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.012} \quad (+0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.2444^{+0.0054}_{-0.0053} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.018}_{-0.019} \quad (+0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.2458^{+0.0055}_{-0.0053} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0090}_{-0.0089} \quad (+0.7\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.58^{+0.11}_{-0.10} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0099}_{-0.010} \quad (+0.8\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	Age/Gyr	$13.85^{+0.38}_{-0.39} \quad (-0.5\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	z_*	$1089.75^{+0.77}_{-0.75} \quad (-1.1\sigma)$	f_{2000}^{217}	$106.4^{+4.4}_{-4.3} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$145.4^{+3.8}_{-3.8} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.33}_{-0.32}$	$100\theta_*$	$1.0413^{+0.0011}_{-0.0011} \quad (+0.3\sigma)$	χ^2_{lensing}	$9.25 \quad (\nu: 0.3)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.96^{+0.35}_{-0.35} \quad (-0.0\sigma)$	χ^2_{small}	$397.0 \quad (\nu: 1.5) \quad (+0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.5\sigma)$	z_{drag}	$1059.6^{+1.5}_{-1.4} \quad (+0.6\sigma)$	χ^2_{lowl}	$23.3 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{TE}	$0.996^{+0.010}_{-0.010}$	r_{drag}	$148.1^{+3.9}_{-3.9} \quad (-0.0\sigma)$	χ^2_{CamSpec}	$11514.1 \quad (\nu: 16.2)$
c_{EE}	$0.992^{+0.011}_{-0.010}$	k_D	$0.1401^{+0.0028}_{-0.0027} \quad (+0.1\sigma)$	χ^2_{JLA}	$1035.05 \quad (\nu: 0.1)$
H_0	$67.5^{+2.5}_{-2.4} \quad (+0.8\sigma)$	$100\theta_D$	$0.16069^{+0.00098}_{-0.00093} \quad (-0.3\sigma)$	χ^2_{6DF}	$0.045 \quad (\nu: 0.0)$
Ω_Λ	$0.691^{+0.013}_{-0.014} \quad (+0.9\sigma)$	z_{eq}	$3382^{+49}_{-51} \quad (-0.8\sigma)$	χ^2_{MGS}	$1.41 \quad (\nu: 0.1)$
Ω_m	$0.309^{+0.014}_{-0.013} \quad (-0.9\sigma)$	k_{eq}	$0.01027^{+0.00023}_{-0.00022} \quad (-0.9\sigma)$	χ^2_{DR12BAO}	$4.5 \quad (\nu: 0.9)$
$\Omega_m h^2$	$0.1408^{+0.0069}_{-0.0065} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.8168^{+0.0097}_{-0.0092} \quad (+0.9\sigma)$	χ^2_{prior}	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_\nu h^2$	$< 0.00130 \quad (-0.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4513^{+0.0049}_{-0.0047} \quad (+0.8\sigma)$	χ^2_{CMB}	$11943.7 \quad (\nu: 17.2) \quad (+1773.5\sigma)$
$\Omega_m h^3$	$0.0950^{+0.0079}_{-0.0072} \quad (+0.3\sigma)$	$H(0.15)$	$72.7^{+2.5}_{-2.4} \quad (+0.8\sigma)$	χ^2_{BAO}	$5.9 \quad (\nu: 0.5)$
σ_8	$0.810^{+0.022}_{-0.023} \quad (+0.7\sigma)$	$D_M(0.15)$	$643^{+23}_{-22} \quad (-0.8\sigma)$		

$$\bar{\chi}^2_{\text{eff}} = 12992.45; \Delta\bar{\chi}^2_{\text{eff}} = 0.20; R - 1 = 0.00689$$

9.49 base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02194	$0.0221^{+0.0014}_{-0.0013}$ (+0.4 σ)	D_{810}	2560	2159^{+1000}_{-900} (−26.3 σ)	$D_{\mathrm{M}}(0.51)$	1929	1862^{+180}_{-180} (−2.1 σ)
$\Omega_{\mathrm{c}} h^2$	0.1349	$0.155^{+0.051}_{-0.048}$ (+8.6 σ)	D_{1420}	790	629^{+400}_{-300} (−35.5 σ)	$H(0.61)$	99.8	105^{+10}_{-10} (+4.4 σ)
$100\theta_{\mathrm{MC}}$	1.084	$1.110^{+0.064}_{-0.068}$ (+115.2 σ)	D_{2000}	230	182^{+100}_{-100} (−20.2 σ)	$D_{\mathrm{M}}(0.61)$	2239	2158^{+210}_{-210} (−2.2 σ)
Σm_{ν} [eV]	0.95	< 3.56 (+6.2 σ)	$n_{\mathrm{s},0.002}$	0.9616	$0.960^{+0.040}_{-0.039}$ (+0.3 σ)	$H(2.33)$	254.1	273^{+50}_{-40} (+9.6 σ)
N_{eff}	2.91	$2.96^{+0.58}_{-0.53}$ (+0.1 σ)	Y_{P}	0.2433	$0.2441^{+0.0080}_{-0.0079}$ (+0.1 σ)	$D_{\mathrm{M}}(2.33)$	5486	5224^{+700}_{-700} (−4.0 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.103	$3.02^{+0.23}_{-0.24}$ (−0.5 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2447	$0.2454^{+0.0080}_{-0.0079}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4566	$0.457^{+0.035}_{-0.035}$ (−0.2 σ)
n_{s}	0.9616	$0.960^{+0.040}_{-0.039}$ (+0.3 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.618	$2.61^{+0.18}_{-0.19}$ (−0.3 σ)	$\sigma_8(0.15)$	0.694	$0.668^{+0.076}_{-0.077}$ (−1.0 σ)
H_0	68.4	$70.2^{+5.4}_{-5.2}$ (+1.5 σ)	Age/Gyr	13.13	$12.5^{+1.6}_{-1.6}$ (−4.1 σ)	$f\sigma_8(0.38)$	0.4655	$0.458^{+0.034}_{-0.036}$ (−0.7 σ)
Ω_{Λ}	0.644	$0.608^{+0.087}_{-0.096}$ (−0.9 σ)	z_*	1091.90	$1093.8^{+4.9}_{-4.6}$ (+6.0 σ)	$\sigma_8(0.38)$	0.612	$0.586^{+0.073}_{-0.073}$ (−1.0 σ)
Ω_{m}	0.356	$0.392^{+0.096}_{-0.087}$ (+0.9 σ)	r_*	141.3	136^{+13}_{-13} (−3.5 σ)	$f\sigma_8(0.51)$	0.4599	$0.450^{+0.035}_{-0.039}$ (−0.8 σ)
$\Omega_{\mathrm{m}} h^2$	0.167	$0.195^{+0.069}_{-0.063}$ (+10.7 σ)	$100\theta_*$	1.085	$1.111^{+0.064}_{-0.069}$ (+95.7 σ)	$\sigma_8(0.51)$	0.572	$0.547^{+0.070}_{-0.070}$ (−1.0 σ)
$\Omega_{\nu} h^2$	0.0098	< 0.0369 (+6.6 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.02	$12.3^{+1.9}_{-1.8}$ (−6.8 σ)	$f\sigma_8(0.61)$	0.4525	$0.441^{+0.037}_{-0.040}$ (−0.8 σ)
$\Omega_{\mathrm{m}} h^3$	0.114	$0.137^{+0.059}_{-0.052}$ (+7.1 σ)	z_{drag}	1060.1	$1062.1^{+6.0}_{-5.6}$ (+2.7 σ)	$\sigma_8(0.61)$	0.543	$0.519^{+0.068}_{-0.068}$ (−1.0 σ)
σ_8	0.754	$0.729^{+0.078}_{-0.079}$ (−1.0 σ)	r_{drag}	144.0	139^{+13}_{-14} (−3.4 σ)	$f\sigma_8(2.33)$	0.2799	$0.266^{+0.033}_{-0.037}$ (−0.9 σ)
S_8	0.822	$0.830^{+0.072}_{-0.069}$ (−0.2 σ)	k_{D}	0.1446	$0.151^{+0.016}_{-0.015}$ (+5.7 σ)	$\sigma_8(2.33)$	0.2826	$0.268^{+0.038}_{-0.039}$ (−1.0 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4502	$0.455^{+0.040}_{-0.038}$ (−0.2 σ)	$100\theta_{\mathrm{D}}$	0.1668	$0.1700^{+0.0085}_{-0.0089}$ (+13.3 σ)	$\chi^2_{\mathrm{lensing}}$	7.55	10.0 (ν : 2.2)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.5827	$0.576^{+0.043}_{-0.045}$ (−0.9 σ)	z_{eq}	3818	4281^{+1000}_{-1000} (+11.5 σ)	χ^2_{Aver15}	0.00	1.0 (ν : 1.1)
$\sigma_8/h^{0.5}$	0.912	$0.87^{+0.11}_{-0.11}$ (−2.4 σ)	k_{eq}	0.01156	$0.0131^{+0.0037}_{-0.0035}$ (+15.8 σ)	$\chi^2_{\mathrm{Cooke17}}$	0.00	1.0 (ν : 1.0)
$r_{\mathrm{drag}} h$	98.49	$97.2^{+3.9}_{-3.9}$ (+0.4 σ)	$100\theta_{\mathrm{eq}}$	0.779	$0.744^{+0.11}_{-0.092}$ (−4.6 σ)	$\chi^2_{6\mathrm{DF}}$	0.11	0.41 (ν : 0.1)
$\langle d^2 \rangle^{1/2}$	2.519	$2.50^{+0.11}_{-0.11}$ (+0.9 σ)	$100\theta_{\mathrm{s,eq}}$	0.433	$0.415^{+0.054}_{-0.048}$ (−4.6 σ)	χ^2_{MGS}	0.93	0.70 (ν : 0.2)
z_{re}	8.27	$8.66^{+1.1}_{-0.98}$ (+1.5 σ)	$H(0.15)$	74.5	$77.0^{+7.0}_{-6.6}$ (+2.0 σ)	$\chi^2_{\mathrm{DR12BAO}}$	2.11	3.8 (ν : 1.3)
$10^9 A_{\mathrm{s}}$	2.226	$2.07^{+0.51}_{-0.45}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	631	613^{+49}_{-51} (−1.6 σ)	χ^2_{prior}	0.01	1.0 (ν : 1.0) (−1.7 σ)
$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.994	$1.85^{+0.46}_{-0.40}$ (−1.0 σ)	$H(0.38)$	86.0	90^{+10}_{-9} (+3.1 σ)	χ^2_{BAO}	3.14	4.9 (ν : 1.6)
D_{40}	1268	1153^{+300}_{-300} (−3.9 σ)	$D_{\mathrm{M}}(0.38)$	1494	1445^{+130}_{-130} (−1.9 σ)	χ^2_{Abund}	0.00	2.1 (ν : 2.1)
D_{220}	5675	4980^{+2000}_{-2000} (−17.6 σ)	$H(0.51)$	93.5	98^{+10}_{-10} (+3.8 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 10.70$; $\bar{\chi}^2_{\mathrm{eff}} = 17.95$; $R - 1 = 0.01127$
 χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.11 MGS: 0.93 DR12BAO: 2.11 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.55

9.50 base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02206	$0.0221^{+0.0014}_{-0.0013}$ (+0.5 σ)	D_{810}	2768	2842^{+600}_{-600} (+21.4 σ)	$D_M(0.51)$	1983	1972^{+120}_{-120} (−0.9 σ)
$\Omega_c h^2$	0.1173	$0.119^{+0.023}_{-0.022}$ (−0.1 σ)	D_{1420}	886	902^{+200}_{-200} (+16.5 σ)	$H(0.61)$	95.3	$96.2^{+7.1}_{-6.7}$ (+1.0 σ)
$100\theta_{MC}$	1.0487	$1.054^{+0.034}_{-0.033}$ (+22.8 σ)	D_{2000}	250	257^{+60}_{-60} (+11.6 σ)	$D_M(0.61)$	2308	2294^{+150}_{-150} (−0.9 σ)
Σm_ν [eV]	0.30	< 1.04 (+1.2 σ)	$n_{s,0.002}$	0.9572	$0.960^{+0.040}_{-0.039}$ (+0.3 σ)	$H(2.33)$	236.1	239^{+21}_{-21} (+0.7 σ)
N_{eff}	2.95	$2.99^{+0.56}_{-0.52}$ (+0.2 σ)	Y_P	0.2440	$0.2444^{+0.0077}_{-0.0076}$ (+0.2 σ)	$D_M(2.33)$	5765	5715^{+430}_{-410} (−1.0 σ)
$\ln(10^{10} A_s)$	3.128	$3.16^{+0.17}_{-0.18}$ (+5.8 σ)	Y_P^{BBN}	0.2453	$0.2458^{+0.0077}_{-0.0077}$ (+0.2 σ)	$f\sigma_8(0.15)$	0.4501	$0.445^{+0.031}_{-0.031}$ (−1.1 σ)
n_s	0.9572	$0.960^{+0.040}_{-0.039}$ (+0.3 σ)	$10^5 D/H$	2.610	$2.61^{+0.18}_{-0.20}$ (−0.2 σ)	$\sigma_8(0.15)$	0.732	$0.717^{+0.050}_{-0.053}$ (+0.0 σ)
H_0	67.50	$67.8^{+4.2}_{-3.8}$ (+0.9 σ)	Age/Gyr	13.80	$13.7^{+1.0}_{-0.99}$ (−1.0 σ)	$f\sigma_8(0.38)$	0.4684	$0.462^{+0.029}_{-0.030}$ (−0.5 σ)
Ω_Λ	0.6874	$0.682^{+0.035}_{-0.037}$ (+0.7 σ)	z_*	1090.01	$1090.2^{+2.1}_{-2.1}$ (−0.3 σ)	$\sigma_8(0.38)$	0.6496	$0.635^{+0.044}_{-0.048}$ (+0.1 σ)
Ω_m	0.3126	$0.318^{+0.037}_{-0.035}$ (−0.7 σ)	r_*	145.8	$145.0^{+8.4}_{-8.4}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4672	$0.460^{+0.028}_{-0.029}$ (−0.3 σ)
$\Omega_m h^2$	0.1424	$0.147^{+0.027}_{-0.026}$ (+0.6 σ)	$100\theta_*$	1.0491	$1.055^{+0.034}_{-0.033}$ (+19.0 σ)	$\sigma_8(0.51)$	0.6082	$0.595^{+0.042}_{-0.045}$ (+0.1 σ)
$\Omega_\nu h^2$	0.0031	< 0.0109 (+1.3 σ)	$D_M(z_*)/\text{Gpc}$	13.90	$13.8^{+1.1}_{-1.1}$ (−0.8 σ)	$f\sigma_8(0.61)$	0.4624	$0.455^{+0.028}_{-0.028}$ (−0.1 σ)
$\Omega_m h^3$	0.0962	$0.0998^{+0.024}_{-0.022}$ (+1.1 σ)	z_{drag}	1058.98	$1059.3^{+4.6}_{-4.4}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5789	$0.566^{+0.040}_{-0.044}$ (+0.1 σ)
σ_8	0.792	$0.775^{+0.053}_{-0.057}$ (−0.1 σ)	r_{drag}	148.6	$147.8^{+8.8}_{-8.8}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2954	$0.290^{+0.018}_{-0.019}$ (+0.3 σ)
S_8	0.808	$0.798^{+0.060}_{-0.059}$ (−1.4 σ)	k_D	0.1394	$0.1404^{+0.0089}_{-0.0083}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3025	$0.296^{+0.022}_{-0.022}$ (+0.3 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4428	$0.437^{+0.033}_{-0.033}$ (−1.4 σ)	$100\theta_D$	0.16209	$0.1629^{+0.0048}_{-0.0045}$ (+2.9 σ)	χ^2_{lensing}	7.62	9.4 (ν : 2.0)
$\sigma_8 \Omega_m^{0.25}$	0.5922	$0.582^{+0.040}_{-0.040}$ (−0.6 σ)	z_{eq}	3373	3409^{+500}_{-500} (−0.5 σ)	χ^2_{Aver15}	0.01	1.0 (ν : 1.1)
$\sigma_8/h^{0.5}$	0.964	$0.942^{+0.064}_{-0.071}$ (−0.7 σ)	k_{eq}	0.01023	$0.0104^{+0.0016}_{-0.0015}$ (−0.3 σ)	χ^2_{Cooke17}	0.01	0.99 (ν : 1.0)
$r_{\text{drag}} h$	100.32	$100.2^{+2.2}_{-2.3}$ (+1.0 σ)	$100\theta_{\text{eq}}$	0.824	$0.825^{+0.061}_{-0.061}$ (+1.5 σ)	χ^2_{JLA}	1035.11	1036.1 (ν : 1.6)
$\langle d^2 \rangle^{1/2}$	2.506	$2.53^{+0.11}_{-0.10}$ (+1.4 σ)	$100\theta_{s,\text{eq}}$	0.4554	$0.456^{+0.031}_{-0.031}$ (+1.5 σ)	$\chi^2_{6\text{DF}}$	0.000	0.054 (ν : 0.0)
z_{re}	7.811	$7.87^{+0.46}_{-0.46}$ (+0.6 σ)	$H(0.15)$	72.80	$73.3^{+4.7}_{-4.3}$ (+0.9 σ)	χ^2_{MGS}	1.68	1.71 (ν : 0.2)
$10^9 A_s$	2.283	$2.37^{+0.43}_{-0.40}$ (+6.4 σ)	$D_M(0.15)$	642.2	639^{+38}_{-38} (−0.9 σ)	χ^2_{DR12BAO}	2.98	3.8 (ν : 1.0)
$10^9 A_s e^{-2\tau}$	2.045	$2.12^{+0.39}_{-0.36}$ (+10.4 σ)	$H(0.38)$	82.9	$83.6^{+5.8}_{-5.4}$ (+1.0 σ)	χ^2_{prior}	0.02	1.0 (ν : 1.0) (−1.7 σ)
D_{40}	1365	1397^{+300}_{-200} (+6.9 σ)	$D_M(0.38)$	1531	1523^{+95}_{-94} (−0.9 σ)	χ^2_{BAO}	4.66	5.6 (ν : 1.4)
D_{220}	6296	6494^{+2000}_{-1000} (+18.9 σ)	$H(0.51)$	89.7	$90.5^{+6.5}_{-6.1}$ (+1.0 σ)	χ^2_{Abund}	0.02	2.0 (ν : 2.0)

Best-fit $\chi^2_{\text{eff}} = 1047.43$; $\bar{\chi}^2_{\text{eff}} = 1054.19$; $R - 1 = 0.07982$

χ^2_{eff} : Abund - Yp_Aver2015: 0.01 D_Cooke2017: 0.01 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 2.98 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmargd: 7.62 SN - JLA Pantheon18: 1035.11

9.51 base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15_theta

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}} h^2$	0.02194	$0.0220^{+0.0014}_{-0.0014}$ (+0.3 σ)	D_{810}	2908	2928^{+500}_{-500} (+27.4 σ)	$D_{\text{M}}(0.51)$	2012	2010^{+100}_{-98} (−0.5 σ)
$\Omega_{\text{c}} h^2$	0.1114	$0.112^{+0.012}_{-0.012}$ (−2.0 σ)	D_{1420}	931	938^{+200}_{-200} (+23.5 σ)	$H(0.61)$	93.65	$93.8^{+4.5}_{-4.4}$ (+0.1 σ)
$100\theta_{\text{MC}}$	1.04089	$1.0409^{+0.0011}_{-0.0011}$ (+0.3 σ)	D_{2000}	262.2	264^{+50}_{-50} (+14.8 σ)	$D_{\text{M}}(0.61)$	2342	2340^{+120}_{-110} (−0.5 σ)
Σm_{ν} [eV]	0.267	< 0.599 (+0.3 σ)	$n_{\text{s},0.002}$	0.9602	$0.962^{+0.038}_{-0.038}$ (+0.4 σ)	$H(2.33)$	231.1	232^{+11}_{-10} (−1.3 σ)
N_{eff}	2.91	$2.94^{+0.56}_{-0.55}$ (+0.0 σ)	Y_{P}	0.2434	$0.2437^{+0.0078}_{-0.0081}$ (+0.0 σ)	$D_{\text{M}}(2.33)$	5868	5860^{+280}_{-270} (−0.1 σ)
$\ln(10^{10} A_{\text{s}})$	3.169	$3.17^{+0.16}_{-0.15}$ (+6.4 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2447	$0.2450^{+0.0078}_{-0.0082}$ (+0.0 σ)	$f\sigma_8(0.15)$	0.4442	$0.442^{+0.023}_{-0.026}$ (−1.3 σ)
n_{s}	0.9602	$0.962^{+0.038}_{-0.038}$ (+0.4 σ)	$10^5 \text{D}/\text{H}$	2.619	$2.62^{+0.18}_{-0.18}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7302	$0.727^{+0.042}_{-0.048}$ (+0.2 σ)
H_0	66.69	$66.8^{+3.6}_{-3.5}$ (+0.6 σ)	Age/Gyr	14.05	$14.03^{+0.67}_{-0.64}$ (−0.0 σ)	$f\sigma_8(0.38)$	0.4638	$0.462^{+0.023}_{-0.027}$ (−0.5 σ)
Ω_{Λ}	0.6939	$0.693^{+0.018}_{-0.018}$ (+1.0 σ)	z_*	1089.59	$1089.6^{+1.3}_{-1.3}$ (−1.5 σ)	$\sigma_8(0.38)$	0.6484	$0.645^{+0.039}_{-0.041}$ (+0.3 σ)
Ω_{m}	0.3061	$0.307^{+0.018}_{-0.018}$ (−1.0 σ)	r_*	147.7	$147.5^{+6.9}_{-6.6}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4633	$0.461^{+0.023}_{-0.026}$ (−0.2 σ)
$\Omega_{\text{m}} h^2$	0.1362	$0.137^{+0.013}_{-0.012}$ (−1.5 σ)	$100\theta_*$	1.04133	$1.0413^{+0.0013}_{-0.0012}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6074	$0.604^{+0.037}_{-0.039}$ (+0.3 σ)
$\Omega_{\nu} h^2$	0.00278	< 0.00623 (+0.3 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	14.19	$14.16^{+0.66}_{-0.63}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4591	$0.457^{+0.023}_{-0.026}$ (−0.1 σ)
$\Omega_{\text{m}} h^3$	0.0908	$0.092^{+0.013}_{-0.012}$ (−0.2 σ)	z_{drag}	1058.22	$1058.5^{+4.3}_{-4.2}$ (−0.3 σ)	$\sigma_8(0.61)$	0.5783	$0.575^{+0.035}_{-0.037}$ (+0.4 σ)
σ_8	0.7892	$0.785^{+0.046}_{-0.052}$ (+0.2 σ)	r_{drag}	150.6	$150.3^{+7.4}_{-7.1}$ (+0.8 σ)	$f\sigma_8(2.33)$	0.2951	$0.294^{+0.015}_{-0.017}$ (+0.5 σ)
S_8	0.7972	$0.794^{+0.046}_{-0.052}$ (−1.6 σ)	k_{D}	0.1375	$0.1378^{+0.0064}_{-0.0061}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3027	$0.301^{+0.017}_{-0.019}$ (+0.5 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4367	$0.435^{+0.025}_{-0.028}$ (−1.6 σ)	$100\theta_{\text{D}}$	0.16109	$0.1611^{+0.0014}_{-0.0014}$ (+0.3 σ)	χ^2_{lensing}	7.51	9.2 (ν : 1.5)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5870	$0.585^{+0.034}_{-0.036}$ (−0.5 σ)	z_{eq}	3247	3245^{+150}_{-170} (−2.7 σ)	χ^2_{Aver15}	0.00	1.0 (ν : 1.1)
$\sigma_8/h^{0.5}$	0.966	$0.961^{+0.053}_{-0.061}$ (−0.2 σ)	k_{eq}	0.00982	$0.00983^{+0.00066}_{-0.00064}$ (−3.5 σ)	χ^2_{Cooke17}	0.00	0.97 (ν : 0.9)
$r_{\text{drag}} h$	100.43	$100.3^{+2.3}_{-2.2}$ (+1.1 σ)	$100\theta_{\text{eq}}$	0.8412	$0.842^{+0.032}_{-0.030}$ (+2.8 σ)	$\chi^2_{6\text{DF}}$	0.000	0.057 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.523	$2.52^{+0.11}_{-0.099}$ (+1.3 σ)	$100\theta_{\text{s,eq}}$	0.4642	$0.465^{+0.017}_{-0.016}$ (+2.8 σ)	χ^2_{MGS}	1.68	1.70 (ν : 0.2)
z_{re}	7.716	$7.71^{+0.22}_{-0.22}$ (+0.4 σ)	$H(0.15)$	71.81	$71.9^{+3.7}_{-3.7}$ (+0.5 σ)	χ^2_{DR12BAO}	3.39	4.3 (ν : 1.0)
$10^9 A_{\text{s}}$	2.379	$2.39^{+0.39}_{-0.35}$ (+7.1 σ)	$D_{\text{M}}(0.15)$	650.5	650^{+35}_{-33} (−0.6 σ)	χ^2_{prior}	0.00	1.9 (ν : 1.8) (−1.5 σ)
$10^9 A_{\text{s}} e^{-2\tau}$	2.131	$2.14^{+0.35}_{-0.31}$ (+11.5 σ)	$H(0.38)$	81.64	$81.8^{+4.0}_{-3.9}$ (+0.4 σ)	χ^2_{BAO}	5.07	6.1 (ν : 0.9)
D_{40}	1426	1426^{+200}_{-200} (+8.1 σ)	$D_{\text{M}}(0.38)$	1553	1551^{+81}_{-77} (−0.5 σ)	χ^2_{Abund}	0.00	2.0 (ν : 1.9)
D_{220}	6689	6733^{+1000}_{-1000} (+24.7 σ)	$H(0.51)$	88.18	$88.3^{+4.3}_{-4.2}$ (+0.2 σ)			

Best-fit $\chi^2_{\text{eff}} = 12.58$; $\bar{\chi}^2_{\text{eff}} = 19.19$; $R - 1 = 0.00759$
 χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.39 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged:
7.51

9.52 base_nnu_mnu_lensing_lenspriors_BAO_Cooke17_Aver15_theta_post_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02198	$0.0220^{+0.0014}_{-0.0013}$ (+0.3 σ)	D_{810}	2893	2928^{+500}_{-500} (+27.4 σ)	$D_M(0.51)$	2008	2007^{+100}_{-97} (−0.5 σ)
$\Omega_c h^2$	0.1117	$0.112^{+0.013}_{-0.012}$ (−2.0 σ)	D_{1420}	926	938^{+200}_{-200} (+23.5 σ)	$H(0.61)$	93.80	$93.9^{+4.5}_{-4.4}$ (+0.2 σ)
$100\theta_{MC}$	1.04090	$1.0409^{+0.0011}_{-0.0011}$ (+0.3 σ)	D_{2000}	260.9	264^{+50}_{-50} (+14.8 σ)	$D_M(0.61)$	2337	2337^{+120}_{-110} (−0.5 σ)
Σm_ν [eV]	0.261	< 0.595 (+0.3 σ)	$n_{s,0.002}$	0.9608	$0.962^{+0.038}_{-0.038}$ (+0.4 σ)	$H(2.33)$	231.3	232^{+11}_{-11} (−1.3 σ)
N_{eff}	2.92	$2.95^{+0.56}_{-0.55}$ (+0.0 σ)	Y_P	0.2436	$0.2438^{+0.0078}_{-0.0081}$ (+0.1 σ)	$D_M(2.33)$	5859	5856^{+280}_{-270} (−0.1 σ)
$\ln(10^{10} A_s)$	3.165	$3.17^{+0.16}_{-0.15}$ (+6.4 σ)	Y_P^{BBN}	0.2449	$0.2451^{+0.0079}_{-0.0082}$ (+0.1 σ)	$f\sigma_8(0.15)$	0.4436	$0.442^{+0.023}_{-0.026}$ (−1.3 σ)
n_s	0.9608	$0.962^{+0.038}_{-0.038}$ (+0.4 σ)	$10^5 D/H$	2.616	$2.61^{+0.18}_{-0.19}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7304	$0.728^{+0.043}_{-0.046}$ (+0.2 σ)
H_0	66.85	$66.9^{+3.5}_{-3.5}$ (+0.7 σ)	Age/Gyr	14.03	$14.02^{+0.68}_{-0.65}$ (−0.1 σ)	$f\sigma_8(0.38)$	0.4634	$0.462^{+0.023}_{-0.026}$ (−0.5 σ)
Ω_Λ	0.6948	$0.694^{+0.016}_{-0.016}$ (+1.0 σ)	z_*	1089.57	$1089.6^{+1.2}_{-1.3}$ (−1.5 σ)	$\sigma_8(0.38)$	0.6487	$0.646^{+0.039}_{-0.041}$ (+0.3 σ)
Ω_m	0.3052	$0.306^{+0.016}_{-0.016}$ (−1.0 σ)	r_*	147.5	$147.4^{+7.0}_{-6.7}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4630	$0.461^{+0.023}_{-0.026}$ (−0.2 σ)
$\Omega_m h^2$	0.1364	$0.137^{+0.013}_{-0.012}$ (−1.5 σ)	$100\theta_*$	1.04132	$1.0413^{+0.0013}_{-0.0012}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6077	$0.605^{+0.036}_{-0.039}$ (+0.4 σ)
$\Omega_\nu h^2$	0.00272	< 0.00619 (+0.3 σ)	$D_M(z_*)/\text{Gpc}$	14.17	$14.16^{+0.66}_{-0.64}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4588	$0.457^{+0.023}_{-0.026}$ (−0.0 σ)
$\Omega_m h^3$	0.0912	$0.092^{+0.013}_{-0.012}$ (−0.2 σ)	z_{drag}	1058.33	$1058.5^{+4.3}_{-4.2}$ (−0.3 σ)	$\sigma_8(0.61)$	0.5786	$0.576^{+0.034}_{-0.037}$ (+0.4 σ)
σ_8	0.7893	$0.786^{+0.045}_{-0.052}$ (+0.2 σ)	r_{drag}	150.4	$150.2^{+7.5}_{-7.1}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.2952	$0.294^{+0.015}_{-0.017}$ (+0.5 σ)
S_8	0.7961	$0.794^{+0.045}_{-0.051}$ (−1.6 σ)	k_D	0.1376	$0.1379^{+0.0064}_{-0.0061}$ (−1.0 σ)	$\sigma_8(2.33)$	0.3029	$0.302^{+0.017}_{-0.019}$ (+0.5 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4360	$0.435^{+0.025}_{-0.028}$ (−1.6 σ)	$100\theta_D$	0.16109	$0.1611^{+0.0014}_{-0.0015}$ (+0.3 σ)	χ^2_{lensing}	7.51	9.2 (ν : 1.5)
$\sigma_8 \Omega_m^{0.25}$	0.5867	$0.585^{+0.032}_{-0.038}$ (−0.5 σ)	z_{eq}	3247	3243^{+150}_{-160} (−2.7 σ)	χ^2_{Aver15}	0.00	1.0 (ν : 1.1)
$\sigma_8/h^{0.5}$	0.965	$0.962^{+0.055}_{-0.059}$ (−0.2 σ)	k_{eq}	0.00983	$0.00983^{+0.00066}_{-0.00064}$ (−3.5 σ)	χ^2_{Cooke17}	0.00	0.96 (ν : 0.9)
$r_{\text{drag}} h$	100.54	$100.5^{+2.1}_{-2.1}$ (+1.1 σ)	$100\theta_{\text{eq}}$	0.8411	$0.843^{+0.032}_{-0.029}$ (+2.8 σ)	χ^2_{JLA}	1034.814	1034.97 (ν : 0.0)
$\langle d^2 \rangle^{1/2}$	2.516	$2.52^{+0.11}_{-0.098}$ (+1.3 σ)	$100\theta_{s,\text{eq}}$	0.4642	$0.465^{+0.017}_{-0.016}$ (+2.8 σ)	$\chi^2_{6\text{DF}}$	0.000	0.049 (ν : 0.0)
z_{re}	7.713	$7.71^{+0.21}_{-0.22}$ (+0.4 σ)	$H(0.15)$	71.97	$72.0^{+3.7}_{-3.6}$ (+0.6 σ)	χ^2_{MGS}	1.75	1.77 (ν : 0.2)
$10^9 A_s$	2.368	$2.39^{+0.39}_{-0.35}$ (+7.1 σ)	$D_M(0.15)$	649.0	649^{+34}_{-32} (−0.6 σ)	χ^2_{DR12BAO}	3.35	4.2 (ν : 0.7)
$10^9 A_s e^{-2\tau}$	2.122	$2.15^{+0.35}_{-0.31}$ (+11.5 σ)	$H(0.38)$	81.80	$81.9^{+4.0}_{-4.0}$ (+0.4 σ)	χ^2_{prior}	0.00	1.9 (ν : 1.8) (−1.5 σ)
D_{40}	1418	1427^{+200}_{-200} (+8.2 σ)	$D_M(0.38)$	1549	1549^{+80}_{-76} (−0.6 σ)	χ^2_{BAO}	5.10	6.0 (ν : 0.7)
D_{220}	6655	6737^{+1000}_{-1000} (+24.8 σ)	$H(0.51)$	88.33	$88.4^{+4.2}_{-4.2}$ (+0.3 σ)	χ^2_{Abund}	0.00	2.0 (ν : 2.0)

Best-fit $\chi^2_{\text{eff}} = 1047.43$; $\bar{\chi}^2_{\text{eff}} = 1054.04$; $R - 1 = 0.00615$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.35 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8_CMBmarged: 7.51 SN - JLA Pantheon18: 1034.81

9.53 base_nnu_mnu_BAO_Cooke17_Aver15

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02201	0.0221 $^{+0.0014}_{-0.0013}$	(+0.5 σ)	Age/Gyr	12.45	12.6 $^{+2.6}_{-2.4}$	(−3.7 σ)	$H(0.38)$	90.1	89 $^{+20}_{-10}$	(+2.9 σ)
$\Omega_{\text{c}}h^2$	0.164	0.15 $^{+0.11}_{-0.10}$	(+6.9 σ)	z_*	1094.0	1093.6 $^{+7.6}_{-7.3}$	(+5.6 σ)	$D_{\text{M}}(0.38)$	1432	1460 $^{+200}_{-200}$	(−1.7 σ)
$100\theta_{\text{MC}}$	1.099	1.111 $^{+0.077}_{-0.080}$	(+117.5 σ)	r_*	135.1	138 $^{+20}_{-20}$	(−2.9 σ)	$H(0.51)$	98.3	98 $^{+20}_{-20}$	(+3.6 σ)
Σm_{ν} [eV]	0.31	—		$100\theta_*$	1.100	1.112 $^{+0.077}_{-0.080}$	(+97.8 σ)	$D_{\text{M}}(0.51)$	1846	1880 $^{+300}_{-300}$	(−1.9 σ)
N_{eff}	2.94	2.97 $^{+0.57}_{-0.54}$	(+0.1 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	12.28	12.4 $^{+3.0}_{-2.6}$	(−6.3 σ)	$H(0.61)$	105.1	105 $^{+20}_{-20}$	(+4.2 σ)
H_0	71.0	70 $^{+9}_{-9}$	(+1.4 σ)	z_{drag}	1062.0	1062.0 $^{+7.7}_{-7.3}$	(+2.6 σ)	$D_{\text{M}}(0.61)$	2141	2179 $^{+400}_{-300}$	(−2.0 σ)
Ω_{Λ}	0.625	0.61 $^{+0.10}_{-0.11}$	(−1.0 σ)	r_{drag}	137.6	140 $^{+20}_{-20}$	(−2.9 σ)	$H(2.33)$	270	272 $^{+70}_{-60}$	(+9.3 σ)
Ω_{m}	0.375	0.39 $^{+0.11}_{-0.10}$	(+1.0 σ)	k_{D}	0.1515	0.150 $^{+0.025}_{-0.024}$	(+5.4 σ)	$D_{\text{M}}(2.33)$	5205	5276 $^{+1000}_{-1000}$	(−3.7 σ)
$\Omega_{\text{m}}h^2$	0.189	0.195 $^{+0.10}_{-0.089}$	(+10.8 σ)	$100\theta_{\text{D}}$	0.1689	0.170 $^{+0.011}_{-0.011}$	(+13.3 σ)	χ^2_{Aver15}	0.00	1.0 (ν : 1.0)	
$\Omega_{\nu}h^2$	0.0032	< 0.0492	(+9.9 σ)	z_{eq}	4509	4100 $^{+3000}_{-2000}$	(+9.0 σ)	χ^2_{Cooke17}	0.00	1.0 (ν : 1.1)	
$\Omega_{\text{m}}h^3$	0.134	0.138 $^{+0.092}_{-0.076}$	(+7.2 σ)	k_{eq}	0.0137	0.0126 $^{+0.0080}_{-0.0071}$	(+13.1 σ)	$\chi^2_{6\text{DF}}$	0.20	0.45 (ν : 0.1)	
$r_{\text{drag}}h$	97.73	97.1 $^{+4.3}_{-4.4}$	(+0.4 σ)	$100\theta_{\text{eq}}$	0.698	0.82 $^{+0.39}_{-0.31}$	(+1.0 σ)	χ^2_{MGS}	0.67	0.71 (ν : 0.2)	
Y_{P}	0.2438	0.2442 $^{+0.0079}_{-0.0080}$	(+0.1 σ)	$100\theta_{\text{s,eq}}$	0.390	0.45 $^{+0.20}_{-0.16}$	(+1.1 σ)	χ^2_{DR12BAO}	2.11	4.0 (ν : 1.8)	
$Y_{\text{P}}^{\text{BBN}}$	0.2451	0.2455 $^{+0.0079}_{-0.0080}$	(+0.1 σ)	$H(0.15)$	77.6	77 $^{+10}_{-10}$	(+1.9 σ)	χ^2_{BAO}	2.98	5.1 (ν : 2.2)	
$10^5\text{D}/\text{H}$	2.618	2.61 $^{+0.18}_{-0.18}$	(−0.3 σ)	$D_{\text{M}}(0.15)$	606	619 $^{+80}_{-90}$	(−1.4 σ)	χ^2_{Abund}	0.00	2.0 (ν : 2.1)	

Best-fit $\chi^2_{\text{eff}} = 2.99$; $\bar{\chi}^2_{\text{eff}} = 7.18$; $R - 1 = 0.00490$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.20 MGS: 0.67 DR12BAO: 2.11

9.54 base_nnu_mnu_BAO_Cooke17_Aver15_Pantheon18

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02200	0.0221 $^{+0.0014}_{-0.0013}$	(+0.4 σ)	z_*	1090.45	1088.5 $^{+3.7}_{-3.2}$	(−3.4 σ)	$H(0.51)$	90.3	86 $^{+10}_{-8}$	(−0.5 σ)
$\Omega_{\text{c}}h^2$	0.122	0.085 $^{+0.053}_{-0.049}$	(−8.5 σ)	r_*	144.8	152 $^{+13}_{-14}$	(+2.6 σ)	$D_{\text{M}}(0.51)$	1970	2071 $^{+190}_{-200}$	(+0.2 σ)
$100\theta_{\text{MC}}$	1.0497	1.050 $^{+0.039}_{-0.040}$	(+15.5 σ)	$100\theta_*$	1.0500	1.051 $^{+0.039}_{-0.040}$	(+13.4 σ)	$H(0.61)$	96.0	92 $^{+10}_{-9}$	(−0.7 σ)
Σm_{ν} [eV]	0.06	—		$D_{\text{M}}(z_*)/\text{Gpc}$	13.79	14.5 $^{+1.7}_{-1.7}$	(+2.2 σ)	$D_{\text{M}}(0.61)$	2292	2410 $^{+230}_{-230}$	(+0.2 σ)
N_{eff}	2.93	2.96 $^{+0.56}_{-0.53}$	(+0.1 σ)	z_{drag}	1059.1	1057.8 $^{+5.2}_{-5.0}$	(−0.9 σ)	$H(2.33)$	237.9	227 $^{+30}_{-30}$	(−2.4 σ)
H_0	68.0	64.7 $^{+6.0}_{-5.4}$	(+0.1 σ)	r_{drag}	147.6	155 $^{+14}_{-15}$	(+2.5 σ)	$D_{\text{M}}(2.33)$	5723	6017 $^{+650}_{-650}$	(+0.9 σ)
Ω_{Λ}	0.6870	0.685 $^{+0.040}_{-0.041}$	(+0.8 σ)	k_{D}	0.1405	0.134 $^{+0.014}_{-0.012}$	(−2.9 σ)	χ^2_{Aver15}	0.00	1.0 (ν : 1.0)	
Ω_{m}	0.3130	0.315 $^{+0.041}_{-0.040}$	(−0.8 σ)	$100\theta_{\text{D}}$	0.1621	0.1619 $^{+0.0053}_{-0.0051}$	(+1.5 σ)	χ^2_{Cooke17}	0.00	0.96 (ν : 0.9)	
$\Omega_{\text{m}}h^2$	0.1446	0.133 $^{+0.037}_{-0.032}$	(−2.4 σ)	z_{eq}	3497	2592 $^{+1000}_{-1000}$	(−11.7 σ)	χ^2_{JLA}	1035.14	1036.1 (ν : 1.6)	
$\Omega_{\nu}h^2$	0.0006	< 0.0490	(+9.9 σ)	k_{eq}	0.01059	0.0081 $^{+0.0036}_{-0.0033}$	(−14.1 σ)	$\chi^2_{6\text{DF}}$	0.000	0.053 (ν : 0.0)	
$\Omega_{\text{m}}h^3$	0.0983	0.086 $^{+0.032}_{-0.027}$	(−1.1 σ)	$100\theta_{\text{eq}}$	0.802	1.07 $^{+0.43}_{-0.34}$	(+19.7 σ)	χ^2_{MGS}	1.68	1.75 (ν : 0.2)	
$r_{\text{drag}}h$	100.32	100.3 $^{+2.3}_{-2.3}$	(+1.1 σ)	$100\theta_{\text{s,eq}}$	0.444	0.58 $^{+0.22}_{-0.17}$	(+19.9 σ)	χ^2_{DR12BAO}	2.95	4.0 (ν : 1.3)	
Y_{P}	0.2436	0.2441 $^{+0.0078}_{-0.0078}$	(+0.1 σ)	$H(0.15)$	73.3	69.8 $^{+6.8}_{-6.2}$	(−0.1 σ)	χ^2_{BAO}	4.63	5.8 (ν : 1.7)	
$Y_{\text{P}}^{\text{BBN}}$	0.2449	0.2454 $^{+0.0079}_{-0.0078}$	(+0.1 σ)	$D_{\text{M}}(0.15)$	638	671 $^{+59}_{-62}$	(−0.0 σ)	χ^2_{Abund}	0.00	2.0 (ν : 1.8)	
$10^5\text{D}/\text{H}$	2.614	2.61 $^{+0.18}_{-0.18}$	(−0.2 σ)	$H(0.38)$	83.5	79.6 $^{+8.7}_{-7.3}$	(−0.4 σ)				
Age/Gyr	13.70	14.4 $^{+1.6}_{-1.6}$	(+1.0 σ)	$D_{\text{M}}(0.38)$	1521	1599 $^{+150}_{-150}$	(+0.1 σ)				

Best-fit $\chi^2_{\text{eff}} = 1039.77$; $\bar{\chi}^2_{\text{eff}} = 1043.83$; $R - 1 = 0.00972$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 2.95 SN - JLA Pantheon18: 1035.14

9.55 base_nnu_mnu_BAO_Cooke17_Aver15_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\mathrm{b}}h^2$	0.02187	0.0221 $^{+0.0014}_{-0.0013}$	(+0.4 σ)	z_*	1089.32	1087.9 $^{+2.2}_{-2.0}$	(−4.5 σ)	$H(0.51)$	87.4	84.5 $^{+5.9}_{-5.3}$	(−1.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.1072	0.078 $^{+0.038}_{-0.036}$	(−10.2 σ)	r_*	149.0	154.3 $^{+9.5}_{-11}$	(+3.3 σ)	$D_{\mathrm{M}}(0.51)$	2030	2102 $^{+140}_{-150}$	(+0.5 σ)
$100\theta_{\mathrm{MC}}$	1.04087	1.0409 $^{+0.0012}_{-0.0012}$	(+0.3 σ)	$100\theta_*$	1.04143	1.0417 $^{+0.0013}_{-0.0014}$	(+0.8 σ)	$H(0.61)$	92.8	89.8 $^{+6.3}_{-5.6}$	(−1.4 σ)
Σm_{ν} [eV]	0.47	—		$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.31	14.81 $^{+0.91}_{-1.0}$	(+3.4 σ)	$D_{\mathrm{M}}(0.61)$	2363	2447 $^{+160}_{-170}$	(+0.6 σ)
N_{eff}	2.88	2.96 $^{+0.56}_{-0.52}$	(+0.1 σ)	z_{drag}	1057.76	1057.2 $^{+4.5}_{-4.3}$	(−1.3 σ)	$H(2.33)$	229.1	222 $^{+15}_{-14}$	(−3.9 σ)
H_0	66.09	63.9 $^{+4.7}_{-4.3}$	(−0.2 σ)	r_{drag}	151.9	157 $^{+10}_{-11}$	(+3.3 σ)	$D_{\mathrm{M}}(2.33)$	5920	6128 $^{+380}_{-430}$	(+1.6 σ)
Ω_{Λ}	0.6935	0.693 $^{+0.017}_{-0.019}$	(+0.9 σ)	k_{D}	0.1362	0.1321 $^{+0.0088}_{-0.0077}$	(−4.0 σ)	χ^2_{Aver15}	0.02	1.0 (ν : 1.0)	
Ω_{m}	0.3065	0.307 $^{+0.019}_{-0.017}$	(−0.9 σ)	$100\theta_{\mathrm{D}}$	0.16117	0.1608 $^{+0.0016}_{-0.0017}$	(−0.2 σ)	$\chi^2_{\mathrm{Cooke17}}$	0.00	1.0 (ν : 1.1)	
$\Omega_{\mathrm{m}}h^2$	0.1339	0.126 $^{+0.017}_{-0.015}$	(−3.9 σ)	z_{eq}	3153	2429 $^{+900}_{-800}$	(−13.9 σ)	$\chi^2_{6\mathrm{DF}}$	0.000	0.058 (ν : 0.0)	
$\Omega_{\nu}h^2$	0.0048	< 0.0491	(+9.8 σ)	k_{eq}	0.00952	0.0076 $^{+0.0025}_{-0.0023}$	(−17.1 σ)	χ^2_{MGS}	1.68	1.71 (ν : 0.2)	
$\Omega_{\mathrm{m}}h^3$	0.0885	0.080 $^{+0.017}_{-0.015}$	(−2.0 σ)	$100\theta_{\mathrm{eq}}$	0.860	1.10 $^{+0.37}_{-0.29}$	(+22.1 σ)	$\chi^2_{\mathrm{DR12BAO}}$	3.37	4.3 (ν : 1.1)	
$r_{\mathrm{drag}}h$	100.42	100.3 $^{+2.3}_{-2.3}$	(+1.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.474	0.60 $^{+0.19}_{-0.15}$	(+22.3 σ)	χ^2_{prior}	0.00	0.98 (ν : 1.0)	(−1.7 σ)
Y_{P}	0.2430	0.2440 $^{+0.0078}_{-0.0076}$	(+0.1 σ)	$H(0.15)$	71.18	68.8 $^{+5.0}_{-4.5}$	(−0.4 σ)	χ^2_{BAO}	5.04	6.1 (ν : 1.1)	
$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2443	0.2453 $^{+0.0078}_{-0.0077}$	(+0.1 σ)	$D_{\mathrm{M}}(0.15)$	656.3	680 $^{+45}_{-50}$	(+0.2 σ)	χ^2_{Abund}	0.03	2.1 (ν : 2.1)	
$10^5\mathrm{D}/\mathrm{H}$	2.623	2.61 $^{+0.19}_{-0.18}$	(−0.2 σ)	$H(0.38)$	80.9	78.3 $^{+5.5}_{-5.0}$	(−0.8 σ)				
Age/Gyr	14.17	14.67 $^{+0.91}_{-1.0}$	(+1.7 σ)	$D_{\mathrm{M}}(0.38)$	1567	1622 $^{+100}_{-120}$	(+0.4 σ)				

Best-fit $\chi^2_{\mathrm{eff}} = 5.07$; $\bar{\chi}^2_{\mathrm{eff}} = 9.13$; $R - 1 = 0.00353$

χ^2_{eff} : Abund - Yp_Aver2015: 0.02 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.37

9.56 base_nnu_mnu_BAO_Cooke17_Aver15_Pantheon18_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\mathrm{b}}h^2$	0.02193	0.0220 $^{+0.0014}_{-0.0013}$	(+0.3 σ)	z_*	1089.73	1087.8 $^{+2.2}_{-1.9}$	(−4.6 σ)	$H(0.51)$	88.5	84.4 $^{+5.9}_{-5.2}$	(−1.2 σ)
$\Omega_{\mathrm{c}}h^2$	0.1130	0.078 $^{+0.038}_{-0.036}$	(−10.3 σ)	r_*	147.3	154.6 $^{+9.5}_{-10}$	(+3.5 σ)	$D_{\mathrm{M}}(0.51)$	2005	2104 $^{+140}_{-150}$	(+0.5 σ)
$100\theta_{\mathrm{MC}}$	1.04090	1.0409 $^{+0.0011}_{-0.0011}$	(+0.2 σ)	$100\theta_*$	1.04129	1.0417 $^{+0.0013}_{-0.0013}$	(+0.8 σ)	$H(0.61)$	94.0	89.7 $^{+6.2}_{-5.5}$	(−1.4 σ)
Σm_{ν} [eV]	0.18	—		$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.14	14.84 $^{+0.91}_{-0.98}$	(+3.5 σ)	$D_{\mathrm{M}}(0.61)$	2334	2449 $^{+160}_{-170}$	(+0.6 σ)
N_{eff}	2.92	2.94 $^{+0.55}_{-0.53}$	(+0.0 σ)	z_{drag}	1058.29	1057.1 $^{+4.5}_{-4.1}$	(−1.4 σ)	$H(2.33)$	231.7	221 $^{+15}_{-13}$	(−4.0 σ)
H_0	66.96	63.9 $^{+4.7}_{-4.2}$	(−0.2 σ)	r_{drag}	150.2	158 $^{+10}_{-11}$	(+3.4 σ)	$D_{\mathrm{M}}(2.33)$	5850	6137 $^{+380}_{-410}$	(+1.7 σ)
Ω_{Λ}	0.6949	0.694 $^{+0.016}_{-0.017}$	(+1.0 σ)	k_{D}	0.1379	0.1319 $^{+0.0087}_{-0.0075}$	(−4.1 σ)	χ^2_{Aver15}	0.00	0.98 (ν : 0.9)	
Ω_{m}	0.3051	0.306 $^{+0.017}_{-0.016}$	(−1.0 σ)	$100\theta_{\mathrm{D}}$	0.16109	0.1607 $^{+0.0016}_{-0.0016}$	(−0.2 σ)	$\chi^2_{\mathrm{Cooke17}}$	0.00	0.97 (ν : 1.0)	
$\Omega_{\mathrm{m}}h^2$	0.1368	0.125 $^{+0.017}_{-0.015}$	(−4.0 σ)	z_{eq}	3281	2422 $^{+900}_{-800}$	(−14.0 σ)	χ^2_{JLA}	1034.813	1034.98 (ν : 0.1)	
$\Omega_{\nu}h^2$	0.0019	< 0.0492	(+9.8 σ)	k_{eq}	0.00993	0.0075 $^{+0.0025}_{-0.0023}$	(−17.3 σ)	$\chi^2_{6\mathrm{DF}}$	0.000	0.049 (ν : 0.0)	
$\Omega_{\mathrm{m}}h^3$	0.0916	0.080 $^{+0.017}_{-0.014}$	(−2.1 σ)	$100\theta_{\mathrm{eq}}$	0.834	1.11 $^{+0.38}_{-0.29}$	(+22.4 σ)	χ^2_{MGS}	1.75	1.81 (ν : 0.2)	
$r_{\mathrm{drag}}h$	100.54	100.5 $^{+2.1}_{-2.1}$	(+1.1 σ)	$100\theta_{\mathrm{s,eq}}$	0.461	0.60 $^{+0.19}_{-0.15}$	(+22.5 σ)	$\chi^2_{\mathrm{DR12BAO}}$	3.35	4.1 (ν : 0.7)	
Y_{P}	0.2435	0.2437 $^{+0.0077}_{-0.0078}$	(+0.0 σ)	$H(0.15)$	72.09	68.8 $^{+5.0}_{-4.4}$	(−0.4 σ)	χ^2_{prior}	0.00	0.9 (ν : 0.8)	(−1.7 σ)
$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2448	0.2451 $^{+0.0078}_{-0.0078}$	(+0.0 σ)	$D_{\mathrm{M}}(0.15)$	647.9	680 $^{+45}_{-48}$	(+0.2 σ)	χ^2_{BAO}	5.10	5.9 (ν : 0.8)	
$10^5\mathrm{D}/\mathrm{H}$	2.623	2.61 $^{+0.18}_{-0.18}$	(−0.2 σ)	$H(0.38)$	81.9	78.2 $^{+5.5}_{-4.9}$	(−0.8 σ)	χ^2_{Abund}	0.00	1.9 (ν : 1.9)	
Age/Gyr	14.01	14.69 $^{+0.91}_{-0.99}$	(+1.7 σ)	$D_{\mathrm{M}}(0.38)$	1547	1623 $^{+110}_{-110}$	(+0.4 σ)				

Best-fit $\chi^2_{\mathrm{eff}} = 1039.91$; $\bar{\chi}^2_{\mathrm{eff}} = 1043.81$; $R - 1 = 0.00806$

χ^2_{eff} : Abund - Yp_Aver2015: 0.00 D_Cooke2017: 0.00 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.35 SN - JLA Pantheon18: 1034.81

9.57 base_nnu_mnu_BAO_Cooke17Marc_Aver15

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02175	$0.0219^{+0.0011}_{-0.0011}$	(-0.2σ)	Age/Gyr	13.23	$12.7^{+2.4}_{-2.3}$	(-3.6σ)	$H(0.38)$	84.9	89^{+20}_{-10}	$(+2.7\sigma)$
$\Omega_{\text{c}}h^2$	0.118	$0.145^{+0.11}_{-0.092}$	$(+6.1\sigma)$	z_*	1091.9	$1093.7^{+7.6}_{-6.4}$	$(+5.9\sigma)$	$D_{\text{M}}(0.38)$	1520	1467^{+200}_{-200}	(-1.6σ)
$100\theta_{\text{MC}}$	1.097	$1.110^{+0.071}_{-0.076}$	$(+114.9\sigma)$	r_*	143.3	138^{+20}_{-20}	(-2.7σ)	$H(0.51)$	92.6	97^{+20}_{-20}	$(+3.4\sigma)$
Σm_{ν} [eV]	2.67	—		$100\theta_*$	1.098	$1.111^{+0.071}_{-0.076}$	$(+95.7\sigma)$	$D_{\text{M}}(0.51)$	1960	1890^{+300}_{-300}	(-1.8σ)
N_{eff}	2.92	$2.98^{+0.56}_{-0.54}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.06	$12.5^{+2.6}_{-2.6}$	(-6.0σ)	$H(0.61)$	98.9	104^{+20}_{-20}	$(+3.9\sigma)$
H_0	66.9	69^{+9}_{-8}	$(+1.3\sigma)$	z_{drag}	1059.5	$1061.3^{+7.5}_{-6.6}$	$(+2.0\sigma)$	$D_{\text{M}}(0.61)$	2274	2191^{+300}_{-300}	(-1.9σ)
Ω_{Λ}	0.626	$0.607^{+0.096}_{-0.10}$	(-1.0σ)	r_{drag}	146.1	141^{+20}_{-20}	(-2.6σ)	$H(2.33)$	254	270^{+60}_{-60}	$(+8.8\sigma)$
Ω_{m}	0.374	$0.393^{+0.10}_{-0.096}$	$(+1.0\sigma)$	k_{D}	0.1430	$0.149^{+0.024}_{-0.022}$	$(+4.8\sigma)$	$D_{\text{M}}(2.33)$	5530	5305^{+1000}_{-900}	(-3.5σ)
$\Omega_{\text{m}}h^2$	0.167	$0.192^{+0.098}_{-0.082}$	$(+10.2\sigma)$	$100\theta_{\text{D}}$	0.1682	$0.170^{+0.010}_{-0.010}$	$(+13.6\sigma)$	$\chi^2_{\text{Cooke17Marc}}$	0.00	$1.0 (\nu: 1.0)$	
$\Omega_{\nu}h^2$	0.0279	< 0.0494	$(+10.0\sigma)$	z_{eq}	3391	4018^{+3000}_{-2000}	$(+7.9\sigma)$	χ^2_{Aver15}	0.00	$1.0 (\nu: 1.0)$	
$\Omega_{\text{m}}h^3$	0.112	$0.135^{+0.087}_{-0.070}$	$(+6.7\sigma)$	k_{eq}	0.0104	$0.0124^{+0.0075}_{-0.0065}$	$(+11.6\sigma)$	$\chi^2_{6\text{DF}}$	0.20	$0.43 (\nu: 0.1)$	
$r_{\text{drag}}h$	97.75	$97.2^{+4.2}_{-4.1}$	$(+0.4\sigma)$	$100\theta_{\text{eq}}$	0.869	$0.82^{+0.37}_{-0.29}$	$(+1.4\sigma)$	χ^2_{MGS}	0.67	$0.70 (\nu: 0.2)$	
Y_{P}	0.2435	$0.2441^{+0.0078}_{-0.0079}$	$(+0.1\sigma)$	$100\theta_{\text{s,eq}}$	0.481	$0.46^{+0.19}_{-0.15}$	$(+1.5\sigma)$	χ^2_{DR12BAO}	2.11	$3.9 (\nu: 1.6)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2448	$0.2455^{+0.0078}_{-0.0079}$	$(+0.1\sigma)$	$H(0.15)$	73.1	76^{+10}_{-10}	$(+1.8\sigma)$	χ^2_{BAO}	2.98	$5.0 (\nu: 2.0)$	
$10^5\text{D}/\text{H}$	2.661	$2.659^{+0.082}_{-0.086}$	$(+0.4\sigma)$	$D_{\text{M}}(0.15)$	644	623^{+80}_{-80}	(-1.3σ)	χ^2_{Abund}	0.00	$2.0 (\nu: 2.0)$	

Best-fit $\chi^2_{\text{eff}} = 2.99$; $\bar{\chi}^2_{\text{eff}} = 7.06$; $R - 1 = 0.00313$

χ^2_{eff} : Abund - D_Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.20 MGS: 0.67 DR12BAO: 2.11

9.58 base_nnu_mnu_BAO_Cooke17Marc_Aver15_Pantheon18

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02179	$0.0219^{+0.0011}_{-0.0011}$	(-0.2σ)	z_*	1090.16	$1088.8^{+3.3}_{-3.0}$	(-2.9σ)	$H(0.51)$	89.1	$86.0^{+8.7}_{-8.1}$	(-0.6σ)
$\Omega_{\text{c}}h^2$	0.1150	$0.085^{+0.051}_{-0.047}$	(-8.5σ)	r_*	146.7	152^{+13}_{-14}	$(+2.6\sigma)$	$D_{\text{M}}(0.51)$	1996	2073^{+190}_{-190}	$(+0.2\sigma)$
$100\theta_{\text{MC}}$	1.0475	$1.050^{+0.037}_{-0.038}$	$(+15.2\sigma)$	$100\theta_*$	1.0479	$1.051^{+0.036}_{-0.037}$	$(+13.2\sigma)$	$H(0.61)$	94.6	$91.5^{+9.5}_{-8.8}$	(-0.7σ)
Σm_{ν} [eV]	0.35	—		$D_{\text{M}}(z_*)/\text{Gpc}$	14.00	$14.5^{+1.7}_{-1.6}$	$(+2.2\sigma)$	$D_{\text{M}}(0.61)$	2323	2412^{+220}_{-220}	$(+0.2\sigma)$
N_{eff}	2.94	$2.98^{+0.55}_{-0.53}$	$(+0.1\sigma)$	z_{drag}	1058.14	$1057.2^{+4.7}_{-4.4}$	(-1.3σ)	$H(2.33)$	234.5	227^{+30}_{-30}	(-2.5σ)
H_0	67.1	$64.7^{+5.7}_{-5.2}$	$(+0.0\sigma)$	r_{drag}	149.6	155^{+13}_{-14}	$(+2.6\sigma)$	$D_{\text{M}}(2.33)$	5803	6021^{+620}_{-610}	$(+1.0\sigma)$
Ω_{Λ}	0.6879	$0.685^{+0.038}_{-0.038}$	$(+0.8\sigma)$	k_{D}	0.1383	$0.134^{+0.012}_{-0.011}$	(-3.1σ)	$\chi^2_{\text{Cooke17Marc}}$	0.00	$1.0 (\nu: 1.0)$	
Ω_{m}	0.3121	$0.315^{+0.038}_{-0.038}$	(-0.8σ)	$100\theta_{\text{D}}$	0.16231	$0.1623^{+0.0048}_{-0.0049}$	$(+2.0\sigma)$	χ^2_{Aver15}	0.00	$0.97 (\nu: 1.0)$	
$\Omega_{\text{m}}h^2$	0.1404	$0.132^{+0.034}_{-0.031}$	(-2.5σ)	z_{eq}	3317	2585^{+1000}_{-1000}	(-11.8σ)	χ^2_{JLA}	1035.09	$1036.0 (\nu: 1.3)$	
$\Omega_{\nu}h^2$	0.0036	< 0.0490	$(+9.8\sigma)$	k_{eq}	0.01005	$0.0080^{+0.0034}_{-0.0031}$	(-14.2σ)	$\chi^2_{6\text{DF}}$	0.000	$0.054 (\nu: 0.0)$	
$\Omega_{\text{m}}h^3$	0.0942	$0.086^{+0.029}_{-0.026}$	(-1.1σ)	$100\theta_{\text{eq}}$	0.833	$1.07^{+0.42}_{-0.33}$	$(+19.6\sigma)$	χ^2_{MGS}	1.68	$1.74 (\nu: 0.2)$	
$r_{\text{drag}}h$	100.34	$100.3^{+2.4}_{-2.2}$	$(+1.1\sigma)$	$100\theta_{\text{s,eq}}$	0.460	$0.58^{+0.21}_{-0.17}$	$(+19.8\sigma)$	χ^2_{DR12BAO}	3.00	$3.9 (\nu: 1.2)$	
Y_{P}	0.2437	$0.2442^{+0.0076}_{-0.0078}$	$(+0.1\sigma)$	$H(0.15)$	72.3	$69.8^{+6.4}_{-5.9}$	(-0.1σ)	χ^2_{BAO}	4.68	$5.7 (\nu: 1.6)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2450	$0.2455^{+0.0076}_{-0.0078}$	$(+0.1\sigma)$	$D_{\text{M}}(0.15)$	646	672^{+56}_{-59}	(-0.0σ)	χ^2_{Abund}	0.00	$2.0 (\nu: 2.0)$	
$10^5\text{D}/\text{H}$	2.660	$2.660^{+0.082}_{-0.085}$	$(+0.4\sigma)$	$H(0.38)$	82.4	$79.5^{+8.2}_{-7.0}$	(-0.4σ)				
Age/Gyr	13.89	$14.4^{+1.5}_{-1.5}$	$(+1.0\sigma)$	$D_{\text{M}}(0.38)$	1541	1601^{+140}_{-150}	$(+0.1\sigma)$				

Best-fit $\chi^2_{\text{eff}} = 1039.76$; $\bar{\chi}^2_{\text{eff}} = 1043.75$; $R - 1 = 0.00814$

χ^2_{eff} : Abund - D_Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.00 SN - JLA Pantheon18: 1035.09

9.59 base_nnu_mnu_BAO_Cooke17Marc_Aver15_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02173	$0.0218^{+0.0012}_{-0.0011}$	(-0.3σ)	z_*	1088.67	$1088.1^{+2.0}_{-1.5}$	(-4.1σ)	$H(0.51)$	85.5	$84.2^{+5.8}_{-5.2}$	(-1.2σ)
$\Omega_{\text{c}}h^2$	0.0931	$0.077^{+0.038}_{-0.035}$	(-10.5σ)	r_*	152.3	$154.8^{+9.7}_{-10}$	$(+3.6\sigma)$	$D_{\text{M}}(0.51)$	2077	2112^{+140}_{-150}	$(+0.6\sigma)$
$100\theta_{\text{MC}}$	1.04086	$1.0409^{+0.0012}_{-0.0012}$	$(+0.3\sigma)$	$100\theta_*$	1.04167	$1.0418^{+0.0013}_{-0.0013}$	$(+0.9\sigma)$	$H(0.61)$	90.8	$89.4^{+6.1}_{-5.5}$	(-1.5σ)
Σm_{ν} [eV]	1.31	—		$D_{\text{M}}(z_*)/\text{Gpc}$	14.62	$14.86^{+0.92}_{-0.98}$	$(+3.6\sigma)$	$D_{\text{M}}(0.61)$	2417	2458^{+160}_{-170}	$(+0.7\sigma)$
N_{eff}	2.91	$2.95^{+0.59}_{-0.54}$	$(+0.1\sigma)$	z_{drag}	1056.73	$1056.5^{+4.2}_{-3.9}$	(-1.9σ)	$H(2.33)$	224.4	221^{+15}_{-14}	(-4.1σ)
H_0	64.56	$63.6^{+4.7}_{-4.2}$	(-0.2σ)	r_{drag}	155.3	158^{+10}_{-11}	$(+3.5\sigma)$	$D_{\text{M}}(2.33)$	6051	6152^{+380}_{-410}	$(+1.8\sigma)$
Ω_{Λ}	0.6919	$0.692^{+0.017}_{-0.018}$	$(+0.9\sigma)$	k_{D}	0.1331	$0.1314^{+0.0084}_{-0.0075}$	(-4.3σ)	$\chi^2_{\text{Cooke17Marc}}$	0.00	$0.99 (\nu: 1.0)$	
Ω_{m}	0.3081	$0.308^{+0.018}_{-0.017}$	(-0.9σ)	$100\theta_{\text{D}}$	0.16148	$0.1611^{+0.0010}_{-0.0011}$	$(+0.2\sigma)$	χ^2_{Aver15}	0.01	$1.0 (\nu: 1.1)$	
$\Omega_{\text{m}}h^2$	0.1284	$0.125^{+0.017}_{-0.015}$	(-4.1σ)	z_{eq}	2794	2388^{+900}_{-800}	(-14.5σ)	$\chi^2_{6\text{DF}}$	0.001	$0.057 (\nu: 0.0)$	
$\Omega_{\nu}h^2$	0.0136	< 0.0496	$(+10.2\sigma)$	k_{eq}	0.00850	$0.0075^{+0.0025}_{-0.0022}$	(-17.8σ)	χ^2_{MGS}	1.61	$1.69 (\nu: 0.2)$	
$\Omega_{\text{m}}h^3$	0.0829	$0.079^{+0.016}_{-0.014}$	(-2.1σ)	$100\theta_{\text{eq}}$	0.946	$1.12^{+0.38}_{-0.30}$	$(+23.3\sigma)$	χ^2_{DR12BAO}	3.37	$4.3 (\nu: 1.1)$	
$r_{\text{drag}}h$	100.30	$100.3^{+2.3}_{-2.2}$	$(+1.1\sigma)$	$100\theta_{\text{s,eq}}$	0.519	$0.61^{+0.19}_{-0.15}$	$(+23.5\sigma)$	χ^2_{prior}	0.00	$1.0 (\nu: 1.1)$	(-1.7σ)
Y_{P}	0.2433	$0.2438^{+0.0082}_{-0.0079}$	$(+0.1\sigma)$	$H(0.15)$	69.55	$68.5^{+4.9}_{-4.4}$	(-0.5σ)	χ^2_{BAO}	4.98	$6.0 (\nu: 1.1)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2446	$0.2451^{+0.0082}_{-0.0079}$	$(+0.1\sigma)$	$D_{\text{M}}(0.15)$	671.7	683^{+45}_{-48}	$(+0.3\sigma)$	χ^2_{Abund}	0.01	$2.0 (\nu: 2.1)$	
$10^5\text{D}/\text{H}$	2.662	$2.661^{+0.084}_{-0.085}$	$(+0.4\sigma)$	$H(0.38)$	79.1	$77.9^{+5.4}_{-4.9}$	(-0.9σ)				
Age/Gyr	14.49	$14.73^{+0.92}_{-0.98}$	$(+1.8\sigma)$	$D_{\text{M}}(0.38)$	1603	1630^{+110}_{-110}	$(+0.5\sigma)$				

Best-fit $\chi^2_{\text{eff}} = 4.99$; $\bar{\chi}^2_{\text{eff}} = 9.06$; $R - 1 = 0.01055$

χ^2_{eff} : Abund - D.Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.01 BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 3.37

9.60 base_nnu_mnu_BAO_Cooke17Marc_Aver15_Pantheon18_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02176	$0.0218^{+0.0011}_{-0.0010}$	(-0.2σ)	z_*	1089.95	$1088.1^{+2.0}_{-1.6}$	(-4.0σ)	$H(0.51)$	88.3	$84.4^{+6.0}_{-5.3}$	(-1.1σ)
$\Omega_{\text{c}}h^2$	0.1127	$0.078^{+0.039}_{-0.036}$	(-10.2σ)	r_*	147.4	$154.5^{+9.6}_{-11}$	$(+3.4\sigma)$	$D_{\text{M}}(0.51)$	2009	2104^{+140}_{-150}	$(+0.5\sigma)$
$100\theta_{\text{MC}}$	1.04093	$1.0409^{+0.0012}_{-0.0012}$	$(+0.2\sigma)$	$100\theta_*$	1.04136	$1.0418^{+0.0013}_{-0.0014}$	$(+0.9\sigma)$	$H(0.61)$	93.8	$89.7^{+6.3}_{-5.6}$	(-1.4σ)
Σm_{ν} [eV]	0.22	—		$D_{\text{M}}(z_*)/\text{Gpc}$	14.16	$14.83^{+0.91}_{-1.0}$	$(+3.5\sigma)$	$D_{\text{M}}(0.61)$	2338	2449^{+160}_{-180}	$(+0.6\sigma)$
N_{eff}	2.93	$2.97^{+0.56}_{-0.52}$	$(+0.1\sigma)$	z_{drag}	1057.87	$1056.6^{+4.2}_{-3.9}$	(-1.8σ)	$H(2.33)$	231.6	221^{+15}_{-14}	(-4.0σ)
H_0	66.79	$63.8^{+4.7}_{-4.2}$	(-0.2σ)	r_{drag}	150.3	158^{+10}_{-11}	$(+3.4\sigma)$	$D_{\text{M}}(2.33)$	5857	6136^{+380}_{-430}	$(+1.7\sigma)$
Ω_{Λ}	0.6935	$0.693^{+0.016}_{-0.016}$	$(+1.0\sigma)$	k_{D}	0.1375	$0.1316^{+0.0087}_{-0.0076}$	(-4.2σ)	$\chi^2_{\text{Cooke17Marc}}$	0.00	$0.96 (\nu: 0.9)$	
Ω_{m}	0.3065	$0.307^{+0.016}_{-0.016}$	(-1.0σ)	$100\theta_{\text{D}}$	0.16141	$0.16109^{+0.00096}_{-0.0011}$	$(+0.3\sigma)$	χ^2_{Aver15}	0.00	$1.0 (\nu: 1.1)$	
$\Omega_{\text{m}}h^2$	0.1367	$0.125^{+0.018}_{-0.015}$	(-4.0σ)	z_{eq}	3265	2414^{+900}_{-800}	(-14.1σ)	χ^2_{JLA}	1034.851	$1034.99 (\nu: 0.1)$	
$\Omega_{\nu}h^2$	0.0022	< 0.0494	$(+9.9\sigma)$	k_{eq}	0.00989	$0.0075^{+0.0026}_{-0.0023}$	(-17.3σ)	$\chi^2_{6\text{DF}}$	0.000	$0.048 (\nu: 0.0)$	
$\Omega_{\text{m}}h^3$	0.0913	$0.080^{+0.017}_{-0.015}$	(-2.0σ)	$100\theta_{\text{eq}}$	0.837	$1.11^{+0.38}_{-0.30}$	$(+22.6\sigma)$	χ^2_{MGS}	1.68	$1.79 (\nu: 0.2)$	
$r_{\text{drag}}h$	100.42	$100.5^{+2.1}_{-2.0}$	$(+1.1\sigma)$	$100\theta_{\text{s,eq}}$	0.462	$0.60^{+0.19}_{-0.15}$	$(+22.8\sigma)$	χ^2_{DR12BAO}	3.37	$4.1 (\nu: 0.7)$	
Y_{P}	0.2436	$0.2440^{+0.0078}_{-0.0076}$	$(+0.1\sigma)$	$H(0.15)$	71.93	$68.8^{+5.0}_{-4.5}$	(-0.4σ)	χ^2_{prior}	0.00	$1.0 (\nu: 1.0)$	(-1.7σ)
$Y_{\text{P}}^{\text{BBN}}$	0.2449	$0.2453^{+0.0078}_{-0.0077}$	$(+0.1\sigma)$	$D_{\text{M}}(0.15)$	649.4	680^{+45}_{-50}	$(+0.2\sigma)$	χ^2_{BAO}	5.04	$5.9 (\nu: 0.8)$	
$10^5\text{D}/\text{H}$	2.662	$2.660^{+0.081}_{-0.082}$	$(+0.4\sigma)$	$H(0.38)$	81.8	$78.2^{+5.6}_{-5.0}$	(-0.8σ)	χ^2_{Abund}	0.00	$2.0 (\nu: 1.9)$	
Age/Gyr	14.02	$14.69^{+0.91}_{-1.0}$	$(+1.7\sigma)$	$D_{\text{M}}(0.38)$	1550	1624^{+110}_{-120}	$(+0.4\sigma)$				

Best-fit $\chi^2_{\text{eff}} = 1039.90$; $\bar{\chi}^2_{\text{eff}} = 1043.87$; $R - 1 = 0.00926$

χ^2_{eff} : Abund - D.Cooke2017_marcucci: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 3.37 SN - JLA Pantheon18: 1034.85

9.61 base_nnu_mnu_BAO_Cooke17Adel_Aver15

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02251	$0.0225^{+0.0013}_{-0.0012}$	(+1.6 σ)	Age/Gyr	12.33	$12.6^{+2.5}_{-2.4}$	(−3.7 σ)	$H(0.38)$	91.0	89^{+20}_{-10}	(+2.9 σ)
$\Omega_{\text{c}}h^2$	0.168	$0.147^{+0.11}_{-0.097}$	(+6.6 σ)	z_*	1093.5	$1092.9^{+7.3}_{-7.0}$	(+4.4 σ)	$D_{\text{M}}(0.38)$	1419	1459^{+200}_{-200}	(−1.7 σ)
$100\theta_{\text{MC}}$	1.102	$1.110^{+0.074}_{-0.083}$	(+115.9 σ)	r_*	134.0	138^{+20}_{-20}	(−2.9 σ)	$H(0.51)$	99.3	98^{+20}_{-20}	(+3.6 σ)
Σm_{ν} [eV]	0.26	—		$100\theta_*$	1.102	$1.111^{+0.074}_{-0.083}$	(+96.3 σ)	$D_{\text{M}}(0.51)$	1829	1880^{+300}_{-300}	(−1.9 σ)
N_{eff}	2.93	$2.94^{+0.57}_{-0.53}$	(+0.0 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	12.16	$12.4^{+2.8}_{-2.7}$	(−6.2 σ)	$H(0.61)$	106.1	105^{+20}_{-20}	(+4.2 σ)
H_0	71.7	70^{+9}_{-9}	(+1.4 σ)	z_{drag}	1063.4	$1062.9^{+7.6}_{-7.0}$	(+3.3 σ)	$D_{\text{M}}(0.61)$	2121	2179^{+400}_{-300}	(−2.0 σ)
Ω_{Λ}	0.624	$0.61^{+0.10}_{-0.11}$	(−0.9 σ)	r_{drag}	136.4	140^{+20}_{-20}	(−2.9 σ)	$H(2.33)$	273	271^{+70}_{-60}	(+9.2 σ)
Ω_{m}	0.376	$0.39^{+0.11}_{-0.10}$	(+0.9 σ)	k_{D}	0.1535	$0.151^{+0.026}_{-0.023}$	(+5.6 σ)	$D_{\text{M}}(2.33)$	5155	5280^{+1000}_{-1000}	(−3.7 σ)
$\Omega_{\text{m}}h^2$	0.193	$0.194^{+0.098}_{-0.087}$	(+10.6 σ)	$100\theta_{\text{D}}$	0.1684	$0.169^{+0.011}_{-0.011}$	(+12.0 σ)	$\chi^2_{\text{Cooke17Adel}}$	0.01	1.0 (ν : 1.0)	
$\Omega_{\nu}h^2$	0.0027	< 0.0489	(+9.9 σ)	z_{eq}	4622	4096^{+3000}_{-2000}	(+9.0 σ)	χ^2_{Aver15}	0.01	1.0 (ν : 1.1)	
$\Omega_{\text{m}}h^3$	0.138	$0.138^{+0.088}_{-0.074}$	(+7.1 σ)	k_{eq}	0.0140	$0.0126^{+0.0076}_{-0.0069}$	(+12.8 σ)	$\chi^2_{6\text{DF}}$	0.21	0.43 (ν : 0.1)	
$r_{\text{drag}}h$	97.72	$97.2^{+4.4}_{-4.3}$	(+0.4 σ)	$100\theta_{\text{eq}}$	0.688	$0.82^{+0.38}_{-0.30}$	(+0.9 σ)	χ^2_{MGS}	0.67	0.74 (ν : 0.2)	
Y_{P}	0.2439	$0.2440^{+0.0080}_{-0.0079}$	(+0.1 σ)	$100\theta_{\text{s,eq}}$	0.384	$0.45^{+0.20}_{-0.16}$	(+1.0 σ)	χ^2_{DR12BAO}	2.11	3.9 (ν : 1.8)	
$Y_{\text{P}}^{\text{BBN}}$	0.2453	$0.2453^{+0.0080}_{-0.0079}$	(+0.1 σ)	$H(0.15)$	78.4	77^{+10}_{-10}	(+1.9 σ)	χ^2_{BAO}	2.98	5.1 (ν : 2.2)	
$10^5\text{D}/\text{H}$	2.522	$2.52^{+0.13}_{-0.13}$	(−1.5 σ)	$D_{\text{M}}(0.15)$	601	619^{+80}_{-80}	(−1.4 σ)	χ^2_{Abund}	0.01	2.0 (ν : 2.1)	

Best-fit $\chi^2_{\text{eff}} = 3.00$; $\bar{\chi}^2_{\text{eff}} = 7.14$; $R - 1 = 0.00205$

χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.01 Yp_Aver2015: 0.01 BAO - 6DF: 0.21 MGS: 0.67 DR12BAO: 2.11

9.62 base_nnu_mnu_BAO_Cooke17Adel_Aver15_Pantheon18

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}}h^2$	0.02246	$0.0225^{+0.0013}_{-0.0013}$	(+1.6 σ)	z_*	1089.95	$1088.0^{+3.6}_{-3.1}$	(−4.2 σ)	$H(0.51)$	90.8	87^{+10}_{-9}	(−0.4 σ)
$\Omega_{\text{c}}h^2$	0.123	$0.086^{+0.053}_{-0.050}$	(−8.3 σ)	r_*	144.2	152^{+14}_{-14}	(+2.4 σ)	$D_{\text{M}}(0.51)$	1959	2063^{+200}_{-200}	(+0.1 σ)
$100\theta_{\text{MC}}$	1.0506	$1.052^{+0.039}_{-0.040}$	(+17.9 σ)	$100\theta_*$	1.0508	$1.052^{+0.039}_{-0.040}$	(+15.4 σ)	$H(0.61)$	96.5	92^{+10}_{-9}	(−0.6 σ)
Σm_{ν} [eV]	0.05	—		$D_{\text{M}}(z_*)/\text{Gpc}$	13.72	$14.4^{+1.8}_{-1.7}$	(+1.9 σ)	$D_{\text{M}}(0.61)$	2279	2400^{+240}_{-230}	(+0.1 σ)
N_{eff}	2.92	$2.94^{+0.56}_{-0.56}$	(+0.0 σ)	z_{drag}	1060.3	$1058.8^{+5.0}_{-5.0}$	(+0.0 σ)	$H(2.33)$	239.1	228^{+30}_{-30}	(−2.2 σ)
H_0	68.3	$65.0^{+6.2}_{-5.5}$	(+0.1 σ)	r_{drag}	146.8	155^{+15}_{-15}	(+2.3 σ)	$D_{\text{M}}(2.33)$	5693	5991^{+700}_{-700}	(+0.8 σ)
Ω_{Λ}	0.6873	$0.685^{+0.039}_{-0.042}$	(+0.8 σ)	k_{D}	0.1417	$0.135^{+0.014}_{-0.012}$	(−2.4 σ)	$\chi^2_{\text{Cooke17Adel}}$	0.00	1.0 (ν : 1.1)	
Ω_{m}	0.3127	$0.315^{+0.042}_{-0.039}$	(−0.8 σ)	$100\theta_{\text{D}}$	0.1616	$0.1614^{+0.0053}_{-0.0052}$	(+0.8 σ)	χ^2_{Aver15}	0.00	1.1 (ν : 1.1)	
$\Omega_{\text{m}}h^2$	0.1460	$0.134^{+0.037}_{-0.034}$	(−2.1 σ)	z_{eq}	3538	2625^{+1000}_{-1000}	(−11.2 σ)	χ^2_{JLA}	1035.12	1036.1 (ν : 1.6)	
$\Omega_{\nu}h^2$	0.0005	< 0.0491	(+10.0 σ)	k_{eq}	0.01071	$0.0082^{+0.0036}_{-0.0033}$	(−13.6 σ)	$\chi^2_{6\text{DF}}$	0.000	0.053 (ν : 0.0)	
$\Omega_{\text{m}}h^3$	0.0998	$0.087^{+0.032}_{-0.028}$	(−0.9 σ)	$100\theta_{\text{eq}}$	0.797	$1.06^{+0.43}_{-0.34}$	(+19.1 σ)	χ^2_{MGS}	1.68	1.74 (ν : 0.2)	
$r_{\text{drag}}h$	100.33	$100.3^{+2.3}_{-2.3}$	(+1.1 σ)	$100\theta_{\text{s,eq}}$	0.441	$0.58^{+0.22}_{-0.17}$	(+19.2 σ)	χ^2_{DR12BAO}	2.97	4.0 (ν : 1.2)	
Y_{P}	0.2437	$0.2440^{+0.0079}_{-0.0083}$	(+0.1 σ)	$H(0.15)$	73.7	$70.1^{+7.0}_{-6.2}$	(+0.0 σ)	χ^2_{BAO}	4.64	5.7 (ν : 1.6)	
$Y_{\text{P}}^{\text{BBN}}$	0.2451	$0.2453^{+0.0079}_{-0.0083}$	(+0.1 σ)	$D_{\text{M}}(0.15)$	634	668^{+61}_{-61}	(−0.1 σ)	χ^2_{Abund}	0.00	2.1 (ν : 2.2)	
$10^5\text{D}/\text{H}$	2.526	$2.52^{+0.13}_{-0.13}$	(−1.5 σ)	$H(0.38)$	84.0	$80.0^{+8.7}_{-7.6}$	(−0.2 σ)				
Age/Gyr	13.63	$14.3^{+1.6}_{-1.6}$	(+0.8 σ)	$D_{\text{M}}(0.38)$	1512	1593^{+150}_{-150}	(+0.0 σ)				

Best-fit $\chi^2_{\text{eff}} = 1039.76$; $\bar{\chi}^2_{\text{eff}} = 1043.96$; $R - 1 = 0.00624$

χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.68 DR12BAO: 2.96 SN - JLA Pantheon18: 1035.12

9.63 base_nnu_mnu_BAO_Cooke17Adel_Aver15_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}} h^2$	0.02240	$0.0225^{+0.0012}_{-0.0012}$	$(+1.5\sigma)$	z_*	1088.62	$1087.3^{+2.0}_{-1.7}$	(-5.4σ)	$H(0.51)$	87.6	$84.7^{+5.9}_{-5.3}$	(-1.0σ)
$\Omega_{\text{c}} h^2$	0.1061	$0.079^{+0.038}_{-0.036}$	(-10.1σ)	r_*	148.8	$154.0^{+9.5}_{-10}$	$(+3.3\sigma)$	$D_{\text{M}}(0.51)$	2026	2096^{+140}_{-150}	$(+0.4\sigma)$
$100\theta_{\text{MC}}$	1.04089	$1.0409^{+0.0011}_{-0.0012}$	$(+0.2\sigma)$	$100\theta_*$	1.04141	$1.0417^{+0.0013}_{-0.0013}$	$(+0.7\sigma)$	$H(0.61)$	93.0	$90.0^{+6.3}_{-5.6}$	(-1.3σ)
Σm_{ν} [eV]	0.56	—		$D_{\text{M}}(z_*)/\text{Gpc}$	14.29	$14.79^{+0.90}_{-1.0}$	$(+3.3\sigma)$	$D_{\text{M}}(0.61)$	2359	2440^{+160}_{-170}	$(+0.5\sigma)$
N_{eff}	2.90	$2.94^{+0.56}_{-0.52}$	$(+0.0\sigma)$	z_{drag}	1058.94	$1058.2^{+4.2}_{-4.0}$	(-0.5σ)	$H(2.33)$	229.5	222^{+15}_{-13}	(-3.8σ)
H_0	66.22	$64.1^{+4.9}_{-4.2}$	(-0.1σ)	r_{drag}	151.5	$156.8^{+9.9}_{-11}$	$(+3.1\sigma)$	$D_{\text{M}}(2.33)$	5909	6114^{+380}_{-410}	$(+1.5\sigma)$
Ω_{Λ}	0.6936	$0.694^{+0.017}_{-0.018}$	$(+1.0\sigma)$	k_{D}	0.1370	$0.1329^{+0.0087}_{-0.0076}$	(-3.6σ)	$\chi^2_{\text{Cooke17Adel}}$	0.00	$1.0 (\nu: 1.1)$	
Ω_{m}	0.3064	$0.306^{+0.018}_{-0.017}$	(-1.0σ)	$100\theta_{\text{D}}$	0.16049	$0.1601^{+0.0012}_{-0.0013}$	(-1.2σ)	χ^2_{Aver15}	0.00	$1.0 (\nu: 0.9)$	
$\Omega_{\text{m}} h^2$	0.1343	$0.126^{+0.017}_{-0.015}$	(-3.8σ)	z_{eq}	3134	2456^{+900}_{-900}	(-13.5σ)	$\chi^2_{6\text{DF}}$	0.001	$0.056 (\nu: 0.0)$	
$\Omega_{\nu} h^2$	0.0058	< 0.0488	$(+9.6\sigma)$	k_{eq}	0.00948	$0.0076^{+0.0025}_{-0.0023}$	(-16.7σ)	χ^2_{MGS}	1.61	$1.74 (\nu: 0.2)$	
$\Omega_{\text{m}} h^3$	0.0890	$0.081^{+0.017}_{-0.015}$	(-1.9σ)	$100\theta_{\text{eq}}$	0.866	$1.09^{+0.37}_{-0.28}$	$(+21.5\sigma)$	χ^2_{DR12BAO}	3.51	$4.3 (\nu: 1.0)$	
$r_{\text{drag}} h$	100.32	$100.4^{+2.3}_{-2.3}$	$(+1.1\sigma)$	$100\theta_{\text{s,eq}}$	0.477	$0.59^{+0.19}_{-0.14}$	$(+21.6\sigma)$	χ^2_{prior}	0.00	$1.0 (\nu: 1.1)$	(-1.7σ)
Y_{P}	0.2434	$0.2439^{+0.0078}_{-0.0077}$	$(+0.1\sigma)$	$H(0.15)$	71.31	$69.0^{+5.2}_{-4.3}$	(-0.3σ)	χ^2_{BAO}	5.12	$6.1 (\nu: 1.0)$	
$Y_{\text{P}}^{\text{BBN}}$	0.2447	$0.2452^{+0.0078}_{-0.0077}$	$(+0.1\sigma)$	$D_{\text{M}}(0.15)$	655.1	678^{+45}_{-49}	$(+0.2\sigma)$	χ^2_{Abund}	0.00	$2.0 (\nu: 2.0)$	
$10^5 \text{D}/\text{H}$	2.529	$2.53^{+0.13}_{-0.13}$	(-1.4σ)	$H(0.38)$	81.1	$78.5^{+5.5}_{-4.9}$	(-0.7σ)				
Age/Gyr	14.15	$14.64^{+0.90}_{-0.99}$	$(+1.6\sigma)$	$D_{\text{M}}(0.38)$	1564	1618^{+110}_{-110}	$(+0.3\sigma)$				

Best-fit $\chi^2_{\text{eff}} = 5.12$; $\bar{\chi}^2_{\text{eff}} = 9.16$; $R - 1 = 0.00663$

χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 3.51

9.64 base_nnu_mnu_BAO_Cooke17Adel_Aver15_Pantheon18_theta

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\text{b}} h^2$	0.02241	$0.0225^{+0.0012}_{-0.0011}$	$(+1.5\sigma)$	z_*	1089.11	$1087.3^{+2.0}_{-1.7}$	(-5.6σ)	$H(0.51)$	88.7	$84.5^{+5.8}_{-5.1}$	(-1.1σ)
$\Omega_{\text{c}} h^2$	0.1128	$0.077^{+0.039}_{-0.035}$	(-10.6σ)	r_*	147.0	$154.5^{+9.3}_{-10}$	$(+3.4\sigma)$	$D_{\text{M}}(0.51)$	2000	2100^{+130}_{-140}	$(+0.5\sigma)$
$100\theta_{\text{MC}}$	1.04095	$1.0409^{+0.0012}_{-0.0011}$	$(+0.2\sigma)$	$100\theta_*$	1.04130	$1.0417^{+0.0013}_{-0.0013}$	$(+0.7\sigma)$	$H(0.61)$	94.2	$89.8^{+6.2}_{-5.4}$	(-1.4σ)
Σm_{ν} [eV]	0.19	—		$D_{\text{M}}(z_*)/\text{Gpc}$	14.12	$14.83^{+0.88}_{-0.97}$	$(+3.5\sigma)$	$D_{\text{M}}(0.61)$	2328	2445^{+150}_{-170}	$(+0.6\sigma)$
N_{eff}	2.90	$2.93^{+0.54}_{-0.51}$	(-0.0σ)	z_{drag}	1059.40	$1058.1^{+4.2}_{-3.8}$	(-0.6σ)	$H(2.33)$	232.0	221^{+15}_{-13}	(-4.0σ)
H_0	67.15	$64.0^{+4.6}_{-4.0}$	(-0.1σ)	r_{drag}	149.7	$157.3^{+9.7}_{-11}$	$(+3.3\sigma)$	$D_{\text{M}}(2.33)$	5838	6130^{+370}_{-410}	$(+1.6\sigma)$
Ω_{Λ}	0.6957	$0.695^{+0.017}_{-0.016}$	$(+1.0\sigma)$	k_{D}	0.1387	$0.1325^{+0.0085}_{-0.0073}$	(-3.8σ)	$\chi^2_{\text{Cooke17Adel}}$	0.00	$0.9 (\nu: 0.9)$	
Ω_{m}	0.3043	$0.305^{+0.016}_{-0.017}$	(-1.0σ)	$100\theta_{\text{D}}$	0.16038	$0.1601^{+0.0012}_{-0.0013}$	(-1.2σ)	χ^2_{Aver15}	0.00	$0.97 (\nu: 0.9)$	
$\Omega_{\text{m}} h^2$	0.1372	$0.125^{+0.017}_{-0.015}$	(-4.0σ)	z_{eq}	3297	2409^{+900}_{-800}	(-14.2σ)	χ^2_{JLA}	1034.793	$1034.94 (\nu: 0.0)$	
$\Omega_{\nu} h^2$	0.0020	< 0.0490	$(+10.1\sigma)$	k_{eq}	0.00996	$0.0075^{+0.0025}_{-0.0022}$	(-17.5σ)	$\chi^2_{6\text{DF}}$	0.000	$0.048 (\nu: 0.0)$	
$\Omega_{\text{m}} h^3$	0.0921	$0.080^{+0.017}_{-0.014}$	(-2.0σ)	$100\theta_{\text{eq}}$	0.833	$1.11^{+0.37}_{-0.30}$	$(+22.7\sigma)$	χ^2_{MGS}	1.75	$1.82 (\nu: 0.2)$	
$r_{\text{drag}} h$	100.55	$100.5^{+2.2}_{-2.0}$	$(+1.1\sigma)$	$100\theta_{\text{s,eq}}$	0.459	$0.60^{+0.18}_{-0.15}$	$(+22.8\sigma)$	χ^2_{DR12BAO}	3.42	$4.1 (\nu: 0.6)$	
Y_{P}	0.2434	$0.2438^{+0.0075}_{-0.0076}$	$(+0.1\sigma)$	$H(0.15)$	72.28	$68.9^{+4.9}_{-4.3}$	(-0.3σ)	χ^2_{prior}	0.01	$0.96 (\nu: 0.9)$	(-1.7σ)
$Y_{\text{P}}^{\text{BBN}}$	0.2447	$0.2451^{+0.0076}_{-0.0076}$	$(+0.1\sigma)$	$D_{\text{M}}(0.15)$	646.1	679^{+43}_{-47}	$(+0.2\sigma)$	χ^2_{BAO}	5.17	$6.0 (\nu: 0.8)$	
$10^5 \text{D}/\text{H}$	2.528	$2.53^{+0.13}_{-0.13}$	(-1.4σ)	$H(0.38)$	82.1	$78.3^{+5.4}_{-4.7}$	(-0.8σ)	χ^2_{Abund}	0.00	$1.9 (\nu: 1.6)$	
Age/Gyr	13.98	$14.68^{+0.88}_{-0.97}$	$(+1.7\sigma)$	$D_{\text{M}}(0.38)$	1543	1620^{+100}_{-110}	$(+0.4\sigma)$				

Best-fit $\chi^2_{\text{eff}} = 1039.97$; $\bar{\chi}^2_{\text{eff}} = 1043.82$; $R - 1 = 0.01456$

χ^2_{eff} : Abund - D.Cooke2017_adelberger: 0.00 Yp_Aver2015: 0.00 BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.42 SN - JLA Pantheon18: 1034.79

10 nnu+nrn

10.1 base_nnu_nrn_plikHM_TTTEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022135	$0.02216^{+0.00044}_{-0.00045}$	$\Omega_m h^2$	0.1385	$0.1390^{+0.0069}_{-0.0065}$	$100\theta_{\text{eq}}$	0.8044	$0.805^{+0.015}_{-0.015}$
$\Omega_c h^2$	0.1157	$0.1162^{+0.0066}_{-0.0062}$	$\Omega_m h^3$	0.0899	$0.0906^{+0.0085}_{-0.0080}$	$100\theta_{\text{s,eq}}$	0.4449	$0.4452^{+0.0076}_{-0.0075}$
$100\theta_{\text{MC}}$	1.04144	$1.04139^{+0.00093}_{-0.00095}$	σ_8	0.7989	$0.800^{+0.023}_{-0.022}$	$H(0.15)$	70.25	$70.5^{+3.2}_{-3.1}$
τ	0.0548	$0.055^{+0.016}_{-0.015}$	S_8	0.8365	$0.836^{+0.032}_{-0.031}$	$D_{\text{M}}(0.15)$	666.7	665^{+32}_{-31}
N_{eff}	2.711	$2.74^{+0.44}_{-0.42}$	$\sigma_8 \Omega_m^{0.5}$	0.4582	$0.458^{+0.018}_{-0.017}$	$H(0.38)$	80.43	$80.7^{+3.2}_{-3.1}$
$\ln(10^{10} A_s)$	3.0364	$3.037^{+0.037}_{-0.035}$	$\sigma_8 \Omega_m^{0.25}$	0.6050	$0.605^{+0.018}_{-0.017}$	$D_{\text{M}}(0.38)$	1586	1582^{+72}_{-69}
n_s	0.9500	$0.950^{+0.021}_{-0.022}$	$\sigma_8/h^{0.5}$	0.9917	$0.991^{+0.024}_{-0.023}$	$H(0.51)$	87.17	$87.4^{+3.2}_{-3.1}$
$dn_s/d \ln k$	-0.0105	$-0.012^{+0.016}_{-0.015}$	$r_{\text{drag}} h$	97.52	$97.6^{+2.7}_{-2.6}$	$D_{\text{M}}(0.51)$	2051	2046^{+89}_{-86}
y_{cal}	1.00054	$1.0005^{+0.0049}_{-0.0049}$	$\langle d^2 \rangle^{1/2}$	2.458	$2.455^{+0.060}_{-0.057}$	$H(0.61)$	92.79	$93.0^{+3.2}_{-3.1}$
A_{217}^{CIB}	46.8	47^{+10}_{-10}	z_{re}	7.68	$7.7^{+1.6}_{-1.5}$	$D_{\text{M}}(0.61)$	2385	2379^{+100}_{-97}
$\xi^{\text{tSZ} \times \text{CIB}}$	0.49	—	$10^9 A_s$	2.083	$2.085^{+0.079}_{-0.073}$	$H(2.33)$	232.4	$232.9^{+6.0}_{-5.7}$
A_{143}^{tSZ}	7.06	$5.2^{+3.7}_{-3.9}$	$10^9 A_s e^{-2\tau}$	1.8666	$1.868^{+0.036}_{-0.036}$	$D_{\text{M}}(2.33)$	5912	5899^{+200}_{-190}
A_{100}^{PS}	250	261^{+50}_{-60}	D_{40}	1225.2	1223^{+37}_{-37}	$f\sigma_8(0.15)$	0.4613	$0.461^{+0.016}_{-0.016}$
A_{143}^{PS}	48.8	47^{+20}_{-20}	D_{220}	5729	5729^{+75}_{-74}	$\sigma_8(0.15)$	0.7366	$0.737^{+0.022}_{-0.021}$
$A_{143 \times 217}^{\text{PS}}$	49.0	42^{+20}_{-20}	D_{810}	2540.0	2539^{+27}_{-27}	$f\sigma_8(0.38)$	0.4755	$0.475^{+0.014}_{-0.013}$
A_{217}^{PS}	120.4	115^{+20}_{-20}	D_{1420}	817.6	$816.0^{+9.7}_{-9.9}$	$\sigma_8(0.38)$	0.6511	$0.652^{+0.021}_{-0.020}$
A^{kSZ}	0.00	< 8.35	D_{2000}	231.55	$230.8^{+3.7}_{-3.7}$	$f\sigma_8(0.51)$	0.4721	$0.472^{+0.013}_{-0.013}$
A_{100}^{dustTT}	8.71	$8.8^{+3.6}_{-3.6}$	$n_{\text{s},0.002}$	0.9838	$0.988^{+0.041}_{-0.041}$	$\sigma_8(0.51)$	0.6086	$0.609^{+0.020}_{-0.019}$
A_{143}^{dustTT}	10.87	$10.8^{+3.6}_{-3.5}$	Y_{P}	0.2407	$0.2411^{+0.0062}_{-0.0061}$	$f\sigma_8(0.61)$	0.4659	$0.466^{+0.013}_{-0.012}$
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.5^{+6.3}_{-6.5}$	$Y_{\text{P}}^{\text{BBN}}$	0.2420	$0.2424^{+0.0062}_{-0.0061}$	$\sigma_8(0.61)$	0.5787	$0.579^{+0.020}_{-0.018}$
A_{217}^{dustTT}	95.1	94^{+10}_{-10}	$10^5 D/H$	2.513	$2.52^{+0.11}_{-0.099}$	$f\sigma_8(2.33)$	0.2912	$0.291^{+0.010}_{-0.0097}$
A_{100}^{dustTE}	0.115	$0.114^{+0.075}_{-0.074}$	Age/Gyr	14.148	$14.12^{+0.47}_{-0.46}$	$\sigma_8(2.33)$	0.2994	$0.300^{+0.011}_{-0.011}$
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.058}_{-0.058}$	z_*	1089.51	$1089.55^{+0.76}_{-0.72}$	f_{2000}^{143}	28.8	30^{+6}_{-6}
$A_{100 \times 217}^{\text{dustTE}}$	0.484	$0.48^{+0.17}_{-0.17}$	r_*	147.47	$147.2^{+4.2}_{-4.2}$	$f_{2000}^{143 \times 217}$	31.94	33^{+4}_{-4}
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	1.04186	$1.0418^{+0.0012}_{-0.0012}$	f_{2000}^{217}	106.53	$107.3^{+3.9}_{-4.0}$
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.154	$14.13^{+0.39}_{-0.39}$	χ_{simall}^2	396.09	$397.1 (\nu: 1.5)$
A_{217}^{dustTE}	2.09	$2.08^{+0.53}_{-0.53}$	z_{drag}	1058.83	$1058.9^{+1.7}_{-1.7}$	χ_{lowl}^2	22.41	$22.5 (\nu: 1.1)$
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	150.24	$150.0^{+4.4}_{-4.3}$	χ_{plik}^2	2343.2	$2360.1 (\nu: 18.4)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	0.13872	$0.1389^{+0.0031}_{-0.0030}$	χ_{prior}^2	1.5	$11.4 (\nu: 10.1)$
H_0	64.90	$65.1^{+3.3}_{-3.2}$	$100\theta_{\text{D}}$	0.16000	$0.1601^{+0.0010}_{-0.00096}$	χ_{CMB}^2	2761.7	$2779.7 (\nu: 18.5)$
Ω_{Λ}	0.6712	$0.672^{+0.023}_{-0.024}$	z_{eq}	3450	3448^{+81}_{-80}			
Ω_{m}	0.3288	$0.328^{+0.024}_{-0.023}$	k_{eq}	0.010290	$0.01031^{+0.00024}_{-0.00023}$			

Best-fit $\chi_{\text{eff}}^2 = 2763.19$; $\Delta\chi_{\text{eff}}^2 = -2.59$; $\bar{\chi}_{\text{eff}}^2 = 2791.11$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.66$; $R - 1 = 0.01356$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.09 (Δ 0.04) commander_dx12_v3.2.29: 22.41 (Δ -0.85) plik_rd12_HM_v22b_TTTEE: 2343.18 (Δ -1.47)

10.2 base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022331	$0.02236^{+0.00035}_{-0.00036}$	$\Omega_m h^3$	0.0929	$0.0937^{+0.0078}_{-0.0072}$	$H(0.15)$	71.85	$72.1^{+2.6}_{-2.4}$
$\Omega_c h^2$	0.1166	$0.1172^{+0.0068}_{-0.0060}$	σ_8	0.8022	$0.803^{+0.024}_{-0.022}$	$D_M(0.15)$	650.8	649^{+23}_{-24}
$100\theta_{MC}$	1.04131	$1.04127^{+0.00094}_{-0.00095}$	S_8	0.8217	$0.822^{+0.027}_{-0.026}$	$H(0.38)$	81.90	$82.1^{+2.7}_{-2.5}$
τ	0.0568	$0.057^{+0.015}_{-0.015}$	$\sigma_8 \Omega_m^{0.5}$	0.4500	$0.450^{+0.015}_{-0.014}$	$D_M(0.38)$	1551	1547^{+53}_{-54}
N_{eff}	2.870	$2.91^{+0.41}_{-0.37}$	$\sigma_8 \Omega_m^{0.25}$	0.6008	$0.601^{+0.017}_{-0.017}$	$H(0.51)$	88.58	$88.8^{+2.8}_{-2.5}$
$\ln(10^{10} A_s)$	3.0423	$3.043^{+0.036}_{-0.034}$	$\sigma_8/h^{0.5}$	0.9830	$0.982^{+0.021}_{-0.020}$	$D_M(0.51)$	2009	2003^{+66}_{-68}
n_s	0.9605	$0.960^{+0.016}_{-0.017}$	$r_{\text{drag}} h$	99.19	$99.3^{+1.6}_{-1.7}$	$H(0.61)$	94.16	$94.4^{+2.8}_{-2.6}$
$dn_s/d \ln k$	-0.0064	$-0.008^{+0.015}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	2.4329	$2.431^{+0.050}_{-0.049}$	$D_M(0.61)$	2337	2331^{+75}_{-78}
y_{cal}	1.00065	$1.0006^{+0.0048}_{-0.0050}$	z_{re}	7.86	$7.8^{+1.5}_{-1.5}$	$H(2.33)$	233.7	$234.3^{+5.8}_{-5.4}$
A_{217}^{CIB}	47.1	47^{+10}_{-10}	$10^9 A_s$	2.095	$2.098^{+0.077}_{-0.070}$	$D_M(2.33)$	5832	5817^{+160}_{-170}
$\xi^{\text{tSZ} \times \text{CIB}}$	0.51	—	$10^9 A_s e^{-2\tau}$	1.8705	$1.873^{+0.036}_{-0.035}$	$f\sigma_8(0.15)$	0.4543	$0.454^{+0.014}_{-0.014}$
A_{143}^{tSZ}	7.11	$5.3^{+3.7}_{-3.9}$	D_{40}	1219.0	1217^{+38}_{-36}	$\sigma_8(0.15)$	0.7409	$0.742^{+0.022}_{-0.021}$
A_{100}^{PS}	249	262^{+60}_{-60}	D_{220}	5735	5738^{+75}_{-75}	$f\sigma_8(0.38)$	0.4718	$0.472^{+0.014}_{-0.013}$
A_{143}^{PS}	48.7	47^{+20}_{-20}	D_{810}	2540.2	2539^{+27}_{-27}	$\sigma_8(0.38)$	0.6564	$0.657^{+0.020}_{-0.019}$
$A_{143 \times 217}^{\text{PS}}$	49.4	42^{+20}_{-20}	D_{1420}	818.5	$817.0^{+9.3}_{-9.3}$	$f\sigma_8(0.51)$	0.4700	$0.470^{+0.013}_{-0.013}$
A_{217}^{PS}	120.0	115^{+20}_{-20}	D_{2000}	231.61	$230.8^{+3.5}_{-3.5}$	$\sigma_8(0.51)$	0.6142	$0.615^{+0.019}_{-0.018}$
A^{kSZ}	0.0	—	$n_{s,0.002}$	0.9812	$0.986^{+0.041}_{-0.040}$	$f\sigma_8(0.61)$	0.4648	$0.465^{+0.013}_{-0.012}$
A_{100}^{dustTT}	8.80	$8.8^{+3.5}_{-3.5}$	Y_P	0.2430	$0.2435^{+0.0055}_{-0.0053}$	$\sigma_8(0.61)$	0.5843	$0.585^{+0.018}_{-0.017}$
A_{143}^{dustTT}	10.95	$10.9^{+3.3}_{-3.5}$	Y_P^{BBN}	0.2443	$0.2448^{+0.0055}_{-0.0053}$	$f\sigma_8(2.33)$	0.2945	$0.2949^{+0.0094}_{-0.0088}$
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.5^{+6.0}_{-6.5}$	$10^5 D/H$	2.532	$2.54^{+0.11}_{-0.098}$	$\sigma_8(2.33)$	0.3035	$0.3039^{+0.0099}_{-0.0093}$
A_{217}^{dustTT}	94.8	94^{+10}_{-10}	Age/Gyr	13.962	$13.93^{+0.39}_{-0.39}$	f_{2000}^{143}	28.7	30^{+6}_{-6}
A_{100}^{dustTE}	0.114	$0.115^{+0.074}_{-0.074}$	z_*	1089.50	$1089.55^{+0.78}_{-0.72}$	$f_{2000}^{143 \times 217}$	31.90	33^{+4}_{-4}
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.134^{+0.060}_{-0.056}$	r_*	146.25	$145.9^{+3.7}_{-3.8}$	f_{2000}^{217}	106.47	$107.3^{+4.2}_{-3.9}$
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	1.04162	$1.0415^{+0.0012}_{-0.0012}$	χ_{small}^2	396.37	$397.2 (\nu: 1.8)$
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	14.041	$14.01^{+0.34}_{-0.36}$	χ_{lowl}^2	22.08	$22.2 (\nu: 1.1)$
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.47	$1059.6^{+1.4}_{-1.4}$	χ_{plik}^2	2344.7	$2361.1 (\nu: 19.5)$
A_{217}^{dustTE}	2.07	$2.06^{+0.53}_{-0.54}$	r_{drag}	148.95	$148.6^{+3.9}_{-4.0}$	$\chi_{6\text{DF}}^2$	0.070	$0.095 (\nu: 0.0)$
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$	k_D	0.13957	$0.1399^{+0.0029}_{-0.0027}$	χ_{MGS}^2	0.98	$1.07 (\nu: 0.1)$
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0013}$	$100\theta_D$	0.16031	$0.16038^{+0.00095}_{-0.00090}$	χ_{DR12BAO}^2	5.26	$5.6 (\nu: 2.0)$
H_0	66.59	$66.8^{+2.6}_{-2.4}$	z_{eq}	3400	3399^{+52}_{-52}	χ_{prior}^2	1.6	$11.6 (\nu: 10.8)$
Ω_Λ	0.6852	$0.686^{+0.013}_{-0.014}$	k_{eq}	0.010255	$0.01028^{+0.00024}_{-0.00022}$	χ_{BAO}^2	6.31	$6.8 (\nu: 1.5)$
Ω_m	0.3148	$0.314^{+0.014}_{-0.013}$	$100\theta_{\text{eq}}$	0.8137	$0.8140^{+0.0098}_{-0.0097}$	χ_{CMB}^2	2763.1	$2780.6 (\nu: 19.1)$
$\Omega_m h^2$	0.1396	$0.1402^{+0.0069}_{-0.0062}$	$100\theta_{s,\text{eq}}$	0.4496	$0.4497^{+0.0050}_{-0.0049}$			

Best-fit $\chi_{\text{eff}}^2 = 2770.98$; $\Delta\chi_{\text{eff}}^2 = -0.93$; $\bar{\chi}_{\text{eff}}^2 = 2798.94$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.03$; $R - 1 = 0.03824$

χ_{eff}^2 : BAO - 6DF: 0.07 (Δ 0.04) MGS: 0.98 (Δ -0.24) DR12BAO: 5.26 (Δ 0.85) CMB - simall_100x143.offlike5_EE_Aplanck_B: 396.37 (Δ 0.16) commander_dx12.v3.2.29: 22.08 (Δ -0.79) plik_rd12_HM.v22b_TTTEEE: 2344.66 (Δ -0.85)

10.3 base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022113	$0.02216^{+0.00043}_{-0.00043}$	$\Omega_m h^2$	0.1376	$0.1385^{+0.0067}_{-0.0064}$	$100\theta_{\text{eq}}$	0.8049	$0.806^{+0.014}_{-0.013}$
$\Omega_c h^2$	0.1149	$0.1157^{+0.0065}_{-0.0061}$	$\Omega_m h^3$	0.0891	$0.0903^{+0.0085}_{-0.0079}$	$100\theta_{\text{s,eq}}$	0.4452	$0.4457^{+0.0069}_{-0.0068}$
$100\theta_{\text{MC}}$	1.04153	$1.04144^{+0.00093}_{-0.00097}$	σ_8	0.7952	$0.797^{+0.022}_{-0.021}$	$H(0.15)$	70.08	$70.5^{+3.1}_{-3.0}$
τ	0.0536	$0.054^{+0.015}_{-0.014}$	S_8	0.8317	$0.831^{+0.026}_{-0.025}$	$D_{\text{M}}(0.15)$	668.2	665^{+31}_{-30}
N_{eff}	2.672	$2.73^{+0.44}_{-0.41}$	$\sigma_8 \Omega_m^{0.5}$	0.4556	$0.455^{+0.014}_{-0.013}$	$H(0.38)$	80.22	$80.6^{+3.1}_{-3.0}$
$\ln(10^{10} A_s)$	3.0309	$3.034^{+0.034}_{-0.033}$	$\sigma_8 \Omega_m^{0.25}$	0.6019	$0.602^{+0.014}_{-0.014}$	$D_{\text{M}}(0.38)$	1590	1581^{+68}_{-67}
n_s	0.9494	$0.950^{+0.020}_{-0.021}$	$\sigma_8/h^{0.5}$	0.9881	$0.988^{+0.018}_{-0.018}$	$H(0.51)$	86.94	$87.4^{+3.1}_{-3.0}$
$dn_s/d \ln k$	-0.0098	$-0.011^{+0.015}_{-0.015}$	$r_{\text{drag}} h$	97.61	$97.8^{+2.4}_{-2.4}$	$D_{\text{M}}(0.51)$	2056	2046^{+85}_{-83}
y_{cal}	1.00027	$1.0004^{+0.0050}_{-0.0048}$	$\langle d^2 \rangle^{1/2}$	2.4525	$2.450^{+0.048}_{-0.046}$	$H(0.61)$	92.54	$93.0^{+3.2}_{-3.1}$
A_{217}^{CIB}	45.6	47^{+10}_{-10}	z_{re}	7.53	$7.6^{+1.5}_{-1.4}$	$D_{\text{M}}(0.61)$	2391	2379^{+97}_{-95}
$\xi^{\text{tSZ} \times \text{CIB}}$	0.68	—	$10^9 A_s$	2.072	$2.078^{+0.072}_{-0.068}$	$H(2.33)$	231.7	$232.5^{+5.9}_{-5.7}$
A_{143}^{tSZ}	6.95	$5.2^{+3.7}_{-4.0}$	$10^9 A_s e^{-2\tau}$	1.8611	$1.865^{+0.036}_{-0.035}$	$D_{\text{M}}(2.33)$	5928	5903^{+190}_{-190}
A_{100}^{PS}	247	261^{+60}_{-60}	D_{40}	1225.8	1223^{+37}_{-36}	$f\sigma_8(0.15)$	0.4587	$0.459^{+0.013}_{-0.012}$
A_{143}^{PS}	50.6	46^{+20}_{-20}	D_{220}	5727	5731^{+76}_{-73}	$\sigma_8(0.15)$	0.7332	$0.735^{+0.021}_{-0.020}$
$A_{143 \times 217}^{\text{PS}}$	53.1	42^{+20}_{-20}	D_{810}	2538.1	2537^{+27}_{-26}	$f\sigma_8(0.38)$	0.4730	$0.473^{+0.011}_{-0.011}$
A_{217}^{PS}	121.8	115^{+20}_{-20}	D_{1420}	817.9	$816.1^{+9.4}_{-9.8}$	$\sigma_8(0.38)$	0.6482	$0.650^{+0.020}_{-0.019}$
A^{kSZ}	0.00	< 8.36	D_{2000}	231.82	$230.9^{+3.6}_{-3.6}$	$f\sigma_8(0.51)$	0.4697	$0.470^{+0.011}_{-0.011}$
A_{100}^{dustTT}	8.72	$8.8^{+3.6}_{-3.5}$	$n_{\text{s},0.002}$	0.9809	$0.986^{+0.041}_{-0.040}$	$\sigma_8(0.51)$	0.6059	$0.608^{+0.019}_{-0.019}$
A_{143}^{dustTT}	10.90	$10.8^{+3.5}_{-3.6}$	Y_{P}	0.2401	$0.2410^{+0.0061}_{-0.0061}$	$f\sigma_8(0.61)$	0.4636	$0.464^{+0.011}_{-0.011}$
$A_{143 \times 217}^{\text{dustTT}}$	20.0	$18.5^{+6.0}_{-6.5}$	$Y_{\text{P}}^{\text{BBN}}$	0.2415	$0.2423^{+0.0061}_{-0.0061}$	$\sigma_8(0.61)$	0.5761	$0.578^{+0.019}_{-0.018}$
A_{217}^{dustTT}	95.4	94^{+10}_{-10}	$10^5 D/H$	2.503	$2.51^{+0.11}_{-0.10}$	$f\sigma_8(2.33)$	0.2899	$0.2909^{+0.0099}_{-0.0097}$
A_{100}^{dustTE}	0.113	$0.115^{+0.076}_{-0.074}$	Age/Gyr	14.188	$14.13^{+0.46}_{-0.46}$	$\sigma_8(2.33)$	0.2981	$0.299^{+0.011}_{-0.011}$
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.060}_{-0.058}$	z_*	1089.42	$1089.49^{+0.75}_{-0.70}$	f_{2000}^{143}	28.3	30^{+6}_{-6}
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.16}_{-0.17}$	r_*	147.93	$147.4^{+4.2}_{-4.1}$	$f_{2000}^{143 \times 217}$	31.60	32^{+4}_{-4}
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04198	$1.0419^{+0.0012}_{-0.0012}$	f_{2000}^{217}	106.09	$107.1^{+3.9}_{-4.0}$
$A_{143 \times 217}^{\text{dustTE}}$	0.664	$0.66^{+0.16}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.197	$14.15^{+0.38}_{-0.38}$	χ_{lensing}^2	8.63	$9.17 (\nu: 0.3)$
A_{217}^{dustTE}	2.07	$2.07^{+0.54}_{-0.53}$	z_{drag}	1058.67	$1058.9^{+1.6}_{-1.7}$	χ_{small}^2	395.91	$396.8 (\nu: 1.1)$
c_{100}	0.99976	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	150.72	$150.2^{+4.3}_{-4.3}$	χ_{lowl}^2	22.56	$22.6 (\nu: 1.2)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0013}$	k_{D}	0.13837	$0.1388^{+0.0030}_{-0.0029}$	χ_{plik}^2	2343.4	$2359.8 (\nu: 17.4)$
H_0	64.76	$65.2^{+3.1}_{-3.1}$	$100\theta_{\text{D}}$	0.15992	$0.1600^{+0.0010}_{-0.00097}$	χ_{prior}^2	1.4	$11.4 (\nu: 10.1)$
Ω_{Λ}	0.6718	$0.673^{+0.021}_{-0.022}$	z_{eq}	3447	3441^{+73}_{-72}	χ_{CMB}^2	2770.6	$2788.4 (\nu: 18.5)$
Ω_{m}	0.3282	$0.327^{+0.022}_{-0.021}$	k_{eq}	0.010253	$0.01028^{+0.00023}_{-0.00021}$			

Best-fit $\chi_{\text{eff}}^2 = 2771.94$; $\Delta\chi_{\text{eff}}^2 = -2.70$; $\bar{\chi}_{\text{eff}}^2 = 2799.77$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.92$; $R - 1 = 0.01835$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.63 (Δ -0.24) simall_100x143_offlike5_EE_Aplanck_B: 395.92 (Δ -0.13) commander_dx12_v3_2_29: 22.56 (Δ -0.70) plik_rd12_HM_v22b_TTTEEE: 2343.45 (Δ -1.48)

10.4 base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02235^{+0.00035}_{-0.00036}$	$\Omega_{\mathrm{m}} h^3$	$0.0934^{+0.0077}_{-0.0071}$	$H(0.15)$	$71.9^{+2.6}_{-2.4}$
$\Omega_{\mathrm{c}} h^2$	$0.1169^{+0.0064}_{-0.0059}$	σ_8	$0.803^{+0.021}_{-0.020}$	$D_{\mathrm{M}}(0.15)$	650^{+23}_{-24}
$100\theta_{\mathrm{MC}}$	$1.04130^{+0.00095}_{-0.00093}$	S_8	$0.822^{+0.022}_{-0.022}$	$H(0.38)$	$82.0^{+2.7}_{-2.5}$
τ	$0.057^{+0.014}_{-0.014}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.38)$	1550^{+52}_{-54}
N_{eff}	$2.89^{+0.39}_{-0.37}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.014}_{-0.014}$	$H(0.51)$	$88.7^{+2.7}_{-2.5}$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.031}_{-0.031}$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016}$	$D_{\mathrm{M}}(0.51)$	2007^{+66}_{-68}
n_{s}	$0.959^{+0.016}_{-0.017}$	$r_{\mathrm{drag}} h$	$99.2^{+1.7}_{-1.6}$	$H(0.61)$	$94.3^{+2.8}_{-2.6}$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.008^{+0.015}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.043}_{-0.044}$	$D_{\mathrm{M}}(0.61)$	2335^{+76}_{-78}
y_{cal}	$1.0007^{+0.0048}_{-0.0049}$	z_{re}	$7.9^{+1.3}_{-1.4}$	$H(2.33)$	$234.0^{+5.6}_{-5.4}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_{\mathrm{s}}$	$2.099^{+0.066}_{-0.064}$	$D_{\mathrm{M}}(2.33)$	5826^{+160}_{-170}
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.034}_{-0.034}$	$f\sigma_8(0.15)$	$0.455^{+0.012}_{-0.011}$
A_{143}^{tSZ}	$5.3^{+3.7}_{-3.9}$	D_{40}	1220^{+37}_{-37}	$\sigma_8(0.15)$	$0.741^{+0.020}_{-0.019}$
A_{100}^{PS}	261^{+50}_{-60}	D_{220}	5741^{+74}_{-75}	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011}$
A_{143}^{PS}	46^{+20}_{-20}	D_{810}	2540^{+27}_{-27}	$\sigma_8(0.38)$	$0.657^{+0.019}_{-0.018}$
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20}	D_{1420}	$817.2^{+9.3}_{-9.3}$	$f\sigma_8(0.51)$	$0.470^{+0.011}_{-0.011}$
A_{217}^{PS}	115^{+20}_{-20}	D_{2000}	$231.0^{+3.4}_{-3.5}$	$\sigma_8(0.51)$	$0.615^{+0.018}_{-0.017}$
A^{kSZ}	< 8.47	$n_{\mathrm{s},0.002}$	$0.984^{+0.041}_{-0.040}$	$f\sigma_8(0.61)$	$0.465^{+0.011}_{-0.011}$
$A_{100}^{\mathrm{dust}TT}$	$8.8^{+3.6}_{-3.5}$	Y_{P}	$0.2432^{+0.0054}_{-0.0053}$	$\sigma_8(0.61)$	$0.585^{+0.017}_{-0.016}$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.3}_{-3.4}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2445^{+0.0054}_{-0.0053}$	$f\sigma_8(2.33)$	$0.2947^{+0.0087}_{-0.0085}$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+5.9}_{-6.4}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.54^{+0.10}_{-0.099}$	$\sigma_8(2.33)$	$0.3037^{+0.0094}_{-0.0091}$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	$\mathrm{Age}/\mathrm{Gyr}$	$13.95^{+0.39}_{-0.39}$	f_{2000}^{143}	30^{+6}_{-6}
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.075}_{-0.075}$	z_*	$1089.52^{+0.76}_{-0.70}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.134^{+0.061}_{-0.056}$	r_*	$146.1^{+3.8}_{-3.7}$	f_{2000}^{217}	$107.2^{+4.0}_{-4.0}$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.0416^{+0.0011}_{-0.0012}$	$\chi_{\mathrm{lensing}}^2$	$9.09 (\nu: 0.2)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.03^{+0.35}_{-0.34}$	χ_{simall}^2	$397.2 (\nu: 1.6)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.5^{+1.4}_{-1.4}$	χ_{lowl}^2	$22.4 (\nu: 1.2)$
$A_{217}^{\mathrm{dust}TE}$	$2.06^{+0.52}_{-0.53}$	r_{drag}	$148.8^{+3.9}_{-3.9}$	χ_{plik}^2	$2360.6 (\nu: 18.6)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_{D}	$0.1397^{+0.0027}_{-0.0027}$	$\chi_{6\mathrm{DF}}^2$	$0.099 (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_{\mathrm{D}}$	$0.16033^{+0.00092}_{-0.00089}$	χ_{MGS}^2	$1.04 (\nu: 0.1)$
H_0	$66.7^{+2.6}_{-2.4}$	z_{eq}	3401^{+49}_{-51}	$\chi_{\mathrm{DR12BAO}}^2$	$5.7 (\nu: 1.9)$
Ω_{Λ}	$0.685^{+0.013}_{-0.014}$	k_{eq}	$0.01027^{+0.00023}_{-0.00021}$	χ_{prior}^2	$11.5 (\nu: 10.4)$
Ω_{m}	$0.315^{+0.014}_{-0.013}$	$100\theta_{\mathrm{eq}}$	$0.8137^{+0.0093}_{-0.0092}$	χ_{CMB}^2	$2789.2 (\nu: 19.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1399^{+0.0066}_{-0.0061}$	$100\theta_{\mathrm{s,eq}}$	$0.4496^{+0.0048}_{-0.0047}$	χ_{BAO}^2	$6.8 (\nu: 1.4)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.63; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.78; R - 1 = 0.03868$$

10.5 base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02216^{+0.00044}_{-0.00044}$	$\Omega_{\mathrm{m}} h^2$	$0.1390^{+0.0069}_{-0.0065}$	$100\theta_{\mathrm{eq}}$	$0.805^{+0.015}_{-0.015}$
$\Omega_{\mathrm{c}} h^2$	$0.1162^{+0.0066}_{-0.0062}$	$\Omega_{\mathrm{m}} h^3$	$0.0906^{+0.0085}_{-0.0079}$	$100\theta_{\mathrm{s,eq}}$	$0.4452^{+0.0076}_{-0.0075}$
$100\theta_{\mathrm{MC}}$	$1.04140^{+0.00094}_{-0.00095}$	σ_8	$0.800^{+0.023}_{-0.021}$	$H(0.15)$	$70.5^{+3.2}_{-3.1}$
τ	$0.056^{+0.014}_{-0.012}$	S_8	$0.837^{+0.032}_{-0.031}$	$D_{\mathrm{M}}(0.15)$	665^{+32}_{-31}
N_{eff}	$2.75^{+0.44}_{-0.42}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.018}_{-0.017}$	$H(0.38)$	$80.7^{+3.2}_{-3.1}$
$\ln(10^{10} A_{\mathrm{s}})$	$3.039^{+0.034}_{-0.032}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.017}_{-0.017}$	$D_{\mathrm{M}}(0.38)$	1581^{+71}_{-69}
n_{s}	$0.950^{+0.021}_{-0.021}$	$\sigma_8/h^{0.5}$	$0.992^{+0.023}_{-0.022}$	$H(0.51)$	$87.4^{+3.2}_{-3.1}$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.012^{+0.016}_{-0.016}$	$r_{\mathrm{drag}} h$	$97.6^{+2.7}_{-2.6}$	$D_{\mathrm{M}}(0.51)$	2045^{+89}_{-86}
y_{cal}	$1.0004^{+0.0049}_{-0.0049}$	$\langle d^2 \rangle^{1/2}$	$2.457^{+0.059}_{-0.057}$	$H(0.61)$	$93.1^{+3.2}_{-3.1}$
A_{217}^{CIB}	47^{+10}_{-10}	z_{re}	< 8.97	$D_{\mathrm{M}}(0.61)$	2378^{+100}_{-97}
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.089^{+0.071}_{-0.066}$	$H(2.33)$	$232.9^{+6.0}_{-5.7}$
A_{143}^{tSZ}	$5.2^{+3.7}_{-3.9}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.868^{+0.036}_{-0.036}$	$D_{\mathrm{M}}(2.33)$	5898^{+200}_{-190}
A_{100}^{PS}	261^{+60}_{-60}	D_{40}	1222^{+37}_{-37}	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016}$
A_{143}^{PS}	47^{+20}_{-20}	D_{220}	5729^{+74}_{-74}	$\sigma_8(0.15)$	$0.738^{+0.022}_{-0.020}$
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20}	D_{810}	2538^{+27}_{-27}	$f\sigma_8(0.38)$	$0.476^{+0.014}_{-0.013}$
A_{217}^{PS}	115^{+20}_{-20}	D_{1420}	$816.0^{+9.5}_{-9.8}$	$\sigma_8(0.38)$	$0.652^{+0.021}_{-0.019}$
A^{kSZ}	< 8.33	D_{2000}	$230.8^{+3.6}_{-3.7}$	$f\sigma_8(0.51)$	$0.473^{+0.013}_{-0.012}$
$A_{100}^{\mathrm{dustTT}}$	$8.8^{+3.6}_{-3.6}$	$n_{\mathrm{s},0.002}$	$0.989^{+0.040}_{-0.041}$	$\sigma_8(0.51)$	$0.610^{+0.020}_{-0.019}$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.6}_{-3.5}$	Y_{P}	$0.2412^{+0.0062}_{-0.0061}$	$f\sigma_8(0.61)$	$0.466^{+0.013}_{-0.012}$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.3}_{-6.5}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2425^{+0.0062}_{-0.0061}$	$\sigma_8(0.61)$	$0.580^{+0.019}_{-0.018}$
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10}	$10^5 \mathrm{D}/\mathrm{H}$	$2.52^{+0.11}_{-0.099}$	$f\sigma_8(2.33)$	$0.292^{+0.010}_{-0.0094}$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.074}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.12^{+0.47}_{-0.45}$	$\sigma_8(2.33)$	$0.300^{+0.011}_{-0.010}$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.059}$	z_*	$1089.55^{+0.76}_{-0.72}$	f_{2000}^{143}	30^{+6}_{-6}
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$147.2^{+4.2}_{-4.2}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.0418^{+0.0012}_{-0.0012}$	f_{2000}^{217}	$107.3^{+3.9}_{-4.0}$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.13^{+0.39}_{-0.38}$	χ_{simall}^2	$397.0 (\nu: 1.6)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	z_{drag}	$1058.9^{+1.6}_{-1.7}$	χ_{lowl}^2	$22.5 (\nu: 1.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	$149.9^{+4.3}_{-4.3}$	χ_{plik}^2	$2360.0 (\nu: 18.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	$0.1390^{+0.0031}_{-0.0030}$	χ_{prior}^2	$11.4 (\nu: 10.1)$
H_0	$65.1^{+3.3}_{-3.2}$	$100\theta_{\mathrm{D}}$	$0.1601^{+0.0010}_{-0.00096}$	χ_{CMB}^2	$2779.5 (\nu: 18.1)$
Ω_{Λ}	$0.672^{+0.022}_{-0.024}$	z_{eq}	3447^{+82}_{-80}		
Ω_{m}	$0.328^{+0.024}_{-0.022}$	k_{eq}	$0.01030^{+0.00024}_{-0.00022}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2790.91; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.63; R - 1 = 0.01332$$

10.6 base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02236^{+0.00035}_{-0.00036}$	$\Omega_{\mathrm{m}}h^3$	$0.0937^{+0.0078}_{-0.0072}$	$H(0.15)$	$72.1^{+2.6}_{-2.4}$
$\Omega_{\mathrm{c}}h^2$	$0.1172^{+0.0068}_{-0.0060}$	σ_8	$0.803^{+0.023}_{-0.022}$	$D_{\mathrm{M}}(0.15)$	649^{+23}_{-24}
$100\theta_{\mathrm{MC}}$	$1.04128^{+0.00095}_{-0.00094}$	S_8	$0.822^{+0.027}_{-0.025}$	$H(0.38)$	$82.1^{+2.7}_{-2.5}$
τ	$0.057^{+0.014}_{-0.013}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.015}_{-0.014}$	$D_{\mathrm{M}}(0.38)$	1547^{+52}_{-54}
N_{eff}	$2.91^{+0.41}_{-0.37}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.017}_{-0.016}$	$H(0.51)$	$88.8^{+2.8}_{-2.5}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.034}_{-0.032}$	$\sigma_8/h^{0.5}$	$0.983^{+0.021}_{-0.019}$	$D_{\mathrm{M}}(0.51)$	2003^{+66}_{-69}
n_{s}	$0.960^{+0.016}_{-0.017}$	$r_{\mathrm{drag}}h$	$99.3^{+1.6}_{-1.7}$	$H(0.61)$	$94.4^{+2.8}_{-2.6}$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.008^{+0.014}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.049}_{-0.047}$	$D_{\mathrm{M}}(0.61)$	2331^{+75}_{-79}
y_{cal}	$1.0006^{+0.0048}_{-0.0050}$	z_{re}	$7.9^{+1.2}_{-1.3}$	$H(2.33)$	$234.2^{+5.8}_{-5.4}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_{\mathrm{s}}$	$2.100^{+0.071}_{-0.066}$	$D_{\mathrm{M}}(2.33)$	5818^{+160}_{-170}
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.873^{+0.036}_{-0.035}$	$f\sigma_8(0.15)$	$0.455^{+0.014}_{-0.013}$
A_{143}^{tSZ}	$5.2^{+3.7}_{-3.9}$	D_{40}	1217^{+38}_{-36}	$\sigma_8(0.15)$	$0.742^{+0.022}_{-0.020}$
A_{100}^{PS}	262^{+60}_{-60}	D_{220}	5737^{+75}_{-75}	$f\sigma_8(0.38)$	$0.472^{+0.014}_{-0.013}$
A_{143}^{PS}	47^{+20}_{-20}	D_{810}	2539^{+27}_{-27}	$\sigma_8(0.38)$	$0.658^{+0.019}_{-0.018}$
$A_{143\times 217}^{\mathrm{PS}}$	42^{+20}_{-20}	D_{1420}	$816.9^{+9.1}_{-9.3}$	$f\sigma_8(0.51)$	$0.471^{+0.013}_{-0.012}$
A_{217}^{PS}	115^{+20}_{-20}	D_{2000}	$230.8^{+3.4}_{-3.6}$	$\sigma_8(0.51)$	$0.615^{+0.018}_{-0.017}$
A^{kSZ}	—	$n_{\mathrm{s},0.002}$	$0.986^{+0.041}_{-0.040}$	$f\sigma_8(0.61)$	$0.465^{+0.013}_{-0.012}$
$A_{100}^{\mathrm{dust}TT}$	$8.8^{+3.6}_{-3.5}$	Y_{P}	$0.2435^{+0.0055}_{-0.0053}$	$\sigma_8(0.61)$	$0.585^{+0.018}_{-0.017}$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.3}_{-3.5}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2448^{+0.0055}_{-0.0053}$	$f\sigma_8(2.33)$	$0.2951^{+0.0093}_{-0.0085}$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.6^{+6.0}_{-6.4}$	$10^5\mathrm{D}/\mathrm{H}$	$2.54^{+0.11}_{-0.098}$	$\sigma_8(2.33)$	$0.3041^{+0.0098}_{-0.0092}$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	$\mathrm{Age}/\mathrm{Gyr}$	$13.93^{+0.39}_{-0.39}$	f_{2000}^{143}	30^{+6}_{-6}
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.074}_{-0.074}$	z_{*}	$1089.54^{+0.78}_{-0.71}$	$f_{2000}^{143\times 217}$	33^{+4}_{-4}
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.134^{+0.061}_{-0.057}$	r_{*}	$145.9^{+3.8}_{-3.8}$	f_{2000}^{217}	$107.3^{+4.2}_{-3.9}$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.17}$	$100\theta_{*}$	$1.0416^{+0.0012}_{-0.0012}$	χ_{simall}^2	$397.2\ (\nu: 1.8)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$14.01^{+0.34}_{-0.36}$	χ_{lowl}^2	$22.2\ (\nu: 1.1)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.6^{+1.4}_{-1.4}$	χ_{plik}^2	$2361.0\ (\nu: 19.2)$
$A_{217}^{\mathrm{dust}TE}$	$2.06^{+0.53}_{-0.54}$	r_{drag}	$148.6^{+3.9}_{-4.0}$	$\chi_{6\mathrm{DF}}^2$	$0.094\ (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_{D}	$0.1398^{+0.0028}_{-0.0027}$	χ_{MGS}^2	$1.08\ (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0013}$	$100\theta_{\mathrm{D}}$	$0.16037^{+0.00097}_{-0.00090}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.6\ (\nu: 1.9)$
H_0	$66.8^{+2.6}_{-2.4}$	z_{eq}	3399^{+52}_{-52}	χ_{prior}^2	$11.6\ (\nu: 10.8)$
Ω_{Λ}	$0.686^{+0.013}_{-0.014}$	k_{eq}	$0.01028^{+0.00024}_{-0.00022}$	χ_{BAO}^2	$6.8\ (\nu: 1.4)$
Ω_{m}	$0.314^{+0.014}_{-0.013}$	$100\theta_{\mathrm{eq}}$	$0.8140^{+0.0097}_{-0.0096}$	χ_{CMB}^2	$2780.4\ (\nu: 18.8)$
$\Omega_{\mathrm{m}}h^2$	$0.1402^{+0.0069}_{-0.0062}$	$100\theta_{\mathrm{s,eq}}$	$0.4498^{+0.0050}_{-0.0049}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.78; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.06; R - 1 = 0.04433$$

10.7 base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02217^{+0.00043}_{-0.00043}$	$\Omega_{\mathrm{m}}h^2$	$0.1385^{+0.0067}_{-0.0063}$	$100\theta_{\mathrm{eq}}$	$0.806^{+0.013}_{-0.013}$
$\Omega_{\mathrm{c}}h^2$	$0.1157^{+0.0065}_{-0.0060}$	$\Omega_{\mathrm{m}}h^3$	$0.0904^{+0.0085}_{-0.0078}$	$100\theta_{\mathrm{s,eq}}$	$0.4459^{+0.0068}_{-0.0068}$
$100\theta_{\mathrm{MC}}$	$1.04145^{+0.00093}_{-0.00097}$	σ_8	$0.798^{+0.021}_{-0.020}$	$H(0.15)$	$70.5^{+3.1}_{-3.0}$
τ	$0.055^{+0.013}_{-0.011}$	S_8	$0.832^{+0.026}_{-0.025}$	$D_{\mathrm{M}}(0.15)$	664^{+31}_{-30}
N_{eff}	$2.73^{+0.44}_{-0.41}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014}$	$H(0.38)$	$80.7^{+3.1}_{-3.0}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.036^{+0.031}_{-0.029}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.014}$	$D_{\mathrm{M}}(0.38)$	1580^{+68}_{-66}
n_{s}	$0.950^{+0.020}_{-0.020}$	$\sigma_8/h^{0.5}$	$0.988^{+0.018}_{-0.017}$	$H(0.51)$	$87.4^{+3.1}_{-3.0}$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.011^{+0.016}_{-0.015}$	$r_{\mathrm{drag}}h$	$97.9^{+2.4}_{-2.4}$	$D_{\mathrm{M}}(0.51)$	2045^{+85}_{-83}
y_{cal}	$1.0004^{+0.0049}_{-0.0048}$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.047}_{-0.046}$	$H(0.61)$	$93.0^{+3.2}_{-3.1}$
A_{217}^{CIB}	47^{+10}_{-10}	z_{re}	< 8.81	$D_{\mathrm{M}}(0.61)$	2377^{+97}_{-94}
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.082^{+0.065}_{-0.061}$	$H(2.33)$	$232.5^{+5.9}_{-5.7}$
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.0}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.865^{+0.036}_{-0.035}$	$D_{\mathrm{M}}(2.33)$	5901^{+190}_{-190}
A_{100}^{PS}	261^{+60}_{-60}	D_{40}	1223^{+36}_{-36}	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013}$
A_{143}^{PS}	46^{+20}_{-20}	D_{220}	5731^{+75}_{-73}	$\sigma_8(0.15)$	$0.736^{+0.021}_{-0.020}$
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20}	D_{810}	2537^{+27}_{-26}	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011}$
A_{217}^{PS}	114^{+20}_{-20}	D_{1420}	$816.1^{+9.3}_{-9.7}$	$\sigma_8(0.38)$	$0.651^{+0.020}_{-0.019}$
A^{kSZ}	< 8.35	D_{2000}	$230.9^{+3.6}_{-3.6}$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011}$
$A_{100}^{\mathrm{dust}TT}$	$8.8^{+3.6}_{-3.5}$	$n_{\mathrm{s},0.002}$	$0.986^{+0.041}_{-0.041}$	$\sigma_8(0.51)$	$0.608^{+0.019}_{-0.018}$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.6}$	Y_{P}	$0.2410^{+0.0061}_{-0.0060}$	$f\sigma_8(0.61)$	$0.465^{+0.011}_{-0.011}$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.1}_{-6.5}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2423^{+0.0061}_{-0.0060}$	$\sigma_8(0.61)$	$0.579^{+0.018}_{-0.017}$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	$10^5 \mathrm{D}/\mathrm{H}$	$2.51^{+0.11}_{-0.099}$	$f\sigma_8(2.33)$	$0.2912^{+0.0097}_{-0.0093}$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.076}_{-0.073}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.12^{+0.46}_{-0.45}$	$\sigma_8(2.33)$	$0.300^{+0.011}_{-0.010}$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.134^{+0.060}_{-0.058}$	z_*	$1089.48^{+0.74}_{-0.69}$	f_{2000}^{143}	30^{+6}_{-6}
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.17}$	r_*	$147.4^{+4.1}_{-4.1}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.0419^{+0.0012}_{-0.0012}$	f_{2000}^{217}	$107.1^{+3.8}_{-4.0}$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.14^{+0.38}_{-0.38}$	$\chi_{\mathrm{lensing}}^2$	$9.18 (\nu: 0.3)$
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.54}_{-0.52}$	z_{drag}	$1058.9^{+1.6}_{-1.6}$	χ_{simall}^2	$396.8 (\nu: 1.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	$150.1^{+4.3}_{-4.3}$	χ_{lowl}^2	$22.6 (\nu: 1.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0013}$	k_{D}	$0.1388^{+0.0030}_{-0.0029}$	χ_{plik}^2	$2359.6 (\nu: 17.3)$
H_0	$65.2^{+3.1}_{-3.0}$	$100\theta_{\mathrm{D}}$	$0.1600^{+0.0010}_{-0.00096}$	χ_{prior}^2	$11.4 (\nu: 10.1)$
Ω_{Λ}	$0.674^{+0.020}_{-0.022}$	z_{eq}	3440^{+74}_{-71}	χ_{CMB}^2	$2788.2 (\nu: 18.0)$
Ω_{m}	$0.326^{+0.022}_{-0.020}$	k_{eq}	$0.01027^{+0.00023}_{-0.00020}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2799.54; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.96; R - 1 = 0.01748$$

10.8 base_nnu_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02235^{+0.00035}_{-0.00036}$	$\Omega_{\mathrm{m}}h^3$	$0.0933^{+0.0077}_{-0.0071}$	$H(0.15)$	$72.0^{+2.6}_{-2.4}$
$\Omega_{\mathrm{c}}h^2$	$0.1169^{+0.0064}_{-0.0059}$	σ_8	$0.803^{+0.021}_{-0.020}$	$D_{\mathrm{M}}(0.15)$	650^{+23}_{-24}
$100\theta_{\mathrm{MC}}$	$1.04130^{+0.00095}_{-0.00093}$	S_8	$0.822^{+0.022}_{-0.022}$	$H(0.38)$	$82.0^{+2.7}_{-2.5}$
τ	$0.057^{+0.013}_{-0.013}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.38)$	1550^{+52}_{-54}
N_{eff}	$2.89^{+0.40}_{-0.37}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.014}_{-0.014}$	$H(0.51)$	$88.7^{+2.7}_{-2.5}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.030}_{-0.028}$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016}$	$D_{\mathrm{M}}(0.51)$	2007^{+67}_{-68}
n_{s}	$0.959^{+0.016}_{-0.017}$	$r_{\mathrm{drag}}h$	$99.2^{+1.6}_{-1.6}$	$H(0.61)$	$94.3^{+2.8}_{-2.6}$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.008^{+0.015}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.042}_{-0.043}$	$D_{\mathrm{M}}(0.61)$	2335^{+76}_{-78}
y_{cal}	$1.0007^{+0.0048}_{-0.0049}$	z_{re}	$7.9^{+1.2}_{-1.3}$	$H(2.33)$	$234.0^{+5.6}_{-5.4}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_{\mathrm{s}}$	$2.100^{+0.064}_{-0.059}$	$D_{\mathrm{M}}(2.33)$	5826^{+160}_{-170}
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.872^{+0.034}_{-0.034}$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011}$
A_{143}^{tSZ}	$5.3^{+3.7}_{-3.9}$	D_{40}	1219^{+37}_{-37}	$\sigma_8(0.15)$	$0.742^{+0.020}_{-0.019}$
A_{100}^{PS}	261^{+50}_{-60}	D_{220}	5741^{+74}_{-75}	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011}$
A_{143}^{PS}	46^{+20}_{-20}	D_{810}	2539^{+27}_{-27}	$\sigma_8(0.38)$	$0.657^{+0.018}_{-0.018}$
$A_{143\times 217}^{\mathrm{PS}}$	42^{+20}_{-20}	D_{1420}	$817.1^{+9.1}_{-9.2}$	$f\sigma_8(0.51)$	$0.470^{+0.011}_{-0.011}$
A_{217}^{PS}	115^{+20}_{-20}	D_{2000}	$231.0^{+3.3}_{-3.5}$	$\sigma_8(0.51)$	$0.615^{+0.018}_{-0.017}$
A^{kSZ}	< 8.45	$n_{\mathrm{s},0.002}$	$0.984^{+0.041}_{-0.040}$	$f\sigma_8(0.61)$	$0.465^{+0.011}_{-0.011}$
$A_{100}^{\mathrm{dust}TT}$	$8.8^{+3.6}_{-3.5}$	Y_{P}	$0.2432^{+0.0054}_{-0.0053}$	$\sigma_8(0.61)$	$0.585^{+0.017}_{-0.016}$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.3}_{-3.4}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2445^{+0.0054}_{-0.0053}$	$f\sigma_8(2.33)$	$0.2948^{+0.0088}_{-0.0084}$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.6^{+5.8}_{-6.4}$	$10^5\mathrm{D}/\mathrm{H}$	$2.53^{+0.10}_{-0.099}$	$\sigma_8(2.33)$	$0.3038^{+0.0093}_{-0.0090}$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	$\mathrm{Age}/\mathrm{Gyr}$	$13.95^{+0.39}_{-0.39}$	f_{2000}^{143}	30^{+6}_{-6}
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.075}_{-0.075}$	z_*	$1089.52^{+0.75}_{-0.70}$	$f_{2000}^{143\times 217}$	32^{+4}_{-4}
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.134^{+0.062}_{-0.056}$	r_*	$146.1^{+3.8}_{-3.7}$	f_{2000}^{217}	$107.2^{+4.0}_{-4.0}$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.0416^{+0.0011}_{-0.0011}$	$\chi_{\mathrm{lensing}}^2$	$9.07\ (\nu: 0.2)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.03^{+0.35}_{-0.34}$	χ_{simall}^2	$397.2\ (\nu: 1.6)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.5^{+1.4}_{-1.4}$	χ_{lowl}^2	$22.4\ (\nu: 1.2)$
$A_{217}^{\mathrm{dust}TE}$	$2.06^{+0.52}_{-0.53}$	r_{drag}	$148.8^{+3.9}_{-3.9}$	χ_{plik}^2	$2360.5\ (\nu: 18.5)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_{D}	$0.1397^{+0.0027}_{-0.0027}$	$\chi_{6\mathrm{DF}}^2$	$0.097\ (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_{\mathrm{D}}$	$0.16033^{+0.00092}_{-0.00089}$	χ_{MGS}^2	$1.05\ (\nu: 0.1)$
H_0	$66.7^{+2.6}_{-2.4}$	z_{eq}	3401^{+49}_{-51}	$\chi_{\mathrm{DR12BAO}}^2$	$5.7\ (\nu: 1.8)$
Ω_{Λ}	$0.685^{+0.013}_{-0.014}$	k_{eq}	$0.01027^{+0.00023}_{-0.00020}$	χ_{prior}^2	$11.5\ (\nu: 10.4)$
Ω_{m}	$0.315^{+0.014}_{-0.013}$	$100\theta_{\mathrm{eq}}$	$0.8137^{+0.0093}_{-0.0091}$	χ_{CMB}^2	$2789.2\ (\nu: 19.2)$
$\Omega_{\mathrm{m}}h^2$	$0.1399^{+0.0066}_{-0.0061}$	$100\theta_{\mathrm{s,eq}}$	$0.4496^{+0.0048}_{-0.0046}$	χ_{BAO}^2	$6.8\ (\nu: 1.3)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.49; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.77; R - 1 = 0.04192$$

11 nnu+yhe

11.1 base_nnu_yhe_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02200	$0.02207^{+0.00063}_{-0.00063}$	S_8	0.8463	$0.841^{+0.050}_{-0.047}$	$100\theta_{s,eq}$	0.4442	$0.447^{+0.015}_{-0.014}$
$\Omega_c h^2$	0.1168	$0.119^{+0.015}_{-0.014}$	$\sigma_8 \Omega_m^{0.5}$	0.4635	$0.461^{+0.027}_{-0.026}$	$H(0.15)$	70.2	$71.5^{+6.9}_{-6.1}$
$100\theta_{MC}$	1.04151	$1.0413^{+0.0038}_{-0.0040}$	$\sigma_8 \Omega_m^{0.25}$	0.6107	$0.610^{+0.024}_{-0.023}$	$D_M(0.15)$	667	657^{+62}_{-61}
τ	0.0521	$0.052^{+0.016}_{-0.016}$	$\sigma_8/h^{0.5}$	0.9994	$0.994^{+0.034}_{-0.034}$	$H(0.38)$	80.5	$81.7^{+7.0}_{-6.1}$
N_{eff}	2.74	$2.92^{+1.1}_{-0.99}$	$r_{drag} h$	97.18	$98.0^{+4.7}_{-4.5}$	$D_M(0.38)$	1586	1562^{+140}_{-140}
Y_P	0.253	$0.251^{+0.058}_{-0.064}$	$\langle d^2 \rangle^{1/2}$	2.474	$2.459^{+0.091}_{-0.088}$	$H(0.51)$	87.3	$88.5^{+7.2}_{-6.2}$
$\ln(10^{10} A_s)$	3.0334	$3.036^{+0.044}_{-0.045}$	z_{re}	7.50	$7.4^{+1.6}_{-1.7}$	$D_M(0.51)$	2051	2022^{+170}_{-170}
n_s	0.9561	$0.960^{+0.027}_{-0.027}$	$10^9 A_s$	2.077	$2.082^{+0.092}_{-0.093}$	$H(0.61)$	92.9	$94.1^{+7.0}_{-6.6}$
y_{cal}	1.0005	$1.0005^{+0.0050}_{-0.0050}$	$10^9 A_s e^{-2\tau}$	1.871	$1.878^{+0.053}_{-0.053}$	$D_M(0.61)$	2384	2351^{+200}_{-200}
A_{217}^{CIB}	47.0	48^{+10}_{-10}	D_{40}	1240.3	1236^{+46}_{-44}	$H(2.33)$	233.1	235^{+13}_{-13}
$\xi^{tSZ \times CIB}$	0.57	—	D_{220}	5708	5712^{+83}_{-83}	$D_M(2.33)$	5903	5837^{+400}_{-420}
A_{143}^{tSZ}	6.89	$5.0^{+3.9}_{-4.0}$	D_{810}	2537.2	2536^{+28}_{-29}	$f\sigma_8(0.15)$	0.4664	$0.464^{+0.024}_{-0.024}$
A_{100}^{PS}	251	264^{+60}_{-60}	D_{1420}	816.5	814^{+10}_{-10}	$\sigma_8(0.15)$	0.7417	$0.745^{+0.034}_{-0.032}$
A_{143}^{PS}	51.7	50^{+20}_{-20}	D_{2000}	230.78	$229.5^{+4.7}_{-4.7}$	$f\sigma_8(0.38)$	0.4801	$0.479^{+0.019}_{-0.019}$
$A_{143 \times 217}^{PS}$	52.6	44^{+20}_{-20}	$n_{s,0.002}$	0.9561	$0.960^{+0.027}_{-0.027}$	$\sigma_8(0.38)$	0.6553	$0.659^{+0.032}_{-0.031}$
A_{217}^{PS}	121.7	115^{+20}_{-20}	Y_P	0.253	$0.251^{+0.058}_{-0.064}$	$f\sigma_8(0.51)$	0.4763	$0.476^{+0.018}_{-0.017}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.254	$0.253^{+0.058}_{-0.064}$	$\sigma_8(0.51)$	0.6124	$0.616^{+0.031}_{-0.030}$
A_{100}^{dustTT}	8.82	$8.9^{+3.6}_{-3.6}$	Age/Gyr	14.13	$13.97^{+0.95}_{-1.0}$	$f\sigma_8(0.61)$	0.4698	$0.470^{+0.018}_{-0.017}$
A_{143}^{dustTT}	10.74	$10.7^{+3.5}_{-3.5}$	z_*	1090.28	$1090.4^{+1.4}_{-1.4}$	$\sigma_8(0.61)$	0.5822	$0.586^{+0.030}_{-0.029}$
$A_{143 \times 217}^{dustTT}$	19.6	$18.3^{+6.5}_{-6.4}$	r_*	147.1	$145.7^{+8.7}_{-9.4}$	$f\sigma_8(2.33)$	0.2928	$0.295^{+0.016}_{-0.015}$
A_{217}^{dustTT}	95.0	93^{+10}_{-10}	$100\theta_*$	1.04163	$1.0414^{+0.0027}_{-0.0028}$	$\sigma_8(2.33)$	0.3010	$0.304^{+0.018}_{-0.017}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	14.12	$13.99^{+0.80}_{-0.87}$	f_{2000}^{143}	29.4	31^{+7}_{-8}
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$	z_{drag}	1058.98	$1059.3^{+2.4}_{-2.4}$	$f_{2000}^{143 \times 217}$	32.7	34^{+6}_{-6}
H_0	64.8	$66.1^{+6.9}_{-6.1}$	r_{drag}	149.9	$148.5^{+9.0}_{-9.7}$	f_{2000}^{217}	107.1	$108.3^{+5.1}_{-5.0}$
Ω_Λ	0.6682	$0.675^{+0.039}_{-0.042}$	k_D	0.1384	$0.1395^{+0.0085}_{-0.0081}$	χ_{simall}^2	395.90	$396.9 (\nu: 1.3)$
Ω_m	0.3318	$0.325^{+0.042}_{-0.039}$	$100\theta_D$	0.16080	$0.1611^{+0.0015}_{-0.0015}$	χ_{lowl}^2	24.59	$24.3 (\nu: 2.6)$
$\Omega_m h^2$	0.1395	$0.142^{+0.015}_{-0.014}$	z_{eq}	3457	3432^{+160}_{-160}	χ_{plik}^2	757.4	$772.6 (\nu: 18.9)$
$\Omega_m h^3$	0.0904	$0.094^{+0.019}_{-0.017}$	k_{eq}	0.010337	$0.01037^{+0.00044}_{-0.00042}$	χ_{prior}^2	1.3	$7.3 (\nu: 6.6)$
σ_8	0.8047	$0.808^{+0.035}_{-0.032}$	$100\theta_{eq}$	0.8028	$0.808^{+0.030}_{-0.028}$	χ_{CMB}^2	1177.9	$1193.8 (\nu: 17.5)$

Best-fit $\chi_{eff}^2 = 1179.18$; $\Delta\chi_{eff}^2 = -0.40$; $\bar{\chi}_{eff}^2 = 1201.13$; $\Delta\bar{\chi}_{eff}^2 = 1.55$; $R - 1 = 0.01463$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.90 (Δ 0.02) commander_dx12_v3.2.29: 24.59 (Δ 0.99) plik_rd12_HM_v22_TT: 757.43 (Δ -1.32)

11.2 base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022258	$0.02226^{+0.00048}_{-0.00048}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6026	$0.606^{+0.023}_{-0.022}$ (−0.4 σ)	$D_M(0.38)$	1526	1516^{+90}_{-94} (−0.7 σ)
$\Omega_c h^2$	0.1192	$0.121^{+0.015}_{-0.014}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9814	$0.983^{+0.024}_{-0.023}$ (−0.7 σ)	$H(0.51)$	89.8	$90.5^{+5.5}_{-4.8}$ (+0.6 σ)
$100\theta_{MC}$	1.04105	$1.0408^{+0.0037}_{-0.0038}$ (−0.3 σ)	$r_{drag}h$	99.88	$99.9^{+2.1}_{-2.0}$ (+0.8 σ)	$D_M(0.51)$	1977	1964^{+110}_{-120} (−0.6 σ)
τ	0.0533	$0.054^{+0.016}_{-0.016}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.423	$2.426^{+0.055}_{-0.055}$ (−0.7 σ)	$H(0.61)$	95.4	$96.1^{+5.8}_{-5.0}$ (+0.6 σ)
N_{eff}	3.06	$3.18^{+0.93}_{-0.86}$ (+0.5 σ)	z_{re}	7.60	$7.7^{+1.6}_{-1.7}$ (+0.3 σ)	$D_M(0.61)$	2301	2286^{+130}_{-140} (−0.6 σ)
Y_P	0.247	$0.245^{+0.060}_{-0.064}$ (−0.2 σ)	$10^9 A_s$	2.091	$2.100^{+0.085}_{-0.083}$ (+0.4 σ)	$H(2.33)$	236.0	238^{+12}_{-12} (+0.4 σ)
$\ln(10^{10} A_s)$	3.0402	$3.044^{+0.040}_{-0.040}$ (+0.4 σ)	$10^9 A_s e^{-2\tau}$	1.8797	$1.886^{+0.048}_{-0.045}$ (+0.3 σ)	$D_M(2.33)$	5757	5721^{+300}_{-330} (−0.6 σ)
n_s	0.9685	$0.970^{+0.017}_{-0.017}$ (+0.7 σ)	D_{40}	1221.8	1222^{+33}_{-33} (−0.6 σ)	$f\sigma_8(0.15)$	0.4541	$0.456^{+0.018}_{-0.017}$ (−0.6 σ)
y_{cal}	1.0005	$1.0006^{+0.0050}_{-0.0051}$ (+0.0 σ)	D_{220}	5718	5719^{+81}_{-82} (+0.2 σ)	$\sigma_8(0.15)$	0.7469	$0.751^{+0.031}_{-0.029}$ (+0.4 σ)
A_{217}^{CIB}	50.2	48^{+10}_{-10} (+0.1 σ)	D_{810}	2537.1	2537^{+29}_{-27} (+0.1 σ)	$f\sigma_8(0.38)$	0.4729	$0.475^{+0.018}_{-0.017}$ (−0.4 σ)
$\xi^{tSZ \times CIB}$	0.11	—	D_{1420}	815.9	815^{+10}_{-11} (+0.1 σ)	$\sigma_8(0.38)$	0.6623	$0.666^{+0.028}_{-0.026}$ (+0.4 σ)
A_{143}^{tSZ}	7.13	$5.0^{+3.9}_{-4.0}$ (−0.0 σ)	D_{2000}	229.94	$229.3^{+4.8}_{-4.8}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4718	$0.474^{+0.018}_{-0.017}$ (−0.2 σ)
A_{100}^{PS}	256	266^{+60}_{-60} (+0.1 σ)	$n_{s,0.002}$	0.9685	$0.970^{+0.017}_{-0.017}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6199	$0.623^{+0.027}_{-0.025}$ (+0.5 σ)
A_{143}^{PS}	46.6	50^{+20}_{-20} (+0.0 σ)	Y_P	0.247	$0.245^{+0.060}_{-0.064}$ (−0.2 σ)	$f\sigma_8(0.61)$	0.4670	$0.469^{+0.018}_{-0.017}$ (−0.1 σ)
$A_{143 \times 217}^{PS}$	41.4	44^{+20}_{-20} (−0.0 σ)	Y_P^{BBN}	0.249	$0.246^{+0.060}_{-0.064}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5899	$0.593^{+0.026}_{-0.024}$ (+0.5 σ)
A_{217}^{PS}	116.9	115^{+20}_{-20} (−0.1 σ)	Age/Gyr	13.78	$13.70^{+0.72}_{-0.78}$ (−0.6 σ)	$f\sigma_8(2.33)$	0.2975	$0.299^{+0.013}_{-0.012}$ (+0.5 σ)
A^{kSZ}	0.0	—	z_*	1090.08	$1090.2^{+1.4}_{-1.3}$ (−0.3 σ)	$\sigma_8(2.33)$	0.3068	$0.309^{+0.014}_{-0.013}$ (+0.6 σ)
A_{100}^{dustTT}	8.95	$9.0^{+3.7}_{-3.5}$ (+0.0 σ)	r_*	144.6	$143.7^{+7.5}_{-8.0}$ (−0.4 σ)	f_{2000}^{143}	30.7	32^{+7}_{-7} (+0.1 σ)
A_{143}^{dustTT}	10.80	$10.8^{+3.5}_{-3.5}$ (+0.0 σ)	$100\theta_*$	1.04118	$1.0409^{+0.0025}_{-0.0025}$ (−0.3 σ)	$f_{2000}^{143 \times 217}$	33.4	34^{+6}_{-6} (+0.1 σ)
$A_{143 \times 217}^{dustTT}$	19.1	$18.4^{+6.4}_{-6.4}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.89	$13.81^{+0.69}_{-0.74}$ (−0.4 σ)	f_{2000}^{217}	107.9	$108.4^{+5.2}_{-5.4}$ (+0.1 σ)
A_{217}^{dustTT}	94.1	93^{+10}_{-10} (−0.0 σ)	z_{drag}	1059.70	$1059.8^{+2.1}_{-2.1}$ (+0.4 σ)	χ_{small}^2	395.88	$397.0 (\nu: 1.6)$ (+0.1 σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.3	$146.4^{+7.6}_{-8.2}$ (−0.5 σ)	χ_{lowl}^2	22.69	$22.8 (\nu: 0.9)$ (−0.7 σ)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	k_D	0.1404	$0.1412^{+0.0081}_{-0.0070}$ (+0.4 σ)	χ_{plik}^2	760.2	$774.2 (\nu: 17.6)$ (+0.3 σ)
H_0	67.80	$68.3^{+4.6}_{-4.1}$ (+0.7 σ)	$100\theta_D$	0.16110	$0.1613^{+0.0015}_{-0.0015}$ (+0.2 σ)	χ_{6DF}^2	0.015	$0.059 (\nu: 0.0)$
Ω_Λ	0.6908	$0.691^{+0.017}_{-0.017}$ (+0.8 σ)	z_{eq}	3372	3368^{+87}_{-87} (−0.8 σ)	χ_{MGS}^2	1.34	$1.45 (\nu: 0.2)$
Ω_m	0.3092	$0.309^{+0.017}_{-0.017}$ (−0.8 σ)	k_{eq}	0.010306	$0.01037^{+0.00046}_{-0.00043}$ (−0.0 σ)	$\chi_{DR12BAO}^2$	4.04	$4.7 (\nu: 1.3)$
$\Omega_m h^2$	0.1421	$0.144^{+0.015}_{-0.014}$ (+0.3 σ)	$100\theta_{eq}$	0.8185	$0.819^{+0.015}_{-0.014}$ (+0.8 σ)	χ_{prior}^2	1.5	$7.3 (\nu: 6.6)$ (+0.0 σ)
$\Omega_m h^3$	0.0964	$0.099^{+0.017}_{-0.015}$ (+0.5 σ)	$100\theta_{s,eq}$	0.4522	$0.4525^{+0.0076}_{-0.0073}$ (+0.8 σ)	χ_{BAO}^2	5.39	$6.2 (\nu: 0.9)$
σ_8	0.8080	$0.813^{+0.033}_{-0.030}$ (+0.3 σ)	$H(0.15)$	73.06	$73.6^{+4.8}_{-4.2}$ (+0.6 σ)	χ_{CMB}^2	1178.8	$1194.0 (\nu: 17.1)$ (+0.0 σ)
S_8	0.8204	$0.824^{+0.034}_{-0.032}$ (−0.7 σ)	$D_M(0.15)$	639.6	635^{+39}_{-40} (−0.7 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4493	$0.451^{+0.018}_{-0.017}$ (−0.7 σ)	$H(0.38)$	83.13	$83.7^{+5.2}_{-4.6}$ (+0.6 σ)			

Best-fit $\chi_{eff}^2 = 1185.69$; $\Delta\chi_{eff}^2 = -0.05$; $\bar{\chi}_{eff}^2 = 1207.58$; $\Delta\bar{\chi}_{eff}^2 = 1.55$; $R - 1 = 0.02042$

χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.01) MGS: 1.34 (Δ 0.06) DR12BAO: 4.04 (Δ -0.15) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 (Δ -0.01) commander_dx12_v3_2_29: 22.69 (Δ -0.14) plik_rd12_HM_v22_TT: 760.21 (Δ 0.11)

11.3 base_nnu_yhe_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02200	$0.02207^{+0.00058}_{-0.00059} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4582	$0.458^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	672	$661^{+58}_{-58} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.1145	$0.117^{+0.014}_{-0.013} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6043	$0.606^{+0.018}_{-0.017} \quad (-0.3\sigma)$	$H(0.38)$	79.9	$81.1^{+6.6}_{-5.7} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	1.04200	$1.0417^{+0.0037}_{-0.0039} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9930	$0.992^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	1597	$1573^{+130}_{-130} \quad (+0.2\sigma)$
τ	0.0502	$0.051^{+0.016}_{-0.015} \quad (-0.0\sigma)$	$r_{\mathrm{drag}} h$	97.35	$98.0^{+3.9}_{-3.7} \quad (+0.0\sigma)$	$H(0.51)$	86.6	$87.8^{+6.7}_{-5.9} \quad (-0.2\sigma)$
N_{eff}	2.63	$2.81^{+0.99}_{-0.93} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.462	$2.455^{+0.063}_{-0.062} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	2066	$2036^{+160}_{-170} \quad (+0.2\sigma)$
Y_{P}	0.256	$0.256^{+0.058}_{-0.060} \quad (+0.1\sigma)$	z_{re}	7.27	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.61)$	92.2	$93.5^{+6.5}_{-6.2} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0242	$3.031^{+0.043}_{-0.045} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.058	$2.073^{+0.091}_{-0.092} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	2401	$2367^{+190}_{-190} \quad (+0.2\sigma)$
n_{s}	0.9547	$0.959^{+0.024}_{-0.024} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.861	$1.871^{+0.051}_{-0.051} \quad (-0.3\sigma)$	$H(2.33)$	231.3	$233^{+13}_{-11} \quad (-0.3\sigma)$
y_{cal}	1.0003	$1.0004^{+0.0051}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	1239.1	$1235^{+38}_{-38} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	5948	$5878^{+380}_{-400} \quad (+0.2\sigma)$
A_{217}^{CIB}	46.5	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{220}	5711	$5714^{+83}_{-82} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	0.4612	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.62	—	D_{810}	2534.9	$2535^{+29}_{-28} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	0.7346	$0.741^{+0.031}_{-0.030} \quad (-0.3\sigma)$
A_{143}^{tSZ}	6.87	$5.0^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{1420}	816.6	$814^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4750	$0.476^{+0.014}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{PS}	250	$263^{+60}_{-60} \quad (-0.0\sigma)$	D_{2000}	230.93	$229.6^{+4.7}_{-4.7} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	0.6492	$0.655^{+0.031}_{-0.029} \quad (-0.3\sigma)$
A_{143}^{PS}	52.2	$49^{+20}_{-20} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9547	$0.959^{+0.024}_{-0.024} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4714	$0.473^{+0.014}_{-0.013} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	53.5	$44^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	0.256	$0.256^{+0.058}_{-0.060} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	0.6067	$0.613^{+0.030}_{-0.028} \quad (-0.2\sigma)$
A_{217}^{PS}	122.2	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.258	$0.257^{+0.059}_{-0.061} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	0.4651	$0.467^{+0.015}_{-0.014} \quad (-0.3\sigma)$
A^{kSZ}	0.0	—	Age/Gyr	14.23	$14.07^{+0.91}_{-0.94} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	0.5768	$0.583^{+0.029}_{-0.027} \quad (-0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.83	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	1090.17	$1090.4^{+1.4}_{-1.4} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	0.2902	$0.293^{+0.016}_{-0.015} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.81	$10.7^{+3.5}_{-3.4} \quad (-0.0\sigma)$	r_*	148.3	$146.8^{+8.4}_{-8.9} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	0.2983	$0.302^{+0.017}_{-0.016} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.8	$18.3^{+6.4}_{-6.4} \quad (-0.0\sigma)$	$100\theta_*$	1.04205	$1.0417^{+0.0027}_{-0.0027} \quad (+0.2\sigma)$	f_{2000}^{143}	29.4	$31^{+7}_{-7} \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	95.4	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.23	$14.09^{+0.77}_{-0.82} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	32.6	$34^{+6}_{-6} \quad (-0.0\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	1058.90	$1059.3^{+2.3}_{-2.3} \quad (-0.0\sigma)$	f_{2000}^{217}	106.9	$108.2^{+5.1}_{-5.1} \quad (-0.0\sigma)$
c_{217}	0.99822	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	151.1	$149.6^{+8.6}_{-9.1} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.48	$9.3 \quad (\nu: 0.5)$
H_0	64.4	$65.6^{+6.4}_{-5.6} \quad (-0.1\sigma)$	k_{D}	0.1374	$0.1385^{+0.0080}_{-0.0077} \quad (-0.2\sigma)$	χ_{small}^2	395.70	$396.8 \quad (\nu: 1.1) \quad (-0.1\sigma)$
Ω_{Λ}	0.6694	$0.675^{+0.032}_{-0.034} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	0.16070	$0.1610^{+0.0015}_{-0.0014} \quad (-0.1\sigma)$	χ_{lowl}^2	24.56	$24.3 \quad (\nu: 1.9) \quad (-0.0\sigma)$
Ω_{m}	0.3306	$0.325^{+0.034}_{-0.032} \quad (-0.0\sigma)$	z_{eq}	3457	$3435^{+140}_{-140} \quad (+0.0\sigma)$	χ_{plik}^2	757.9	$772.0 \quad (\nu: 16.8) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.1372	$0.140^{+0.014}_{-0.013} \quad (-0.3\sigma)$	k_{eq}	0.010251	$0.01031^{+0.00038}_{-0.00037} \quad (-0.3\sigma)$	χ_{prior}^2	1.2	$7.3 \quad (\nu: 6.5) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.0884	$0.092^{+0.018}_{-0.016} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	0.8031	$0.807^{+0.025}_{-0.024} \quad (-0.0\sigma)$	χ_{CMB}^2	1186.7	$1202.4 \quad (\nu: 17.5) \quad (+1.4\sigma)$
σ_8	0.7969	$0.803^{+0.032}_{-0.030} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4443	$0.446^{+0.013}_{-0.012} \quad (-0.0\sigma)$			
S_8	0.8366	$0.836^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	69.7	$70.9^{+6.4}_{-5.6} \quad (-0.2\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 1187.84$; $\Delta\chi_{\mathrm{eff}}^2 = -0.73$; $\bar{\chi}_{\mathrm{eff}}^2 = 1209.69$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.28$; $R - 1 = 0.01748$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.48 (Δ -0.42) small_100x143_offlike5_EE_Aplanck_B: 395.70 (Δ -0.16) commander_dx12_v3_2_29: 24.56 (Δ 1.32) plik_rd12_HM_v22_TT: 757.94 (Δ -1.38)

11.4 base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022245	$0.02226^{+0.00048}_{-0.00048}$ $(+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4511	$0.452^{+0.014}_{-0.014}$ (-0.6σ)	$D_{\mathrm{M}}(0.15)$	641.9	639^{+38}_{-39} (-0.5σ)
$\Omega_{\mathrm{c}}h^2$	0.1190	$0.120^{+0.013}_{-0.013}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6040	$0.605^{+0.018}_{-0.017}$ (-0.4σ)	$H(0.38)$	82.90	$83.3^{+4.7}_{-4.5}$ $(+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	1.04108	$1.0410^{+0.0036}_{-0.0037}$ (-0.2σ)	$\sigma_8/h^{0.5}$	0.9842	$0.985^{+0.019}_{-0.019}$ (-0.6σ)	$D_{\mathrm{M}}(0.38)$	1531	1525^{+87}_{-91} (-0.5σ)
τ	0.0544	$0.055^{+0.015}_{-0.014}$ $(+0.4\sigma)$	$r_{\mathrm{drag}}h$	99.65	$99.8^{+2.0}_{-2.0}$ $(+0.7\sigma)$	$H(0.51)$	89.61	$90.0^{+5.2}_{-4.5}$ $(+0.4\sigma)$
N_{eff}	3.04	$3.10^{+0.86}_{-0.80}$ $(+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4306	$2.432^{+0.044}_{-0.044}$ (-0.6σ)	$D_{\mathrm{M}}(0.51)$	1983	1976^{+110}_{-120} (-0.5σ)
Y_{P}	0.247	$0.247^{+0.058}_{-0.063}$ (-0.1σ)	z_{re}	7.71	$7.8^{+1.5}_{-1.5}$ $(+0.4\sigma)$	$H(0.61)$	95.2	$95.6^{+5.3}_{-4.7}$ $(+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0425	$3.045^{+0.033}_{-0.034}$ $(+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	2.096	$2.102^{+0.071}_{-0.070}$ $(+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	2308	2299^{+130}_{-130} (-0.5σ)
n_{s}	0.9675	$0.968^{+0.017}_{-0.016}$ $(+0.6\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8796	$1.883^{+0.043}_{-0.043}$ $(+0.2\sigma)$	$H(2.33)$	235.8	237^{+11}_{-11} $(+0.2\sigma)$
y_{cal}	1.0005	$1.0007^{+0.0050}_{-0.0050}$ $(+0.1\sigma)$	D_{40}	1224.0	1225^{+32}_{-33} (-0.5σ)	$D_{\mathrm{M}}(2.33)$	5769	5749^{+290}_{-300} (-0.4σ)
A_{217}^{CIB}	48.4	48^{+10}_{-10} $(+0.0\sigma)$	D_{220}	5720	5723^{+81}_{-80} $(+0.3\sigma)$	$f\sigma_8(0.15)$	0.4557	$0.456^{+0.014}_{-0.013}$ (-0.6σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.34	—	D_{810}	2538.3	2538^{+28}_{-27} $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7475	$0.750^{+0.026}_{-0.025}$ $(+0.3\sigma)$
A_{143}^{tSZ}	7.06	$5.0^{+3.9}_{-3.9}$ (-0.0σ)	D_{1420}	816.5	815^{+11}_{-10} $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4741	$0.475^{+0.014}_{-0.013}$ (-0.4σ)
A_{100}^{PS}	253	266^{+60}_{-60} $(+0.1\sigma)$	D_{2000}	230.28	$229.6^{+4.9}_{-4.8}$ $(+0.0\sigma)$	$\sigma_8(0.38)$	0.6626	$0.665^{+0.024}_{-0.023}$ $(+0.4\sigma)$
A_{143}^{PS}	49.2	50^{+20}_{-20} $(+0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9675	$0.968^{+0.017}_{-0.016}$ $(+0.6\sigma)$	$f\sigma_8(0.51)$	0.4728	$0.474^{+0.014}_{-0.013}$ (-0.2σ)
$A_{143 \times 217}^{\mathrm{PS}}$	47.3	44^{+20}_{-20} (-0.0σ)	Y_{P}	0.247	$0.247^{+0.058}_{-0.063}$ (-0.1σ)	$\sigma_8(0.51)$	0.6201	$0.622^{+0.023}_{-0.021}$ $(+0.4\sigma)$
A_{217}^{PS}	119.8	115^{+20}_{-20} (-0.0σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.249	$0.249^{+0.058}_{-0.064}$ (-0.1σ)	$f\sigma_8(0.61)$	0.4678	$0.469^{+0.014}_{-0.014}$ (-0.1σ)
A^{kSZ}	0.0	—	Age/Gyr	13.81	$13.76^{+0.69}_{-0.73}$ (-0.4σ)	$\sigma_8(0.61)$	0.5901	$0.592^{+0.022}_{-0.021}$ $(+0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.90	$8.9^{+3.7}_{-3.5}$ (-0.0σ)	z_*	1090.07	$1090.2^{+1.3}_{-1.4}$ (-0.3σ)	$f\sigma_8(2.33)$	0.2975	$0.299^{+0.012}_{-0.011}$ $(+0.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.75	$10.7^{+3.5}_{-3.4}$ $(+0.0\sigma)$	r_*	144.8	$144.4^{+7.0}_{-7.5}$ (-0.3σ)	$\sigma_8(2.33)$	0.3068	$0.308^{+0.012}_{-0.012}$ $(+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.4	$18.3^{+6.5}_{-6.4}$ $(+0.0\sigma)$	$100\theta_*$	1.04123	$1.0411^{+0.0024}_{-0.0024}$ (-0.2σ)	$\chi^2_{\mathrm{lensing}}$	8.87	9.43 ($\nu: 0.4$)
$A_{217}^{\mathrm{dustTT}}$	94.6	93^{+10}_{-10} (-0.0σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.91	$13.87^{+0.64}_{-0.69}$ (-0.3σ)	χ^2_{small}	396.08	397.1 ($\nu: 1.5$) $(+0.1\sigma)$
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	z_{drag}	1059.63	$1059.8^{+2.1}_{-2.1}$ $(+0.4\sigma)$	χ^2_{lowl}	22.88	23.0 ($\nu: 0.9$) (-0.6σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	r_{drag}	147.5	$147.1^{+7.1}_{-7.6}$ (-0.3σ)	χ^2_{plik}	759.9	773.4 ($\nu: 16.6$) $(+0.1\sigma)$
H_0	67.54	$67.9^{+4.5}_{-3.9}$ $(+0.5\sigma)$	k_{D}	0.1403	$0.1406^{+0.0076}_{-0.0066}$ $(+0.3\sigma)$	$\chi^2_{6\mathrm{DF}}$	0.029	0.064 ($\nu: 0.0$)
Ω_{Λ}	0.6890	$0.690^{+0.016}_{-0.017}$ $(+0.7\sigma)$	$100\theta_{\mathrm{D}}$	0.16104	$0.1612^{+0.0014}_{-0.0015}$ $(+0.1\sigma)$	χ^2_{MGS}	1.22	1.36 ($\nu: 0.2$)
Ω_{m}	0.3110	$0.310^{+0.017}_{-0.016}$ (-0.7σ)	z_{eq}	3380	3376^{+86}_{-86} (-0.7σ)	$\chi^2_{\mathrm{DR12BAO}}$	4.36	4.9 ($\nu: 1.4$)
$\Omega_{\mathrm{m}}h^2$	0.1419	$0.143^{+0.013}_{-0.013}$ $(+0.2\sigma)$	k_{eq}	0.010308	$0.01034^{+0.00040}_{-0.00038}$ (-0.2σ)	χ^2_{prior}	1.3	7.3 ($\nu: 6.7$) $(+0.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.0958	$0.097^{+0.015}_{-0.014}$ $(+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	0.8171	$0.818^{+0.014}_{-0.014}$ $(+0.7\sigma)$	χ^2_{CMB}	1187.7	1202.9 ($\nu: 17.4$) $(+1.5\sigma)$
σ_8	0.8088	$0.811^{+0.027}_{-0.026}$ $(+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4515	$0.4518^{+0.0075}_{-0.0071}$ $(+0.7\sigma)$	χ^2_{BAO}	5.61	6.3 ($\nu: 1.0$)
S_8	0.8236	$0.825^{+0.026}_{-0.025}$ (-0.6σ)	$H(0.15)$	72.81	$73.2^{+4.6}_{-4.0}$ $(+0.5\sigma)$			

Best-fit $\chi^2_{\mathrm{eff}} = 1194.67$; $\Delta\chi^2_{\mathrm{eff}} = -0.01$; $\bar{\chi}^2_{\mathrm{eff}} = 1216.49$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 1.76$; $R - 1 = 0.01644$
 χ^2_{eff} : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.36 (Δ -0.01) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.87 (Δ -0.01) small_100x143_offlike5_EE_Aplanck
396.08 (Δ -0.01) commander_dx12_v3.2_29: 22.88 (Δ -0.08) plik_rd12_HM_v22_TT: 759.91 (Δ 0.10)

11.5 base_nnu_yhe_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02210^{+0.00062}_{-0.00062} \quad (+0.1\sigma)$	S_8	$0.841^{+0.050}_{-0.047} \quad (-0.0\sigma)$	$100\theta_{s,eq}$	$0.447^{+0.015}_{-0.014} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.119^{+0.015}_{-0.014} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.460^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$H(0.15)$	$71.6^{+6.8}_{-6.0} \quad (+0.1\sigma)$
$100\theta_{MC}$	$1.0413^{+0.0038}_{-0.0039} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.611^{+0.024}_{-0.023} \quad (+0.1\sigma)$	$D_M(0.15)$	$655^{+61}_{-60} \quad (-0.1\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.995^{+0.034}_{-0.033} \quad (+0.0\sigma)$	$H(0.38)$	$81.9^{+7.0}_{-6.0} \quad (+0.1\sigma)$
N_{eff}	$2.94^{+1.1}_{-0.98} \quad (+0.0\sigma)$	$r_{drag} h$	$98.2^{+4.7}_{-4.5} \quad (+0.1\sigma)$	$D_M(0.38)$	$1558^{+140}_{-140} \quad (-0.1\sigma)$
Y_P	$0.251^{+0.058}_{-0.064} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.460^{+0.091}_{-0.088} \quad (+0.0\sigma)$	$H(0.51)$	$88.7^{+7.2}_{-6.1} \quad (+0.0\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.041}_{-0.037} \quad (+0.2\sigma)$	z_{re}	$< 8.86 \quad (+0.2\sigma)$	$D_M(0.51)$	$2017^{+170}_{-170} \quad (-0.1\sigma)$
n_s	$0.961^{+0.026}_{-0.026} \quad (+0.1\sigma)$	$10^9 A_s$	$2.091^{+0.087}_{-0.077} \quad (+0.2\sigma)$	$H(0.61)$	$94.3^{+7.0}_{-6.5} \quad (+0.0\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.052}_{-0.052} \quad (+0.0\sigma)$	$D_M(0.61)$	$2345^{+190}_{-200} \quad (-0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{40}	$1235^{+45}_{-44} \quad (-0.1\sigma)$	$H(2.33)$	$235^{+13}_{-12} \quad (+0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5712^{+83}_{-83} \quad (+0.0\sigma)$	$D_M(2.33)$	$5827^{+390}_{-420} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (-0.0\sigma)$	D_{810}	$2536^{+28}_{-28} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.024} \quad (+0.0\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (+0.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.033}_{-0.030} \quad (+0.1\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.5^{+4.8}_{-4.7} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.019}_{-0.019} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.961^{+0.026}_{-0.026} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.032}_{-0.029} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.251^{+0.058}_{-0.064} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.018}_{-0.017} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.253^{+0.059}_{-0.064} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.031}_{-0.028} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	Age/Gyr	$13.95^{+0.93}_{-0.99} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.017}_{-0.016} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	z_*	$1090.4^{+1.4}_{-1.4} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.030}_{-0.027} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.3} \quad (+0.0\sigma)$	r_*	$145.6^{+8.6}_{-9.3} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.016}_{-0.015} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.0413^{+0.0027}_{-0.0027} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.018}_{-0.016} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.98^{+0.79}_{-0.86} \quad (-0.0\sigma)$	f_{2000}^{143}	$31^{+7}_{-8} \quad (-0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.4^{+2.4}_{-2.3} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+6}_{-6} \quad (+0.0\sigma)$
H_0	$66.3^{+6.8}_{-6.0} \quad (+0.1\sigma)$	r_{drag}	$148.4^{+8.8}_{-9.6} \quad (-0.0\sigma)$	f_{2000}^{217}	$108.3^{+5.1}_{-5.1} \quad (+0.0\sigma)$
Ω_Λ	$0.676^{+0.038}_{-0.041} \quad (+0.1\sigma)$	k_D	$0.1396^{+0.0085}_{-0.0080} \quad (+0.0\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_m	$0.324^{+0.041}_{-0.038} \quad (-0.1\sigma)$	$100\theta_D$	$0.1611^{+0.0015}_{-0.0015} \quad (+0.0\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 2.5) \quad (-0.1\sigma)$
$\Omega_m h^2$	$0.142^{+0.015}_{-0.014} \quad (+0.0\sigma)$	z_{eq}	$3427^{+160}_{-160} \quad (-0.1\sigma)$	χ_{plik}^2	$772.5 \quad (\nu: 19.0) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.094^{+0.019}_{-0.017} \quad (+0.0\sigma)$	k_{eq}	$0.01037^{+0.00044}_{-0.00042} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (-0.0\sigma)$
σ_8	$0.810^{+0.034}_{-0.031} \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.809^{+0.029}_{-0.027} \quad (+0.1\sigma)$	χ_{CMB}^2	$1193.5 \quad (\nu: 17.1) \quad (-0.0\sigma)$

$\bar{\chi}_{eff}^2 = 1200.83$; $\Delta \bar{\chi}_{eff}^2 = 1.51$; $R - 1 = 0.01329$

11.6 base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02227^{+0.00048}_{-0.00048} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.023}_{-0.020} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1516^{+90}_{-93} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.121^{+0.015}_{-0.014} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.023}_{-0.022} \quad (-0.6\sigma)$	$H(0.51)$	$90.5^{+5.4}_{-4.8} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0037}_{-0.0038} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.96^{+2.1}_{-2.0} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1964^{+110}_{-120} \quad (-0.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.054}_{-0.053} \quad (-0.7\sigma)$	$H(0.61)$	$96.1^{+5.7}_{-5.0} \quad (+0.6\sigma)$
N_{eff}	$3.18^{+0.92}_{-0.86} \quad (+0.5\sigma)$	z_{re}	$< 8.99 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2286^{+130}_{-140} \quad (-0.6\sigma)$
Y_{P}	$0.245^{+0.060}_{-0.063} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.077}_{-0.073} \quad (+0.5\sigma)$	$H(2.33)$	$238^{+13}_{-11} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.036}_{-0.035} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.886^{+0.048}_{-0.045} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5721^{+300}_{-320} \quad (-0.6\sigma)$
n_{s}	$0.970^{+0.017}_{-0.017} \quad (+0.7\sigma)$	D_{40}	$1222^{+33}_{-33} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.018}_{-0.017} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0051} \quad (+0.0\sigma)$	D_{220}	$5719^{+81}_{-82} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.030}_{-0.028} \quad (+0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.1\sigma)$	D_{810}	$2537^{+29}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.018}_{-0.016} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-11} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.028}_{-0.025} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (-0.0\sigma)$	D_{2000}	$229.3^{+4.9}_{-4.8} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.018}_{-0.016} \quad (-0.2\sigma)$
A_{100}^{PS}	$266^{+60}_{-60} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.970^{+0.017}_{-0.017} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.026}_{-0.025} \quad (+0.5\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.245^{+0.060}_{-0.063} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.018}_{-0.016} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.247^{+0.060}_{-0.063} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.026}_{-0.023} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	Age/Gyr	$13.70^{+0.72}_{-0.77} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.013}_{-0.012} \quad (+0.6\sigma)$
A^{kSZ}	—	z_*	$1090.2^{+1.4}_{-1.3} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.014}_{-0.012} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.7^{+7.5}_{-7.9} \quad (-0.4\sigma)$	f_{2000}^{143}	$32^{+7}_{-7} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.0409^{+0.0025}_{-0.0025} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-6} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+6.5}_{-6.3} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.81^{+0.68}_{-0.73} \quad (-0.4\sigma)$	f_{2000}^{217}	$108.4^{+5.2}_{-5.4} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.8^{+2.1}_{-2.2} \quad (+0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.4^{+7.6}_{-8.0} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 0.9) \quad (-0.7\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.1412^{+0.0079}_{-0.0071} \quad (+0.4\sigma)$	χ_{plik}^2	$774.0 \quad (\nu: 17.6) \quad (+0.2\sigma)$
H_0	$68.3^{+4.6}_{-4.1} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1613^{+0.0015}_{-0.0015} \quad (+0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.017}_{-0.017} \quad (+0.8\sigma)$	z_{eq}	$3368^{+87}_{-87} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.47 \quad (\nu: 0.2)$
Ω_{m}	$0.309^{+0.017}_{-0.017} \quad (-0.8\sigma)$	k_{eq}	$0.01036^{+0.00045}_{-0.00043} \quad (-0.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^2$	$0.144^{+0.015}_{-0.014} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.015}_{-0.014} \quad (+0.8\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.099^{+0.016}_{-0.015} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4526^{+0.0076}_{-0.0073} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
σ_8	$0.813^{+0.032}_{-0.029} \quad (+0.3\sigma)$	$H(0.15)$	$73.6^{+4.8}_{-4.2} \quad (+0.7\sigma)$	χ_{CMB}^2	$1193.8 \quad (\nu: 16.7) \quad (-0.0\sigma)$
S_8	$0.825^{+0.033}_{-0.031} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+39}_{-40} \quad (-0.7\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.018}_{-0.017} \quad (-0.6\sigma)$	$H(0.38)$	$83.8^{+5.1}_{-4.6} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1207.34$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.58$; $R - 1 = 0.02392$

11.7 base_nnu_yhe_plikHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02210^{+0.00057}_{-0.00058} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.457^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$D_{\text{M}}(0.15)$	$659^{+57}_{-57} \quad (+0.1\sigma)$
$\Omega_{\text{c}}h^2$	$0.117^{+0.014}_{-0.013} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.606^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$H(0.38)$	$81.3^{+6.5}_{-5.7} \quad (-0.1\sigma)$
$100\theta_{\text{MC}}$	$1.0416^{+0.0037}_{-0.0038} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\text{M}}(0.38)$	$1568^{+130}_{-130} \quad (+0.1\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{\text{drag}}h$	$98.3^{+3.8}_{-3.6} \quad (+0.1\sigma)$	$H(0.51)$	$88.0^{+6.7}_{-5.8} \quad (-0.1\sigma)$
N_{eff}	$2.83^{+0.99}_{-0.92} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.063}_{-0.061} \quad (-0.1\sigma)$	$D_{\text{M}}(0.51)$	$2030^{+160}_{-160} \quad (+0.1\sigma)$
Y_{P}	$0.255^{+0.059}_{-0.060} \quad (+0.1\sigma)$	z_{re}	$< 8.78 \quad (+0.2\sigma)$	$H(0.61)$	$93.7^{+6.8}_{-5.9} \quad (-0.1\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.036^{+0.040}_{-0.036} \quad (+0.0\sigma)$	10^9A_{s}	$2.082^{+0.081}_{-0.079} \quad (-0.0\sigma)$	$D_{\text{M}}(0.61)$	$2360^{+180}_{-190} \quad (+0.1\sigma)$
n_{s}	$0.960^{+0.023}_{-0.024} \quad (+0.0\sigma)$	$10^9A_{\text{s}}e^{-2\tau}$	$1.871^{+0.050}_{-0.051} \quad (-0.2\sigma)$	$H(2.33)$	$234^{+13}_{-11} \quad (-0.2\sigma)$
y_{cal}	$1.0005^{+0.0051}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1234^{+38}_{-37} \quad (-0.1\sigma)$	$D_{\text{M}}(2.33)$	$5866^{+380}_{-390} \quad (+0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{220}	$5714^{+83}_{-82} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	$2535^{+28}_{-28} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.031}_{-0.028} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.014}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.0\sigma)$	D_{2000}	$229.6^{+4.8}_{-4.7} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.030}_{-0.028} \quad (-0.1\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	$n_{\text{s},0.002}$	$0.960^{+0.023}_{-0.024} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.014}_{-0.013} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.255^{+0.059}_{-0.060} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.029}_{-0.027} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.257^{+0.059}_{-0.060} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.014}_{-0.014} \quad (-0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$14.04^{+0.90}_{-0.93} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.028}_{-0.026} \quad (-0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	$1090.3^{+1.4}_{-1.4} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.015}_{-0.014} \quad (-0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.4} \quad (+0.0\sigma)$	r_*	$146.6^{+8.4}_{-8.8} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.017}_{-0.015} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.3} \quad (-0.0\sigma)$	$100\theta_*$	$1.0416^{+0.0027}_{-0.0027} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$14.08^{+0.78}_{-0.81} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+6}_{-6} \quad (-0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.2^{+5.1}_{-5.1} \quad (-0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$149.4^{+8.6}_{-9.0} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.3 \quad (\nu: 0.5)$
H_0	$65.8^{+6.3}_{-5.5} \quad (-0.1\sigma)$	k_{D}	$0.1387^{+0.0080}_{-0.0076} \quad (-0.2\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.1) \quad (-0.1\sigma)$
Ω_{Λ}	$0.677^{+0.031}_{-0.033} \quad (+0.1\sigma)$	$100\theta_{\text{D}}$	$0.1611^{+0.0015}_{-0.0014} \quad (-0.0\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 1.8) \quad (-0.1\sigma)$
Ω_{m}	$0.323^{+0.033}_{-0.031} \quad (-0.1\sigma)$	z_{eq}	$3428^{+140}_{-140} \quad (-0.0\sigma)$	χ_{plik}^2	$772.0 \quad (\nu: 16.8) \quad (-0.1\sigma)$
$\Omega_{\text{m}}h^2$	$0.140^{+0.014}_{-0.013} \quad (-0.2\sigma)$	k_{eq}	$0.01030^{+0.00038}_{-0.00036} \quad (-0.3\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.5) \quad (+0.0\sigma)$
$\Omega_{\text{m}}h^3$	$0.092^{+0.018}_{-0.016} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	$0.809^{+0.025}_{-0.022} \quad (+0.1\sigma)$	χ_{CMB}^2	$1202.1 \quad (\nu: 17.0) \quad (+1.4\sigma)$
σ_8	$0.805^{+0.031}_{-0.029} \quad (-0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.447^{+0.013}_{-0.011} \quad (+0.1\sigma)$		
S_8	$0.835^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$71.2^{+6.3}_{-5.5} \quad (-0.1\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1209.43; \Delta\bar{\chi}_{\text{eff}}^2 = 1.27; R - 1 = 0.01928$$

11.8 base_nnu_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02226^{+0.00047}_{-0.00048} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.018}_{-0.017} \quad (-0.4\sigma)$	$D_M(0.38)$	$1525^{+86}_{-90} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.120^{+0.013}_{-0.012} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$H(0.51)$	$90.0^{+5.1}_{-4.5} \quad (+0.4\sigma)$
$100\theta_{MC}$	$1.0410^{+0.0036}_{-0.0037} \quad (-0.1\sigma)$	$r_{drag} h$	$99.8^{+2.0}_{-1.9} \quad (+0.8\sigma)$	$D_M(0.51)$	$1976^{+110}_{-120} \quad (-0.5\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.044}_{-0.044} \quad (-0.6\sigma)$	$H(0.61)$	$95.6^{+5.3}_{-4.7} \quad (+0.4\sigma)$
N_{eff}	$3.10^{+0.85}_{-0.80} \quad (+0.3\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$D_M(0.61)$	$2299^{+130}_{-130} \quad (-0.5\sigma)$
Y_P	$0.248^{+0.058}_{-0.063} \quad (-0.1\sigma)$	$10^9 A_s$	$2.105^{+0.069}_{-0.062} \quad (+0.5\sigma)$	$H(2.33)$	$237^{+11}_{-11} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.032}_{-0.030} \quad (+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.043}_{-0.042} \quad (+0.2\sigma)$	$D_M(2.33)$	$5750^{+290}_{-300} \quad (-0.4\sigma)$
n_s	$0.968^{+0.017}_{-0.016} \quad (+0.6\sigma)$	D_{40}	$1225^{+32}_{-33} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.014}_{-0.013} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0050} \quad (+0.1\sigma)$	D_{220}	$5723^{+81}_{-80} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.026}_{-0.024} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2538^{+28}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.014}_{-0.013} \quad (-0.4\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{1420}	$815^{+11}_{-11} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.024}_{-0.022} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-3.9} \quad (-0.0\sigma)$	D_{2000}	$229.6^{+4.9}_{-4.8} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.014}_{-0.013} \quad (-0.2\sigma)$
A_{100}^{PS}	$266^{+60}_{-60} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.968^{+0.017}_{-0.016} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.023}_{-0.021} \quad (+0.4\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.248^{+0.058}_{-0.063} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.014}_{-0.013} \quad (-0.1\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.249^{+0.058}_{-0.063} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.022}_{-0.020} \quad (+0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.77^{+0.69}_{-0.72} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.011}_{-0.011} \quad (+0.5\sigma)$
A^{kSZ}	—	z_*	$1090.2^{+1.3}_{-1.4} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.308^{+0.012}_{-0.011} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.4^{+6.9}_{-7.3} \quad (-0.3\sigma)$	f_{2000}^{143}	$32^{+7}_{-7} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.0411^{+0.0024}_{-0.0024} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.6}_{-6.4} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.87^{+0.63}_{-0.67} \quad (-0.3\sigma)$	f_{2000}^{217}	$108.3^{+5.2}_{-5.4} \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.8^{+2.1}_{-2.1} \quad (+0.4\sigma)$	$\chi_{lensing}^2$	$9.39 \quad (\nu: 0.3)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.1^{+7.1}_{-7.5} \quad (-0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_D	$0.1406^{+0.0076}_{-0.0066} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.9) \quad (-0.6\sigma)$
H_0	$67.9^{+4.5}_{-3.9} \quad (+0.5\sigma)$	$100\theta_D$	$0.1612^{+0.0014}_{-0.0015} \quad (+0.1\sigma)$	χ_{plik}^2	$773.3 \quad (\nu: 16.5) \quad (+0.1\sigma)$
Ω_Λ	$0.690^{+0.016}_{-0.017} \quad (+0.8\sigma)$	z_{eq}	$3376^{+86}_{-85} \quad (-0.7\sigma)$	χ_{6DF}^2	$0.062 \quad (\nu: 0.0)$
Ω_m	$0.310^{+0.017}_{-0.016} \quad (-0.8\sigma)$	k_{eq}	$0.01033^{+0.00039}_{-0.00038} \quad (-0.2\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.2)$
$\Omega_m h^2$	$0.143^{+0.013}_{-0.012} \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.818^{+0.014}_{-0.014} \quad (+0.7\sigma)$	$\chi_{DR12BAO}^2$	$4.8 \quad (\nu: 1.4)$
$\Omega_m h^3$	$0.097^{+0.015}_{-0.014} \quad (+0.3\sigma)$	$100\theta_{s,eq}$	$0.4519^{+0.0074}_{-0.0071} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (+0.0\sigma)$
σ_8	$0.812^{+0.027}_{-0.026} \quad (+0.2\sigma)$	$H(0.15)$	$73.2^{+4.6}_{-4.0} \quad (+0.5\sigma)$	χ_{CMB}^2	$1202.8 \quad (\nu: 17.1) \quad (+1.5\sigma)$
S_8	$0.825^{+0.026}_{-0.025} \quad (-0.6\sigma)$	$D_M(0.15)$	$639^{+37}_{-39} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.38)$	$83.3^{+4.9}_{-4.3} \quad (+0.5\sigma)$		

$\bar{\chi}_{eff}^2 = 1216.32$; $\Delta \bar{\chi}_{eff}^2 = 1.75$; $R - 1 = 0.01882$

11.9 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022215	$0.02225^{+0.00044}_{-0.00043}$ (+0.6 σ)	Ω_m	0.3227	$0.321^{+0.022}_{-0.021}$ (−0.2 σ)	k_{eq}	0.010297	$0.01033^{+0.00031}_{-0.00029}$ (−0.2 σ)
$\Omega_c h^2$	0.1167	$0.1179^{+0.0097}_{-0.0088}$ (−0.1 σ)	$\Omega_m h^2$	0.1395	$0.1408^{+0.0098}_{-0.0089}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8083	$0.809^{+0.016}_{-0.015}$ (+0.1 σ)
$100\theta_{\text{MC}}$	1.04140	$1.0413^{+0.0024}_{-0.0024}$ (+0.0 σ)	$\Omega_m h^3$	0.0918	$0.093^{+0.011}_{-0.010}$ (−0.1 σ)	$100\theta_{\text{s,eq}}$	0.4469	$0.4474^{+0.0079}_{-0.0078}$ (+0.1 σ)
τ	0.0539	$0.054^{+0.016}_{-0.016}$ (+0.3 σ)	σ_8	0.8029	$0.806^{+0.025}_{-0.025}$ (−0.1 σ)	$H(0.15)$	71.08	$71.6^{+3.8}_{-3.4}$ (+0.0 σ)
N_{eff}	2.81	$2.89^{+0.63}_{-0.57}$ (−0.1 σ)	S_8	0.8327	$0.833^{+0.032}_{-0.034}$ (−0.3 σ)	$D_{\text{M}}(0.15)$	658.4	654^{+34}_{-34} (−0.1 σ)
Y_{P}	0.2449	$0.246^{+0.034}_{-0.036}$ (−0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4561	$0.456^{+0.018}_{-0.018}$ (−0.3 σ)	$H(0.38)$	81.22	$81.7^{+3.9}_{-3.5}$ (+0.0 σ)
$\ln(10^{10} A_{\text{s}})$	3.0357	$3.038^{+0.039}_{-0.038}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6051	$0.606^{+0.019}_{-0.019}$ (−0.3 σ)	$D_{\text{M}}(0.38)$	1568	1558^{+76}_{-78} (−0.1 σ)
n_{s}	0.9584	$0.960^{+0.017}_{-0.017}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9901	$0.990^{+0.023}_{-0.024}$ (−0.3 σ)	$H(0.51)$	87.95	$88.5^{+4.0}_{-3.6}$ (+0.0 σ)
y_{cal}	1.00047	$1.0007^{+0.0048}_{-0.0047}$ (+0.1 σ)	$r_{\text{drag}} h$	98.23	$98.4^{+2.6}_{-2.5}$ (+0.2 σ)	$D_{\text{M}}(0.51)$	2029	2017^{+96}_{-98} (−0.1 σ)
A_{217}^{CIB}	43.8	46^{+10}_{-10} (−0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.457	$2.456^{+0.059}_{-0.060}$ (−0.1 σ)	$H(0.61)$	93.57	$94.1^{+4.1}_{-3.7}$ (−0.0 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.89	—	z_{re}	7.60	$7.6^{+1.6}_{-1.7}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2359	2345^{+110}_{-110} (−0.1 σ)
A_{143}^{tSZ}	6.90	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_{\text{s}}$	2.082	$2.086^{+0.082}_{-0.077}$ (+0.1 σ)	$H(2.33)$	233.5	$234.5^{+8.2}_{-7.7}$ (−0.1 σ)
A_{100}^{PS}	244	257^{+60}_{-50} (−0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8689	$1.874^{+0.040}_{-0.040}$ (−0.1 σ)	$D_{\text{M}}(2.33)$	5865	5834^{+230}_{-240} (−0.0 σ)
A_{143}^{PS}	51.4	45^{+20}_{-20} (−0.5 σ)	D_{40}	1238.1	1238^{+33}_{-32} (+0.1 σ)	$f\sigma_8(0.15)$	0.4597	$0.460^{+0.017}_{-0.017}$ (−0.3 σ)
$A_{143 \times 217}^{\text{PS}}$	57.2	42^{+20}_{-20} (−0.2 σ)	D_{220}	5730	5733^{+75}_{-75} (+0.5 σ)	$\sigma_8(0.15)$	0.7408	$0.743^{+0.024}_{-0.023}$ (−0.1 σ)
A_{217}^{PS}	124.0	115^{+20}_{-20} (+0.0 σ)	D_{810}	2539.1	2538^{+27}_{-27} (+0.2 σ)	$f\sigma_8(0.38)$	0.4754	$0.476^{+0.015}_{-0.015}$ (−0.3 σ)
A^{kSZ}	0.00	< 7.89 (−0.2 σ)	D_{1420}	819.7	$817.9^{+9.3}_{-9.2}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6555	$0.658^{+0.022}_{-0.021}$ (−0.1 σ)
A_{100}^{dustTT}	8.69	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	232.45	$231.5^{+3.5}_{-3.5}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4727	$0.474^{+0.014}_{-0.014}$ (−0.3 σ)
A_{143}^{dustTT}	10.86	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9584	$0.960^{+0.017}_{-0.017}$ (−0.0 σ)	$\sigma_8(0.51)$	0.6130	$0.615^{+0.021}_{-0.021}$ (−0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.1	$18.5^{+6.4}_{-6.4}$ (+0.1 σ)	Y_{P}	0.2449	$0.246^{+0.034}_{-0.036}$ (−0.2 σ)	$f\sigma_8(0.61)$	0.4669	$0.468^{+0.014}_{-0.014}$ (−0.2 σ)
A_{217}^{dustTT}	95.8	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2463	$0.247^{+0.034}_{-0.036}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5829	$0.585^{+0.021}_{-0.020}$ (−0.1 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.074}_{-0.075}$	Age/Gyr	14.04	$13.97^{+0.56}_{-0.57}$ (−0.0 σ)	$f\sigma_8(2.33)$	0.2935	$0.295^{+0.011}_{-0.010}$ (−0.0 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.058}_{-0.058}$	z_*	1089.70	$1089.85^{+0.87}_{-0.87}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3021	$0.303^{+0.012}_{-0.011}$ (−0.0 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.16}$	r_*	146.6	$145.9^{+5.4}_{-5.5}$ (+0.0 σ)	f_{2000}^{143}	27.2	29^{+6}_{-6} (−0.7 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04168	$1.0415^{+0.0019}_{-0.0018}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	30.92	32^{+4}_{-4} (−0.7 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	14.08	$14.01^{+0.50}_{-0.50}$ (+0.0 σ)	f_{2000}^{217}	105.51	$106.6^{+4.1}_{-4.1}$ (−0.6 σ)
A_{217}^{dustTE}	2.09	$2.09^{+0.53}_{-0.53}$	z_{drag}	1059.25	$1059.5^{+1.6}_{-1.6}$ (+0.1 σ)	χ_{small}^2	396.03	397.1 (ν : 1.6) (+0.1 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	149.4	$148.7^{+5.6}_{-5.6}$ (+0.0 σ)	χ_{lowl}^2	24.26	24.3 (ν : 1.2) (−0.0 σ)
c_{217}	0.99814	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.13918	$0.1397^{+0.0051}_{-0.0048}$ (+0.1 σ)	χ_{plik}^2	2343.1	2360.3 (ν : 19.0) (+258.3 σ)
H_0	65.76	$66.2^{+3.7}_{-3.4}$ (+0.0 σ)	$100\theta_{\text{D}}$	0.16035	$0.16056^{+0.00093}_{-0.00095}$ (−0.7 σ)	χ_{prior}^2	1.4	11.5 (ν : 10.3) (+1.2 σ)
Ω_{Λ}	0.6773	$0.679^{+0.021}_{-0.022}$ (+0.2 σ)	z_{eq}	3429	3424^{+88}_{-87} (−0.1 σ)	χ_{CMB}^2	2763.3	2781.7 (ν : 18.8) (+268.3 σ)

Best-fit $\chi_{\text{eff}}^2 = 2764.72$; $\Delta\chi_{\text{eff}}^2 = -1.05$; $\bar{\chi}_{\text{eff}}^2 = 2793.18$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.41$; $R - 1 = 0.01243$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.03 (Δ -0.02) commander_dx12_v3_2_29: 24.26 (Δ 1.00) plik_rd12_HM_v22b_TTTEEE: 2343.05 (Δ -1.59)

11.10 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022350	$0.02239^{+0.00037}_{-0.00037}$ $(+1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.0946	$0.096^{+0.011}_{-0.010}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	645.7	643^{+29}_{-28} (-0.4σ)
$\Omega_{\mathrm{c}}h^2$	0.1179	$0.1186^{+0.0098}_{-0.0092}$ (-0.0σ)	σ_8	0.8053	$0.807^{+0.026}_{-0.026}$ (-0.0σ)	$H(0.38)$	82.48	$82.8^{+3.4}_{-3.3}$ $(+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.04108	$1.0411^{+0.0024}_{-0.0024}$ (-0.1σ)	S_8	0.8222	$0.823^{+0.028}_{-0.028}$ (-0.7σ)	$D_{\mathrm{M}}(0.38)$	1540	1534^{+67}_{-65} (-0.4σ)
τ	0.0551	$0.055^{+0.016}_{-0.016}$ $(+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4503	$0.451^{+0.015}_{-0.016}$ (-0.7σ)	$H(0.51)$	89.17	$89.5^{+3.6}_{-3.4}$ $(+0.3\sigma)$
N_{eff}	2.96	$3.01^{+0.61}_{-0.57}$ $(+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6022	$0.603^{+0.019}_{-0.019}$ (-0.5σ)	$D_{\mathrm{M}}(0.51)$	1994	1987^{+85}_{-83} (-0.4σ)
Y_{P}	0.2422	$0.244^{+0.034}_{-0.036}$ (-0.2σ)	$\sigma_8/h^{0.5}$	0.9829	$0.983^{+0.022}_{-0.022}$ (-0.6σ)	$H(0.61)$	94.77	$95.1^{+3.7}_{-3.6}$ $(+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0401	$3.043^{+0.038}_{-0.037}$ $(+0.3\sigma)$	$r_{\mathrm{drag}}h$	99.42	$99.5^{+1.7}_{-1.7}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	2320	2313^{+97}_{-95} (-0.4σ)
n_{s}	0.9648	$0.965^{+0.014}_{-0.014}$ $(+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.435	$2.437^{+0.051}_{-0.052}$ (-0.5σ)	$H(2.33)$	234.9	$235.5^{+8.2}_{-7.9}$ $(+0.1\sigma)$
y_{cal}	1.00029	$1.0007^{+0.0047}_{-0.0046}$ $(+0.1\sigma)$	z_{re}	7.71	$7.7^{+1.6}_{-1.6}$ $(+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	5796	5779^{+220}_{-220} (-0.3σ)
A_{217}^{CIB}	44.5	46^{+10}_{-10} (-0.2σ)	$10^9 A_{\mathrm{s}}$	2.091	$2.097^{+0.080}_{-0.077}$ $(+0.3\sigma)$	$f\sigma_8(0.15)$	0.4548	$0.455^{+0.015}_{-0.016}$ (-0.7σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.82	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8726	$1.877^{+0.039}_{-0.041}$ (-0.0σ)	$\sigma_8(0.15)$	0.7440	$0.746^{+0.024}_{-0.024}$ $(+0.0\sigma)$
A_{143}^{tSZ}	7.03	$5.6^{+3.8}_{-3.8}$ $(+0.3\sigma)$	D_{40}	1227.9	1230^{+29}_{-28} (-0.3σ)	$f\sigma_8(0.38)$	0.4728	$0.474^{+0.015}_{-0.015}$ (-0.6σ)
A_{100}^{PS}	244	257^{+50}_{-60} (-0.2σ)	D_{220}	5729	5738^{+73}_{-76} $(+0.6\sigma)$	$\sigma_8(0.38)$	0.6594	$0.661^{+0.022}_{-0.022}$ $(+0.1\sigma)$
A_{143}^{PS}	50.7	45^{+20}_{-20} (-0.5σ)	D_{810}	2538.4	2539^{+26}_{-27} $(+0.2\sigma)$	$f\sigma_8(0.51)$	0.4712	$0.472^{+0.015}_{-0.015}$ (-0.4σ)
$A_{143 \times 217}^{\mathrm{PS}}$	55.6	42^{+20}_{-20} (-0.2σ)	D_{1420}	819.4	$818.2^{+9.1}_{-9.1}$ $(+0.7\sigma)$	$\sigma_8(0.51)$	0.6170	$0.619^{+0.021}_{-0.021}$ $(+0.2\sigma)$
A_{217}^{PS}	122.8	115^{+20}_{-20} (-0.0σ)	D_{2000}	232.14	$231.4^{+3.5}_{-3.6}$ $(+0.8\sigma)$	$f\sigma_8(0.61)$	0.4662	$0.467^{+0.015}_{-0.015}$ (-0.3σ)
A^{kSZ}	0.01	< 7.93 (-0.2σ)	$n_{\mathrm{s},0.002}$	0.9648	$0.965^{+0.014}_{-0.014}$ $(+0.4\sigma)$	$\sigma_8(0.61)$	0.5871	$0.589^{+0.020}_{-0.020}$ $(+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.83	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	Y_{P}	0.2422	$0.244^{+0.034}_{-0.036}$ (-0.2σ)	$f\sigma_8(2.33)$	0.2960	$0.297^{+0.010}_{-0.010}$ $(+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.99	$10.9^{+3.5}_{-3.6}$ $(+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2435	$0.246^{+0.034}_{-0.036}$ (-0.2σ)	$\sigma_8(2.33)$	0.3051	$0.306^{+0.011}_{-0.011}$ $(+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.3	$18.6^{+6.4}_{-6.3}$ $(+0.1\sigma)$	Age/Gyr	13.87	$13.83^{+0.52}_{-0.51}$ (-0.3σ)	f_{2000}^{143}	27.5	29^{+6}_{-6} (-0.6σ)
$A_{217}^{\mathrm{dustTT}}$	95.9	94^{+10}_{-10} $(+0.1\sigma)$	z_*	1089.60	$1089.73^{+0.85}_{-0.85}$ (-0.9σ)	$f_{2000}^{143 \times 217}$	31.06	32^{+4}_{-4} (-0.7σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.072}_{-0.074}$	r_*	145.4	$145.1^{+5.4}_{-5.3}$ (-0.2σ)	f_{2000}^{217}	105.56	$106.7^{+4.0}_{-4.2}$ (-0.6σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.059}_{-0.058}$	$100\theta_*$	1.04138	$1.0413^{+0.0018}_{-0.0018}$ (-0.0σ)	χ_{small}^2	396.16	397.3 $(\nu: 2.0)$ $(+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.483	$0.48^{+0.17}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.964	$13.93^{+0.49}_{-0.49}$ (-0.2σ)	χ_{lowl}^2	23.25	23.4 $(\nu: 0.7)$ (-0.4σ)
$A_{143}^{\mathrm{dustTE}}$	0.225	$0.22^{+0.11}_{-0.11}$	z_{drag}	1059.59	$1059.8^{+1.5}_{-1.5}$ $(+0.4\sigma)$	χ_{plik}^2	2344.8	2361.2 $(\nu: 19.0)$ $(+258.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.667	$0.66^{+0.16}_{-0.16}$	r_{drag}	148.1	$147.7^{+5.5}_{-5.4}$ (-0.2σ)	$\chi_{6\mathrm{DF}}^2$	0.047	0.069 $(\nu: 0.0)$
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.52}_{-0.52}$	k_{D}	0.14020	$0.1405^{+0.0050}_{-0.0048}$ $(+0.2\sigma)$	χ_{MGS}^2	1.10	1.23 $(\nu: 0.1)$
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.16047	$0.16063^{+0.00092}_{-0.00093}$ (-0.6σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.80	5.1 $(\nu: 1.4)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	z_{eq}	3391	3389^{+64}_{-62} (-0.5σ)	χ_{prior}^2	1.5	11.6 $(\nu: 10.2)$ $(+1.2\sigma)$
H_0	67.13	$67.4^{+3.2}_{-3.0}$ $(+0.4\sigma)$	k_{eq}	0.010291	$0.01031^{+0.00032}_{-0.00031}$ (-0.3σ)	χ_{BAO}^2	5.94	6.4 $(\nu: 1.0)$
Ω_{Λ}	0.6873	$0.688^{+0.013}_{-0.014}$ $(+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	0.8153	$0.816^{+0.011}_{-0.011}$ $(+0.6\sigma)$	χ_{CMB}^2	2764.2	2781.9 $(\nu: 18.1)$ $(+268.3\sigma)$
Ω_{m}	0.3127	$0.312^{+0.014}_{-0.013}$ (-0.7σ)	$100\theta_{\mathrm{s,eq}}$	0.4505	$0.4507^{+0.0056}_{-0.0056}$ $(+0.5\sigma)$			
$\Omega_{\mathrm{m}}h^2$	0.1409	$0.1417^{+0.0099}_{-0.0093}$ (-0.0σ)	$H(0.15)$	72.40	$72.7^{+3.2}_{-3.1}$ $(+0.4\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 2771.61$; $\Delta\chi_{\mathrm{eff}}^2 = -0.31$; $\bar{\chi}_{\mathrm{eff}}^2 = 2799.87$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.96$; $R - 1 = 0.02630$
 χ_{eff}^2 : BAO - 6DF: 0.05 (Δ 0.02) MGS: 1.10 (Δ -0.12) DR12BAO: 4.80 (Δ 0.39) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.16 (Δ -0.04) commander_dx12_v3_2_29: 23.25 (Δ 0.38) plik_rd12_HM_v22b_TTTEEE: 2344.78 (Δ -0.73)

11.11 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022215	$0.02224^{+0.00043}_{-0.00043}$ (+0.5 σ)	$\Omega_{\mathrm{m}}h^2$	0.1391	$0.1400^{+0.0093}_{-0.0083}$ (−0.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.4470	$0.4474^{+0.0074}_{-0.0073}$ (+0.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.1163	$0.1171^{+0.0092}_{-0.0082}$ (−0.2 σ)	$\Omega_{\mathrm{m}}h^3$	0.0914	$0.092^{+0.011}_{-0.010}$ (−0.1 σ)	$H(0.15)$	71.01	$71.3^{+3.7}_{-3.4}$ (−0.0 σ)
$100\theta_{\mathrm{MC}}$	1.04151	$1.0415^{+0.0023}_{-0.0024}$ (+0.1 σ)	σ_8	0.8019	$0.803^{+0.023}_{-0.022}$ (−0.3 σ)	$D_{\mathrm{M}}(0.15)$	659.0	656^{+34}_{-34} (−0.0 σ)
τ	0.0539	$0.053^{+0.015}_{-0.015}$ (+0.2 σ)	S_8	0.8312	$0.831^{+0.025}_{-0.026}$ (−0.4 σ)	$H(0.38)$	81.14	$81.5^{+3.8}_{-3.4}$ (−0.1 σ)
N_{eff}	2.79	$2.84^{+0.62}_{-0.55}$ (−0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4552	$0.455^{+0.014}_{-0.014}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1569	1563^{+76}_{-76} (+0.0 σ)
Y_{P}	0.2458	$0.247^{+0.034}_{-0.036}$ (−0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6042	$0.605^{+0.015}_{-0.015}$ (−0.4 σ)	$H(0.51)$	87.85	$88.2^{+3.9}_{-3.5}$ (−0.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0349	$3.036^{+0.035}_{-0.034}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9893	$0.989^{+0.018}_{-0.019}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	2031	2023^{+95}_{-97} (+0.0 σ)
n_{s}	0.9583	$0.959^{+0.017}_{-0.017}$ (−0.1 σ)	$r_{\mathrm{drag}}h$	98.28	$98.4^{+2.4}_{-2.3}$ (+0.2 σ)	$H(0.61)$	93.46	$93.8^{+4.0}_{-3.6}$ (−0.1 σ)
y_{cal}	1.00046	$1.0007^{+0.0048}_{-0.0046}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4559	$2.454^{+0.046}_{-0.048}$ (−0.1 σ)	$D_{\mathrm{M}}(0.61)$	2362	2353^{+110}_{-110} (+0.0 σ)
A_{217}^{CIB}	44.0	46^{+10}_{-10} (−0.3 σ)	z_{re}	7.60	$7.6^{+1.5}_{-1.5}$ (+0.1 σ)	$H(2.33)$	233.1	$233.8^{+8.1}_{-7.4}$ (−0.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.89	—	$10^9 A_{\mathrm{s}}$	2.080	$2.082^{+0.075}_{-0.071}$ (−0.0 σ)	$D_{\mathrm{M}}(2.33)$	5872	5853^{+220}_{-240} (+0.1 σ)
A_{143}^{tSZ}	6.95	$5.6^{+3.8}_{-3.8}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8673	$1.871^{+0.038}_{-0.038}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4589	$0.459^{+0.013}_{-0.013}$ (−0.4 σ)
A_{100}^{PS}	244	256^{+50}_{-50} (−0.3 σ)	D_{40}	1237.7	1238^{+31}_{-30} (+0.1 σ)	$\sigma_8(0.15)$	0.7399	$0.741^{+0.022}_{-0.021}$ (−0.2 σ)
A_{143}^{PS}	51.6	45^{+20}_{-20} (−0.5 σ)	D_{220}	5730	5734^{+74}_{-74} (+0.5 σ)	$f\sigma_8(0.38)$	0.4747	$0.475^{+0.012}_{-0.012}$ (−0.4 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	57.1	42^{+20}_{-20} (−0.2 σ)	D_{810}	2538.7	2538^{+26}_{-26} (+0.1 σ)	$\sigma_8(0.38)$	0.6547	$0.656^{+0.021}_{-0.020}$ (−0.2 σ)
A_{217}^{PS}	123.5	115^{+20}_{-20} (+0.0 σ)	D_{1420}	819.6	$817.9^{+9.2}_{-9.1}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4720	$0.472^{+0.012}_{-0.012}$ (−0.4 σ)
A^{kSZ}	0.00	< 7.89 (−0.2 σ)	D_{2000}	232.44	$231.6^{+3.5}_{-3.6}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6123	$0.614^{+0.020}_{-0.019}$ (−0.2 σ)
$A_{100}^{\mathrm{dust}TT}$	8.71	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9583	$0.959^{+0.017}_{-0.017}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4663	$0.467^{+0.012}_{-0.012}$ (−0.4 σ)
$A_{143}^{\mathrm{dust}TT}$	10.92	$10.8^{+3.6}_{-3.5}$ (+0.1 σ)	Y_{P}	0.2458	$0.247^{+0.034}_{-0.036}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5823	$0.584^{+0.019}_{-0.019}$ (−0.2 σ)
$A_{143 \times 217}^{\mathrm{dust}TT}$	20.3	$18.5^{+6.3}_{-6.3}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2472	$0.249^{+0.034}_{-0.036}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2932	$0.294^{+0.010}_{-0.0099}$ (−0.1 σ)
$A_{217}^{\mathrm{dust}TT}$	96.0	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	14.06	$14.01^{+0.53}_{-0.56}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3018	$0.303^{+0.011}_{-0.011}$ (−0.1 σ)
$A_{100}^{\mathrm{dust}TE}$	0.114	$0.115^{+0.073}_{-0.074}$	z_*	1089.69	$1089.82^{+0.86}_{-0.86}$ (−0.8 σ)	f_{2000}^{143}	27.3	29^{+6}_{-6} (−0.7 σ)
$A_{100 \times 143}^{\mathrm{dust}TE}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	146.8	$146.4^{+5.2}_{-5.4}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	30.98	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 217}^{\mathrm{dust}TE}$	0.483	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	1.04177	$1.0417^{+0.0018}_{-0.0017}$ (+0.2 σ)	f_{2000}^{217}	105.51	$106.6^{+4.1}_{-4.2}$ (−0.7 σ)
$A_{143}^{\mathrm{dust}TE}$	0.227	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.096	$14.05^{+0.48}_{-0.50}$ (+0.1 σ)	$\chi_{\mathrm{lensing}}^2$	8.49	9.01 (ν : 0.3)
$A_{143 \times 217}^{\mathrm{dust}TE}$	0.667	$0.67^{+0.16}_{-0.16}$	z_{drag}	1059.25	$1059.4^{+1.6}_{-1.7}$ (+0.1 σ)	χ_{small}^2	396.03	396.9 (ν : 1.3) (+0.0 σ)
$A_{217}^{\mathrm{dust}TE}$	2.09	$2.09^{+0.52}_{-0.52}$	r_{drag}	149.6	$149.1^{+5.4}_{-5.6}$ (+0.1 σ)	χ_{lowl}^2	24.24	24.3 (ν : 1.1) (+0.0 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.13899	$0.1393^{+0.0050}_{-0.0046}$ (−0.0 σ)	χ_{plik}^2	2343.0	2359.9 (ν : 18.0) (+258.3 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.16035	$0.16052^{+0.00094}_{-0.00096}$ (−0.8 σ)	χ_{prior}^2	1.5	11.5 (ν : 10.0) (+1.1 σ)
H_0	65.70	$66.0^{+3.7}_{-3.4}$ (−0.0 σ)	z_{eq}	3429	3425^{+84}_{-82} (−0.1 σ)	χ_{CMB}^2	2771.8	2790.2 (ν : 19.0) (+269.7 σ)
Ω_{Λ}	0.6777	$0.679^{+0.020}_{-0.021}$ (+0.2 σ)	k_{eq}	0.010281	$0.01030^{+0.00029}_{-0.00026}$ (−0.3 σ)			
Ω_{m}	0.3223	$0.321^{+0.021}_{-0.020}$ (−0.2 σ)	$100\theta_{\mathrm{eq}}$	0.8085	$0.809^{+0.015}_{-0.014}$ (+0.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2773.24$; $\Delta\chi_{\mathrm{eff}}^2 = -1.39$; $\bar{\chi}_{\mathrm{eff}}^2 = 2801.64$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.95$; $R - 1 = 0.01539$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.49 (Δ -0.37) small_100x143_offlike5_EE_Aplanck_B: 396.03 (Δ -0.02) commander_dx12_v3_2_29: 24.23 (Δ 0.98) plik_rd12_HM_v22b_TTTEEE: 2343.02 (Δ -1.91)

11.12 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022358	$0.02238^{+0.00037}_{-0.00037}$ (+0.9 σ)	$\Omega_{\text{m}}h^2$	0.1404	$0.1412^{+0.0093}_{-0.0086}$ (−0.1 σ)	$100\theta_{\text{s,eq}}$	0.4503	$0.4504^{+0.0055}_{-0.0054}$ (+0.5 σ)
$\Omega_{\text{c}}h^2$	0.1174	$0.1182^{+0.0091}_{-0.0085}$ (−0.1 σ)	$\Omega_{\text{m}}h^3$	0.0940	$0.0950^{+0.010}_{-0.0094}$ (+0.1 σ)	$H(0.15)$	72.24	$72.5^{+3.2}_{-3.0}$ (+0.3 σ)
$100\theta_{\text{MC}}$	1.04126	$1.0412^{+0.0023}_{-0.0023}$ (−0.0 σ)	σ_8	0.8054	$0.807^{+0.023}_{-0.022}$ (−0.1 σ)	$D_{\text{M}}(0.15)$	647.1	645^{+28}_{-28} (−0.4 σ)
τ	0.0563	$0.056^{+0.015}_{-0.014}$ (+0.6 σ)	S_8	0.8225	$0.824^{+0.023}_{-0.023}$ (−0.7 σ)	$H(0.38)$	82.30	$82.6^{+3.4}_{-3.2}$ (+0.3 σ)
N_{eff}	2.93	$2.97^{+0.58}_{-0.54}$ (+0.1 σ)	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4505	$0.451^{+0.012}_{-0.013}$ (−0.7 σ)	$D_{\text{M}}(0.38)$	1543	1538^{+65}_{-65} (−0.3 σ)
Y_{P}	0.2443	$0.245^{+0.035}_{-0.035}$ (−0.2 σ)	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6024	$0.603^{+0.015}_{-0.016}$ (−0.5 σ)	$H(0.51)$	88.98	$89.3^{+3.5}_{-3.3}$ (+0.2 σ)
$\ln(10^{10}A_{\text{s}})$	3.0426	$3.044^{+0.034}_{-0.032}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9841	$0.984^{+0.018}_{-0.017}$ (−0.6 σ)	$D_{\text{M}}(0.51)$	1999	1993^{+82}_{-83} (−0.3 σ)
n_{s}	0.9644	$0.964^{+0.014}_{-0.014}$ (+0.3 σ)	$r_{\text{drag}}h$	99.42	$99.5^{+1.7}_{-1.6}$ (+0.6 σ)	$H(0.61)$	94.57	$94.9^{+3.6}_{-3.4}$ (+0.2 σ)
y_{cal}	1.00073	$1.0008^{+0.0047}_{-0.0047}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4386	$2.440^{+0.042}_{-0.042}$ (−0.4 σ)	$D_{\text{M}}(0.61)$	2325	2319^{+95}_{-95} (−0.3 σ)
A_{217}^{CIB}	44.4	46^{+10}_{-10} (−0.2 σ)	z_{re}	7.83	$7.8^{+1.4}_{-1.4}$ (+0.5 σ)	$H(2.33)$	234.4	$235.1^{+7.9}_{-7.4}$ (+0.0 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.80	—	$10^9 A_{\text{s}}$	2.096	$2.099^{+0.072}_{-0.067}$ (+0.4 σ)	$D_{\text{M}}(2.33)$	5808	5791^{+210}_{-210} (−0.2 σ)
A_{143}^{tSZ}	7.00	$5.6^{+3.8}_{-3.8}$ (+0.3 σ)	$10^9 A_{\text{s}}e^{-2\tau}$	1.8727	$1.875^{+0.036}_{-0.037}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4550	$0.456^{+0.012}_{-0.012}$ (−0.7 σ)
A_{100}^{PS}	245	257^{+50}_{-60} (−0.2 σ)	D_{40}	1229.6	1231^{+28}_{-28} (−0.2 σ)	$\sigma_8(0.15)$	0.7441	$0.746^{+0.022}_{-0.021}$ (+0.0 σ)
A_{143}^{PS}	50.5	45^{+20}_{-20} (−0.5 σ)	D_{220}	5737	5741^{+73}_{-76} (+0.7 σ)	$f\sigma_8(0.38)$	0.4729	$0.474^{+0.012}_{-0.012}$ (−0.6 σ)
$A_{143 \times 217}^{\text{PS}}$	55.2	42^{+20}_{-20} (−0.2 σ)	D_{810}	2540.5	2539^{+25}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6595	$0.661^{+0.020}_{-0.020}$ (+0.1 σ)
A_{217}^{PS}	123.0	115^{+20}_{-20} (+0.0 σ)	D_{1420}	820.1	$818.4^{+9.0}_{-9.2}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4713	$0.472^{+0.012}_{-0.012}$ (−0.4 σ)
A^{kSZ}	0.00	< 7.88 (−0.2 σ)	D_{2000}	232.36	$231.5^{+3.5}_{-3.6}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6171	$0.618^{+0.019}_{-0.019}$ (+0.1 σ)
A_{100}^{dustTT}	8.82	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$n_{\text{s},0.002}$	0.9644	$0.964^{+0.014}_{-0.014}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4663	$0.467^{+0.012}_{-0.012}$ (−0.3 σ)
A_{143}^{dustTT}	10.98	$10.8^{+3.6}_{-3.5}$ (+0.1 σ)	Y_{P}	0.2443	$0.245^{+0.035}_{-0.035}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5871	$0.588^{+0.018}_{-0.018}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2456	$0.246^{+0.035}_{-0.035}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.2960	$0.2967^{+0.0093}_{-0.0093}$ (+0.2 σ)
A_{217}^{dustTT}	96.0	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.90	$13.86^{+0.50}_{-0.50}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3051	$0.306^{+0.010}_{-0.0099}$ (+0.2 σ)
A_{100}^{dustTE}	0.115	$0.114^{+0.072}_{-0.074}$	z_*	1089.61	$1089.71^{+0.85}_{-0.85}$ (−1.0 σ)	χ_{lensing}^2	8.56	9.06 (ν : 0.2)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.059}_{-0.058}$	r_*	145.7	$145.3^{+5.1}_{-5.1}$ (−0.1 σ)	χ_{small}^2	396.43	397.3 (ν : 1.8) (+0.2 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.484	$0.48^{+0.16}_{-0.16}$	$100\theta_*$	1.04150	$1.0414^{+0.0017}_{-0.0017}$ (+0.0 σ)	χ_{lowl}^2	23.32	23.5 (ν : 0.7) (−0.3 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.993	$13.96^{+0.47}_{-0.47}$ (−0.1 σ)	χ_{plik}^2	2344.5	2360.6 (ν : 17.9) (+258.4 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.63	$1059.8^{+1.5}_{-1.5}$ (+0.4 σ)	$\chi_{6\text{DF}}^2$	0.048	0.074 (ν : 0.0)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.52}$	r_{drag}	148.4	$148.0^{+5.2}_{-5.2}$ (−0.1 σ)	χ_{MGS}^2	1.10	1.18 (ν : 0.1)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.13991	$0.1402^{+0.0048}_{-0.0046}$ (+0.2 σ)	χ_{DR12BAO}^2	4.79	5.2 (ν : 1.4)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.2 σ)	$100\theta_{\text{D}}$	0.16047	$0.16060^{+0.00093}_{-0.00093}$ (−0.7 σ)	χ_{prior}^2	1.5	11.6 (ν : 10.1) (+1.2 σ)
H_0	66.98	$67.2^{+3.1}_{-2.9}$ (+0.3 σ)	z_{eq}	3393	3393^{+63}_{-62} (−0.5 σ)	χ_{CMB}^2	2772.8	2790.5 (ν : 18.3) (+269.8 σ)
Ω_{Λ}	0.6872	$0.687^{+0.014}_{-0.014}$ (+0.6 σ)	k_{eq}	0.010274	$0.01030^{+0.00029}_{-0.00027}$ (−0.3 σ)	χ_{BAO}^2	5.94	6.4 (ν : 1.0)
Ω_{m}	0.3128	$0.313^{+0.014}_{-0.014}$ (−0.6 σ)	$100\theta_{\text{eq}}$	0.8150	$0.815^{+0.011}_{-0.011}$ (+0.5 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2780.20$; $\Delta\chi_{\text{eff}}^2 = -0.50$; $\bar{\chi}_{\text{eff}}^2 = 2808.46$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.62$; $R - 1 = 0.02254$
 χ_{eff}^2 : BAO - 6DF: 0.05 (Δ 0.02) MGS: 1.10 (Δ -0.12) DR12BAO: 4.79 (Δ 0.37) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.56 (Δ -0.17) small_100x143_offlike5_EE_Aplanck 396.44 (Δ -0.09) commander_dx12_v3.2_29: 23.32 (Δ 0.42) plik_rd12_HM_v22b_TTTEEE: 2344.47 (Δ -0.85)

11.13 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02226^{+0.00043}_{-0.00042} \quad (+0.6\sigma)$	Ω_{m}	$0.321^{+0.022}_{-0.021} \quad (-0.2\sigma)$	k_{eq}	$0.01033^{+0.00031}_{-0.00030} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1179^{+0.0097}_{-0.0088} \quad (-0.1\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1409^{+0.0098}_{-0.0089} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.015}_{-0.015} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0413^{+0.0024}_{-0.0024} \quad (+0.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.093^{+0.011}_{-0.010} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4476^{+0.0079}_{-0.0076} \quad (+0.1\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	σ_8	$0.807^{+0.025}_{-0.024} \quad (-0.1\sigma)$	$H(0.15)$	$71.6^{+3.7}_{-3.4} \quad (+0.1\sigma)$
N_{eff}	$2.89^{+0.62}_{-0.56} \quad (-0.1\sigma)$	S_8	$0.834^{+0.032}_{-0.033} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$654^{+33}_{-34} \quad (-0.1\sigma)$
Y_{P}	$0.246^{+0.034}_{-0.036} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.018} \quad (-0.3\sigma)$	$H(0.38)$	$81.8^{+3.9}_{-3.5} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.035}_{-0.033} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.018}_{-0.019} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1557^{+75}_{-77} \quad (-0.1\sigma)$
n_{s}	$0.960^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$H(0.51)$	$88.5^{+4.0}_{-3.6} \quad (+0.0\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.5^{+2.6}_{-2.5} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2015^{+95}_{-97} \quad (-0.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.458^{+0.058}_{-0.058} \quad (-0.0\sigma)$	$H(0.61)$	$94.2^{+4.1}_{-3.7} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 8.91 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2344^{+110}_{-110} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.073}_{-0.068} \quad (+0.2\sigma)$	$H(2.33)$	$234.6^{+8.3}_{-7.7} \quad (-0.1\sigma)$
A_{100}^{PS}	$256^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.874^{+0.040}_{-0.039} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5832^{+230}_{-240} \quad (-0.0\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1238^{+32}_{-31} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.017} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5733^{+74}_{-74} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.024}_{-0.023} \quad (-0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.015}_{-0.015} \quad (-0.2\sigma)$
A^{kSZ}	$< 7.88 \quad (-0.2\sigma)$	D_{1420}	$817.8^{+9.3}_{-9.2} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.022}_{-0.021} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.5}_{-3.6} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.014}_{-0.014} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.021}_{-0.020} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.246^{+0.034}_{-0.036} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.014}_{-0.014} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.248^{+0.034}_{-0.036} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.020}_{-0.019} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.074}_{-0.075}$	Age/Gyr	$13.96^{+0.55}_{-0.57} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.011}_{-0.0097} \quad (+0.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.057}$	z_*	$1089.85^{+0.87}_{-0.88} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.011}_{-0.010} \quad (+0.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	r_*	$145.9^{+5.4}_{-5.5} \quad (+0.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.0415^{+0.0019}_{-0.0018} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.01^{+0.49}_{-0.50} \quad (+0.0\sigma)$	f_{2000}^{217}	$106.6^{+4.1}_{-4.1} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.09^{+0.53}_{-0.53}$	z_{drag}	$1059.5^{+1.6}_{-1.6} \quad (+0.1\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$148.6^{+5.6}_{-5.6} \quad (+0.0\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.2) \quad (-0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.1397^{+0.0051}_{-0.0048} \quad (+0.1\sigma)$	χ_{plik}^2	$2360.1 \quad (\nu: 18.9) \quad (+258.3\sigma)$
H_0	$66.3^{+3.7}_{-3.4} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16057^{+0.00093}_{-0.00095} \quad (-0.7\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.2\sigma)$
Ω_{Λ}	$0.679^{+0.021}_{-0.022} \quad (+0.2\sigma)$	z_{eq}	$3422^{+87}_{-86} \quad (-0.1\sigma)$	χ_{CMB}^2	$2781.4 \quad (\nu: 18.3) \quad (+268.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2792.90; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.36; R - 1 = 0.01223$$

11.14 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00036}_{-0.00037} \quad (+1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.096^{+0.011}_{-0.010} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+29}_{-29} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1186^{+0.0099}_{-0.0092} \quad (-0.0\sigma)$	σ_8	$0.808^{+0.025}_{-0.026} \quad (+0.0\sigma)$	$H(0.38)$	$82.8^{+3.4}_{-3.3} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0024}_{-0.0024} \quad (-0.1\sigma)$	S_8	$0.824^{+0.028}_{-0.028} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+67}_{-66} \quad (-0.4\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.015}_{-0.015} \quad (-0.7\sigma)$	$H(0.51)$	$89.5^{+3.6}_{-3.4} \quad (+0.3\sigma)$
N_{eff}	$3.01^{+0.61}_{-0.57} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.018}_{-0.019} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+85}_{-83} \quad (-0.4\sigma)$
Y_{P}	$0.244^{+0.034}_{-0.036} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$H(0.61)$	$95.1^{+3.7}_{-3.6} \quad (+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.036}_{-0.033} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+98}_{-95} \quad (-0.4\sigma)$
n_{s}	$0.965^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.049}_{-0.048} \quad (-0.4\sigma)$	$H(2.33)$	$235.5^{+8.2}_{-7.9} \quad (+0.1\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0046} \quad (+0.1\sigma)$	z_{re}	$< 9.06 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5778^{+220}_{-220} \quad (-0.3\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.077}_{-0.068} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.015}_{-0.015} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.039}_{-0.041} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.024}_{-0.024} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.3\sigma)$	D_{40}	$1230^{+29}_{-28} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.014}_{-0.015} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5738^{+72}_{-76} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.021}_{-0.022} \quad (+0.2\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+26}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.014}_{-0.014} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.1^{+9.2}_{-9.0} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.020}_{-0.020} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.5}_{-3.5} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.014}_{-0.014} \quad (-0.3\sigma)$
A^{kSZ}	$< 7.93 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.020}_{-0.020} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.244^{+0.034}_{-0.036} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.297^{+0.010}_{-0.010} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246^{+0.034}_{-0.036} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.011}_{-0.011} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.6^{+6.4}_{-6.3} \quad (+0.1\sigma)$	Age/Gyr	$13.83^{+0.53}_{-0.51} \quad (-0.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.73^{+0.85}_{-0.85} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.075}$	r_*	$145.0^{+5.4}_{-5.3} \quad (-0.2\sigma)$	f_{2000}^{217}	$106.7^{+4.0}_{-4.2} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.0413^{+0.0018}_{-0.0018} \quad (-0.0\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.1) \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.93^{+0.49}_{-0.49} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.7) \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	z_{drag}	$1059.8^{+1.5}_{-1.5} \quad (+0.4\sigma)$	χ_{plik}^2	$2361.0 \quad (\nu: 18.7) \quad (+258.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.7^{+5.5}_{-5.4} \quad (-0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.068 \quad (\nu: 0.0)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.52}_{-0.51}$	k_{D}	$0.1405^{+0.0051}_{-0.0049} \quad (+0.2\sigma)$	χ_{MGS}^2	$1.23 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16064^{+0.00092}_{-0.00094} \quad (-0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 \quad (\nu: 1.4)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.2\sigma)$	z_{eq}	$3389^{+64}_{-63} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.2\sigma)$
H_0	$67.4^{+3.2}_{-3.0} \quad (+0.4\sigma)$	k_{eq}	$0.01031^{+0.00032}_{-0.00031} \quad (-0.3\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$
Ω_{Λ}	$0.688^{+0.013}_{-0.014} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.011}_{-0.011} \quad (+0.6\sigma)$	χ_{CMB}^2	$2781.7 \quad (\nu: 17.7) \quad (+268.3\sigma)$
Ω_{m}	$0.312^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0056}_{-0.0056} \quad (+0.5\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1417^{+0.0099}_{-0.0093} \quad (+0.0\sigma)$	$H(0.15)$	$72.7^{+3.3}_{-3.1} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2799.64; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.93; R - 1 = 0.02640$$

11.15 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02225^{+0.00042}_{-0.00042} \quad (+0.6\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1400^{+0.0093}_{-0.0083} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4476^{+0.0073}_{-0.0071} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1171^{+0.0092}_{-0.0082} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.093^{+0.011}_{-0.010} \quad (-0.1\sigma)$	$H(0.15)$	$71.4^{+3.7}_{-3.3} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0415^{+0.0023}_{-0.0024} \quad (+0.1\sigma)$	σ_8	$0.804^{+0.022}_{-0.022} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$656^{+33}_{-34} \quad (-0.0\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	S_8	$0.831^{+0.025}_{-0.026} \quad (-0.4\sigma)$	$H(0.38)$	$81.5^{+3.8}_{-3.4} \quad (-0.0\sigma)$
N_{eff}	$2.85^{+0.62}_{-0.55} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1561^{+73}_{-76} \quad (-0.0\sigma)$
Y_{P}	$0.248^{+0.033}_{-0.036} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$H(0.51)$	$88.3^{+3.9}_{-3.5} \quad (-0.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.038^{+0.034}_{-0.029} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.018}_{-0.018} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$2021^{+92}_{-96} \quad (-0.0\sigma)$
n_{s}	$0.959^{+0.016}_{-0.017} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.5^{+2.4}_{-2.2} \quad (+0.2\sigma)$	$H(0.61)$	$93.9^{+4.0}_{-3.6} \quad (-0.1\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0046} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.046}_{-0.047} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2351^{+110}_{-110} \quad (+0.0\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	z_{re}	$< 8.82 \quad (+0.3\sigma)$	$H(2.33)$	$233.8^{+8.1}_{-7.4} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.087^{+0.067}_{-0.064} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5850^{+220}_{-240} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.037}_{-0.037} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{100}^{PS}	$256^{+50}_{-60} \quad (-0.3\sigma)$	D_{40}	$1238^{+31}_{-29} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.022}_{-0.021} \quad (-0.2\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{220}	$5734^{+73}_{-75} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2537^{+26}_{-25} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.020}_{-0.019} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$817.9^{+9.2}_{-9.1} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.012} \quad (-0.4\sigma)$
A^{kSZ}	$< 7.90 \quad (-0.2\sigma)$	D_{2000}	$231.5^{+3.5}_{-3.6} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.016}_{-0.017} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.012} \quad (-0.3\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.6}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.248^{+0.033}_{-0.036} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.019}_{-0.018} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.3}_{-6.3} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.249^{+0.034}_{-0.036} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.010}_{-0.0094} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$14.00^{+0.53}_{-0.56} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.011}_{-0.010} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.074}_{-0.074}$	z_*	$1089.81^{+0.85}_{-0.86} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	r_*	$146.4^{+5.2}_{-5.4} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.16}$	$100\theta_*$	$1.0417^{+0.0018}_{-0.0018} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.5^{+4.1}_{-4.2} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.05^{+0.48}_{-0.50} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.00 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.5^{+1.6}_{-1.6} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.09^{+0.53}_{-0.53}$	r_{drag}	$149.1^{+5.4}_{-5.6} \quad (+0.1\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.1) \quad (-0.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1393^{+0.0050}_{-0.0046} \quad (-0.0\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 17.9) \quad (+258.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16053^{+0.00094}_{-0.00096} \quad (-0.7\sigma)$	χ_{prior}^2	$11.4 \quad (\nu: 10.0) \quad (+1.1\sigma)$
H_0	$66.1^{+3.6}_{-3.3} \quad (+0.0\sigma)$	z_{eq}	$3423^{+82}_{-81} \quad (-0.1\sigma)$	χ_{CMB}^2	$2789.9 \quad (\nu: 18.5) \quad (+269.7\sigma)$
Ω_{Λ}	$0.679^{+0.020}_{-0.020} \quad (+0.2\sigma)$	k_{eq}	$0.01030^{+0.00029}_{-0.00026} \quad (-0.3\sigma)$		
Ω_{m}	$0.321^{+0.020}_{-0.020} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.014}_{-0.014} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.36; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.85; R - 1 = 0.01489$$

11.16 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02238^{+0.00037}_{-0.00037} \quad (+0.9\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0950^{+0.011}_{-0.0095} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+28}_{-28} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1181^{+0.0091}_{-0.0085} \quad (-0.1\sigma)$	σ_8	$0.807^{+0.022}_{-0.022} \quad (-0.0\sigma)$	$H(0.38)$	$82.6^{+3.4}_{-3.2} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0023}_{-0.0023} \quad (-0.0\sigma)$	S_8	$0.824^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1538^{+65}_{-65} \quad (-0.3\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.013} \quad (-0.7\sigma)$	$H(0.51)$	$89.3^{+3.5}_{-3.3} \quad (+0.2\sigma)$
N_{eff}	$2.97^{+0.58}_{-0.54} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.015}_{-0.015} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+82}_{-83} \quad (-0.3\sigma)$
Y_{P}	$0.245^{+0.035}_{-0.035} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$H(0.61)$	$94.9^{+3.6}_{-3.4} \quad (+0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.031}_{-0.030} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.5^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+95}_{-95} \quad (-0.3\sigma)$
n_{s}	$0.964^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.041}_{-0.041} \quad (-0.4\sigma)$	$H(2.33)$	$235.1^{+7.9}_{-7.4} \quad (-0.0\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5791^{+210}_{-210} \quad (-0.2\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.066}_{-0.063} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.875^{+0.036}_{-0.037} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.021}_{-0.021} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$5.6^{+3.8}_{-3.8} \quad (+0.3\sigma)$	D_{40}	$1231^{+28}_{-28} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.012}_{-0.012} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+50}_{-60} \quad (-0.2\sigma)$	D_{220}	$5740^{+73}_{-76} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.020}_{-0.019} \quad (+0.1\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+25}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.3^{+9.0}_{-9.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.019}_{-0.018} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.5^{+3.5}_{-3.5} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A^{kSZ}	$< 7.89 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.964^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.018}_{-0.017} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.245^{+0.035}_{-0.035} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0093}_{-0.0091} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.247^{+0.035}_{-0.035} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0099}_{-0.0097} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.6^{+6.4}_{-6.4} \quad (+0.1\sigma)$	Age/Gyr	$13.86^{+0.50}_{-0.50} \quad (-0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.71^{+0.85}_{-0.85} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.074}$	r_*	$145.3^{+5.1}_{-5.1} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.6^{+4.0}_{-4.2} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.134^{+0.059}_{-0.058}$	$100\theta_*$	$1.0414^{+0.0017}_{-0.0017} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.03 \quad (\nu: 0.2)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.46}_{-0.47} \quad (-0.1\sigma)$	χ_{simall}^2	$397.3 \quad (\nu: 1.9) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	z_{drag}	$1059.8^{+1.5}_{-1.5} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.7) \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$148.0^{+5.2}_{-5.3} \quad (-0.1\sigma)$	χ_{plik}^2	$2360.5 \quad (\nu: 17.8) \quad (+258.3\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.52}_{-0.52}$	k_{D}	$0.1402^{+0.0048}_{-0.0046} \quad (+0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.072 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16060^{+0.00092}_{-0.00094} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.19 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.2\sigma)$	z_{eq}	$3392^{+63}_{-62} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 \quad (\nu: 1.4)$
H_0	$67.2^{+3.1}_{-2.9} \quad (+0.3\sigma)$	k_{eq}	$0.01030^{+0.00029}_{-0.00027} \quad (-0.3\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.1) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.011} \quad (+0.5\sigma)$	χ_{CMB}^2	$2790.3 \quad (\nu: 18.1) \quad (+269.8\sigma)$
Ω_{m}	$0.312^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4504^{+0.0054}_{-0.0054} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}}h^2$	$0.1412^{+0.0092}_{-0.0086} \quad (-0.1\sigma)$	$H(0.15)$	$72.5^{+3.2}_{-3.0} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2808.31; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.59; R - 1 = 0.02301$$

11.17 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022190	$0.02222^{+0.00046}_{-0.00045}$ $(+0.4\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.0905	$0.091^{+0.011}_{-0.011}$ (-0.3σ)	$100\theta_{\mathrm{eq}}$	0.8098	$0.811^{+0.015}_{-0.016}$ $(+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.1151	$0.1157^{+0.0095}_{-0.0093}$ (-0.4σ)	σ_8	0.7983	$0.800^{+0.026}_{-0.025}$ (-0.5σ)	$100\theta_{\mathrm{s,eq}}$	0.4477	$0.4481^{+0.0078}_{-0.0080}$ $(+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	1.04185	$1.0419^{+0.0027}_{-0.0028}$ $(+0.3\sigma)$	S_8	0.8246	$0.824^{+0.032}_{-0.031}$ (-0.7σ)	$H(0.15)$	70.90	$71.2^{+3.8}_{-3.5}$ (-0.1σ)
τ	0.0527	$0.053^{+0.016}_{-0.016}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4516	$0.452^{+0.018}_{-0.017}$ (-0.7σ)	$D_{\mathrm{M}}(0.15)$	659.9	657^{+35}_{-35} $(+0.0\sigma)$
N_{eff}	2.74	$2.78^{+0.65}_{-0.57}$ (-0.3σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6004	$0.601^{+0.019}_{-0.018}$ (-0.7σ)	$H(0.38)$	80.96	$81.3^{+3.9}_{-3.6}$ (-0.1σ)
Y_{P}	0.2548	$0.256^{+0.042}_{-0.046}$ $(+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9853	$0.985^{+0.023}_{-0.023}$ (-0.5σ)	$D_{\mathrm{M}}(0.38)$	1572	1566^{+80}_{-80} $(+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0295	$3.031^{+0.039}_{-0.037}$ (-0.2σ)	$r_{\mathrm{drag}}h$	98.58	$98.8^{+2.6}_{-2.7}$ $(+0.3\sigma)$	$H(0.51)$	87.63	$88.0^{+4.0}_{-3.7}$ (-0.2σ)
n_{s}	0.9609	$0.962^{+0.019}_{-0.019}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.440	$2.438^{+0.061}_{-0.060}$ (-0.5σ)	$D_{\mathrm{M}}(0.51)$	2034	2027^{+100}_{-100} $(+0.1\sigma)$
y_{cal}	1.00029	$1.0005^{+0.0049}_{-0.0049}$ (-0.0σ)	z_{re}	7.50	$7.5^{+1.6}_{-1.7}$ $(+0.0\sigma)$	$H(0.61)$	93.20	$93.5^{+4.1}_{-3.8}$ (-0.2σ)
A_{100}^{PS}	232	240^{+50}_{-50} (-0.8σ)	$10^9 A_{\mathrm{s}}$	2.069	$2.072^{+0.082}_{-0.076}$ (-0.2σ)	$D_{\mathrm{M}}(0.61)$	2366	2358^{+110}_{-110} $(+0.1\sigma)$
A_{143}^{PS}	44.4	40^{+20}_{-20} (-1.1σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8617	$1.865^{+0.041}_{-0.041}$ (-0.5σ)	$H(2.33)$	232.2	$232.7^{+8.6}_{-7.8}$ (-0.4σ)
A_{217}^{PS}	106.8	102^{+30}_{-30} (-1.3σ)	D_{40}	1228.2	1228^{+36}_{-35} (-0.3σ)	$D_{\mathrm{M}}(2.33)$	5889	5872^{+240}_{-250} $(+0.2\sigma)$
A_{217}^{CIB}	39.8	40^{+10}_{-10} (-1.2σ)	D_{220}	5711	5715^{+77}_{-77} $(+0.1\sigma)$	$f\sigma_8(0.15)$	0.4555	$0.455^{+0.017}_{-0.016}$ (-0.7σ)
A_{143}^{tSZ}	5.46	< 7.42 (-0.6σ)	D_{810}	2533.2	2533^{+27}_{-28} (-0.2σ)	$\sigma_8(0.15)$	0.7368	$0.738^{+0.024}_{-0.023}$ (-0.4σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.731	$0.66^{+0.25}_{-0.25}$	D_{1420}	816.8	816^{+10}_{-10} $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4716	$0.472^{+0.015}_{-0.014}$ (-0.7σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.65	—	D_{2000}	230.99	$230.4^{+4.6}_{-4.6}$ $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6522	$0.654^{+0.023}_{-0.022}$ (-0.3σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.62	—	$n_{\mathrm{s},0.002}$	0.9609	$0.962^{+0.019}_{-0.019}$ $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4693	$0.470^{+0.014}_{-0.014}$ (-0.7σ)
A^{kSZ}	1.6	—	Y_{P}	0.2548	$0.256^{+0.042}_{-0.046}$ $(+0.2\sigma)$	$\sigma_8(0.51)$	0.6100	$0.611^{+0.022}_{-0.021}$ (-0.3σ)
A_{100}^{dust}	0.994	$1.01^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2561	$0.258^{+0.042}_{-0.046}$ $(+0.2\sigma)$	$f\sigma_8(0.61)$	0.4637	$0.464^{+0.014}_{-0.013}$ (-0.7σ)
A_{143}^{dust}	0.963	$0.96^{+0.34}_{-0.34}$	Age/Gyr	14.10	$14.06^{+0.58}_{-0.59}$ $(+0.2\sigma)$	$\sigma_8(0.61)$	0.5802	$0.582^{+0.021}_{-0.020}$ (-0.3σ)
A_{217}^{dust}	0.978	$0.97^{+0.20}_{-0.20}$	z_*	1089.96	$1090.1^{+1.2}_{-1.2}$ (-0.5σ)	$f\sigma_8(2.33)$	0.2922	$0.293^{+0.011}_{-0.011}$ (-0.3σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.046	$1.02^{+0.32}_{-0.32}$	r_*	147.4	$147.1^{+5.6}_{-5.8}$ $(+0.3\sigma)$	$\sigma_8(2.33)$	0.3009	$0.302^{+0.012}_{-0.011}$ (-0.2σ)
c_{100}	0.99771	$0.9975^{+0.0021}_{-0.0020}$ (-3.4σ)	$100\theta_*$	1.04190	$1.0419^{+0.0020}_{-0.0020}$ $(+0.4\sigma)$	f_{2000}^{143}	29.0	30^{+7}_{-7} (-0.4σ)
c_{217}	1.00096	$1.0011^{+0.0031}_{-0.0031}$ $(+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.15	$14.12^{+0.51}_{-0.53}$ $(+0.3\sigma)$	f_{2000}^{217}	106.2	$107.0^{+5.2}_{-5.1}$ (-0.5σ)
c_{TE}	0.9966	$0.997^{+0.011}_{-0.011}$	z_{drag}	1059.36	$1059.5^{+1.9}_{-1.9}$ $(+0.2\sigma)$	$f_{2000}^{143 \times 217}$	31.7	32^{+6}_{-6} (-0.5σ)
c_{EE}	0.9917	$0.993^{+0.013}_{-0.013}$	r_{drag}	150.2	$149.8^{+5.8}_{-6.0}$ $(+0.3\sigma)$	χ_{simall}^2	395.87	$396.9(\nu: 1.4)$ $(+0.0\sigma)$
H_0	65.64	$65.9^{+3.8}_{-3.6}$ (-0.0σ)	k_{D}	0.1382	$0.1384^{+0.0054}_{-0.0049}$ (-0.3σ)	χ_{lowl}^2	23.44	$23.5(\nu: 1.2)$ (-0.4σ)
Ω_{Λ}	0.6799	$0.681^{+0.021}_{-0.023}$ $(+0.3\sigma)$	$100\theta_{\mathrm{D}}$	0.16070	$0.1609^{+0.0014}_{-0.0014}$ (-0.3σ)	$\chi_{\mathrm{CamSpec}}^2$	11498.8	$11515.3(\nu: 18.4)$
Ω_{m}	0.3201	$0.319^{+0.023}_{-0.021}$ (-0.3σ)	z_{eq}	3422	3418^{+90}_{-85} (-0.2σ)	χ_{prior}^2	1.9	$7.9(\nu: 6.0)$ $(+0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.1379	$0.1386^{+0.0096}_{-0.0094}$ (-0.4σ)	k_{eq}	0.010225	$0.01024^{+0.00032}_{-0.00030}$ (-0.6σ)	χ_{CMB}^2	11918.1	$11935.7(\nu: 19.1)$ $(+1815.0\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 11920.00$; $\Delta\chi_{\mathrm{eff}}^2 = -0.76$; $\bar{\chi}_{\mathrm{eff}}^2 = 11943.57$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.12$; $R - 1 = 0.00989$

χ_{eff}^2 : CMB - simall_100x143_offlike5.EE_Aplanck_B: 395.87 (Δ -0.03) commander_dx12.v3.2.29: 23.44 (Δ 0.44) CamSpec like_10.7HM_1400_unified: 11498.75 (Δ -0.90)

11.18 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00039}_{-0.00038} \quad (+0.8\sigma)$	S_8	$0.816^{+0.028}_{-0.027} \quad (-1.0\sigma)$	$H(0.38)$	$82.2^{+3.5}_{-3.2} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1164^{+0.0095}_{-0.0093} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.015}_{-0.015} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1545^{+67}_{-67} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0418^{+0.0027}_{-0.0027} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.599^{+0.018}_{-0.018} \quad (-0.9\sigma)$	$H(0.51)$	$88.8^{+3.7}_{-3.3} \quad (+0.1\sigma)$
τ	$0.054^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.021}_{-0.021} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$2002^{+84}_{-86} \quad (-0.2\sigma)$
N_{eff}	$2.88^{+0.59}_{-0.57} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$H(0.61)$	$94.4^{+3.8}_{-3.5} \quad (+0.1\sigma)$
Y_{P}	$0.257^{+0.042}_{-0.045} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.052}_{-0.050} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2330^{+97}_{-99} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.036^{+0.036}_{-0.035} \quad (+0.0\sigma)$	z_{re}	$7.6^{+1.5}_{-1.6} \quad (+0.2\sigma)$	$H(2.33)$	$233.6^{+8.1}_{-8.0} \quad (-0.2\sigma)$
n_{s}	$0.967^{+0.015}_{-0.015} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.082^{+0.076}_{-0.073} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5823^{+210}_{-230} \quad (-0.1\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.869^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.015}_{-0.014} \quad (-1.0\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1220^{+32}_{-31} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.024}_{-0.023} \quad (-0.2\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5719^{+77}_{-77} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.015}_{-0.014} \quad (-0.9\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.021}_{-0.021} \quad (-0.1\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815.7^{+9.9}_{-10} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.014}_{-0.014} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$< 7.39 \quad (-0.6\sigma)$	D_{2000}	$230.1^{+4.5}_{-4.4} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.020}_{-0.020} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.967^{+0.015}_{-0.015} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.014}_{-0.014} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.257^{+0.042}_{-0.045} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.258^{+0.042}_{-0.046} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2951^{+0.0099}_{-0.0098} \quad (+0.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.94^{+0.51}_{-0.54} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.011}_{-0.010} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.1^{+1.2}_{-1.1} \quad (-0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	r_*	$146.3^{+5.3}_{-5.6} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.3^{+5.0}_{-4.9} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	$1.0417^{+0.0019}_{-0.0018} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.04^{+0.48}_{-0.51} \quad (+0.1\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.9^{+1.7}_{-1.8} \quad (+0.5\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 0.7) \quad (-0.7\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$149.0^{+5.4}_{-5.7} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11516.0 \quad (\nu: 18.2)$
c_{TE}	$0.998^{+0.010}_{-0.010}$	k_{D}	$0.1390^{+0.0054}_{-0.0049} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
c_{EE}	$0.994^{+0.013}_{-0.013}$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	χ_{MGS}^2	$1.32 \quad (\nu: 0.1)$
H_0	$67.0^{+3.2}_{-3.0} \quad (+0.3\sigma)$	z_{eq}	$3390^{+65}_{-65} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.1)$
Ω_{Λ}	$0.689^{+0.014}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01023^{+0.00033}_{-0.00030} \quad (-0.7\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
Ω_{m}	$0.311^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.011}_{-0.011} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^2$	$0.1394^{+0.0096}_{-0.0094} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0057}_{-0.0056} \quad (+0.6\sigma)$	χ_{CMB}^2	$11935.7 \quad (\nu: 18.6) \quad (+1815.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.093^{+0.011}_{-0.010} \quad (-0.0\sigma)$	$H(0.15)$	$72.2^{+3.3}_{-3.0} \quad (+0.2\sigma)$		
σ_8	$0.802^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$648^{+29}_{-29} \quad (-0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.72; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.44; R - 1 = 0.01974$$

11.19 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00045}_{-0.00043} \quad (+0.4\sigma)$	σ_8	$0.800^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$H(0.15)$	$71.0^{+3.8}_{-3.4} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1156^{+0.0096}_{-0.0085} \quad (-0.4\sigma)$	S_8	$0.827^{+0.026}_{-0.026} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$659^{+34}_{-35} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0419^{+0.0027}_{-0.0027} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.38)$	$81.1^{+3.9}_{-3.5} \quad (-0.2\sigma)$
τ	$0.054^{+0.015}_{-0.014} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.015}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1570^{+77}_{-80} \quad (+0.1\sigma)$
N_{eff}	$2.76^{+0.64}_{-0.55} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.019}_{-0.019} \quad (-0.4\sigma)$	$H(0.51)$	$87.8^{+4.0}_{-3.6} \quad (-0.2\sigma)$
Y_{P}	$0.255^{+0.042}_{-0.046} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.6^{+2.5}_{-2.5} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2033^{+96}_{-100} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.035}_{-0.035} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.050}_{-0.050} \quad (-0.3\sigma)$	$H(0.61)$	$93.4^{+4.1}_{-3.7} \quad (-0.2\sigma)$
n_{s}	$0.961^{+0.018}_{-0.018} \quad (+0.0\sigma)$	z_{re}	$7.6^{+1.5}_{-1.5} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2364^{+110}_{-120} \quad (+0.1\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.075^{+0.073}_{-0.072} \quad (-0.1\sigma)$	$H(2.33)$	$232.5^{+8.3}_{-7.6} \quad (-0.4\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.864^{+0.039}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5883^{+230}_{-240} \quad (+0.2\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	D_{40}	$1231^{+34}_{-33} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{220}	$5717^{+76}_{-76} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.022}_{-0.021} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2534^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.6\sigma)$	D_{1420}	$816.1^{+9.9}_{-10} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.654^{+0.021}_{-0.020} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{2000}	$230.6^{+4.5}_{-4.5} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.961^{+0.018}_{-0.018} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.612^{+0.020}_{-0.019} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.255^{+0.042}_{-0.046} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.012}_{-0.011} \quad (-0.6\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.257^{+0.043}_{-0.046} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.020}_{-0.019} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.37}$	Age/Gyr	$14.08^{+0.55}_{-0.58} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.011}_{-0.0099} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1090.0^{+1.2}_{-1.2} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.012}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$147.2^{+5.5}_{-5.6} \quad (+0.3\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	$100\theta_*$	$1.0419^{+0.0019}_{-0.0019} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+5.1}_{-5.1} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.13^{+0.50}_{-0.51} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-6} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.5^{+1.9}_{-1.9} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.05 \quad (\nu: 0.3)$
c_{TE}	$0.997^{+0.011}_{-0.010}$	r_{drag}	$150.0^{+5.6}_{-5.8} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (-0.0\sigma)$
c_{EE}	$0.992^{+0.012}_{-0.013}$	k_{D}	$0.1383^{+0.0053}_{-0.0048} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 1.2) \quad (-0.2\sigma)$
H_0	$65.7^{+3.8}_{-3.4} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1608^{+0.0014}_{-0.0014} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.7 \quad (\nu: 17.3)$
Ω_{Λ}	$0.679^{+0.021}_{-0.022} \quad (+0.2\sigma)$	z_{eq}	$3424^{+89}_{-84} \quad (-0.1\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
Ω_{m}	$0.321^{+0.022}_{-0.021} \quad (-0.2\sigma)$	k_{eq}	$0.01024^{+0.00030}_{-0.00027} \quad (-0.6\sigma)$	χ_{CMB}^2	$11944.4 \quad (\nu: 18.8) \quad (+1816.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1384^{+0.0097}_{-0.0086} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.015}_{-0.015} \quad (+0.1\sigma)$		
$\Omega_{\mathrm{m}} h^3$	$0.0910^{+0.011}_{-0.0097} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4476^{+0.0077}_{-0.0078} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11952.22; \Delta\chi_{\mathrm{eff}}^2 = 0.78; R - 1 = 0.01363$$

11.20 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02232^{+0.00038}_{-0.00038} \quad (+0.8\sigma)$	S_8	$0.820^{+0.023}_{-0.022} \quad (-0.8\sigma)$	$H(0.38)$	$82.1^{+3.4}_{-3.2} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1164^{+0.0091}_{-0.0088} \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$D_M(0.38)$	$1548^{+65}_{-67} \quad (-0.2\sigma)$
$100\theta_{MC}$	$1.0417^{+0.0026}_{-0.0027} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.601^{+0.015}_{-0.015} \quad (-0.7\sigma)$	$H(0.51)$	$88.7^{+3.6}_{-3.3} \quad (+0.1\sigma)$
τ	$0.056^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.018}_{-0.017} \quad (-0.6\sigma)$	$D_M(0.51)$	$2005^{+83}_{-85} \quad (-0.2\sigma)$
N_{eff}	$2.88^{+0.58}_{-0.56} \quad (-0.1\sigma)$	$r_{\text{drag}} h$	$99.5^{+1.7}_{-1.7} \quad (+0.6\sigma)$	$H(0.61)$	$94.3^{+3.8}_{-3.4} \quad (+0.0\sigma)$
Y_P	$0.256^{+0.042}_{-0.046} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.043}_{-0.043} \quad (-0.6\sigma)$	$D_M(0.61)$	$2333^{+95}_{-98} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	$3.040^{+0.032}_{-0.032} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.4}_{-1.4} \quad (+0.4\sigma)$	$H(2.33)$	$233.6^{+8.1}_{-7.3} \quad (-0.2\sigma)$
n_s	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$10^9 A_s$	$2.091^{+0.067}_{-0.066} \quad (+0.2\sigma)$	$D_M(2.33)$	$5828^{+210}_{-220} \quad (-0.0\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.870^{+0.038}_{-0.038} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+31}_{-30} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.021}_{-0.020} \quad (-0.1\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5724^{+76}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.019}_{-0.019} \quad (-0.1\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816^{+10}_{-10} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.35 \quad (-0.6\sigma)$	D_{2000}	$230.3^{+4.5}_{-4.4} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.018}_{-0.018} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.24}$	$n_{s,0.002}$	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.256^{+0.042}_{-0.046} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.018}_{-0.017} \quad (+0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.257^{+0.042}_{-0.046} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2956^{+0.0091}_{-0.0088} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.95^{+0.50}_{-0.53} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.3047^{+0.0098}_{-0.0095} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.0^{+1.2}_{-1.2} \quad (-0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.96^{+0.36}_{-0.35}$	r_*	$146.3^{+5.1}_{-5.3} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.2^{+5.0}_{-5.0} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.0417^{+0.0018}_{-0.0018} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-5} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.31}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$14.04^{+0.47}_{-0.49} \quad (+0.1\sigma)$	χ_{lensing}^2	$9.27 \quad (\nu: 0.4)$
c_{100}	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.9^{+1.7}_{-1.8} \quad (+0.4\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.7) \quad (+0.2\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$149.0^{+5.3}_{-5.5} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.8) \quad (-0.6\sigma)$
c_{TE}	$0.997^{+0.010}_{-0.010}$	k_D	$0.1390^{+0.0051}_{-0.0048} \quad (-0.1\sigma)$	χ_{CamSpec}^2	$11515.3 \quad (\nu: 17.8)$
c_{EE}	$0.993^{+0.013}_{-0.013}$	$100\theta_D$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.068 \quad (\nu: 0.0)$
H_0	$66.8^{+3.1}_{-2.9} \quad (+0.2\sigma)$	z_{eq}	$3395^{+64}_{-66} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.22 \quad (\nu: 0.1)$
Ω_Λ	$0.688^{+0.014}_{-0.014} \quad (+0.6\sigma)$	k_{eq}	$0.01024^{+0.00030}_{-0.00028} \quad (-0.6\sigma)$	χ_{DR12BAO}^2	$5.0 \quad (\nu: 1.3)$
Ω_m	$0.312^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.011}_{-0.011} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1394^{+0.0092}_{-0.0089} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.4504^{+0.0057}_{-0.0055} \quad (+0.5\sigma)$	χ_{CMB}^2	$11944.7 \quad (\nu: 19.1) \quad (+1816.6\sigma)$
$\Omega_m h^3$	$0.0932^{+0.010}_{-0.0098} \quad (-0.1\sigma)$	$H(0.15)$	$72.1^{+3.2}_{-3.0} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$
σ_8	$0.804^{+0.022}_{-0.021} \quad (-0.2\sigma)$	$D_M(0.15)$	$649^{+29}_{-29} \quad (-0.2\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11958.81; \Delta\bar{\chi}_{\text{eff}}^2 = 1.41; R - 1 = 0.01792$$

11.21 base_nnu_yhe_CamSpecHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02223^{+0.00045}_{-0.00045} \quad (+0.5\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.092^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.015}_{-0.016} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1157^{+0.0095}_{-0.0093} \quad (-0.4\sigma)$	σ_8	$0.801^{+0.025}_{-0.024} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4483^{+0.0077}_{-0.0079} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0419^{+0.0027}_{-0.0028} \quad (+0.3\sigma)$	S_8	$0.825^{+0.032}_{-0.031} \quad (-0.6\sigma)$	$H(0.15)$	$71.3^{+3.8}_{-3.5} \quad (-0.1\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.018}_{-0.017} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$657^{+35}_{-35} \quad (+0.0\sigma)$
N_{eff}	$2.78^{+0.64}_{-0.57} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.019}_{-0.018} \quad (-0.7\sigma)$	$H(0.38)$	$81.3^{+3.9}_{-3.6} \quad (-0.1\sigma)$
Y_{P}	$0.257^{+0.042}_{-0.046} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1565^{+80}_{-79} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.034^{+0.035}_{-0.033} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.8^{+2.6}_{-2.6} \quad (+0.3\sigma)$	$H(0.51)$	$88.0^{+4.0}_{-3.7} \quad (-0.1\sigma)$
n_{s}	$0.962^{+0.019}_{-0.019} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.060}_{-0.058} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$2026^{+100}_{-100} \quad (+0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	z_{re}	$< 8.85 \quad (+0.2\sigma)$	$H(0.61)$	$93.6^{+4.1}_{-3.8} \quad (-0.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.078^{+0.073}_{-0.069} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2357^{+110}_{-110} \quad (+0.1\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.865^{+0.041}_{-0.042} \quad (-0.5\sigma)$	$H(2.33)$	$232.7^{+8.5}_{-7.8} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1227^{+36}_{-35} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5871^{+240}_{-240} \quad (+0.2\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5715^{+76}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.017}_{-0.016} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.44 \quad (-0.6\sigma)$	D_{810}	$2533^{+27}_{-28} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.740^{+0.024}_{-0.023} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$816^{+10}_{-10} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.015}_{-0.014} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$230.4^{+4.5}_{-4.6} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.022}_{-0.021} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.962^{+0.019}_{-0.019} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.014}_{-0.013} \quad (-0.6\sigma)$
A^{kSZ}	—	Y_{P}	$0.257^{+0.042}_{-0.046} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.021}_{-0.020} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.258^{+0.042}_{-0.046} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.014}_{-0.013} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.05^{+0.58}_{-0.58} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.020}_{-0.020} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1090.1^{+1.2}_{-1.2} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.011}_{-0.010} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	r_*	$147.1^{+5.6}_{-5.8} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.012}_{-0.011} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.0419^{+0.0020}_{-0.0020} \quad (+0.4\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.4\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.11^{+0.51}_{-0.53} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.0^{+5.2}_{-5.1} \quad (-0.5\sigma)$
c_{TE}	$0.997^{+0.011}_{-0.011}$	z_{drag}	$1059.6^{+1.9}_{-1.9} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-6} \quad (-0.5\sigma)$
c_{EE}	$0.993^{+0.013}_{-0.013}$	r_{drag}	$149.8^{+5.8}_{-5.9} \quad (+0.3\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.1\sigma)$
H_0	$66.0^{+3.8}_{-3.6} \quad (-0.0\sigma)$	k_{D}	$0.1384^{+0.0054}_{-0.0049} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 1.2) \quad (-0.4\sigma)$
Ω_{Λ}	$0.682^{+0.021}_{-0.023} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1609^{+0.0014}_{-0.0014} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.2 \quad (\nu: 18.5)$
Ω_{m}	$0.318^{+0.023}_{-0.021} \quad (-0.3\sigma)$	z_{eq}	$3417^{+90}_{-84} \quad (-0.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.0) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1385^{+0.0096}_{-0.0094} \quad (-0.4\sigma)$	k_{eq}	$0.01024^{+0.00032}_{-0.00030} \quad (-0.6\sigma)$	χ_{CMB}^2	$11935.4 \quad (\nu: 18.9) \quad (+1815.0\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11943.30; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.12; R - 1 = 0.00937$$

11.22 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00039}_{-0.00038} \quad (+0.8\sigma)$	S_8	$0.817^{+0.028}_{-0.026} \quad (-1.0\sigma)$	$H(0.38)$	$82.2^{+3.6}_{-3.2} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1164^{+0.0095}_{-0.0092} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.015}_{-0.014} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1545^{+66}_{-68} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0418^{+0.0026}_{-0.0028} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.599^{+0.018}_{-0.017} \quad (-0.9\sigma)$	$H(0.51)$	$88.8^{+3.7}_{-3.3} \quad (+0.1\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.021}_{-0.019} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$2002^{+84}_{-86} \quad (-0.2\sigma)$
N_{eff}	$2.88^{+0.60}_{-0.57} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.8}_{-1.7} \quad (+0.7\sigma)$	$H(0.61)$	$94.4^{+3.7}_{-3.6} \quad (+0.1\sigma)$
Y_{P}	$0.257^{+0.042}_{-0.046} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.051}_{-0.047} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2329^{+96}_{-100} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.033}_{-0.032} \quad (+0.1\sigma)$	z_{re}	$< 8.93 \quad (+0.4\sigma)$	$H(2.33)$	$233.6^{+8.2}_{-8.0} \quad (-0.2\sigma)$
n_{s}	$0.967^{+0.015}_{-0.015} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.087^{+0.069}_{-0.068} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5823^{+210}_{-230} \quad (-0.1\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.869^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.015}_{-0.014} \quad (-1.0\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1220^{+32}_{-31} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.023}_{-0.022} \quad (-0.2\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5719^{+77}_{-76} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.014}_{-0.014} \quad (-0.9\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.021}_{-0.020} \quad (-0.1\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815.7^{+9.9}_{-10} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.014}_{-0.013} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$< 7.39 \quad (-0.6\sigma)$	D_{2000}	$230.1^{+4.5}_{-4.4} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.020}_{-0.019} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.24}$	$n_{\mathrm{s},0.002}$	$0.967^{+0.015}_{-0.015} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.014}_{-0.013} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.257^{+0.042}_{-0.046} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.019}_{-0.018} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.258^{+0.042}_{-0.047} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2954^{+0.0097}_{-0.0095} \quad (+0.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.94^{+0.51}_{-0.54} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.010}_{-0.010} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.0^{+1.2}_{-1.2} \quad (-0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	r_*	$146.3^{+5.2}_{-5.6} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.3^{+5.0}_{-5.0} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.21}$	$100\theta_*$	$1.0417^{+0.0019}_{-0.0019} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+6}_{-5} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.04^{+0.48}_{-0.51} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.9^{+1.7}_{-1.8} \quad (+0.5\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 0.7) \quad (-0.7\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	r_{drag}	$149.0^{+5.3}_{-5.8} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.8 \quad (\nu: 18.0)$
c_{TE}	$0.997^{+0.010}_{-0.010}$	k_{D}	$0.1390^{+0.0055}_{-0.0049} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
c_{EE}	$0.994^{+0.013}_{-0.013}$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	χ_{MGS}^2	$1.33 \quad (\nu: 0.1)$
H_0	$67.0^{+3.2}_{-3.0} \quad (+0.3\sigma)$	z_{eq}	$3389^{+65}_{-65} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.1)$
Ω_{Λ}	$0.689^{+0.014}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01023^{+0.00033}_{-0.00030} \quad (-0.7\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
Ω_{m}	$0.311^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.011}_{-0.011} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^2$	$0.1393^{+0.0096}_{-0.0093} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0057}_{-0.0056} \quad (+0.6\sigma)$	χ_{CMB}^2	$11935.5 \quad (\nu: 18.2) \quad (+1815.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.093^{+0.011}_{-0.010} \quad (-0.0\sigma)$	$H(0.15)$	$72.2^{+3.3}_{-3.0} \quad (+0.2\sigma)$		
σ_8	$0.803^{+0.025}_{-0.024} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$648^{+29}_{-30} \quad (-0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.50; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.52; R - 1 = 0.02228$$

11.23 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02221^{+0.00045}_{-0.00044} \quad (+0.4\sigma)$	σ_8	$0.801^{+0.022}_{-0.022} \quad (-0.4\sigma)$	$H(0.15)$	$71.1^{+3.8}_{-3.4} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1155^{+0.0096}_{-0.0085} \quad (-0.5\sigma)$	S_8	$0.827^{+0.026}_{-0.026} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$659^{+34}_{-35} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0419^{+0.0027}_{-0.0027} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.38)$	$81.1^{+3.9}_{-3.5} \quad (-0.2\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.015}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1569^{+77}_{-79} \quad (+0.1\sigma)$
N_{eff}	$2.76^{+0.62}_{-0.58} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.019}_{-0.018} \quad (-0.4\sigma)$	$H(0.51)$	$87.8^{+4.0}_{-3.6} \quad (-0.2\sigma)$
Y_{P}	$0.256^{+0.043}_{-0.046} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.6^{+2.5}_{-2.5} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$2031^{+96}_{-100} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.035^{+0.033}_{-0.031} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.050}_{-0.050} \quad (-0.3\sigma)$	$H(0.61)$	$93.4^{+4.1}_{-3.7} \quad (-0.2\sigma)$
n_{s}	$0.961^{+0.018}_{-0.018} \quad (+0.1\sigma)$	z_{re}	$< 8.83 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2363^{+110}_{-120} \quad (+0.1\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.080^{+0.069}_{-0.064} \quad (-0.0\sigma)$	$H(2.33)$	$232.5^{+8.3}_{-7.6} \quad (-0.4\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.864^{+0.039}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5881^{+230}_{-240} \quad (+0.2\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	D_{40}	$1230^{+33}_{-33} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5717^{+76}_{-76} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.022}_{-0.021} \quad (-0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2534^{+26}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.012}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.35 \quad (-0.6\sigma)$	D_{1420}	$816.1^{+9.8}_{-10} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.021}_{-0.020} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{2000}	$230.6^{+4.4}_{-4.5} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.961^{+0.018}_{-0.018} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.612^{+0.020}_{-0.019} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.256^{+0.043}_{-0.046} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.012}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.257^{+0.043}_{-0.046} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.019}_{-0.019} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.37}$	Age/Gyr	$14.08^{+0.55}_{-0.58} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.010}_{-0.0097} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1090.0^{+1.2}_{-1.2} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$147.2^{+5.5}_{-5.6} \quad (+0.3\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	$100\theta_*$	$1.0419^{+0.0019}_{-0.0019} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+5.1}_{-5.0} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.13^{+0.50}_{-0.51} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-6} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.5^{+1.9}_{-2.0} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.02 \quad (\nu: 0.3)$
c_{TE}	$0.997^{+0.011}_{-0.010}$	r_{drag}	$150.0^{+5.6}_{-5.8} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
c_{EE}	$0.992^{+0.012}_{-0.013}$	k_{D}	$0.1383^{+0.0054}_{-0.0048} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.7 \quad (\nu: 1.2) \quad (-0.3\sigma)$
H_0	$65.8^{+3.8}_{-3.4} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1608^{+0.0014}_{-0.0014} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.6 \quad (\nu: 17.3)$
Ω_{Λ}	$0.680^{+0.020}_{-0.022} \quad (+0.3\sigma)$	z_{eq}	$3422^{+88}_{-85} \quad (-0.1\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
Ω_{m}	$0.320^{+0.022}_{-0.020} \quad (-0.3\sigma)$	k_{eq}	$0.01024^{+0.00030}_{-0.00027} \quad (-0.6\sigma)$	χ_{CMB}^2	$11944.2 \quad (\nu: 18.4) \quad (+1816.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1384^{+0.0097}_{-0.0086} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.015}_{-0.015} \quad (+0.2\sigma)$		
$\Omega_{\mathrm{m}} h^3$	$0.0911^{+0.011}_{-0.0097} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4477^{+0.0076}_{-0.0076} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11952.01; \Delta\chi_{\mathrm{eff}}^2 = 0.76; R - 1 = 0.01202$$

11.24 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02232^{+0.00038}_{-0.00038} \quad (+0.8\sigma)$	S_8	$0.820^{+0.023}_{-0.022} \quad (-0.8\sigma)$	$H(0.38)$	$82.1^{+3.4}_{-3.2} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1164^{+0.0091}_{-0.0088} \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$D_M(0.38)$	$1548^{+65}_{-67} \quad (-0.2\sigma)$
$100\theta_{MC}$	$1.0418^{+0.0026}_{-0.0027} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.601^{+0.015}_{-0.015} \quad (-0.7\sigma)$	$H(0.51)$	$88.7^{+3.6}_{-3.3} \quad (+0.1\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$D_M(0.51)$	$2005^{+83}_{-85} \quad (-0.2\sigma)$
N_{eff}	$2.87^{+0.58}_{-0.55} \quad (-0.1\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$H(0.61)$	$94.3^{+3.8}_{-3.4} \quad (+0.0\sigma)$
Y_P	$0.256^{+0.043}_{-0.046} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.043}_{-0.042} \quad (-0.6\sigma)$	$D_M(0.61)$	$2333^{+95}_{-98} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.031}_{-0.029} \quad (+0.2\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$H(2.33)$	$233.6^{+8.1}_{-7.3} \quad (-0.2\sigma)$
n_s	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$10^9 A_s$	$2.093^{+0.065}_{-0.061} \quad (+0.2\sigma)$	$D_M(2.33)$	$5828^{+210}_{-220} \quad (-0.0\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.870^{+0.038}_{-0.038} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+31}_{-30} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.021}_{-0.020} \quad (-0.1\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5724^{+76}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.019}_{-0.018} \quad (-0.0\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.2^{+9.9}_{-10} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.012}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.6\sigma)$	D_{2000}	$230.3^{+4.5}_{-4.5} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.018}_{-0.017} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.24}$	$n_{s,0.002}$	$0.966^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.256^{+0.043}_{-0.046} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.017}_{-0.017} \quad (+0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.258^{+0.043}_{-0.046} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2957^{+0.0090}_{-0.0087} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.95^{+0.50}_{-0.53} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.3048^{+0.0097}_{-0.0094} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.0^{+1.2}_{-1.2} \quad (-0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.36}_{-0.35}$	r_*	$146.3^{+5.1}_{-5.4} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.2^{+5.0}_{-5.0} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.0417^{+0.0018}_{-0.0018} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-5} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.31}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	$14.05^{+0.46}_{-0.49} \quad (+0.1\sigma)$	χ_{lensing}^2	$9.23 \quad (\nu: 0.3)$
c_{100}	$0.9976^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.9^{+1.7}_{-1.8} \quad (+0.4\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.8) \quad (+0.2\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	r_{drag}	$149.0^{+5.2}_{-5.5} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.8) \quad (-0.6\sigma)$
c_{TE}	$0.997^{+0.010}_{-0.010}$	k_D	$0.1390^{+0.0052}_{-0.0048} \quad (-0.1\sigma)$	χ_{CamSpec}^2	$11515.2 \quad (\nu: 17.8)$
c_{EE}	$0.993^{+0.013}_{-0.013}$	$100\theta_D$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.067 \quad (\nu: 0.0)$
H_0	$66.8^{+3.1}_{-2.9} \quad (+0.2\sigma)$	z_{eq}	$3394^{+64}_{-66} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.23 \quad (\nu: 0.1)$
Ω_Λ	$0.688^{+0.014}_{-0.014} \quad (+0.6\sigma)$	k_{eq}	$0.01024^{+0.00030}_{-0.00028} \quad (-0.6\sigma)$	χ_{DR12BAO}^2	$5.0 \quad (\nu: 1.2)$
Ω_m	$0.312^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.011}_{-0.011} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_m h^2$	$0.1394^{+0.0092}_{-0.0089} \quad (-0.3\sigma)$	$100\theta_{s,\text{eq}}$	$0.4504^{+0.0057}_{-0.0055} \quad (+0.5\sigma)$	χ_{CMB}^2	$11944.6 \quad (\nu: 18.9) \quad (+1816.5\sigma)$
$\Omega_m h^3$	$0.0932^{+0.010}_{-0.0098} \quad (-0.1\sigma)$	$H(0.15)$	$72.1^{+3.2}_{-3.0} \quad (+0.2\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
σ_8	$0.804^{+0.022}_{-0.021} \quad (-0.2\sigma)$	$D_M(0.15)$	$649^{+29}_{-29} \quad (-0.2\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 11958.67; \Delta\chi_{\text{eff}}^2 = 1.41; R - 1 = 0.01939$$

11.25 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15

Parameter	Best fit	95% limits		Parameter	Best fit	95% limits		Parameter	Best fit	95% limits	
$\Omega_{\mathrm{b}} h^2$	0.02201	$0.02207^{+0.00063}_{-0.00062}$	(-0.0σ)	S_8	0.8425	$0.840^{+0.050}_{-0.048}$	(-0.0σ)	$100\theta_{\mathrm{s,eq}}$	0.4460	$0.448^{+0.013}_{-0.013}$	$(+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.1185	$0.1201^{+0.0094}_{-0.0088}$	$(+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4615	$0.460^{+0.027}_{-0.026}$	(-0.0σ)	$H(0.15)$	71.0	$71.9^{+5.2}_{-5.0}$	$(+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	1.04099	$1.0408^{+0.0015}_{-0.0015}$	(-0.2σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6100	$0.610^{+0.023}_{-0.023}$	$(+0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	659.2	652^{+50}_{-47}	(-0.1σ)
τ	0.0515	$0.051^{+0.016}_{-0.016}$	(-0.0σ)	$\sigma_8/h^{0.5}$	0.9951	$0.993^{+0.033}_{-0.032}$	(-0.1σ)	$H(0.38)$	81.30	$82.1^{+5.1}_{-4.8}$	$(+0.1\sigma)$
N_{eff}	2.88	$3.00^{+0.68}_{-0.65}$	$(+0.1\sigma)$	$r_{\mathrm{drag}} h$	97.65	$98.2^{+4.6}_{-4.4}$	$(+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1568	1552^{+110}_{-110}	(-0.1σ)
Y_{P}	0.2439	$0.2439^{+0.0080}_{-0.0078}$	(-0.2σ)	$\langle d^2 \rangle^{1/2}$	2.465	$2.458^{+0.091}_{-0.088}$	(-0.0σ)	$H(0.51)$	88.10	$89.0^{+5.1}_{-4.8}$	$(+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0337	$3.036^{+0.042}_{-0.043}$	$(+0.0\sigma)$	z_{re}	7.43	$7.4^{+1.6}_{-1.8}$	(-0.1σ)	$D_{\mathrm{M}}(0.51)$	2029	2009^{+140}_{-130}	(-0.1σ)
n_{s}	0.9575	$0.960^{+0.027}_{-0.027}$	(-0.0σ)	$10^9 A_{\mathrm{s}}$	2.077	$2.084^{+0.088}_{-0.089}$	$(+0.0\sigma)$	$H(0.61)$	93.77	$94.6^{+5.1}_{-4.8}$	$(+0.1\sigma)$
y_{cal}	1.00024	$1.0005^{+0.0049}_{-0.0047}$	$(+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8739	$1.881^{+0.046}_{-0.048}$	$(+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2359	2336^{+150}_{-150}	(-0.1σ)
A_{217}^{CIB}	47.0	48^{+10}_{-10}	(-0.1σ)	D_{40}	1238.6	1237^{+45}_{-43}	$(+0.1\sigma)$	$H(2.33)$	234.7	$236.1^{+8.5}_{-8.2}$	$(+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.51	—		D_{220}	5706	5714^{+83}_{-80}	$(+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	5851	5803^{+290}_{-280}	(-0.2σ)
A_{143}^{tSZ}	6.97	$5.1^{+3.8}_{-3.9}$	$(+0.0\sigma)$	D_{810}	2535.3	2536^{+29}_{-28}	$(+0.0\sigma)$	$f\sigma_8(0.15)$	0.4647	$0.464^{+0.025}_{-0.024}$	(-0.0σ)
A_{100}^{PS}	250	262^{+60}_{-60}	(-0.1σ)	D_{1420}	816.1	$814.9^{+9.8}_{-9.8}$	$(+0.1\sigma)$	$\sigma_8(0.15)$	0.7435	$0.747^{+0.028}_{-0.028}$	$(+0.1\sigma)$
A_{143}^{PS}	50.0	48^{+20}_{-20}	(-0.1σ)	D_{2000}	230.76	$229.9^{+4.1}_{-4.2}$	$(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4793	$0.479^{+0.019}_{-0.018}$	$(+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	50.4	43^{+20}_{-20}	(-0.0σ)	$n_{\mathrm{s},0.002}$	0.9575	$0.960^{+0.027}_{-0.027}$	(-0.0σ)	$\sigma_8(0.38)$	0.6574	$0.661^{+0.027}_{-0.027}$	$(+0.1\sigma)$
A_{217}^{PS}	120.9	115^{+20}_{-20}	$(+0.0\sigma)$	Y_{P}	0.2439	$0.2439^{+0.0080}_{-0.0078}$	(-0.2σ)	$f\sigma_8(0.51)$	0.4761	$0.477^{+0.017}_{-0.016}$	$(+0.1\sigma)$
A^{kSZ}	0.01	< 8.40	(-0.1σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2453	$0.2452^{+0.0081}_{-0.0078}$	(-0.2σ)	$\sigma_8(0.51)$	0.6145	$0.618^{+0.026}_{-0.026}$	$(+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.83	$8.9^{+3.6}_{-3.6}$	(-0.0σ)	Age/Gyr	14.00	$13.89^{+0.70}_{-0.67}$	(-0.2σ)	$f\sigma_8(0.61)$	0.4699	$0.471^{+0.016}_{-0.016}$	$(+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.75	$10.7^{+3.5}_{-3.6}$	(-0.0σ)	z_*	1090.12	$1090.23^{+0.92}_{-0.86}$	(-0.2σ)	$\sigma_8(0.61)$	0.5843	$0.588^{+0.025}_{-0.025}$	$(+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.2^{+6.6}_{-6.5}$	(-0.0σ)	r_*	145.9	$145.0^{+5.9}_{-5.7}$	(-0.2σ)	$f\sigma_8(2.33)$	0.2940	$0.296^{+0.014}_{-0.014}$	$(+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.9	93^{+10}_{-10}	(-0.0σ)	$100\theta_*$	1.04129	$1.0411^{+0.0017}_{-0.0016}$	(-0.2σ)	$\sigma_8(2.33)$	0.3024	$0.304^{+0.015}_{-0.015}$	$(+0.1\sigma)$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$	(-0.0σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.01	$13.92^{+0.55}_{-0.54}$	(-0.2σ)	χ_{small}^2	395.81	$396.9 (\nu: 1.3)$	(-0.0σ)
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$	(-0.0σ)	z_{drag}	1058.90	$1059.2^{+2.1}_{-2.1}$	(-0.1σ)	χ_{lowl}^2	24.45	$24.5 (\nu: 2.7)$	$(+0.1\sigma)$
H_0	65.7	$66.5^{+5.4}_{-5.1}$	$(+0.1\sigma)$	r_{drag}	148.7	$147.7^{+6.2}_{-6.0}$	(-0.2σ)	χ_{plik}^2	757.7	$771.7 (\nu: 17.4)$	(-0.1σ)
Ω_{Λ}	0.6724	$0.676^{+0.037}_{-0.040}$	$(+0.1\sigma)$	k_{D}	0.13948	$0.1402^{+0.0046}_{-0.0046}$	$(+0.2\sigma)$	χ_{Aver15}^2	0.01	$1.0 (\nu: 1.0)$	
Ω_{m}	0.3276	$0.324^{+0.040}_{-0.037}$	(-0.1σ)	$100\theta_{\mathrm{D}}$	0.16071	$0.1609^{+0.0012}_{-0.0012}$	(-0.2σ)	χ_{prior}^2	1.3	$7.3 (\nu: 6.7)$	(-0.0σ)
$\Omega_{\mathrm{m}} h^2$	0.1412	$0.1428^{+0.0097}_{-0.0091}$	$(+0.1\sigma)$	z_{eq}	3436	3421^{+140}_{-140}	(-0.1σ)	χ_{CMB}^2	1178.0	$1193.0 (\nu: 16.2)$	(-0.1σ)
$\Omega_{\mathrm{m}} h^3$	0.0927	$0.095^{+0.013}_{-0.012}$	$(+0.1\sigma)$	k_{eq}	0.010368	$0.01040^{+0.00033}_{-0.00032}$	$(+0.1\sigma)$				
σ_8	0.8063	$0.809^{+0.029}_{-0.028}$	$(+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	0.8063	$0.809^{+0.026}_{-0.025}$	$(+0.1\sigma)$				

Best-fit $\chi_{\mathrm{eff}}^2 = 1179.25$; $\bar{\chi}_{\mathrm{eff}}^2 = 1201.30$; $R - 1 = 0.00666$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.01 CMB - small_100x143_offlike5_EE_Aplanck_B: 395.81 commander_dx12_v3.2_29: 24.45 plik_rd12_HM_v22_TT: 757.69

11.26 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02226^{+0.00046}_{-0.00045} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.020}_{-0.020} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1515^{+66}_{-65} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1211^{+0.0091}_{-0.0085} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$H(0.51)$	$90.5^{+3.6}_{-3.4} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0407^{+0.0015}_{-0.0014} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.95^{+2.0}_{-2.0} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1963^{+84}_{-82} \quad (-0.7\sigma)$
τ	$0.053^{+0.016}_{-0.015} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.055}_{-0.054} \quad (-0.7\sigma)$	$H(0.61)$	$96.1^{+3.7}_{-3.5} \quad (+0.6\sigma)$
N_{eff}	$3.18^{+0.53}_{-0.53} \quad (+0.5\sigma)$	z_{re}	$7.6^{+1.5}_{-1.7} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2285^{+96}_{-94} \quad (-0.7\sigma)$
Y_{P}	$0.2439^{+0.0079}_{-0.0076} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.080}_{-0.079} \quad (+0.3\sigma)$	$H(2.33)$	$237.6^{+7.8}_{-7.5} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.037}_{-0.038} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.886^{+0.043}_{-0.044} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5718^{+210}_{-210} \quad (-0.6\sigma)$
n_{s}	$0.969^{+0.016}_{-0.016} \quad (+0.7\sigma)$	D_{40}	$1223^{+29}_{-29} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.017}_{-0.016} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0046} \quad (+0.0\sigma)$	D_{220}	$5720^{+81}_{-80} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.026}_{-0.025} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2537^{+28}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.016}_{-0.016} \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-9.8} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.024}_{-0.023} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$229.5^{+4.0}_{-4.1} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.016}_{-0.015} \quad (-0.2\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.969^{+0.016}_{-0.016} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.023}_{-0.022} \quad (+0.4\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.2439^{+0.0079}_{-0.0076} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.015}_{-0.015} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2452^{+0.0079}_{-0.0076} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.022}_{-0.021} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.69^{+0.50}_{-0.50} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.299^{+0.011}_{-0.011} \quad (+0.5\sigma)$
A^{kSZ}	—	z_*	$1090.14^{+0.91}_{-0.84} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.012}_{-0.012} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.7^{+4.9}_{-4.9} \quad (-0.5\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.6}_{-3.7} \quad (+0.0\sigma)$	$100\theta_*$	$1.0409^{+0.0015}_{-0.0015} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.6} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.80^{+0.46}_{-0.46} \quad (-0.5\sigma)$	f_{2000}^{217}	$108.3^{+4.5}_{-4.2} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.8^{+1.6}_{-1.5} \quad (+0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.3^{+5.1}_{-5.1} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 0.7) \quad (-0.7\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.1413^{+0.0041}_{-0.0039} \quad (+0.4\sigma)$	χ_{plik}^2	$773.2 \quad (\nu: 15.4) \quad (+0.1\sigma)$
H_0	$68.3^{+3.2}_{-3.1} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0011}_{-0.0010} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.96 \quad (\nu: 0.9)$
Ω_{Λ}	$0.691^{+0.016}_{-0.017} \quad (+0.8\sigma)$	z_{eq}	$3366^{+64}_{-63} \quad (-0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.017}_{-0.016} \quad (-0.8\sigma)$	k_{eq}	$0.01036^{+0.00033}_{-0.00032} \quad (-0.1\sigma)$	χ_{MGS}^2	$1.46 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1440^{+0.0093}_{-0.0087} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.012}_{-0.012} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^3$	$0.098^{+0.010}_{-0.010} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4527^{+0.0061}_{-0.0060} \quad (+0.8\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
σ_8	$0.812^{+0.028}_{-0.027} \quad (+0.2\sigma)$	$H(0.15)$	$73.6^{+3.3}_{-3.1} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
S_8	$0.823^{+0.033}_{-0.031} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+29}_{-28} \quad (-0.7\sigma)$	χ_{CMB}^2	$1193.0 \quad (\nu: 14.9) \quad (-0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.018}_{-0.017} \quad (-0.7\sigma)$	$H(0.38)$	$83.7^{+3.4}_{-3.3} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1207.49; R - 1 = 0.02393$

11.27 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02206^{+0.00060}_{-0.00059} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.018}_{-0.018} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$654^{+46}_{-43} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0088}_{-0.0084} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$H(0.38)$	$81.9^{+4.7}_{-4.5} \quad (+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0015}_{-0.0014} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1557^{+100}_{-97} \quad (-0.1\sigma)$
τ	$0.051^{+0.016}_{-0.017} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.3^{+3.7}_{-3.6} \quad (+0.1\sigma)$	$H(0.51)$	$88.6^{+4.7}_{-4.5} \quad (+0.0\sigma)$
N_{eff}	$2.94^{+0.65}_{-0.63} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.454^{+0.063}_{-0.062} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2015^{+130}_{-120} \quad (-0.1\sigma)$
Y_{P}	$0.2439^{+0.0079}_{-0.0077} \quad (-0.2\sigma)$	z_{re}	$7.4^{+1.6}_{-1.8} \quad (-0.1\sigma)$	$H(0.61)$	$94.3^{+4.7}_{-4.6} \quad (+0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.041}_{-0.043} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.077^{+0.087}_{-0.089} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2343^{+140}_{-140} \quad (-0.1\sigma)$
n_{s}	$0.959^{+0.024}_{-0.025} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.043}_{-0.046} \quad (-0.1\sigma)$	$H(2.33)$	$235.2^{+8.0}_{-7.9} \quad (+0.0\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	D_{40}	$1238^{+38}_{-37} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5824^{+280}_{-270} \quad (-0.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5716^{+83}_{-79} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2535^{+28}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.026}_{-0.027} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.2^{+3.9}_{-3.9} \quad (+0.1\sigma)$	D_{1420}	$815.0^{+9.6}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.1\sigma)$	D_{2000}	$230.1^{+3.9}_{-4.1} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.026}_{-0.027} \quad (-0.1\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.024}_{-0.025} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.013} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2439^{+0.0079}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.025}_{-0.026} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0080}_{-0.0077} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A^{kSZ}	$< 8.40 \quad (-0.1\sigma)$	Age/Gyr	$13.94^{+0.67}_{-0.64} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.025}_{-0.025} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.11^{+0.84}_{-0.78} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.295^{+0.013}_{-0.014} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.7} \quad (-0.0\sigma)$	r_*	$145.6^{+5.9}_{-5.5} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.015}_{-0.015} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.7}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0016}_{-0.0015} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.98^{+0.54}_{-0.51} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.1^{+2.0}_{-2.1} \quad (-0.2\sigma)$	f_{2000}^{217}	$107.7^{+4.4}_{-4.2} \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$148.3^{+6.1}_{-5.8} \quad (-0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.4 \quad (\nu: 0.5)$
H_0	$66.3^{+4.9}_{-4.6} \quad (+0.1\sigma)$	k_{D}	$0.1398^{+0.0044}_{-0.0045} \quad (+0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.2) \quad (-0.0\sigma)$
Ω_{Λ}	$0.677^{+0.030}_{-0.032} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1608^{+0.0012}_{-0.0011} \quad (-0.4\sigma)$	χ_{lowl}^2	$24.5 \quad (\nu: 2.1) \quad (+0.1\sigma)$
Ω_{m}	$0.323^{+0.032}_{-0.030} \quad (-0.1\sigma)$	z_{eq}	$3417^{+110}_{-110} \quad (-0.2\sigma)$	χ_{plik}^2	$771.1 \quad (\nu: 14.8) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1416^{+0.0091}_{-0.0087} \quad (-0.0\sigma)$	k_{eq}	$0.01035^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	χ_{Aver15}^2	$0.99 \quad (\nu: 1.0)$
$\Omega_{\mathrm{m}} h^3$	$0.094^{+0.013}_{-0.012} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.021}_{-0.020} \quad (+0.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
σ_8	$0.806^{+0.027}_{-0.027} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.448^{+0.011}_{-0.010} \quad (+0.2\sigma)$	χ_{CMB}^2	$1201.8 \quad (\nu: 15.9) \quad (+1.3\sigma)$
S_8	$0.835^{+0.033}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$71.6^{+4.8}_{-4.5} \quad (+0.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1210.08; R - 1 = 0.01169$

11.28 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02225^{+0.00045}_{-0.00045} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+65}_{-63} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1205^{+0.0085}_{-0.0078} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.018} \quad (-0.6\sigma)$	$H(0.51)$	$90.2^{+3.4}_{-3.3} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0407^{+0.0014}_{-0.0013} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+2.0}_{-1.9} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+82}_{-80} \quad (-0.6\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.045}_{-0.044} \quad (-0.6\sigma)$	$H(0.61)$	$95.8^{+3.4}_{-3.4} \quad (+0.5\sigma)$
N_{eff}	$3.14^{+0.51}_{-0.48} \quad (+0.4\sigma)$	z_{re}	$7.7^{+1.4}_{-1.5} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2293^{+94}_{-92} \quad (-0.6\sigma)$
Y_{P}	$0.2439^{+0.0080}_{-0.0077} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.070}_{-0.069} \quad (+0.4\sigma)$	$H(2.33)$	$237.0^{+7.2}_{-7.0} \quad (+0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.033}_{-0.033} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.039}_{-0.039} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5734^{+200}_{-190} \quad (-0.5\sigma)$
n_{s}	$0.968^{+0.016}_{-0.016} \quad (+0.6\sigma)$	D_{40}	$1226^{+28}_{-27} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0047} \quad (+0.1\sigma)$	D_{220}	$5724^{+81}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.022}_{-0.023} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-9.7} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.020}_{-0.021} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{2000}	$229.8^{+4.0}_{-4.0} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.020}_{-0.020} \quad (+0.4\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2439^{+0.0080}_{-0.0077} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0080}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.019}_{-0.019} \quad (+0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.73^{+0.48}_{-0.46} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2988^{+0.0099}_{-0.010} \quad (+0.5\sigma)$
A^{kSZ}	—	z_*	$1090.09^{+0.85}_{-0.79} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.308^{+0.011}_{-0.011} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.0^{+4.6}_{-4.6} \quad (-0.4\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.7}_{-3.8} \quad (+0.0\sigma)$	$100\theta_*$	$1.0409^{+0.0015}_{-0.0014} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.7}_{-6.7} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.83^{+0.43}_{-0.43} \quad (-0.4\sigma)$	f_{2000}^{217}	$108.1^{+4.3}_{-4.2} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.7^{+1.5}_{-1.5} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.43 \quad (\nu: 0.3)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.7^{+4.8}_{-4.8} \quad (-0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.1410^{+0.0038}_{-0.0037} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.7) \quad (-0.5\sigma)$
H_0	$68.1^{+3.1}_{-3.0} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1611^{+0.0010}_{-0.00096} \quad (+0.0\sigma)$	χ_{plik}^2	$772.4 \quad (\nu: 14.1) \quad (-0.0\sigma)$
Ω_{Λ}	$0.690^{+0.015}_{-0.016} \quad (+0.8\sigma)$	z_{eq}	$3371^{+61}_{-62} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 0.9)$
Ω_{m}	$0.310^{+0.016}_{-0.015} \quad (-0.8\sigma)$	k_{eq}	$0.01035^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.060 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1434^{+0.0087}_{-0.0080} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.011} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0977^{+0.010}_{-0.0092} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4522^{+0.0059}_{-0.0057} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.4)$
σ_8	$0.812^{+0.023}_{-0.024} \quad (+0.2\sigma)$	$H(0.15)$	$73.3^{+3.2}_{-3.1} \quad (+0.6\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
S_8	$0.825^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+28}_{-27} \quad (-0.6\sigma)$	χ_{CMB}^2	$1201.9 \quad (\nu: 14.7) \quad (+1.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$83.5^{+3.3}_{-3.2} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$

$\bar{\chi}_{\mathrm{eff}}^2 = 1216.46; R - 1 = 0.02078$

11.29 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02210^{+0.00062}_{-0.00060} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.460^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$650^{+49}_{-47} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1203^{+0.0094}_{-0.0089} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.023}_{-0.022} \quad (+0.1\sigma)$	$H(0.38)$	$82.3^{+5.1}_{-4.8} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0015}_{-0.0014} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.033}_{-0.031} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1548^{+110}_{-100} \quad (-0.2\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.3^{+4.5}_{-4.4} \quad (+0.1\sigma)$	$H(0.51)$	$89.1^{+5.0}_{-4.7} \quad (+0.2\sigma)$
N_{eff}	$3.02^{+0.68}_{-0.64} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.460^{+0.090}_{-0.087} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$2003^{+130}_{-130} \quad (-0.2\sigma)$
Y_{P}	$0.2439^{+0.0081}_{-0.0078} \quad (-0.2\sigma)$	z_{re}	$< 8.82 \quad (+0.2\sigma)$	$H(0.61)$	$94.8^{+5.0}_{-4.8} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.038}_{-0.035} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.082}_{-0.072} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2330^{+150}_{-150} \quad (-0.2\sigma)$
n_{s}	$0.961^{+0.026}_{-0.026} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.045}_{-0.047} \quad (+0.1\sigma)$	$H(2.33)$	$236.3^{+8.4}_{-8.2} \quad (+0.2\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0047} \quad (+0.0\sigma)$	D_{40}	$1236^{+44}_{-43} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5793^{+290}_{-280} \quad (-0.2\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5714^{+83}_{-79} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.025}_{-0.024} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2536^{+28}_{-27} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.027}_{-0.026} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{1420}	$814.9^{+9.8}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.019}_{-0.018} \quad (+0.1\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.1\sigma)$	D_{2000}	$229.9^{+4.1}_{-4.2} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.026}_{-0.024} \quad (+0.2\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.961^{+0.026}_{-0.026} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.017}_{-0.016} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.2439^{+0.0081}_{-0.0078} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.025}_{-0.024} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2452^{+0.0081}_{-0.0078} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.016}_{-0.015} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.39 \quad (-0.1\sigma)$	Age/Gyr	$13.87^{+0.68}_{-0.67} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.025}_{-0.023} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.22^{+0.92}_{-0.86} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.297^{+0.013}_{-0.012} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (-0.0\sigma)$	r_*	$144.8^{+5.9}_{-5.7} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.015}_{-0.014} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.6}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.0410^{+0.0017}_{-0.0016} \quad (-0.2\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.91^{+0.54}_{-0.53} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.3^{+2.1}_{-2.1} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.9^{+4.4}_{-4.3} \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.5^{+6.1}_{-5.9} \quad (-0.2\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.2) \quad (-0.1\sigma)$
H_0	$66.7^{+5.3}_{-5.0} \quad (+0.2\sigma)$	k_{D}	$0.1404^{+0.0046}_{-0.0045} \quad (+0.2\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 2.6) \quad (-0.0\sigma)$
Ω_{Λ}	$0.678^{+0.036}_{-0.039} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0012}_{-0.0012} \quad (-0.2\sigma)$	χ_{plik}^2	$771.6 \quad (\nu: 17.5) \quad (-0.2\sigma)$
Ω_{m}	$0.322^{+0.039}_{-0.036} \quad (-0.2\sigma)$	z_{eq}	$3415^{+140}_{-130} \quad (-0.2\sigma)$	χ_{Aver15}^2	$1.0 \quad (\nu: 1.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1430^{+0.0097}_{-0.0091} \quad (+0.2\sigma)$	k_{eq}	$0.01040^{+0.00034}_{-0.00032} \quad (+0.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.095^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.026}_{-0.025} \quad (+0.2\sigma)$	χ_{CMB}^2	$1192.7 \quad (\nu: 15.7) \quad (-0.2\sigma)$
σ_8	$0.811^{+0.028}_{-0.026} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.448^{+0.013}_{-0.013} \quad (+0.2\sigma)$		
S_8	$0.841^{+0.050}_{-0.047} \quad (-0.0\sigma)$	$H(0.15)$	$72.1^{+5.2}_{-4.9} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1200.97; R - 1 = 0.00742$$

11.30 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02227^{+0.00046}_{-0.00044} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1514^{+66}_{-64} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1211^{+0.0091}_{-0.0087} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.023}_{-0.021} \quad (-0.6\sigma)$	$H(0.51)$	$90.5^{+3.6}_{-3.4} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0407^{+0.0015}_{-0.0014} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.98^{+2.0}_{-2.0} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1962^{+84}_{-82} \quad (-0.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.053}_{-0.050} \quad (-0.7\sigma)$	$H(0.61)$	$96.2^{+3.7}_{-3.5} \quad (+0.6\sigma)$
N_{eff}	$3.18^{+0.53}_{-0.53} \quad (+0.5\sigma)$	z_{re}	$< 8.94 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2284^{+96}_{-94} \quad (-0.7\sigma)$
Y_{P}	$0.2439^{+0.0080}_{-0.0076} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.072}_{-0.072} \quad (+0.5\sigma)$	$H(2.33)$	$237.6^{+7.8}_{-7.5} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.034}_{-0.034} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.886^{+0.043}_{-0.044} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5716^{+210}_{-210} \quad (-0.6\sigma)$
n_{s}	$0.970^{+0.016}_{-0.016} \quad (+0.7\sigma)$	D_{40}	$1223^{+29}_{-28} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.017}_{-0.016} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0047} \quad (+0.0\sigma)$	D_{220}	$5719^{+82}_{-80} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.026}_{-0.025} \quad (+0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.016}_{-0.016} \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-9.7} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.024}_{-0.022} \quad (+0.5\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$229.5^{+4.0}_{-4.2} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.015}_{-0.015} \quad (-0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.970^{+0.016}_{-0.016} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.023}_{-0.021} \quad (+0.5\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.2439^{+0.0080}_{-0.0076} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.015}_{-0.015} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2452^{+0.0081}_{-0.0076} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.022}_{-0.020} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.69^{+0.50}_{-0.50} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.011}_{-0.010} \quad (+0.6\sigma)$
A^{kSZ}	—	z_*	$1090.14^{+0.92}_{-0.84} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.012}_{-0.011} \quad (+0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$143.6^{+5.0}_{-4.9} \quad (-0.5\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.7}_{-3.8} \quad (+0.0\sigma)$	$100\theta_*$	$1.0409^{+0.0015}_{-0.0015} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.6} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.80^{+0.46}_{-0.46} \quad (-0.5\sigma)$	f_{2000}^{217}	$108.3^{+4.4}_{-4.2} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.8^{+1.6}_{-1.6} \quad (+0.4\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.3^{+5.1}_{-5.1} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 0.7) \quad (-0.7\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.1413^{+0.0041}_{-0.0039} \quad (+0.4\sigma)$	χ_{plik}^2	$773.0 \quad (\nu: 15.4) \quad (+0.1\sigma)$
H_0	$68.4^{+3.2}_{-3.1} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0011}_{-0.0010} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 1.0)$
Ω_{Λ}	$0.692^{+0.016}_{-0.017} \quad (+0.8\sigma)$	z_{eq}	$3365^{+64}_{-63} \quad (-0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
Ω_{m}	$0.308^{+0.017}_{-0.016} \quad (-0.8\sigma)$	k_{eq}	$0.01036^{+0.00032}_{-0.00032} \quad (-0.0\sigma)$	χ_{MGS}^2	$1.48 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1440^{+0.0092}_{-0.0087} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.012}_{-0.012} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^3$	$0.099^{+0.010}_{-0.010} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4527^{+0.0061}_{-0.0060} \quad (+0.8\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (+0.0\sigma)$
σ_8	$0.813^{+0.027}_{-0.026} \quad (+0.3\sigma)$	$H(0.15)$	$73.7^{+3.3}_{-3.2} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
S_8	$0.824^{+0.032}_{-0.030} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+29}_{-28} \quad (-0.7\sigma)$	χ_{CMB}^2	$1192.8 \quad (\nu: 14.6) \quad (-0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.018}_{-0.017} \quad (-0.7\sigma)$	$H(0.38)$	$83.8^{+3.4}_{-3.3} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1207.26; R - 1 = 0.02342$

11.31 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02209^{+0.00058}_{-0.00056} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.018} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$652^{+43}_{-42} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0087}_{-0.0084} \quad (+0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$H(0.38)$	$82.1^{+4.7}_{-4.3} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0015}_{-0.0014} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1552^{+96}_{-95} \quad (-0.2\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.5^{+3.6}_{-3.3} \quad (+0.2\sigma)$	$H(0.51)$	$88.8^{+4.6}_{-4.3} \quad (+0.1\sigma)$
N_{eff}	$2.97^{+0.63}_{-0.60} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.454^{+0.063}_{-0.062} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2009^{+120}_{-120} \quad (-0.1\sigma)$
Y_{P}	$0.2440^{+0.0080}_{-0.0078} \quad (-0.2\sigma)$	z_{re}	$< 8.76 \quad (+0.2\sigma)$	$H(0.61)$	$94.5^{+4.6}_{-4.4} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.038}_{-0.034} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.087^{+0.080}_{-0.070} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2336^{+140}_{-140} \quad (-0.1\sigma)$
n_{s}	$0.960^{+0.024}_{-0.023} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.042}_{-0.045} \quad (-0.1\sigma)$	$H(2.33)$	$235.4^{+7.9}_{-7.8} \quad (+0.0\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0047} \quad (-0.0\sigma)$	D_{40}	$1236^{+36}_{-36} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5813^{+270}_{-260} \quad (-0.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5717^{+82}_{-79} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2535^{+28}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.025}_{-0.024} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$5.2^{+3.9}_{-3.9} \quad (+0.1\sigma)$	D_{1420}	$815.0^{+9.8}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.1\sigma)$	D_{2000}	$230.1^{+4.0}_{-4.2} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.025}_{-0.024} \quad (+0.0\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.024}_{-0.023} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.012}_{-0.012} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2440^{+0.0080}_{-0.0078} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.024}_{-0.023} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0080}_{-0.0078} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.012}_{-0.013} \quad (-0.1\sigma)$
A^{kSZ}	$< 8.43 \quad (-0.1\sigma)$	Age/Gyr	$13.91^{+0.64}_{-0.62} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.024}_{-0.022} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.10^{+0.84}_{-0.77} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.013}_{-0.012} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.7} \quad (-0.0\sigma)$	r_*	$145.4^{+5.7}_{-5.5} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.014}_{-0.013} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.7}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.0412^{+0.0016}_{-0.0015} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.53}_{-0.51} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.1^{+2.0}_{-2.0} \quad (-0.2\sigma)$	f_{2000}^{217}	$107.7^{+4.3}_{-4.2} \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$148.1^{+5.9}_{-5.7} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.4 \quad (\nu: 0.5)$
H_0	$66.5^{+4.7}_{-4.4} \quad (+0.1\sigma)$	k_{D}	$0.1399^{+0.0044}_{-0.0044} \quad (+0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.1) \quad (-0.1\sigma)$
Ω_{Λ}	$0.679^{+0.029}_{-0.029} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1609^{+0.0012}_{-0.0011} \quad (-0.3\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.8) \quad (-0.0\sigma)$
Ω_{m}	$0.321^{+0.029}_{-0.029} \quad (-0.2\sigma)$	z_{eq}	$3410^{+100}_{-110} \quad (-0.3\sigma)$	χ_{plik}^2	$771.1 \quad (\nu: 14.9) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0090}_{-0.0088} \quad (+0.0\sigma)$	k_{eq}	$0.01035^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	χ_{Aver15}^2	$1.0 \quad (\nu: 1.0)$
$\Omega_{\mathrm{m}} h^3$	$0.094^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.020}_{-0.019} \quad (+0.2\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (-0.0\sigma)$
σ_8	$0.808^{+0.026}_{-0.025} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.448^{+0.010}_{-0.0096} \quad (+0.2\sigma)$	χ_{CMB}^2	$1201.5 \quad (\nu: 15.3) \quad (+1.3\sigma)$
S_8	$0.835^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$71.9^{+4.7}_{-4.3} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1209.75; R - 1 = 0.01470$$

11.32 base_nnu_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02226^{+0.00045}_{-0.00045} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.016}_{-0.016} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1520^{+65}_{-63} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1205^{+0.0082}_{-0.0079} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$H(0.51)$	$90.2^{+3.3}_{-3.3} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0407^{+0.0014}_{-0.0013} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+2.0}_{-1.9} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+82}_{-80} \quad (-0.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.044}_{-0.042} \quad (-0.6\sigma)$	$H(0.61)$	$95.9^{+3.4}_{-3.4} \quad (+0.5\sigma)$
N_{eff}	$3.14^{+0.51}_{-0.48} \quad (+0.4\sigma)$	z_{re}	$< 8.93 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2292^{+94}_{-92} \quad (-0.6\sigma)$
Y_{P}	$0.2440^{+0.0080}_{-0.0077} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.067}_{-0.065} \quad (+0.5\sigma)$	$H(2.33)$	$237.0^{+7.2}_{-7.0} \quad (+0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.032}_{-0.031} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.039}_{-0.039} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5734^{+200}_{-190} \quad (-0.5\sigma)$
n_{s}	$0.968^{+0.016}_{-0.016} \quad (+0.6\sigma)$	D_{40}	$1226^{+28}_{-27} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0047} \quad (+0.1\sigma)$	D_{220}	$5724^{+81}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.022}_{-0.023} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.012} \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-9.7} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.020}_{-0.021} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{2000}	$229.7^{+4.0}_{-4.0} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.013}_{-0.012} \quad (-0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.019}_{-0.020} \quad (+0.4\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2440^{+0.0080}_{-0.0077} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0081}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.019}_{-0.019} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.73^{+0.48}_{-0.46} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2991^{+0.0098}_{-0.0099} \quad (+0.5\sigma)$
A^{kSZ}	$< 8.54 \quad (-0.0\sigma)$	z_*	$1090.09^{+0.85}_{-0.78} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.308^{+0.011}_{-0.011} \quad (+0.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.0^{+4.6}_{-4.6} \quad (-0.4\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.7}_{-3.8} \quad (+0.0\sigma)$	$100\theta_*$	$1.0409^{+0.0015}_{-0.0014} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.7}_{-6.7} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.83^{+0.43}_{-0.42} \quad (-0.4\sigma)$	f_{2000}^{217}	$108.1^{+4.3}_{-4.2} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.7^{+1.5}_{-1.5} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.39 \quad (\nu: 0.3)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$146.7^{+4.8}_{-4.7} \quad (-0.4\sigma)$	χ_{simall}^2	$397.0 \quad (\nu: 1.4) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.1410^{+0.0037}_{-0.0037} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.7) \quad (-0.5\sigma)$
H_0	$68.1^{+3.1}_{-3.0} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1611^{+0.0010}_{-0.00096} \quad (+0.0\sigma)$	χ_{plik}^2	$772.3 \quad (\nu: 14.0) \quad (-0.0\sigma)$
Ω_{Λ}	$0.690^{+0.015}_{-0.016} \quad (+0.8\sigma)$	z_{eq}	$3370^{+61}_{-61} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 0.9)$
Ω_{m}	$0.310^{+0.016}_{-0.015} \quad (-0.8\sigma)$	k_{eq}	$0.01035^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1434^{+0.0086}_{-0.0081} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.011}_{-0.011} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0977^{+0.0099}_{-0.0092} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4523^{+0.0058}_{-0.0057} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.3)$
σ_8	$0.812^{+0.023}_{-0.024} \quad (+0.3\sigma)$	$H(0.15)$	$73.4^{+3.2}_{-3.1} \quad (+0.6\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
S_8	$0.825^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+28}_{-27} \quad (-0.6\sigma)$	χ_{CMB}^2	$1201.8 \quad (\nu: 14.4) \quad (+1.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$83.5^{+3.3}_{-3.2} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1216.27; R - 1 = 0.02175$$

11.33 base_nnu_yhe_plikHM_TTTEE_lowl_lowE_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022222	$0.02225^{+0.00042}_{-0.00041}$ (+0.5 σ)	Ω_{m}	0.3217	$0.321^{+0.022}_{-0.020}$ (−0.2 σ)	k_{eq}	0.010318	$0.01035^{+0.00026}_{-0.00026}$ (−0.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.1175	$0.1184^{+0.0074}_{-0.0068}$ (−0.1 σ)	$\Omega_{\mathrm{m}}h^2$	0.1403	$0.1412^{+0.0076}_{-0.0070}$ (−0.1 σ)	$100\theta_{\mathrm{eq}}$	0.8091	$0.810^{+0.014}_{-0.014}$ (+0.1 σ)
$100\theta_{\mathrm{MC}}$	1.04124	$1.0411^{+0.0012}_{-0.0012}$ (−0.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.0927	$0.0938^{+0.0091}_{-0.0082}$ (−0.0 σ)	$100\theta_{\mathrm{s,eq}}$	0.4473	$0.4477^{+0.0070}_{-0.0071}$ (+0.1 σ)
τ	0.0539	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	σ_8	0.8045	$0.806^{+0.024}_{-0.023}$ (−0.1 σ)	$H(0.15)$	71.37	$71.7^{+3.1}_{-3.0}$ (+0.1 σ)
N_{eff}	2.859	$2.92^{+0.47}_{-0.44}$ (−0.0 σ)	S_8	0.8331	$0.833^{+0.031}_{-0.032}$ (−0.3 σ)	$D_{\mathrm{M}}(0.15)$	655.6	653^{+30}_{-29} (−0.1 σ)
Y_{P}	0.2437	$0.2437^{+0.0075}_{-0.0080}$ (−0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4563	$0.456^{+0.017}_{-0.017}$ (−0.3 σ)	$H(0.38)$	81.54	$81.9^{+3.2}_{-3.0}$ (+0.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0371	$3.037^{+0.037}_{-0.037}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6059	$0.607^{+0.018}_{-0.018}$ (−0.3 σ)	$D_{\mathrm{M}}(0.38)$	1561	1555^{+66}_{-64} (−0.1 σ)
n_{s}	0.9590	$0.960^{+0.017}_{-0.017}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9900	$0.989^{+0.023}_{-0.023}$ (−0.3 σ)	$H(0.51)$	88.27	$88.6^{+3.2}_{-3.0}$ (+0.0 σ)
y_{cal}	1.00052	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	$r_{\mathrm{drag}}h$	98.34	$98.4^{+2.5}_{-2.5}$ (+0.2 σ)	$D_{\mathrm{M}}(0.51)$	2021	2013^{+83}_{-81} (−0.1 σ)
A_{217}^{CIB}	45.8	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.457	$2.455^{+0.058}_{-0.057}$ (−0.1 σ)	$H(0.61)$	93.90	$94.3^{+3.3}_{-3.1}$ (+0.0 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.56	—	z_{re}	7.61	$7.5^{+1.5}_{-1.6}$ (+0.1 σ)	$D_{\mathrm{M}}(0.61)$	2350	2341^{+94}_{-92} (−0.1 σ)
A_{143}^{tSZ}	7.13	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}$	2.085	$2.085^{+0.078}_{-0.076}$ (+0.1 σ)	$H(2.33)$	234.1	$234.9^{+6.5}_{-6.1}$ (−0.0 σ)
A_{100}^{PS}	247	256^{+50}_{-50} (−0.3 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8716	$1.875^{+0.037}_{-0.037}$ (−0.1 σ)	$D_{\mathrm{M}}(2.33)$	5845	5824^{+190}_{-190} (−0.1 σ)
A_{143}^{PS}	47.1	45^{+20}_{-20} (−0.6 σ)	D_{40}	1238.0	1239^{+30}_{-30} (+0.1 σ)	$f\sigma_8(0.15)$	0.4600	$0.460^{+0.016}_{-0.016}$ (−0.3 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	49.3	42^{+20}_{-20} (−0.2 σ)	D_{220}	5730	5733^{+76}_{-75} (+0.5 σ)	$\sigma_8(0.15)$	0.7424	$0.744^{+0.023}_{-0.022}$ (−0.1 σ)
A_{217}^{PS}	120.6	115^{+20}_{-20} (−0.0 σ)	D_{810}	2538.5	2538^{+27}_{-27} (+0.1 σ)	$f\sigma_8(0.38)$	0.4760	$0.476^{+0.014}_{-0.015}$ (−0.3 σ)
A^{kSZ}	0.00	< 7.72 (−0.3 σ)	D_{1420}	818.9	$817.8^{+9.6}_{-9.6}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6570	$0.658^{+0.021}_{-0.020}$ (−0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.71	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	232.08	$231.5^{+3.6}_{-3.5}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4734	$0.474^{+0.013}_{-0.014}$ (−0.2 σ)
$A_{143}^{\mathrm{dustTT}}$	10.89	$10.8^{+3.4}_{-3.5}$ (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9590	$0.960^{+0.017}_{-0.017}$ (−0.0 σ)	$\sigma_8(0.51)$	0.6144	$0.616^{+0.020}_{-0.019}$ (−0.0 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.7	$18.5^{+6.4}_{-6.4}$ (+0.1 σ)	Y_{P}	0.2437	$0.2437^{+0.0075}_{-0.0080}$ (−0.2 σ)	$f\sigma_8(0.61)$	0.4677	$0.468^{+0.013}_{-0.014}$ (−0.2 σ)
$A_{217}^{\mathrm{dustTT}}$	95.1	94^{+10}_{-10} (+0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2450	$0.2450^{+0.0075}_{-0.0080}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5844	$0.586^{+0.019}_{-0.019}$ (−0.0 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.074}_{-0.075}$	Age/Gyr	13.990	$13.94^{+0.45}_{-0.46}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2943	$0.295^{+0.010}_{-0.0098}$ (−0.0 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.058}_{-0.057}$	z_*	1089.74	$1089.81^{+0.65}_{-0.66}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3029	$0.304^{+0.011}_{-0.011}$ (+0.0 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	r_*	146.16	$145.7^{+4.3}_{-4.3}$ (−0.0 σ)	χ_{small}^2	396.03	397.0 (ν : 1.5) (+0.0 σ)
$A_{143}^{\mathrm{dustTE}}$	0.225	$0.23^{+0.10}_{-0.11}$	$100\theta_*$	1.04153	$1.0414^{+0.0013}_{-0.0013}$ (+0.0 σ)	χ_{lowl}^2	24.23	24.3 (ν : 1.1) (+0.0 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.670	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	14.033	$13.99^{+0.40}_{-0.40}$ (−0.0 σ)	χ_{plik}^2	2343.0	2359.4 (ν : 18.3) (+258.2 σ)
$A_{217}^{\mathrm{dustTE}}$	2.10	$2.08^{+0.53}_{-0.52}$	z_{drag}	1059.28	$1059.4^{+1.4}_{-1.4}$ (+0.1 σ)	χ_{Aver15}^2	0.00	0.98 (ν : 1.0)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	148.89	$148.4^{+4.4}_{-4.5}$ (−0.0 σ)	χ_{prior}^2	1.6	11.5 (ν : 10.1) (+1.1 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.13956	$0.1400^{+0.0036}_{-0.0033}$ (+0.1 σ)	χ_{CMB}^2	2763.2	2780.8 (ν : 18.0) (+268.1 σ)
H_0	66.05	$66.4^{+3.1}_{-3.0}$ (+0.1 σ)	$100\theta_{\mathrm{D}}$	0.16041	$0.16051^{+0.00076}_{-0.00076}$ (−0.8 σ)			
Ω_{Λ}	0.6783	$0.679^{+0.020}_{-0.022}$ (+0.2 σ)	z_{eq}	3424	3421^{+77}_{-73} (−0.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2764.84$; $\bar{\chi}_{\mathrm{eff}}^2 = 2793.22$; $R - 1 = 0.01284$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.00 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.03 commander_dx12_v3.2_29: 24.23 plik_rd12_HM_v22b_TTTEE: 2342.98

11.34 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02238^{+0.00035}_{-0.00036} \quad (+1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0957^{+0.0088}_{-0.0079} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+24}_{-24} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1188^{+0.0074}_{-0.0069} \quad (-0.0\sigma)$	σ_8	$0.808^{+0.024}_{-0.024} \quad (-0.0\sigma)$	$H(0.38)$	$82.8^{+2.8}_{-2.7} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	S_8	$0.823^{+0.026}_{-0.028} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+55}_{-54} \quad (-0.4\sigma)$
τ	$0.055^{+0.016}_{-0.015} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.014}_{-0.015} \quad (-0.7\sigma)$	$H(0.51)$	$89.5^{+2.9}_{-2.8} \quad (+0.3\sigma)$
N_{eff}	$3.02^{+0.45}_{-0.41} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.017}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+69}_{-69} \quad (-0.4\sigma)$
Y_{P}	$0.2437^{+0.0076}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.020}_{-0.021} \quad (-0.7\sigma)$	$H(0.61)$	$95.2^{+3.0}_{-2.9} \quad (+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.036}_{-0.036} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+79}_{-78} \quad (-0.4\sigma)$
n_{s}	$0.965^{+0.013}_{-0.014} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.048}_{-0.048} \quad (-0.5\sigma)$	$H(2.33)$	$235.7^{+6.5}_{-6.1} \quad (+0.1\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.5}_{-1.6} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5774^{+170}_{-180} \quad (-0.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.077}_{-0.074} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.014}_{-0.015} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.038}_{-0.037} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.023}_{-0.022} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1230^{+26}_{-26} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.014} \quad (-0.6\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5737^{+78}_{-76} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.021}_{-0.020} \quad (+0.1\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.014} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.1^{+9.4}_{-9.4} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.020}_{-0.019} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.6}_{-3.4} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.013}_{-0.014} \quad (-0.3\sigma)$
A^{kSZ}	$< 7.97 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.013}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.019}_{-0.018} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2437^{+0.0076}_{-0.0080} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0098}_{-0.0091} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.4}_{-3.4} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0076}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.010}_{-0.0097} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.3}_{-6.6} \quad (+0.1\sigma)$	Age/Gyr	$13.82^{+0.42}_{-0.42} \quad (-0.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.72^{+0.66}_{-0.66} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.073}$	r_*	$144.9^{+4.1}_{-4.2} \quad (-0.2\sigma)$	f_{2000}^{217}	$106.7^{+3.9}_{-3.8} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.057}_{-0.058}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.92^{+0.38}_{-0.39} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.6) \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.10}_{-0.11}$	z_{drag}	$1059.8^{+1.3}_{-1.3} \quad (+0.4\sigma)$	χ_{plik}^2	$2360.6 \quad (\nu: 19.7) \quad (+258.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.15}_{-0.16}$	r_{drag}	$147.6^{+4.3}_{-4.3} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.98 \quad (\nu: 0.9)$
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.54}_{-0.53}$	k_{D}	$0.1406^{+0.0035}_{-0.0033} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.067 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16062^{+0.00073}_{-0.00074} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.23 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3388^{+52}_{-50} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 \quad (\nu: 1.4)$
H_0	$67.5^{+2.6}_{-2.5} \quad (+0.4\sigma)$	k_{eq}	$0.01032^{+0.00027}_{-0.00026} \quad (-0.3\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.0) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.013}_{-0.014} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8160^{+0.0095}_{-0.0097} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.0)$
Ω_{m}	$0.312^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0048}_{-0.0049} \quad (+0.6\sigma)$	χ_{CMB}^2	$2781.2 \quad (\nu: 19.0) \quad (+268.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1418^{+0.0076}_{-0.0071} \quad (+0.0\sigma)$	$H(0.15)$	$72.7^{+2.7}_{-2.6} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2800.04; R - 1 = 0.03428$$

11.35 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02223^{+0.00042}_{-0.00041} \quad (+0.5\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1406^{+0.0073}_{-0.0067} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4477^{+0.0066}_{-0.0065} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1177^{+0.0071}_{-0.0065} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0931^{+0.0089}_{-0.0082} \quad (-0.1\sigma)$	$H(0.15)$	$71.5^{+3.1}_{-2.9} \quad (+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	σ_8	$0.804^{+0.022}_{-0.021} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$654^{+29}_{-29} \quad (-0.1\sigma)$
τ	$0.053^{+0.015}_{-0.014} \quad (+0.2\sigma)$	S_8	$0.831^{+0.025}_{-0.025} \quad (-0.4\sigma)$	$H(0.38)$	$81.7^{+3.1}_{-2.9} \quad (+0.0\sigma)$
N_{eff}	$2.88^{+0.46}_{-0.43} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1558^{+64}_{-65} \quad (-0.1\sigma)$
Y_{P}	$0.2438^{+0.0075}_{-0.0081} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.014}_{-0.015} \quad (-0.4\sigma)$	$H(0.51)$	$88.4^{+3.2}_{-3.0} \quad (-0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.036^{+0.035}_{-0.034} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.017}_{-0.018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$2017^{+80}_{-81} \quad (-0.1\sigma)$
n_{s}	$0.959^{+0.017}_{-0.016} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.5^{+2.3}_{-2.3} \quad (+0.2\sigma)$	$H(0.61)$	$94.1^{+3.2}_{-3.1} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.454^{+0.046}_{-0.046} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2346^{+92}_{-92} \quad (-0.0\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	z_{re}	$7.5^{+1.5}_{-1.5} \quad (+0.1\sigma)$	$H(2.33)$	$234.4^{+6.3}_{-5.9} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.082^{+0.073}_{-0.071} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5837^{+190}_{-190} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.036}_{-0.035} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	D_{40}	$1239^{+29}_{-29} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.021}_{-0.020} \quad (-0.2\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.6\sigma)$	D_{220}	$5734^{+79}_{-75} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.012} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.657^{+0.020}_{-0.019} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.8^{+9.5}_{-9.6} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A^{kSZ}	$< 7.83 \quad (-0.3\sigma)$	D_{2000}	$231.6^{+3.8}_{-3.6} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.8^{+3.5}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.017}_{-0.016} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.4}_{-3.5} \quad (+0.0\sigma)$	Y_{P}	$0.2438^{+0.0075}_{-0.0081} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.019}_{-0.018} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.4^{+6.4}_{-6.5} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2451^{+0.0075}_{-0.0081} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2942^{+0.0098}_{-0.0094} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.97^{+0.45}_{-0.45} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.011}_{-0.010} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.072}_{-0.074}$	z_*	$1089.75^{+0.62}_{-0.63} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.8\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.059}$	r_*	$146.0^{+4.2}_{-4.3} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	$1.0415^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.4^{+3.9}_{-3.7} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.02^{+0.38}_{-0.40} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.01 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.3^{+1.4}_{-1.4} \quad (+0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.51}$	r_{drag}	$148.7^{+4.3}_{-4.4} \quad (+0.0\sigma)$	χ_{lowl}^2	$24.4 \quad (\nu: 1.0) \quad (+0.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1397^{+0.0035}_{-0.0032} \quad (+0.0\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 17.2) \quad (+258.1\sigma)$
c_{217}	$0.9982^{+0.0013}_{-0.0013} \quad (-0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16046^{+0.00076}_{-0.00075} \quad (-0.8\sigma)$	χ_{Aver15}^2	$0.99 \quad (\nu: 0.9)$
H_0	$66.2^{+3.1}_{-3.0} \quad (+0.0\sigma)$	z_{eq}	$3420^{+71}_{-69} \quad (-0.1\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.8) \quad (+1.1\sigma)$
Ω_{Λ}	$0.679^{+0.019}_{-0.020} \quad (+0.2\sigma)$	k_{eq}	$0.01032^{+0.00024}_{-0.00023} \quad (-0.2\sigma)$	χ_{CMB}^2	$2789.4 \quad (\nu: 18.1) \quad (+269.6\sigma)$
Ω_{m}	$0.321^{+0.020}_{-0.019} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.013}_{-0.013} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.87; R - 1 = 0.01524$$

11.36 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02237^{+0.00035}_{-0.00036} \quad (+0.9\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0953^{+0.0085}_{-0.0076} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+24}_{-24} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1185^{+0.0070}_{-0.0065} \quad (-0.1\sigma)$	σ_8	$0.807^{+0.021}_{-0.021} \quad (-0.0\sigma)$	$H(0.38)$	$82.7^{+2.8}_{-2.6} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	S_8	$0.824^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+54}_{-54} \quad (-0.4\sigma)$
τ	$0.056^{+0.015}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$H(0.51)$	$89.4^{+2.9}_{-2.7} \quad (+0.3\sigma)$
N_{eff}	$2.99^{+0.43}_{-0.40} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.015} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+68}_{-69} \quad (-0.4\sigma)$
Y_{P}	$0.2437^{+0.0077}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.016}_{-0.017} \quad (-0.6\sigma)$	$H(0.61)$	$95.0^{+3.0}_{-2.8} \quad (+0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.033}_{-0.032} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.5^{+1.6}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2315^{+78}_{-79} \quad (-0.3\sigma)$
n_{s}	$0.964^{+0.013}_{-0.014} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.042}_{-0.041} \quad (-0.4\sigma)$	$H(2.33)$	$235.4^{+6.2}_{-5.8} \quad (+0.0\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.5}_{-1.4} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5784^{+170}_{-170} \quad (-0.3\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.071}_{-0.066} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.876^{+0.036}_{-0.035} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.021}_{-0.020} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1232^{+25}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5739^{+77}_{-74} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.019}_{-0.018} \quad (+0.1\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2538^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.2^{+9.4}_{-9.4} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.018}_{-0.017} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.5^{+3.6}_{-3.5} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A^{kSZ}	$< 7.96 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.964^{+0.013}_{-0.014} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.017}_{-0.016} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2437^{+0.0077}_{-0.0080} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0091}_{-0.0085} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0077}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3059^{+0.0098}_{-0.0090} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.3}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.85^{+0.40}_{-0.41} \quad (-0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.69^{+0.62}_{-0.63} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.074}$	r_*	$145.1^{+4.0}_{-4.1} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.5^{+3.9}_{-3.9} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0013} \quad (-0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.04 \quad (\nu: 0.2)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.94^{+0.37}_{-0.38} \quad (-0.1\sigma)$	χ_{simall}^2	$397.3 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.10}_{-0.11}$	z_{drag}	$1059.7^{+1.3}_{-1.3} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.6) \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.8^{+4.1}_{-4.2} \quad (-0.2\sigma)$	χ_{plik}^2	$2359.9 \quad (\nu: 18.2) \quad (+258.3\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.54}_{-0.52}$	k_{D}	$0.1404^{+0.0034}_{-0.0032} \quad (+0.2\sigma)$	χ_{Aver15}^2	$0.98 \quad (\nu: 0.9)$
c_{100}	$0.9997^{+0.0012}_{-0.0011} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16058^{+0.00072}_{-0.00073} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.071 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3390^{+51}_{-50} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.18 \quad (\nu: 0.1)$
H_0	$67.3^{+2.6}_{-2.5} \quad (+0.4\sigma)$	k_{eq}	$0.01031^{+0.00024}_{-0.00024} \quad (-0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.2 \quad (\nu: 1.4)$
Ω_{Λ}	$0.688^{+0.013}_{-0.014} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8155^{+0.0094}_{-0.0093} \quad (+0.5\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.7) \quad (+1.1\sigma)$
Ω_{m}	$0.312^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0048}_{-0.0047} \quad (+0.5\sigma)$	χ_{CMB}^2	$2789.8 \quad (\nu: 18.8) \quad (+269.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1415^{+0.0073}_{-0.0068} \quad (-0.0\sigma)$	$H(0.15)$	$72.6^{+2.7}_{-2.5} \quad (+0.3\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 1.0)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2808.62; R - 1 = 0.03124$$

11.37 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02226^{+0.00041}_{-0.00041} \quad (+0.6\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1413^{+0.0076}_{-0.0070} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4478^{+0.0070}_{-0.0070} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1184^{+0.0073}_{-0.0067} \quad (-0.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0940^{+0.0091}_{-0.0082} \quad (+0.0\sigma)$	$H(0.15)$	$71.8^{+3.1}_{-3.0} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	σ_8	$0.807^{+0.023}_{-0.022} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$652^{+29}_{-29} \quad (-0.1\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	S_8	$0.834^{+0.031}_{-0.031} \quad (-0.3\sigma)$	$H(0.38)$	$82.0^{+3.1}_{-3.0} \quad (+0.1\sigma)$
N_{eff}	$2.92^{+0.46}_{-0.43} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1553^{+65}_{-64} \quad (-0.1\sigma)$
Y_{P}	$0.2437^{+0.0075}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.017}_{-0.018} \quad (-0.2\sigma)$	$H(0.51)$	$88.7^{+3.2}_{-3.0} \quad (+0.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.040^{+0.035}_{-0.030} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.022}_{-0.022} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2011^{+82}_{-81} \quad (-0.1\sigma)$
n_{s}	$0.960^{+0.016}_{-0.016} \quad (-0.0\sigma)$	$r_{\mathrm{drag}}h$	$98.5^{+2.4}_{-2.4} \quad (+0.2\sigma)$	$H(0.61)$	$94.4^{+3.3}_{-3.0} \quad (+0.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.457^{+0.057}_{-0.055} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2338^{+93}_{-92} \quad (-0.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	z_{re}	$< 8.87 \quad (+0.3\sigma)$	$H(2.33)$	$235.0^{+6.5}_{-6.1} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.092^{+0.070}_{-0.065} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5820^{+190}_{-190} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.037}_{-0.037} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.3\sigma)$
A_{100}^{PS}	$256^{+50}_{-50} \quad (-0.3\sigma)$	D_{40}	$1238^{+30}_{-30} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.022}_{-0.021} \quad (-0.0\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.6\sigma)$	D_{220}	$5732^{+75}_{-75} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.014}_{-0.014} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.020}_{-0.019} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.7^{+9.5}_{-9.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A^{kSZ}	$< 7.73 \quad (-0.3\sigma)$	D_{2000}	$231.5^{+3.6}_{-3.5} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.019}_{-0.018} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.960^{+0.016}_{-0.016} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.4}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.2437^{+0.0075}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.018}_{-0.017} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.4}_{-6.4} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0075}_{-0.0080} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2955^{+0.0097}_{-0.0091} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.93^{+0.45}_{-0.46} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.304^{+0.010}_{-0.0099} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.075}_{-0.075}$	z_*	$1089.81^{+0.65}_{-0.66} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.057}$	r_*	$145.6^{+4.2}_{-4.3} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.0414^{+0.0013}_{-0.0013} \quad (+0.0\sigma)$	f_{2000}^{217}	$106.5^{+3.8}_{-3.8} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.98^{+0.39}_{-0.40} \quad (-0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.5^{+1.4}_{-1.4} \quad (+0.1\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.1) \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.53}_{-0.52}$	r_{drag}	$148.3^{+4.4}_{-4.5} \quad (-0.0\sigma)$	χ_{plik}^2	$2359.2 \quad (\nu: 18.0) \quad (+258.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1400^{+0.0035}_{-0.0033} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.99 \quad (\nu: 1.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16052^{+0.00076}_{-0.00076} \quad (-0.8\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.1) \quad (+1.1\sigma)$
H_0	$66.4^{+3.1}_{-3.0} \quad (+0.1\sigma)$	z_{eq}	$3419^{+75}_{-73} \quad (-0.2\sigma)$	χ_{CMB}^2	$2780.5 \quad (\nu: 17.4) \quad (+268.1\sigma)$
Ω_{Λ}	$0.680^{+0.020}_{-0.021} \quad (+0.2\sigma)$	k_{eq}	$0.01035^{+0.00027}_{-0.00026} \quad (-0.1\sigma)$		
Ω_{m}	$0.320^{+0.021}_{-0.020} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.014}_{-0.014} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2792.93$; $R - 1 = 0.01332$

11.38 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00035}_{-0.00036} \quad (+1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0958^{+0.0088}_{-0.0079} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$642^{+24}_{-23} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1189^{+0.0074}_{-0.0069} \quad (-0.0\sigma)$	σ_8	$0.808^{+0.023}_{-0.023} \quad (+0.0\sigma)$	$H(0.38)$	$82.9^{+2.8}_{-2.7} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	S_8	$0.824^{+0.026}_{-0.028} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1532^{+55}_{-54} \quad (-0.4\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.014}_{-0.015} \quad (-0.7\sigma)$	$H(0.51)$	$89.6^{+2.9}_{-2.8} \quad (+0.3\sigma)$
N_{eff}	$3.02^{+0.46}_{-0.41} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.017}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1985^{+69}_{-69} \quad (-0.4\sigma)$
Y_{P}	$0.2437^{+0.0077}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.019}_{-0.020} \quad (-0.6\sigma)$	$H(0.61)$	$95.2^{+3.1}_{-2.9} \quad (+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.034}_{-0.031} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2310^{+79}_{-79} \quad (-0.4\sigma)$
n_{s}	$0.965^{+0.013}_{-0.014} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.047}_{-0.045} \quad (-0.5\sigma)$	$H(2.33)$	$235.7^{+6.4}_{-6.1} \quad (+0.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 9.03 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5772^{+180}_{-180} \quad (-0.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.073}_{-0.065} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.014}_{-0.015} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.039}_{-0.037} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.022}_{-0.021} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1230^{+26}_{-26} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.014} \quad (-0.5\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5737^{+78}_{-76} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.020}_{-0.019} \quad (+0.2\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.013}_{-0.014} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.0^{+9.4}_{-9.3} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.019}_{-0.018} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.6}_{-3.4} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.013}_{-0.014} \quad (-0.3\sigma)$
A^{kSZ}	$< 7.96 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.013}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.018}_{-0.017} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Y_{P}	$0.2437^{+0.0077}_{-0.0080} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0095}_{-0.0089} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0077}_{-0.0080} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.307^{+0.010}_{-0.0093} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.3}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.82^{+0.42}_{-0.42} \quad (-0.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.72^{+0.65}_{-0.66} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.073}$	r_*	$144.9^{+4.1}_{-4.2} \quad (-0.2\sigma)$	f_{2000}^{217}	$106.6^{+3.9}_{-3.9} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.057}_{-0.058}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.91^{+0.38}_{-0.39} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.6) \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.10}_{-0.11}$	z_{drag}	$1059.8^{+1.3}_{-1.3} \quad (+0.4\sigma)$	χ_{plik}^2	$2360.4 \quad (\nu: 19.5) \quad (+258.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.15}_{-0.16}$	r_{drag}	$147.5^{+4.3}_{-4.3} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.98 \quad (\nu: 1.0)$
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.54}_{-0.53}$	k_{D}	$0.1406^{+0.0035}_{-0.0033} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.066 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16063^{+0.00073}_{-0.00074} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.23 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3387^{+52}_{-50} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.4)$
H_0	$67.5^{+2.6}_{-2.5} \quad (+0.4\sigma)$	k_{eq}	$0.01032^{+0.00027}_{-0.00026} \quad (-0.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.0) \quad (+1.2\sigma)$
Ω_{Λ}	$0.688^{+0.013}_{-0.014} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8161^{+0.0095}_{-0.0096} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$
Ω_{m}	$0.312^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0048}_{-0.0049} \quad (+0.6\sigma)$	χ_{CMB}^2	$2781.0 \quad (\nu: 18.4) \quad (+268.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1419^{+0.0077}_{-0.0071} \quad (+0.0\sigma)$	$H(0.15)$	$72.8^{+2.7}_{-2.6} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2799.83; R - 1 = 0.03359$$

11.39 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02225^{+0.00041}_{-0.00040} \quad (+0.5\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1407^{+0.0073}_{-0.0066} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4479^{+0.0065}_{-0.0064} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1178^{+0.0071}_{-0.0064} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0933^{+0.0085}_{-0.0082} \quad (-0.1\sigma)$	$H(0.15)$	$71.6^{+3.1}_{-2.9} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	σ_8	$0.805^{+0.021}_{-0.020} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$653^{+28}_{-29} \quad (-0.1\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	S_8	$0.831^{+0.025}_{-0.025} \quad (-0.4\sigma)$	$H(0.38)$	$81.8^{+3.1}_{-2.9} \quad (+0.0\sigma)$
N_{eff}	$2.89^{+0.46}_{-0.42} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1556^{+63}_{-64} \quad (-0.1\sigma)$
Y_{P}	$0.2438^{+0.0075}_{-0.0081} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$H(0.51)$	$88.5^{+3.1}_{-2.9} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.038^{+0.031}_{-0.030} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$2015^{+79}_{-80} \quad (-0.1\sigma)$
n_{s}	$0.959^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.6^{+2.3}_{-2.2} \quad (+0.2\sigma)$	$H(0.61)$	$94.1^{+3.2}_{-3.0} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.046}_{-0.046} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2343^{+89}_{-92} \quad (-0.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	z_{re}	$< 8.80 \quad (+0.2\sigma)$	$H(2.33)$	$234.5^{+6.3}_{-5.8} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.087^{+0.065}_{-0.062} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5833^{+190}_{-190} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.036}_{-0.035} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{40}	$1239^{+28}_{-28} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.021}_{-0.019} \quad (-0.1\sigma)$
A_{143}^{PS}	$44^{+20}_{-20} \quad (-0.6\sigma)$	D_{220}	$5733^{+77}_{-75} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.019}_{-0.018} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$817.7^{+9.5}_{-9.6} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A^{kSZ}	$< 7.88 \quad (-0.2\sigma)$	D_{2000}	$231.6^{+3.7}_{-3.5} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.018}_{-0.017} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.8^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.959^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.4}_{-3.5} \quad (+0.0\sigma)$	Y_{P}	$0.2438^{+0.0075}_{-0.0081} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.018}_{-0.016} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.4^{+6.3}_{-6.5} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2451^{+0.0075}_{-0.0082} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2947^{+0.0095}_{-0.0087} \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	$13.96^{+0.44}_{-0.45} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.010}_{-0.0095} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.074}$	z_*	$1089.75^{+0.62}_{-0.62} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.8\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.057}_{-0.059}$	r_*	$145.9^{+4.1}_{-4.3} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (-0.8\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.0415^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.4^{+3.9}_{-3.7} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.01^{+0.38}_{-0.39} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.00 \quad (\nu: 0.2)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.4^{+1.4}_{-1.4} \quad (+0.0\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.52}_{-0.52}$	r_{drag}	$148.7^{+4.3}_{-4.4} \quad (+0.0\sigma)$	χ_{lowl}^2	$24.4 \quad (\nu: 1.0) \quad (+0.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.1397^{+0.0034}_{-0.0032} \quad (+0.1\sigma)$	χ_{plik}^2	$2358.9 \quad (\nu: 17.2) \quad (+258.1\sigma)$
c_{217}	$0.9982^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16047^{+0.00076}_{-0.00075} \quad (-0.8\sigma)$	χ_{Aver15}^2	$1.0 \quad (\nu: 0.9)$
H_0	$66.3^{+3.1}_{-2.9} \quad (+0.1\sigma)$	z_{eq}	$3418^{+69}_{-68} \quad (-0.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.9) \quad (+1.2\sigma)$
Ω_{Λ}	$0.680^{+0.019}_{-0.019} \quad (+0.3\sigma)$	k_{eq}	$0.01032^{+0.00024}_{-0.00023} \quad (-0.2\sigma)$	χ_{CMB}^2	$2789.1 \quad (\nu: 17.7) \quad (+269.6\sigma)$
Ω_{m}	$0.320^{+0.019}_{-0.019} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.013}_{-0.012} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 2801.62$; $R - 1 = 0.01633$

11.40 base_nnu_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02237^{+0.00035}_{-0.00036}$ (+0.9 σ)	$\Omega_{\mathrm{m}}h^3$	$0.0953^{+0.0085}_{-0.0077}$ (+0.2 σ)	$D_{\mathrm{M}}(0.15)$	644^{+23}_{-24} (−0.4 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1185^{+0.0071}_{-0.0065}$ (−0.1 σ)	σ_8	$0.808^{+0.021}_{-0.021}$ (−0.0 σ)	$H(0.38)$	$82.7^{+2.8}_{-2.6}$ (+0.3 σ)
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0012}_{-0.0012}$ (−0.1 σ)	S_8	$0.824^{+0.022}_{-0.022}$ (−0.7 σ)	$D_{\mathrm{M}}(0.38)$	1536^{+54}_{-55} (−0.4 σ)
τ	$0.057^{+0.014}_{-0.012}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.012}$ (−0.7 σ)	$H(0.51)$	$89.4^{+2.9}_{-2.7}$ (+0.3 σ)
N_{eff}	$2.99^{+0.43}_{-0.40}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.014}_{-0.014}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1989^{+68}_{-69} (−0.4 σ)
Y_{P}	$0.2437^{+0.0077}_{-0.0080}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	$0.984^{+0.016}_{-0.016}$ (−0.6 σ)	$H(0.61)$	$95.0^{+3.0}_{-2.8}$ (+0.2 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.033}_{-0.029}$ (+0.4 σ)	$r_{\mathrm{drag}}h$	$99.5^{+1.6}_{-1.6}$ (+0.6 σ)	$D_{\mathrm{M}}(0.61)$	2315^{+78}_{-79} (−0.4 σ)
n_{s}	$0.964^{+0.013}_{-0.014}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.041}_{-0.040}$ (−0.4 σ)	$H(2.33)$	$235.4^{+6.2}_{-5.8}$ (+0.0 σ)
y_{cal}	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	$7.9^{+1.2}_{-1.3}$ (+0.5 σ)	$D_{\mathrm{M}}(2.33)$	5783^{+170}_{-170} (−0.3 σ)
A_{217}^{CIB}	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	$2.101^{+0.069}_{-0.060}$ (+0.4 σ)	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012}$ (−0.7 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.876^{+0.036}_{-0.035}$ (−0.1 σ)	$\sigma_8(0.15)$	$0.746^{+0.020}_{-0.019}$ (+0.1 σ)
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8}$ (+0.2 σ)	D_{40}	1231^{+25}_{-26} (−0.2 σ)	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011}$ (−0.5 σ)
A_{100}^{PS}	257^{+50}_{-50} (−0.2 σ)	D_{220}	5739^{+77}_{-74} (+0.6 σ)	$\sigma_8(0.38)$	$0.662^{+0.019}_{-0.018}$ (+0.1 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.5 σ)	D_{810}	2538^{+26}_{-26} (+0.2 σ)	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011}$ (−0.4 σ)
$A_{143\times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.2 σ)	D_{1420}	$818.2^{+9.4}_{-9.4}$ (+0.7 σ)	$\sigma_8(0.51)$	$0.619^{+0.018}_{-0.017}$ (+0.2 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.0 σ)	D_{2000}	$231.5^{+3.6}_{-3.5}$ (+0.8 σ)	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.011}$ (−0.3 σ)
A^{kSZ}	< 7.96 (−0.2 σ)	$n_{\mathrm{s},0.002}$	$0.964^{+0.013}_{-0.014}$ (+0.3 σ)	$\sigma_8(0.61)$	$0.589^{+0.017}_{-0.016}$ (+0.2 σ)
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	Y_{P}	$0.2437^{+0.0077}_{-0.0080}$ (−0.2 σ)	$f\sigma_8(2.33)$	$0.2970^{+0.0090}_{-0.0083}$ (+0.2 σ)
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2451^{+0.0077}_{-0.0080}$ (−0.2 σ)	$\sigma_8(2.33)$	$0.3061^{+0.0096}_{-0.0089}$ (+0.3 σ)
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.5^{+6.2}_{-6.5}$ (+0.1 σ)	Age/Gyr	$13.85^{+0.40}_{-0.41}$ (−0.3 σ)	f_{2000}^{143}	29^{+6}_{-6} (−0.7 σ)
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10} (+0.0 σ)	z_*	$1089.69^{+0.62}_{-0.63}$ (−1.0 σ)	$f_{2000}^{143\times 217}$	32^{+4}_{-4} (−0.8 σ)
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.074}$	r_*	$145.1^{+4.0}_{-4.1}$ (−0.1 σ)	f_{2000}^{217}	$106.5^{+3.9}_{-3.9}$ (−0.7 σ)
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0013}$ (−0.0 σ)	$\chi_{\mathrm{lensing}}^2$	9.02 (ν : 0.2)
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.94^{+0.37}_{-0.38}$ (−0.1 σ)	χ_{small}^2	397.3 (ν : 2.1) (+0.2 σ)
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.10}_{-0.11}$	z_{drag}	$1059.8^{+1.3}_{-1.3}$ (+0.4 σ)	χ_{lowl}^2	23.5 (ν : 0.6) (−0.3 σ)
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.8^{+4.1}_{-4.3}$ (−0.2 σ)	χ_{plik}^2	2359.8 (ν : 18.2) (+258.2 σ)
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.54}_{-0.53}$	k_{D}	$0.1404^{+0.0034}_{-0.0032}$ (+0.2 σ)	χ_{Aver15}^2	0.98 (ν : 1.0)
c_{100}	$0.9997^{+0.0012}_{-0.0011}$ (+0.1 σ)	$100\theta_{\mathrm{D}}$	$0.16058^{+0.00072}_{-0.00073}$ (−0.7 σ)	$\chi_{6\mathrm{DF}}^2$	0.069 (ν : 0.0)
c_{217}	$0.9982^{+0.0013}_{-0.0012}$ (−0.1 σ)	z_{eq}	3390^{+50}_{-49} (−0.5 σ)	χ_{MGS}^2	1.19 (ν : 0.1)
H_0	$67.3^{+2.6}_{-2.5}$ (+0.4 σ)	k_{eq}	$0.01031^{+0.00024}_{-0.00024}$ (−0.3 σ)	$\chi_{\mathrm{DR12BAO}}^2$	5.1 (ν : 1.3)
Ω_{Λ}	$0.688^{+0.013}_{-0.014}$ (+0.6 σ)	$100\theta_{\mathrm{eq}}$	$0.8157^{+0.0093}_{-0.0093}$ (+0.5 σ)	χ_{prior}^2	11.5 (ν : 9.7) (+1.1 σ)
Ω_{m}	$0.312^{+0.014}_{-0.013}$ (−0.6 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0047}_{-0.0047}$ (+0.5 σ)	χ_{CMB}^2	2789.7 (ν : 18.6) (+269.6 σ)
$\Omega_{\mathrm{m}}h^2$	$0.1415^{+0.0073}_{-0.0067}$ (−0.0 σ)	$H(0.15)$	$72.6^{+2.7}_{-2.5}$ (+0.3 σ)	χ_{BAO}^2	6.4 (ν : 0.9)

$$\bar{\chi}_{\mathrm{eff}}^2 = 2808.47; R - 1 = 0.03303$$

11.41 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022361	$0.02219^{+0.00044}_{-0.00042}$ $(+0.3\sigma)$	σ_8	0.8214	$0.801^{+0.024}_{-0.024}$ (-0.4σ)	$H(0.15)$	73.26	$71.7^{+3.5}_{-3.4}$ $(+0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.1208	$0.1174^{+0.0077}_{-0.0073}$ (-0.2σ)	S_8	0.8367	$0.826^{+0.031}_{-0.031}$ (-0.6σ)	$D_{\mathrm{M}}(0.15)$	638.0	653^{+33}_{-32} (-0.1σ)
$100\theta_{\mathrm{MC}}$	1.04069	$1.0412^{+0.0013}_{-0.0013}$ (-0.1σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4583	$0.452^{+0.017}_{-0.017}$ (-0.6σ)	$H(0.38)$	83.43	$81.8^{+3.6}_{-3.4}$ $(+0.0\sigma)$
τ	0.0637	$0.052^{+0.016}_{-0.016}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6135	$0.602^{+0.018}_{-0.018}$ (-0.6σ)	$D_{\mathrm{M}}(0.38)$	1522	1556^{+74}_{-73} (-0.1σ)
N_{eff}	3.13	$2.89^{+0.52}_{-0.49}$ (-0.1σ)	$\sigma_8/h^{0.5}$	0.9964	$0.984^{+0.023}_{-0.023}$ (-0.6σ)	$H(0.51)$	90.18	$88.5^{+3.6}_{-3.4}$ $(+0.0\sigma)$
Y_{P}	0.2438	$0.2440^{+0.0077}_{-0.0077}$ (-0.2σ)	$r_{\mathrm{drag}}h$	99.56	$98.7^{+2.7}_{-2.6}$ $(+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	1971	2014^{+93}_{-91} (-0.1σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0665	$3.031^{+0.037}_{-0.038}$ (-0.2σ)	$\langle d^2 \rangle^{1/2}$	2.459	$2.441^{+0.058}_{-0.060}$ (-0.4σ)	$H(0.61)$	95.83	$94.1^{+3.7}_{-3.5}$ (-0.0σ)
n_{s}	0.9690	$0.960^{+0.018}_{-0.017}$ $(+0.0\sigma)$	z_{re}	8.63	$7.4^{+1.5}_{-1.7}$ (-0.0σ)	$D_{\mathrm{M}}(0.61)$	2294	2343^{+110}_{-100} (-0.1σ)
y_{cal}	1.00188	$1.0004^{+0.0049}_{-0.0048}$ (-0.0σ)	$10^9 A_{\mathrm{s}}$	2.147	$2.072^{+0.077}_{-0.077}$ (-0.2σ)	$H(2.33)$	237.3	$234.1^{+6.8}_{-6.6}$ (-0.1σ)
A_{100}^{PS}	233.7	237^{+50}_{-50} (-0.9σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8897	$1.867^{+0.040}_{-0.040}$ (-0.4σ)	$D_{\mathrm{M}}(2.33)$	5732	5835^{+220}_{-210} (-0.0σ)
A_{143}^{PS}	47.2	38^{+20}_{-20} (-1.3σ)	D_{40}	1229.3	1232^{+31}_{-31} (-0.1σ)	$f\sigma_8(0.15)$	0.4629	$0.456^{+0.016}_{-0.016}$ (-0.6σ)
A_{217}^{PS}	105.6	103^{+20}_{-30} (-1.2σ)	D_{220}	5736	5717^{+78}_{-77} $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7590	$0.740^{+0.023}_{-0.023}$ (-0.3σ)
A_{217}^{CIB}	40.8	39^{+10}_{-10} (-1.3σ)	D_{810}	2544.7	2532^{+27}_{-27} (-0.2σ)	$f\sigma_8(0.38)$	0.4816	$0.473^{+0.014}_{-0.014}$ (-0.6σ)
A_{143}^{tSZ}	5.40	< 7.51 (-0.5σ)	D_{1420}	818.8	$816.4^{+9.9}_{-9.5}$ $(+0.4\sigma)$	$\sigma_8(0.38)$	0.6728	$0.655^{+0.021}_{-0.021}$ (-0.3σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.732	$0.66^{+0.25}_{-0.26}$	D_{2000}	231.31	$231.0^{+4.0}_{-3.8}$ $(+0.6\sigma)$	$f\sigma_8(0.51)$	0.4802	$0.471^{+0.013}_{-0.013}$ (-0.6σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.74	—	$n_{\mathrm{s},0.002}$	0.9690	$0.960^{+0.018}_{-0.017}$ $(+0.0\sigma)$	$\sigma_8(0.51)$	0.6297	$0.613^{+0.021}_{-0.020}$ (-0.2σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.76	—	Y_{P}	0.2438	$0.2440^{+0.0077}_{-0.0077}$ (-0.2σ)	$f\sigma_8(0.61)$	0.4752	$0.465^{+0.013}_{-0.013}$ (-0.6σ)
A^{kSZ}	1.7	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2452	$0.2454^{+0.0077}_{-0.0077}$ (-0.2σ)	$\sigma_8(0.61)$	0.5991	$0.583^{+0.020}_{-0.019}$ (-0.2σ)
A_{100}^{dust}	1.008	$1.01^{+0.39}_{-0.38}$	Age/Gyr	13.72	$13.97^{+0.51}_{-0.51}$ (-0.0σ)	$f\sigma_8(2.33)$	0.3021	$0.294^{+0.011}_{-0.010}$ (-0.2σ)
A_{143}^{dust}	0.955	$0.96^{+0.35}_{-0.34}$	z_*	1089.97	$1089.80^{+0.73}_{-0.73}$ (-0.8σ)	$\sigma_8(2.33)$	0.3115	$0.302^{+0.012}_{-0.011}$ (-0.1σ)
A_{217}^{dust}	0.978	$0.98^{+0.20}_{-0.20}$	r_*	143.85	$146.1^{+4.7}_{-4.7}$ $(+0.1\sigma)$	f_{2000}^{143}	29.4	29^{+6}_{-6} (-0.7σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.021	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	1.04089	$1.0415^{+0.0014}_{-0.0014}$ $(+0.1\sigma)$	f_{2000}^{217}	106.61	$106.2^{+4.3}_{-4.3}$ (-0.8σ)
c_{100}	0.99783	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.820	$14.03^{+0.43}_{-0.43}$ $(+0.1\sigma)$	$f_{2000}^{143 \times 217}$	31.92	31^{+5}_{-5} (-0.9σ)
c_{217}	1.00118	$1.0011^{+0.0031}_{-0.0031}$ $(+4.5\sigma)$	z_{drag}	1059.93	$1059.2^{+1.6}_{-1.5}$ (-0.1σ)	χ_{small}^2	399.05	$396.8 (\nu: 1.2)$ (-0.1σ)
c_{TE}	0.9961	$0.9958^{+0.0099}_{-0.0098}$	r_{drag}	146.50	$148.8^{+4.8}_{-4.8}$ $(+0.1\sigma)$	χ_{lowl}^2	23.05	$23.9 (\nu: 1.0)$ (-0.2σ)
c_{EE}	0.9923	$0.990^{+0.011}_{-0.011}$	k_{D}	0.14128	$0.1395^{+0.0037}_{-0.0036}$ $(+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	11499.5	$11514.4 (\nu: 17.1)$
H_0	67.96	$66.4^{+3.6}_{-3.4}$ $(+0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.16091	$0.16057^{+0.00093}_{-0.00091}$ (-0.7σ)	χ_{Aver15}^2	0.00	$0.96 (\nu: 0.9)$
Ω_{Λ}	0.6887	$0.681^{+0.022}_{-0.023}$ $(+0.3\sigma)$	z_{eq}	3383	3408^{+82}_{-80} (-0.3σ)	χ_{prior}^2	2.4	$7.9 (\nu: 6.0)$ $(+0.2\sigma)$
Ω_{m}	0.3113	$0.319^{+0.023}_{-0.022}$ (-0.3σ)	k_{eq}	0.010381	$0.01029^{+0.00026}_{-0.00027}$ (-0.4σ)	χ_{CMB}^2	11921.6	$11935.1 (\nu: 17.2)$ $(+1814.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.1438	$0.1402^{+0.0079}_{-0.0076}$ (-0.2σ)	$100\theta_{\mathrm{eq}}$	0.8166	$0.812^{+0.015}_{-0.015}$ $(+0.3\sigma)$			
$\Omega_{\mathrm{m}}h^3$	0.0977	$0.0931^{+0.0099}_{-0.0090}$ (-0.1σ)	$100\theta_{\mathrm{s,eq}}$	0.4511	$0.4488^{+0.0077}_{-0.0076}$ $(+0.3\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 11924.04$; $\bar{\chi}_{\mathrm{eff}}^2 = 11943.94$; $R - 1 = 0.01231$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.01 CMB - simall_100x143_offlike5_EE_Aplanck_B: 399.05 commander_dx12_v3.2_29: 23.05 CamSpec like_10.7HM_1400_unified: 11499.50

11.42 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00036}_{-0.00037} \quad (+0.7\sigma)$	S_8	$0.817^{+0.026}_{-0.027} \quad (-0.9\sigma)$	$H(0.38)$	$82.7^{+3.0}_{-2.8} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0078}_{-0.0073} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.014}_{-0.015} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1535^{+58}_{-59} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.018}_{-0.017} \quad (-0.8\sigma)$	$H(0.51)$	$89.4^{+3.1}_{-2.9} \quad (+0.3\sigma)$
τ	$0.053^{+0.015}_{-0.015} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.020}_{-0.021} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1988^{+73}_{-74} \quad (-0.4\sigma)$
N_{eff}	$3.00^{+0.48}_{-0.44} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$H(0.61)$	$95.0^{+3.3}_{-3.1} \quad (+0.2\sigma)$
Y_{P}	$0.2441^{+0.0076}_{-0.0077} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.050}_{-0.050} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2314^{+84}_{-85} \quad (-0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.035^{+0.036}_{-0.035} \quad (-0.0\sigma)$	z_{re}	$7.5^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$H(2.33)$	$235.1^{+6.8}_{-6.4} \quad (-0.0\sigma)$
n_{s}	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.081^{+0.076}_{-0.073} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5785^{+190}_{-190} \quad (-0.2\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0047} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.039}_{-0.040} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.014}_{-0.014} \quad (-0.9\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+27}_{-27} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.023}_{-0.022} \quad (-0.2\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5722^{+74}_{-74} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.014}_{-0.014} \quad (-0.8\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.658^{+0.021}_{-0.020} \quad (-0.1\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.4^{+9.6}_{-9.5} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.014}_{-0.013} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.5\sigma)$	D_{2000}	$230.7^{+3.9}_{-3.8} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.616^{+0.020}_{-0.019} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.014}_{-0.013} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2441^{+0.0076}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.020}_{-0.018} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2455^{+0.0076}_{-0.0078} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.296^{+0.010}_{-0.0092} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.85^{+0.44}_{-0.45} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.011}_{-0.0099} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1089.77^{+0.72}_{-0.71} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+7}_{-6} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	r_*	$145.3^{+4.3}_{-4.5} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.5^{+4.3}_{-4.1} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.30}_{-0.33}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.95^{+0.40}_{-0.41} \quad (-0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.2) \quad (-0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.6^{+1.3}_{-1.4} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.6) \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$148.0^{+4.5}_{-4.6} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.0 \quad (\nu: 16.1)$
c_{TE}	$0.9964^{+0.0096}_{-0.0096}$	k_{D}	$0.1401^{+0.0036}_{-0.0034} \quad (+0.2\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 0.9)$
c_{EE}	$0.992^{+0.011}_{-0.010}$	$100\theta_{\mathrm{D}}$	$0.16072^{+0.00088}_{-0.00087} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
H_0	$67.4^{+2.9}_{-2.7} \quad (+0.4\sigma)$	z_{eq}	$3379^{+55}_{-53} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.31 \quad (\nu: 0.1)$
Ω_{Λ}	$0.689^{+0.014}_{-0.015} \quad (+0.7\sigma)$	k_{eq}	$0.01028^{+0.00027}_{-0.00026} \quad (-0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.2)$
Ω_{m}	$0.311^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0099}_{-0.010} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.7) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0080}_{-0.0074} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0051}_{-0.0051} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^3$	$0.0951^{+0.0093}_{-0.0083} \quad (+0.1\sigma)$	$H(0.15)$	$72.7^{+2.9}_{-2.7} \quad (+0.4\sigma)$	χ_{CMB}^2	$11934.9 \quad (\nu: 15.8) \quad (+1814.9\sigma)$
σ_8	$0.803^{+0.025}_{-0.023} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+25}_{-26} \quad (-0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11949.86$; $R - 1 = 0.01509$

11.43 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02216^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	σ_8	$0.801^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$H(0.15)$	$71.4^{+3.5}_{-3.3} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1170^{+0.0076}_{-0.0073} \quad (-0.3\sigma)$	S_8	$0.828^{+0.025}_{-0.025} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$656^{+33}_{-33} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0013}_{-0.0013} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$H(0.38)$	$81.5^{+3.5}_{-3.4} \quad (-0.1\sigma)$
τ	$0.053^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1562^{+74}_{-72} \quad (-0.0\sigma)$
N_{eff}	$2.85^{+0.51}_{-0.49} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.018} \quad (-0.5\sigma)$	$H(0.51)$	$88.2^{+3.6}_{-3.5} \quad (-0.1\sigma)$
Y_{P}	$0.2441^{+0.0075}_{-0.0074} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.5^{+2.5}_{-2.5} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$2022^{+93}_{-91} \quad (+0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.031^{+0.034}_{-0.035} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.046}_{-0.048} \quad (-0.3\sigma)$	$H(0.61)$	$93.8^{+3.6}_{-3.5} \quad (-0.1\sigma)$
n_{s}	$0.959^{+0.018}_{-0.017} \quad (-0.1\sigma)$	z_{re}	$7.5^{+1.4}_{-1.6} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2352^{+110}_{-100} \quad (+0.0\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.073^{+0.072}_{-0.072} \quad (-0.2\sigma)$	$H(2.33)$	$233.7^{+6.8}_{-6.7} \quad (-0.2\sigma)$
A_{100}^{PS}	$236^{+50}_{-50} \quad (-1.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.866^{+0.039}_{-0.038} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5852^{+220}_{-210} \quad (+0.1\sigma)$
A_{143}^{PS}	$37^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1235^{+29}_{-28} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.1\sigma)$	D_{220}	$5719^{+74}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.022}_{-0.021} \quad (-0.4\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.4\sigma)$	D_{810}	$2533^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.49 \quad (-0.5\sigma)$	D_{1420}	$816.8^{+9.7}_{-9.7} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.021}_{-0.020} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.26}$	D_{2000}	$231.3^{+3.9}_{-3.9} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.959^{+0.018}_{-0.017} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.612^{+0.020}_{-0.019} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2441^{+0.0075}_{-0.0074} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0075}_{-0.0075} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.582^{+0.020}_{-0.019} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$14.01^{+0.52}_{-0.51} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.293^{+0.010}_{-0.010} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.34}$	z_*	$1089.78^{+0.69}_{-0.69} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.302^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$146.4^{+4.8}_{-4.7} \quad (+0.1\sigma)$	f_{2000}^{143}	$28^{+6}_{-6} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.0415^{+0.0014}_{-0.0013} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.0^{+4.3}_{-4.2} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.06^{+0.44}_{-0.43} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.9\sigma)$
c_{217}	$1.0010^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.1^{+1.5}_{-1.5} \quad (-0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.03 \quad (\nu: 0.3)$
c_{TE}	$0.9955^{+0.0097}_{-0.0098}$	r_{drag}	$149.2^{+5.0}_{-4.8} \quad (+0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.1) \quad (-0.1\sigma)$
c_{EE}	$0.990^{+0.011}_{-0.011}$	k_{D}	$0.1393^{+0.0037}_{-0.0037} \quad (-0.0\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 1.0) \quad (-0.1\sigma)$
H_0	$66.1^{+3.5}_{-3.4} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16050^{+0.00092}_{-0.00090} \quad (-0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.6 \quad (\nu: 15.4)$
Ω_{Λ}	$0.680^{+0.021}_{-0.022} \quad (+0.2\sigma)$	z_{eq}	$3415^{+77}_{-77} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.9)$
Ω_{m}	$0.320^{+0.022}_{-0.021} \quad (-0.2\sigma)$	k_{eq}	$0.01028^{+0.00025}_{-0.00024} \quad (-0.4\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1398^{+0.0078}_{-0.0075} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.014}_{-0.014} \quad (+0.2\sigma)$	χ_{CMB}^2	$11943.6 \quad (\nu: 16.6) \quad (+1816.4\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0924^{+0.0099}_{-0.0091} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4481^{+0.0073}_{-0.0072} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11952.31; R - 1 = 0.01285$$

11.44 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02229^{+0.00035}_{-0.00036} \quad (+0.7\sigma)$	S_8	$0.821^{+0.022}_{-0.022} \quad (-0.8\sigma)$	$H(0.38)$	$82.6^{+3.0}_{-2.8} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1180^{+0.0075}_{-0.0069} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1538^{+57}_{-58} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$H(0.51)$	$89.2^{+3.1}_{-2.9} \quad (+0.2\sigma)$
τ	$0.055^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+73}_{-74} \quad (-0.3\sigma)$
N_{eff}	$2.98^{+0.46}_{-0.43} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.5^{+1.7}_{-1.7} \quad (+0.6\sigma)$	$H(0.61)$	$94.8^{+3.2}_{-3.0} \quad (+0.2\sigma)$
Y_{P}	$0.2441^{+0.0075}_{-0.0077} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.042}_{-0.041} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2319^{+83}_{-84} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.039^{+0.031}_{-0.031} \quad (+0.2\sigma)$	z_{re}	$7.7^{+1.3}_{-1.4} \quad (+0.3\sigma)$	$H(2.33)$	$234.9^{+6.6}_{-6.1} \quad (-0.0\sigma)$
n_{s}	$0.964^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.089^{+0.066}_{-0.063} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5793^{+180}_{-180} \quad (-0.2\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.037}_{-0.036} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1228^{+26}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.021}_{-0.019} \quad (-0.1\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5726^{+73}_{-74} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.019}_{-0.018} \quad (+0.0\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.9^{+9.7}_{-9.5} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.5\sigma)$	D_{2000}	$230.9^{+3.9}_{-3.8} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.018}_{-0.017} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.964^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2441^{+0.0075}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.018}_{-0.016} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0075}_{-0.0078} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2960^{+0.0093}_{-0.0085} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.87^{+0.43}_{-0.44} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.010}_{-0.0091} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1089.77^{+0.69}_{-0.69} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	r_*	$145.4^{+4.2}_{-4.3} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.4^{+4.2}_{-4.1} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0013} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-4} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.30}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.39}_{-0.40} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.26 \quad (\nu: 0.3)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.5^{+1.4}_{-1.3} \quad (+0.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.3) \quad (+0.1\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$148.1^{+4.4}_{-4.4} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.6) \quad (-0.4\sigma)$
c_{TE}	$0.9962^{+0.0095}_{-0.0096}$	k_{D}	$0.1401^{+0.0035}_{-0.0033} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.1 \quad (\nu: 15.2)$
c_{EE}	$0.991^{+0.011}_{-0.010}$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00087}_{-0.00085} \quad (-0.6\sigma)$	χ_{Aver15}^2	$0.96 \quad (\nu: 0.9)$
H_0	$67.2^{+2.8}_{-2.6} \quad (+0.3\sigma)$	z_{eq}	$3385^{+53}_{-54} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.068 \quad (\nu: 0.0)$
Ω_{Λ}	$0.688^{+0.014}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01028^{+0.00025}_{-0.00024} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.22 \quad (\nu: 0.1)$
Ω_{m}	$0.312^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8163^{+0.0099}_{-0.0098} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1410^{+0.0078}_{-0.0071} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0051}_{-0.0049} \quad (+0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0948^{+0.0090}_{-0.0080} \quad (+0.1\sigma)$	$H(0.15)$	$72.5^{+2.8}_{-2.7} \quad (+0.3\sigma)$	χ_{CMB}^2	$11943.7 \quad (\nu: 15.9) \quad (+1816.4\sigma)$
σ_8	$0.805^{+0.022}_{-0.020} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+25}_{-25} \quad (-0.4\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.76; R - 1 = 0.01459$$

11.45 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00044}_{-0.00042} \quad (+0.4\sigma)$	σ_8	$0.803^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$H(0.15)$	$71.7^{+3.5}_{-3.3} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1175^{+0.0076}_{-0.0074} \quad (-0.2\sigma)$	S_8	$0.826^{+0.031}_{-0.031} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$652^{+33}_{-32} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$H(0.38)$	$81.9^{+3.5}_{-3.3} \quad (+0.0\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1554^{+73}_{-72} \quad (-0.1\sigma)$
N_{eff}	$2.90^{+0.52}_{-0.49} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$H(0.51)$	$88.6^{+3.6}_{-3.4} \quad (+0.0\sigma)$
Y_{P}	$0.2441^{+0.0077}_{-0.0077} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.8^{+2.7}_{-2.5} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$2012^{+92}_{-90} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.035^{+0.034}_{-0.030} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.444^{+0.057}_{-0.058} \quad (-0.3\sigma)$	$H(0.61)$	$94.2^{+3.6}_{-3.5} \quad (+0.0\sigma)$
n_{s}	$0.961^{+0.018}_{-0.017} \quad (+0.0\sigma)$	z_{re}	$< 8.72 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2341^{+100}_{-100} \quad (-0.1\sigma)$
y_{cal}	$1.0004^{+0.0050}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.079^{+0.068}_{-0.065} \quad (-0.1\sigma)$	$H(2.33)$	$234.2^{+6.8}_{-6.6} \quad (-0.1\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.867^{+0.040}_{-0.040} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5831^{+210}_{-210} \quad (-0.0\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1232^{+31}_{-31} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.016}_{-0.016} \quad (-0.6\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{220}	$5716^{+79}_{-76} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.741^{+0.022}_{-0.021} \quad (-0.2\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2532^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.014}_{-0.014} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.5\sigma)$	D_{1420}	$816.4^{+9.8}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.021}_{-0.020} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{2000}	$231.0^{+4.0}_{-3.8} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.013}_{-0.013} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.961^{+0.018}_{-0.017} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.020}_{-0.019} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2441^{+0.0077}_{-0.0077} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.013}_{-0.012} \quad (-0.5\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0077}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.019}_{-0.018} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	Age/Gyr	$13.96^{+0.51}_{-0.50} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.010}_{-0.0095} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	z_*	$1089.80^{+0.74}_{-0.73} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.011}_{-0.010} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$146.0^{+4.7}_{-4.7} \quad (+0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.0414^{+0.0014}_{-0.0014} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.1^{+4.3}_{-4.3} \quad (-0.8\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.02^{+0.43}_{-0.43} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.9\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.3^{+1.5}_{-1.5} \quad (-0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.2) \quad (-0.1\sigma)$
c_{TE}	$0.9957^{+0.0099}_{-0.0099}$	r_{drag}	$148.8^{+4.9}_{-4.8} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 1.0) \quad (-0.2\sigma)$
c_{EE}	$0.990^{+0.011}_{-0.011}$	k_{D}	$0.1396^{+0.0037}_{-0.0036} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.2 \quad (\nu: 17.2)$
H_0	$66.5^{+3.5}_{-3.3} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16057^{+0.00093}_{-0.00091} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.96 \quad (\nu: 0.9)$
Ω_{Λ}	$0.682^{+0.021}_{-0.022} \quad (+0.4\sigma)$	z_{eq}	$3406^{+79}_{-80} \quad (-0.3\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.0) \quad (+0.2\sigma)$
Ω_{m}	$0.318^{+0.022}_{-0.021} \quad (-0.4\sigma)$	k_{eq}	$0.01029^{+0.00026}_{-0.00027} \quad (-0.4\sigma)$	χ_{CMB}^2	$11934.8 \quad (\nu: 16.9) \quad (+1814.9\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1403^{+0.0079}_{-0.0076} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.015}_{-0.015} \quad (+0.3\sigma)$		
$\Omega_{\mathrm{m}} h^3$	$0.0933^{+0.0098}_{-0.0090} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0077}_{-0.0074} \quad (+0.3\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11943.65$; $R - 1 = 0.01349$

11.46 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00036}_{-0.00037} \quad (+0.7\sigma)$	S_8	$0.818^{+0.026}_{-0.026} \quad (-0.9\sigma)$	$H(0.38)$	$82.7^{+3.0}_{-2.8} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0078}_{-0.0072} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.014}_{-0.014} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+58}_{-59} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.017}_{-0.016} \quad (-0.8\sigma)$	$H(0.51)$	$89.4^{+3.2}_{-2.9} \quad (+0.3\sigma)$
τ	$0.055^{+0.012}_{-0.011} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.019}_{-0.018} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1988^{+73}_{-75} \quad (-0.4\sigma)$
N_{eff}	$3.00^{+0.49}_{-0.44} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$H(0.61)$	$95.0^{+3.3}_{-3.0} \quad (+0.2\sigma)$
Y_{P}	$0.2441^{+0.0076}_{-0.0077} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.048}_{-0.046} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2313^{+83}_{-85} \quad (-0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.032}_{-0.030} \quad (+0.1\sigma)$	z_{re}	$< 8.78 \quad (+0.3\sigma)$	$H(2.33)$	$235.1^{+6.8}_{-6.3} \quad (-0.0\sigma)$
n_{s}	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.087^{+0.067}_{-0.063} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5784^{+180}_{-190} \quad (-0.3\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0047} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.039}_{-0.040} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.014}_{-0.014} \quad (-0.9\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+27}_{-26} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.023}_{-0.020} \quad (-0.1\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5721^{+75}_{-73} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.014}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{PS}	$102^{+20}_{-30} \quad (-1.3\sigma)$	D_{810}	$2533^{+26}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.659^{+0.021}_{-0.019} \quad (+0.0\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.4^{+9.5}_{-9.4} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.013}_{-0.013} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.5\sigma)$	D_{2000}	$230.7^{+3.8}_{-3.9} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.020}_{-0.018} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.966^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.013}_{-0.013} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2441^{+0.0076}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.019}_{-0.017} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0076}_{-0.0077} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2961^{+0.0098}_{-0.0087} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.85^{+0.43}_{-0.45} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.011}_{-0.0093} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1089.77^{+0.72}_{-0.71} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+7}_{-6} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$145.3^{+4.3}_{-4.5} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.4^{+4.3}_{-4.2} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0014} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-5} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.30}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.95^{+0.40}_{-0.41} \quad (-0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.2) \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.6^{+1.4}_{-1.4} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.6) \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$147.9^{+4.5}_{-4.6} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.8 \quad (\nu: 16.2)$
c_{TE}	$0.9964^{+0.0096}_{-0.0097}$	k_{D}	$0.1402^{+0.0037}_{-0.0034} \quad (+0.2\sigma)$	χ_{Aver15}^2	$0.96 \quad (\nu: 0.9)$
c_{EE}	$0.992^{+0.011}_{-0.010}$	$100\theta_{\mathrm{D}}$	$0.16072^{+0.00089}_{-0.00087} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
H_0	$67.4^{+2.9}_{-2.6} \quad (+0.4\sigma)$	z_{eq}	$3378^{+55}_{-53} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.33 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.014}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01028^{+0.00026}_{-0.00026} \quad (-0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.1)$
Ω_{m}	$0.310^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0099}_{-0.010} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.7) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0080}_{-0.0074} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0051}_{-0.0051} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.0952^{+0.0095}_{-0.0082} \quad (+0.1\sigma)$	$H(0.15)$	$72.7^{+2.9}_{-2.7} \quad (+0.4\sigma)$	χ_{CMB}^2	$11934.7 \quad (\nu: 15.7) \quad (+1814.9\sigma)$
σ_8	$0.805^{+0.024}_{-0.022} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+25}_{-26} \quad (-0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11949.59$; $R - 1 = 0.01728$

11.47 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02217^{+0.00042}_{-0.00042} \quad (+0.3\sigma)$	σ_8	$0.802^{+0.022}_{-0.021} \quad (-0.3\sigma)$	$H(0.15)$	$71.5^{+3.5}_{-3.3} \quad (+0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1170^{+0.0075}_{-0.0074} \quad (-0.3\sigma)$	S_8	$0.828^{+0.024}_{-0.025} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$655^{+32}_{-32} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0013}_{-0.0013} \quad (-0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.013}_{-0.014} \quad (-0.5\sigma)$	$H(0.38)$	$81.6^{+3.5}_{-3.4} \quad (-0.0\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1560^{+73}_{-72} \quad (-0.0\sigma)$
N_{eff}	$2.86^{+0.51}_{-0.49} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.51)$	$88.3^{+3.5}_{-3.4} \quad (-0.1\sigma)$
Y_{P}	$0.2441^{+0.0075}_{-0.0074} \quad (-0.2\sigma)$	$r_{\mathrm{drag}}h$	$98.6^{+2.4}_{-2.3} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$2020^{+92}_{-91} \quad (-0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.034^{+0.032}_{-0.029} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.045}_{-0.048} \quad (-0.2\sigma)$	$H(0.61)$	$93.9^{+3.6}_{-3.5} \quad (-0.1\sigma)$
n_{s}	$0.959^{+0.017}_{-0.017} \quad (-0.1\sigma)$	z_{re}	$< 8.68 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2349^{+100}_{-100} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.079^{+0.067}_{-0.059} \quad (-0.1\sigma)$	$H(2.33)$	$233.8^{+6.7}_{-6.8} \quad (-0.2\sigma)$
A_{100}^{PS}	$236^{+50}_{-50} \quad (-1.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.866^{+0.039}_{-0.038} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5848^{+220}_{-210} \quad (+0.1\sigma)$
A_{143}^{PS}	$37^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1235^{+28}_{-28} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.012}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.1\sigma)$	D_{220}	$5719^{+74}_{-74} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.740^{+0.022}_{-0.020} \quad (-0.3\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.4\sigma)$	D_{810}	$2533^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.5\sigma)$	D_{1420}	$816.7^{+9.7}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.020}_{-0.019} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.26}$	D_{2000}	$231.2^{+4.0}_{-3.9} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.959^{+0.017}_{-0.017} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.020}_{-0.018} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2441^{+0.0075}_{-0.0074} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0075}_{-0.0074} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.019}_{-0.018} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$14.00^{+0.51}_{-0.51} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.294^{+0.010}_{-0.0093} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.95^{+0.35}_{-0.34}$	z_*	$1089.77^{+0.68}_{-0.69} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.303^{+0.011}_{-0.010} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$146.4^{+4.8}_{-4.7} \quad (+0.1\sigma)$	f_{2000}^{143}	$28^{+6}_{-6} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.0415^{+0.0014}_{-0.0013} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.0^{+4.3}_{-4.2} \quad (-0.9\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$14.05^{+0.45}_{-0.43} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+5}_{-5} \quad (-0.9\sigma)$
c_{217}	$1.0010^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.1^{+1.5}_{-1.5} \quad (-0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$8.99 \quad (\nu: 0.2)$
c_{TE}	$0.9955^{+0.0097}_{-0.0098}$	r_{drag}	$149.1^{+5.0}_{-4.9} \quad (+0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.1) \quad (-0.1\sigma)$
c_{EE}	$0.990^{+0.011}_{-0.011}$	k_{D}	$0.1393^{+0.0037}_{-0.0037} \quad (-0.0\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 0.9) \quad (-0.1\sigma)$
H_0	$66.2^{+3.5}_{-3.3} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16051^{+0.00091}_{-0.00089} \quad (-0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.5 \quad (\nu: 15.4)$
Ω_{Λ}	$0.680^{+0.020}_{-0.020} \quad (+0.3\sigma)$	z_{eq}	$3412^{+74}_{-75} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.9)$
Ω_{m}	$0.320^{+0.020}_{-0.020} \quad (-0.3\sigma)$	k_{eq}	$0.01028^{+0.00024}_{-0.00024} \quad (-0.4\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1398^{+0.0077}_{-0.0076} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.014}_{-0.013} \quad (+0.2\sigma)$	χ_{CMB}^2	$11943.3 \quad (\nu: 16.2) \quad (+1816.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0926^{+0.0099}_{-0.0091} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4484^{+0.0072}_{-0.0067} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11952.02; R - 1 = 0.01312$

11.48 base_nnu_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02229^{+0.00035}_{-0.00037} \quad (+0.7\sigma)$	S_8	$0.821^{+0.022}_{-0.022} \quad (-0.8\sigma)$	$H(0.38)$	$82.6^{+3.0}_{-2.8} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1180^{+0.0075}_{-0.0069} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1538^{+57}_{-58} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$H(0.51)$	$89.2^{+3.1}_{-2.9} \quad (+0.2\sigma)$
τ	$0.056^{+0.012}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+73}_{-74} \quad (-0.3\sigma)$
N_{eff}	$2.98^{+0.47}_{-0.43} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.6^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$H(0.61)$	$94.8^{+3.2}_{-3.0} \quad (+0.2\sigma)$
Y_{P}	$0.2441^{+0.0075}_{-0.0077} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.042}_{-0.040} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2319^{+83}_{-85} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.031}_{-0.028} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.1}_{-1.3} \quad (+0.4\sigma)$	$H(2.33)$	$234.9^{+6.6}_{-6.1} \quad (-0.0\sigma)$
n_{s}	$0.965^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.062}_{-0.060} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5793^{+180}_{-190} \quad (-0.2\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.871^{+0.037}_{-0.036} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.012}_{-0.011} \quad (-0.8\sigma)$
A_{100}^{PS}	$237^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1228^{+26}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.021}_{-0.019} \quad (-0.1\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5726^{+73}_{-73} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+25}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.019}_{-0.018} \quad (+0.0\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.8^{+9.5}_{-9.4} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.5\sigma)$	D_{2000}	$231.0^{+3.9}_{-3.8} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.617^{+0.018}_{-0.017} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.965^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2441^{+0.0075}_{-0.0077} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.587^{+0.018}_{-0.016} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0075}_{-0.0077} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2962^{+0.0093}_{-0.0084} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.87^{+0.43}_{-0.44} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.305^{+0.010}_{-0.0090} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1089.76^{+0.69}_{-0.69} \quad (-0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	r_*	$145.4^{+4.2}_{-4.3} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.4^{+4.2}_{-4.1} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	$100\theta_*$	$1.0413^{+0.0013}_{-0.0013} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.30}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.96^{+0.39}_{-0.40} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.21 \quad (\nu: 0.3)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.5^{+1.4}_{-1.3} \quad (+0.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	r_{drag}	$148.1^{+4.3}_{-4.4} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.6) \quad (-0.4\sigma)$
c_{TE}	$0.9962^{+0.0095}_{-0.0097}$	k_{D}	$0.1401^{+0.0035}_{-0.0033} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.1 \quad (\nu: 15.2)$
c_{EE}	$0.991^{+0.011}_{-0.010}$	$100\theta_{\mathrm{D}}$	$0.16067^{+0.00088}_{-0.00085} \quad (-0.6\sigma)$	χ_{Aver15}^2	$0.96 \quad (\nu: 0.9)$
H_0	$67.2^{+2.8}_{-2.6} \quad (+0.3\sigma)$	z_{eq}	$3384^{+53}_{-53} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.066 \quad (\nu: 0.0)$
Ω_{Λ}	$0.688^{+0.014}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01028^{+0.00025}_{-0.00024} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.23 \quad (\nu: 0.1)$
Ω_{m}	$0.312^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.010}_{-0.0098} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1409^{+0.0078}_{-0.0071} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4511^{+0.0050}_{-0.0049} \quad (+0.6\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0948^{+0.0090}_{-0.0080} \quad (+0.1\sigma)$	$H(0.15)$	$72.5^{+2.8}_{-2.7} \quad (+0.3\sigma)$	χ_{CMB}^2	$11943.6 \quad (\nu: 15.8) \quad (+1816.4\sigma)$
σ_8	$0.805^{+0.022}_{-0.020} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+25}_{-25} \quad (-0.4\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.9)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.57; R - 1 = 0.01608$$

12 nrun

12.1 base_nrun_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022178	$0.02216^{+0.00046}_{-0.00045}$	$\sigma_8 \Omega_m^{0.5}$	0.4595	$0.460^{+0.026}_{-0.025}$	$100\theta_{s,eq}$	0.4483	$0.4480^{+0.0091}_{-0.0089}$
$\Omega_c h^2$	0.12059	$0.1208^{+0.0041}_{-0.0041}$	$\sigma_8 \Omega_m^{0.25}$	0.6110	$0.612^{+0.023}_{-0.023}$	$H(0.15)$	72.32	$72.3^{+1.6}_{-1.5}$
$100\theta_{MC}$	1.04080	$1.04078^{+0.00095}_{-0.00092}$	$\sigma_8/h^{0.5}$	0.9928	$0.994^{+0.031}_{-0.031}$	$D_M(0.15)$	646.9	648^{+16}_{-15}
τ	0.0531	$0.053^{+0.016}_{-0.016}$	$r_{drag}h$	98.52	$98.4^{+3.2}_{-3.1}$	$H(0.38)$	82.57	$82.5^{+1.1}_{-1.1}$
$\ln(10^{10} A_s)$	3.0432	$3.044^{+0.034}_{-0.035}$	$\langle d^2 \rangle^{1/2}$	2.447	$2.451^{+0.074}_{-0.075}$	$D_M(0.38)$	1540.8	1542^{+31}_{-31}
n_s	0.9635	$0.962^{+0.012}_{-0.012}$	z_{re}	7.60	$7.6^{+1.6}_{-1.7}$	$H(0.51)$	89.37	$89.34^{+0.89}_{-0.84}$
$dn_s/d \ln k$	$-288 \cdot 10^{-5}$	$-0.004^{+0.015}_{-0.015}$	$10^9 A_s$	2.097	$2.100^{+0.073}_{-0.072}$	$D_M(0.51)$	1994.7	1996^{+36}_{-36}
y_{cal}	1.00044	$1.0004^{+0.0048}_{-0.0050}$	$10^9 A_s e^{-2\tau}$	1.8860	$1.887^{+0.028}_{-0.028}$	$H(0.61)$	95.06	$95.03^{+0.71}_{-0.67}$
A_{217}^{CIB}	49.4	48^{+10}_{-10}	D_{40}	1224.5	1225^{+42}_{-41}	$D_M(0.61)$	2320.0	2322^{+39}_{-39}
$\xi^{tSZ \times CIB}$	0.24	—	D_{220}	5712	5713^{+81}_{-81}	$H(2.33)$	236.75	$236.8^{+2.6}_{-2.5}$
A_{143}^{tSZ}	7.04	$4.9^{+3.9}_{-4.0}$	D_{810}	2539.2	2538^{+27}_{-28}	$D_M(2.33)$	5774.7	5776^{+32}_{-33}
A_{100}^{PS}	256	266^{+60}_{-60}	D_{1420}	815.3	814^{+10}_{-10}	$f\sigma_8(0.15)$	0.4634	$0.464^{+0.024}_{-0.023}$
A_{143}^{PS}	49.3	50^{+20}_{-20}	D_{2000}	229.77	$229.1^{+3.8}_{-3.8}$	$\sigma_8(0.15)$	0.7498	$0.750^{+0.015}_{-0.015}$
$A_{143 \times 217}^{PS}$	45.4	44^{+20}_{-20}	$n_{s,0.002}$	0.9728	$0.976^{+0.046}_{-0.046}$	$f\sigma_8(0.38)$	0.4799	$0.480^{+0.019}_{-0.019}$
A_{217}^{PS}	118.7	115^{+20}_{-20}	Y_P	0.245317	$0.24530^{+0.00018}_{-0.00021}$	$\sigma_8(0.38)$	0.6637	$0.664^{+0.012}_{-0.012}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246643	$0.24663^{+0.00018}_{-0.00021}$	$f\sigma_8(0.51)$	0.4775	$0.478^{+0.016}_{-0.016}$
A_{100}^{dustTT}	8.89	$9.0^{+3.7}_{-3.5}$	$10^5 D/H$	2.622	$2.626^{+0.086}_{-0.085}$	$\sigma_8(0.51)$	0.6208	$0.621^{+0.011}_{-0.011}$
A_{143}^{dustTT}	10.86	$10.8^{+3.5}_{-3.5}$	Age/Gyr	13.823	$13.826^{+0.072}_{-0.073}$	$f\sigma_8(0.61)$	0.4718	$0.472^{+0.014}_{-0.014}$
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.6}_{-6.5}$	z_*	1090.21	$1090.26^{+0.81}_{-0.80}$	$\sigma_8(0.61)$	0.5904	$0.590^{+0.010}_{-0.010}$
A_{217}^{dustTT}	94.4	93^{+10}_{-10}	r_*	144.43	$144.40^{+0.96}_{-0.97}$	$f\sigma_8(2.33)$	0.2974	$0.2972^{+0.0050}_{-0.0051}$
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04100	$1.04098^{+0.00093}_{-0.00090}$	$\sigma_8(2.33)$	0.3062	$0.3060^{+0.0053}_{-0.0053}$
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.874	$13.872^{+0.090}_{-0.090}$	f_{2000}^{143}	30.9	32^{+6}_{-6}
H_0	66.95	$66.9^{+1.8}_{-1.8}$	z_{drag}	1059.55	$1059.50^{+0.97}_{-0.98}$	$f_{2000}^{143 \times 217}$	33.62	34^{+4}_{-4}
Ω_Λ	0.6801	$0.679^{+0.025}_{-0.026}$	r_{drag}	147.15	$147.13^{+0.98}_{-0.99}$	f_{2000}^{217}	108.00	$108.6^{+4.1}_{-4.0}$
Ω_m	0.3199	$0.321^{+0.026}_{-0.025}$	k_D	0.14066	$0.1407^{+0.0011}_{-0.0011}$	χ_{simall}^2	395.91	$397.1 (\nu: 1.5)$
$\Omega_m h^2$	0.14341	$0.1436^{+0.0040}_{-0.0039}$	$100\theta_D$	0.16099	$0.16101^{+0.00057}_{-0.00056}$	χ_{lowl}^2	22.74	$23.1 (\nu: 2.2)$
$\Omega_m h^3$	0.09601	$0.09599^{+0.00097}_{-0.00096}$	z_{eq}	3412	3415^{+95}_{-94}	χ_{plik}^2	759.4	$772.7 (\nu: 16.2)$
σ_8	0.8123	$0.812^{+0.018}_{-0.018}$	k_{eq}	0.010413	$0.01042^{+0.00029}_{-0.00029}$	χ_{prior}^2	1.4	$7.3 (\nu: 6.7)$
S_8	0.8389	$0.841^{+0.048}_{-0.046}$	$100\theta_{eq}$	0.8110	$0.810^{+0.018}_{-0.017}$	χ_{CMB}^2	1178.0	$1192.9 (\nu: 15.8)$

Best-fit $\chi_{eff}^2 = 1179.45$; $\Delta\chi_{eff}^2 = -0.13$; $\bar{\chi}_{eff}^2 = 1200.22$; $\Delta\bar{\chi}_{eff}^2 = 0.64$; $R - 1 = 0.00668$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.91 (Δ 0.03) commander_dx12_v3.2.29: 22.74 (Δ -0.86) plik_rd12_HM_v22_TT: 759.37 (Δ 0.62)

12.2 base_nrun_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022255	$0.02225^{+0.00042}_{-0.00043}$ $(+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9819	$0.982^{+0.023}_{-0.022}$ (-0.7σ)	$D_M(0.38)$	1529.2	1529^{+19}_{-18} (-0.8σ)
$\Omega_c h^2$	0.11900	$0.1190^{+0.0024}_{-0.0024}$ (-0.8σ)	$r_{\text{drag}} h$	99.76	$99.8^{+1.8}_{-1.8}$ $(+0.8\sigma)$	$H(0.51)$	89.69	$89.69^{+0.59}_{-0.57}$ $(+0.8\sigma)$
$100\theta_{\text{MC}}$	1.04101	$1.04100^{+0.00085}_{-0.00084}$ $(+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	2.423	$2.424^{+0.056}_{-0.056}$ (-0.7σ)	$D_M(0.51)$	1981.1	1981^{+22}_{-22} (-0.8σ)
τ	0.0549	$0.055^{+0.017}_{-0.016}$ $(+0.2\sigma)$	z_{re}	7.75	$7.7^{+1.6}_{-1.7}$ $(+0.1\sigma)$	$H(0.61)$	95.29	$95.29^{+0.50}_{-0.49}$ $(+0.7\sigma)$
$\ln(10^{10} A_s)$	3.0428	$3.043^{+0.035}_{-0.035}$ (-0.1σ)	$10^9 A_s$	2.096	$2.098^{+0.075}_{-0.072}$ (-0.1σ)	$D_M(0.61)$	2305.4	2305^{+24}_{-23} (-0.8σ)
n_s	0.9663	$0.9660^{+0.0088}_{-0.0087}$ $(+0.7\sigma)$	$10^9 A_s e^{-2\tau}$	1.8784	$1.879^{+0.024}_{-0.024}$ (-0.5σ)	$H(2.33)$	235.79	$235.8^{+1.6}_{-1.6}$ (-0.8σ)
$dn_s/d \ln k$	-0.0034	$-0.004^{+0.015}_{-0.015}$ $(+0.1\sigma)$	D_{40}	1216.8	1218^{+39}_{-40} (-0.3σ)	$D_M(2.33)$	5765.1	5765^{+25}_{-25} (-0.7σ)
y_{cal}	1.00027	$1.0006^{+0.0048}_{-0.0050}$ $(+0.0\sigma)$	D_{220}	5717	5721^{+80}_{-80} $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4544	$0.454^{+0.015}_{-0.015}$ (-0.8σ)
A_{217}^{CIB}	51.1	48^{+10}_{-10} (-0.0σ)	D_{810}	2536.4	2537^{+27}_{-27} (-0.1σ)	$\sigma_8(0.15)$	0.7463	$0.746^{+0.014}_{-0.014}$ (-0.5σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.06	—	D_{1420}	815.0	$815.0^{+9.8}_{-10}$ $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4730	$0.473^{+0.013}_{-0.013}$ (-0.8σ)
A_{143}^{tSZ}	7.16	$5.0^{+4.0}_{-4.0}$ $(+0.1\sigma)$	D_{2000}	229.65	$229.6^{+3.6}_{-3.7}$ $(+0.2\sigma)$	$\sigma_8(0.38)$	0.6617	$0.662^{+0.012}_{-0.012}$ (-0.3σ)
A_{100}^{PS}	258	264^{+60}_{-60} (-0.1σ)	$n_{s,0.002}$	0.9773	$0.977^{+0.046}_{-0.045}$ $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4718	$0.472^{+0.012}_{-0.011}$ (-0.7σ)
A_{143}^{PS}	46.5	49^{+20}_{-20} (-0.1σ)	Y_P	0.245348	$0.24534^{+0.00017}_{-0.00018}$ $(+0.4\sigma)$	$\sigma_8(0.51)$	0.6193	$0.619^{+0.011}_{-0.011}$ (-0.2σ)
$A_{143 \times 217}^{\text{PS}}$	40.2	43^{+20}_{-20} (-0.1σ)	Y_P^{BBN}	0.246675	$0.24667^{+0.00017}_{-0.00018}$ $(+0.4\sigma)$	$f\sigma_8(0.61)$	0.4669	$0.467^{+0.011}_{-0.011}$ (-0.7σ)
A_{217}^{PS}	115.5	114^{+20}_{-20} (-0.0σ)	10^5D/H	2.607	$2.608^{+0.082}_{-0.077}$ (-0.4σ)	$\sigma_8(0.61)$	0.5893	$0.589^{+0.010}_{-0.010}$ (-0.2σ)
A^{kSZ}	0.1	—	Age/Gyr	13.802	$13.802^{+0.058}_{-0.058}$ (-0.6σ)	$f\sigma_8(2.33)$	0.2972	$0.2972^{+0.0051}_{-0.0051}$ (-0.0σ)
A_{100}^{dustTT}	8.98	$9.0^{+3.6}_{-3.5}$ $(+0.0\sigma)$	z_*	1089.98	$1089.98^{+0.62}_{-0.59}$ (-0.7σ)	$\sigma_8(2.33)$	0.3065	$0.3065^{+0.0054}_{-0.0053}$ $(+0.2\sigma)$
A_{143}^{dustTT}	10.79	$10.8^{+3.5}_{-3.5}$ $(+0.0\sigma)$	r_*	144.78	$144.79^{+0.66}_{-0.65}$ $(+0.8\sigma)$	f_{2000}^{143}	31.1	32^{+6}_{-6} (-0.1σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.0	$18.4^{+6.4}_{-6.4}$ $(+0.0\sigma)$	$100\theta_*$	1.04120	$1.04120^{+0.00083}_{-0.00083}$ $(+0.5\sigma)$	$f_{2000}^{143 \times 217}$	33.66	34^{+4}_{-4} (-0.2σ)
A_{217}^{dustTT}	93.6	93^{+10}_{-10} $(+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.905	$13.906^{+0.065}_{-0.064}$ $(+0.7\sigma)$	f_{2000}^{217}	108.00	$108.3^{+4.0}_{-4.0}$ (-0.2σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	z_{drag}	1059.59	$1059.59^{+0.95}_{-0.99}$ $(+0.2\sigma)$	χ_{small}^2	396.07	$397.2 (\nu: 1.7)$ $(+0.1\sigma)$
c_{217}	0.99828	$0.9983^{+0.0012}_{-0.0012}$ (-0.0σ)	r_{drag}	147.49	$147.49^{+0.74}_{-0.73}$ $(+0.7\sigma)$	χ_{lowl}^2	22.13	$22.6 (\nu: 1.7)$ (-0.3σ)
H_0	67.64	$67.6^{+1.1}_{-1.1}$ $(+0.8\sigma)$	k_D	0.14036	$0.14035^{+0.00097}_{-0.00097}$ (-0.5σ)	χ_{plik}^2	760.4	$773.1 (\nu: 16.1)$ $(+0.1\sigma)$
Ω_Λ	0.6898	$0.690^{+0.014}_{-0.015}$ $(+0.8\sigma)$	$100\theta_D$	0.16096	$0.16097^{+0.00057}_{-0.00056}$ (-0.2σ)	$\chi_{6\text{DF}}^2$	0.022	$0.058 (\nu: 0.0)$
Ω_m	0.3102	$0.310^{+0.015}_{-0.014}$ (-0.8σ)	z_{eq}	3376	3375^{+57}_{-56} (-0.8σ)	χ_{MGS}^2	1.28	$1.36 (\nu: 0.1)$
$\Omega_m h^2$	0.14190	$0.1419^{+0.0024}_{-0.0023}$ (-0.8σ)	k_{eq}	0.010303	$0.01030^{+0.00017}_{-0.00017}$ (-0.8σ)	χ_{DR12BAO}^2	4.20	$4.8 (\nu: 1.3)$
$\Omega_m h^3$	0.09598	$0.09597^{+0.00099}_{-0.00099}$ (-0.0σ)	$100\theta_{\text{eq}}$	0.8178	$0.818^{+0.010}_{-0.010}$ $(+0.8\sigma)$	χ_{prior}^2	1.6	$7.4 (\nu: 6.9)$ $(+0.0\sigma)$
σ_8	0.8075	$0.808^{+0.015}_{-0.015}$ (-0.5σ)	$100\theta_{s,\text{eq}}$	0.4518	$0.4519^{+0.0054}_{-0.0054}$ $(+0.8\sigma)$	χ_{BAO}^2	5.50	$6.2 (\nu: 0.9)$
S_8	0.8211	$0.821^{+0.029}_{-0.028}$ (-0.8σ)	$H(0.15)$	72.90	$72.91^{+0.93}_{-0.92}$ $(+0.8\sigma)$	χ_{CMB}^2	1178.6	$1192.9 (\nu: 15.5)$ (-0.0σ)
$\sigma_8 \Omega_m^{0.5}$	0.4497	$0.450^{+0.016}_{-0.016}$ (-0.8σ)	$D_M(0.15)$	641.0	$641.0^{+9.2}_{-9.0}$ (-0.8σ)			
$\sigma_8 \Omega_m^{0.25}$	0.6026	$0.603^{+0.016}_{-0.016}$ (-0.8σ)	$H(0.38)$	82.99	$82.99^{+0.70}_{-0.69}$ $(+0.8\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 1185.71$; $\Delta\chi_{\text{eff}}^2 = -0.04$; $\bar{\chi}_{\text{eff}}^2 = 1206.47$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.44$; $R - 1 = 0.01307$

χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.00) MGS: 1.28 (Δ 0.00) DR12BAO: 4.20 (Δ 0.02) CMB - small_100x143.offlike5_EE_Aplanck_B: 396.07 (Δ 0.19) commander_dx12_v3_2_29: 22.13 (Δ -0.70) plik_rd12_HM_v22_TT: 760.40 (Δ 0.30)

12.3 base_nrun_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022169	$0.02218^{+0.00045}_{-0.00044}$ ($+0.1\sigma$)	$\sigma_8 \Omega_m^{0.25}$	0.6087	$0.609^{+0.015}_{-0.015}$ (-0.3σ)	$D_M(0.15)$	646.0	646^{+12}_{-12} (-0.2σ)
$\Omega_c h^2$	0.12026	$0.1202^{+0.0032}_{-0.0031}$ (-0.3σ)	$\sigma_8/h^{0.5}$	0.9898	$0.990^{+0.021}_{-0.021}$ (-0.3σ)	$H(0.38)$	82.63	$82.66^{+0.91}_{-0.89}$ ($+0.2\sigma$)
$100\theta_{MC}$	1.04081	$1.04082^{+0.00090}_{-0.00090}$ ($+0.1\sigma$)	$r_{drag}h$	98.75	$98.8^{+2.4}_{-2.4}$ ($+0.3\sigma$)	$D_M(0.38)$	1539.0	1538^{+25}_{-24} (-0.2σ)
τ	0.0527	$0.053^{+0.016}_{-0.016}$ (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.445	$2.443^{+0.052}_{-0.053}$ (-0.2σ)	$H(0.51)$	89.41	$89.44^{+0.73}_{-0.71}$ ($+0.2\sigma$)
$\ln(10^{10} A_s)$	3.0407	$3.043^{+0.030}_{-0.031}$ (-0.1σ)	z_{re}	7.56	$7.6^{+1.5}_{-1.7}$ (-0.0σ)	$D_M(0.51)$	1992.6	1992^{+29}_{-28} (-0.2σ)
n_s	0.9634	$0.963^{+0.010}_{-0.010}$ ($+0.2\sigma$)	$10^9 A_s$	2.092	$2.096^{+0.064}_{-0.065}$ (-0.1σ)	$H(0.61)$	95.08	$95.10^{+0.61}_{-0.60}$ ($+0.2\sigma$)
$dn_s/d \ln k$	-0.0016	$-0.003^{+0.014}_{-0.015}$ ($+0.2\sigma$)	$10^9 A_s e^{-2\tau}$	1.8827	$1.884^{+0.024}_{-0.024}$ (-0.2σ)	$D_M(0.61)$	2317.8	2317^{+31}_{-31} (-0.2σ)
y_{cal}	1.00017	$1.0005^{+0.0049}_{-0.0049}$ ($+0.0\sigma$)	D_{40}	1227.4	1225^{+40}_{-39} ($+0.0\sigma$)	$H(2.33)$	236.52	$236.5^{+1.9}_{-1.9}$ (-0.3σ)
A_{217}^{CIB}	51.0	48^{+10}_{-10} (-0.0σ)	D_{220}	5713	5716^{+80}_{-81} ($+0.1\sigma$)	$D_M(2.33)$	5774.2	5773^{+29}_{-29} (-0.2σ)
$\xi^{tSZ \times CIB}$	0.01	—	D_{810}	2535.9	2537^{+27}_{-27} (-0.1σ)	$f\sigma_8(0.15)$	0.4612	$0.461^{+0.016}_{-0.016}$ (-0.3σ)
A_{143}^{tSZ}	7.22	$5.0^{+4.0}_{-4.1}$ ($+0.0\sigma$)	D_{1420}	814.3	$814.2^{+9.9}_{-10}$ ($+0.1\sigma$)	$\sigma_8(0.15)$	0.7483	$0.748^{+0.011}_{-0.011}$ (-0.2σ)
A_{100}^{PS}	258	265^{+60}_{-50} (-0.0σ)	D_{2000}	229.47	$229.3^{+3.7}_{-3.9}$ ($+0.1\sigma$)	$f\sigma_8(0.38)$	0.4781	$0.478^{+0.012}_{-0.012}$ (-0.3σ)
A_{143}^{PS}	45.8	50^{+20}_{-20} (-0.1σ)	$n_{s,0.002}$	0.9684	$0.973^{+0.046}_{-0.045}$ (-0.1σ)	$\sigma_8(0.38)$	0.6626	$0.6627^{+0.0095}_{-0.0096}$ (-0.1σ)
$A_{143 \times 217}^{PS}$	39.3	43^{+20}_{-20} (-0.0σ)	Y_P	0.245313	$0.24531^{+0.00018}_{-0.00021}$ ($+0.1\sigma$)	$f\sigma_8(0.51)$	0.4759	$0.476^{+0.011}_{-0.011}$ (-0.3σ)
A_{217}^{PS}	115.9	115^{+20}_{-20} (-0.0σ)	Y_P^{BBN}	0.246639	$0.24664^{+0.00018}_{-0.00021}$ ($+0.1\sigma$)	$\sigma_8(0.51)$	0.6198	$0.6199^{+0.0090}_{-0.0092}$ (-0.1σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.624	$2.623^{+0.086}_{-0.083}$ (-0.1σ)	$f\sigma_8(0.61)$	0.4704	$0.4702^{+0.0093}_{-0.0095}$ (-0.2σ)
A_{100}^{dustTT}	8.95	$9.0^{+3.6}_{-3.5}$ ($+0.0\sigma$)	Age/Gyr	13.822	$13.820^{+0.066}_{-0.066}$ (-0.1σ)	$\sigma_8(0.61)$	0.5896	$0.5897^{+0.0087}_{-0.0088}$ (-0.1σ)
A_{143}^{dustTT}	10.82	$10.7^{+3.5}_{-3.4}$ (-0.0σ)	z_*	1090.20	$1090.18^{+0.72}_{-0.71}$ (-0.2σ)	$f\sigma_8(2.33)$	0.29700	$0.2971^{+0.0046}_{-0.0046}$ (-0.1σ)
$A_{143 \times 217}^{dustTT}$	19.0	$18.4^{+6.4}_{-6.5}$ ($+0.0\sigma$)	r_*	144.52	$144.53^{+0.76}_{-0.75}$ ($+0.3\sigma$)	$\sigma_8(2.33)$	0.3059	$0.3060^{+0.0051}_{-0.0051}$ (-0.0σ)
A_{217}^{dustTT}	93.8	93^{+10}_{-10} ($+0.0\sigma$)	$100\theta_*$	1.04102	$1.04103^{+0.00088}_{-0.00088}$ ($+0.1\sigma$)	f_{2000}^{143}	31.2	32^{+6}_{-6} (-0.1σ)
c_{100}	0.99962	$0.9996^{+0.0012}_{-0.0012}$ ($+0.0\sigma$)	$D_M(z_*)/\text{Gpc}$	13.882	$13.884^{+0.071}_{-0.070}$ ($+0.3\sigma$)	$f_{2000}^{143 \times 217}$	33.71	34^{+4}_{-4} (-0.1σ)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ ($+0.0\sigma$)	z_{drag}	1059.47	$1059.50^{+0.97}_{-1.0}$ ($+0.0\sigma$)	f_{2000}^{217}	108.15	$108.5^{+4.0}_{-4.0}$ (-0.1σ)
H_0	67.06	$67.1^{+1.4}_{-1.4}$ ($+0.2\sigma$)	r_{drag}	147.25	$147.26^{+0.79}_{-0.78}$ ($+0.3\sigma$)	$\chi^2_{lensing}$	8.93	9.59 ($\nu: 0.5$)
Ω_Λ	0.6819	$0.682^{+0.019}_{-0.020}$ ($+0.3\sigma$)	k_D	0.14055	$0.14054^{+0.00096}_{-0.00098}$ (-0.2σ)	χ^2_{small}	395.89	397.0 ($\nu: 1.3$) (-0.1σ)
Ω_m	0.3181	$0.318^{+0.020}_{-0.019}$ (-0.3σ)	$100\theta_D$	0.16102	$0.16101^{+0.00059}_{-0.00057}$ (-0.0σ)	χ^2_{lowl}	23.13	23.2 ($\nu: 2.2$) ($+0.1\sigma$)
$\Omega_m h^2$	0.14307	$0.1430^{+0.0030}_{-0.0029}$ (-0.3σ)	z_{eq}	3404	3402^{+72}_{-70} (-0.3σ)	χ^2_{plik}	758.9	772.1 ($\nu: 15.2$) (-0.1σ)
$\Omega_m h^3$	0.09595	$0.09595^{+0.00097}_{-0.00096}$ (-0.1σ)	k_{eq}	0.010388	$0.01038^{+0.00022}_{-0.00021}$ (-0.3σ)	χ^2_{prior}	1.6	7.3 ($\nu: 6.8$) ($+0.0\sigma$)
σ_8	0.8105	$0.811^{+0.012}_{-0.013}$ (-0.2σ)	$100\theta_{eq}$	0.8124	$0.813^{+0.013}_{-0.013}$ ($+0.3\sigma$)	χ^2_{CMB}	1186.9	1201.9 ($\nu: 15.7$) ($+1.6\sigma$)
S_8	0.8347	$0.834^{+0.033}_{-0.032}$ (-0.3σ)	$100\theta_{s,eq}$	0.4491	$0.4493^{+0.0069}_{-0.0069}$ ($+0.3\sigma$)			
$\sigma_8 \Omega_m^{0.5}$	0.4572	$0.457^{+0.018}_{-0.017}$ (-0.3σ)	$H(0.15)$	72.41	$72.4^{+1.2}_{-1.2}$ ($+0.2\sigma$)			

Best-fit $\chi^2_{eff} = 1188.47$; $\Delta\chi^2_{eff} = -0.10$; $\bar{\chi}^2_{eff} = 1209.27$; $\Delta\bar{\chi}^2_{eff} = 0.86$; $R - 1 = 0.01153$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp.p_teb_consect8: 8.93 (Δ 0.03) small_100x143_offlike5_EE_Aplanck_B: 395.89 (Δ 0.02) commander_dx12_v3_2_29: 23.13 (Δ -0.10) plik_rd12_HM_v22_TT: 758.91 (Δ -0.41)

12.4 base_nrun_plikHM_TT_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022258	$0.02225^{+0.00042}_{-0.00043}$ $(+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9836	$0.984^{+0.017}_{-0.017}$ (-0.6σ)	$D_M(0.38)$	1529.3	1530^{+17}_{-17} (-0.8σ)
$\Omega_c h^2$	0.11902	$0.1191^{+0.0022}_{-0.0021}$ (-0.8σ)	$r_{\text{drag}} h$	99.74	$99.7^{+1.6}_{-1.6}$ $(+0.8\sigma)$	$H(0.51)$	89.68	$89.67^{+0.55}_{-0.55}$ $(+0.7\sigma)$
$100\theta_{\text{MC}}$	1.04101	$1.04099^{+0.00083}_{-0.00084}$ $(+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4298	$2.431^{+0.046}_{-0.046}$ (-0.5σ)	$D_M(0.51)$	1981.2	1982^{+20}_{-20} (-0.8σ)
τ	0.0553	$0.056^{+0.015}_{-0.015}$ $(+0.3\sigma)$	z_{re}	7.79	$7.9^{+1.4}_{-1.5}$ $(+0.3\sigma)$	$H(0.61)$	95.291	$95.28^{+0.48}_{-0.48}$ $(+0.7\sigma)$
$\ln(10^{10} A_s)$	3.0442	$3.046^{+0.031}_{-0.031}$ $(+0.1\sigma)$	$10^9 A_s$	2.099	$2.104^{+0.065}_{-0.064}$ $(+0.1\sigma)$	$D_M(0.61)$	2305.6	2306^{+22}_{-22} (-0.8σ)
n_s	0.9672	$0.9657^{+0.0084}_{-0.0084}$ $(+0.6\sigma)$	$10^9 A_s e^{-2\tau}$	1.8795	$1.880^{+0.022}_{-0.022}$ (-0.5σ)	$H(2.33)$	235.81	$235.8^{+1.4}_{-1.4}$ (-0.8σ)
$dn_s/d \ln k$	-0.0008	$-0.003^{+0.014}_{-0.015}$ $(+0.2\sigma)$	D_{40}	1223.0	1221^{+38}_{-38} (-0.2σ)	$D_M(2.33)$	5765.1	5766^{+25}_{-25} (-0.6σ)
y_{cal}	1.00066	$1.0007^{+0.0049}_{-0.0049}$ $(+0.1\sigma)$	D_{220}	5723	5725^{+79}_{-78} $(+0.3\sigma)$	$f\sigma_8(0.15)$	0.4553	$0.456^{+0.012}_{-0.012}$ (-0.7σ)
A_{217}^{CIB}	48.8	48^{+10}_{-10} (-0.0σ)	D_{810}	2538.8	2538^{+27}_{-27} (-0.0σ)	$\sigma_8(0.15)$	0.7476	$0.748^{+0.011}_{-0.011}$ (-0.3σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.32	—	D_{1420}	816.8	$815.3^{+9.8}_{-10}$ $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4739	$0.4741^{+0.0099}_{-0.0099}$ (-0.6σ)
A_{143}^{tSZ}	7.02	$5.0^{+3.9}_{-4.1}$ $(+0.1\sigma)$	D_{2000}	230.43	$229.8^{+3.7}_{-3.7}$ $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6628	$0.6629^{+0.0097}_{-0.0096}$ (-0.1σ)
A_{100}^{PS}	254	264^{+60}_{-60} (-0.1σ)	$n_{s,0.002}$	0.9699	$0.975^{+0.046}_{-0.044}$ (-0.0σ)	$f\sigma_8(0.51)$	0.4726	$0.4728^{+0.0088}_{-0.0088}$ (-0.6σ)
A_{143}^{PS}	49.0	49^{+20}_{-20} (-0.2σ)	Y_P	0.245350	$0.24534^{+0.00017}_{-0.00018}$ $(+0.4\sigma)$	$\sigma_8(0.51)$	0.6204	$0.6204^{+0.0091}_{-0.0090}$ (-0.0σ)
$A_{143 \times 217}^{\text{PS}}$	46.7	43^{+20}_{-20} (-0.1σ)	Y_P^{BBN}	0.246676	$0.24667^{+0.00017}_{-0.00018}$ $(+0.4\sigma)$	$f\sigma_8(0.61)$	0.4677	$0.4679^{+0.0082}_{-0.0082}$ (-0.6σ)
A_{217}^{PS}	119.1	114^{+20}_{-20} (-0.0σ)	$10^5 \text{D}/\text{H}$	2.607	$2.609^{+0.082}_{-0.076}$ (-0.4σ)	$\sigma_8(0.61)$	0.5903	$0.5903^{+0.0088}_{-0.0086}$ $(+0.0\sigma)$
A^{kSZ}	0.0	—	Age/Gyr	13.802	$13.803^{+0.058}_{-0.057}$ (-0.6σ)	$f\sigma_8(2.33)$	0.29769	$0.2977^{+0.0045}_{-0.0045}$ $(+0.2\sigma)$
A_{100}^{dustTT}	8.86	$9.0^{+3.6}_{-3.5}$ $(+0.0\sigma)$	z_*	1089.98	$1089.99^{+0.62}_{-0.60}$ (-0.6σ)	$\sigma_8(2.33)$	0.30696	$0.3069^{+0.0049}_{-0.0048}$ $(+0.3\sigma)$
A_{143}^{dustTT}	10.79	$10.7^{+3.5}_{-3.5}$ (-0.0σ)	r_*	144.77	$144.76^{+0.59}_{-0.58}$ $(+0.7\sigma)$	f_{2000}^{143}	30.1	31^{+6}_{-6} (-0.2σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.3	$18.4^{+6.3}_{-6.5}$ $(+0.0\sigma)$	$100\theta_*$	1.04120	$1.04119^{+0.00083}_{-0.00082}$ $(+0.4\sigma)$	$f_{2000}^{143 \times 217}$	33.07	34^{+4}_{-4} (-0.2σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} $(+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.904	$13.903^{+0.059}_{-0.057}$ $(+0.7\sigma)$	f_{2000}^{217}	107.56	$108.2^{+4.0}_{-4.0}$ (-0.2σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	z_{drag}	1059.59	$1059.59^{+0.95}_{-0.96}$ $(+0.2\sigma)$	χ_{lensing}^2	8.88	9.35 ($\nu: 0.3$)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (-0.0σ)	r_{drag}	147.48	$147.47^{+0.67}_{-0.66}$ $(+0.7\sigma)$	χ_{simall}^2	396.19	397.2 ($\nu: 1.7$) $(+0.1\sigma)$
H_0	67.63	$67.60^{+0.97}_{-0.98}$ $(+0.8\sigma)$	k_D	0.14038	$0.14038^{+0.00091}_{-0.00092}$ (-0.5σ)	χ_{lowl}^2	22.70	22.8 ($\nu: 1.8$) (-0.1σ)
Ω_Λ	0.6897	$0.689^{+0.013}_{-0.013}$ $(+0.8\sigma)$	$100\theta_D$	0.16096	$0.16097^{+0.00056}_{-0.00056}$ (-0.2σ)	χ_{plik}^2	759.9	772.4 ($\nu: 15.2$) (-0.1σ)
Ω_m	0.3103	$0.311^{+0.013}_{-0.013}$ (-0.8σ)	z_{eq}	3376	3378^{+50}_{-51} (-0.8σ)	$\chi_{6\text{DF}}^2$	0.023	0.056 ($\nu: 0.0$)
$\Omega_m h^2$	0.14193	$0.1420^{+0.0021}_{-0.0021}$ (-0.8σ)	k_{eq}	0.010305	$0.01031^{+0.00015}_{-0.00015}$ (-0.8σ)	χ_{MGS}^2	1.28	1.30 ($\nu: 0.1$)
$\Omega_m h^3$	0.09599	$0.09598^{+0.00097}_{-0.00096}$ (-0.0σ)	$100\theta_{\text{eq}}$	0.8177	$0.8175^{+0.0092}_{-0.0092}$ $(+0.8\sigma)$	χ_{DR12BAO}^2	4.23	4.8 ($\nu: 1.1$)
σ_8	0.8089	$0.809^{+0.012}_{-0.012}$ (-0.4σ)	$100\theta_{s,\text{eq}}$	0.45178	$0.4517^{+0.0048}_{-0.0047}$ $(+0.8\sigma)$	χ_{prior}^2	1.4	7.4 ($\nu: 6.9$) $(+0.0\sigma)$
S_8	0.8227	$0.823^{+0.024}_{-0.023}$ (-0.7σ)	$H(0.15)$	72.90	$72.87^{+0.84}_{-0.85}$ $(+0.8\sigma)$	χ_{CMB}^2	1187.7	1201.8 ($\nu: 15.5$) $(+1.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4506	$0.451^{+0.013}_{-0.013}$ (-0.7σ)	$D_M(0.15)$	641.1	$641.4^{+8.5}_{-8.3}$ (-0.8σ)	χ_{BAO}^2	5.53	6.1 ($\nu: 0.7$)
$\sigma_8 \Omega_m^{0.25}$	0.6037	$0.604^{+0.012}_{-0.012}$ (-0.6σ)	$H(0.38)$	82.98	$82.96^{+0.64}_{-0.65}$ $(+0.8\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 1194.63$; $\Delta\chi_{\text{eff}}^2 = -0.05$; $\bar{\chi}_{\text{eff}}^2 = 1215.34$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.61$; $R - 1 = 0.01612$

χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.28 (Δ 0.06) DR12BAO: 4.23 (Δ -0.15) CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 8.88 (Δ 0.01) simall_100x143_offlike5.EE.Aplanck 396.19 (Δ 0.09) commander_dx12.v3.2.29: 22.70 (Δ -0.26) plik_rd12_HM.v22.TT: 759.95 (Δ 0.14)

12.5 base_nrun_plikHM_TT_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022390	$0.02240^{+0.00045}_{-0.00046}$ (+1.0 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5941	$0.595^{+0.020}_{-0.021}$ (−1.4 σ)	$D_M(0.15)$	634.5	635^{+13}_{-12} (−1.6 σ)
$\Omega_c h^2$	0.11735	$0.1175^{+0.0035}_{-0.0033}$ (−1.5 σ)	$\sigma_8/h^{0.5}$	0.9706	$0.972^{+0.028}_{-0.029}$ (−1.4 σ)	$H(0.38)$	83.47	$83.47^{+0.92}_{-0.97}$ (+1.7 σ)
$100\theta_{MC}$	1.04122	$1.04125^{+0.00089}_{-0.00088}$ (+1.0 σ)	$r_{drag}h$	101.10	$101.0^{+2.5}_{-2.7}$ (+1.6 σ)	$D_M(0.38)$	1516.0	1516^{+25}_{-25} (−1.6 σ)
τ	0.0562	$0.057^{+0.016}_{-0.016}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.399	$2.400^{+0.068}_{-0.070}$ (−1.3 σ)	$H(0.51)$	90.07	$90.07^{+0.75}_{-0.78}$ (+1.6 σ)
$\ln(10^{10} A_s)$	3.0418	$3.044^{+0.034}_{-0.035}$ (+0.0 σ)	z_{re}	7.83	$7.9^{+1.6}_{-1.7}$ (+0.3 σ)	$D_M(0.51)$	1965.7	1966^{+31}_{-28} (−1.6 σ)
n_s	0.9709	$0.970^{+0.010}_{-0.011}$ (+1.3 σ)	$10^9 A_s$	2.094	$2.100^{+0.072}_{-0.074}$ (+0.0 σ)	$H(0.61)$	95.59	$95.60^{+0.68}_{-0.64}$ (+1.6 σ)
$dn_s/d \ln k$	−0.0017	$−0.004^{+0.015}_{-0.016}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8716	$1.873^{+0.025}_{-0.024}$ (−0.9 σ)	$D_M(0.61)$	2288.8	2289^{+33}_{-31} (−1.6 σ)
y_{cal}	1.00047	$1.0007^{+0.0049}_{-0.0050}$ (+0.1 σ)	D_{40}	1212.2	1209^{+41}_{-41} (−0.7 σ)	$H(2.33)$	234.86	$235.0^{+2.2}_{-2.0}$ (−1.4 σ)
A_{217}^{CIB}	49.2	48^{+10}_{-10} (−0.1 σ)	D_{220}	5728	5731^{+83}_{-77} (+0.4 σ)	$D_M(2.33)$	5752.4	5752^{+30}_{-33} (−1.5 σ)
$\xi^{tSZ \times CIB}$	0.26	—	D_{810}	2536.5	2537^{+26}_{-27} (−0.0 σ)	$f\sigma_8(0.15)$	0.4451	$0.446^{+0.021}_{-0.020}$ (−1.5 σ)
A_{143}^{tSZ}	7.10	$5.2^{+4.0}_{-4.2}$ (+0.2 σ)	D_{1420}	817.2	$816.6^{+9.7}_{-11}$ (+0.5 σ)	$\sigma_8(0.15)$	0.7430	$0.744^{+0.015}_{-0.015}$ (−0.8 σ)
A_{100}^{PS}	255	262^{+60}_{-60} (−0.1 σ)	D_{2000}	230.61	$230.3^{+3.6}_{-3.9}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.4659	$0.466^{+0.017}_{-0.017}$ (−1.4 σ)
A_{143}^{PS}	47.4	48^{+20}_{-20} (−0.2 σ)	$n_{s,0.002}$	0.9764	$0.983^{+0.047}_{-0.047}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6599	$0.660^{+0.012}_{-0.012}$ (−0.5 σ)
$A_{143 \times 217}^{PS}$	44.4	43^{+20}_{-20} (−0.1 σ)	Y_P	0.245403	$0.24540^{+0.00018}_{-0.00019}$ (+1.0 σ)	$f\sigma_8(0.51)$	0.4658	$0.466^{+0.015}_{-0.015}$ (−1.4 σ)
A_{217}^{PS}	117.6	114^{+20}_{-20} (−0.0 σ)	Y_P^{BBN}	0.246730	$0.24673^{+0.00018}_{-0.00019}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6181	$0.618^{+0.011}_{-0.011}$ (−0.4 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.582	$2.580^{+0.086}_{-0.082}$ (−1.0 σ)	$f\sigma_8(0.61)$	0.4618	$0.462^{+0.013}_{-0.014}$ (−1.3 σ)
A_{100}^{dustTT}	8.91	$9.1^{+3.4}_{-3.5}$ (+0.1 σ)	Age/Gyr	13.775	$13.773^{+0.067}_{-0.074}$ (−1.4 σ)	$\sigma_8(0.61)$	0.5884	$0.589^{+0.010}_{-0.011}$ (−0.3 σ)
A_{143}^{dustTT}	10.84	$10.8^{+3.6}_{-3.5}$ (+0.0 σ)	z_*	1089.66	$1089.66^{+0.72}_{-0.71}$ (−1.4 σ)	$f\sigma_8(2.33)$	0.2972	$0.2973^{+0.0050}_{-0.0054}$ (+0.0 σ)
$A_{143 \times 217}^{dustTT}$	19.3	$18.5^{+6.3}_{-6.2}$ (+0.1 σ)	r_*	145.11	$145.07^{+0.79}_{-0.85}$ (+1.3 σ)	$\sigma_8(2.33)$	0.3069	$0.3070^{+0.0053}_{-0.0055}$ (+0.4 σ)
A_{217}^{dustTT}	94.4	94^{+20}_{-10} (+0.1 σ)	$100\theta_*$	1.04141	$1.04144^{+0.00084}_{-0.00086}$ (+1.0 σ)	f_{2000}^{143}	29.9	31^{+6}_{-6} (−0.3 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0011}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.934	$13.929^{+0.077}_{-0.079}$ (+1.3 σ)	$f_{2000}^{143 \times 217}$	32.85	33^{+4}_{-5} (−0.4 σ)
c_{217}	0.99827	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{drag}	1059.78	$1059.8^{+1.0}_{-1.0}$ (+0.7 σ)	f_{2000}^{217}	107.31	$107.9^{+4.3}_{-4.0}$ (−0.4 σ)
H_0	68.42	$68.4^{+1.4}_{-1.5}$ (+1.6 σ)	r_{drag}	147.78	$147.73^{+0.80}_{-0.89}$ (+1.2 σ)	χ_{small}^2	396.20	397.4 (ν : 2.1) (+0.2 σ)
Ω_Λ	0.7001	$0.699^{+0.019}_{-0.020}$ (+1.6 σ)	k_D	0.14016	$0.1402^{+0.0010}_{-0.0010}$ (−0.8 σ)	χ_{lowl}^2	21.84	22.0 (ν : 1.3) (−0.6 σ)
Ω_m	0.2999	$0.301^{+0.020}_{-0.019}$ (−1.6 σ)	$100\theta_D$	0.16086	$0.16085^{+0.00058}_{-0.00055}$ (−0.6 σ)	χ_{plik}^2	762.8	775.9 (ν : 19.9) (+0.6 σ)
$\Omega_m h^2$	0.14038	$0.1405^{+0.0033}_{-0.0030}$ (−1.5 σ)	z_{eq}	3339	3343^{+80}_{-72} (−1.5 σ)	$\chi_{H073p45}^2$	9.2	9.5 (ν : 4.1)
$\Omega_m h^3$	0.09604	$0.0961^{+0.0011}_{-0.0011}$ (+0.2 σ)	k_{eq}	0.010192	$0.01020^{+0.00024}_{-0.00022}$ (−1.5 σ)	χ_{prior}^2	1.4	7.5 (ν : 7.0) (+0.0 σ)
σ_8	0.8028	$0.803^{+0.017}_{-0.017}$ (−1.0 σ)	$100\theta_{eq}$	0.8250	$0.825^{+0.014}_{-0.015}$ (+1.6 σ)	χ_{CMB}^2	1180.9	1195.2 (ν : 18.8) (+0.4 σ)
S_8	0.8027	$0.804^{+0.040}_{-0.038}$ (−1.5 σ)	$100\theta_{s,eq}$	0.4555	$0.4552^{+0.0073}_{-0.0078}$ (+1.6 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4397	$0.440^{+0.022}_{-0.021}$ (−1.5 σ)	$H(0.15)$	73.57	$73.6^{+1.3}_{-1.3}$ (+1.7 σ)			

Best-fit $\chi_{eff}^2 = 1191.49$; $\Delta\chi_{eff}^2 = -0.08$; $\bar{\chi}_{eff}^2 = 1212.16$; $\Delta\bar{\chi}_{eff}^2 = 0.08$; $R - 1 = 0.05554$
 χ_{eff}^2 : CMB - simall_100x143.offlike5_EE_Aplanck_B: 396.20 (Δ 0.13) commander_dx12_v3.2.29: 21.84 (Δ -0.25) plik_rd12_HM_v22_TT: 762.82 (Δ -0.20) Hubble - H073p45: 9.20 (Δ 0.21)

12.6 base_nrun_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02217^{+0.00045}_{-0.00044} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.461^{+0.026}_{-0.025} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4482^{+0.0091}_{-0.0089} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1207^{+0.0041}_{-0.0041} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.612^{+0.023}_{-0.023} \quad (+0.0\sigma)$	$H(0.15)$	$72.3^{+1.5}_{-1.5} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.04079^{+0.00094}_{-0.00091} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$D_M(0.15)$	$647^{+16}_{-15} \quad (-0.0\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$r_{drag} h$	$98.5^{+3.2}_{-3.1} \quad (+0.0\sigma)$	$H(0.38)$	$82.6^{+1.1}_{-1.1} \quad (+0.0\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.030}_{-0.029} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.452^{+0.073}_{-0.074} \quad (+0.0\sigma)$	$D_M(0.38)$	$1542^{+31}_{-31} \quad (-0.0\sigma)$
n_s	$0.962^{+0.012}_{-0.011} \quad (+0.0\sigma)$	z_{re}	$< 8.99 \quad (+0.2\sigma)$	$H(0.51)$	$89.36^{+0.88}_{-0.83} \quad (+0.0\sigma)$
$dn_s/d \ln k$	$-0.005^{+0.015}_{-0.015} \quad (-0.0\sigma)$	$10^9 A_s$	$2.106^{+0.063}_{-0.060} \quad (+0.2\sigma)$	$D_M(0.51)$	$1996^{+36}_{-36} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.887^{+0.028}_{-0.028} \quad (-0.0\sigma)$	$H(0.61)$	$95.05^{+0.71}_{-0.66} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1224^{+41}_{-41} \quad (-0.0\sigma)$	$D_M(0.61)$	$2321^{+38}_{-39} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5713^{+81}_{-81} \quad (+0.0\sigma)$	$H(2.33)$	$236.8^{+2.6}_{-2.5} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{810}	$2538^{+27}_{-28} \quad (+0.0\sigma)$	$D_M(2.33)$	$5775^{+31}_{-33} \quad (-0.0\sigma)$
A_{100}^{PS}	$266^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.023} \quad (+0.0\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.2^{+3.8}_{-3.8} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.014}_{-0.014} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.977^{+0.046}_{-0.045} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.018}_{-0.019} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.24531^{+0.00018}_{-0.00021} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24663^{+0.00018}_{-0.00021} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.5} \quad (+0.0\sigma)$	$10^5 D/H$	$2.624^{+0.085}_{-0.084} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0093} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.824^{+0.070}_{-0.073} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.014}_{-0.014} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	z_*	$1090.24^{+0.80}_{-0.79} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0095}_{-0.0086} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.41^{+0.96}_{-0.97} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0044}_{-0.0042} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.04099^{+0.00092}_{-0.00090} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0046}_{-0.0044} \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.872^{+0.089}_{-0.090} \quad (+0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$66.9^{+1.8}_{-1.8} \quad (+0.0\sigma)$	z_{drag}	$1059.52^{+0.99}_{-0.96} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.0\sigma)$
Ω_Λ	$0.679^{+0.025}_{-0.026} \quad (+0.0\sigma)$	r_{drag}	$147.14^{+0.98}_{-0.99} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.6^{+4.1}_{-4.0} \quad (-0.0\sigma)$
Ω_m	$0.321^{+0.026}_{-0.025} \quad (-0.0\sigma)$	k_D	$0.1407^{+0.0011}_{-0.0011} \quad (+0.0\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (-0.0\sigma)$
$\Omega_m h^2$	$0.1435^{+0.0040}_{-0.0039} \quad (-0.0\sigma)$	$100\theta_D$	$0.16100^{+0.00057}_{-0.00056} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 2.0) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.09601^{+0.00096}_{-0.00096} \quad (+0.0\sigma)$	z_{eq}	$3414^{+94}_{-94} \quad (-0.0\sigma)$	χ_{plik}^2	$772.6 \quad (\nu: 16.2) \quad (-0.0\sigma)$
σ_8	$0.813^{+0.017}_{-0.017} \quad (+0.1\sigma)$	k_{eq}	$0.01042^{+0.00029}_{-0.00029} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
S_8	$0.841^{+0.048}_{-0.046} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.811^{+0.018}_{-0.017} \quad (+0.0\sigma)$	χ_{CMB}^2	$1192.6 \quad (\nu: 15.4) \quad (-0.0\sigma)$

$\bar{\chi}_{eff}^2 = 1199.98$; $\Delta \bar{\chi}_{eff}^2 = 0.66$; $R - 1 = 0.00614$

12.7 base_nrun_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02226^{+0.00042}_{-0.00042} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$D_M(0.38)$	$1529^{+18}_{-18} \quad (-0.8\sigma)$
$\Omega_c h^2$	$0.1190^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.8}_{-1.8} \quad (+0.9\sigma)$	$H(0.51)$	$89.70^{+0.58}_{-0.57} \quad (+0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04101^{+0.00084}_{-0.00083} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.054}_{-0.054} \quad (-0.6\sigma)$	$D_M(0.51)$	$1981^{+22}_{-21} \quad (-0.8\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.3\sigma)$	z_{re}	$< 9.07 \quad (+0.3\sigma)$	$H(0.61)$	$95.30^{+0.50}_{-0.49} \quad (+0.8\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.030}_{-0.030} \quad (+0.1\sigma)$	$10^9 A_s$	$2.103^{+0.064}_{-0.063} \quad (+0.1\sigma)$	$D_M(0.61)$	$2305^{+23}_{-23} \quad (-0.8\sigma)$
n_s	$0.9661^{+0.0088}_{-0.0088} \quad (+0.7\sigma)$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.024}_{-0.024} \quad (-0.5\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.6} \quad (-0.8\sigma)$
$dn_s/d \ln k$	$-0.004^{+0.015}_{-0.015} \quad (+0.1\sigma)$	D_{40}	$1218^{+39}_{-40} \quad (-0.3\sigma)$	$D_M(2.33)$	$5765^{+25}_{-25} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	D_{220}	$5721^{+80}_{-80} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.015}_{-0.014} \quad (-0.8\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2537^{+28}_{-28} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.0^{+9.8}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.0^{+4.0}_{-4.0} \quad (+0.1\sigma)$	D_{2000}	$229.6^{+3.6}_{-3.7} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.978^{+0.046}_{-0.045} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.010} \quad (-0.7\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24535^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6200^{+0.0098}_{-0.0095} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24667^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.0096} \quad (-0.6\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.607^{+0.081}_{-0.076} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0093}_{-0.0089} \quad (-0.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.801^{+0.059}_{-0.057} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0046}_{-0.0044} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	z_*	$1089.97^{+0.62}_{-0.59} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3068^{+0.0048}_{-0.0046} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.78^{+0.66}_{-0.65} \quad (+0.8\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.3}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04120^{+0.00083}_{-0.00083} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.905^{+0.065}_{-0.064} \quad (+0.7\sigma)$	f_{2000}^{217}	$108.3^{+4.1}_{-4.0} \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.61^{+0.94}_{-0.97} \quad (+0.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.49^{+0.74}_{-0.73} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.6 \quad (\nu: 1.6) \quad (-0.3\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.8\sigma)$	k_{D}	$0.14036^{+0.00097}_{-0.00097} \quad (-0.5\sigma)$	χ_{plik}^2	$773.0 \quad (\nu: 16.0) \quad (+0.0\sigma)$
Ω_Λ	$0.690^{+0.014}_{-0.015} \quad (+0.9\sigma)$	$100\theta_{\text{D}}$	$0.16096^{+0.00056}_{-0.00056} \quad (-0.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.057 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3375^{+57}_{-56} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.36 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^2$	$0.1419^{+0.0024}_{-0.0023} \quad (-0.8\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{DR12BAO}^2	$4.7 \quad (\nu: 1.3)$
$\Omega_{\text{m}} h^3$	$0.09598^{+0.00099}_{-0.00098} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
σ_8	$0.808^{+0.015}_{-0.013} \quad (-0.4\sigma)$	$100\theta_{s,\text{eq}}$	$0.4519^{+0.0054}_{-0.0054} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
S_8	$0.822^{+0.029}_{-0.028} \quad (-0.8\sigma)$	$H(0.15)$	$72.92^{+0.92}_{-0.92} \quad (+0.8\sigma)$	χ_{CMB}^2	$1192.6 \quad (\nu: 15.1) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.450^{+0.016}_{-0.015} \quad (-0.8\sigma)$	$D_M(0.15)$	$640.9^{+9.2}_{-8.9} \quad (-0.8\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.603^{+0.016}_{-0.015} \quad (-0.7\sigma)$	$H(0.38)$	$83.00^{+0.70}_{-0.69} \quad (+0.8\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1206.22; \Delta \bar{\chi}_{\text{eff}}^2 = 0.46; R - 1 = 0.01231$$

12.8 base_nrun_plikHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02219^{+0.00044}_{-0.00044} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.3\sigma)$	$D_{\text{M}}(0.15)$	$645^{+12}_{-12} \quad (-0.3\sigma)$
$\Omega_{\text{c}} h^2$	$0.1200^{+0.0030}_{-0.0030} \quad (-0.3\sigma)$	$\sigma_8 / h^{0.5}$	$0.990^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$H(0.38)$	$82.70^{+0.88}_{-0.85} \quad (+0.3\sigma)$
$100\theta_{\text{MC}}$	$1.04084^{+0.00090}_{-0.00089} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$98.9^{+2.4}_{-2.3} \quad (+0.3\sigma)$	$D_{\text{M}}(0.38)$	$1537^{+23}_{-23} \quad (-0.3\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.444^{+0.052}_{-0.053} \quad (-0.2\sigma)$	$H(0.51)$	$89.47^{+0.71}_{-0.68} \quad (+0.3\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.045^{+0.027}_{-0.026} \quad (+0.1\sigma)$	z_{re}	$< 8.89 \quad (+0.2\sigma)$	$D_{\text{M}}(0.51)$	$1991^{+27}_{-27} \quad (-0.3\sigma)$
n_{s}	$0.9635^{+0.0099}_{-0.0098} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.101^{+0.056}_{-0.054} \quad (+0.1\sigma)$	$H(0.61)$	$95.12^{+0.60}_{-0.57} \quad (+0.3\sigma)$
$\text{d}n_{\text{s}}/\text{d} \ln k$	$-0.003^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.883^{+0.023}_{-0.023} \quad (-0.3\sigma)$	$D_{\text{M}}(0.61)$	$2316^{+30}_{-30} \quad (-0.3\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0050} \quad (-0.0\sigma)$	D_{40}	$1224^{+39}_{-39} \quad (-0.0\sigma)$	$H(2.33)$	$236.4^{+1.9}_{-1.9} \quad (-0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{220}	$5717^{+80}_{-81} \quad (+0.1\sigma)$	$D_{\text{M}}(2.33)$	$5772^{+29}_{-29} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{810}	$2537^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.0^{+4.0}_{-4.1} \quad (+0.0\sigma)$	D_{1420}	$814.2^{+9.9}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.010} \quad (-0.1\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} \quad (-0.0\sigma)$	D_{2000}	$229.3^{+3.7}_{-3.9} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.012} \quad (-0.3\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\text{s},0.002}$	$0.974^{+0.046}_{-0.044} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6634^{+0.0090}_{-0.0084} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24532^{+0.00017}_{-0.00021} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00017}_{-0.00021} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0085}_{-0.0078} \quad (+0.0\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.620^{+0.084}_{-0.081} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0093}_{-0.0094} \quad (-0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	Age/Gyr	$13.818^{+0.065}_{-0.065} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0082}_{-0.0074} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.4} \quad (-0.0\sigma)$	z_*	$1090.15^{+0.70}_{-0.70} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0041}_{-0.0039} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.4}_{-6.5} \quad (+0.0\sigma)$	r_*	$144.56^{+0.74}_{-0.74} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0045}_{-0.0043} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04104^{+0.00087}_{-0.00088} \quad (+0.1\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.886^{+0.070}_{-0.069} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.52^{+0.98}_{-1.0} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.4^{+4.0}_{-4.0} \quad (-0.1\sigma)$
H_0	$67.2^{+1.4}_{-1.3} \quad (+0.3\sigma)$	r_{drag}	$147.28^{+0.78}_{-0.78} \quad (+0.3\sigma)$	χ_{lensing}^2	$9.58 \quad (\nu: 0.5)$
Ω_{Λ}	$0.683^{+0.018}_{-0.019} \quad (+0.3\sigma)$	k_{D}	$0.14053^{+0.00096}_{-0.00098} \quad (-0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{m}	$0.317^{+0.019}_{-0.018} \quad (-0.3\sigma)$	$100\theta_{\text{D}}$	$0.16100^{+0.00057}_{-0.00056} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 2.1) \quad (+0.0\sigma)$
$\Omega_{\text{m}} h^2$	$0.1429^{+0.0029}_{-0.0029} \quad (-0.3\sigma)$	z_{eq}	$3399^{+70}_{-69} \quad (-0.3\sigma)$	χ_{plik}^2	$772.1 \quad (\nu: 15.3) \quad (-0.1\sigma)$
$\Omega_{\text{m}} h^3$	$0.09596^{+0.00097}_{-0.00095} \quad (-0.1\sigma)$	k_{eq}	$0.01037^{+0.00021}_{-0.00021} \quad (-0.3\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
σ_8	$0.811^{+0.012}_{-0.012} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.813^{+0.013}_{-0.013} \quad (+0.3\sigma)$	χ_{CMB}^2	$1201.7 \quad (\nu: 15.3) \quad (+1.6\sigma)$
S_8	$0.834^{+0.033}_{-0.032} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4495^{+0.0067}_{-0.0066} \quad (+0.3\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.457^{+0.018}_{-0.017} \quad (-0.3\sigma)$	$H(0.15)$	$72.5^{+1.2}_{-1.2} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1209.03; \Delta \bar{\chi}_{\text{eff}}^2 = 0.87; R - 1 = 0.01103$$

12.9 base_nrun_plikHM_TT_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02226^{+0.00042}_{-0.00042} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.017} \quad (-0.6\sigma)$	$D_M(0.38)$	$1530^{+17}_{-17} \quad (-0.8\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0021}_{-0.0021} \quad (-0.8\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$H(0.51)$	$89.68^{+0.54}_{-0.54} \quad (+0.8\sigma)$
$100\theta_{\text{MC}}$	$1.04099^{+0.00083}_{-0.00083} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.045}_{-0.045} \quad (-0.5\sigma)$	$D_M(0.51)$	$1982^{+20}_{-20} \quad (-0.8\sigma)$
τ	$0.057^{+0.013}_{-0.013} \quad (+0.4\sigma)$	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.4\sigma)$	$H(0.61)$	$95.29^{+0.48}_{-0.48} \quad (+0.7\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.027}_{-0.027} \quad (+0.2\sigma)$	$10^9 A_s$	$2.106^{+0.058}_{-0.057} \quad (+0.2\sigma)$	$D_M(0.61)$	$2306^{+22}_{-21} \quad (-0.8\sigma)$
n_s	$0.9658^{+0.0084}_{-0.0084} \quad (+0.6\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$H(2.33)$	$235.8^{+1.4}_{-1.4} \quad (-0.8\sigma)$
$dn_s/d \ln k$	$-0.003^{+0.015}_{-0.015} \quad (+0.2\sigma)$	D_{40}	$1221^{+38}_{-38} \quad (-0.2\sigma)$	$D_M(2.33)$	$5765^{+25}_{-25} \quad (-0.6\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5725^{+79}_{-78} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2538^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.3^{+9.7}_{-10} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4743^{+0.0098}_{-0.0098} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.9}_{-4.0} \quad (+0.1\sigma)$	D_{2000}	$229.8^{+3.7}_{-3.7} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6632^{+0.0094}_{-0.0088} \quad (-0.1\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.976^{+0.046}_{-0.044} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.4730^{+0.0087}_{-0.0087} \quad (-0.6\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.2\sigma)$	Y_{P}	$0.24535^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6207^{+0.0088}_{-0.0082} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24667^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4681^{+0.0080}_{-0.0079} \quad (-0.5\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.608^{+0.081}_{-0.076} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0085}_{-0.0078} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.803^{+0.058}_{-0.057} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0043}_{-0.0039} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.4} \quad (+0.0\sigma)$	z_*	$1089.98^{+0.61}_{-0.59} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0045}_{-0.0043} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$10.7^{+3.4}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.76^{+0.59}_{-0.57} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.2}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04119^{+0.00083}_{-0.00082} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.904^{+0.058}_{-0.056} \quad (+0.7\sigma)$	f_{2000}^{217}	$108.2^{+4.0}_{-4.0} \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.60^{+0.94}_{-0.97} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.32 \quad (\nu: 0.2)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.47^{+0.67}_{-0.66} \quad (+0.7\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.7) \quad (+0.1\sigma)$
H_0	$67.62^{+0.97}_{-0.97} \quad (+0.8\sigma)$	k_{D}	$0.14038^{+0.00091}_{-0.00092} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 1.8) \quad (-0.2\sigma)$
Ω_Λ	$0.689^{+0.013}_{-0.013} \quad (+0.8\sigma)$	$100\theta_{\text{D}}$	$0.16096^{+0.00056}_{-0.00055} \quad (-0.2\sigma)$	χ_{plik}^2	$772.4 \quad (\nu: 15.2) \quad (-0.1\sigma)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.8\sigma)$	z_{eq}	$3377^{+49}_{-50} \quad (-0.8\sigma)$	$\chi_{6\text{DF}}^2$	$0.054 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.31 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^3$	$0.09599^{+0.00097}_{-0.00095} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	$0.8176^{+0.0091}_{-0.0090} \quad (+0.8\sigma)$	χ_{DR12BAO}^2	$4.7 \quad (\nu: 1.1)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4517^{+0.0047}_{-0.0047} \quad (+0.8\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
S_8	$0.824^{+0.024}_{-0.023} \quad (-0.7\sigma)$	$H(0.15)$	$72.89^{+0.84}_{-0.84} \quad (+0.8\sigma)$	χ_{CMB}^2	$1201.7 \quad (\nu: 15.2) \quad (+1.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$D_M(0.15)$	$641.2^{+8.4}_{-8.2} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.38)$	$82.97^{+0.64}_{-0.65} \quad (+0.8\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1215.17$; $\Delta \bar{\chi}_{\text{eff}}^2 = 0.60$; $R - 1 = 0.01603$

12.10 base_nrun_plikHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02241^{+0.00045}_{-0.00045} \quad (+1.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.595^{+0.020}_{-0.018} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+12}_{-12} \quad (-1.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1175^{+0.0034}_{-0.0034} \quad (-1.5\sigma)$	$\sigma_8/h^{0.5}$	$0.972^{+0.028}_{-0.026} \quad (-1.3\sigma)$	$H(0.38)$	$83.48^{+0.91}_{-0.97} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04126^{+0.00088}_{-0.00088} \quad (+1.0\sigma)$	$r_{\mathrm{drag}}h$	$101.1^{+2.5}_{-2.7} \quad (+1.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1516^{+25}_{-25} \quad (-1.6\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.402^{+0.067}_{-0.063} \quad (-1.3\sigma)$	$H(0.51)$	$90.08^{+0.75}_{-0.78} \quad (+1.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.031}_{-0.030} \quad (+0.1\sigma)$	z_{re}	$8.0^{+1.2}_{-1.5} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1966^{+30}_{-29} \quad (-1.6\sigma)$
n_{s}	$0.970^{+0.010}_{-0.011} \quad (+1.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.066}_{-0.064} \quad (+0.1\sigma)$	$H(0.61)$	$95.61^{+0.69}_{-0.63} \quad (+1.6\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.004^{+0.015}_{-0.015} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.874^{+0.025}_{-0.024} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2289^{+32}_{-32} \quad (-1.6\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	D_{40}	$1209^{+41}_{-42} \quad (-0.7\sigma)$	$H(2.33)$	$235.0^{+2.2}_{-2.0} \quad (-1.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5731^{+76}_{-77} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5751^{+30}_{-34} \quad (-1.5\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	D_{810}	$2537^{+26}_{-28} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.020}_{-0.019} \quad (-1.5\sigma)$
A_{143}^{tSZ}	$5.2^{+3.9}_{-4.3} \quad (+0.2\sigma)$	D_{1420}	$816.5^{+9.8}_{-11} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.014}_{-0.014} \quad (-0.7\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.1\sigma)$	D_{2000}	$230.3^{+3.6}_{-4.0} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.017}_{-0.015} \quad (-1.4\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.984^{+0.048}_{-0.046} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.012}_{-0.011} \quad (-0.4\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24541^{+0.00018}_{-0.00019} \quad (+1.0\sigma)$	$f\sigma_8(0.51)$	$0.467^{+0.014}_{-0.014} \quad (-1.3\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00018}_{-0.00019} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.010}_{-0.010} \quad (-0.3\sigma)$
A^{kSZ}	—	$10^5\mathrm{D}/\mathrm{H}$	$2.580^{+0.086}_{-0.082} \quad (-1.0\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.013}_{-0.013} \quad (-1.3\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.1^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.772^{+0.067}_{-0.069} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.5893^{+0.0094}_{-0.0094} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.7}_{-3.5} \quad (+0.0\sigma)$	z_*	$1089.65^{+0.71}_{-0.71} \quad (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0047}_{-0.0044} \quad (+0.1\sigma)$
$A_{143\times 217}^{\mathrm{dustTT}}$	$18.5^{+6.3}_{-6.2} \quad (+0.1\sigma)$	r_*	$145.06^{+0.80}_{-0.84} \quad (+1.3\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0051}_{-0.0046} \quad (+0.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+20}_{-10} \quad (+0.1\sigma)$	$100\theta_*$	$1.04145^{+0.00087}_{-0.00086} \quad (+1.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.929^{+0.077}_{-0.079} \quad (+1.2\sigma)$	$f_{2000}^{143\times 217}$	$33^{+4}_{-5} \quad (-0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{drag}	$1059.8^{+1.0}_{-1.0} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.9^{+4.3}_{-4.0} \quad (-0.4\sigma)$
H_0	$68.4^{+1.4}_{-1.5} \quad (+1.7\sigma)$	r_{drag}	$147.73^{+0.83}_{-0.89} \quad (+1.2\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.1) \quad (+0.2\sigma)$
Ω_{Λ}	$0.699^{+0.019}_{-0.020} \quad (+1.6\sigma)$	k_{D}	$0.1402^{+0.0010}_{-0.0011} \quad (-0.8\sigma)$	χ_{lowl}^2	$21.9 \quad (\nu: 1.3) \quad (-0.6\sigma)$
Ω_{m}	$0.301^{+0.020}_{-0.019} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00058}_{-0.00055} \quad (-0.6\sigma)$	χ_{plik}^2	$775.7 \quad (\nu: 19.6) \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1405^{+0.0033}_{-0.0030} \quad (-1.5\sigma)$	z_{eq}	$3343^{+79}_{-72} \quad (-1.5\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$9.5 \quad (\nu: 4.0)$
$\Omega_{\mathrm{m}}h^3$	$0.0961^{+0.0010}_{-0.0011} \quad (+0.2\sigma)$	k_{eq}	$0.01020^{+0.00024}_{-0.00022} \quad (-1.5\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 7.1) \quad (+0.0\sigma)$
σ_8	$0.804^{+0.017}_{-0.016} \quad (-0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.825^{+0.015}_{-0.015} \quad (+1.6\sigma)$	χ_{CMB}^2	$1195.0 \quad (\nu: 18.5) \quad (+0.4\sigma)$
S_8	$0.805^{+0.039}_{-0.037} \quad (-1.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4552^{+0.0076}_{-0.0077} \quad (+1.6\sigma)$		
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.021}_{-0.020} \quad (-1.5\sigma)$	$H(0.15)$	$73.6^{+1.3}_{-1.3} \quad (+1.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1211.96$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.15$; $R - 1 = 0.05098$

12.11 base_nrun_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022392	$0.02239^{+0.00030}_{-0.00030}$ (+1.0 σ)	$\Omega_{\mathrm{m}}h^2$	0.14339	$0.1434^{+0.0025}_{-0.0025}$ (−0.1 σ)	k_{eq}	0.010411	$0.01041^{+0.00018}_{-0.00018}$ (−0.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.12035	$0.1203^{+0.0027}_{-0.0026}$ (−0.2 σ)	$\Omega_{\mathrm{m}}h^3$	0.09641	$0.09640^{+0.00060}_{-0.00060}$ (+0.8 σ)	$100\theta_{\mathrm{eq}}$	0.8117	$0.812^{+0.011}_{-0.011}$ (+0.2 σ)
$100\theta_{\mathrm{MC}}$	1.04089	$1.04090^{+0.00061}_{-0.00063}$ (+0.3 σ)	σ_8	0.8122	$0.813^{+0.015}_{-0.015}$ (+0.0 σ)	$100\theta_{\mathrm{s,eq}}$	0.4486	$0.4486^{+0.0057}_{-0.0057}$ (+0.1 σ)
τ	0.0548	$0.056^{+0.016}_{-0.015}$ (+0.3 σ)	S_8	0.8351	$0.836^{+0.032}_{-0.032}$ (−0.2 σ)	$H(0.15)$	72.58	$72.6^{+1.0}_{-1.0}$ (+0.4 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0469	$3.049^{+0.035}_{-0.033}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4574	$0.458^{+0.018}_{-0.018}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	644.4	644^{+10}_{-10} (−0.4 σ)
n_{s}	0.9643	$0.9635^{+0.0089}_{-0.0091}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6095	$0.610^{+0.017}_{-0.017}$ (−0.1 σ)	$H(0.38)$	82.81	$82.81^{+0.75}_{-0.72}$ (+0.5 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	−0.0047	$−0.006^{+0.013}_{-0.013}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	0.9905	$0.991^{+0.024}_{-0.024}$ (−0.2 σ)	$D_{\mathrm{M}}(0.38)$	1535.4	1535^{+20}_{-20} (−0.4 σ)
y_{cal}	1.00040	$1.0007^{+0.0049}_{-0.0050}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	98.82	$98.8^{+2.1}_{-2.0}$ (+0.3 σ)	$H(0.51)$	89.59	$89.59^{+0.59}_{-0.57}$ (+0.6 σ)
A_{217}^{CIB}	48.9	48^{+10}_{-10} (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.442	$2.445^{+0.058}_{-0.058}$ (−0.2 σ)	$D_{\mathrm{M}}(0.51)$	1988.0	1988^{+24}_{-24} (−0.4 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.24	—	z_{re}	7.73	$7.8^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	95.256	$95.26^{+0.47}_{-0.46}$ (+0.6 σ)
A_{143}^{tSZ}	7.28	$5.2^{+3.8}_{-4.0}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}$	2.105	$2.111^{+0.074}_{-0.069}$ (+0.3 σ)	$D_{\mathrm{M}}(0.61)$	2312.6	2313^{+25}_{-26} (−0.5 σ)
A_{100}^{PS}	254	263^{+60}_{-60} (−0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8867	$1.887^{+0.024}_{-0.024}$ (+0.0 σ)	$H(2.33)$	236.81	$236.8^{+1.6}_{-1.6}$ (−0.0 σ)
A_{143}^{PS}	46.8	48^{+20}_{-20} (−0.3 σ)	D_{40}	1220.4	1221^{+37}_{-37} (−0.2 σ)	$D_{\mathrm{M}}(2.33)$	5763.9	5764^{+21}_{-22} (−0.7 σ)
$A_{143\times 217}^{\mathrm{PS}}$	43.9	42^{+20}_{-20} (−0.1 σ)	D_{220}	5728	5733^{+76}_{-77} (+0.5 σ)	$f\sigma_8(0.15)$	0.4615	$0.462^{+0.016}_{-0.016}$ (−0.2 σ)
A_{217}^{PS}	118.2	115^{+20}_{-20} (−0.0 σ)	D_{810}	2541.5	2542^{+27}_{-27} (+0.3 σ)	$\sigma_8(0.15)$	0.7499	$0.750^{+0.013}_{-0.013}$ (+0.1 σ)
A^{kSZ}	0.0	—	D_{1420}	816.8	$816.3^{+9.7}_{-9.6}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4786	$0.479^{+0.013}_{-0.014}$ (−0.2 σ)
$A_{100}^{\mathrm{dustTT}}$	8.93	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	D_{2000}	230.48	$230.2^{+3.6}_{-3.5}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6642	$0.665^{+0.011}_{-0.011}$ (+0.2 σ)
$A_{143}^{\mathrm{dustTT}}$	11.07	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9794	$0.981^{+0.040}_{-0.040}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4766	$0.477^{+0.012}_{-0.012}$ (−0.1 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.7	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	Y_{P}	0.245404	$0.24540^{+0.00011}_{-0.00012}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6213	$0.622^{+0.011}_{-0.010}$ (+0.2 σ)
$A_{217}^{\mathrm{dustTT}}$	94.5	93^{+10}_{-10} (+0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246731	$0.24673^{+0.00011}_{-0.00012}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4711	$0.471^{+0.011}_{-0.011}$ (−0.1 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.115^{+0.076}_{-0.074}$	$10^5\mathrm{D}/\mathrm{H}$	2.581	$2.583^{+0.056}_{-0.053}$ (−1.0 σ)	$\sigma_8(0.61)$	0.5910	$0.591^{+0.010}_{-0.0098}$ (+0.2 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.057}_{-0.058}$	Age/Gyr	13.7975	$13.798^{+0.048}_{-0.049}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.29777	$0.2980^{+0.0050}_{-0.0048}$ (+0.3 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.92	$1089.93^{+0.53}_{-0.54}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3067	$0.3070^{+0.0052}_{-0.0050}$ (+0.3 σ)
$A_{143}^{\mathrm{dustTE}}$	0.226	$0.22^{+0.10}_{-0.11}$	r_*	144.32	$144.33^{+0.59}_{-0.60}$ (−0.1 σ)	f_{2000}^{143}	29.9	31^{+6}_{-6} (−0.4 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.667	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	1.04107	$1.04108^{+0.00060}_{-0.00061}$ (+0.2 σ)	$f_{2000}^{143\times 217}$	32.80	33^{+4}_{-4} (−0.5 σ)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.09^{+0.52}_{-0.52}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.863	$13.864^{+0.055}_{-0.056}$ (−0.2 σ)	f_{2000}^{217}	107.41	$107.8^{+3.9}_{-4.0}$ (−0.4 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.01	$1060.00^{+0.62}_{-0.64}$ (+1.0 σ)	χ_{small}^2	396.07	397.3 (ν : 2.0) (+0.1 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	146.97	$146.99^{+0.59}_{-0.59}$ (−0.3 σ)	χ_{lowl}^2	22.25	22.6 (ν : 1.3) (−0.3 σ)
H_0	67.24	$67.2^{+1.2}_{-1.2}$ (+0.4 σ)	k_{D}	0.14101	$0.14099^{+0.00066}_{-0.00065}$ (+0.6 σ)	χ_{plik}^2	2345.3	2360.9 (ν : 17.7) (+278.8 σ)
Ω_{Λ}	0.6828	$0.683^{+0.016}_{-0.017}$ (+0.3 σ)	$100\theta_{\mathrm{D}}$	0.160712	$0.16072^{+0.00036}_{-0.00035}$ (−1.0 σ)	χ_{prior}^2	1.8	11.5 (ν : 10.4) (+1.1 σ)
Ω_{m}	0.3172	$0.317^{+0.017}_{-0.016}$ (−0.3 σ)	z_{eq}	3411	3411^{+61}_{-59} (−0.1 σ)	χ_{CMB}^2	2763.6	2780.7 (ν : 17.5) (+282.7 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 2765.41$; $\Delta\chi_{\mathrm{eff}}^2 = -0.36$; $\bar{\chi}_{\mathrm{eff}}^2 = 2792.22$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.45$; $R - 1 = 0.01212$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.07 (Δ 0.02) commander_dx12_v3.2.29: 22.25 (Δ -1.00) plik_rd12_HM_v22b_TTTEEE: 2345.28 (Δ 0.63)

12.12 base_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022465	$0.02245^{+0.00028}_{-0.00028}$ (+1.2 σ)	σ_8	0.8102	$0.810^{+0.015}_{-0.014}$ (−0.3 σ)	$D_M(0.15)$	640.3	$640.8^{+7.5}_{-7.6}$ (−0.9 σ)
$\Omega_c h^2$	0.11929	$0.1194^{+0.0020}_{-0.0020}$ (−0.6 σ)	S_8	0.8243	$0.825^{+0.025}_{-0.026}$ (−0.6 σ)	$H(0.38)$	83.09	$83.06^{+0.58}_{-0.55}$ (+0.9 σ)
$100\theta_{MC}$	1.04100	$1.04101^{+0.00056}_{-0.00059}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4515	$0.452^{+0.014}_{-0.014}$ (−0.6 σ)	$D_M(0.38)$	1527.3	1528^{+15}_{-15} (−0.9 σ)
τ	0.0566	$0.057^{+0.016}_{-0.015}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6048	$0.605^{+0.014}_{-0.014}$ (−0.6 σ)	$H(0.51)$	89.808	$89.78^{+0.47}_{-0.44}$ (+1.0 σ)
$\ln(10^{10} A_s)$	3.0483	$3.049^{+0.036}_{-0.034}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9846	$0.985^{+0.021}_{-0.021}$ (−0.5 σ)	$D_M(0.51)$	1978.7	1980^{+17}_{-18} (−0.9 σ)
n_s	0.9674	$0.9658^{+0.0080}_{-0.0081}$ (+0.7 σ)	$r_{drag} h$	99.66	$99.6^{+1.5}_{-1.5}$ (+0.7 σ)	$H(0.61)$	95.425	$95.41^{+0.38}_{-0.37}$ (+1.1 σ)
$dn_s/d \ln k$	−0.0034	$−0.005^{+0.013}_{-0.013}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.429	$2.431^{+0.052}_{-0.052}$ (−0.5 σ)	$D_M(0.61)$	2302.6	2304^{+19}_{-20} (−0.9 σ)
y_{cal}	1.00057	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.88	$7.9^{+1.6}_{-1.6}$ (+0.3 σ)	$H(2.33)$	236.19	$236.2^{+1.2}_{-1.2}$ (−0.5 σ)
A_{217}^{CIB}	47.4	48^{+10}_{-10} (−0.1 σ)	$10^9 A_s$	2.108	$2.110^{+0.077}_{-0.071}$ (+0.3 σ)	$D_M(2.33)$	5756.8	5758^{+17}_{-18} (−1.1 σ)
$\xi^{tSZ \times CIB}$	0.48	—	$10^9 A_s e^{-2\tau}$	1.8824	$1.883^{+0.023}_{-0.022}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4562	$0.457^{+0.013}_{-0.013}$ (−0.6 σ)
A_{143}^{tSZ}	7.17	$5.2^{+3.8}_{-4.0}$ (+0.2 σ)	D_{40}	1218.0	1218^{+35}_{-35} (−0.3 σ)	$\sigma_8(0.15)$	0.7487	$0.749^{+0.013}_{-0.013}$ (−0.2 σ)
A_{100}^{PS}	251	262^{+60}_{-60} (−0.1 σ)	D_{220}	5735	5737^{+74}_{-75} (+0.6 σ)	$f\sigma_8(0.38)$	0.4747	$0.475^{+0.011}_{-0.012}$ (−0.6 σ)
A_{143}^{PS}	49.3	47^{+20}_{-20} (−0.4 σ)	D_{810}	2541.7	2541^{+27}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6638	$0.664^{+0.011}_{-0.011}$ (+0.0 σ)
$A_{143 \times 217}^{PS}$	49.4	42^{+20}_{-20} (−0.2 σ)	D_{1420}	818.3	$816.9^{+9.3}_{-9.0}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4734	$0.474^{+0.010}_{-0.011}$ (−0.5 σ)
A_{217}^{PS}	120.2	114^{+20}_{-20} (−0.0 σ)	D_{2000}	231.12	$230.5^{+3.4}_{-3.4}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6212	$0.621^{+0.011}_{-0.010}$ (+0.1 σ)
A^{kSZ}	0.0	—	$n_{s,0.002}$	0.9784	$0.982^{+0.041}_{-0.040}$ (+0.2 σ)	$f\sigma_8(0.61)$	0.4685	$0.4686^{+0.0097}_{-0.0099}$ (−0.5 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.245432	$0.24542^{+0.00010}_{-0.00011}$ (+1.2 σ)	$\sigma_8(0.61)$	0.5912	$0.591^{+0.010}_{-0.0097}$ (+0.1 σ)
A_{143}^{dustTT}	11.05	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.246758	$0.24675^{+0.00010}_{-0.00011}$ (+1.2 σ)	$f\sigma_8(2.33)$	0.29810	$0.2980^{+0.0051}_{-0.0048}$ (+0.3 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	$10^5 D/H$	2.568	$2.572^{+0.052}_{-0.049}$ (−1.2 σ)	$\sigma_8(2.33)$	0.3074	$0.3072^{+0.0052}_{-0.0051}$ (+0.4 σ)
A_{217}^{dustTT}	95.0	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7823	$13.784^{+0.039}_{-0.041}$ (−1.1 σ)	f_{2000}^{143}	29.3	30^{+6}_{-6} (−0.5 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.077}_{-0.075}$	z_*	1089.739	$1089.77^{+0.44}_{-0.44}$ (−1.2 σ)	$f_{2000}^{143 \times 217}$	32.34	33^{+4}_{-4} (−0.6 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.134^{+0.060}_{-0.058}$	r_*	144.543	$144.53^{+0.45}_{-0.48}$ (+0.3 σ)	f_{2000}^{217}	106.86	$107.6^{+4.0}_{-3.8}$ (−0.5 σ)
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04118	$1.04119^{+0.00055}_{-0.00059}$ (+0.4 σ)	χ_{small}^2	396.37	$397.4 (\nu: 2.4)$ (+0.2 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.10}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8826	$13.881^{+0.044}_{-0.046}$ (+0.2 σ)	χ_{lowl}^2	22.10	$22.3 (\nu: 1.2)$ (−0.4 σ)
$A_{143 \times 217}^{dustTE}$	0.662	$0.66^{+0.15}_{-0.16}$	z_{drag}	1060.09	$1060.07^{+0.59}_{-0.60}$ (+1.2 σ)	χ_{plik}^2	2345.8	$2360.9 (\nu: 17.3)$ (+278.8 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.51}$	r_{drag}	147.177	$147.17^{+0.48}_{-0.50}$ (+0.1 σ)	χ_{6DF}^2	0.029	$0.060 (\nu: 0.0)$
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14085	$0.14085^{+0.00060}_{-0.00060}$ (+0.3 σ)	χ_{MGS}^2	1.22	$1.23 (\nu: 0.1)$
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160664	$0.16069^{+0.00036}_{-0.00034}$ (−1.1 σ)	$\chi_{DR12BAO}^2$	4.42	$5.0 (\nu: 1.1)$
H_0	67.71	$67.66^{+0.89}_{-0.87}$ (+0.9 σ)	z_{eq}	3387.4	3390^{+45}_{-45} (−0.5 σ)	χ_{prior}^2	1.7	$11.6 (\nu: 10.5)$ (+1.2 σ)
Ω_Λ	0.6894	$0.689^{+0.012}_{-0.012}$ (+0.8 σ)	k_{eq}	0.010339	$0.01035^{+0.00014}_{-0.00014}$ (−0.5 σ)	χ_{BAO}^2	5.67	$6.3 (\nu: 0.7)$
Ω_m	0.3106	$0.311^{+0.012}_{-0.012}$ (−0.8 σ)	$100\theta_{eq}$	0.8163	$0.8159^{+0.0085}_{-0.0085}$ (+0.6 σ)	χ_{CMB}^2	2764.3	$2780.6 (\nu: 16.8)$ (+282.7 σ)
$\Omega_m h^2$	0.14240	$0.1425^{+0.0019}_{-0.0019}$ (−0.5 σ)	$100\theta_{s,eq}$	0.45087	$0.4507^{+0.0044}_{-0.0043}$ (+0.6 σ)			
$\Omega_m h^3$	0.09642	$0.09641^{+0.00061}_{-0.00059}$ (+0.8 σ)	$H(0.15)$	72.99	$72.95^{+0.77}_{-0.74}$ (+0.9 σ)			

Best-fit $\chi_{eff}^2 = 2771.68$; $\Delta\chi_{eff}^2 = -0.24$; $\bar{\chi}_{eff}^2 = 2798.48$; $\Delta\bar{\chi}_{eff}^2 = 0.57$; $R - 1 = 0.02043$

χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.42 (Δ 0.01) CMB - small_100x143.offlike5_EE_Aplanck_B: 396.37 (Δ 0.16) commander_dx12.v3.2.29: 22.11 (Δ -0.77) plik_rd12_HM.v22b_TTTEEE: 2345.83 (Δ 0.33)

12.13 base_nrun_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022396	$0.02240^{+0.00029}_{-0.00029}$ (+1.0 σ)	$\Omega_m h^3$	0.09638	$0.09639^{+0.00060}_{-0.00059}$ (+0.8 σ)	$100\theta_{s,eq}$	0.44926	$0.4492^{+0.0049}_{-0.0050}$ (+0.3 σ)
$\Omega_c h^2$	0.12003	$0.1200^{+0.0023}_{-0.0023}$ (−0.3 σ)	σ_8	0.8113	$0.811^{+0.012}_{-0.012}$ (−0.1 σ)	$H(0.15)$	72.69	$72.69^{+0.91}_{-0.89}$ (+0.6 σ)
$100\theta_{MC}$	1.04091	$1.04092^{+0.00060}_{-0.00061}$ (+0.3 σ)	S_8	0.8317	$0.832^{+0.025}_{-0.025}$ (−0.4 σ)	$D_M(0.15)$	643.3	$643.3^{+9.0}_{-8.9}$ (−0.5 σ)
τ	0.0546	$0.055^{+0.015}_{-0.014}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4555	$0.456^{+0.014}_{-0.014}$ (−0.4 σ)	$H(0.38)$	82.87	$82.88^{+0.67}_{-0.64}$ (+0.6 σ)
$\ln(10^{10} A_s)$	3.0457	$3.047^{+0.029}_{-0.029}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6079	$0.608^{+0.012}_{-0.013}$ (−0.3 σ)	$D_M(0.38)$	1533.3	1533^{+18}_{-18} (−0.6 σ)
n_s	0.9650	$0.9641^{+0.0084}_{-0.0085}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9885	$0.989^{+0.017}_{-0.018}$ (−0.3 σ)	$H(0.51)$	89.64	$89.64^{+0.53}_{-0.51}$ (+0.7 σ)
$dn_s/d \ln k$	−0.0025	$−0.005^{+0.013}_{-0.013}$ (−0.0 σ)	$r_{drag} h$	99.06	$99.1^{+1.8}_{-1.8}$ (+0.4 σ)	$D_M(0.51)$	1985.7	1986^{+21}_{-21} (−0.6 σ)
y_{cal}	1.00056	$1.0007^{+0.0049}_{-0.0049}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4413	$2.441^{+0.046}_{-0.046}$ (−0.3 σ)	$H(0.61)$	95.290	$95.30^{+0.43}_{-0.41}$ (+0.7 σ)
A_{217}^{CIB}	48.9	48^{+10}_{-10} (−0.1 σ)	z_{re}	7.71	$7.8^{+1.4}_{-1.5}$ (+0.2 σ)	$D_M(0.61)$	2310.1	2310^{+22}_{-23} (−0.6 σ)
$\xi^{tSZ \times CIB}$	0.23	—	$10^9 A_s$	2.102	$2.106^{+0.062}_{-0.060}$ (+0.2 σ)	$H(2.33)$	236.61	$236.6^{+1.4}_{-1.3}$ (−0.2 σ)
A_{143}^{tSZ}	7.27	$5.2^{+3.8}_{-4.0}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8848	$1.886^{+0.022}_{-0.022}$ (−0.1 σ)	$D_M(2.33)$	5762.7	5762^{+19}_{-20} (−0.8 σ)
A_{100}^{PS}	253	263^{+60}_{-60} (−0.1 σ)	D_{40}	1225.1	1222^{+37}_{-35} (−0.1 σ)	$f\sigma_8(0.15)$	0.4598	$0.460^{+0.013}_{-0.013}$ (−0.4 σ)
A_{143}^{PS}	45.9	47^{+20}_{-20} (−0.3 σ)	D_{220}	5733	5735^{+75}_{-76} (+0.5 σ)	$\sigma_8(0.15)$	0.7493	$0.749^{+0.011}_{-0.011}$ (−0.1 σ)
$A_{143 \times 217}^{PS}$	42.9	42^{+20}_{-20} (−0.1 σ)	D_{810}	2541.0	2541^{+27}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4773	$0.477^{+0.010}_{-0.010}$ (−0.3 σ)
A_{217}^{PS}	117.7	115^{+20}_{-20} (−0.0 σ)	D_{1420}	817.3	$816.4^{+9.6}_{-9.5}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6638	$0.6638^{+0.0095}_{-0.0094}$ (+0.0 σ)
A^{kSZ}	0.0	—	D_{2000}	230.77	$230.3^{+3.5}_{-3.5}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4755	$0.4755^{+0.0088}_{-0.0093}$ (−0.3 σ)
A_{100}^{dustTT}	8.90	$8.9^{+3.5}_{-3.6}$ (−0.0 σ)	$n_{s,0.002}$	0.9729	$0.979^{+0.041}_{-0.039}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6210	$0.6210^{+0.0089}_{-0.0088}$ (+0.1 σ)
A_{143}^{dustTT}	11.01	$11.0^{+3.6}_{-3.5}$ (+0.1 σ)	Y_P	0.245406	$0.24540^{+0.00011}_{-0.00011}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4702	$0.4702^{+0.0081}_{-0.0084}$ (−0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.6	$18.6^{+6.6}_{-6.4}$ (+0.1 σ)	Y_P^{BBN}	0.246732	$0.24673^{+0.00011}_{-0.00012}$ (+1.0 σ)	$\sigma_8(0.61)$	0.5908	$0.5908^{+0.0085}_{-0.0084}$ (+0.1 σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (+0.0 σ)	$10^5 D/H$	2.581	$2.581^{+0.054}_{-0.051}$ (−1.0 σ)	$f\sigma_8(2.33)$	0.29773	$0.2977^{+0.0045}_{-0.0043}$ (+0.2 σ)
A_{100}^{dustTE}	0.116	$0.115^{+0.077}_{-0.075}$	Age/Gyr	13.7951	$13.795^{+0.044}_{-0.045}$ (−0.8 σ)	$\sigma_8(2.33)$	0.30678	$0.3068^{+0.0048}_{-0.0047}$ (+0.3 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.134^{+0.058}_{-0.059}$	z_*	1089.89	$1089.89^{+0.50}_{-0.50}$ (−0.9 σ)	f_{2000}^{143}	29.7	31^{+6}_{-6} (−0.4 σ)
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.17}_{-0.17}$	r_*	144.40	$144.40^{+0.51}_{-0.53}$ (−0.0 σ)	$f_{2000}^{143 \times 217}$	32.55	33^{+4}_{-4} (−0.5 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04110	$1.04110^{+0.00059}_{-0.00061}$ (+0.3 σ)	f_{2000}^{217}	107.20	$107.7^{+4.0}_{-3.9}$ (−0.4 σ)
$A_{143 \times 217}^{dustTE}$	0.665	$0.66^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	13.8702	$13.870^{+0.048}_{-0.049}$ (−0.0 σ)	$\chi^2_{lensing}$	8.89	9.43 (ν : 0.3)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.52}$	z_{drag}	1060.01	$1060.00^{+0.58}_{-0.61}$ (+1.0 σ)	χ^2_{small}	396.06	397.1 (ν : 1.5) (+0.0 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.05	$147.05^{+0.52}_{-0.53}$ (−0.2 σ)	χ^2_{lowl}	22.71	22.7 (ν : 1.4) (−0.2 σ)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_D	0.14093	$0.14093^{+0.00061}_{-0.00060}$ (+0.5 σ)	χ^2_{plik}	2345.0	2360.5 (ν : 16.8) (+278.7 σ)
H_0	67.36	$67.4^{+1.0}_{-1.0}$ (+0.5 σ)	$100\theta_D$	0.160720	$0.16072^{+0.00036}_{-0.00034}$ (−1.0 σ)	χ^2_{prior}	1.8	11.6 (ν : 10.6) (+1.2 σ)
Ω_Λ	0.6847	$0.685^{+0.014}_{-0.014}$ (+0.4 σ)	z_{eq}	3404	3404^{+53}_{-50} (−0.2 σ)	χ^2_{CMB}	2772.6	2789.7 (ν : 17.3) (+284.3 σ)
Ω_m	0.3153	$0.315^{+0.014}_{-0.014}$ (−0.4 σ)	k_{eq}	0.010388	$0.01039^{+0.00016}_{-0.00015}$ (−0.2 σ)			
$\Omega_m h^2$	0.14308	$0.1431^{+0.0022}_{-0.0021}$ (−0.2 σ)	$100\theta_{eq}$	0.8131	$0.8131^{+0.0096}_{-0.0097}$ (+0.3 σ)			

Best-fit $\chi^2_{eff} = 2774.42$; $\Delta\chi^2_{eff} = -0.22$; $\bar{\chi}^2_{eff} = 2801.27$; $\Delta\bar{\chi}^2_{eff} = 0.58$; $R - 1 = 0.02010$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.89 (Δ 0.02) small_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ 0.01) commander_dx12_v3.2_29: 22.71 (Δ -0.54) plik_rd12_HM_v22b_TTTEEE: 2344.96 (Δ 0.03)

12.14 base_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022447	$0.02245^{+0.00027}_{-0.00027}$ (+1.2 σ)	σ_8	0.8101	$0.810^{+0.012}_{-0.012}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	640.4	$640.7^{+7.0}_{-7.0}$ (−0.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.11930	$0.1194^{+0.0018}_{-0.0018}$ (−0.7 σ)	S_8	0.8245	$0.825^{+0.021}_{-0.021}$ (−0.6 σ)	$H(0.38)$	83.08	$83.07^{+0.54}_{-0.52}$ (+0.9 σ)
$100\theta_{\mathrm{MC}}$	1.04103	$1.04101^{+0.00056}_{-0.00060}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4516	$0.452^{+0.012}_{-0.011}$ (−0.6 σ)	$D_{\mathrm{M}}(0.38)$	1527.6	1528^{+14}_{-14} (−0.9 σ)
τ	0.0565	$0.057^{+0.015}_{-0.014}$ (+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6048	$0.605^{+0.011}_{-0.012}$ (−0.5 σ)	$H(0.51)$	89.798	$89.79^{+0.44}_{-0.42}$ (+1.0 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0482	$3.049^{+0.029}_{-0.029}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9846	$0.985^{+0.017}_{-0.017}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1979.0	1980^{+16}_{-17} (−0.9 σ)
n_{s}	0.9669	$0.9659^{+0.0078}_{-0.0080}$ (+0.7 σ)	$r_{\mathrm{drag}}h$	99.65	$99.6^{+1.4}_{-1.4}$ (+0.7 σ)	$H(0.61)$	95.415	$95.41^{+0.36}_{-0.35}$ (+1.1 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	−0.0033	$−0.004^{+0.013}_{-0.013}$ (+0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.4307	$2.433^{+0.041}_{-0.044}$ (−0.5 σ)	$D_{\mathrm{M}}(0.61)$	2302.9	2304^{+18}_{-18} (−0.9 σ)
y_{cal}	1.00058	$1.0008^{+0.0048}_{-0.0047}$ (+0.1 σ)	z_{re}	7.88	$7.9^{+1.4}_{-1.4}$ (+0.3 σ)	$H(2.33)$	236.19	$236.2^{+1.1}_{-1.1}$ (−0.5 σ)
A_{217}^{CIB}	48.6	47^{+10}_{-10} (−0.1 σ)	$10^9 A_{\mathrm{s}}$	2.108	$2.111^{+0.062}_{-0.060}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5757.3	5758^{+17}_{-18} (−1.1 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.31	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8823	$1.883^{+0.022}_{-0.021}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4562	$0.457^{+0.011}_{-0.011}$ (−0.6 σ)
A_{143}^{tSZ}	7.22	$5.3^{+3.8}_{-4.0}$ (+0.2 σ)	D_{40}	1219.2	1220^{+35}_{-35} (−0.2 σ)	$\sigma_8(0.15)$	0.7487	$0.749^{+0.011}_{-0.011}$ (−0.1 σ)
A_{100}^{PS}	253	262^{+60}_{-60} (−0.1 σ)	D_{220}	5735	5739^{+73}_{-73} (+0.6 σ)	$f\sigma_8(0.38)$	0.4747	$0.4751^{+0.0091}_{-0.0093}$ (−0.6 σ)
A_{143}^{PS}	46.9	47^{+20}_{-20} (−0.4 σ)	D_{810}	2541.3	2541^{+26}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6637	$0.6639^{+0.0096}_{-0.0096}$ (+0.0 σ)
$A_{143\times 217}^{\mathrm{PS}}$	44.8	42^{+20}_{-20} (−0.2 σ)	D_{1420}	817.9	$817.1^{+9.2}_{-9.1}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4734	$0.4737^{+0.0083}_{-0.0085}$ (−0.5 σ)
A_{217}^{PS}	118.2	114^{+20}_{-20} (−0.0 σ)	D_{2000}	230.96	$230.6^{+3.4}_{-3.4}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6212	$0.6213^{+0.0090}_{-0.0089}$ (+0.1 σ)
A^{kSZ}	0.01	< 8.46 (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9776	$0.979^{+0.041}_{-0.039}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4685	$0.4687^{+0.0078}_{-0.0079}$ (−0.5 σ)
$A_{100}^{\mathrm{dustTT}}$	8.93	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_{P}	0.245425	$0.24542^{+0.00010}_{-0.00011}$ (+1.2 σ)	$\sigma_8(0.61)$	0.5911	$0.5912^{+0.0086}_{-0.0084}$ (+0.2 σ)
$A_{143}^{\mathrm{dustTT}}$	11.07	$11.0^{+3.6}_{-3.5}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246752	$0.24675^{+0.00010}_{-0.00011}$ (+1.2 σ)	$f\sigma_8(2.33)$	0.29807	$0.2981^{+0.0044}_{-0.0044}$ (+0.3 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.7	$18.6^{+6.5}_{-6.3}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.571	$2.572^{+0.051}_{-0.049}$ (−1.2 σ)	$\sigma_8(2.33)$	0.30733	$0.3073^{+0.0046}_{-0.0046}$ (+0.5 σ)
$A_{217}^{\mathrm{dustTT}}$	94.6	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7835	$13.784^{+0.038}_{-0.040}$ (−1.1 σ)	f_{2000}^{143}	29.5	30^{+6}_{-6} (−0.5 σ)
$A_{100}^{\mathrm{dustTE}}$	0.115	$0.115^{+0.078}_{-0.076}$	z_*	1089.762	$1089.77^{+0.43}_{-0.42}$ (−1.2 σ)	$f_{2000}^{143\times 217}$	32.45	33^{+4}_{-4} (−0.6 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.060}_{-0.059}$	r_*	144.552	$144.54^{+0.42}_{-0.44}$ (+0.3 σ)	f_{2000}^{217}	107.07	$107.5^{+4.0}_{-3.8}$ (−0.5 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.483	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04120	$1.04118^{+0.00056}_{-0.00059}$ (+0.4 σ)	$\chi_{\mathrm{lensing}}^2$	8.84	9.25 (ν : 0.2)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8832	$13.882^{+0.040}_{-0.042}$ (+0.2 σ)	χ_{small}^2	396.36	397.3 (ν : 1.9) (+0.1 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.663	$0.66^{+0.15}_{-0.16}$	z_{drag}	1060.05	$1060.07^{+0.59}_{-0.63}$ (+1.1 σ)	χ_{lowl}^2	22.20	22.5 (ν : 1.3) (−0.3 σ)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.52}_{-0.51}$	r_{drag}	147.191	$147.17^{+0.45}_{-0.46}$ (+0.1 σ)	χ_{plik}^2	2345.6	2360.5 (ν : 16.5) (+278.7 σ)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.14082	$0.14084^{+0.00058}_{-0.00057}$ (+0.3 σ)	$\chi_{6\mathrm{DF}}^2$	0.030	0.055 (ν : 0.0)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.160691	$0.16069^{+0.00036}_{-0.00034}$ (−1.1 σ)	χ_{MGS}^2	1.22	1.24 (ν : 0.1)
H_0	67.70	$67.67^{+0.83}_{-0.81}$ (+0.9 σ)	z_{eq}	3387.4	3389^{+41}_{-40} (−0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.44	4.9 (ν : 0.9)
Ω_{Λ}	0.6893	$0.689^{+0.011}_{-0.011}$ (+0.8 σ)	k_{eq}	0.010339	$0.01034^{+0.00013}_{-0.00012}$ (−0.5 σ)	χ_{prior}^2	1.8	11.6 (ν : 10.5) (+1.2 σ)
Ω_{m}	0.3107	$0.311^{+0.011}_{-0.011}$ (−0.8 σ)	$100\theta_{\mathrm{eq}}$	0.8162	$0.8160^{+0.0077}_{-0.0077}$ (+0.6 σ)	χ_{CMB}^2	2773.0	2789.6 (ν : 16.7) (+284.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.14240	$0.1425^{+0.0017}_{-0.0017}$ (−0.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.45087	$0.4507^{+0.0039}_{-0.0039}$ (+0.6 σ)	χ_{BAO}^2	5.68	6.2 (ν : 0.6)
$\Omega_{\mathrm{m}}h^3$	0.09640	$0.09640^{+0.00061}_{-0.00059}$ (+0.8 σ)	$H(0.15)$	72.98	$72.95^{+0.71}_{-0.70}$ (+0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2780.51$; $\Delta\chi_{\mathrm{eff}}^2 = -0.19$; $\bar{\chi}_{\mathrm{eff}}^2 = 2807.32$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.48$; $R - 1 = 0.02542$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.43 (Δ 0.01) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.84 (Δ 0.11) small_100x143_offlike5_EE_Aplanck.L
396.36 (Δ -0.16) commander_dx12_v3.2_29: 22.20 (Δ -0.70) plik_rd12_HM_v22b_TTTEEE: 2345.61 (Δ 0.30)

12.15 base_nrun_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022521	$0.02252^{+0.00030}_{-0.00030}$ (+1.5 σ)	$\Omega_{\mathrm{m}}h^3$	0.09646	$0.09647^{+0.00060}_{-0.00059}$ (+1.0 σ)	$100\theta_{\mathrm{s,eq}}$	0.4522	$0.4522^{+0.0061}_{-0.0056}$ (+0.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.11866	$0.1187^{+0.0026}_{-0.0028}$ (−1.0 σ)	σ_8	0.8083	$0.808^{+0.016}_{-0.015}$ (−0.5 σ)	$H(0.15)$	73.24	$73.2^{+1.0}_{-0.98}$ (+1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04110	$1.04112^{+0.00064}_{-0.00064}$ (+0.7 σ)	S_8	0.8172	$0.817^{+0.032}_{-0.033}$ (−1.0 σ)	$D_{\mathrm{M}}(0.15)$	637.8	$637.9^{+9.7}_{-10}$ (−1.2 σ)
τ	0.0574	$0.058^{+0.017}_{-0.016}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4476	$0.448^{+0.017}_{-0.018}$ (−1.0 σ)	$H(0.38)$	83.28	$83.28^{+0.76}_{-0.71}$ (+1.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0487	$3.049^{+0.037}_{-0.033}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6015	$0.602^{+0.017}_{-0.017}$ (−0.9 σ)	$D_{\mathrm{M}}(0.38)$	1522.3	1522^{+19}_{-20} (−1.2 σ)
n_{s}	0.9685	$0.9675^{+0.0087}_{-0.0090}$ (+0.9 σ)	$\sigma_8/h^{0.5}$	0.9802	$0.980^{+0.024}_{-0.024}$ (−0.8 σ)	$H(0.51)$	89.96	$89.96^{+0.62}_{-0.56}$ (+1.4 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	−0.0037	$−0.005^{+0.013}_{-0.014}$ (−0.1 σ)	$r_{\mathrm{drag}}h$	100.16	$100.2^{+2.1}_{-2.0}$ (+1.1 σ)	$D_{\mathrm{M}}(0.51)$	1972.7	1973^{+23}_{-24} (−1.3 σ)
y_{cal}	1.00065	$1.0007^{+0.0046}_{-0.0046}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.420	$2.420^{+0.057}_{-0.054}$ (−0.8 σ)	$H(0.61)$	95.543	$95.55^{+0.53}_{-0.45}$ (+1.5 σ)
A_{217}^{CIB}	48.0	47^{+10}_{-10} (−0.2 σ)	z_{re}	7.94	$8.0^{+1.6}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(0.61)$	2296.2	2296^{+24}_{-25} (−1.3 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.34	—	10^9A_{s}	2.109	$2.111^{+0.075}_{-0.073}$ (+0.3 σ)	$H(2.33)$	235.85	$235.9^{+1.5}_{-1.6}$ (−0.7 σ)
A_{143}^{tSZ}	7.24	$5.3^{+3.8}_{-4.0}$ (+0.2 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8800	$1.880^{+0.024}_{-0.024}$ (−0.5 σ)	$D_{\mathrm{M}}(2.33)$	5751.7	5752^{+21}_{-22} (−1.5 σ)
A_{100}^{PS}	251	261^{+50}_{-50} (−0.2 σ)	D_{40}	1215.3	1215^{+37}_{-36} (−0.5 σ)	$f\sigma_8(0.15)$	0.4526	$0.453^{+0.016}_{-0.017}$ (−0.9 σ)
A_{143}^{PS}	46.8	46^{+20}_{-20} (−0.5 σ)	D_{220}	5741	5742^{+79}_{-73} (+0.7 σ)	$\sigma_8(0.15)$	0.7474	$0.747^{+0.014}_{-0.014}$ (−0.3 σ)
$A_{143\times 217}^{\mathrm{PS}}$	45.2	41^{+20}_{-20} (−0.2 σ)	D_{810}	2541.6	2541^{+26}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4720	$0.472^{+0.014}_{-0.014}$ (−0.9 σ)
A_{217}^{PS}	118.4	114^{+20}_{-20} (−0.0 σ)	D_{1420}	818.6	$817.5^{+9.0}_{-8.9}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6631	$0.663^{+0.012}_{-0.011}$ (−0.1 σ)
A^{kSZ}	0.0	—	D_{2000}	231.23	$230.8^{+3.3}_{-3.3}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4711	$0.471^{+0.012}_{-0.012}$ (−0.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.90	$9.0^{+3.7}_{-3.5}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9805	$0.984^{+0.041}_{-0.041}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6208	$0.621^{+0.011}_{-0.011}$ (−0.0 σ)
$A_{143}^{\mathrm{dustTT}}$	11.09	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	Y_{P}	0.245452	$0.24545^{+0.00011}_{-0.00012}$ (+1.5 σ)	$f\sigma_8(0.61)$	0.4666	$0.467^{+0.011}_{-0.011}$ (−0.8 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.8	$18.6^{+6.3}_{-6.3}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246779	$0.24678^{+0.00011}_{-0.00012}$ (+1.5 σ)	$\sigma_8(0.61)$	0.5908	$0.591^{+0.010}_{-0.010}$ (+0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	95.0	94^{+10}_{-10} (+0.0 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.558	$2.559^{+0.055}_{-0.053}$ (−1.5 σ)	$f\sigma_8(2.33)$	0.2981	$0.2980^{+0.0053}_{-0.0047}$ (+0.3 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.115^{+0.076}_{-0.075}$	Age/Gyr	13.7712	$13.771^{+0.047}_{-0.049}$ (−1.5 σ)	$\sigma_8(2.33)$	0.3075	$0.3074^{+0.0054}_{-0.0049}$ (+0.5 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.060}_{-0.060}$	z_*	1089.61	$1089.62^{+0.52}_{-0.52}$ (−1.5 σ)	f_{2000}^{143}	29.2	30^{+6}_{-6} (−0.6 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	r_*	144.66	$144.65^{+0.61}_{-0.58}$ (+0.5 σ)	$f_{2000}^{143\times 217}$	32.18	33^{+4}_{-4} (−0.7 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	1.04127	$1.04129^{+0.00063}_{-0.00063}$ (+0.7 σ)	f_{2000}^{217}	106.82	$107.4^{+3.8}_{-3.8}$ (−0.6 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.663	$0.66^{+0.15}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.893	$13.892^{+0.057}_{-0.054}$ (+0.4 σ)	χ_{simall}^2	396.48	397.5 (ν : 3.0) (+0.3 σ)
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.07^{+0.53}_{-0.49}$	z_{drag}	1060.20	$1060.19^{+0.58}_{-0.60}$ (+1.4 σ)	χ_{lowl}^2	21.87	22.1 (ν : 1.1) (−0.5 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.2 σ)	r_{drag}	147.28	$147.27^{+0.57}_{-0.59}$ (+0.3 σ)	χ_{plik}^2	2346.8	2362.4 (ν : 21.1) (+279.0 σ)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.0 σ)	k_{D}	0.14078	$0.14079^{+0.00064}_{-0.00062}$ (+0.2 σ)	$\chi_{\mathrm{H073p45}}^2$	10.74	10.9 (ν : 2.8)
H_0	68.01	$68.0^{+1.2}_{-1.1}$ (+1.2 σ)	$100\theta_{\mathrm{D}}$	0.160621	$0.16063^{+0.00035}_{-0.00034}$ (−1.3 σ)	χ_{prior}^2	1.8	11.7 (ν : 10.2) (+1.2 σ)
Ω_{Λ}	0.6934	$0.693^{+0.016}_{-0.016}$ (+1.1 σ)	z_{eq}	3374	3375^{+58}_{-62} (−0.8 σ)	χ_{CMB}^2	2765.2	2782.1 (ν : 20.5) (+283.0 σ)
Ω_{m}	0.3066	$0.307^{+0.016}_{-0.016}$ (−1.1 σ)	k_{eq}	0.010297	$0.01030^{+0.00018}_{-0.00019}$ (−0.8 σ)			
$\Omega_{\mathrm{m}}h^2$	0.14183	$0.1419^{+0.0024}_{-0.0026}$ (−0.8 σ)	$100\theta_{\mathrm{eq}}$	0.8190	$0.819^{+0.012}_{-0.011}$ (+0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2777.71$; $\Delta\chi_{\mathrm{eff}}^2 = -0.23$; $\bar{\chi}_{\mathrm{eff}}^2 = 2804.64$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.47$; $R - 1 = 0.04323$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck.B: 396.48 (Δ 0.01) commander_dx12_v3.2.29: 21.87 (Δ -0.67) plik_rd12_HM_v22b_TTTEEE: 2346.81 (Δ 0.05) Hubble - H073p45: 10.74 (Δ 0.15)

12.16 base_nrun_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02239^{+0.00030}_{-0.00029} \quad (+1.0\sigma)$	$\Omega_{\mathrm{m}} h^2$	$0.1434^{+0.0025}_{-0.0025} \quad (-0.1\sigma)$	k_{eq}	$0.01041^{+0.00018}_{-0.00018} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1203^{+0.0027}_{-0.0026} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.09641^{+0.00061}_{-0.00060} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04090^{+0.00061}_{-0.00063} \quad (+0.3\sigma)$	σ_8	$0.813^{+0.015}_{-0.014} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4487^{+0.0057}_{-0.0057} \quad (+0.1\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	S_8	$0.836^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$72.6^{+1.0}_{-0.99} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.051^{+0.031}_{-0.029} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+10}_{-10} \quad (-0.4\sigma)$
n_{s}	$0.9636^{+0.0089}_{-0.0090} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$H(0.38)$	$82.82^{+0.74}_{-0.72} \quad (+0.5\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.006^{+0.013}_{-0.013} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1535^{+20}_{-20} \quad (-0.4\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.9^{+2.0}_{-2.0} \quad (+0.3\sigma)$	$H(0.51)$	$89.60^{+0.59}_{-0.57} \quad (+0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.057}_{-0.057} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1988^{+23}_{-24} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.3\sigma)$	$H(0.61)$	$95.26^{+0.47}_{-0.46} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.114^{+0.066}_{-0.062} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+25}_{-26} \quad (-0.5\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.887^{+0.024}_{-0.024} \quad (+0.0\sigma)$	$H(2.33)$	$236.8^{+1.6}_{-1.6} \quad (-0.0\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.3\sigma)$	D_{40}	$1221^{+37}_{-37} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+21}_{-22} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5733^{+76}_{-77} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2542^{+27}_{-27} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.013}_{-0.012} \quad (+0.2\sigma)$
A^{kSZ}	—	D_{1420}	$816.2^{+9.6}_{-9.6} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$230.2^{+3.6}_{-3.4} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.011}_{-0.010} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.982^{+0.040}_{-0.040} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.012}_{-0.012} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(0.51)$	$0.6222^{+0.0097}_{-0.0094} \quad (+0.3\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.011}_{-0.011} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.076}_{-0.074}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.583^{+0.056}_{-0.053} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.5919^{+0.0091}_{-0.0088} \quad (+0.3\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.134^{+0.057}_{-0.059}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.797^{+0.048}_{-0.049} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0045}_{-0.0043} \quad (+0.4\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.93^{+0.53}_{-0.54} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0047}_{-0.0044} \quad (+0.4\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.10}_{-0.10}$	r_*	$144.34^{+0.59}_{-0.59} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	$1.04108^{+0.00060}_{-0.00061} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.09^{+0.52}_{-0.53}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.864^{+0.055}_{-0.055} \quad (-0.2\sigma)$	f_{2000}^{217}	$107.8^{+3.9}_{-4.0} \quad (-0.4\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.00^{+0.62}_{-0.60} \quad (+1.0\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.1) \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$146.99^{+0.59}_{-0.59} \quad (-0.3\sigma)$	χ_{lowl}^2	$22.6 \quad (\nu: 1.3) \quad (-0.3\sigma)$
H_0	$67.3^{+1.2}_{-1.2} \quad (+0.4\sigma)$	k_{D}	$0.14099^{+0.00066}_{-0.00065} \quad (+0.6\sigma)$	χ_{plik}^2	$2360.7 \quad (\nu: 17.5) \quad (+278.7\sigma)$
Ω_{Λ}	$0.683^{+0.016}_{-0.017} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16072^{+0.00036}_{-0.00035} \quad (-1.0\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_{m}	$0.317^{+0.017}_{-0.016} \quad (-0.3\sigma)$	z_{eq}	$3410^{+60}_{-59} \quad (-0.1\sigma)$	χ_{CMB}^2	$2780.5 \quad (\nu: 17.2) \quad (+282.7\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 2792.02$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.49$; $R - 1 = 0.01357$

12.17 base_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02245^{+0.00027}_{-0.00028} \quad (+1.2\sigma)$	σ_8	$0.811^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.7^{+7.5}_{-7.5} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1194^{+0.0020}_{-0.0020} \quad (-0.6\sigma)$	S_8	$0.826^{+0.025}_{-0.025} \quad (-0.6\sigma)$	$H(0.38)$	$83.07^{+0.58}_{-0.55} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04101^{+0.00056}_{-0.00060} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+15}_{-15} \quad (-0.9\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$H(0.51)$	$89.79^{+0.47}_{-0.44} \quad (+1.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.050^{+0.032}_{-0.030} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.020}_{-0.020} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+18}_{-18} \quad (-0.9\sigma)$
n_{s}	$0.9659^{+0.0080}_{-0.0081} \quad (+0.7\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.5}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$95.41^{+0.39}_{-0.37} \quad (+1.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.005^{+0.013}_{-0.013} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.051}_{-0.051} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+19}_{-20} \quad (-0.9\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$H(2.33)$	$236.2^{+1.2}_{-1.2} \quad (-0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.113^{+0.068}_{-0.064} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+17}_{-18} \quad (-1.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.883^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.0} \quad (+0.2\sigma)$	D_{40}	$1218^{+35}_{-36} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.013}_{-0.012} \quad (-0.1\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.1\sigma)$	D_{220}	$5737^{+74}_{-75} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.4\sigma)$	D_{810}	$2541^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$816.9^{+9.2}_{-9.0} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.010} \quad (-0.5\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.5^{+3.4}_{-3.4} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0099}_{-0.0096} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.48 \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.982^{+0.041}_{-0.040} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0095}_{-0.0093} \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.24542^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.5914^{+0.0094}_{-0.0090} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.0^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0047}_{-0.0045} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.3} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.571^{+0.052}_{-0.049} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0048}_{-0.0046} \quad (+0.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.039}_{-0.041} \quad (-1.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.077}_{-0.075}$	z_*	$1089.77^{+0.44}_{-0.44} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.060}_{-0.059}$	r_*	$144.53^{+0.45}_{-0.48} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.6^{+3.9}_{-3.8} \quad (-0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04119^{+0.00055}_{-0.00059} \quad (+0.4\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.5) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.881^{+0.043}_{-0.046} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.3 \quad (\nu: 1.2) \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1060.07^{+0.58}_{-0.60} \quad (+1.2\sigma)$	χ_{plik}^2	$2360.8 \quad (\nu: 17.1) \quad (+278.7\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.51}$	r_{drag}	$147.17^{+0.48}_{-0.50} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.059 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14085^{+0.00060}_{-0.00059} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00036}_{-0.00034} \quad (-1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.1)$
H_0	$67.67^{+0.89}_{-0.87} \quad (+0.9\sigma)$	z_{eq}	$3389^{+45}_{-45} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
Ω_{Λ}	$0.689^{+0.012}_{-0.012} \quad (+0.8\sigma)$	k_{eq}	$0.01034^{+0.00014}_{-0.00014} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$
Ω_{m}	$0.311^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8159^{+0.0084}_{-0.0085} \quad (+0.6\sigma)$	χ_{CMB}^2	$2780.5 \quad (\nu: 16.5) \quad (+282.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1425^{+0.0019}_{-0.0019} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0044}_{-0.0043} \quad (+0.6\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.09641^{+0.00061}_{-0.00059} \quad (+0.8\sigma)$	$H(0.15)$	$72.95^{+0.77}_{-0.75} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.32; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.61; R - 1 = 0.02163$$

12.18 base_nrun_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00029}_{-0.00029} \quad (+1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09639^{+0.00061}_{-0.00059} \quad (+0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4493^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0023}_{-0.0022} \quad (-0.4\sigma)$	σ_8	$0.812^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$H(0.15)$	$72.71^{+0.90}_{-0.87} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00060}_{-0.00062} \quad (+0.3\sigma)$	S_8	$0.832^{+0.025}_{-0.025} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.2^{+8.8}_{-8.9} \quad (-0.6\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$H(0.38)$	$82.89^{+0.66}_{-0.63} \quad (+0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.049^{+0.027}_{-0.026} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.012}_{-0.013} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+18}_{-18} \quad (-0.6\sigma)$
n_{s}	$0.9643^{+0.0083}_{-0.0084} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.017}_{-0.018} \quad (-0.3\sigma)$	$H(0.51)$	$89.65^{+0.52}_{-0.50} \quad (+0.7\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.005^{+0.013}_{-0.013} \quad (-0.0\sigma)$	$r_{\mathrm{drag}}h$	$99.1^{+1.8}_{-1.7} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1985^{+20}_{-21} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.045}_{-0.045} \quad (-0.2\sigma)$	$H(0.61)$	$95.30^{+0.43}_{-0.41} \quad (+0.8\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2310^{+22}_{-23} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.109^{+0.058}_{-0.054} \quad (+0.3\sigma)$	$H(2.33)$	$236.6^{+1.4}_{-1.3} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.885^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+19}_{-20} \quad (-0.8\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.1\sigma)$	D_{40}	$1222^{+36}_{-35} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	$5734^{+75}_{-76} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.010}_{-0.0097} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2541^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.010}_{-0.010} \quad (-0.3\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$816.4^{+9.5}_{-9.4} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6642^{+0.0088}_{-0.0086} \quad (+0.1\sigma)$
A^{kSZ}	—	D_{2000}	$230.3^{+3.5}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4757^{+0.0087}_{-0.0092} \quad (-0.3\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.979^{+0.041}_{-0.039} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0082}_{-0.0080} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.0^{+3.6}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.24541^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0079}_{-0.0082} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.6}_{-6.3} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0078}_{-0.0076} \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.054}_{-0.051} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0041}_{-0.0039} \quad (+0.3\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.077}_{-0.075}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.794^{+0.044}_{-0.045} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0044}_{-0.0041} \quad (+0.4\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.059}$	z_*	$1089.88^{+0.49}_{-0.49} \quad (-0.9\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.4\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.41^{+0.50}_{-0.52} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	$1.04111^{+0.00059}_{-0.00061} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.7^{+4.0}_{-3.9} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.871^{+0.048}_{-0.049} \quad (-0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.42 \quad (\nu: 0.3)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.52}$	z_{drag}	$1060.01^{+0.61}_{-0.61} \quad (+1.0\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (-0.0\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.06^{+0.51}_{-0.52} \quad (-0.1\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 1.4) \quad (-0.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14093^{+0.00061}_{-0.00059} \quad (+0.5\sigma)$	χ_{plik}^2	$2360.4 \quad (\nu: 16.7) \quad (+278.7\sigma)$
H_0	$67.4^{+1.0}_{-1.0} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16072^{+0.00036}_{-0.00034} \quad (-1.0\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.5) \quad (+1.2\sigma)$
Ω_{Λ}	$0.685^{+0.014}_{-0.014} \quad (+0.5\sigma)$	z_{eq}	$3403^{+52}_{-50} \quad (-0.2\sigma)$	χ_{CMB}^2	$2789.5 \quad (\nu: 17.1) \quad (+284.3\sigma)$
Ω_{m}	$0.315^{+0.014}_{-0.014} \quad (-0.5\sigma)$	k_{eq}	$0.01039^{+0.00016}_{-0.00015} \quad (-0.2\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1431^{+0.0022}_{-0.0021} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8133^{+0.0095}_{-0.0096} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.11; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.60; R - 1 = 0.02119$$

12.19 base_nrun_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02245^{+0.00027}_{-0.00028} \quad (+1.2\sigma)$	σ_8	$0.811^{+0.012}_{-0.011} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.6^{+7.0}_{-6.9} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1194^{+0.0018}_{-0.0018} \quad (-0.7\sigma)$	S_8	$0.825^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$H(0.38)$	$83.07^{+0.54}_{-0.51} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04101^{+0.00056}_{-0.00061} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.012}_{-0.011} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+14}_{-14} \quad (-0.9\sigma)$
τ	$0.057^{+0.013}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$H(0.51)$	$89.79^{+0.43}_{-0.42} \quad (+1.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.050^{+0.029}_{-0.026} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+16}_{-17} \quad (-0.9\sigma)$
n_{s}	$0.9659^{+0.0078}_{-0.0079} \quad (+0.7\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.4}_{-1.4} \quad (+0.7\sigma)$	$H(0.61)$	$95.41^{+0.37}_{-0.35} \quad (+1.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.004^{+0.013}_{-0.013} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.041}_{-0.044} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+18}_{-18} \quad (-0.9\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+0.4\sigma)$	$H(2.33)$	$236.2^{+1.1}_{-1.1} \quad (-0.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.112^{+0.059}_{-0.056} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+17}_{-18} \quad (-1.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.883^{+0.022}_{-0.021} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$5.3^{+3.8}_{-4.0} \quad (+0.2\sigma)$	D_{40}	$1220^{+35}_{-36} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0099} \quad (-0.1\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.1\sigma)$	D_{220}	$5739^{+73}_{-73} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.4752^{+0.0091}_{-0.0093} \quad (-0.5\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.4\sigma)$	D_{810}	$2541^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6641^{+0.0094}_{-0.0085} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$817.1^{+9.2}_{-9.1} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4738^{+0.0082}_{-0.0083} \quad (-0.5\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$230.6^{+3.4}_{-3.4} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0088}_{-0.0080} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.46 \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.979^{+0.041}_{-0.039} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0076}_{-0.0077} \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.24542^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.5914^{+0.0084}_{-0.0075} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.0^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0043}_{-0.0038} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.3} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.572^{+0.051}_{-0.049} \quad (-1.2\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0044}_{-0.0042} \quad (+0.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.038}_{-0.040} \quad (-1.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.078}_{-0.076}$	z_*	$1089.77^{+0.43}_{-0.41} \quad (-1.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.060}_{-0.059}$	r_*	$144.54^{+0.42}_{-0.43} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-3.9} \quad (-0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04118^{+0.00055}_{-0.00060} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.23 \quad (\nu: 0.2)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.882^{+0.040}_{-0.042} \quad (+0.2\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.9) \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1060.07^{+0.59}_{-0.63} \quad (+1.1\sigma)$	χ_{lowl}^2	$22.5 \quad (\nu: 1.3) \quad (-0.3\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.51}$	r_{drag}	$147.18^{+0.45}_{-0.46} \quad (+0.1\sigma)$	χ_{plik}^2	$2360.4 \quad (\nu: 16.4) \quad (+278.7\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14084^{+0.00058}_{-0.00057} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16069^{+0.00036}_{-0.00034} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
H_0	$67.68^{+0.83}_{-0.81} \quad (+0.9\sigma)$	z_{eq}	$3389^{+41}_{-41} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 0.9)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.8\sigma)$	k_{eq}	$0.01034^{+0.00013}_{-0.00012} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.4) \quad (+1.2\sigma)$
Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8160^{+0.0077}_{-0.0076} \quad (+0.6\sigma)$	χ_{CMB}^2	$2789.5 \quad (\nu: 16.5) \quad (+284.3\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1424^{+0.0017}_{-0.0017} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0039}_{-0.0039} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}}h^3$	$0.09640^{+0.00061}_{-0.00059} \quad (+0.8\sigma)$	$H(0.15)$	$72.96^{+0.71}_{-0.70} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.20; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.48; R - 1 = 0.02657$$

12.20 base_nrun_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02252^{+0.00030}_{-0.00030} \quad (+1.6\sigma)$	$\Omega_{\text{m}}h^3$	$0.09647^{+0.00060}_{-0.00059} \quad (+1.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.4522^{+0.0061}_{-0.0056} \quad (+0.9\sigma)$
$\Omega_{\text{c}}h^2$	$0.1187^{+0.0026}_{-0.0028} \quad (-1.0\sigma)$	σ_8	$0.809^{+0.016}_{-0.015} \quad (-0.4\sigma)$	$H(0.15)$	$73.2^{+1.0}_{-0.98} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04112^{+0.00065}_{-0.00064} \quad (+0.7\sigma)$	S_8	$0.818^{+0.031}_{-0.033} \quad (-1.0\sigma)$	$D_{\text{M}}(0.15)$	$637.8^{+9.7}_{-10} \quad (-1.2\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.448^{+0.017}_{-0.018} \quad (-1.0\sigma)$	$H(0.38)$	$83.29^{+0.76}_{-0.71} \quad (+1.3\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.051^{+0.033}_{-0.031} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.602^{+0.017}_{-0.017} \quad (-0.8\sigma)$	$D_{\text{M}}(0.38)$	$1522^{+19}_{-20} \quad (-1.3\sigma)$
n_{s}	$0.9676^{+0.0087}_{-0.0090} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.024}_{-0.024} \quad (-0.8\sigma)$	$H(0.51)$	$89.96^{+0.62}_{-0.56} \quad (+1.4\sigma)$
$\text{d}n_{\text{s}}/\text{d} \ln k$	$-0.005^{+0.013}_{-0.014} \quad (-0.1\sigma)$	$r_{\text{drag}}h$	$100.2^{+2.1}_{-2.0} \quad (+1.1\sigma)$	$D_{\text{M}}(0.51)$	$1973^{+23}_{-23} \quad (-1.3\sigma)$
y_{cal}	$1.0007^{+0.0046}_{-0.0045} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.421^{+0.057}_{-0.054} \quad (-0.8\sigma)$	$H(0.61)$	$95.55^{+0.52}_{-0.45} \quad (+1.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$8.0^{+1.4}_{-1.5} \quad (+0.5\sigma)$	$D_{\text{M}}(0.61)$	$2296^{+24}_{-25} \quad (-1.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}$	$2.113^{+0.070}_{-0.066} \quad (+0.4\sigma)$	$H(2.33)$	$235.9^{+1.5}_{-1.6} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.3^{+3.8}_{-4.0} \quad (+0.2\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.880^{+0.024}_{-0.024} \quad (-0.5\sigma)$	$D_{\text{M}}(2.33)$	$5751^{+21}_{-22} \quad (-1.5\sigma)$
A_{100}^{PS}	$261^{+50}_{-50} \quad (-0.2\sigma)$	D_{40}	$1214^{+37}_{-36} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.016}_{-0.017} \quad (-0.9\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.5\sigma)$	D_{220}	$5742^{+80}_{-73} \quad (+0.7\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.013} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (-0.2\sigma)$	D_{810}	$2541^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.014} \quad (-0.9\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.5^{+9.0}_{-8.9} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.011} \quad (-0.1\sigma)$
A^{kSZ}	—	D_{2000}	$230.8^{+3.4}_{-3.3} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (-0.0\sigma)$	$n_{\text{s},0.002}$	$0.984^{+0.041}_{-0.041} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0099} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.24545^{+0.00011}_{-0.00012} \quad (+1.5\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.3}_{-6.3} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24678^{+0.00011}_{-0.00012} \quad (+1.5\sigma)$	$\sigma_8(0.61)$	$0.5909^{+0.0099}_{-0.0093} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.558^{+0.055}_{-0.053} \quad (-1.5\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0049}_{-0.0046} \quad (+0.4\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.075}$	Age/Gyr	$13.770^{+0.047}_{-0.049} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.3076^{+0.0050}_{-0.0048} \quad (+0.6\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.060}_{-0.060}$	z_*	$1089.62^{+0.52}_{-0.52} \quad (-1.5\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.66^{+0.60}_{-0.59} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	$1.04129^{+0.00063}_{-0.00063} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.4^{+3.8}_{-3.9} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.892^{+0.057}_{-0.054} \quad (+0.4\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 3.1) \quad (+0.3\sigma)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.49}$	z_{drag}	$1060.19^{+0.58}_{-0.60} \quad (+1.4\sigma)$	χ_{lowl}^2	$22.1 \quad (\nu: 1.1) \quad (-0.5\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.2\sigma)$	r_{drag}	$147.27^{+0.57}_{-0.58} \quad (+0.3\sigma)$	χ_{plik}^2	$2362.4 \quad (\nu: 21.2) \quad (+279.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{D}	$0.14079^{+0.00064}_{-0.00062} \quad (+0.2\sigma)$	χ_{H073p45}^2	$10.9 \quad (\nu: 2.8)$
H_0	$68.0^{+1.2}_{-1.1} \quad (+1.2\sigma)$	$100\theta_{\text{D}}$	$0.16062^{+0.00035}_{-0.00033} \quad (-1.3\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_{Λ}	$0.693^{+0.016}_{-0.016} \quad (+1.1\sigma)$	z_{eq}	$3374^{+58}_{-62} \quad (-0.8\sigma)$	χ_{CMB}^2	$2782.0 \quad (\nu: 20.5) \quad (+282.9\sigma)$
Ω_{m}	$0.307^{+0.016}_{-0.016} \quad (-1.1\sigma)$	k_{eq}	$0.01030^{+0.00018}_{-0.00019} \quad (-0.8\sigma)$		
$\Omega_{\text{m}}h^2$	$0.1419^{+0.0024}_{-0.0026} \quad (-0.8\sigma)$	$100\theta_{\text{eq}}$	$0.819^{+0.012}_{-0.011} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2804.52; \Delta\bar{\chi}_{\text{eff}}^2 = 0.63; R - 1 = 0.04836$$

12.21 base_nrun_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022152	$0.02216^{+0.00045}_{-0.00047} \quad (+0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4596	$0.459^{+0.026}_{-0.025} \quad (-0.1\sigma)$	$H(0.15)$	72.28	$72.3^{+1.6}_{-1.5} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.12068	$0.1206^{+0.0042}_{-0.0040} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6108	$0.610^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	647.3	$647^{+16}_{-16} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	1.04082	$1.04084^{+0.00094}_{-0.00093} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9925	$0.991^{+0.032}_{-0.031} \quad (-0.1\sigma)$	$H(0.38)$	82.55	$82.6^{+1.1}_{-1.1} \quad (+0.1\sigma)$
τ	0.0529	$0.053^{+0.017}_{-0.016} \quad (-0.0\sigma)$	$r_{\mathrm{drag}} h$	98.46	$98.6^{+3.2}_{-3.2} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1541.6	$1541^{+31}_{-31} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0419	$3.041^{+0.037}_{-0.035} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.448	$2.445^{+0.076}_{-0.074} \quad (-0.1\sigma)$	$H(0.51)$	89.35	$89.39^{+0.90}_{-0.87} \quad (+0.1\sigma)$
n_{s}	0.9624	$0.963^{+0.012}_{-0.012} \quad (+0.2\sigma)$	z_{re}	7.59	$7.6^{+1.7}_{-1.7} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	1995.6	$1994^{+37}_{-37} \quad (-0.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	-0.0033	$-0.003^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	2.094	$2.094^{+0.078}_{-0.072} \quad (-0.2\sigma)$	$H(0.61)$	95.04	$95.07^{+0.73}_{-0.70} \quad (+0.1\sigma)$
y_{cal}	1.00058	$1.0004^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8842	$1.883^{+0.029}_{-0.028} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	2321.0	$2320^{+39}_{-39} \quad (-0.1\sigma)$
A_{100}^{PS}	245.0	$244^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	1224.5	$1223^{+42}_{-41} \quad (-0.1\sigma)$	$H(2.33)$	236.78	$236.7^{+2.6}_{-2.5} \quad (-0.1\sigma)$
A_{143}^{PS}	39.9	$42^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	5706	$5704^{+82}_{-80} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	5775.7	$5775^{+33}_{-33} \quad (-0.1\sigma)$
A_{217}^{PS}	98.4	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	2535.5	$2535^{+29}_{-28} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4634	$0.463^{+0.024}_{-0.023} \quad (-0.1\sigma)$
A_{217}^{CIB}	45.4	$42^{+20}_{-10} \quad (-1.0\sigma)$	D_{1420}	813.5	$814^{+11}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	0.7493	$0.749^{+0.015}_{-0.015} \quad (-0.1\sigma)$
A_{143}^{tSZ}	5.16	$< 7.33 \quad (-0.6\sigma)$	D_{2000}	229.09	$229.1^{+4.0}_{-3.9} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4798	$0.479^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.549	$0.64^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9730	$0.974^{+0.046}_{-0.046} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6632	$0.663^{+0.012}_{-0.012} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.74	—	Y_{P}	0.245306	$0.24530^{+0.00019}_{-0.00021} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	0.4773	$0.477^{+0.016}_{-0.016} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.00	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246632	$0.24663^{+0.00019}_{-0.00021} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	0.6202	$0.620^{+0.011}_{-0.011} \quad (-0.1\sigma)$
A^{kSZ}	2.6	—	$10^5 \mathrm{D}/\mathrm{H}$	2.627	$2.626^{+0.090}_{-0.084} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	0.4716	$0.471^{+0.014}_{-0.014} \quad (-0.1\sigma)$
A_{100}^{dust}	1.017	$1.02^{+0.38}_{-0.39}$	Age/Gyr	13.825	$13.823^{+0.074}_{-0.074} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	0.5899	$0.590^{+0.011}_{-0.010} \quad (-0.1\sigma)$
A_{143}^{dust}	0.986	$0.98^{+0.34}_{-0.35}$	z_*	1090.26	$1090.24^{+0.84}_{-0.80} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	0.2971	$0.2970^{+0.0053}_{-0.0051} \quad (-0.1\sigma)$
A_{217}^{dust}	0.961	$0.97^{+0.20}_{-0.20}$	r_*	144.42	$144.45^{+0.95}_{-0.98} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.3059	$0.3059^{+0.0056}_{-0.0054} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.002	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04103	$1.04105^{+0.00092}_{-0.00092} \quad (+0.1\sigma)$	f_{2000}^{143}	32.0	$32^{+7}_{-7} \quad (-0.2\sigma)$
c_{100}	0.99751	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.873	$13.876^{+0.087}_{-0.090} \quad (+0.1\sigma)$	f_{2000}^{217}	108.26	$108.0^{+4.3}_{-4.4} \quad (-0.3\sigma)$
c_{217}	1.00149	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	z_{drag}	1059.47	$1059.49^{+0.94}_{-0.97} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	33.66	$34^{+5}_{-5} \quad (-0.3\sigma)$
H_0	66.91	$67.0^{+1.8}_{-1.8} \quad (+0.1\sigma)$	r_{drag}	147.16	$147.18^{+0.96}_{-0.99} \quad (+0.1\sigma)$	χ_{simall}^2	395.90	$397.0 \quad (\nu: 1.6) \quad (-0.0\sigma)$
Ω_{Λ}	0.6795	$0.680^{+0.025}_{-0.027} \quad (+0.1\sigma)$	k_{D}	0.14063	$0.1406^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	χ_{lowl}^2	22.73	$23.1 \quad (\nu: 2.2) \quad (-0.0\sigma)$
Ω_{m}	0.3205	$0.320^{+0.027}_{-0.025} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.16103	$0.16103^{+0.00057}_{-0.00055} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	7050.5	$7064.2 \quad (\nu: 16.0)$
$\Omega_{\mathrm{m}} h^2$	0.14347	$0.1434^{+0.0040}_{-0.0038} \quad (-0.1\sigma)$	z_{eq}	3413	$3410^{+96}_{-92} \quad (-0.1\sigma)$	χ_{prior}^2	2.4	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.09599	$0.09599^{+0.00097}_{-0.00096} \quad (+0.0\sigma)$	k_{eq}	0.010417	$0.01041^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	χ_{CMB}^2	7469.1	$7484.4 \quad (\nu: 15.9) \quad (+1120.2\sigma)$
σ_8	0.8118	$0.811^{+0.018}_{-0.018} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	0.8107	$0.811^{+0.017}_{-0.018} \quad (+0.1\sigma)$			
S_8	0.8391	$0.838^{+0.048}_{-0.046} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4482	$0.4485^{+0.0090}_{-0.0090} \quad (+0.1\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 7471.52$; $\Delta\chi_{\mathrm{eff}}^2 = -0.22$; $\bar{\chi}_{\mathrm{eff}}^2 = 7492.14$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.60$; $R - 1 = 0.00818$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.90 (Δ 0.07) commander_dx12_v3.2.29: 22.73 (Δ -0.67) CamSpec like_10.7HM: 7050.50 (Δ 0.16)

12.22 base_nrun_CamSpecHM_TT_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02225^{+0.00041}_{-0.00040} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.016}_{-0.016} \quad (-0.8\sigma)$	$H(0.38)$	$83.01^{+0.70}_{-0.69} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0024}_{-0.0023} \quad (-0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+19}_{-19} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00085}_{-0.00081} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.8}_{-1.9} \quad (+0.9\sigma)$	$H(0.51)$	$89.71^{+0.59}_{-0.57} \quad (+0.8\sigma)$
τ	$0.055^{+0.017}_{-0.016} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.056}_{-0.055} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+22}_{-22} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.037}_{-0.034} \quad (-0.2\sigma)$	z_{re}	$7.7^{+1.7}_{-1.7} \quad (+0.1\sigma)$	$H(0.61)$	$95.31^{+0.51}_{-0.48} \quad (+0.8\sigma)$
n_{s}	$0.9668^{+0.0094}_{-0.0089} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.079}_{-0.071} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+24}_{-23} \quad (-0.9\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.003^{+0.015}_{-0.015} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.024}_{-0.024} \quad (-0.8\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.5} \quad (-0.8\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1217^{+39}_{-38} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+25}_{-26} \quad (-0.7\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5710^{+81}_{-78} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-0.9\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2534^{+28}_{-28} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.014}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$814^{+11}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$229.5^{+3.9}_{-3.8} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.012}_{-0.011} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.30 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.975^{+0.047}_{-0.045} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.012} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	Y_{P}	$0.24534^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24667^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.010} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.608^{+0.076}_{-0.076} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.801^{+0.056}_{-0.059} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0054}_{-0.0051} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	z_*	$1089.98^{+0.60}_{-0.60} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0056}_{-0.0052} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	r_*	$144.80^{+0.64}_{-0.63} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04126^{+0.00083}_{-0.00079} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.7^{+4.2}_{-4.3} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.906^{+0.062}_{-0.062} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	z_{drag}	$1059.58^{+0.92}_{-0.95} \quad (+0.2\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	r_{drag}	$147.51^{+0.70}_{-0.70} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.6 \quad (\nu: 1.6) \quad (-0.3\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.9\sigma)$	k_{D}	$0.14034^{+0.00094}_{-0.00093} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.6 \quad (\nu: 15.3)$
Ω_{Λ}	$0.690^{+0.014}_{-0.015} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16098^{+0.00054}_{-0.00053} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3374^{+57}_{-55} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0024}_{-0.0023} \quad (-0.8\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.09599^{+0.00095}_{-0.00095} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.9\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.2) \quad (+0.1\sigma)$
σ_8	$0.807^{+0.016}_{-0.015} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4520^{+0.0052}_{-0.0054} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
S_8	$0.820^{+0.030}_{-0.028} \quad (-0.9\sigma)$	$H(0.15)$	$72.94^{+0.94}_{-0.93} \quad (+0.9\sigma)$	χ_{CMB}^2	$7484.3 \quad (\nu: 15.1) \quad (+1120.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.7^{+9.2}_{-9.1} \quad (-0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7498.15$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.60$; $R - 1 = 0.01937$

12.23 base_nrun_CamSpecHM_TT_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02217^{+0.00044}_{-0.00044} \quad (+0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.017} \quad (-0.3\sigma)$	$H(0.15)$	$72.4^{+1.2}_{-1.2} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1202^{+0.0032}_{-0.0031} \quad (-0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+13}_{-12} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04087^{+0.00089}_{-0.00089} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} \quad (-0.2\sigma)$	$H(0.38)$	$82.65^{+0.92}_{-0.89} \quad (+0.2\sigma)$
τ	$0.053^{+0.017}_{-0.016} \quad (-0.0\sigma)$	$r_{\mathrm{drag}} h$	$98.8^{+2.5}_{-2.5} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1539^{+25}_{-24} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.033}_{-0.031} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.052}_{-0.052} \quad (-0.2\sigma)$	$H(0.51)$	$89.43^{+0.75}_{-0.71} \quad (+0.2\sigma)$
n_{s}	$0.964^{+0.011}_{-0.010} \quad (+0.3\sigma)$	z_{re}	$7.6^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1992^{+29}_{-29} \quad (-0.2\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.002^{+0.014}_{-0.015} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.070}_{-0.065} \quad (-0.2\sigma)$	$H(0.61)$	$95.10^{+0.62}_{-0.60} \quad (+0.2\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.024}_{-0.023} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2317^{+31}_{-31} \quad (-0.2\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+40}_{-39} \quad (-0.0\sigma)$	$H(2.33)$	$236.5^{+1.9}_{-1.9} \quad (-0.2\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5707^{+83}_{-78} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5773^{+30}_{-29} \quad (-0.2\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2534^{+28}_{-26} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.3\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+11}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.6\sigma)$	D_{2000}	$229.2^{+4.0}_{-3.8} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.971^{+0.045}_{-0.045} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.6626^{+0.0098}_{-0.0097} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24531^{+0.00018}_{-0.00020} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00019}_{-0.00020} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6198^{+0.0095}_{-0.0090} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.624^{+0.086}_{-0.081} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.4703^{+0.0092}_{-0.0095} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.820^{+0.067}_{-0.066} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5896^{+0.0091}_{-0.0087} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.20^{+0.74}_{-0.71} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0048}_{-0.0047} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.52^{+0.73}_{-0.73} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0054}_{-0.0052} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.33}$	$100\theta_*$	$1.04107^{+0.00088}_{-0.00087} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-7} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.882^{+0.069}_{-0.070} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.9^{+4.2}_{-4.3} \quad (-0.4\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	z_{drag}	$1059.48^{+0.94}_{-0.96} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.3\sigma)$
H_0	$67.1^{+1.4}_{-1.4} \quad (+0.2\sigma)$	r_{drag}	$147.25^{+0.77}_{-0.78} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.61 \quad (\nu: 0.4)$
Ω_{Λ}	$0.682^{+0.019}_{-0.020} \quad (+0.2\sigma)$	k_{D}	$0.14054^{+0.00096}_{-0.00095} \quad (-0.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (-0.0\sigma)$
Ω_{m}	$0.318^{+0.020}_{-0.019} \quad (-0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00056}_{-0.00053} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 2.2) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1431^{+0.0030}_{-0.0029} \quad (-0.2\sigma)$	z_{eq}	$3403^{+72}_{-70} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.5 \quad (\nu: 14.6)$
$\Omega_{\mathrm{m}} h^3$	$0.09597^{+0.00094}_{-0.00094} \quad (-0.0\sigma)$	k_{eq}	$0.01039^{+0.00022}_{-0.00022} \quad (-0.2\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.811^{+0.013}_{-0.013} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.014}_{-0.013} \quad (+0.2\sigma)$	χ_{CMB}^2	$7493.4 \quad (\nu: 15.9) \quad (+1121.8\sigma)$
S_8	$0.834^{+0.032}_{-0.032} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4492^{+0.0069}_{-0.0068} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7501.08; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.83; R - 1 = 0.01225$$

12.24 base_nrun_CamSpecHM_TT_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02225^{+0.00041}_{-0.00040} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.38)$	$82.97^{+0.66}_{-0.65} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0022}_{-0.0021} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.018}_{-0.018} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+17}_{-17} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00084}_{-0.00080} \quad (+0.6\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.7}_{-1.7} \quad (+0.8\sigma)$	$H(0.51)$	$89.67^{+0.57}_{-0.54} \quad (+0.7\sigma)$
τ	$0.056^{+0.016}_{-0.015} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.046}_{-0.046} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+20}_{-20} \quad (-0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.033}_{-0.030} \quad (+0.0\sigma)$	z_{re}	$7.9^{+1.5}_{-1.5} \quad (+0.3\sigma)$	$H(0.61)$	$95.28^{+0.50}_{-0.47} \quad (+0.7\sigma)$
n_{s}	$0.9663^{+0.0091}_{-0.0085} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.069}_{-0.063} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2306^{+22}_{-22} \quad (-0.8\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.002^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.023}_{-0.022} \quad (-0.6\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{40}	$1220^{+38}_{-38} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+24}_{-25} \quad (-0.6\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5714^{+79}_{-77} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.012}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+11}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.010}_{-0.010} \quad (-0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$229.7^{+3.9}_{-3.7} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0096} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.31 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.974^{+0.047}_{-0.046} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.4729^{+0.0090}_{-0.0090} \quad (-0.6\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.26}$	Y_{P}	$0.24534^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6204^{+0.0096}_{-0.0090} \quad (-0.0\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24667^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4679^{+0.0083}_{-0.0083} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.610^{+0.076}_{-0.074} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5903^{+0.0091}_{-0.0085} \quad (+0.0\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.803^{+0.056}_{-0.058} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0048}_{-0.0044} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	z_*	$1090.00^{+0.59}_{-0.58} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0052}_{-0.0046} \quad (+0.3\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	r_*	$144.75^{+0.57}_{-0.57} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-7} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04123^{+0.00083}_{-0.00079} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.6^{+4.2}_{-4.3} \quad (-0.5\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.902^{+0.056}_{-0.056} \quad (+0.7\sigma)$	$f_{2000}^{143\times 217}$	$33^{+4}_{-5} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1059.58^{+0.92}_{-0.95} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.47 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	r_{drag}	$147.46^{+0.65}_{-0.64} \quad (+0.7\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.9) \quad (+0.1\sigma)$
H_0	$67.60^{+0.99}_{-0.99} \quad (+0.8\sigma)$	k_{D}	$0.14038^{+0.00089}_{-0.00088} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 1.8) \quad (-0.1\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16098^{+0.00054}_{-0.00052} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.8 \quad (\nu: 14.3)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.8\sigma)$	z_{eq}	$3378^{+50}_{-50} \quad (-0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.30 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}}h^3$	$0.09600^{+0.00093}_{-0.00094} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0092}_{-0.0092} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.2)$
σ_8	$0.809^{+0.013}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0048}_{-0.0048} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
S_8	$0.824^{+0.024}_{-0.024} \quad (-0.7\sigma)$	$H(0.15)$	$72.87^{+0.85}_{-0.85} \quad (+0.8\sigma)$	χ_{CMB}^2	$7493.4 \quad (\nu: 15.3) \quad (+1121.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.4^{+8.5}_{-8.3} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7507.23$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.75$; $R - 1 = 0.02103$

12.25 base_nrun_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02217^{+0.00045}_{-0.00046} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.459^{+0.026}_{-0.025} \quad (-0.1\sigma)$	$H(0.15)$	$72.4^{+1.6}_{-1.5} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1205^{+0.0042}_{-0.0040} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.023}_{-0.022} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+16}_{-15} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04086^{+0.00094}_{-0.00093} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.031}_{-0.031} \quad (-0.1\sigma)$	$H(0.38)$	$82.6^{+1.1}_{-1.1} \quad (+0.1\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.6^{+3.1}_{-3.2} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1540^{+31}_{-31} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.032}_{-0.029} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.075}_{-0.073} \quad (-0.1\sigma)$	$H(0.51)$	$89.41^{+0.89}_{-0.86} \quad (+0.1\sigma)$
n_{s}	$0.963^{+0.012}_{-0.012} \quad (+0.2\sigma)$	z_{re}	$< 9.03 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1994^{+36}_{-36} \quad (-0.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.004^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.067}_{-0.060} \quad (+0.0\sigma)$	$H(0.61)$	$95.08^{+0.72}_{-0.68} \quad (+0.1\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.883^{+0.029}_{-0.028} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2319^{+39}_{-39} \quad (-0.1\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1222^{+42}_{-41} \quad (-0.1\sigma)$	$H(2.33)$	$236.7^{+2.6}_{-2.5} \quad (-0.1\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5704^{+82}_{-80} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5774^{+32}_{-33} \quad (-0.1\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2535^{+29}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.024}_{-0.023} \quad (-0.1\sigma)$
A_{217}^{CIB}	$42^{+20}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+11}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.014}_{-0.014} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$< 7.31 \quad (-0.6\sigma)$	D_{2000}	$229.2^{+4.0}_{-3.9} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.975^{+0.047}_{-0.045} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.012}_{-0.010} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24531^{+0.00019}_{-0.00021} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.016}_{-0.016} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00019}_{-0.00021} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0096} \quad (+0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.624^{+0.090}_{-0.084} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.014}_{-0.014} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.821^{+0.074}_{-0.073} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0094}_{-0.0089} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	z_*	$1090.22^{+0.83}_{-0.80} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0046}_{-0.0042} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.46^{+0.94}_{-0.98} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0049}_{-0.0043} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04106^{+0.00092}_{-0.00092} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.876^{+0.087}_{-0.090} \quad (+0.1\sigma)$	f_{2000}^{217}	$108.0^{+4.3}_{-4.4} \quad (-0.3\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	z_{drag}	$1059.51^{+0.96}_{-0.99} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (-0.3\sigma)$
H_0	$67.0^{+1.8}_{-1.8} \quad (+0.1\sigma)$	r_{drag}	$147.19^{+0.96}_{-0.99} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (-0.1\sigma)$
Ω_{Λ}	$0.681^{+0.024}_{-0.026} \quad (+0.1\sigma)$	k_{D}	$0.1406^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 2.1) \quad (-0.0\sigma)$
Ω_{m}	$0.319^{+0.026}_{-0.024} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00057}_{-0.00055} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.2 \quad (\nu: 16.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1433^{+0.0040}_{-0.0038} \quad (-0.1\sigma)$	z_{eq}	$3409^{+96}_{-91} \quad (-0.1\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09601^{+0.00097}_{-0.00095} \quad (+0.0\sigma)$	k_{eq}	$0.01040^{+0.00029}_{-0.00028} \quad (-0.1\sigma)$	χ_{CMB}^2	$7484.1 \quad (\nu: 15.5) \quad (+1120.2\sigma)$
σ_8	$0.812^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.017}_{-0.017} \quad (+0.1\sigma)$		
S_8	$0.838^{+0.048}_{-0.046} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4487^{+0.0089}_{-0.0091} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7491.87; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.61; R - 1 = 0.00915$$

12.26 base_nrun_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02226^{+0.00041}_{-0.00040} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.016}_{-0.015} \quad (-0.8\sigma)$	$H(0.38)$	$83.02^{+0.71}_{-0.68} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0024}_{-0.0023} \quad (-0.9\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+19}_{-19} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00085}_{-0.00080} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.8}_{-1.8} \quad (+0.9\sigma)$	$H(0.51)$	$89.72^{+0.59}_{-0.56} \quad (+0.8\sigma)$
τ	$0.056^{+0.015}_{-0.013} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.055}_{-0.053} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+22}_{-22} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.033}_{-0.029} \quad (-0.0\sigma)$	z_{re}	$< 9.12 \quad (+0.3\sigma)$	$H(0.61)$	$95.32^{+0.51}_{-0.48} \quad (+0.8\sigma)$
n_{s}	$0.9669^{+0.0094}_{-0.0089} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.069}_{-0.062} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+24}_{-23} \quad (-0.9\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.003^{+0.014}_{-0.015} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.024}_{-0.024} \quad (-0.8\sigma)$	$H(2.33)$	$235.7^{+1.6}_{-1.5} \quad (-0.8\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	D_{40}	$1216^{+39}_{-38} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+25}_{-25} \quad (-0.7\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5710^{+80}_{-78} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.014} \quad (-0.8\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2533^{+29}_{-28} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.4\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$814^{+11}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.012} \quad (-0.8\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$229.5^{+3.9}_{-3.7} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.010} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.31 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.976^{+0.046}_{-0.044} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	Y_{P}	$0.24535^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.010}_{-0.0094} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24667^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.0098} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.607^{+0.077}_{-0.076} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5897^{+0.0097}_{-0.0088} \quad (-0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.800^{+0.057}_{-0.058} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0048}_{-0.0043} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.39}$	z_*	$1089.97^{+0.60}_{-0.60} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0050}_{-0.0045} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.98^{+0.35}_{-0.34}$	r_*	$144.80^{+0.64}_{-0.63} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.19}_{-0.20}$	$100\theta_*$	$1.04126^{+0.00083}_{-0.00079} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.7^{+4.2}_{-4.3} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.906^{+0.062}_{-0.062} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	z_{drag}	$1059.59^{+0.95}_{-0.92} \quad (+0.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.0\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	r_{drag}	$147.51^{+0.70}_{-0.70} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.5 \quad (\nu: 1.6) \quad (-0.3\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.9\sigma)$	k_{D}	$0.14034^{+0.00094}_{-0.00093} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.5 \quad (\nu: 15.2)$
Ω_{Λ}	$0.690^{+0.014}_{-0.015} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16097^{+0.00054}_{-0.00053} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-0.9\sigma)$	z_{eq}	$3374^{+57}_{-56} \quad (-0.9\sigma)$	χ_{MGS}^2	$1.40 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0024}_{-0.0023} \quad (-0.9\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.09600^{+0.00096}_{-0.00095} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.9\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.2) \quad (+0.1\sigma)$
σ_8	$0.808^{+0.015}_{-0.014} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4521^{+0.0052}_{-0.0054} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
S_8	$0.821^{+0.030}_{-0.028} \quad (-0.8\sigma)$	$H(0.15)$	$72.95^{+0.93}_{-0.92} \quad (+0.9\sigma)$	χ_{CMB}^2	$7484.1 \quad (\nu: 14.8) \quad (+1120.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.016}_{-0.015} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.6^{+9.2}_{-9.2} \quad (-0.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7497.95$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.64$; $R - 1 = 0.02138$

12.27 base_nrun_CamSpecHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02218^{+0.00043}_{-0.00043} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.017} \quad (-0.3\sigma)$	$H(0.15)$	$72.5^{+1.2}_{-1.2} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0030}_{-0.0030} \quad (-0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+12}_{-12} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00089}_{-0.00087} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} \quad (-0.2\sigma)$	$H(0.38)$	$82.69^{+0.90}_{-0.86} \quad (+0.3\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.9^{+2.4}_{-2.3} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+24}_{-24} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.029}_{-0.026} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.052}_{-0.052} \quad (-0.2\sigma)$	$H(0.51)$	$89.46^{+0.73}_{-0.70} \quad (+0.3\sigma)$
n_{s}	$0.964^{+0.010}_{-0.0098} \quad (+0.3\sigma)$	z_{re}	$< 8.99 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1991^{+28}_{-28} \quad (-0.3\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.003^{+0.014}_{-0.015} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.060}_{-0.054} \quad (-0.0\sigma)$	$H(0.61)$	$95.12^{+0.61}_{-0.58} \quad (+0.3\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.024}_{-0.023} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2316^{+30}_{-30} \quad (-0.3\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1223^{+39}_{-39} \quad (-0.1\sigma)$	$H(2.33)$	$236.4^{+1.9}_{-1.8} \quad (-0.3\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5707^{+83}_{-79} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5772^{+28}_{-29} \quad (-0.2\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2534^{+28}_{-26} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.3\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+11}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.010} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.6\sigma)$	D_{2000}	$229.3^{+4.0}_{-3.8} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.972^{+0.045}_{-0.045} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6634^{+0.0090}_{-0.0086} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24531^{+0.00018}_{-0.00019} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00018}_{-0.00019} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0085}_{-0.0080} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.622^{+0.083}_{-0.080} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4705^{+0.0092}_{-0.0093} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.818^{+0.065}_{-0.065} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5903^{+0.0081}_{-0.0076} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.17^{+0.71}_{-0.70} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0043}_{-0.0039} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	r_*	$144.55^{+0.71}_{-0.72} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0048}_{-0.0042} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04109^{+0.00088}_{-0.00086} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-7} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.884^{+0.067}_{-0.068} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.9^{+4.2}_{-4.3} \quad (-0.4\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	z_{drag}	$1059.50^{+0.92}_{-0.95} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.4\sigma)$
H_0	$67.2^{+1.4}_{-1.4} \quad (+0.3\sigma)$	r_{drag}	$147.28^{+0.76}_{-0.77} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.59 \quad (\nu: 0.4)$
Ω_{Λ}	$0.683^{+0.019}_{-0.019} \quad (+0.3\sigma)$	k_{D}	$0.14053^{+0.00095}_{-0.00094} \quad (-0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.1\sigma)$
Ω_{m}	$0.317^{+0.019}_{-0.019} \quad (-0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00056}_{-0.00053} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 2.1) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1429^{+0.0029}_{-0.0029} \quad (-0.3\sigma)$	z_{eq}	$3400^{+69}_{-69} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.5 \quad (\nu: 14.7)$
$\Omega_{\mathrm{m}} h^3$	$0.09598^{+0.00093}_{-0.00093} \quad (-0.0\sigma)$	k_{eq}	$0.01038^{+0.00021}_{-0.00021} \quad (-0.3\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.0) \quad (+0.1\sigma)$
σ_8	$0.811^{+0.012}_{-0.012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.013}_{-0.013} \quad (+0.3\sigma)$	χ_{CMB}^2	$7493.1 \quad (\nu: 15.5) \quad (+1121.8\sigma)$
S_8	$0.834^{+0.032}_{-0.032} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4495^{+0.0067}_{-0.0065} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7500.82; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.81; R - 1 = 0.01490$$

12.28 base_nrun_CamSpecHM_TT_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02225^{+0.00041}_{-0.00040} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.38)$	$82.98^{+0.65}_{-0.64} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0021}_{-0.0021} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.018}_{-0.017} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+17}_{-17} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00084}_{-0.00080} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.7}_{-1.6} \quad (+0.8\sigma)$	$H(0.51)$	$89.68^{+0.56}_{-0.53} \quad (+0.8\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.045}_{-0.045} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+20}_{-20} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.030}_{-0.028} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$H(0.61)$	$95.29^{+0.50}_{-0.47} \quad (+0.7\sigma)$
n_{s}	$0.9664^{+0.0091}_{-0.0085} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.063}_{-0.058} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2306^{+22}_{-22} \quad (-0.8\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.002^{+0.015}_{-0.015} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.023}_{-0.022} \quad (-0.6\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-0.8\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0047} \quad (+0.1\sigma)$	D_{40}	$1220^{+38}_{-38} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+24}_{-25} \quad (-0.7\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5714^{+79}_{-77} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.1\sigma)$	D_{810}	$2535^{+28}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+11}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.4743^{+0.0099}_{-0.0099} \quad (-0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{2000}	$229.7^{+3.9}_{-3.7} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0087} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.32 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.974^{+0.047}_{-0.046} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.4730^{+0.0088}_{-0.0088} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.26}$	Y_{P}	$0.24534^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6207^{+0.0089}_{-0.0084} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24667^{+0.00016}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4681^{+0.0082}_{-0.0080} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.609^{+0.076}_{-0.074} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0085}_{-0.0080} \quad (+0.1\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.802^{+0.056}_{-0.058} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0044}_{-0.0041} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.39}$	z_*	$1090.00^{+0.59}_{-0.58} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0047}_{-0.0043} \quad (+0.4\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	r_*	$144.76^{+0.57}_{-0.57} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-7} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04124^{+0.00083}_{-0.00079} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.7^{+4.1}_{-4.3} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.33}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.902^{+0.056}_{-0.056} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1059.59^{+0.92}_{-0.91} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.43 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	r_{drag}	$147.47^{+0.65}_{-0.64} \quad (+0.7\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.0) \quad (+0.1\sigma)$
H_0	$67.61^{+0.99}_{-0.97} \quad (+0.8\sigma)$	k_{D}	$0.14038^{+0.00089}_{-0.00088} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 1.8) \quad (-0.2\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16098^{+0.00054}_{-0.00052} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.8 \quad (\nu: 14.4)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.8\sigma)$	z_{eq}	$3378^{+50}_{-50} \quad (-0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.31 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09600^{+0.00094}_{-0.00094} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0092}_{-0.0091} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.1)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0048}_{-0.0047} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
S_8	$0.824^{+0.024}_{-0.024} \quad (-0.7\sigma)$	$H(0.15)$	$72.88^{+0.85}_{-0.85} \quad (+0.8\sigma)$	χ_{CMB}^2	$7493.3 \quad (\nu: 15.1) \quad (+1121.8\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.3^{+8.4}_{-8.3} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7507.10$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.78$; $R - 1 = 0.02288$

12.29 base_nrun_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022296	$0.02229^{+0.00032}_{-0.00031}$ (+0.6 σ)	σ_8	0.8086	$0.808^{+0.015}_{-0.015}$ (−0.5 σ)	$100\theta_{\text{eq}}$	0.8148	$0.815^{+0.012}_{-0.012}$ (+0.5 σ)
$\Omega_c h^2$	0.11967	$0.1196^{+0.0028}_{-0.0027}$ (−0.5 σ)	S_8	0.8272	$0.826^{+0.032}_{-0.032}$ (−0.6 σ)	$100\theta_{\text{s,eq}}$	0.4502	$0.4503^{+0.0060}_{-0.0061}$ (+0.5 σ)
$100\theta_{\text{MC}}$	1.04087	$1.04087^{+0.00063}_{-0.00060}$ (+0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4531	$0.453^{+0.018}_{-0.017}$ (−0.6 σ)	$H(0.15)$	72.70	$72.7^{+1.0}_{-1.0}$ (+0.6 σ)
τ	0.0532	$0.053^{+0.017}_{-0.016}$ (−0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6053	$0.605^{+0.017}_{-0.017}$ (−0.6 σ)	$D_{\text{M}}(0.15)$	643.1	643^{+10}_{-10} (−0.6 σ)
$\ln(10^{10} A_{\text{s}})$	3.0394	$3.039^{+0.035}_{-0.034}$ (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9849	$0.984^{+0.024}_{-0.023}$ (−0.6 σ)	$H(0.38)$	82.86	$82.86^{+0.75}_{-0.74}$ (+0.6 σ)
n_{s}	0.9660	$0.9657^{+0.0094}_{-0.0096}$ (+0.6 σ)	$r_{\text{drag}} h$	99.25	$99.3^{+2.1}_{-2.1}$ (+0.5 σ)	$D_{\text{M}}(0.38)$	1533.1	1533^{+21}_{-20} (−0.6 σ)
$\text{d}n_{\text{s}}/\text{d} \ln k$	−0.0007	$−0.001^{+0.013}_{-0.013}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.433	$2.432^{+0.056}_{-0.057}$ (−0.5 σ)	$H(0.51)$	89.60	$89.60^{+0.59}_{-0.57}$ (+0.6 σ)
y_{cal}	1.00030	$1.0004^{+0.0049}_{-0.0049}$ (−0.0 σ)	z_{re}	7.57	$7.5^{+1.6}_{-1.7}$ (−0.1 σ)	$D_{\text{M}}(0.51)$	1985.6	1985^{+24}_{-24} (−0.6 σ)
A_{100}^{PS}	236.5	241^{+50}_{-50} (−0.9 σ)	$10^9 A_{\text{s}}$	2.089	$2.088^{+0.075}_{-0.070}$ (−0.3 σ)	$H(0.61)$	95.236	$95.24^{+0.48}_{-0.46}$ (+0.6 σ)
A_{143}^{PS}	42.4	40^{+20}_{-20} (−1.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8786	$1.879^{+0.025}_{-0.024}$ (−0.6 σ)	$D_{\text{M}}(0.61)$	2310.2	2310^{+26}_{-26} (−0.6 σ)
A_{217}^{PS}	102.5	102^{+30}_{-30} (−1.2 σ)	D_{40}	1223.7	1224^{+36}_{-35} (−0.0 σ)	$H(2.33)$	236.26	$236.2^{+1.7}_{-1.6}$ (−0.5 σ)
A_{217}^{CIB}	42.9	40^{+10}_{-10} (−1.2 σ)	D_{220}	5715	5716^{+77}_{-74} (+0.1 σ)	$D_{\text{M}}(2.33)$	5766.6	5767^{+21}_{-22} (−0.6 σ)
A_{143}^{tSZ}	5.59	< 7.50 (−0.5 σ)	D_{810}	2534.9	2535^{+27}_{-27} (−0.2 σ)	$f\sigma_8(0.15)$	0.4574	$0.457^{+0.016}_{-0.016}$ (−0.6 σ)
$r_{143 \times 217}^{\text{PS}}$	0.627	$0.65^{+0.25}_{-0.26}$	D_{1420}	815.6	$815.3^{+9.9}_{-9.8}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7469	$0.746^{+0.013}_{-0.013}$ (−0.5 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.78	—	D_{2000}	230.18	$230.0^{+3.7}_{-3.6}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4752	$0.475^{+0.014}_{-0.013}$ (−0.6 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.33	—	$n_{\text{s},0.002}$	0.9681	$0.969^{+0.040}_{-0.040}$ (−0.3 σ)	$\sigma_8(0.38)$	0.6618	$0.661^{+0.011}_{-0.011}$ (−0.4 σ)
A^{kSZ}	1.5	—	Y_{P}	0.245366	$0.24536^{+0.00012}_{-0.00013}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4735	$0.473^{+0.012}_{-0.012}$ (−0.6 σ)
A_{100}^{dust}	1.015	$1.01^{+0.38}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.246692	$0.24669^{+0.00012}_{-0.00013}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6192	$0.619^{+0.011}_{-0.010}$ (−0.3 σ)
A_{143}^{dust}	0.978	$0.97^{+0.35}_{-0.36}$	$10^5 \text{D}/\text{H}$	2.599	$2.601^{+0.060}_{-0.058}$ (−0.6 σ)	$f\sigma_8(0.61)$	0.4683	$0.468^{+0.011}_{-0.011}$ (−0.6 σ)
A_{217}^{dust}	0.971	$0.97^{+0.20}_{-0.20}$	Age/Gyr	13.8048	$13.805^{+0.048}_{-0.050}$ (−0.6 σ)	$\sigma_8(0.61)$	0.5891	$0.589^{+0.010}_{-0.0098}$ (−0.3 σ)
$A_{143 \times 217}^{\text{dust}}$	0.992	$1.03^{+0.32}_{-0.31}$	z_*	1089.99	$1089.99^{+0.56}_{-0.55}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.2970	$0.2968^{+0.0051}_{-0.0049}$ (−0.2 σ)
c_{100}	0.99763	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_*	144.57	$144.59^{+0.63}_{-0.65}$ (+0.4 σ)	$\sigma_8(2.33)$	0.3060	$0.3059^{+0.0053}_{-0.0052}$ (−0.1 σ)
c_{217}	1.00129	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	$100\theta_*$	1.04107	$1.04106^{+0.00061}_{-0.00060}$ (+0.2 σ)	f_{2000}^{143}	30.2	30^{+6}_{-6} (−0.6 σ)
c_{TE}	0.9966	$0.9967^{+0.0098}_{-0.0098}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.887	$13.889^{+0.059}_{-0.060}$ (+0.4 σ)	f_{2000}^{217}	106.90	$107.1^{+4.3}_{-4.3}$ (−0.8 σ)
c_{EE}	0.9921	$0.9922^{+0.0099}_{-0.0097}$	z_{drag}	1059.74	$1059.73^{+0.66}_{-0.67}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	32.19	32^{+5}_{-4} (−0.8 σ)
H_0	67.40	$67.4^{+1.2}_{-1.2}$ (+0.6 σ)	r_{drag}	147.26	$147.28^{+0.64}_{-0.66}$ (+0.3 σ)	χ_{simall}^2	395.88	$396.9(\nu: 1.5)$ (−0.1 σ)
Ω_{Λ}	0.6860	$0.686^{+0.016}_{-0.017}$ (+0.6 σ)	k_{D}	0.14063	$0.14061^{+0.00074}_{-0.00073}$ (−0.1 σ)	χ_{lowl}^2	22.85	$23.1(\nu: 1.7)$ (+0.0 σ)
Ω_{m}	0.3140	$0.314^{+0.017}_{-0.016}$ (−0.6 σ)	$100\theta_{\text{D}}$	0.160863	$0.16087^{+0.00039}_{-0.00039}$ (−0.5 σ)	χ_{CamSpec}^2	11499.9	$11515.5(\nu: 17.5)$
$\Omega_{\text{m}} h^2$	0.14261	$0.1426^{+0.0027}_{-0.0026}$ (−0.5 σ)	z_{eq}	3392	3391^{+64}_{-61} (−0.5 σ)	χ_{prior}^2	2.2	$7.8(\nu: 6.0)$ (+0.1 σ)
$\Omega_{\text{m}} h^3$	0.09611	$0.09609^{+0.00065}_{-0.00065}$ (+0.2 σ)	k_{eq}	0.010354	$0.01035^{+0.00019}_{-0.00019}$ (−0.5 σ)	χ_{CMB}^2	11918.6	$11935.6(\nu: 17.6)$ (+1912.7 σ)

Best-fit $\chi_{\text{eff}}^2 = 11920.76$; $\Delta\chi_{\text{eff}}^2 = -0.00$; $\bar{\chi}_{\text{eff}}^2 = 11943.38$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.92$; $R - 1 = 0.00835$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 (Δ -0.02) commander_dx12.v3.2.29: 22.85 (Δ -0.15) CamSpec like_10.7HM.1400.unified: 11499.86 (Δ 0.21)

12.30 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00030}_{-0.00030} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.014}_{-0.014} \quad (-0.9\sigma)$	$H(0.38)$	$83.04^{+0.58}_{-0.56} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0020}_{-0.0020} \quad (-0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.014}_{-0.014} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+15}_{-15} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00059}_{-0.00057} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.020}_{-0.021} \quad (-0.9\sigma)$	$H(0.51)$	$89.74^{+0.47}_{-0.45} \quad (+0.9\sigma)$
τ	$0.054^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.6}_{-1.5} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+18}_{-18} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.039^{+0.035}_{-0.034} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.049}_{-0.051} \quad (-0.7\sigma)$	$H(0.61)$	$95.34^{+0.39}_{-0.38} \quad (+0.9\sigma)$
n_{s}	$0.9674^{+0.0083}_{-0.0080} \quad (+0.9\sigma)$	z_{re}	$7.6^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+19}_{-19} \quad (-0.9\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$0.000^{+0.013}_{-0.013} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.088^{+0.075}_{-0.069} \quad (-0.3\sigma)$	$H(2.33)$	$235.8^{+1.2}_{-1.3} \quad (-0.8\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-19} \quad (-0.8\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1222^{+35}_{-34} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.013}_{-0.013} \quad (-0.9\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5720^{+78}_{-73} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.9\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.9^{+9.6}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.5\sigma)$	D_{2000}	$230.3^{+3.5}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.010}_{-0.010} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.969^{+0.041}_{-0.040} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.010} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4660^{+0.0096}_{-0.0097} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.0097} \quad (-0.3\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.593^{+0.057}_{-0.055} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0051}_{-0.0049} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.796^{+0.042}_{-0.044} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0052}_{-0.0051} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.88^{+0.47}_{-0.46} \quad (-0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.73^{+0.50}_{-0.49} \quad (+0.7\sigma)$	f_{2000}^{217}	$106.9^{+4.1}_{-4.3} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.31}$	$100\theta_*$	$1.04114^{+0.00058}_{-0.00057} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.048}_{-0.046} \quad (+0.6\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (-0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0032} \quad (+4.6\sigma)$	z_{drag}	$1059.77^{+0.65}_{-0.68} \quad (+0.6\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 1.6) \quad (-0.1\sigma)$
c_{TE}	$0.9969^{+0.0097}_{-0.0099}$	r_{drag}	$147.41^{+0.54}_{-0.52} \quad (+0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.4 \quad (\nu: 17.7)$
c_{EE}	$0.9925^{+0.0098}_{-0.0097}$	k_{D}	$0.14050^{+0.00066}_{-0.00068} \quad (-0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.045 \quad (\nu: 0.0)$
H_0	$67.71^{+0.89}_{-0.87} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00040}_{-0.00038} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.36 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.9\sigma)$	z_{eq}	$3376^{+45}_{-46} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.8)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.9\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00014} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0019}_{-0.0019} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8179^{+0.0087}_{-0.0084} \quad (+0.8\sigma)$	χ_{BAO}^2	$5.97 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.09609^{+0.00064}_{-0.00066} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4518^{+0.0045}_{-0.0043} \quad (+0.8\sigma)$	χ_{CMB}^2	$11935.4 \quad (\nu: 17.7) \quad (+1912.7\sigma)$
σ_8	$0.806^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$H(0.15)$	$72.97^{+0.77}_{-0.75} \quad (+0.9\sigma)$		
S_8	$0.819^{+0.025}_{-0.025} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.4^{+7.5}_{-7.6} \quad (-0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.15; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.86; R - 1 = 0.01377$$

12.31 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02229^{+0.00031}_{-0.00030} \quad (+0.6\sigma)$	S_8	$0.828^{+0.025}_{-0.025} \quad (-0.5\sigma)$	$H(0.15)$	$72.69^{+0.92}_{-0.90} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1197^{+0.0024}_{-0.0024} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.2^{+9.1}_{-9.1} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04086^{+0.00061}_{-0.00059} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$H(0.38)$	$82.85^{+0.66}_{-0.65} \quad (+0.6\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+18}_{-18} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.031}_{-0.030} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.2^{+1.9}_{-1.8} \quad (+0.5\sigma)$	$H(0.51)$	$89.59^{+0.54}_{-0.52} \quad (+0.6\sigma)$
n_{s}	$0.9655^{+0.0086}_{-0.0089} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.044}_{-0.045} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+21}_{-21} \quad (-0.6\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.001^{+0.013}_{-0.013} \quad (+0.5\sigma)$	z_{re}	$7.6^{+1.5}_{-1.6} \quad (-0.0\sigma)$	$H(0.61)$	$95.23^{+0.45}_{-0.42} \quad (+0.6\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.066}_{-0.062} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+23}_{-23} \quad (-0.6\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$H(2.33)$	$236.3^{+1.5}_{-1.5} \quad (-0.4\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1226^{+34}_{-34} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+20}_{-21} \quad (-0.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5719^{+78}_{-74} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.012}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.010} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.49 \quad (-0.5\sigma)$	D_{1420}	$815.5^{+9.8}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.010}_{-0.010} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{2000}	$230.1^{+3.6}_{-3.6} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6622^{+0.0097}_{-0.0093} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.967^{+0.040}_{-0.039} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.4738^{+0.0089}_{-0.0089} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24536^{+0.00012}_{-0.00013} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.6196^{+0.0091}_{-0.0088} \quad (-0.2\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4686^{+0.0081}_{-0.0081} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.601^{+0.058}_{-0.057} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.5895^{+0.0087}_{-0.0084} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.36}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.806^{+0.046}_{-0.047} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0045}_{-0.0044} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1089.99^{+0.51}_{-0.52} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_*	$144.57^{+0.56}_{-0.56} \quad (+0.3\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04105^{+0.00060}_{-0.00058} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.3} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.053}_{-0.053} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-4} \quad (-0.8\sigma)$
c_{TE}	$0.9967^{+0.0098}_{-0.0099}$	z_{drag}	$1059.73^{+0.66}_{-0.67} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.33 \quad (\nu: 0.3)$
c_{EE}	$0.9922^{+0.0099}_{-0.0095}$	r_{drag}	$147.26^{+0.57}_{-0.58} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.1\sigma)$
H_0	$67.4^{+1.1}_{-1.1} \quad (+0.5\sigma)$	k_{D}	$0.14062^{+0.00068}_{-0.00068} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 1.8) \quad (+0.1\sigma)$
Ω_{Λ}	$0.686^{+0.014}_{-0.015} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16087^{+0.00039}_{-0.00039} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.9 \quad (\nu: 17.0)$
Ω_{m}	$0.314^{+0.015}_{-0.014} \quad (-0.5\sigma)$	z_{eq}	$3393^{+54}_{-54} \quad (-0.5\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0023}_{-0.0023} \quad (-0.5\sigma)$	k_{eq}	$0.01036^{+0.00017}_{-0.00016} \quad (-0.5\sigma)$	χ_{CMB}^2	$11944.5 \quad (\nu: 18.0) \quad (+1914.3\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09610^{+0.00064}_{-0.00065} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.010}_{-0.010} \quad (+0.5\sigma)$		
σ_8	$0.809^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4502^{+0.0053}_{-0.0052} \quad (+0.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11952.22; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.78; R - 1 = 0.01144$$

12.32 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00030}_{-0.00030} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-0.8\sigma)$	$H(0.38)$	$83.01^{+0.54}_{-0.53} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0018}_{-0.0019} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+14}_{-14} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00059}_{-0.00057} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.51)$	$89.71^{+0.44}_{-0.43} \quad (+0.8\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.5}_{-1.4} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+17}_{-17} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.031}_{-0.028} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.042}_{-0.042} \quad (-0.5\sigma)$	$H(0.61)$	$95.33^{+0.38}_{-0.37} \quad (+0.8\sigma)$
n_{s}	$0.9669^{+0.0080}_{-0.0078} \quad (+0.8\sigma)$	z_{re}	$7.8^{+1.5}_{-1.5} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+18}_{-18} \quad (-0.8\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$0.000^{+0.013}_{-0.013} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.066}_{-0.059} \quad (-0.1\sigma)$	$H(2.33)$	$235.9^{+1.1}_{-1.2} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+18}_{-18} \quad (-0.8\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+34}_{-34} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.010}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5724^{+80}_{-74} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4736^{+0.0089}_{-0.0089} \quad (-0.7\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.1^{+9.6}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6623^{+0.0097}_{-0.0091} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.5\sigma)$	D_{2000}	$230.4^{+3.5}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4723^{+0.0082}_{-0.0081} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.968^{+0.040}_{-0.039} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.6198^{+0.0091}_{-0.0086} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4674^{+0.0077}_{-0.0076} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5898^{+0.0087}_{-0.0083} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.594^{+0.056}_{-0.055} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0045}_{-0.0042} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.797^{+0.041}_{-0.042} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0048}_{-0.0045} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.36}$	z_*	$1089.89^{+0.46}_{-0.45} \quad (-0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.70^{+0.47}_{-0.45} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.9^{+4.0}_{-4.3} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.31}$	$100\theta_*$	$1.04113^{+0.00059}_{-0.00056} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.045}_{-0.043} \quad (+0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.32 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.78^{+0.65}_{-0.68} \quad (+0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{TE}	$0.9968^{+0.0097}_{-0.0099}$	r_{drag}	$147.38^{+0.51}_{-0.49} \quad (+0.5\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{EE}	$0.9925^{+0.0098}_{-0.0096}$	k_{D}	$0.14053^{+0.00064}_{-0.00065} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.8 \quad (\nu: 16.9)$
H_0	$67.65^{+0.83}_{-0.82} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00039}_{-0.00037} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.8\sigma)$	z_{eq}	$3380^{+41}_{-43} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0017}_{-0.0018} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8173^{+0.0082}_{-0.0077} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09610^{+0.00064}_{-0.00066} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0042}_{-0.0039} \quad (+0.7\sigma)$	χ_{CMB}^2	$11944.4 \quad (\nu: 17.7) \quad (+1914.3\sigma)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.5\sigma)$	$H(0.15)$	$72.92^{+0.71}_{-0.70} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.02 \quad (\nu: 0.5)$
S_8	$0.822^{+0.020}_{-0.021} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.0^{+7.0}_{-7.0} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.12; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.72; R - 1 = 0.01586$$

12.33 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00030}_{-0.00031} \quad (+1.1\sigma)$	S_8	$0.810^{+0.030}_{-0.030} \quad (-1.3\sigma)$	$H(0.15)$	$73.33^{+0.95}_{-0.96} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0025}_{-0.0024} \quad (-1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.443^{+0.016}_{-0.016} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.9^{+9.5}_{-9.2} \quad (-1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00057}_{-0.00060} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.597^{+0.016}_{-0.016} \quad (-1.2\sigma)$	$H(0.38)$	$83.31^{+0.67}_{-0.70} \quad (+1.4\sigma)$
τ	$0.055^{+0.017}_{-0.016} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.974^{+0.023}_{-0.022} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+19}_{-18} \quad (-1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.037}_{-0.034} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+1.9}_{-1.9} \quad (+1.3\sigma)$	$H(0.51)$	$89.95^{+0.54}_{-0.56} \quad (+1.4\sigma)$
n_{s}	$0.9696^{+0.0088}_{-0.0090} \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.410^{+0.054}_{-0.055} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1971^{+22}_{-21} \quad (-1.4\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$0.000^{+0.013}_{-0.013} \quad (+0.5\sigma)$	z_{re}	$7.7^{+1.7}_{-1.7} \quad (+0.1\sigma)$	$H(0.61)$	$95.51^{+0.45}_{-0.45} \quad (+1.3\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.090^{+0.078}_{-0.070} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+24}_{-23} \quad (-1.4\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.024}_{-0.024} \quad (-1.0\sigma)$	$H(2.33)$	$235.3^{+1.5}_{-1.5} \quad (-1.1\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.4\sigma)$	D_{40}	$1218^{+36}_{-35} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+21}_{-21} \quad (-1.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5725^{+76}_{-71} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.015}_{-0.016} \quad (-1.3\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.744^{+0.014}_{-0.013} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$< 7.59 \quad (-0.5\sigma)$	D_{1420}	$816.6^{+9.6}_{-9.5} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.013}_{-0.013} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	D_{2000}	$230.6^{+3.6}_{-3.5} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.012}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.971^{+0.043}_{-0.039} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.012}_{-0.012} \quad (-1.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00011}_{-0.00013} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00011}_{-0.00013} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.011}_{-0.010} \quad (-1.2\sigma)$
A_{100}^{dust}	$1.01^{+0.40}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.578^{+0.059}_{-0.054} \quad (-1.1\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.780^{+0.047}_{-0.046} \quad (-1.2\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0054}_{-0.0050} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	z_*	$1089.69^{+0.53}_{-0.49} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0057}_{-0.0051} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	r_*	$144.90^{+0.60}_{-0.59} \quad (+1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.8\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04125^{+0.00057}_{-0.00059} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.6^{+4.1}_{-4.2} \quad (-1.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0032} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.916^{+0.059}_{-0.055} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.1\sigma)$
c_{TE}	$0.9969^{+0.0098}_{-0.0098}$	z_{drag}	$1059.90^{+0.68}_{-0.66} \quad (+0.8\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.0) \quad (+0.1\sigma)$
c_{EE}	$0.9923^{+0.0096}_{-0.0097}$	r_{drag}	$147.55^{+0.61}_{-0.61} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 1.5) \quad (-0.2\sigma)$
H_0	$68.1^{+1.1}_{-1.1} \quad (+1.4\sigma)$	k_{D}	$0.14042^{+0.00072}_{-0.00073} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11517.0 \quad (\nu: 20.4)$
Ω_{Λ}	$0.696^{+0.014}_{-0.015} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16078^{+0.00038}_{-0.00038} \quad (-0.8\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.4 \quad (\nu: 2.4)$
Ω_{m}	$0.304^{+0.015}_{-0.014} \quad (-1.3\sigma)$	z_{eq}	$3357^{+58}_{-55} \quad (-1.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0024}_{-0.0023} \quad (-1.2\sigma)$	k_{eq}	$0.01025^{+0.00018}_{-0.00017} \quad (-1.2\sigma)$	χ_{CMB}^2	$11936.8 \quad (\nu: 19.8) \quad (+1913.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09614^{+0.00067}_{-0.00067} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (+1.3\sigma)$		
σ_8	$0.804^{+0.015}_{-0.015} \quad (-0.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4537^{+0.0055}_{-0.0056} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11955.07; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.80; R - 1 = 0.04651$$

12.34 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00032}_{-0.00031} \quad (+0.6\sigma)$	σ_8	$0.809^{+0.015}_{-0.013} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.012} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0028}_{-0.0027} \quad (-0.6\sigma)$	S_8	$0.827^{+0.032}_{-0.031} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4504^{+0.0060}_{-0.0060} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00062}_{-0.00059} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.018}_{-0.017} \quad (-0.6\sigma)$	$H(0.15)$	$72.7^{+1.0}_{-1.0} \quad (+0.6\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+10}_{-10} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.030}_{-0.027} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$H(0.38)$	$82.88^{+0.74}_{-0.73} \quad (+0.6\sigma)$
n_{s}	$0.9658^{+0.0094}_{-0.0096} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.3^{+2.1}_{-2.1} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+20}_{-20} \quad (-0.6\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.001^{+0.013}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.054}_{-0.053} \quad (-0.4\sigma)$	$H(0.51)$	$89.62^{+0.59}_{-0.57} \quad (+0.6\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	z_{re}	$< 8.91 \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1985^{+24}_{-24} \quad (-0.6\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.064}_{-0.056} \quad (-0.1\sigma)$	$H(0.61)$	$95.25^{+0.48}_{-0.45} \quad (+0.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.024}_{-0.024} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2310^{+26}_{-26} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1223^{+36}_{-34} \quad (-0.1\sigma)$	$H(2.33)$	$236.2^{+1.7}_{-1.6} \quad (-0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5716^{+76}_{-73} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+21}_{-22} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.5\sigma)$	D_{810}	$2535^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.016}_{-0.016} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	D_{1420}	$815.2^{+9.8}_{-9.7} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.011} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$230.0^{+3.6}_{-3.6} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.970^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0095} \quad (-0.2\sigma)$
A^{kSZ}	—	Y_{P}	$0.24537^{+0.00012}_{-0.00013} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.011} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.6197^{+0.0094}_{-0.0087} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.36}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.599^{+0.060}_{-0.058} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.010} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.804^{+0.048}_{-0.049} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.5896^{+0.0089}_{-0.0082} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_*	$1089.97^{+0.55}_{-0.54} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0044}_{-0.0040} \quad (-0.0\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_*	$144.59^{+0.63}_{-0.64} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0045}_{-0.0042} \quad (+0.1\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_*$	$1.04107^{+0.00061}_{-0.00059} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.6\sigma)$
c_{TE}	$0.9966^{+0.0098}_{-0.0098}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.058}_{-0.060} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.0^{+4.3}_{-4.3} \quad (-0.8\sigma)$
c_{EE}	$0.9921^{+0.0099}_{-0.0097}$	z_{drag}	$1059.74^{+0.69}_{-0.65} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-4} \quad (-0.8\sigma)$
H_0	$67.4^{+1.2}_{-1.2} \quad (+0.6\sigma)$	r_{drag}	$147.28^{+0.64}_{-0.66} \quad (+0.3\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.1\sigma)$
Ω_{Λ}	$0.686^{+0.016}_{-0.017} \quad (+0.6\sigma)$	k_{D}	$0.14061^{+0.00074}_{-0.00073} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 1.7) \quad (-0.0\sigma)$
Ω_{m}	$0.314^{+0.017}_{-0.016} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16086^{+0.00040}_{-0.00039} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.3 \quad (\nu: 17.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1425^{+0.0026}_{-0.0025} \quad (-0.5\sigma)$	z_{eq}	$3391^{+63}_{-61} \quad (-0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09610^{+0.00065}_{-0.00065} \quad (+0.2\sigma)$	k_{eq}	$0.01035^{+0.00019}_{-0.00019} \quad (-0.5\sigma)$	χ_{CMB}^2	$11935.2 \quad (\nu: 17.1) \quad (+1912.7\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11943.05; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.86; R - 1 = 0.00888$$

12.35 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00030}_{-0.00030} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.014}_{-0.013} \quad (-0.9\sigma)$	$H(0.38)$	$83.05^{+0.58}_{-0.55} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0019}_{-0.0020} \quad (-0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.013}_{-0.013} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+15}_{-15} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00058}_{-0.00057} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.020}_{-0.019} \quad (-0.8\sigma)$	$H(0.51)$	$89.75^{+0.46}_{-0.45} \quad (+0.9\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.6}_{-1.5} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+18}_{-18} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.031}_{-0.027} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.048}_{-0.047} \quad (-0.7\sigma)$	$H(0.61)$	$95.35^{+0.39}_{-0.38} \quad (+0.9\sigma)$
n_{s}	$0.9674^{+0.0083}_{-0.0080} \quad (+0.9\sigma)$	z_{re}	$< 8.96 \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+19}_{-19} \quad (-0.9\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.001^{+0.013}_{-0.013} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.064}_{-0.056} \quad (-0.2\sigma)$	$H(2.33)$	$235.8^{+1.2}_{-1.2} \quad (-0.8\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.023}_{-0.023} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-19} \quad (-0.8\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1221^{+35}_{-34} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.012} \quad (-0.8\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5719^{+79}_{-73} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.012}_{-0.011} \quad (-0.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.011}_{-0.011} \quad (-0.8\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.8^{+9.6}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0093} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.5\sigma)$	D_{2000}	$230.3^{+3.5}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4714^{+0.0098}_{-0.0096} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.970^{+0.040}_{-0.040} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.6193^{+0.0094}_{-0.0086} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4666^{+0.0092}_{-0.0088} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.5893^{+0.0089}_{-0.0081} \quad (-0.2\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.057}_{-0.054} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0044}_{-0.0040} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.795^{+0.041}_{-0.043} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0046}_{-0.0041} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.87^{+0.46}_{-0.46} \quad (-0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.73^{+0.50}_{-0.49} \quad (+0.7\sigma)$	f_{2000}^{217}	$106.9^{+4.1}_{-4.3} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.31}$	$100\theta_*$	$1.04114^{+0.00058}_{-0.00057} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.047}_{-0.046} \quad (+0.6\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.1\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0032} \quad (+4.6\sigma)$	z_{drag}	$1059.78^{+0.64}_{-0.65} \quad (+0.6\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 1.6) \quad (-0.1\sigma)$
c_{TE}	$0.9968^{+0.0098}_{-0.0099}$	r_{drag}	$147.41^{+0.54}_{-0.52} \quad (+0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.3 \quad (\nu: 17.7)$
c_{EE}	$0.9924^{+0.0099}_{-0.0097}$	k_{D}	$0.14050^{+0.00066}_{-0.00068} \quad (-0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
H_0	$67.72^{+0.90}_{-0.86} \quad (+0.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00040}_{-0.00037} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.9\sigma)$	z_{eq}	$3376^{+45}_{-46} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.8)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.9\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00014} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0019}_{-0.0019} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8180^{+0.0086}_{-0.0083} \quad (+0.8\sigma)$	χ_{BAO}^2	$5.96 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.09610^{+0.00063}_{-0.00066} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0044}_{-0.0043} \quad (+0.8\sigma)$	χ_{CMB}^2	$11935.1 \quad (\nu: 17.2) \quad (+1912.7\sigma)$
σ_8	$0.807^{+0.014}_{-0.012} \quad (-0.6\sigma)$	$H(0.15)$	$72.98^{+0.77}_{-0.75} \quad (+0.9\sigma)$		
S_8	$0.820^{+0.025}_{-0.024} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.4^{+7.5}_{-7.5} \quad (-0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11948.86; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.87; R - 1 = 0.01438$$

12.36 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00031}_{-0.00030} \quad (+0.6\sigma)$	S_8	$0.828^{+0.025}_{-0.025} \quad (-0.5\sigma)$	$H(0.15)$	$72.72^{+0.90}_{-0.87} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0023}_{-0.0023} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.0^{+8.7}_{-8.9} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04087^{+0.00060}_{-0.00058} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$H(0.38)$	$82.87^{+0.65}_{-0.63} \quad (+0.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+17}_{-18} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.027}_{-0.025} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.3^{+1.8}_{-1.7} \quad (+0.5\sigma)$	$H(0.51)$	$89.61^{+0.53}_{-0.50} \quad (+0.6\sigma)$
n_{s}	$0.9656^{+0.0086}_{-0.0087} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.043}_{-0.044} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1985^{+20}_{-21} \quad (-0.6\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.001^{+0.013}_{-0.013} \quad (+0.5\sigma)$	z_{re}	$< 8.90 \quad (+0.1\sigma)$	$H(0.61)$	$95.24^{+0.44}_{-0.41} \quad (+0.6\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.058}_{-0.052} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2310^{+22}_{-22} \quad (-0.6\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$H(2.33)$	$236.2^{+1.4}_{-1.4} \quad (-0.5\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1226^{+34}_{-34} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+20}_{-21} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5719^{+78}_{-74} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.012}_{-0.013} \quad (-0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.0092} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.5\sigma)$	D_{1420}	$815.4^{+9.7}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.010}_{-0.010} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{2000}	$230.1^{+3.6}_{-3.6} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6628^{+0.0088}_{-0.0082} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.968^{+0.040}_{-0.039} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.4741^{+0.0087}_{-0.0087} \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24536^{+0.00012}_{-0.00013} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.6201^{+0.0082}_{-0.0076} \quad (-0.1\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0079}_{-0.0079} \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.600^{+0.058}_{-0.056} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0079}_{-0.0073} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.805^{+0.045}_{-0.047} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0040}_{-0.0037} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1089.98^{+0.50}_{-0.51} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0043}_{-0.0040} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_*	$144.59^{+0.56}_{-0.55} \quad (+0.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04106^{+0.00059}_{-0.00057} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.0^{+4.2}_{-4.3} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.053}_{-0.052} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{TE}	$0.9966^{+0.0097}_{-0.0099}$	z_{drag}	$1059.74^{+0.65}_{-0.65} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.28 \quad (\nu: 0.2)$
c_{EE}	$0.9922^{+0.0099}_{-0.0095}$	r_{drag}	$147.27^{+0.57}_{-0.57} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.1\sigma)$
H_0	$67.4^{+1.0}_{-1.0} \quad (+0.6\sigma)$	k_{D}	$0.14062^{+0.00068}_{-0.00068} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 1.8) \quad (+0.1\sigma)$
Ω_{Λ}	$0.686^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16087^{+0.00039}_{-0.00038} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.7 \quad (\nu: 16.9)$
Ω_{m}	$0.314^{+0.014}_{-0.014} \quad (-0.6\sigma)$	z_{eq}	$3391^{+53}_{-53} \quad (-0.5\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0022}_{-0.0022} \quad (-0.5\sigma)$	k_{eq}	$0.01035^{+0.00016}_{-0.00016} \quad (-0.5\sigma)$	χ_{CMB}^2	$11944.2 \quad (\nu: 17.4) \quad (+1914.3\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09610^{+0.00064}_{-0.00065} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.010}_{-0.0099} \quad (+0.5\sigma)$		
σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0052}_{-0.0051} \quad (+0.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11951.93; \Delta\chi_{\mathrm{eff}}^2 = 0.68; R - 1 = 0.01119$$

12.37 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00030}_{-0.00030} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.38)$	$83.02^{+0.53}_{-0.53} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0018}_{-0.0019} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+14}_{-14} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00059}_{-0.00056} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-0.6\sigma)$	$H(0.51)$	$89.72^{+0.44}_{-0.43} \quad (+0.9\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.4}_{-1.4} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+17}_{-17} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.028}_{-0.026} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.041}_{-0.041} \quad (-0.5\sigma)$	$H(0.61)$	$95.33^{+0.38}_{-0.37} \quad (+0.8\sigma)$
n_{s}	$0.9670^{+0.0080}_{-0.0077} \quad (+0.8\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+18}_{-18} \quad (-0.9\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$0.000^{+0.013}_{-0.013} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.059}_{-0.054} \quad (-0.0\sigma)$	$H(2.33)$	$235.9^{+1.1}_{-1.2} \quad (-0.7\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.022}_{-0.021} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+18}_{-18} \quad (-0.8\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1225^{+35}_{-34} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.010}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{220}	$5723^{+80}_{-74} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0093} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4738^{+0.0088}_{-0.0088} \quad (-0.7\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.0^{+9.5}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6627^{+0.0094}_{-0.0080} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.49 \quad (-0.5\sigma)$	D_{2000}	$230.4^{+3.5}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4725^{+0.0080}_{-0.0078} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.968^{+0.040}_{-0.039} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.6202^{+0.0089}_{-0.0075} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4676^{+0.0076}_{-0.0072} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0081}_{-0.0074} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.593^{+0.056}_{-0.054} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0041}_{-0.0038} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.37}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.797^{+0.041}_{-0.042} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0043}_{-0.0040} \quad (+0.3\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.36}$	z_*	$1089.89^{+0.46}_{-0.44} \quad (-0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.70^{+0.48}_{-0.45} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.9^{+4.0}_{-4.3} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.31}$	$100\theta_*$	$1.04113^{+0.00059}_{-0.00056} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.045}_{-0.043} \quad (+0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.27 \quad (\nu: 0.2)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.78^{+0.65}_{-0.65} \quad (+0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (-0.0\sigma)$
c_{TE}	$0.9967^{+0.0097}_{-0.0098}$	r_{drag}	$147.38^{+0.52}_{-0.49} \quad (+0.5\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.8) \quad (+0.0\sigma)$
c_{EE}	$0.9925^{+0.0099}_{-0.0096}$	k_{D}	$0.14053^{+0.00063}_{-0.00065} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.7 \quad (\nu: 16.8)$
H_0	$67.66^{+0.82}_{-0.81} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00039}_{-0.00037} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+0.8\sigma)$	z_{eq}	$3379^{+41}_{-43} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.30 \quad (\nu: 0.1)$
Ω_{m}	$0.310^{+0.011}_{-0.011} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00012}_{-0.00013} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0017}_{-0.0018} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0082}_{-0.0075} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09611^{+0.00064}_{-0.00065} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0042}_{-0.0039} \quad (+0.8\sigma)$	χ_{CMB}^2	$11944.2 \quad (\nu: 17.3) \quad (+1914.3\sigma)$
σ_8	$0.809^{+0.012}_{-0.010} \quad (-0.4\sigma)$	$H(0.15)$	$72.93^{+0.71}_{-0.70} \quad (+0.9\sigma)$	χ_{BAO}^2	$6.00 \quad (\nu: 0.4)$
S_8	$0.823^{+0.020}_{-0.020} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.9^{+7.0}_{-6.9} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.93; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.67; R - 1 = 0.01735$$

12.38 base_nrun_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00030}_{-0.00031} \quad (+1.1\sigma)$	S_8	$0.810^{+0.030}_{-0.030} \quad (-1.3\sigma)$	$H(0.15)$	$73.34^{+0.94}_{-0.95} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0025}_{-0.0024} \quad (-1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.016}_{-0.017} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$636.8^{+9.4}_{-9.1} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00057}_{-0.00060} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.598^{+0.016}_{-0.015} \quad (-1.2\sigma)$	$H(0.38)$	$83.32^{+0.68}_{-0.69} \quad (+1.4\sigma)$
τ	$0.056^{+0.015}_{-0.013} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.975^{+0.023}_{-0.021} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+19}_{-18} \quad (-1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.032}_{-0.028} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.0}_{-1.9} \quad (+1.3\sigma)$	$H(0.51)$	$89.96^{+0.54}_{-0.55} \quad (+1.4\sigma)$
n_{s}	$0.9697^{+0.0087}_{-0.0090} \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.412^{+0.053}_{-0.054} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1971^{+22}_{-21} \quad (-1.4\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.001^{+0.013}_{-0.013} \quad (+0.5\sigma)$	z_{re}	$< 9.13 \quad (+0.2\sigma)$	$H(0.61)$	$95.52^{+0.44}_{-0.45} \quad (+1.4\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.067}_{-0.059} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2294^{+24}_{-23} \quad (-1.4\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.872^{+0.024}_{-0.024} \quad (-1.0\sigma)$	$H(2.33)$	$235.3^{+1.5}_{-1.5} \quad (-1.1\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.4\sigma)$	D_{40}	$1217^{+37}_{-35} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+21}_{-21} \quad (-1.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5725^{+76}_{-71} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.015}_{-0.016} \quad (-1.2\sigma)$
A_{217}^{CIB}	$39^{+20}_{-10} \quad (-1.3\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.012} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.65 \quad (-0.5\sigma)$	D_{1420}	$816.6^{+9.6}_{-9.5} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.469^{+0.013}_{-0.013} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.27}_{-0.26}$	D_{2000}	$230.7^{+3.5}_{-3.5} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.011}_{-0.0098} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.971^{+0.042}_{-0.039} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.011}_{-0.011} \quad (-1.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00011}_{-0.00013} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.010}_{-0.0090} \quad (-0.3\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00011}_{-0.00013} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.011}_{-0.010} \quad (-1.1\sigma)$
A_{100}^{dust}	$1.01^{+0.40}_{-0.39}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.577^{+0.059}_{-0.053} \quad (-1.1\sigma)$	$\sigma_8(0.61)$	$0.5889^{+0.0095}_{-0.0085} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.36}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.779^{+0.047}_{-0.046} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0047}_{-0.0042} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	z_*	$1089.69^{+0.52}_{-0.49} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.3068^{+0.0049}_{-0.0044} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	r_*	$144.90^{+0.61}_{-0.59} \quad (+1.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.9\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04125^{+0.00057}_{-0.00059} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.6^{+4.1}_{-4.2} \quad (-1.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0032} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.916^{+0.059}_{-0.055} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-1.1\sigma)$
c_{TE}	$0.9968^{+0.0099}_{-0.0096}$	z_{drag}	$1059.91^{+0.67}_{-0.67} \quad (+0.8\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.1) \quad (+0.0\sigma)$
c_{EE}	$0.9922^{+0.0097}_{-0.0097}$	r_{drag}	$147.55^{+0.63}_{-0.61} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 1.5) \quad (-0.2\sigma)$
H_0	$68.1^{+1.1}_{-1.1} \quad (+1.4\sigma)$	k_{D}	$0.14042^{+0.00072}_{-0.00073} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11516.9 \quad (\nu: 20.7)$
Ω_{Λ}	$0.696^{+0.014}_{-0.015} \quad (+1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16077^{+0.00038}_{-0.00038} \quad (-0.8\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.4 \quad (\nu: 2.4)$
Ω_{m}	$0.304^{+0.015}_{-0.014} \quad (-1.3\sigma)$	z_{eq}	$3357^{+57}_{-55} \quad (-1.2\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0024}_{-0.0023} \quad (-1.2\sigma)$	k_{eq}	$0.01025^{+0.00018}_{-0.00017} \quad (-1.2\sigma)$	χ_{CMB}^2	$11936.7 \quad (\nu: 19.8) \quad (+1912.9\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09615^{+0.00065}_{-0.00066} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.011} \quad (+1.3\sigma)$		
σ_8	$0.805^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4538^{+0.0055}_{-0.0056} \quad (+1.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11954.85$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.84$; $R - 1 = 0.05101$

12.39 base_nrun_plikHM_TE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02250	$0.02253^{+0.00052}_{-0.00050}$ (+1.6 σ)	$r_{\mathrm{drag}} h$	101.34	$101.5^{+3.5}_{-3.3}$ (+1.9 σ)	$100\theta_{\mathrm{s,eq}}$	0.4557	$0.4561^{+0.0098}_{-0.0095}$ (+1.8 σ)
$\Omega_{\mathrm{c}} h^2$	0.11724	$0.1170^{+0.0043}_{-0.0043}$ (−1.8 σ)	$\langle d^2 \rangle^{1/2}$	2.397	$2.395^{+0.093}_{-0.092}$ (−1.5 σ)	$H(0.15)$	73.76	$73.8^{+1.7}_{-1.6}$ (+2.0 σ)
$100\theta_{\mathrm{MC}}$	1.04145	$1.0414^{+0.0010}_{-0.00099}$ (+1.4 σ)	z_{re}	7.07	$6.9^{+1.8}_{-1.8}$ (−0.9 σ)	$D_{\mathrm{M}}(0.15)$	632.7	632^{+16}_{-16} (−2.0 σ)
τ	0.0491	$0.047^{+0.017}_{-0.018}$ (−0.7 σ)	$10^9 A_{\mathrm{s}}$	2.035	$2.027^{+0.089}_{-0.088}$ (−2.0 σ)	$H(0.38)$	83.64	$83.7^{+1.3}_{-1.2}$ (+2.1 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0129	$3.009^{+0.043}_{-0.044}$ (−2.0 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8444	$1.843^{+0.042}_{-0.041}$ (−3.0 σ)	$D_{\mathrm{M}}(0.38)$	1512.2	1511^{+32}_{-32} (−2.0 σ)
n_{s}	0.9733	$0.975^{+0.031}_{-0.032}$ (+2.2 σ)	D_{40}	1236	1240^{+99}_{-95} (+0.7 σ)	$H(0.51)$	90.22	$90.3^{+1.0}_{-0.93}$ (+2.1 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	0.0145	$0.017^{+0.049}_{-0.049}$ (+2.8 σ)	D_{220}	5690	5691^{+110}_{-110} (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1961.0	1959^{+37}_{-38} (−2.0 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.076}_{-0.075}$	D_{810}	2505.6	2507^{+49}_{-49} (−2.2 σ)	$H(0.61)$	95.74	$95.78^{+0.83}_{-0.76}$ (+2.1 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.136	$0.136^{+0.058}_{-0.057}$	D_{1420}	812.7	815^{+32}_{-31} (+0.1 σ)	$D_{\mathrm{M}}(0.61)$	2283.6	2282^{+40}_{-41} (−2.0 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.477	$0.48^{+0.17}_{-0.17}$	D_{2000}	230.7	232^{+15}_{-14} (+1.3 σ)	$H(2.33)$	234.92	$234.8^{+2.6}_{-2.6}$ (−1.6 σ)
$A_{143}^{\mathrm{dustTE}}$	0.221	$0.22^{+0.11}_{-0.11}$	$n_{\mathrm{s},0.002}$	0.927	$0.92^{+0.14}_{-0.14}$ (−2.4 σ)	$D_{\mathrm{M}}(2.33)$	5744.5	5743^{+35}_{-36} (−2.0 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.657	$0.66^{+0.16}_{-0.16}$	Y_{P}	0.245446	$0.24545^{+0.00022}_{-0.00020}$ (+1.5 σ)	$f\sigma_8(0.15)$	0.4394	$0.438^{+0.024}_{-0.024}$ (−2.1 σ)
$A_{217}^{\mathrm{dustTE}}$	2.04	$2.04^{+0.53}_{-0.52}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246773	$0.24678^{+0.00022}_{-0.00020}$ (+1.5 σ)	$\sigma_8(0.15)$	0.7356	$0.735^{+0.019}_{-0.020}$ (−2.0 σ)
c_{100}	1.00016	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.561	$2.558^{+0.093}_{-0.094}$ (−1.5 σ)	$f\sigma_8(0.38)$	0.4603	$0.459^{+0.020}_{-0.020}$ (−2.2 σ)
c_{217}	0.99800	$0.9980^{+0.0013}_{-0.0013}$ (−0.5 σ)	Age/Gyr	13.756	$13.754^{+0.077}_{-0.079}$ (−1.9 σ)	$\sigma_8(0.38)$	0.6535	$0.653^{+0.016}_{-0.017}$ (−1.8 σ)
y_{cal}	0.99985	$1.0000^{+0.0048}_{-0.0049}$ (−0.2 σ)	z_*	1089.51	$1089.47^{+0.87}_{-0.86}$ (−1.9 σ)	$f\sigma_8(0.51)$	0.4605	$0.459^{+0.018}_{-0.018}$ (−2.2 σ)
H_0	68.62	$68.7^{+2.0}_{-1.9}$ (+2.0 σ)	r_*	145.05	$145.1^{+1.0}_{-0.99}$ (+1.4 σ)	$\sigma_8(0.51)$	0.6122	$0.611^{+0.015}_{-0.016}$ (−1.7 σ)
Ω_{Λ}	0.7019	$0.703^{+0.024}_{-0.025}$ (+1.8 σ)	$100\theta_*$	1.04161	$1.04159^{+0.00099}_{-0.00098}$ (+1.3 σ)	$f\sigma_8(0.61)$	0.4567	$0.456^{+0.016}_{-0.017}$ (−2.2 σ)
Ω_{m}	0.2981	$0.297^{+0.025}_{-0.024}$ (−1.8 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.925	$13.929^{+0.095}_{-0.093}$ (+1.3 σ)	$\sigma_8(0.61)$	0.5829	$0.582^{+0.014}_{-0.015}$ (−1.5 σ)
$\Omega_{\mathrm{m}} h^2$	0.14039	$0.1402^{+0.0041}_{-0.0041}$ (−1.7 σ)	z_{drag}	1060.05	$1060.1^{+1.1}_{-1.1}$ (+1.2 σ)	$f\sigma_8(2.33)$	0.2944	$0.2942^{+0.0070}_{-0.0074}$ (−1.2 σ)
$\Omega_{\mathrm{m}} h^3$	0.09633	$0.0963^{+0.0010}_{-0.00099}$ (+0.7 σ)	r_{drag}	147.68	$147.7^{+1.0}_{-1.0}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3041	$0.3039^{+0.0075}_{-0.0078}$ (−0.8 σ)
σ_8	0.7946	$0.793^{+0.021}_{-0.022}$ (−2.1 σ)	k_{D}	0.14035	$0.1403^{+0.0011}_{-0.0012}$ (−0.6 σ)	χ_{small}^2	395.53	396.7 (ν : 1.2) (−0.2 σ)
S_8	0.7921	$0.790^{+0.048}_{-0.047}$ (−2.1 σ)	$100\theta_{\mathrm{D}}$	0.16074	$0.16072^{+0.00062}_{-0.00062}$ (−1.0 σ)	χ_{plikTE}^2	852.5	860.4 (ν : 8.0)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4339	$0.432^{+0.026}_{-0.026}$ (−2.1 σ)	z_{eq}	3339	3335^{+97}_{-97} (−1.7 σ)	χ_{prior}^2	0.4	7.4 (ν : 6.8) (+0.0 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.5872	$0.586^{+0.025}_{-0.025}$ (−2.2 σ)	k_{eq}	0.010192	$0.01018^{+0.00030}_{-0.00030}$ (−1.7 σ)	χ_{CMB}^2	1248.0	1257.2 (ν : 9.2) (+11.4 σ)
$\sigma_8/h^{0.5}$	0.9592	$0.957^{+0.034}_{-0.035}$ (−2.3 σ)	$100\theta_{\mathrm{eq}}$	0.8255	$0.826^{+0.019}_{-0.018}$ (+1.8 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1248.43$; $\Delta\chi_{\mathrm{eff}}^2 = -0.56$; $\bar{\chi}_{\mathrm{eff}}^2 = 1264.57$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.57$; $R - 1 = 0.00548$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.53 (Δ -0.16) plik_rd12_HM_v22_TE: 852.47 (Δ -0.38)

12.40 base_nrun_plikHM_TE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022477	$0.02246^{+0.00046}_{-0.00045}$ (+1.3 σ)	$\langle d^2 \rangle^{1/2}$	2.410	$2.406^{+0.081}_{-0.082}$ (−1.2 σ)	$D_M(0.15)$	635.2	$635.5^{+9.4}_{-9.2}$ (−1.5 σ)
$\Omega_c h^2$	0.11793	$0.1180^{+0.0024}_{-0.0025}$ (−1.3 σ)	z_{re}	6.83	$6.9^{+1.7}_{-1.9}$ (−0.9 σ)	$H(0.38)$	83.46	$83.44^{+0.74}_{-0.72}$ (+1.6 σ)
$100\theta_{\text{MC}}$	1.04135	$1.04131^{+0.00091}_{-0.00087}$ (+1.1 σ)	$10^9 A_s$	2.029	$2.033^{+0.087}_{-0.087}$ (−1.8 σ)	$D_M(0.38)$	1517.2	1518^{+19}_{-19} (−1.5 σ)
τ	0.0466	$0.047^{+0.016}_{-0.018}$ (−0.7 σ)	$10^9 A_s e^{-2\tau}$	1.8482	$1.849^{+0.037}_{-0.037}$ (−2.6 σ)	$H(0.51)$	90.08	$90.06^{+0.61}_{-0.60}$ (+1.6 σ)
$\ln(10^{10} A_s)$	3.0101	$3.012^{+0.042}_{-0.044}$ (−1.8 σ)	D_{40}	1247	1239^{+99}_{-94} (+0.7 σ)	$D_M(0.51)$	1966.9	1968^{+22}_{-22} (−1.5 σ)
n_s	0.9727	$0.971^{+0.028}_{-0.029}$ (+1.5 σ)	D_{220}	5695	5690^{+110}_{-110} (−0.5 σ)	$H(0.61)$	95.63	$95.62^{+0.54}_{-0.52}$ (+1.6 σ)
$dn_s/d \ln k$	0.0177	$0.013^{+0.047}_{-0.047}$ (+2.3 σ)	D_{810}	2508.6	2507^{+49}_{-49} (−2.2 σ)	$D_M(0.61)$	2289.9	2291^{+24}_{-24} (−1.6 σ)
y_{cal}	1.00007	$0.99999^{+0.0049}_{-0.0050}$ (−0.2 σ)	D_{1420}	814.5	812^{+30}_{-30} (−0.3 σ)	$H(2.33)$	235.35	$235.3^{+1.6}_{-1.6}$ (−1.1 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.078}_{-0.075}$	D_{2000}	231.5	230^{+14}_{-13} (+0.7 σ)	$D_M(2.33)$	5748.6	5750^{+26}_{-27} (−1.6 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.137^{+0.059}_{-0.058}$	$n_{s,0.002}$	0.916	$0.93^{+0.14}_{-0.13}$ (−2.0 σ)	$f\sigma_8(0.15)$	0.4430	$0.443^{+0.016}_{-0.017}$ (−1.7 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.478	$0.48^{+0.17}_{-0.16}$	Y_P	0.245436	$0.24543^{+0.00019}_{-0.00018}$ (+1.2 σ)	$\sigma_8(0.15)$	0.7368	$0.736^{+0.018}_{-0.019}$ (−1.8 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.11}_{-0.11}$	Y_P^{BBN}	0.246763	$0.24676^{+0.00019}_{-0.00018}$ (+1.2 σ)	$f\sigma_8(0.38)$	0.4631	$0.463^{+0.014}_{-0.015}$ (−1.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.661	$0.66^{+0.16}_{-0.16}$	10^5D/H	2.566	$2.569^{+0.084}_{-0.084}$ (−1.3 σ)	$\sigma_8(0.38)$	0.6541	$0.654^{+0.016}_{-0.017}$ (−1.6 σ)
A_{217}^{dustTE}	2.05	$2.05^{+0.54}_{-0.52}$	Age/Gyr	13.765	$13.767^{+0.059}_{-0.061}$ (−1.6 σ)	$f\sigma_8(0.51)$	0.4628	$0.463^{+0.013}_{-0.014}$ (−1.9 σ)
c_{100}	1.00017	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	z_*	1089.61	$1089.63^{+0.65}_{-0.65}$ (−1.5 σ)	$\sigma_8(0.51)$	0.6126	$0.612^{+0.015}_{-0.016}$ (−1.5 σ)
c_{217}	0.99799	$0.9980^{+0.0013}_{-0.0013}$ (−0.5 σ)	r_*	144.89	$144.89^{+0.66}_{-0.66}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4586	$0.458^{+0.013}_{-0.013}$ (−1.9 σ)
H_0	68.32	$68.3^{+1.1}_{-1.1}$ (+1.5 σ)	$100\theta_*$	1.04153	$1.04149^{+0.00090}_{-0.00087}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5831	$0.583^{+0.014}_{-0.015}$ (−1.5 σ)
Ω_Λ	0.6978	$0.697^{+0.014}_{-0.015}$ (+1.4 σ)	$D_M(z_*)/\text{Gpc}$	13.911	$13.912^{+0.065}_{-0.066}$ (+0.9 σ)	$f\sigma_8(2.33)$	0.2944	$0.2941^{+0.0071}_{-0.0074}$ (−1.2 σ)
Ω_m	0.3022	$0.303^{+0.015}_{-0.014}$ (−1.4 σ)	z_{drag}	1060.05	$1060.0^{+1.0}_{-1.0}$ (+1.0 σ)	$\sigma_8(2.33)$	0.3039	$0.3036^{+0.0074}_{-0.0076}$ (−0.9 σ)
$\Omega_m h^2$	0.14105	$0.1411^{+0.0023}_{-0.0024}$ (−1.2 σ)	r_{drag}	147.52	$147.53^{+0.74}_{-0.75}$ (+0.8 σ)	χ^2_{simall}	395.58	$396.8 (\nu: 1.2)$ (−0.2 σ)
$\Omega_m h^3$	0.09637	$0.0963^{+0.0010}_{-0.00097}$ (+0.7 σ)	k_D	0.14049	$0.1405^{+0.0010}_{-0.00097}$ (−0.3 σ)	χ^2_{plikTE}	852.6	$859.9 (\nu: 6.8)$
σ_8	0.7963	$0.796^{+0.020}_{-0.021}$ (−1.8 σ)	$100\theta_D$	0.16075	$0.16076^{+0.00060}_{-0.00061}$ (−0.9 σ)	$\chi^2_{6\text{DF}}$	0.004	$0.042 (\nu: 0.0)$
S_8	0.7993	$0.799^{+0.031}_{-0.032}$ (−1.7 σ)	z_{eq}	3355	3356^{+56}_{-57} (−1.2 σ)	χ^2_{MGS}	1.89	$1.93 (\nu: 0.2)$
$\sigma_8 \Omega_m^{0.5}$	0.4378	$0.438^{+0.017}_{-0.017}$ (−1.7 σ)	k_{eq}	0.010241	$0.01024^{+0.00017}_{-0.00017}$ (−1.2 σ)	χ^2_{DR12BAO}	3.37	$3.99 (\nu: 0.4)$
$\sigma_8 \Omega_m^{0.25}$	0.5904	$0.590^{+0.018}_{-0.019}$ (−1.8 σ)	$100\theta_{\text{eq}}$	0.8224	$0.822^{+0.011}_{-0.010}$ (+1.3 σ)	χ^2_{prior}	0.4	$7.4 (\nu: 6.8)$ (+0.0 σ)
$\sigma_8/h^{0.5}$	0.9635	$0.963^{+0.027}_{-0.028}$ (−1.9 σ)	$100\theta_{s,\text{eq}}$	0.4541	$0.4540^{+0.0056}_{-0.0054}$ (+1.3 σ)	χ^2_{BAO}	5.27	$6.0 (\nu: 0.6)$
$r_{\text{drag}} h$	100.78	$100.7^{+1.9}_{-1.9}$ (+1.4 σ)	$H(0.15)$	73.50	$73.48^{+0.96}_{-0.95}$ (+1.6 σ)	χ^2_{CMB}	1248.2	$1256.6 (\nu: 8.0)$ (+11.4 σ)

Best-fit $\chi^2_{\text{eff}} = 1253.85$; $\Delta\chi^2_{\text{eff}} = -0.39$; $\bar{\chi}^2_{\text{eff}} = 1270.03$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.61$; $R - 1 = 0.00960$
 χ^2_{eff} : BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.89 (Δ 0.14) DR12BAO: 3.37 (Δ -0.07) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.58 (Δ -0.08) plik_rd12_HM_v22_TE: 852.58 (Δ -0.36)

12.41 base_nrun_plikHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02253^{+0.00052}_{-0.00050} \quad (+1.6\sigma)$	$r_{\mathrm{drag}} h$	$101.5^{+3.4}_{-3.3} \quad (+1.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4560^{+0.0098}_{-0.0095} \quad (+1.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1171^{+0.0043}_{-0.0042} \quad (-1.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.399^{+0.091}_{-0.090} \quad (-1.3\sigma)$	$H(0.15)$	$73.8^{+1.7}_{-1.6} \quad (+2.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04142^{+0.00099}_{-0.00099} \quad (+1.4\sigma)$	z_{re}	$< 8.43 \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$632^{+16}_{-16} \quad (-1.9\sigma)$
τ	$0.0519^{+0.011}_{-0.0088} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.048^{+0.071}_{-0.066} \quad (-1.4\sigma)$	$H(0.38)$	$83.7^{+1.2}_{-1.2} \quad (+2.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.019^{+0.034}_{-0.032} \quad (-1.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.846^{+0.042}_{-0.041} \quad (-2.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+32}_{-32} \quad (-2.0\sigma)$
n_{s}	$0.975^{+0.031}_{-0.032} \quad (+2.1\sigma)$	D_{40}	$1233^{+95}_{-93} \quad (+0.4\sigma)$	$H(0.51)$	$90.3^{+1.0}_{-0.94} \quad (+2.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$0.013^{+0.047}_{-0.048} \quad (+2.4\sigma)$	D_{220}	$5690^{+110}_{-110} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1959^{+38}_{-38} \quad (-2.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.074}$	D_{810}	$2508^{+49}_{-49} \quad (-2.1\sigma)$	$H(0.61)$	$95.78^{+0.82}_{-0.76} \quad (+2.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.136^{+0.058}_{-0.057}$	D_{1420}	$814^{+32}_{-31} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2282^{+41}_{-41} \quad (-2.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	D_{2000}	$231^{+14}_{-14} \quad (+1.1\sigma)$	$H(2.33)$	$234.9^{+2.6}_{-2.6} \quad (-1.5\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$n_{\mathrm{s},0.002}$	$0.93^{+0.13}_{-0.13} \quad (-1.9\sigma)$	$D_{\mathrm{M}}(2.33)$	$5743^{+34}_{-36} \quad (-2.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	Y_{P}	$0.24546^{+0.00022}_{-0.00020} \quad (+1.5\sigma)$	$f\sigma_8(0.15)$	$0.440^{+0.024}_{-0.024} \quad (-2.0\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.04^{+0.53}_{-0.52}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00022}_{-0.00020} \quad (+1.5\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.017}_{-0.017} \quad (-1.6\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.557^{+0.093}_{-0.094} \quad (-1.6\sigma)$	$f\sigma_8(0.38)$	$0.461^{+0.019}_{-0.020} \quad (-2.0\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.5\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.753^{+0.077}_{-0.079} \quad (-2.0\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.014}_{-0.014} \quad (-1.4\sigma)$
y_{cal}	$1.0000^{+0.0048}_{-0.0049} \quad (-0.2\sigma)$	z_*	$1089.47^{+0.87}_{-0.87} \quad (-1.9\sigma)$	$f\sigma_8(0.51)$	$0.461^{+0.017}_{-0.017} \quad (-2.0\sigma)$
H_0	$68.7^{+1.9}_{-1.9} \quad (+2.0\sigma)$	r_*	$145.1^{+1.0}_{-1.0} \quad (+1.3\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.013}_{-0.013} \quad (-1.2\sigma)$
Ω_{Λ}	$0.703^{+0.024}_{-0.026} \quad (+1.8\sigma)$	$100\theta_*$	$1.04159^{+0.00098}_{-0.00098} \quad (+1.3\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.015}_{-0.016} \quad (-2.0\sigma)$
Ω_{m}	$0.297^{+0.026}_{-0.024} \quad (-1.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.927^{+0.095}_{-0.093} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.013}_{-0.012} \quad (-1.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1403^{+0.0041}_{-0.0041} \quad (-1.6\sigma)$	z_{drag}	$1060.1^{+1.1}_{-1.0} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2953^{+0.0064}_{-0.0061} \quad (-0.7\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0963^{+0.0010}_{-0.00099} \quad (+0.7\sigma)$	r_{drag}	$147.7^{+1.0}_{-1.0} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3051^{+0.0068}_{-0.0064} \quad (-0.3\sigma)$
σ_8	$0.797^{+0.020}_{-0.020} \quad (-1.8\sigma)$	k_{D}	$0.1404^{+0.0011}_{-0.0011} \quad (-0.5\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.4\sigma)$
S_8	$0.793^{+0.047}_{-0.047} \quad (-2.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00061}_{-0.00061} \quad (-1.0\sigma)$	χ_{plikTE}^2	$860.5 \quad (\nu: 7.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.434^{+0.026}_{-0.026} \quad (-2.0\sigma)$	z_{eq}	$3336^{+97}_{-97} \quad (-1.6\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.588^{+0.024}_{-0.024} \quad (-2.0\sigma)$	k_{eq}	$0.01018^{+0.00030}_{-0.00030} \quad (-1.6\sigma)$	χ_{CMB}^2	$1256.8 \quad (\nu: 8.7) \quad (+11.4\sigma)$
$\sigma_8/h^{0.5}$	$0.961^{+0.032}_{-0.033} \quad (-2.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.826^{+0.019}_{-0.019} \quad (+1.8\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1264.22$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.57$; $R - 1 = 0.00681$

12.42 base_nrun_plikHM_TE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02247^{+0.00047}_{-0.00045} \quad (+1.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.410^{+0.078}_{-0.078} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$635.5^{+9.4}_{-9.2} \quad (-1.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1180^{+0.0024}_{-0.0025} \quad (-1.3\sigma)$	z_{re}	$< 8.43 \quad (-0.3\sigma)$	$H(0.38)$	$83.44^{+0.73}_{-0.72} \quad (+1.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04132^{+0.00090}_{-0.00087} \quad (+1.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.053^{+0.069}_{-0.063} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1518^{+19}_{-19} \quad (-1.5\sigma)$
τ	$0.0518^{+0.011}_{-0.0089} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.851^{+0.037}_{-0.037} \quad (-2.5\sigma)$	$H(0.51)$	$90.07^{+0.61}_{-0.60} \quad (+1.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.022^{+0.033}_{-0.031} \quad (-1.3\sigma)$	D_{40}	$1231^{+94}_{-91} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1968^{+22}_{-22} \quad (-1.6\sigma)$
n_{s}	$0.971^{+0.028}_{-0.028} \quad (+1.5\sigma)$	D_{220}	$5689^{+110}_{-110} \quad (-0.6\sigma)$	$H(0.61)$	$95.62^{+0.54}_{-0.51} \quad (+1.7\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$0.009^{+0.045}_{-0.047} \quad (+1.8\sigma)$	D_{810}	$2509^{+49}_{-49} \quad (-2.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2291^{+24}_{-24} \quad (-1.6\sigma)$
y_{cal}	$0.99996^{+0.0049}_{-0.0050} \quad (-0.2\sigma)$	D_{1420}	$812^{+30}_{-31} \quad (-0.4\sigma)$	$H(2.33)$	$235.4^{+1.6}_{-1.6} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.076}$	D_{2000}	$230^{+13}_{-13} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5749^{+26}_{-27} \quad (-1.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.136^{+0.059}_{-0.058}$	$n_{\mathrm{s},0.002}$	$0.94^{+0.13}_{-0.13} \quad (-1.5\sigma)$	$f\sigma_8(0.15)$	$0.445^{+0.015}_{-0.015} \quad (-1.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	Y_{P}	$0.24543^{+0.00019}_{-0.00018} \quad (+1.3\sigma)$	$\sigma_8(0.15)$	$0.739^{+0.016}_{-0.016} \quad (-1.4\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24676^{+0.00019}_{-0.00018} \quad (+1.3\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.013}_{-0.013} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.568^{+0.084}_{-0.084} \quad (-1.3\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.014}_{-0.014} \quad (-1.2\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.04^{+0.54}_{-0.53}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.766^{+0.059}_{-0.062} \quad (-1.6\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.012}_{-0.012} \quad (-1.6\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.62^{+0.65}_{-0.65} \quad (-1.5\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.013}_{-0.013} \quad (-1.1\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.5\sigma)$	r_*	$144.88^{+0.66}_{-0.64} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.012}_{-0.011} \quad (-1.6\sigma)$
H_0	$68.3^{+1.1}_{-1.1} \quad (+1.5\sigma)$	$100\theta_*$	$1.04150^{+0.00089}_{-0.00087} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.013}_{-0.012} \quad (-1.0\sigma)$
Ω_{Λ}	$0.697^{+0.014}_{-0.015} \quad (+1.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.910^{+0.065}_{-0.064} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.2953^{+0.0065}_{-0.0061} \quad (-0.8\sigma)$
Ω_{m}	$0.303^{+0.015}_{-0.014} \quad (-1.4\sigma)$	z_{drag}	$1060.0^{+1.1}_{-1.0} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3048^{+0.0068}_{-0.0064} \quad (-0.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0023}_{-0.0024} \quad (-1.2\sigma)$	r_{drag}	$147.51^{+0.72}_{-0.73} \quad (+0.8\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.6) \quad (-0.4\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0964^{+0.0010}_{-0.00097} \quad (+0.7\sigma)$	k_{D}	$0.1405^{+0.0010}_{-0.00096} \quad (-0.3\sigma)$	χ_{plikTE}^2	$860.0 \quad (\nu: 6.8)$
σ_8	$0.799^{+0.018}_{-0.018} \quad (-1.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00060}_{-0.00061} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.041 \quad (\nu: 0.0)$
S_8	$0.803^{+0.030}_{-0.029} \quad (-1.6\sigma)$	z_{eq}	$3357^{+56}_{-58} \quad (-1.2\sigma)$	χ_{MGS}^2	$1.92 \quad (\nu: 0.2)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.440^{+0.016}_{-0.016} \quad (-1.6\sigma)$	k_{eq}	$0.01024^{+0.00017}_{-0.00018} \quad (-1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$3.99 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.593^{+0.017}_{-0.016} \quad (-1.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.010} \quad (+1.3\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.967^{+0.024}_{-0.024} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4540^{+0.0056}_{-0.0054} \quad (+1.3\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$r_{\mathrm{drag}} h$	$100.7^{+1.9}_{-1.9} \quad (+1.4\sigma)$	$H(0.15)$	$73.48^{+0.97}_{-0.95} \quad (+1.6\sigma)$	χ_{CMB}^2	$1256.3 \quad (\nu: 7.7) \quad (+11.3\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1269.67; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.68; R - 1 = 0.01461$$

12.43 base_nrun_plikHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.02363	$0.0235^{+0.0027}_{-0.0026}$ (+5.5 σ)	D_{40}	1268	1266^{+110}_{-100} (+2.0 σ)	$D_{\mathrm{M}}(0.15)$	620.5	624^{+46}_{-43} (−2.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.1145	$0.1152^{+0.0099}_{-0.0093}$ (−2.6 σ)	D_{220}	5901	5867^{+430}_{-440} (+3.7 σ)	$H(0.38)$	84.70	$84.5^{+4.0}_{-3.7}$ (+3.5 σ)
$100\theta_{\mathrm{MC}}$	1.04011	$1.0401^{+0.0017}_{-0.0018}$ (−1.5 σ)	D_{810}	2580	2574^{+84}_{-86} (+2.6 σ)	$D_{\mathrm{M}}(0.38)$	1487	1494^{+95}_{-91} (−3.0 σ)
τ	0.0493	$0.049^{+0.019}_{-0.019}$ (−0.5 σ)	D_{1420}	851.8	849^{+42}_{-41} (+6.8 σ)	$H(0.51)$	91.14	$91.0^{+3.5}_{-3.2}$ (+3.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.033	$3.032^{+0.066}_{-0.062}$ (−0.7 σ)	D_{2000}	245.9	245^{+18}_{-18} (+8.2 σ)	$D_{\mathrm{M}}(0.51)$	1931	1939^{+110}_{-110} (−3.1 σ)
n_{s}	0.9929	$0.993^{+0.043}_{-0.043}$ (+5.3 σ)	$n_{\mathrm{s},0.002}$	0.902	$0.90^{+0.20}_{-0.19}$ (−3.2 σ)	$H(0.61)$	96.54	$96.4^{+3.0}_{-2.9}$ (+3.9 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	0.028	$0.029^{+0.068}_{-0.071}$ (+4.4 σ)	Y_{P}	0.24592	$0.2458^{+0.0010}_{-0.0011}$ (+5.1 σ)	$D_{\mathrm{M}}(0.61)$	2250	2259^{+120}_{-120} (−3.1 σ)
y_{cal}	1.00007	$1.0001^{+0.0048}_{-0.0048}$ (−0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.24725	$0.2471^{+0.0010}_{-0.0011}$ (+5.1 σ)	$H(2.33)$	234.16	$234.4^{+5.0}_{-4.7}$ (−1.8 σ)
H_0	70.1	$69.8^{+5.6}_{-5.3}$ (+3.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.366	$2.41^{+0.45}_{-0.43}$ (−4.8 σ)	$D_{\mathrm{M}}(2.33)$	5706	5715^{+140}_{-150} (−3.7 σ)
Ω_{Λ}	0.717	$0.712^{+0.058}_{-0.062}$ (+2.5 σ)	Age/Gyr	13.670	$13.69^{+0.31}_{-0.32}$ (−3.6 σ)	$f\sigma_8(0.15)$	0.430	$0.434^{+0.061}_{-0.056}$ (−2.4 σ)
Ω_{m}	0.283	$0.288^{+0.062}_{-0.058}$ (−2.5 σ)	z_*	1087.95	$1088.3^{+3.7}_{-3.6}$ (−4.7 σ)	$\sigma_8(0.15)$	0.7383	$0.740^{+0.028}_{-0.030}$ (−1.3 σ)
$\Omega_{\mathrm{m}}h^2$	0.1388	$0.1393^{+0.0083}_{-0.0079}$ (−2.1 σ)	r_*	144.88	$144.9^{+1.9}_{-1.8}$ (+0.9 σ)	$f\sigma_8(0.38)$	0.4540	$0.457^{+0.047}_{-0.047}$ (−2.4 σ)
$\Omega_{\mathrm{m}}h^3$	0.09730	$0.0971^{+0.0043}_{-0.0040}$ (+2.2 σ)	$100\theta_*$	1.04016	$1.0402^{+0.0017}_{-0.0017}$ (−1.8 σ)	$\sigma_8(0.38)$	0.6577	$0.658^{+0.020}_{-0.022}$ (−0.9 σ)
σ_8	0.7958	$0.798^{+0.036}_{-0.038}$ (−1.6 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.929	$13.93^{+0.17}_{-0.17}$ (+1.2 σ)	$f\sigma_8(0.51)$	0.4561	$0.459^{+0.040}_{-0.040}$ (−2.3 σ)
S_8	0.772	$0.78^{+0.12}_{-0.11}$ (−2.4 σ)	z_{drag}	1062.4	$1062.0^{+5.4}_{-5.6}$ (+5.0 σ)	$\sigma_8(0.51)$	0.6168	$0.617^{+0.017}_{-0.019}$ (−0.6 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.423	$0.428^{+0.066}_{-0.059}$ (−2.4 σ)	r_{drag}	147.15	$147.2^{+2.2}_{-2.1}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4535	$0.456^{+0.034}_{-0.036}$ (−2.3 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.580	$0.584^{+0.057}_{-0.054}$ (−2.3 σ)	k_{D}	0.14170	$0.1415^{+0.0035}_{-0.0037}$ (+1.4 σ)	$\sigma_8(0.61)$	0.5878	$0.588^{+0.015}_{-0.017}$ (−0.4 σ)
$\sigma_8/h^{0.5}$	0.951	$0.956^{+0.081}_{-0.078}$ (−2.3 σ)	$100\theta_{\mathrm{D}}$	0.15918	$0.1595^{+0.0031}_{-0.0029}$ (−5.2 σ)	$f\sigma_8(2.33)$	0.2976	$0.2975^{+0.0070}_{-0.0075}$ (+0.1 σ)
$r_{\mathrm{drag}}h$	103.1	$102.7^{+8.3}_{-8.1}$ (+2.6 σ)	z_{eq}	3302	3314^{+200}_{-190} (−2.1 σ)	$\sigma_8(2.33)$	0.3082	$0.3080^{+0.0075}_{-0.0077}$ (+0.7 σ)
$\langle d^2 \rangle^{1/2}$	2.387	$2.40^{+0.16}_{-0.15}$ (−1.4 σ)	k_{eq}	0.01008	$0.01011^{+0.00061}_{-0.00057}$ (−2.1 σ)	χ_{small}^2	395.42	396.7 (ν : 1.3) (−0.2 σ)
z_{re}	6.83	$6.8^{+1.7}_{-1.9}$ (−0.9 σ)	$100\theta_{\mathrm{eq}}$	0.8346	$0.832^{+0.042}_{-0.040}$ (+2.5 σ)	χ_{plikEE}^2	738.4	744.2 (ν : 5.9)
$10^9 A_{\mathrm{s}}$	2.076	$2.07^{+0.14}_{-0.13}$ (−0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.4595	$0.458^{+0.020}_{-0.020}$ (+2.3 σ)	χ_{prior}^2	0.00	0.98 (ν : 1.0) (−1.7 σ)
$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.881	$1.880^{+0.074}_{-0.071}$ (−0.5 σ)	$H(0.15)$	75.08	$74.8^{+5.0}_{-4.7}$ (+3.2 σ)	χ_{CMB}^2	1133.8	1140.9 (ν : 7.3) (−9.2 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 1133.78$; $\Delta\chi_{\mathrm{eff}}^2 = -0.78$; $\bar{\chi}_{\mathrm{eff}}^2 = 1141.92$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.31$; $R - 1 = 0.00923$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.42 (Δ -0.17) plik_rd12_HM_v22_EE: 738.36 (Δ -0.60)

12.44 base_nrun_plikHM_EE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02278	$0.0229^{+0.0019}_{-0.0019}$ (+3.2 σ)	D_{810}	2562	2564^{+77}_{-79} (+1.8 σ)	$D_M(0.51)$	1968.4	1966^{+44}_{-42} (−1.6 σ)
$\Omega_c h^2$	0.11736	$0.1174^{+0.0029}_{-0.0030}$ (−1.6 σ)	D_{1420}	843.7	843^{+31}_{-31} (+5.5 σ)	$H(0.61)$	95.55	$95.7^{+1.5}_{-1.4}$ (+1.8 σ)
$100\theta_{MC}$	1.03984	$1.0399^{+0.0016}_{-0.0016}$ (−1.8 σ)	D_{2000}	242.8	242^{+14}_{-13} (+6.7 σ)	$D_M(0.61)$	2291.7	2289^{+50}_{-47} (−1.6 σ)
τ	0.0476	$0.048^{+0.019}_{-0.018}$ (−0.7 σ)	$n_{s,0.002}$	0.883	$0.90^{+0.20}_{-0.19}$ (−3.4 σ)	$H(2.33)$	235.12	$235.3^{+2.6}_{-2.5}$ (−1.2 σ)
$\ln(10^{10} A_s)$	3.027	$3.029^{+0.062}_{-0.063}$ (−0.9 σ)	Y_P	0.24555	$0.24560^{+0.00073}_{-0.00081}$ (+2.9 σ)	$D_M(2.33)$	5753	5748^{+81}_{-83} (−1.7 σ)
n_s	0.9889	$0.988^{+0.035}_{-0.034}$ (+4.4 σ)	Y_P^{BBN}	0.24687	$0.24693^{+0.00074}_{-0.00081}$ (+2.9 σ)	$f\sigma_8(0.15)$	0.4487	$0.448^{+0.020}_{-0.020}$ (−1.3 σ)
$dn_s/d \ln k$	0.033	$0.029^{+0.067}_{-0.071}$ (+4.4 σ)	$10^5 D/H$	2.512	$2.50^{+0.33}_{-0.33}$ (−2.9 σ)	$\sigma_8(0.15)$	0.7464	$0.746^{+0.019}_{-0.019}$ (−0.5 σ)
y_{cal}	1.00034	$1.0001^{+0.0047}_{-0.0046}$ (−0.1 σ)	Age/Gyr	13.777	$13.76^{+0.19}_{-0.19}$ (−1.7 σ)	$f\sigma_8(0.38)$	0.4691	$0.468^{+0.017}_{-0.017}$ (−1.2 σ)
H_0	68.27	$68.4^{+1.9}_{-1.9}$ (+1.6 σ)	z_*	1089.18	$1089.1^{+2.4}_{-2.2}$ (−2.8 σ)	$\sigma_8(0.38)$	0.6627	$0.662^{+0.016}_{-0.016}$ (−0.2 σ)
Ω_Λ	0.6979	$0.698^{+0.018}_{-0.019}$ (+1.5 σ)	r_*	144.80	$144.7^{+1.5}_{-1.6}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4688	$0.468^{+0.016}_{-0.016}$ (−1.2 σ)
Ω_m	0.3021	$0.302^{+0.019}_{-0.018}$ (−1.5 σ)	$100\theta_*$	1.04000	$1.0400^{+0.0016}_{-0.0016}$ (−2.0 σ)	$\sigma_8(0.51)$	0.6206	$0.620^{+0.014}_{-0.015}$ (−0.1 σ)
$\Omega_m h^2$	0.14078	$0.1410^{+0.0033}_{-0.0033}$ (−1.3 σ)	$D_M(z_*)/\text{Gpc}$	13.923	$13.91^{+0.14}_{-0.15}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.4646	$0.464^{+0.014}_{-0.015}$ (−1.1 σ)
$\Omega_m h^3$	0.09611	$0.0964^{+0.0036}_{-0.0034}$ (+0.8 σ)	z_{drag}	1060.70	$1060.9^{+4.2}_{-4.4}$ (+2.9 σ)	$\sigma_8(0.61)$	0.5908	$0.590^{+0.014}_{-0.014}$ (+0.0 σ)
σ_8	0.8067	$0.806^{+0.021}_{-0.021}$ (−0.7 σ)	r_{drag}	147.34	$147.2^{+2.1}_{-2.1}$ (+0.1 σ)	$f\sigma_8(2.33)$	0.2982	$0.2981^{+0.0070}_{-0.0070}$ (+0.3 σ)
S_8	0.8095	$0.808^{+0.039}_{-0.038}$ (−1.3 σ)	k_D	0.14091	$0.1411^{+0.0035}_{-0.0036}$ (+0.8 σ)	$\sigma_8(2.33)$	0.3079	$0.3078^{+0.0074}_{-0.0073}$ (+0.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4434	$0.443^{+0.021}_{-0.021}$ (−1.3 σ)	$100\theta_D$	0.16012	$0.1600^{+0.0025}_{-0.0025}$ (−3.4 σ)	χ_{simall}^2	395.50	$396.8 (\nu: 1.3)$ (−0.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5981	$0.597^{+0.022}_{-0.021}$ (−1.2 σ)	z_{eq}	3349	3353^{+80}_{-79} (−1.3 σ)	χ_{plikEE}^2	738.5	$743.5 (\nu: 4.9)$
$\sigma_8/h^{0.5}$	0.9764	$0.975^{+0.033}_{-0.033}$ (−1.2 σ)	k_{eq}	0.010221	$0.01023^{+0.00024}_{-0.00024}$ (−1.3 σ)	χ_{6DF}^2	0.000	$0.057 (\nu: 0.0)$
$r_{drag} h$	100.59	$100.6^{+2.3}_{-2.2}$ (+1.4 σ)	$100\theta_{eq}$	0.8233	$0.823^{+0.013}_{-0.013}$ (+1.4 σ)	χ_{MGS}^2	1.75	$1.86 (\nu: 0.3)$
$\langle d^2 \rangle^{1/2}$	2.434	$2.429^{+0.097}_{-0.090}$ (−0.6 σ)	$100\theta_{s,eq}$	0.4542	$0.4540^{+0.0072}_{-0.0069}$ (+1.3 σ)	$\chi_{DR12BAO}^2$	3.59	$4.4 (\nu: 0.8)$
z_{re}	6.86	$6.8^{+1.7}_{-1.9}$ (−0.9 σ)	$H(0.15)$	73.45	$73.6^{+1.8}_{-1.8}$ (+1.7 σ)	χ_{prior}^2	0.02	$0.9 (\nu: 0.9)$ (−1.7 σ)
$10^9 A_s$	2.064	$2.07^{+0.13}_{-0.13}$ (−0.8 σ)	$D_M(0.15)$	635.7	635^{+17}_{-16} (−1.6 σ)	χ_{BAO}^2	5.33	$6.3 (\nu: 0.9)$
$10^9 A_s e^{-2\tau}$	1.877	$1.879^{+0.074}_{-0.072}$ (−0.5 σ)	$H(0.38)$	83.39	$83.5^{+1.6}_{-1.6}$ (+1.7 σ)	χ_{CMB}^2	1134.0	$1140.3 (\nu: 6.3)$ (−9.4 σ)
D_{40}	1273	1267^{+100}_{-110} (+2.0 σ)	$D_M(0.38)$	1518.4	1516^{+36}_{-35} (−1.6 σ)			
D_{220}	5778	5789^{+350}_{-350} (+1.8 σ)	$H(0.51)$	90.01	$90.1^{+1.5}_{-1.5}$ (+1.8 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1139.39$; $\Delta\chi_{\text{eff}}^2 = -0.77$; $\bar{\chi}_{\text{eff}}^2 = 1147.51$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.15$; $R - 1 = 0.01371$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.75 (Δ -0.14) DR12BAO: 3.59 (Δ -0.01) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.50 (Δ -0.12) plik_rd12_HM_v22_EE: 738.54 (Δ -0.50)

12.45 base_nrun_plikHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.0235^{+0.0027}_{-0.0026} \quad (+5.8\sigma)$	D_{40}	$1255^{+100}_{-100} \quad (+1.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$625^{+46}_{-43} \quad (-2.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.115^{+0.010}_{-0.0092} \quad (-2.5\sigma)$	D_{220}	$5877^{+430}_{-440} \quad (+3.9\sigma)$	$H(0.38)$	$84.5^{+4.0}_{-3.7} \quad (+3.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0401^{+0.0017}_{-0.0018} \quad (-1.5\sigma)$	D_{810}	$2576^{+84}_{-87} \quad (+2.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1495^{+95}_{-90} \quad (-3.0\sigma)$
τ	$0.054^{+0.014}_{-0.012} \quad (+0.1\sigma)$	D_{1420}	$847^{+40}_{-41} \quad (+6.3\sigma)$	$H(0.51)$	$91.0^{+3.5}_{-3.2} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.059}_{-0.052} \quad (+0.0\sigma)$	D_{2000}	$244^{+18}_{-17} \quad (+7.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1939^{+110}_{-110} \quad (-3.1\sigma)$
n_{s}	$0.990^{+0.042}_{-0.041} \quad (+4.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.92^{+0.19}_{-0.18} \quad (-2.3\sigma)$	$H(0.61)$	$96.4^{+3.0}_{-2.9} \quad (+3.9\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$0.021^{+0.065}_{-0.068} \quad (+3.4\sigma)$	Y_{P}	$0.2458^{+0.0010}_{-0.0011} \quad (+5.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2260^{+120}_{-120} \quad (-3.1\sigma)$
y_{cal}	$1.0000^{+0.0048}_{-0.0048} \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2472^{+0.0010}_{-0.0011} \quad (+5.3\sigma)$	$H(2.33)$	$234.7^{+4.9}_{-4.6} \quad (-1.6\sigma)$
H_0	$69.7^{+5.5}_{-5.4} \quad (+3.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.40^{+0.45}_{-0.43} \quad (-5.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5713^{+140}_{-140} \quad (-3.8\sigma)$
Ω_{Λ}	$0.711^{+0.058}_{-0.063} \quad (+2.4\sigma)$	Age/Gyr	$13.69^{+0.31}_{-0.32} \quad (-3.8\sigma)$	$f\sigma_{\mathrm{s}}(0.15)$	$0.437^{+0.061}_{-0.056} \quad (-2.2\sigma)$
Ω_{m}	$0.289^{+0.063}_{-0.058} \quad (-2.4\sigma)$	z_{*}	$1088.3^{+3.7}_{-3.5} \quad (-4.8\sigma)$	$\sigma_{\mathrm{s}}(0.15)$	$0.742^{+0.027}_{-0.029} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1397^{+0.0082}_{-0.0077} \quad (-1.9\sigma)$	r_{*}	$144.7^{+1.8}_{-1.8} \quad (+0.7\sigma)$	$f\sigma_{\mathrm{s}}(0.38)$	$0.460^{+0.047}_{-0.046} \quad (-2.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0972^{+0.0042}_{-0.0040} \quad (+2.5\sigma)$	$100\theta_{*}$	$1.0401^{+0.0017}_{-0.0017} \quad (-1.8\sigma)$	$\sigma_{\mathrm{s}}(0.38)$	$0.661^{+0.019}_{-0.021} \quad (-0.5\sigma)$
σ_{s}	$0.801^{+0.035}_{-0.036} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.91^{+0.17}_{-0.17} \quad (+0.9\sigma)$	$f\sigma_{\mathrm{s}}(0.51)$	$0.461^{+0.039}_{-0.040} \quad (-2.1\sigma)$
S_{s}	$0.79^{+0.12}_{-0.11} \quad (-2.2\sigma)$	z_{drag}	$1062.2^{+5.4}_{-5.6} \quad (+5.4\sigma)$	$\sigma_{\mathrm{s}}(0.51)$	$0.619^{+0.016}_{-0.017} \quad (-0.2\sigma)$
$\sigma_{\mathrm{s}} \Omega_{\mathrm{m}}^{0.5}$	$0.431^{+0.066}_{-0.059} \quad (-2.2\sigma)$	r_{drag}	$147.0^{+2.2}_{-2.1} \quad (-0.2\sigma)$	$f\sigma_{\mathrm{s}}(0.61)$	$0.458^{+0.034}_{-0.035} \quad (-2.0\sigma)$
$\sigma_{\mathrm{s}} \Omega_{\mathrm{m}}^{0.25}$	$0.587^{+0.057}_{-0.053} \quad (-2.1\sigma)$	k_{D}	$0.1417^{+0.0034}_{-0.0037} \quad (+1.8\sigma)$	$\sigma_{\mathrm{s}}(0.61)$	$0.590^{+0.014}_{-0.015} \quad (-0.0\sigma)$
$\sigma_{\mathrm{s}}/h^{0.5}$	$0.960^{+0.079}_{-0.077} \quad (-2.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1594^{+0.0031}_{-0.0029} \quad (-5.6\sigma)$	$f\sigma_{\mathrm{s}}(2.33)$	$0.2985^{+0.0066}_{-0.0065} \quad (+0.5\sigma)$
$r_{\mathrm{drag}} h$	$102.5^{+8.3}_{-8.1} \quad (+2.5\sigma)$	z_{eq}	$3322^{+200}_{-180} \quad (-1.9\sigma)$	$\sigma_{\mathrm{s}}(2.33)$	$0.3089^{+0.0071}_{-0.0068} \quad (+1.1\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.40^{+0.16}_{-0.15} \quad (-1.3\sigma)$	k_{eq}	$0.01014^{+0.00060}_{-0.00056} \quad (-1.9\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 1.1) \quad (-0.3\sigma)$
z_{re}	$< 8.41 \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.831^{+0.041}_{-0.040} \quad (+2.3\sigma)$	χ_{plikEE}^2	$744.1 \quad (\nu: 5.8)$
$10^9 A_{\mathrm{s}}$	$2.10^{+0.12}_{-0.11} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.458^{+0.020}_{-0.020} \quad (+2.1\sigma)$	χ_{prior}^2	$0.98 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.885^{+0.073}_{-0.071} \quad (-0.1\sigma)$	$H(0.15)$	$74.7^{+4.9}_{-4.8} \quad (+3.2\sigma)$	χ_{CMB}^2	$1140.7 \quad (\nu: 7.0) \quad (-9.3\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1141.65; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.34; R - 1 = 0.00996$$

12.46 base_nrun_plikHM_EE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.0230^{+0.0018}_{-0.0018} \quad (+3.7\sigma)$	D_{810}	$2567^{+76}_{-79} \quad (+2.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1964^{+43}_{-42} \quad (-1.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1175^{+0.0029}_{-0.0030} \quad (-1.5\sigma)$	D_{1420}	$841^{+30}_{-30} \quad (+5.2\sigma)$	$H(0.61)$	$95.8^{+1.5}_{-1.4} \quad (+2.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0399^{+0.0016}_{-0.0016} \quad (-1.8\sigma)$	D_{2000}	$241^{+14}_{-13} \quad (+6.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2286^{+48}_{-48} \quad (-1.8\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.92^{+0.20}_{-0.18} \quad (-2.4\sigma)$	$H(2.33)$	$235.5^{+2.6}_{-2.6} \quad (-1.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.056}_{-0.051} \quad (-0.1\sigma)$	Y_{P}	$0.24565^{+0.00073}_{-0.00077} \quad (+3.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5742^{+78}_{-80} \quad (-2.0\sigma)$
n_{s}	$0.985^{+0.033}_{-0.034} \quad (+3.8\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24698^{+0.00073}_{-0.00077} \quad (+3.4\sigma)$	$f\sigma_8(0.15)$	$0.449^{+0.020}_{-0.020} \quad (-1.2\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$0.020^{+0.067}_{-0.073} \quad (+3.3\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.48^{+0.34}_{-0.30} \quad (-3.4\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.018}_{-0.017} \quad (-0.2\sigma)$
y_{cal}	$1.0001^{+0.0047}_{-0.0047} \quad (-0.2\sigma)$	Age/Gyr	$13.75^{+0.18}_{-0.19} \quad (-2.0\sigma)$	$f\sigma_8(0.38)$	$0.470^{+0.017}_{-0.017} \quad (-1.1\sigma)$
H_0	$68.5^{+1.9}_{-1.9} \quad (+1.7\sigma)$	z_*	$1088.9^{+2.3}_{-2.1} \quad (-3.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.015}_{-0.015} \quad (+0.1\sigma)$
Ω_{Λ}	$0.699^{+0.018}_{-0.019} \quad (+1.5\sigma)$	r_*	$144.6^{+1.5}_{-1.5} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.016}_{-0.016} \quad (-1.0\sigma)$
Ω_{m}	$0.301^{+0.019}_{-0.018} \quad (-1.5\sigma)$	$100\theta_*$	$1.0400^{+0.0017}_{-0.0016} \quad (-2.1\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.014}_{-0.014} \quad (+0.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0034}_{-0.0034} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.90^{+0.15}_{-0.15} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.014}_{-0.014} \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0966^{+0.0035}_{-0.0033} \quad (+1.3\sigma)$	z_{drag}	$1061.2^{+4.1}_{-4.1} \quad (+3.5\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.013}_{-0.013} \quad (+0.4\sigma)$
σ_8	$0.808^{+0.020}_{-0.020} \quad (-0.4\sigma)$	r_{drag}	$147.0^{+2.1}_{-2.1} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2990^{+0.0066}_{-0.0063} \quad (+0.7\sigma)$
S_8	$0.810^{+0.038}_{-0.038} \quad (-1.3\sigma)$	k_{D}	$0.1414^{+0.0034}_{-0.0035} \quad (+1.2\sigma)$	$\sigma_8(2.33)$	$0.3087^{+0.0068}_{-0.0065} \quad (+1.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.021}_{-0.021} \quad (-1.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.1599^{+0.0024}_{-0.0024} \quad (-4.0\sigma)$	χ_{small}^2	$396.6 \quad (\nu: 1.0) \quad (-0.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.599^{+0.021}_{-0.021} \quad (-1.1\sigma)$	z_{eq}	$3357^{+80}_{-81} \quad (-1.2\sigma)$	χ_{plikEE}^2	$743.5 \quad (\nu: 5.1)$
$\sigma_8/h^{0.5}$	$0.977^{+0.033}_{-0.033} \quad (-1.0\sigma)$	k_{eq}	$0.01025^{+0.00024}_{-0.00025} \quad (-1.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
$r_{\mathrm{drag}} h$	$100.7^{+2.3}_{-2.2} \quad (+1.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.013}_{-0.012} \quad (+1.3\sigma)$	χ_{MGS}^2	$1.88 \quad (\nu: 0.3)$
$\langle d^2 \rangle^{1/2}$	$2.430^{+0.096}_{-0.088} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4537^{+0.0072}_{-0.0068} \quad (+1.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.8)$
z_{re}	$< 8.44 \quad (-0.3\sigma)$	$H(0.15)$	$73.6^{+1.8}_{-1.7} \quad (+1.8\sigma)$	χ_{prior}^2	$0.9 \quad (\nu: 0.9) \quad (-1.7\sigma)$
$10^9 A_{\mathrm{s}}$	$2.10^{+0.12}_{-0.11} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$634^{+16}_{-16} \quad (-1.7\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.9)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.885^{+0.072}_{-0.072} \quad (-0.1\sigma)$	$H(0.38)$	$83.6^{+1.6}_{-1.6} \quad (+1.9\sigma)$	χ_{CMB}^2	$1140.0 \quad (\nu: 6.1) \quad (-9.4\sigma)$
D_{40}	$1256^{+100}_{-98} \quad (+1.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1515^{+35}_{-35} \quad (-1.7\sigma)$		
D_{220}	$5810^{+350}_{-330} \quad (+2.3\sigma)$	$H(0.51)$	$90.2^{+1.5}_{-1.5} \quad (+2.0\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1147.29$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.23$; $R - 1 = 0.01768$

12.47 base_nrun_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022136	$0.02215^{+0.00045}_{-0.00045} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	0.9912	$0.991^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	647.6	$647^{+16}_{-15} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12068	$0.1205^{+0.0041}_{-0.0041} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	98.42	$98.6^{+3.2}_{-3.1} \quad (+0.1\sigma)$	$H(0.38)$	82.52	$82.6^{+1.1}_{-1.1} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	1.04078	$1.04079^{+0.00094}_{-0.00092} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.445	$2.445^{+0.075}_{-0.075} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1542.3	$1541^{+31}_{-31} \quad (-0.1\sigma)$
τ	0.0532	$0.053^{+0.017}_{-0.016} \quad (-0.0\sigma)$	z_{re}	7.63	$7.6^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.51)$	89.32	$89.37^{+0.88}_{-0.84} \quad (+0.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0419	$3.041^{+0.035}_{-0.035} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.095	$2.094^{+0.074}_{-0.072} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	1996.4	$1995^{+36}_{-36} \quad (-0.1\sigma)$
n_{s}	0.9603	$0.961^{+0.012}_{-0.012} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8831	$1.883^{+0.029}_{-0.028} \quad (-0.3\sigma)$	$H(0.61)$	95.01	$95.05^{+0.71}_{-0.67} \quad (+0.0\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.0065	$-0.005^{+0.015}_{-0.015} \quad (-0.1\sigma)$	D_{40}	1219.7	$1222^{+41}_{-41} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2321.9	$2320^{+38}_{-38} \quad (-0.1\sigma)$
y_{cal}	1.0002	$1.0003^{+0.0050}_{-0.0050} \quad (-0.0\sigma)$	D_{220}	5704	$5707^{+82}_{-81} \quad (-0.1\sigma)$	$H(2.33)$	236.76	$236.7^{+2.5}_{-2.5} \quad (-0.1\sigma)$
A_{100}^{PS}	266	$259^{+50}_{-50} \quad (-0.2\sigma)$	D_{810}	2531.9	$2533^{+28}_{-29} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	5777.1	$5776^{+32}_{-32} \quad (-0.0\sigma)$
A_{143}^{tSZ}	4.49	$< 7.38 \quad (-0.6\sigma)$	D_{1420}	810.6	$812^{+11}_{-11} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	0.4629	$0.462^{+0.024}_{-0.024} \quad (-0.2\sigma)$
A^{kSZ}	3.1	—	D_{2000}	227.85	$228.4^{+4.0}_{-4.0} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	0.7481	$0.748^{+0.015}_{-0.015} \quad (-0.2\sigma)$
A_{100}^{dust}	1.004	$1.01^{+0.38}_{-0.38}$	$n_{\mathrm{s},0.002}$	0.9812	$0.977^{+0.046}_{-0.045} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4792	$0.479^{+0.019}_{-0.019} \quad (-0.2\sigma)$
A_{143}^{power}	13.0	$11.0^{+5.5}_{-4.7}$	Y_{P}	0.245299	$0.24530^{+0.00018}_{-0.00021} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	0.6622	$0.662^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{217}^{power}	11.2	$8.7^{+5.7}_{-4.7}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246625	$0.24663^{+0.00018}_{-0.00022} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	0.4767	$0.476^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{power}}$	7.41	$4.8^{+5.0}_{-4.8}$	$10^5 \mathrm{D}/\mathrm{H}$	2.630	$2.627^{+0.087}_{-0.083} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	0.6192	$0.619^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$\gamma_{143}^{\mathrm{power}}$	1.20	$1.32^{+0.98}_{-0.81}$	Age/Gyr	13.828	$13.825^{+0.071}_{-0.072} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	0.4710	$0.471^{+0.014}_{-0.015} \quad (-0.2\sigma)$
$\gamma_{217}^{\mathrm{power}}$	1.08	—	z_*	1090.28	$1090.24^{+0.81}_{-0.79} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	0.5890	$0.589^{+0.010}_{-0.010} \quad (-0.2\sigma)$
$\gamma_{143 \times 217}^{\mathrm{power}}$	1.03	$1.28^{+1.2}_{-0.99}$	r_*	144.43	$144.46^{+0.99}_{-0.96} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2966	$0.2967^{+0.0051}_{-0.0051} \quad (-0.2\sigma)$
c_{100}	0.99777	$0.9978^{+0.0021}_{-0.0022} \quad (-2.9\sigma)$	$100\theta_*$	1.04097	$1.04099^{+0.00092}_{-0.00091} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	0.3054	$0.3055^{+0.0054}_{-0.0053} \quad (-0.2\sigma)$
c_{217}	0.99938	$0.9995^{+0.0032}_{-0.0029} \quad (+1.9\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.875	$13.877^{+0.091}_{-0.089} \quad (+0.1\sigma)$	f_{2000}^{143}	25.1	$24^{+7}_{-6} \quad (-2.4\sigma)$
H_0	66.87	$67.0^{+1.8}_{-1.8} \quad (+0.1\sigma)$	z_{drag}	1059.44	$1059.47^{+0.96}_{-0.99} \quad (-0.1\sigma)$	f_{2000}^{217}	18.11	$17.5^{+4.5}_{-4.3} \quad (-43.8\sigma)$
Ω_{Λ}	0.6792	$0.680^{+0.025}_{-0.026} \quad (+0.1\sigma)$	r_{drag}	147.17	$147.2^{+1.0}_{-0.97} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	12.82	$11.9^{+5.0}_{-4.7} \quad (-9.9\sigma)$
Ω_{m}	0.3208	$0.320^{+0.026}_{-0.025} \quad (-0.1\sigma)$	k_{D}	0.14060	$0.1406^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	χ_{simall}^2	395.93	$397.0 \quad (\nu: 1.5) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14346	$0.1433^{+0.0040}_{-0.0040} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.16104	$0.16103^{+0.00057}_{-0.00055} \quad (+0.1\sigma)$	χ_{lowl}^2	22.24	$23.0 \quad (\nu: 2.0) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09594	$0.09595^{+0.00096}_{-0.00095} \quad (-0.1\sigma)$	z_{eq}	3413	$3410^{+95}_{-95} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	6705.0	$6717.4 \quad (\nu: 14.6)$
σ_8	0.8106	$0.810^{+0.018}_{-0.018} \quad (-0.2\sigma)$	k_{eq}	0.010417	$0.01041^{+0.00029}_{-0.00029} \quad (-0.1\sigma)$	χ_{prior}^2	1.4	$5.3 \quad (\nu: 4.2) \quad (-0.5\sigma)$
S_8	0.8382	$0.837^{+0.048}_{-0.047} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	0.8106	$0.811^{+0.018}_{-0.017} \quad (+0.1\sigma)$	χ_{CMB}^2	7123.1	$7137.4 \quad (\nu: 14.7) \quad (+1058.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4591	$0.458^{+0.027}_{-0.026} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4482	$0.4485^{+0.0092}_{-0.0089} \quad (+0.1\sigma)$			
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6101	$0.610^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$H(0.15)$	72.25	$72.3^{+1.5}_{-1.5} \quad (+0.1\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 7124.55$; $\Delta\chi_{\mathrm{eff}}^2 = -0.57$; $\bar{\chi}_{\mathrm{eff}}^2 = 7142.72$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.51$; $R - 1 = 0.00730$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.93 (Δ 0.14) commander_dx12_v3.2.29: 22.24 (Δ -1.46) CamSpec like_10.7cleaned: 6704.97 (Δ 0.53)

13 nrun+nnu+w+mnu

13.1 base_nrun_nnu_w_mnu_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022447	$0.02248^{+0.00037}_{-0.00037}$	$\Omega_\nu h^2$	0.00002	< 0.00171	$D_M(0.15)$	626.7	626^{+18}_{-17}
$\Omega_c h^2$	0.1200	$0.1205^{+0.0059}_{-0.0058}$	$\Omega_m h^3$	0.0990	$0.1000^{+0.0068}_{-0.0066}$	$H(0.38)$	83.78	$83.7^{+2.4}_{-2.4}$
$100\theta_{MC}$	1.04098	$1.04088^{+0.00089}_{-0.00085}$	σ_8	0.8346	$0.829^{+0.024}_{-0.024}$	$D_M(0.38)$	1502.7	1503^{+42}_{-41}
τ	0.0537	$0.056^{+0.016}_{-0.015}$	S_8	0.8276	$0.824^{+0.023}_{-0.023}$	$H(0.51)$	90.24	$90.2^{+2.6}_{-2.6}$
Σm_ν [eV]	0.002	< 0.160	$\sigma_8 \Omega_m^{0.5}$	0.4533	$0.451^{+0.012}_{-0.012}$	$D_M(0.51)$	1951	1952^{+55}_{-53}
w_0	-1.041	$-1.053^{+0.068}_{-0.072}$	$\sigma_8 \Omega_m^{0.25}$	0.6151	$0.612^{+0.016}_{-0.016}$	$H(0.61)$	95.70	$95.7^{+2.8}_{-2.7}$
N_{eff}	3.071	$3.11^{+0.37}_{-0.36}$	$\sigma_8/h^{0.5}$	1.0011	$0.993^{+0.022}_{-0.025}$	$D_M(0.61)$	2274	2274^{+63}_{-62}
$\ln(10^{10} A_s)$	3.0431	$3.049^{+0.034}_{-0.033}$	$r_{\text{drag}} h$	102.09	$102.0^{+2.2}_{-2.2}$	$H(2.33)$	235.8	$236.5^{+5.6}_{-5.5}$
n_s	0.9667	$0.967^{+0.017}_{-0.017}$	$\langle d^2 \rangle^{1/2}$	2.4448	$2.440^{+0.047}_{-0.046}$	$D_M(2.33)$	5732	5728^{+150}_{-150}
$dn_s/d \ln k$	-0.0028	$-0.004^{+0.015}_{-0.015}$	z_{re}	7.59	$7.8^{+1.5}_{-1.5}$	$f\sigma_8(0.15)$	0.4616	$0.461^{+0.013}_{-0.013}$
y_{cal}	1.00025	$1.0006^{+0.0048}_{-0.0048}$	$10^9 A_s$	2.097	$2.109^{+0.072}_{-0.068}$	$\sigma_8(0.15)$	0.7726	$0.767^{+0.023}_{-0.023}$
A_{217}^{CIB}	49.7	47^{+10}_{-10}	$10^9 A_s e^{-2\tau}$	1.8837	$1.887^{+0.032}_{-0.033}$	$f\sigma_8(0.38)$	0.4858	$0.485^{+0.016}_{-0.015}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.13	—	D_{40}	1220.1	1219^{+36}_{-35}	$\sigma_8(0.38)$	0.6857	$0.681^{+0.021}_{-0.021}$
A_{143}^{tSZ}	7.40	$5.3^{+3.8}_{-4.0}$	D_{220}	5730	5737^{+74}_{-74}	$f\sigma_8(0.51)$	0.4863	$0.486^{+0.016}_{-0.016}$
A_{100}^{PS}	255	262^{+60}_{-50}	D_{810}	2538.5	2541^{+26}_{-26}	$\sigma_8(0.51)$	0.6419	$0.637^{+0.019}_{-0.020}$
A_{143}^{PS}	44.5	47^{+20}_{-20}	D_{1420}	816.3	$816.4^{+9.7}_{-9.6}$	$f\sigma_8(0.61)$	0.4823	$0.482^{+0.016}_{-0.015}$
$A_{143 \times 217}^{\text{PS}}$	40.3	42^{+20}_{-20}	D_{2000}	230.51	$230.3^{+3.7}_{-3.6}$	$\sigma_8(0.61)$	0.6109	$0.606^{+0.018}_{-0.019}$
A_{217}^{PS}	116.2	114^{+20}_{-20}	$n_{s,0.002}$	0.9757	$0.979^{+0.040}_{-0.041}$	$f\sigma_8(2.33)$	0.3074	$0.3058^{+0.0089}_{-0.0089}$
A^{kSZ}	0.0	—	Y_P	0.2458	$0.2462^{+0.0049}_{-0.0050}$	$\sigma_8(2.33)$	0.3167	$0.3141^{+0.0094}_{-0.010}$
$A_{100}^{\text{dust}TT}$	8.93	$9.0^{+3.6}_{-3.6}$	Y_P^{BBN}	0.2471	$0.2475^{+0.0050}_{-0.0050}$	f_{2000}^{143}	29.9	31^{+6}_{-6}
$A_{143}^{\text{dust}TT}$	11.05	$11.0^{+3.5}_{-3.5}$	$10^5 D/H$	2.580	$2.586^{+0.099}_{-0.097}$	$f_{2000}^{143 \times 217}$	32.65	33^{+4}_{-4}
$A_{143 \times 217}^{\text{dust}TT}$	19.5	$18.7^{+6.4}_{-6.4}$	Age/Gyr	13.708	$13.70^{+0.35}_{-0.34}$	f_{2000}^{217}	107.26	$107.7^{+4.0}_{-4.0}$
$A_{217}^{\text{dust}TT}$	94.2	94^{+10}_{-10}	z_*	1089.84	$1089.88^{+0.71}_{-0.70}$	χ_{lensing}^2	9.11	$9.47 (\nu: 0.3)$
$A_{100}^{\text{dust}TE}$	0.114	$0.114^{+0.075}_{-0.075}$	r_*	144.25	$143.9^{+3.5}_{-3.4}$	χ_{small}^2	395.88	$397.1 (\nu: 1.7)$
$A_{100 \times 143}^{\text{dust}TE}$	0.135	$0.135^{+0.057}_{-0.058}$	$100\theta_*$	1.04111	$1.0410^{+0.0011}_{-0.0010}$	χ_{lowl}^2	22.38	$22.5 (\nu: 1.2)$
$A_{100 \times 217}^{\text{dust}TE}$	0.479	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.856	$13.83^{+0.32}_{-0.31}$	χ_{plik}^2	2344.3	$2361.5 (\nu: 21.0)$
$A_{143}^{\text{dust}TE}$	0.225	$0.22^{+0.11}_{-0.11}$	z_{drag}	1060.12	$1060.3^{+1.4}_{-1.4}$	χ_{H073p45}^2	5.7	$5.8 (\nu: 4.5)$
$A_{143 \times 217}^{\text{dust}TE}$	0.664	$0.66^{+0.16}_{-0.16}$	r_{drag}	146.88	$146.6^{+3.6}_{-3.5}$	χ_{JLA}^2	1035.46	$1036.3 (\nu: 1.6)$
$A_{217}^{\text{dust}TE}$	2.08	$2.08^{+0.53}_{-0.52}$	k_D	0.14104	$0.1413^{+0.0026}_{-0.0026}$	$\chi_{6\text{DF}}^2$	0.075	$0.09 (\nu: 0.0)$
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_D$	0.16076	$0.16081^{+0.00088}_{-0.00086}$	χ_{MGS}^2	2.51	$2.42 (\nu: 0.2)$
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3393	3390^{+56}_{-56}	χ_{DR12BAO}^2	3.95	$4.56 (\nu: 0.4)$
H_0	69.50	$69.6^{+2.1}_{-2.1}$	k_{eq}	0.010373	$0.01039^{+0.00022}_{-0.00021}$	χ_{prior}^2	1.9	$11.6 (\nu: 10.3)$
Ω_Λ	0.7050	$0.703^{+0.013}_{-0.014}$	$100\theta_{\text{eq}}$	0.8151	$0.816^{+0.011}_{-0.010}$	χ_{CMB}^2	2771.7	$2790.6 (\nu: 22.6)$
Ω_m	0.2950	$0.297^{+0.014}_{-0.013}$	$100\theta_{s,\text{eq}}$	0.4503	$0.4506^{+0.0054}_{-0.0053}$	χ_{BAO}^2	6.54	$7.1 (\nu: 0.7)$
$\Omega_m h^2$	0.1425	$0.1437^{+0.0063}_{-0.0062}$	$H(0.15)$	74.26	$74.3^{+2.1}_{-2.1}$			

Best-fit $\chi_{\text{eff}}^2 = 3821.27$; $\Delta\chi_{\text{eff}}^2 = -5.56$; $\bar{\chi}_{\text{eff}}^2 = 3851.33$; $\Delta\bar{\chi}_{\text{eff}}^2 = -1.76$; $R - 1 = 0.00441$
 χ_{eff}^2 : BAO - 6DF: 0.07 (Δ 0.07) MGS: 2.51 (Δ 0.97) DR12BAO: 3.95 (Δ 0.26) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 9.11 (Δ 0.37) small_100x143_offlike5_EE_Aplanck.L
395.88 (Δ -1.04) commander_dx12_v3_2.29: 22.38 (Δ -0.29) plik_rd12_HM_v22b_TTTEEE: 2344.32 (Δ -1.86) Hubble - H073p45: 5.65 (Δ -4.99) SN - JLA Pantheon18: 1035.46
(Δ 0.61)

13.2 base_nrun_nnu_w_mnu_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02249^{+0.00037}_{-0.00037}$	$\Omega_\nu h^2$	< 0.00172	$D_M(0.15)$	626^{+18}_{-17}
$\Omega_c h^2$	$0.1205^{+0.0059}_{-0.0058}$	$\Omega_m h^3$	$0.1000^{+0.0068}_{-0.0066}$	$H(0.38)$	$83.8^{+2.4}_{-2.4}$
$100\theta_{MC}$	$1.04088^{+0.00089}_{-0.00085}$	σ_8	$0.829^{+0.024}_{-0.024}$	$D_M(0.38)$	1503^{+42}_{-41}
τ	$0.056^{+0.013}_{-0.013}$	S_8	$0.824^{+0.023}_{-0.023}$	$H(0.51)$	$90.2^{+2.6}_{-2.6}$
Σm_ν [eV]	< 0.161	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.012}_{-0.012}$	$D_M(0.51)$	1951^{+55}_{-53}
w_0	$-1.052^{+0.068}_{-0.072}$	$\sigma_8 \Omega_m^{0.25}$	$0.612^{+0.016}_{-0.016}$	$H(0.61)$	$95.7^{+2.8}_{-2.7}$
N_{eff}	$3.11^{+0.37}_{-0.37}$	$\sigma_8/h^{0.5}$	$0.994^{+0.022}_{-0.025}$	$D_M(0.61)$	2274^{+63}_{-61}
$\ln(10^{10} A_s)$	$3.050^{+0.031}_{-0.030}$	$r_{\text{drag}} h$	$102.0^{+2.2}_{-2.2}$	$H(2.33)$	$236.5^{+5.6}_{-5.6}$
n_s	$0.968^{+0.016}_{-0.017}$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.047}_{-0.045}$	$D_M(2.33)$	5727^{+150}_{-150}
$dn_s/d \ln k$	$-0.004^{+0.015}_{-0.015}$	z_{re}	< 9.06	$f\sigma_8(0.15)$	$0.461^{+0.013}_{-0.013}$
y_{cal}	$1.0006^{+0.0048}_{-0.0048}$	$10^9 A_s$	$2.112^{+0.066}_{-0.062}$	$\sigma_8(0.15)$	$0.767^{+0.023}_{-0.023}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_s e^{-2\tau}$	$1.887^{+0.032}_{-0.033}$	$f\sigma_8(0.38)$	$0.485^{+0.016}_{-0.015}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	1219^{+36}_{-35}	$\sigma_8(0.38)$	$0.681^{+0.021}_{-0.021}$
A_{143}^{tSZ}	$5.3^{+3.7}_{-4.0}$	D_{220}	5736^{+74}_{-74}	$f\sigma_8(0.51)$	$0.486^{+0.016}_{-0.016}$
A_{100}^{PS}	262^{+60}_{-50}	D_{810}	2541^{+26}_{-26}	$\sigma_8(0.51)$	$0.637^{+0.019}_{-0.020}$
A_{143}^{PS}	47^{+20}_{-20}	D_{1420}	$816.4^{+9.7}_{-9.6}$	$f\sigma_8(0.61)$	$0.482^{+0.016}_{-0.015}$
$A_{143 \times 217}^{\text{PS}}$	42^{+20}_{-20}	D_{2000}	$230.3^{+3.7}_{-3.6}$	$\sigma_8(0.61)$	$0.606^{+0.018}_{-0.019}$
A_{217}^{PS}	114^{+20}_{-20}	$n_{s,0.002}$	$0.979^{+0.040}_{-0.041}$	$f\sigma_8(2.33)$	$0.3059^{+0.0089}_{-0.0089}$
A^{kSZ}	—	Y_P	$0.2463^{+0.0049}_{-0.0050}$	$\sigma_8(2.33)$	$0.3143^{+0.0093}_{-0.010}$
$A_{100}^{\text{dust}TT}$	$9.0^{+3.6}_{-3.6}$	Y_P^{BBN}	$0.2476^{+0.0049}_{-0.0051}$	f_{2000}^{143}	31^{+6}_{-6}
$A_{143}^{\text{dust}TT}$	$11.0^{+3.5}_{-3.5}$	10^5D/H	$2.586^{+0.099}_{-0.097}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
$A_{143 \times 217}^{\text{dust}TT}$	$18.7^{+6.4}_{-6.4}$	Age/Gyr	$13.69^{+0.35}_{-0.34}$	f_{2000}^{217}	$107.7^{+4.0}_{-4.0}$
$A_{217}^{\text{dust}TT}$	94^{+10}_{-10}	z_*	$1089.88^{+0.71}_{-0.70}$	χ^2_{lensing}	$9.46 (\nu: 0.3)$
$A_{100}^{\text{dust}TE}$	$0.114^{+0.075}_{-0.074}$	r_*	$143.9^{+3.5}_{-3.4}$	χ^2_{simall}	$397.1 (\nu: 1.7)$
$A_{100 \times 143}^{\text{dust}TE}$	$0.135^{+0.057}_{-0.058}$	$100\theta_*$	$1.0410^{+0.0011}_{-0.0010}$	χ^2_{lowl}	$22.5 (\nu: 1.2)$
$A_{100 \times 217}^{\text{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.83^{+0.32}_{-0.31}$	χ^2_{plik}	$2361.5 (\nu: 21.0)$
$A_{143}^{\text{dust}TE}$	$0.22^{+0.11}_{-0.11}$	z_{drag}	$1060.3^{+1.4}_{-1.4}$	χ^2_{H073p45}	$5.8 (\nu: 4.5)$
$A_{143 \times 217}^{\text{dust}TE}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$146.5^{+3.6}_{-3.5}$	χ^2_{JLA}	$1036.3 (\nu: 1.5)$
$A_{217}^{\text{dust}TE}$	$2.08^{+0.53}_{-0.52}$	k_D	$0.1413^{+0.0026}_{-0.0026}$	$\chi^2_{6\text{DF}}$	$0.09 (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_D$	$0.16081^{+0.00087}_{-0.00086}$	χ^2_{MGS}	$2.42 (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3389^{+54}_{-56}	χ^2_{DR12BAO}	$4.54 (\nu: 0.4)$
H_0	$69.6^{+2.1}_{-2.1}$	k_{eq}	$0.01039^{+0.00022}_{-0.00021}$	χ^2_{prior}	$11.6 (\nu: 10.3)$
Ω_Λ	$0.703^{+0.013}_{-0.014}$	$100\theta_{\text{eq}}$	$0.816^{+0.011}_{-0.010}$	χ^2_{CMB}	$2790.4 (\nu: 22.4)$
Ω_m	$0.297^{+0.014}_{-0.013}$	$100\theta_{s,\text{eq}}$	$0.4507^{+0.0054}_{-0.0052}$	χ^2_{BAO}	$7.1 (\nu: 0.7)$
$\Omega_m h^2$	$0.1437^{+0.0063}_{-0.0062}$	$H(0.15)$	$74.3^{+2.1}_{-2.1}$		

$$\bar{\chi}^2_{\text{eff}} = 3851.17; \Delta \bar{\chi}^2_{\text{eff}} = -1.84; R - 1 = 0.00442$$

14 nrun+nrnunrun

14.1 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022332	$0.02234^{+0.00033}_{-0.00032}$	$\Omega_m h^2$	0.14367	$0.1436^{+0.0027}_{-0.0026}$	$100\theta_{\text{eq}}$	0.8103	$0.811^{+0.012}_{-0.012}$
$\Omega_c h^2$	0.12070	$0.1206^{+0.0029}_{-0.0028}$	$\Omega_m h^3$	0.09633	$0.09636^{+0.00062}_{-0.00059}$	$100\theta_{\text{s,eq}}$	0.4479	$0.4480^{+0.0060}_{-0.0061}$
$100\theta_{\text{MC}}$	1.04082	$1.04086^{+0.00062}_{-0.00062}$	σ_8	0.8178	$0.817^{+0.018}_{-0.017}$	$H(0.15)$	72.42	$72.5^{+1.1}_{-1.1}$
τ	0.0570	$0.058^{+0.018}_{-0.016}$	S_8	0.8441	$0.843^{+0.036}_{-0.034}$	$D_{\text{M}}(0.15)$	646.0	646^{+11}_{-11}
$\ln(10^{10} A_{\text{s}})$	3.0513	$3.053^{+0.036}_{-0.033}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4623	$0.462^{+0.020}_{-0.019}$	$H(0.38)$	82.68	$82.71^{+0.79}_{-0.78}$
n_{s}	0.9624	$0.961^{+0.010}_{-0.011}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6149	$0.614^{+0.019}_{-0.018}$	$D_{\text{M}}(0.38)$	1538.7	1538^{+22}_{-22}
$\text{d}n_{\text{s}}/\text{d} \ln k$	0.0053	$0.001^{+0.020}_{-0.019}$	$\sigma_8/h^{0.5}$	0.9987	$0.997^{+0.027}_{-0.026}$	$H(0.51)$	89.48	$89.51^{+0.63}_{-0.61}$
$\text{d}^2 n_{\text{s}}/\text{d} \ln k^2$	0.0139	$0.012^{+0.024}_{-0.025}$	$r_{\text{drag}} h$	98.53	$98.6^{+2.2}_{-2.2}$	$D_{\text{M}}(0.51)$	1992.0	1991^{+26}_{-25}
y_{cal}	1.00047	$1.0006^{+0.0048}_{-0.0047}$	$\langle d^2 \rangle^{1/2}$	2.448	$2.446^{+0.057}_{-0.056}$	$H(0.61)$	95.169	$95.20^{+0.50}_{-0.48}$
A_{217}^{CIB}	45.2	47^{+10}_{-10}	z_{re}	7.98	$8.0^{+1.7}_{-1.7}$	$D_{\text{M}}(0.61)$	2316.9	2316^{+28}_{-27}
$\xi^{\text{tSZ}} \times \text{CIB}$	0.70	—	$10^9 A_{\text{s}}$	2.114	$2.118^{+0.077}_{-0.068}$	$H(2.33)$	236.97	$237.0^{+1.7}_{-1.7}$
A_{143}^{tSZ}	7.08	$5.4^{+3.7}_{-3.9}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8864	$1.887^{+0.023}_{-0.023}$	$D_{\text{M}}(2.33)$	5768.0	5767^{+22}_{-23}
A_{100}^{PS}	247	259^{+60}_{-60}	D_{40}	1221.4	1218^{+37}_{-35}	$f\sigma_8(0.15)$	0.4663	$0.465^{+0.018}_{-0.018}$
A_{143}^{PS}	49.0	45^{+20}_{-20}	D_{220}	5739	5740^{+76}_{-77}	$\sigma_8(0.15)$	0.7549	$0.754^{+0.016}_{-0.015}$
$A_{143 \times 217}^{\text{PS}}$	52.6	41^{+20}_{-20}	D_{810}	2540.2	2539^{+26}_{-26}	$f\sigma_8(0.38)$	0.4829	$0.482^{+0.015}_{-0.015}$
A_{217}^{PS}	121.3	114^{+20}_{-20}	D_{1420}	818.9	$817.0^{+9.7}_{-9.6}$	$\sigma_8(0.38)$	0.6683	$0.668^{+0.014}_{-0.012}$
A^{kSZ}	0.00	< 8.12	D_{2000}	232.19	$231.2^{+4.0}_{-4.0}$	$f\sigma_8(0.51)$	0.4806	$0.480^{+0.013}_{-0.013}$
A_{100}^{dustTT}	8.80	$8.9^{+3.6}_{-3.6}$	$n_{\text{s},0.002}$	1.017	$1.019^{+0.087}_{-0.088}$	$\sigma_8(0.51)$	0.6250	$0.624^{+0.013}_{-0.011}$
A_{143}^{dustTT}	11.05	$10.9^{+3.5}_{-3.4}$	Y_{P}	0.245380	$0.24538^{+0.00012}_{-0.00013}$	$f\sigma_8(0.61)$	0.4749	$0.474^{+0.012}_{-0.012}$
$A_{143 \times 217}^{\text{dustTT}}$	20.1	$18.5^{+6.5}_{-6.5}$	$Y_{\text{P}}^{\text{BBN}}$	0.246707	$0.24671^{+0.00012}_{-0.00013}$	$\sigma_8(0.61)$	0.5945	$0.594^{+0.012}_{-0.011}$
A_{217}^{dustTT}	95.6	94^{+10}_{-10}	$10^5 \text{D}/\text{H}$	2.593	$2.591^{+0.060}_{-0.059}$	$f\sigma_8(2.33)$	0.2994	$0.2992^{+0.0059}_{-0.0053}$
A_{100}^{dustTE}	0.115	$0.115^{+0.073}_{-0.074}$	Age/Gyr	13.807	$13.804^{+0.050}_{-0.051}$	$\sigma_8(2.33)$	0.3084	$0.3081^{+0.0061}_{-0.0055}$
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.058}$	z_*	1090.03	$1090.01^{+0.58}_{-0.58}$	f_{2000}^{143}	27.5	29^{+7}_{-7}
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	r_*	144.28	$144.29^{+0.61}_{-0.64}$	$f_{2000}^{143 \times 217}$	30.98	32^{+5}_{-5}
A_{143}^{dustTE}	0.225	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	1.04101	$1.04104^{+0.00060}_{-0.00061}$	f_{2000}^{217}	105.57	$106.7^{+4.6}_{-4.4}$
$A_{143 \times 217}^{\text{dustTE}}$	0.668	$0.67^{+0.15}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.860	$13.860^{+0.057}_{-0.059}$	χ_{simall}^2	396.42	$397.5 (\nu: 2.1)$
A_{217}^{dustTE}	2.09	$2.10^{+0.53}_{-0.53}$	z_{drag}	1059.89	$1059.92^{+0.66}_{-0.64}$	χ_{lowl}^2	21.69	$22.4 (\nu: 1.1)$
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	146.95	$146.95^{+0.60}_{-0.62}$	χ_{plik}^2	2344.6	$2360.7 (\nu: 17.5)$
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	0.14099	$0.14099^{+0.00067}_{-0.00066}$	χ_{prior}^2	1.5	$11.5 (\nu: 10.4)$
H_0	67.05	$67.1^{+1.3}_{-1.3}$	$100\theta_{\text{D}}$	0.160775	$0.16077^{+0.00038}_{-0.00038}$	χ_{CMB}^2	2762.7	$2780.6 (\nu: 18.7)$
Ω_{Λ}	0.6804	$0.681^{+0.017}_{-0.018}$	z_{eq}	3418	3417^{+65}_{-62}			
Ω_{m}	0.3196	$0.319^{+0.018}_{-0.017}$	k_{eq}	0.010432	$0.01043^{+0.00020}_{-0.00019}$			

Best-fit $\chi_{\text{eff}}^2 = 2764.20$; $\Delta\chi_{\text{eff}}^2 = -1.57$; $\bar{\chi}_{\text{eff}}^2 = 2792.05$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.29$; $R - 1 = 0.02103$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.42 (Δ 0.37) commander_dx12_v3.2.29: 21.69 (Δ -1.57) plik_rd12_HM_v22b_TTTEE: 2344.61 (Δ -0.04)

14.2 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022418	$0.02243^{+0.00028}_{-0.00029}$	$\Omega_m h^3$	0.09639	$0.09638^{+0.00060}_{-0.00060}$	$H(0.15)$	72.87	$72.90^{+0.78}_{-0.79}$
$\Omega_c h^2$	0.11958	$0.1195^{+0.0020}_{-0.0020}$	σ_8	0.8146	$0.814^{+0.017}_{-0.015}$	$D_M(0.15)$	641.5	$641.2^{+7.9}_{-7.7}$
$100\theta_{MC}$	1.04101	$1.04100^{+0.00055}_{-0.00056}$	S_8	0.8313	$0.830^{+0.028}_{-0.027}$	$H(0.38)$	83.00	$83.03^{+0.58}_{-0.58}$
τ	0.0586	$0.059^{+0.019}_{-0.016}$	$\sigma_8 \Omega_m^{0.5}$	0.4553	$0.454^{+0.015}_{-0.015}$	$D_M(0.38)$	1529.8	1529^{+16}_{-15}
$\ln(10^{10} A_s)$	3.0524	$3.053^{+0.036}_{-0.034}$	$\sigma_8 \Omega_m^{0.25}$	0.6090	$0.608^{+0.016}_{-0.015}$	$H(0.51)$	89.735	$89.75^{+0.47}_{-0.47}$
n_s	0.9652	$0.9644^{+0.0085}_{-0.0087}$	$\sigma_8/h^{0.5}$	0.9910	$0.990^{+0.024}_{-0.022}$	$D_M(0.51)$	1981.5	1981^{+18}_{-18}
$dn_s/d \ln k$	0.0033	$0.000^{+0.020}_{-0.019}$	$r_{drag} h$	99.43	$99.5^{+1.6}_{-1.6}$	$H(0.61)$	95.366	$95.38^{+0.39}_{-0.38}$
$d^2 n_s/d \ln k^2$	0.0112	$0.009^{+0.025}_{-0.026}$	$\langle d^2 \rangle^{1/2}$	2.433	$2.432^{+0.051}_{-0.049}$	$D_M(0.61)$	2305.7	2305^{+20}_{-19}
y_{cal}	1.00062	$1.0007^{+0.0049}_{-0.0048}$	z_{re}	8.09	$8.1^{+1.8}_{-1.6}$	$H(2.33)$	236.34	$236.3^{+1.2}_{-1.2}$
A_{217}^{CIB}	45.9	47^{+10}_{-10}	$10^9 A_s$	2.117	$2.119^{+0.076}_{-0.072}$	$D_M(2.33)$	5759.5	5759^{+19}_{-18}
$\xi^{tSZ \times CIB}$	0.58	—	$10^9 A_s e^{-2\tau}$	1.8826	$1.882^{+0.022}_{-0.021}$	$f\sigma_8(0.15)$	0.4599	$0.459^{+0.014}_{-0.014}$
A_{143}^{tSZ}	7.19	$5.5^{+3.8}_{-3.8}$	D_{40}	1216.6	1215^{+37}_{-34}	$\sigma_8(0.15)$	0.7527	$0.752^{+0.016}_{-0.014}$
A_{100}^{PS}	248	259^{+50}_{-60}	D_{220}	5744	5744^{+75}_{-77}	$f\sigma_8(0.38)$	0.4781	$0.477^{+0.013}_{-0.012}$
A_{143}^{PS}	47.3	45^{+20}_{-20}	D_{810}	2540.6	2540^{+27}_{-26}	$\sigma_8(0.38)$	0.6671	$0.666^{+0.013}_{-0.013}$
$A_{143 \times 217}^{PS}$	49.7	41^{+20}_{-20}	D_{1420}	819.3	$817.8^{+9.9}_{-9.6}$	$f\sigma_8(0.51)$	0.4766	$0.476^{+0.012}_{-0.011}$
A_{217}^{PS}	120.5	114^{+20}_{-20}	D_{2000}	232.19	$231.4^{+4.1}_{-4.0}$	$\sigma_8(0.51)$	0.6242	$0.624^{+0.013}_{-0.011}$
A^{kSZ}	0.01	< 8.09	$n_{s,0.002}$	1.013	$1.012^{+0.087}_{-0.090}$	$f\sigma_8(0.61)$	0.4715	$0.471^{+0.011}_{-0.010}$
A_{100}^{dustTT}	8.83	$8.9^{+3.5}_{-3.5}$	Y_P	0.245414	$0.24542^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	0.5939	$0.593^{+0.012}_{-0.011}$
A_{143}^{dustTT}	11.06	$10.9^{+3.5}_{-3.4}$	Y_P^{BBN}	0.246741	$0.24674^{+0.00010}_{-0.00012}$	$f\sigma_8(2.33)$	0.2994	$0.2992^{+0.0060}_{-0.0053}$
$A_{143 \times 217}^{dustTT}$	19.9	$18.5^{+6.5}_{-6.6}$	$10^5 D/H$	2.577	$2.575^{+0.054}_{-0.051}$	$\sigma_8(2.33)$	0.3087	$0.3084^{+0.0060}_{-0.0057}$
A_{217}^{dustTT}	95.4	93^{+10}_{-10}	Age/Gyr	13.7882	$13.787^{+0.042}_{-0.042}$	f_{2000}^{143}	27.7	29^{+7}_{-7}
A_{100}^{dustTE}	0.114	$0.114^{+0.072}_{-0.075}$	z_*	1089.821	$1089.80^{+0.47}_{-0.45}$	$f_{2000}^{143 \times 217}$	31.2	32^{+5}_{-5}
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.059}_{-0.057}$	r_*	144.503	$144.52^{+0.46}_{-0.48}$	f_{2000}^{217}	105.88	$106.7^{+4.7}_{-4.5}$
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04119	$1.04118^{+0.00055}_{-0.00055}$	χ_{simall}^2	396.62	$397.7 (\nu: 2.7)$
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8787	$13.880^{+0.046}_{-0.045}$	χ_{lowl}^2	21.44	$22.2 (\nu: 1.2)$
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.15}_{-0.16}$	z_{drag}	1060.01	$1060.03^{+0.62}_{-0.60}$	χ_{plik}^2	2345.1	$2360.9 (\nu: 18.0)$
A_{217}^{dustTE}	2.08	$2.08^{+0.51}_{-0.55}$	r_{drag}	147.150	$147.16^{+0.49}_{-0.50}$	χ_{6DF}^2	0.047	$0.068 (\nu: 0.0)$
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$	k_D	0.14084	$0.14084^{+0.00062}_{-0.00059}$	χ_{MGS}^2	1.10	$1.19 (\nu: 0.1)$
c_{217}	0.99817	$0.9982^{+0.0013}_{-0.0012}$	$100\theta_D$	0.160720	$0.16071^{+0.00036}_{-0.00035}$	$\chi_{DR12BAO}^2$	4.82	$5.1 (\nu: 1.3)$
H_0	67.57	$67.61^{+0.91}_{-0.92}$	z_{eq}	3393.3	3391^{+46}_{-45}	χ_{prior}^2	1.6	$11.5 (\nu: 9.9)$
Ω_Λ	0.6876	$0.688^{+0.012}_{-0.013}$	k_{eq}	0.010357	$0.01035^{+0.00014}_{-0.00014}$	χ_{BAO}^2	5.97	$6.4 (\nu: 0.9)$
Ω_m	0.3124	$0.312^{+0.013}_{-0.012}$	$100\theta_{eq}$	0.8151	$0.8155^{+0.0086}_{-0.0085}$	χ_{CMB}^2	2763.2	$2780.9 (\nu: 18.6)$
$\Omega_m h^2$	0.14264	$0.1426^{+0.0019}_{-0.0019}$	$100\theta_{s,eq}$	0.45028	$0.4505^{+0.0044}_{-0.0044}$			

Best-fit $\chi_{\text{eff}}^2 = 2770.78$; $\Delta\chi_{\text{eff}}^2 = -1.14$; $\bar{\chi}_{\text{eff}}^2 = 2798.78$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.87$; $R - 1 = 0.02726$
 χ_{eff}^2 : BAO - 6DF: 0.05 (Δ 0.02) MGS: 1.10 (Δ -0.12) DR12BAO: 4.83 (Δ 0.41) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.62 (Δ 0.42) commander_dx12_v3_2_29: 21.44 (Δ -1.43) plik_rd12_HM_v22b_TTTEE: 2345.10 (Δ -0.40)

14.3 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022365	$0.02237^{+0.00031}_{-0.00031}$	$\Omega_m h^2$	0.14319	$0.1432^{+0.0023}_{-0.0023}$	$100\theta_{\text{eq}}$	0.8125	$0.813^{+0.010}_{-0.010}$
$\Omega_c h^2$	0.12018	$0.1202^{+0.0024}_{-0.0024}$	$\Omega_m h^3$	0.09634	$0.09634^{+0.00061}_{-0.00059}$	$100\theta_{\text{s,eq}}$	0.4490	$0.4490^{+0.0052}_{-0.0052}$
$100\theta_{\text{MC}}$	1.04091	$1.04090^{+0.00059}_{-0.00057}$	σ_8	0.8152	$0.814^{+0.013}_{-0.013}$	$H(0.15)$	72.62	$72.62^{+0.94}_{-0.93}$
τ	0.0564	$0.056^{+0.017}_{-0.015}$	S_8	0.8371	$0.836^{+0.027}_{-0.027}$	$D_{\text{M}}(0.15)$	644.0	$644.0^{+9.4}_{-9.3}$
$\ln(10^{10} A_{\text{s}})$	3.0482	$3.049^{+0.031}_{-0.029}$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4585	$0.458^{+0.015}_{-0.015}$	$H(0.38)$	82.82	$82.83^{+0.69}_{-0.68}$
n_{s}	0.9639	$0.9625^{+0.0093}_{-0.0095}$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6114	$0.611^{+0.014}_{-0.014}$	$D_{\text{M}}(0.38)$	1534.7	1535^{+19}_{-19}
$\text{d}n_{\text{s}}/\text{d} \ln k$	0.0057	$0.002^{+0.020}_{-0.019}$	$\sigma_8/h^{0.5}$	0.9939	$0.993^{+0.020}_{-0.019}$	$H(0.51)$	89.59	$89.60^{+0.54}_{-0.54}$
$\text{d}^2 n_{\text{s}}/\text{d} \ln k^2$	0.0129	$0.010^{+0.024}_{-0.024}$	$r_{\text{drag}} h$	98.94	$98.9^{+1.9}_{-1.9}$	$D_{\text{M}}(0.51)$	1987.3	1987^{+22}_{-22}
y_{cal}	1.00025	$1.0005^{+0.0048}_{-0.0048}$	$\langle d^2 \rangle^{1/2}$	2.4386	$2.439^{+0.045}_{-0.045}$	$H(0.61)$	95.254	$95.26^{+0.44}_{-0.44}$
A_{217}^{CIB}	45.3	47^{+10}_{-10}	z_{re}	7.90	$7.9^{+1.5}_{-1.5}$	$D_{\text{M}}(0.61)$	2311.9	2312^{+24}_{-24}
$\xi^{\text{tSZ} \times \text{CIB}}$	0.70	—	$10^9 A_{\text{s}}$	2.108	$2.110^{+0.066}_{-0.060}$	$H(2.33)$	236.67	$236.7^{+1.4}_{-1.4}$
A_{143}^{tSZ}	7.09	$5.5^{+3.8}_{-3.8}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8830	$1.884^{+0.021}_{-0.021}$	$D_{\text{M}}(2.33)$	5764.4	5764^{+21}_{-21}
A_{100}^{PS}	246	259^{+50}_{-60}	D_{40}	1220.7	1219^{+36}_{-35}	$f\sigma_8(0.15)$	0.4627	$0.462^{+0.014}_{-0.014}$
A_{143}^{PS}	48.6	45^{+20}_{-20}	D_{220}	5738	5740^{+76}_{-77}	$\sigma_8(0.15)$	0.7528	$0.752^{+0.012}_{-0.011}$
$A_{143 \times 217}^{\text{PS}}$	52.4	41^{+20}_{-20}	D_{810}	2538.6	2538^{+27}_{-26}	$f\sigma_8(0.38)$	0.4801	$0.479^{+0.011}_{-0.011}$
A_{217}^{PS}	121.0	114^{+20}_{-20}	D_{1420}	818.9	$817^{+10}_{-9.6}$	$\sigma_8(0.38)$	0.6668	$0.666^{+0.011}_{-0.010}$
A^{kSZ}	0.00	< 8.15	D_{2000}	232.23	$231.2^{+4.0}_{-3.9}$	$f\sigma_8(0.51)$	0.4781	$0.4774^{+0.0098}_{-0.0098}$
$A_{100}^{\text{dust}TT}$	8.81	$8.9^{+3.5}_{-3.4}$	$n_{\text{s},0.002}$	1.012	$1.011^{+0.086}_{-0.087}$	$\sigma_8(0.51)$	0.6238	$0.623^{+0.010}_{-0.0093}$
$A_{143}^{\text{dust}TT}$	10.97	$10.9^{+3.5}_{-3.4}$	Y_{P}	0.245394	$0.24539^{+0.00012}_{-0.00013}$	$f\sigma_8(0.61)$	0.4727	$0.4720^{+0.0090}_{-0.0089}$
$A_{143 \times 217}^{\text{dust}TT}$	20.0	$18.5^{+6.4}_{-6.5}$	$Y_{\text{P}}^{\text{BBN}}$	0.246720	$0.24672^{+0.00012}_{-0.00013}$	$\sigma_8(0.61)$	0.5934	$0.5926^{+0.0095}_{-0.0089}$
$A_{217}^{\text{dust}TT}$	95.4	94^{+10}_{-10}	$10^5 \text{D}/\text{H}$	2.586	$2.587^{+0.058}_{-0.056}$	$f\sigma_8(2.33)$	0.29902	$0.2986^{+0.0049}_{-0.0046}$
$A_{100}^{\text{dust}TE}$	0.115	$0.114^{+0.073}_{-0.074}$	Age/Gyr	13.7990	$13.799^{+0.047}_{-0.047}$	$\sigma_8(2.33)$	0.3081	$0.3077^{+0.0053}_{-0.0049}$
$A_{100 \times 143}^{\text{dust}TE}$	0.135	$0.135^{+0.058}_{-0.057}$	z_*	1089.94	$1089.94^{+0.55}_{-0.52}$	f_{2000}^{143}	27.3	29^{+7}_{-7}
$A_{100 \times 217}^{\text{dust}TE}$	0.484	$0.48^{+0.17}_{-0.17}$	r_*	144.39	$144.39^{+0.54}_{-0.53}$	$f_{2000}^{143 \times 217}$	30.88	32^{+5}_{-5}
$A_{143}^{\text{dust}TE}$	0.224	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	1.04109	$1.04108^{+0.00058}_{-0.00056}$	f_{2000}^{217}	105.45	$106.6^{+4.5}_{-4.4}$
$A_{143 \times 217}^{\text{dust}TE}$	0.668	$0.67^{+0.15}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.869	$13.869^{+0.051}_{-0.050}$	χ_{lensing}^2	8.98	$9.47 (\nu: 0.4)$
$A_{217}^{\text{dust}TE}$	2.09	$2.09^{+0.52}_{-0.53}$	z_{drag}	1059.93	$1059.94^{+0.64}_{-0.62}$	χ_{small}^2	396.28	$397.2 (\nu: 1.4)$
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	147.05	$147.05^{+0.55}_{-0.53}$	χ_{lowl}^2	21.70	$22.5 (\nu: 1.3)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	0.14091	$0.14091^{+0.00062}_{-0.00062}$	χ_{plik}^2	2344.9	$2360.5 (\nu: 16.3)$
H_0	67.28	$67.3^{+1.1}_{-1.1}$	$100\theta_{\text{D}}$	0.160757	$0.16075^{+0.00037}_{-0.00038}$	χ_{prior}^2	1.5	$11.5 (\nu: 10.1)$
Ω_{Λ}	0.6837	$0.684^{+0.015}_{-0.015}$	z_{eq}	3406	3407^{+55}_{-54}	χ_{CMB}^2	2771.8	$2789.6 (\nu: 18.4)$
Ω_{m}	0.3163	$0.316^{+0.015}_{-0.015}$	k_{eq}	0.010396	$0.01040^{+0.00017}_{-0.00016}$			

Best-fit $\chi_{\text{eff}}^2 = 2773.34$; $\Delta\chi_{\text{eff}}^2 = -1.29$; $\bar{\chi}_{\text{eff}}^2 = 2801.12$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.43$; $R - 1 = 0.02893$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.98 (Δ 0.11) small.100x143_offlike5_EE_Aplanck_B: 396.28 (Δ 0.23) commander_dx12_v3.2_29: 21.70 (Δ -1.55) plik_rd12_HM_v22b_TTTEE: 2344.88 (Δ -0.05)

14.4 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02243^{+0.00028}_{-0.00028}$	$\Omega_{\mathrm{m}}h^3$	$0.09637^{+0.00060}_{-0.00059}$	$H(0.15)$	$72.93^{+0.73}_{-0.73}$
$\Omega_{\mathrm{c}}h^2$	$0.1194^{+0.0019}_{-0.0019}$	σ_8	$0.813^{+0.013}_{-0.013}$	$D_{\mathrm{M}}(0.15)$	$640.9^{+7.3}_{-7.2}$
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00055}_{-0.00055}$	S_8	$0.828^{+0.022}_{-0.021}$	$H(0.38)$	$83.05^{+0.55}_{-0.54}$
τ	$0.059^{+0.016}_{-0.015}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.38)$	1529^{+15}_{-14}
$\ln(10^{10}A_{\mathrm{s}})$	$3.052^{+0.031}_{-0.029}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.012}_{-0.012}$	$H(0.51)$	$89.77^{+0.44}_{-0.44}$
n_{s}	$0.9647^{+0.0081}_{-0.0084}$	$\sigma_8/h^{0.5}$	$0.989^{+0.019}_{-0.018}$	$D_{\mathrm{M}}(0.51)$	1980^{+17}_{-17}
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$0.001^{+0.020}_{-0.019}$	$r_{\mathrm{drag}}h$	$99.6^{+1.4}_{-1.4}$	$H(0.61)$	$95.39^{+0.38}_{-0.37}$
$\mathrm{d}^2n_{\mathrm{s}}/\mathrm{d}\ln k^2$	$0.009^{+0.025}_{-0.025}$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.042}_{-0.043}$	$D_{\mathrm{M}}(0.61)$	2304^{+19}_{-19}
y_{cal}	$1.0007^{+0.0049}_{-0.0048}$	z_{re}	$8.1^{+1.5}_{-1.5}$	$H(2.33)$	$236.2^{+1.1}_{-1.1}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_{\mathrm{s}}$	$2.117^{+0.067}_{-0.060}$	$D_{\mathrm{M}}(2.33)$	5759^{+18}_{-18}
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.021}_{-0.021}$	$f\sigma_8(0.15)$	$0.458^{+0.012}_{-0.011}$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8}$	D_{40}	1217^{+37}_{-35}	$\sigma_8(0.15)$	$0.751^{+0.012}_{-0.012}$
A_{100}^{PS}	258^{+60}_{-60}	D_{220}	5745^{+74}_{-77}	$f\sigma_8(0.38)$	$0.4767^{+0.0099}_{-0.0097}$
A_{143}^{PS}	45^{+20}_{-20}	D_{810}	2539^{+27}_{-26}	$\sigma_8(0.38)$	$0.666^{+0.011}_{-0.010}$
$A_{143\times 217}^{\mathrm{PS}}$	41^{+20}_{-20}	D_{1420}	$818^{+10}_{-9.7}$	$f\sigma_8(0.51)$	$0.4753^{+0.0091}_{-0.0089}$
A_{217}^{PS}	114^{+20}_{-20}	D_{2000}	$231.5^{+4.1}_{-4.0}$	$\sigma_8(0.51)$	$0.623^{+0.010}_{-0.0095}$
A^{kSZ}	< 8.09	$n_{\mathrm{s},0.002}$	$1.008^{+0.086}_{-0.088}$	$f\sigma_8(0.61)$	$0.4704^{+0.0086}_{-0.0084}$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.5}_{-3.5}$	Y_{P}	$0.24542^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	$0.5931^{+0.0097}_{-0.0090}$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.4}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	$0.2990^{+0.0050}_{-0.0046}$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.5^{+6.5}_{-6.6}$	$10^5\mathrm{D}/\mathrm{H}$	$2.575^{+0.053}_{-0.050}$	$\sigma_8(2.33)$	$0.3083^{+0.0052}_{-0.0049}$
$A_{217}^{\mathrm{dust}TT}$	93^{+10}_{-10}	$\mathrm{Age}/\mathrm{Gyr}$	$13.786^{+0.041}_{-0.041}$	f_{2000}^{143}	29^{+7}_{-7}
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.072}_{-0.075}$	z_{*}	$1089.79^{+0.45}_{-0.44}$	$f_{2000}^{143\times 217}$	32^{+5}_{-5}
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.135^{+0.059}_{-0.057}$	r_{*}	$144.54^{+0.43}_{-0.44}$	f_{2000}^{217}	$106.6^{+4.7}_{-4.5}$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_{*}$	$1.04118^{+0.00054}_{-0.00055}$	$\chi_{\mathrm{lensing}}^2$	$9.21 (\nu: 0.2)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.883^{+0.043}_{-0.043}$	χ_{small}^2	$397.5 (\nu: 1.9)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1060.03^{+0.63}_{-0.59}$	χ_{lowl}^2	$22.3 (\nu: 1.4)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.51}_{-0.55}$	r_{drag}	$147.19^{+0.46}_{-0.47}$	χ_{plik}^2	$2360.7 (\nu: 16.9)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_{D}	$0.14081^{+0.00060}_{-0.00057}$	$\chi_{6\mathrm{DF}}^2$	$0.059 (\nu: 0.0)$
c_{217}	$0.9982^{+0.0013}_{-0.0012}$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00036}_{-0.00035}$	χ_{MGS}^2	$1.22 (\nu: 0.1)$
H_0	$67.64^{+0.85}_{-0.85}$	z_{eq}	3389^{+43}_{-42}	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 (\nu: 1.0)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011}$	k_{eq}	$0.01034^{+0.00013}_{-0.00013}$	χ_{prior}^2	$11.5 (\nu: 9.8)$
Ω_{m}	$0.311^{+0.011}_{-0.011}$	$100\theta_{\mathrm{eq}}$	$0.8159^{+0.0079}_{-0.0079}$	χ_{CMB}^2	$2789.8 (\nu: 18.4)$
$\Omega_{\mathrm{m}}h^2$	$0.1425^{+0.0018}_{-0.0017}$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0040}_{-0.0041}$	χ_{BAO}^2	$6.2 (\nu: 0.7)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.58; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.74; R - 1 = 0.02956$$

14.5 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02235^{+0.00032}_{-0.00032}$	$\Omega_{\mathrm{m}}h^2$	$0.1436^{+0.0027}_{-0.0026}$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.012}_{-0.012}$
$\Omega_{\mathrm{c}}h^2$	$0.1206^{+0.0029}_{-0.0028}$	$\Omega_{\mathrm{m}}h^3$	$0.09636^{+0.00062}_{-0.00060}$	$100\theta_{\mathrm{s,eq}}$	$0.4480^{+0.0060}_{-0.0062}$
$100\theta_{\mathrm{MC}}$	$1.04086^{+0.00061}_{-0.00062}$	σ_8	$0.817^{+0.017}_{-0.016}$	$H(0.15)$	$72.5^{+1.1}_{-1.1}$
τ	$0.058^{+0.016}_{-0.014}$	S_8	$0.843^{+0.036}_{-0.034}$	$D_{\mathrm{M}}(0.15)$	646^{+11}_{-11}
$\ln(10^{10}A_{\mathrm{s}})$	$3.054^{+0.032}_{-0.030}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.462^{+0.020}_{-0.019}$	$H(0.38)$	$82.72^{+0.79}_{-0.78}$
n_{s}	$0.961^{+0.010}_{-0.011}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.019}_{-0.018}$	$D_{\mathrm{M}}(0.38)$	1538^{+22}_{-22}
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$0.001^{+0.020}_{-0.020}$	$\sigma_8/h^{0.5}$	$0.998^{+0.026}_{-0.026}$	$H(0.51)$	$89.52^{+0.62}_{-0.61}$
$\mathrm{d}^2n_{\mathrm{s}}/\mathrm{d}\ln k^2$	$0.012^{+0.024}_{-0.025}$	$r_{\mathrm{drag}}h$	$98.6^{+2.2}_{-2.2}$	$D_{\mathrm{M}}(0.51)$	1991^{+26}_{-25}
y_{cal}	$1.0005^{+0.0048}_{-0.0047}$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.056}_{-0.055}$	$H(0.61)$	$95.20^{+0.50}_{-0.48}$
A_{217}^{CIB}	47^{+10}_{-10}	z_{re}	$8.1^{+1.4}_{-1.5}$	$D_{\mathrm{M}}(0.61)$	2316^{+28}_{-27}
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	10^9A_{s}	$2.121^{+0.069}_{-0.064}$	$H(2.33)$	$236.9^{+1.7}_{-1.7}$
A_{143}^{tSZ}	$5.4^{+3.7}_{-3.9}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.887^{+0.023}_{-0.023}$	$D_{\mathrm{M}}(2.33)$	5767^{+22}_{-23}
A_{100}^{PS}	259^{+60}_{-60}	D_{40}	1218^{+37}_{-35}	$f\sigma_8(0.15)$	$0.466^{+0.018}_{-0.018}$
A_{143}^{PS}	45^{+20}_{-20}	D_{220}	5740^{+76}_{-77}	$\sigma_8(0.15)$	$0.755^{+0.015}_{-0.014}$
$A_{143\times 217}^{\mathrm{PS}}$	41^{+20}_{-20}	D_{810}	2539^{+26}_{-26}	$f\sigma_8(0.38)$	$0.482^{+0.015}_{-0.015}$
A_{217}^{PS}	114^{+20}_{-20}	D_{1420}	$817.0^{+9.6}_{-9.6}$	$\sigma_8(0.38)$	$0.668^{+0.012}_{-0.012}$
A^{kSZ}	< 8.09	D_{2000}	$231.2^{+4.0}_{-4.0}$	$f\sigma_8(0.51)$	$0.480^{+0.013}_{-0.013}$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6}$	$n_{\mathrm{s},0.002}$	$1.020^{+0.087}_{-0.088}$	$\sigma_8(0.51)$	$0.625^{+0.011}_{-0.011}$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.4}$	Y_{P}	$0.24538^{+0.00012}_{-0.00013}$	$f\sigma_8(0.61)$	$0.475^{+0.012}_{-0.012}$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.5^{+6.5}_{-6.5}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00012}_{-0.00013}$	$\sigma_8(0.61)$	$0.594^{+0.011}_{-0.010}$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	$10^5\mathrm{D}/\mathrm{H}$	$2.591^{+0.060}_{-0.059}$	$f\sigma_8(2.33)$	$0.2994^{+0.0053}_{-0.0050}$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.073}_{-0.074}$	Age/Gyr	$13.804^{+0.050}_{-0.051}$	$\sigma_8(2.33)$	$0.3083^{+0.0055}_{-0.0052}$
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.135^{+0.057}_{-0.058}$	z_*	$1090.01^{+0.58}_{-0.58}$	f_{2000}^{143}	29^{+7}_{-7}
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.29^{+0.61}_{-0.64}$	$f_{2000}^{143\times 217}$	32^{+5}_{-5}
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	$1.04105^{+0.00060}_{-0.00061}$	f_{2000}^{217}	$106.7^{+4.6}_{-4.4}$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.67^{+0.15}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.860^{+0.057}_{-0.059}$	χ_{simall}^2	$397.5 (\nu: 2.2)$
$A_{217}^{\mathrm{dust}TE}$	$2.10^{+0.52}_{-0.53}$	z_{drag}	$1059.93^{+0.66}_{-0.64}$	χ_{lowl}^2	$22.4 (\nu: 1.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	$146.96^{+0.61}_{-0.62}$	χ_{plik}^2	$2360.5 (\nu: 17.4)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	$0.14099^{+0.00067}_{-0.00066}$	χ_{prior}^2	$11.4 (\nu: 10.3)$
H_0	$67.1^{+1.3}_{-1.3}$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00038}_{-0.00038}$	χ_{CMB}^2	$2780.4 (\nu: 18.3)$
Ω_{Λ}	$0.681^{+0.017}_{-0.018}$	z_{eq}	3417^{+65}_{-62}		
Ω_{m}	$0.319^{+0.018}_{-0.017}$	k_{eq}	$0.01043^{+0.00020}_{-0.00019}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2791.89; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.35; R - 1 = 0.02012$$

14.6 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02243^{+0.00028}_{-0.00029}$	$\Omega_{\mathrm{m}}h^3$	$0.09638^{+0.00060}_{-0.00059}$	$H(0.15)$	$72.90^{+0.78}_{-0.78}$
$\Omega_{\mathrm{c}}h^2$	$0.1195^{+0.0020}_{-0.0020}$	σ_8	$0.814^{+0.016}_{-0.015}$	$D_{\mathrm{M}}(0.15)$	$641.2^{+7.8}_{-7.6}$
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00056}_{-0.00056}$	S_8	$0.830^{+0.028}_{-0.027}$	$H(0.38)$	$83.03^{+0.58}_{-0.58}$
τ	$0.060^{+0.016}_{-0.015}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.015}_{-0.015}$	$D_{\mathrm{M}}(0.38)$	1529^{+16}_{-15}
$\ln(10^{10}A_{\mathrm{s}})$	$3.054^{+0.034}_{-0.031}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.016}_{-0.014}$	$H(0.51)$	$89.76^{+0.47}_{-0.46}$
n_{s}	$0.9644^{+0.0086}_{-0.0087}$	$\sigma_8/h^{0.5}$	$0.990^{+0.024}_{-0.021}$	$D_{\mathrm{M}}(0.51)$	1981^{+18}_{-18}
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$0.000^{+0.020}_{-0.019}$	$r_{\mathrm{drag}}h$	$99.5^{+1.6}_{-1.6}$	$H(0.61)$	$95.38^{+0.39}_{-0.38}$
$\mathrm{d}^2n_{\mathrm{s}}/\mathrm{d}\ln k^2$	$0.0095^{+0.025}_{-0.026}$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.051}_{-0.048}$	$D_{\mathrm{M}}(0.61)$	2305^{+20}_{-19}
y_{cal}	$1.0007^{+0.0049}_{-0.0048}$	z_{re}	$8.2^{+1.5}_{-1.6}$	$H(2.33)$	$236.3^{+1.2}_{-1.2}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_{\mathrm{s}}$	$2.121^{+0.072}_{-0.066}$	$D_{\mathrm{M}}(2.33)$	5759^{+18}_{-18}
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.022}_{-0.021}$	$f\sigma_8(0.15)$	$0.459^{+0.014}_{-0.014}$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$	D_{40}	1215^{+37}_{-34}	$\sigma_8(0.15)$	$0.752^{+0.014}_{-0.014}$
A_{100}^{PS}	258^{+50}_{-60}	D_{220}	5744^{+75}_{-77}	$f\sigma_8(0.38)$	$0.478^{+0.013}_{-0.012}$
A_{143}^{PS}	45^{+20}_{-20}	D_{810}	2539^{+27}_{-26}	$\sigma_8(0.38)$	$0.667^{+0.012}_{-0.012}$
$A_{143\times 217}^{\mathrm{PS}}$	41^{+20}_{-20}	D_{1420}	$817.7^{+9.8}_{-9.5}$	$f\sigma_8(0.51)$	$0.476^{+0.012}_{-0.011}$
A_{217}^{PS}	114^{+20}_{-20}	D_{2000}	$231.4^{+4.1}_{-4.0}$	$\sigma_8(0.51)$	$0.624^{+0.012}_{-0.011}$
A^{kSZ}	< 8.08	$n_{\mathrm{s},0.002}$	$1.013^{+0.086}_{-0.089}$	$f\sigma_8(0.61)$	$0.471^{+0.011}_{-0.0099}$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.5}_{-3.5}$	Y_{P}	$0.24542^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	$0.594^{+0.011}_{-0.010}$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.4}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00010}_{-0.00012}$	$f\sigma_8(2.33)$	$0.2993^{+0.0055}_{-0.0052}$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.5^{+6.5}_{-6.5}$	$10^5\mathrm{D}/\mathrm{H}$	$2.575^{+0.054}_{-0.051}$	$\sigma_8(2.33)$	$0.3086^{+0.0057}_{-0.0053}$
$A_{217}^{\mathrm{dust}TT}$	93^{+10}_{-10}	$\mathrm{Age}/\mathrm{Gyr}$	$13.787^{+0.042}_{-0.042}$	f_{2000}^{143}	29^{+7}_{-7}
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.071}_{-0.075}$	z_*	$1089.80^{+0.47}_{-0.45}$	$f_{2000}^{143\times 217}$	32^{+5}_{-5}
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.135^{+0.059}_{-0.057}$	r_*	$144.52^{+0.46}_{-0.48}$	f_{2000}^{217}	$106.6^{+4.7}_{-4.5}$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04118^{+0.00055}_{-0.00055}$	χ_{small}^2	$397.7 (\nu: 2.7)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.880^{+0.046}_{-0.045}$	χ_{lowl}^2	$22.2 (\nu: 1.2)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.67^{+0.15}_{-0.16}$	z_{drag}	$1060.03^{+0.62}_{-0.60}$	χ_{plik}^2	$2360.8 (\nu: 17.8)$
$A_{217}^{\mathrm{dust}TE}$	$2.09^{+0.51}_{-0.54}$	r_{drag}	$147.16^{+0.49}_{-0.50}$	$\chi_{6\mathrm{DF}}^2$	$0.067 (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_{D}	$0.14084^{+0.00062}_{-0.00059}$	χ_{MGS}^2	$1.19 (\nu: 0.1)$
c_{217}	$0.9982^{+0.0013}_{-0.0012}$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00036}_{-0.00035}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 (\nu: 1.3)$
H_0	$67.61^{+0.90}_{-0.91}$	z_{eq}	3391^{+46}_{-44}	χ_{prior}^2	$11.5 (\nu: 9.7)$
Ω_{Λ}	$0.688^{+0.012}_{-0.013}$	k_{eq}	$0.01035^{+0.00014}_{-0.00014}$	χ_{BAO}^2	$6.4 (\nu: 0.9)$
Ω_{m}	$0.312^{+0.013}_{-0.012}$	$100\theta_{\mathrm{eq}}$	$0.8155^{+0.0086}_{-0.0085}$	χ_{CMB}^2	$2780.8 (\nu: 18.3)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0019}_{-0.0019}$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0044}_{-0.0044}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.65; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.93; R - 1 = 0.02773$$

14.7 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02237^{+0.00031}_{-0.00030}$	$\Omega_{\text{m}}h^2$	$0.1432^{+0.0022}_{-0.0022}$	$100\theta_{\text{eq}}$	$0.813^{+0.010}_{-0.0098}$
$\Omega_{\text{c}}h^2$	$0.1201^{+0.0024}_{-0.0024}$	$\Omega_{\text{m}}h^3$	$0.09634^{+0.00061}_{-0.00059}$	$100\theta_{\text{s,eq}}$	$0.4491^{+0.0052}_{-0.0050}$
$100\theta_{\text{MC}}$	$1.04090^{+0.00059}_{-0.00057}$	σ_8	$0.815^{+0.013}_{-0.012}$	$H(0.15)$	$72.64^{+0.94}_{-0.92}$
τ	$0.057^{+0.014}_{-0.013}$	S_8	$0.836^{+0.027}_{-0.027}$	$D_{\text{M}}(0.15)$	$643.9^{+9.3}_{-9.2}$
$\ln(10^{10}A_{\text{s}})$	$3.050^{+0.028}_{-0.027}$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.458^{+0.015}_{-0.015}$	$H(0.38)$	$82.84^{+0.69}_{-0.67}$
n_{s}	$0.9626^{+0.0093}_{-0.0096}$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.611^{+0.014}_{-0.013}$	$D_{\text{M}}(0.38)$	1534^{+19}_{-19}
$\text{d}n_{\text{s}}/\text{d}\ln k$	$0.002^{+0.020}_{-0.019}$	$\sigma_8/h^{0.5}$	$0.993^{+0.020}_{-0.019}$	$H(0.51)$	$89.61^{+0.54}_{-0.54}$
$\text{d}^2n_{\text{s}}/\text{d}\ln k^2$	$0.011^{+0.024}_{-0.024}$	$r_{\text{drag}}h$	$99.0^{+1.9}_{-1.8}$	$D_{\text{M}}(0.51)$	1987^{+22}_{-22}
y_{cal}	$1.0005^{+0.0048}_{-0.0048}$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.044}_{-0.045}$	$H(0.61)$	$95.26^{+0.44}_{-0.44}$
A_{217}^{CIB}	47^{+10}_{-10}	z_{re}	$8.0^{+1.3}_{-1.4}$	$D_{\text{M}}(0.61)$	2312^{+23}_{-23}
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}$	$2.112^{+0.060}_{-0.056}$	$H(2.33)$	$236.7^{+1.4}_{-1.4}$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8}$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.884^{+0.021}_{-0.021}$	$D_{\text{M}}(2.33)$	5764^{+21}_{-20}
A_{100}^{PS}	259^{+50}_{-60}	D_{40}	1219^{+36}_{-35}	$f\sigma_8(0.15)$	$0.462^{+0.014}_{-0.014}$
A_{143}^{PS}	45^{+20}_{-20}	D_{220}	5740^{+77}_{-76}	$\sigma_8(0.15)$	$0.752^{+0.012}_{-0.011}$
$A_{143 \times 217}^{\text{PS}}$	41^{+20}_{-20}	D_{810}	2538^{+27}_{-26}	$f\sigma_8(0.38)$	$0.480^{+0.011}_{-0.011}$
A_{217}^{PS}	114^{+20}_{-20}	D_{1420}	$817^{+10}_{-9.6}$	$\sigma_8(0.38)$	$0.666^{+0.010}_{-0.0092}$
A^{kSZ}	< 8.14	D_{2000}	$231.3^{+4.0}_{-4.0}$	$f\sigma_8(0.51)$	$0.4776^{+0.0097}_{-0.0096}$
$A_{100}^{\text{dust}TT}$	$8.9^{+3.5}_{-3.5}$	$n_{\text{s},0.002}$	$1.012^{+0.085}_{-0.087}$	$\sigma_8(0.51)$	$0.6233^{+0.0097}_{-0.0086}$
$A_{143}^{\text{dust}TT}$	$10.9^{+3.5}_{-3.4}$	Y_{P}	$0.24539^{+0.00011}_{-0.00012}$	$f\sigma_8(0.61)$	$0.4722^{+0.0089}_{-0.0088}$
$A_{143 \times 217}^{\text{dust}TT}$	$18.6^{+6.3}_{-6.5}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24672^{+0.00012}_{-0.00012}$	$\sigma_8(0.61)$	$0.5930^{+0.0093}_{-0.0081}$
$A_{217}^{\text{dust}TT}$	94^{+10}_{-10}	$10^5 \text{D}/\text{H}$	$2.586^{+0.057}_{-0.055}$	$f\sigma_8(2.33)$	$0.2988^{+0.0048}_{-0.0041}$
$A_{100}^{\text{dust}TE}$	$0.114^{+0.073}_{-0.074}$	Age/Gyr	$13.798^{+0.047}_{-0.046}$	$\sigma_8(2.33)$	$0.3079^{+0.0049}_{-0.0046}$
$A_{100 \times 143}^{\text{dust}TE}$	$0.135^{+0.058}_{-0.057}$	z_*	$1089.93^{+0.53}_{-0.51}$	f_{2000}^{143}	29^{+7}_{-7}
$A_{100 \times 217}^{\text{dust}TE}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.39^{+0.54}_{-0.52}$	$f_{2000}^{143 \times 217}$	32^{+5}_{-5}
$A_{143}^{\text{dust}TE}$	$0.23^{+0.11}_{-0.11}$	$100\theta_*$	$1.04109^{+0.00058}_{-0.00056}$	f_{2000}^{217}	$106.6^{+4.5}_{-4.3}$
$A_{143 \times 217}^{\text{dust}TE}$	$0.67^{+0.15}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.870^{+0.051}_{-0.049}$	χ_{lensing}^2	$9.47 (\nu: 0.4)$
$A_{217}^{\text{dust}TE}$	$2.09^{+0.51}_{-0.54}$	z_{drag}	$1059.95^{+0.63}_{-0.63}$	χ_{small}^2	$397.2 (\nu: 1.4)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	r_{drag}	$147.05^{+0.54}_{-0.53}$	χ_{lowl}^2	$22.4 (\nu: 1.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	$0.14091^{+0.00061}_{-0.00062}$	χ_{plik}^2	$2360.4 (\nu: 16.1)$
H_0	$67.3^{+1.1}_{-1.1}$	$100\theta_{\text{D}}$	$0.16075^{+0.00037}_{-0.00038}$	χ_{prior}^2	$11.5 (\nu: 10.0)$
Ω_{Λ}	$0.684^{+0.015}_{-0.015}$	z_{eq}	3406^{+53}_{-53}	χ_{CMB}^2	$2789.5 (\nu: 17.9)$
Ω_{m}	$0.316^{+0.015}_{-0.015}$	k_{eq}	$0.01039^{+0.00016}_{-0.00016}$		

$$\bar{\chi}_{\text{eff}}^2 = 2800.94; \Delta\bar{\chi}_{\text{eff}}^2 = 0.43; R - 1 = 0.02757$$

14.8 base_nrun_nrunrun_plikHM_TTTEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00028}_{-0.00029}$	$\Omega_m h^3$	$0.09637^{+0.00060}_{-0.00059}$	$H(0.15)$	$72.93^{+0.73}_{-0.73}$
$\Omega_c h^2$	$0.1194^{+0.0019}_{-0.0019}$	σ_8	$0.813^{+0.013}_{-0.012}$	$D_M(0.15)$	$640.9^{+7.3}_{-7.2}$
$100\theta_{MC}$	$1.04100^{+0.00055}_{-0.00056}$	S_8	$0.828^{+0.022}_{-0.021}$	$H(0.38)$	$83.05^{+0.55}_{-0.54}$
τ	$0.059^{+0.015}_{-0.014}$	$\sigma_8 \Omega_m^{0.5}$	$0.454^{+0.012}_{-0.011}$	$D_M(0.38)$	1528^{+15}_{-14}
$\ln(10^{10} A_s)$	$3.053^{+0.029}_{-0.028}$	$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.012}_{-0.012}$	$H(0.51)$	$89.77^{+0.44}_{-0.43}$
n_s	$0.9647^{+0.0081}_{-0.0083}$	$\sigma_8/h^{0.5}$	$0.989^{+0.018}_{-0.018}$	$D_M(0.51)$	1980^{+17}_{-17}
$dn_s/d \ln k$	$0.001^{+0.020}_{-0.019}$	$r_{\text{drag}} h$	$99.6^{+1.4}_{-1.4}$	$H(0.61)$	$95.39^{+0.37}_{-0.37}$
$d^2 n_s/d \ln k^2$	$0.009^{+0.025}_{-0.025}$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.042}_{-0.042}$	$D_M(0.61)$	2304^{+19}_{-18}
y_{cal}	$1.0007^{+0.0048}_{-0.0048}$	z_{re}	$8.1^{+1.4}_{-1.4}$	$H(2.33)$	$236.2^{+1.1}_{-1.1}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_s$	$2.118^{+0.062}_{-0.058}$	$D_M(2.33)$	5759^{+18}_{-18}
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.882^{+0.021}_{-0.020}$	$f\sigma_8(0.15)$	$0.458^{+0.012}_{-0.011}$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8}$	D_{40}	1217^{+36}_{-35}	$\sigma_8(0.15)$	$0.752^{+0.012}_{-0.011}$
A_{100}^{PS}	258^{+60}_{-60}	D_{220}	5745^{+74}_{-77}	$f\sigma_8(0.38)$	$0.4768^{+0.0099}_{-0.0096}$
A_{143}^{PS}	44^{+20}_{-20}	D_{810}	2539^{+27}_{-26}	$\sigma_8(0.38)$	$0.666^{+0.011}_{-0.0095}$
$A_{143 \times 217}^{\text{PS}}$	41^{+20}_{-20}	D_{1420}	$818^{+10}_{-9.7}$	$f\sigma_8(0.51)$	$0.4754^{+0.0091}_{-0.0088}$
A_{217}^{PS}	114^{+20}_{-20}	D_{2000}	$231.5^{+4.1}_{-4.0}$	$\sigma_8(0.51)$	$0.623^{+0.010}_{-0.0089}$
A^{kSZ}	< 8.08	$n_{\text{s},0.002}$	$1.009^{+0.086}_{-0.087}$	$f\sigma_8(0.61)$	$0.4705^{+0.0085}_{-0.0082}$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.5}$	Y_{P}	$0.24542^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	$0.5933^{+0.0096}_{-0.0085}$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.3}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24674^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	$0.2991^{+0.0049}_{-0.0044}$
$A_{143 \times 217}^{\text{dustTT}}$	$18.5^{+6.4}_{-6.5}$	10^5D/H	$2.575^{+0.054}_{-0.050}$	$\sigma_8(2.33)$	$0.3084^{+0.0052}_{-0.0046}$
A_{217}^{dustTT}	93^{+10}_{-10}	Age/Gyr	$13.786^{+0.041}_{-0.041}$	f_{2000}^{143}	29^{+7}_{-7}
A_{100}^{dustTE}	$0.114^{+0.072}_{-0.074}$	z_*	$1089.79^{+0.45}_{-0.44}$	$f_{2000}^{143 \times 217}$	32^{+5}_{-5}
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.059}_{-0.057}$	r_*	$144.55^{+0.43}_{-0.44}$	f_{2000}^{217}	$106.5^{+4.6}_{-4.4}$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04118^{+0.00054}_{-0.00055}$	χ_{lensing}^2	$9.20 (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.883^{+0.043}_{-0.042}$	χ_{small}^2	$397.5 (\nu: 1.9)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.15}$	z_{drag}	$1060.03^{+0.63}_{-0.59}$	χ_{lowl}^2	$22.3 (\nu: 1.3)$
A_{217}^{dustTE}	$2.09^{+0.51}_{-0.54}$	r_{drag}	$147.19^{+0.46}_{-0.46}$	χ_{plik}^2	$2360.7 (\nu: 16.7)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_{D}	$0.14081^{+0.00059}_{-0.00057}$	$\chi_{6\text{DF}}^2$	$0.058 (\nu: 0.0)$
c_{217}	$0.9982^{+0.0013}_{-0.0012}$	$100\theta_{\text{D}}$	$0.16071^{+0.00036}_{-0.00035}$	χ_{MGS}^2	$1.23 (\nu: 0.1)$
H_0	$67.65^{+0.84}_{-0.84}$	z_{eq}	3389^{+42}_{-42}	χ_{DR12BAO}^2	$4.9 (\nu: 1.0)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011}$	k_{eq}	$0.01034^{+0.00013}_{-0.00013}$	χ_{prior}^2	$11.5 (\nu: 9.6)$
Ω_{m}	$0.311^{+0.011}_{-0.011}$	$100\theta_{\text{eq}}$	$0.8160^{+0.0079}_{-0.0079}$	χ_{CMB}^2	$2789.7 (\nu: 18.2)$
$\Omega_{\text{m}} h^2$	$0.1425^{+0.0018}_{-0.0017}$	$100\theta_{\text{s,eq}}$	$0.4507^{+0.0040}_{-0.0041}$	χ_{BAO}^2	$6.2 (\nu: 0.6)$

$$\bar{\chi}_{\text{eff}}^2 = 2807.47; \Delta \bar{\chi}_{\text{eff}}^2 = 0.75; R - 1 = 0.02999$$

15 nrun+r

15.1 base_nrun_r_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022169	$0.02221^{+0.00047}_{-0.00046}$	$\sigma_8/h^{0.5}$	0.9939	$0.991^{+0.031}_{-0.032}$	$H(0.51)$	89.33	$89.43^{+0.92}_{-0.86}$
$\Omega_c h^2$	0.12080	$0.1205^{+0.0042}_{-0.0042}$	$r_{\text{drag}} h$	98.35	$98.6^{+3.3}_{-3.2}$	$D_M(0.51)$	1996.5	1993^{+37}_{-37}
$100\theta_{\text{MC}}$	1.04076	$1.04082^{+0.00093}_{-0.00095}$	$\langle d^2 \rangle^{1/2}$	2.450	$2.438^{+0.077}_{-0.078}$	$H(0.61)$	95.02	$95.10^{+0.74}_{-0.69}$
τ	0.0529	$0.054^{+0.017}_{-0.017}$	z_{re}	7.60	$7.6^{+1.6}_{-1.8}$	$D_M(0.61)$	2322.0	2318^{+39}_{-40}
$\ln(10^{10} A_s)$	3.0434	$3.045^{+0.035}_{-0.035}$	$10^9 A_s$	2.098	$2.101^{+0.075}_{-0.073}$	$H(2.33)$	236.87	$236.7^{+2.5}_{-2.5}$
n_s	0.9625	$0.963^{+0.012}_{-0.012}$	$10^9 A_s e^{-2\tau}$	1.8870	$1.887^{+0.028}_{-0.028}$	$D_M(2.33)$	5776.0	5773^{+32}_{-33}
$dn_s/d \ln k$	-0.0036	$-0.008^{+0.016}_{-0.017}$	D_{40}	1224.8	1233^{+46}_{-43}	$f\sigma_8(0.15)$	0.4644	$0.462^{+0.024}_{-0.024}$
r	0.000	< 0.153	D_{220}	5712	5711^{+81}_{-81}	$\sigma_8(0.15)$	0.7500	$0.749^{+0.015}_{-0.015}$
y_{cal}	1.00039	$1.0005^{+0.0049}_{-0.0049}$	D_{810}	2538.8	2539^{+28}_{-27}	$f\sigma_8(0.38)$	0.4806	$0.479^{+0.019}_{-0.019}$
A_{217}^{CIB}	50.9	49^{+10}_{-10}	D_{1420}	814.7	$814^{+10}_{-9.9}$	$\sigma_8(0.38)$	0.6638	$0.663^{+0.012}_{-0.012}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.07	—	D_{2000}	229.49	$229.0^{+3.8}_{-3.7}$	$f\sigma_8(0.51)$	0.4781	$0.476^{+0.016}_{-0.016}$
A_{143}^{tSZ}	7.15	$4.9^{+3.9}_{-3.9}$	$n_{s,0.002}$	0.974	$0.988^{+0.053}_{-0.050}$	$\sigma_8(0.51)$	0.6207	$0.620^{+0.011}_{-0.011}$
A_{100}^{PS}	258	267^{+60}_{-60}	Y_{P}	0.245313	$0.24533^{+0.00018}_{-0.00021}$	$f\sigma_8(0.61)$	0.4723	$0.471^{+0.014}_{-0.015}$
A_{143}^{PS}	46.9	51^{+20}_{-20}	$Y_{\text{P}}^{\text{BBN}}$	0.246639	$0.24665^{+0.00018}_{-0.00021}$	$\sigma_8(0.61)$	0.5904	$0.590^{+0.010}_{-0.010}$
$A_{143 \times 217}^{\text{PS}}$	41.0	44^{+20}_{-20}	$10^5 D/H$	2.624	$2.616^{+0.088}_{-0.086}$	$f\sigma_8(2.33)$	0.2973	$0.2971^{+0.0051}_{-0.0051}$
A_{217}^{PS}	116.7	115^{+20}_{-20}	Age/Gyr	13.826	$13.818^{+0.073}_{-0.075}$	$\sigma_8(2.33)$	0.3061	$0.3060^{+0.0054}_{-0.0053}$
A^{kSZ}	0.0	—	z_*	1090.25	$1090.16^{+0.82}_{-0.82}$	$r_{0.002}$	0.000	< 0.157
A_{100}^{dustTT}	8.90	$9.0^{+3.6}_{-3.6}$	r_*	144.38	$144.43^{+0.97}_{-0.96}$	$r_{0.01}$	0.000	< 0.152
A_{143}^{dustTT}	10.82	$10.8^{+3.5}_{-3.5}$	$100\theta_*$	1.04097	$1.04102^{+0.00091}_{-0.00093}$	$\ln(10^{10} A_t)$	-6.50	$-0.4^{+1.9}_{-2.5}$
$A_{143 \times 217}^{\text{dustTT}}$	19.0	$18.4^{+6.5}_{-6.5}$	$D_M(z_*)/\text{Gpc}$	13.870	$13.874^{+0.089}_{-0.089}$	r_{10}	0.0000	< 0.0828
A_{217}^{dustTT}	93.8	93^{+10}_{-10}	z_{drag}	1059.51	$1059.60^{+0.98}_{-0.97}$	$10^9 A_t$	0.000	< 0.323
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$	r_{drag}	147.11	$147.14^{+0.98}_{-0.98}$	$10^9 A_t e^{-2\tau}$	0.000	< 0.289
c_{217}	0.99828	$0.9983^{+0.0012}_{-0.0012}$	k_{D}	0.14070	$0.1407^{+0.0011}_{-0.0011}$	f_{2000}^{143}	31.2	32^{+6}_{-6}
H_0	66.86	$67.0^{+1.9}_{-1.8}$	$100\theta_{\text{D}}$	0.16099	$0.16095^{+0.00057}_{-0.00057}$	$f_{2000}^{143 \times 217}$	33.81	34^{+4}_{-4}
Ω_{Λ}	0.6787	$0.681^{+0.025}_{-0.026}$	z_{eq}	3417	3410^{+95}_{-95}	f_{2000}^{217}	108.28	$108.9^{+4.1}_{-4.1}$
Ω_{m}	0.3213	$0.319^{+0.026}_{-0.025}$	k_{eq}	0.010428	$0.01041^{+0.00029}_{-0.00029}$	χ_{simall}^2	395.91	$397.3 (\nu: 1.6)$
$\Omega_{\text{m}} h^2$	0.14361	$0.1433^{+0.0040}_{-0.0040}$	$100\theta_{\text{eq}}$	0.8101	$0.812^{+0.018}_{-0.017}$	χ_{lowl}^2	22.73	$23.7 (\nu: 2.5)$
$\Omega_{\text{m}} h^3$	0.09602	$0.09606^{+0.00098}_{-0.00097}$	$100\theta_{s,\text{eq}}$	0.4478	$0.4486^{+0.0093}_{-0.0090}$	χ_{plik}^2	759.2	$773.6 (\nu: 17.0)$
σ_8	0.8127	$0.811^{+0.018}_{-0.018}$	$H(0.15)$	72.24	$72.4^{+1.6}_{-1.5}$	χ_{prior}^2	1.5	$7.3 (\nu: 6.8)$
S_8	0.8410	$0.837^{+0.047}_{-0.047}$	$D_M(0.15)$	647.7	646^{+16}_{-16}	χ_{CMB}^2	1177.9	$1194.6 (\nu: 17.4)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4607	$0.458^{+0.026}_{-0.026}$	$H(0.38)$	82.52	$82.6^{+1.2}_{-1.1}$			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6119	$0.610^{+0.023}_{-0.023}$	$D_M(0.38)$	1542.4	1540^{+31}_{-32}			

Best-fit $\chi_{\text{eff}}^2 = 1179.41$; $\Delta\chi_{\text{eff}}^2 = -0.16$; $\bar{\chi}_{\text{eff}}^2 = 1201.96$; $\Delta\bar{\chi}_{\text{eff}}^2 = 2.38$; $R - 1 = 0.00730$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.91 (Δ 0.03) commander_dx12_v3.2.29: 22.73 (Δ -0.87) plik_rd12_HM_v22_TT: 759.25 (Δ 0.50)

15.2 base_nrun_r_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022267	$0.02230^{+0.00043}_{-0.00042}$ (+0.4 σ)	$r_{\text{drag}} h$	99.84	$99.8^{+1.9}_{-1.8}$ (+0.7 σ)	$H(0.61)$	95.32	$95.34^{+0.51}_{-0.49}$ (+0.6 σ)
$\Omega_c h^2$	0.11893	$0.1189^{+0.0024}_{-0.0024}$ (−0.7 σ)	$\langle d^2 \rangle^{1/2}$	2.420	$2.415^{+0.058}_{-0.059}$ (−0.6 σ)	$D_M(0.61)$	2304.2	2304^{+24}_{-24} (−0.7 σ)
$100\theta_{\text{MC}}$	1.04106	$1.04102^{+0.00081}_{-0.00083}$ (+0.4 σ)	z_{re}	7.64	$7.8^{+1.6}_{-1.7}$ (+0.1 σ)	$H(2.33)$	235.76	$235.8^{+1.6}_{-1.6}$ (−0.7 σ)
τ	0.0539	$0.055^{+0.017}_{-0.016}$ (+0.2 σ)	$10^9 A_s$	2.091	$2.100^{+0.076}_{-0.073}$ (−0.0 σ)	$D_M(2.33)$	5763.8	5763^{+25}_{-25} (−0.6 σ)
$\ln(10^{10} A_s)$	3.0401	$3.045^{+0.036}_{-0.035}$ (−0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8772	$1.880^{+0.025}_{-0.024}$ (−0.5 σ)	$f\sigma_8(0.15)$	0.4535	$0.454^{+0.015}_{-0.015}$ (−0.7 σ)
n_s	0.9671	$0.9662^{+0.0088}_{-0.0087}$ (+0.6 σ)	D_{40}	1217.0	1228^{+46}_{-42} (−0.2 σ)	$\sigma_8(0.15)$	0.7455	$0.746^{+0.014}_{-0.013}$ (−0.4 σ)
$dn_s/d \ln k$	−0.0024	$−0.008^{+0.016}_{-0.017}$ (+0.0 σ)	D_{220}	5715	5717^{+81}_{-79} (+0.2 σ)	$f\sigma_8(0.38)$	0.4722	$0.472^{+0.013}_{-0.013}$ (−0.7 σ)
r	0.000	< 0.164 (+0.1 σ)	D_{810}	2535.9	2538^{+28}_{-27} (−0.1 σ)	$\sigma_8(0.38)$	0.6611	$0.661^{+0.012}_{-0.012}$ (−0.3 σ)
y_{cal}	1.00017	$1.0006^{+0.0050}_{-0.0048}$ (+0.0 σ)	D_{1420}	815.4	$815^{+10}_{-9.7}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4710	$0.471^{+0.012}_{-0.012}$ (−0.6 σ)
A_{217}^{CIB}	50.7	49^{+10}_{-10} (−0.0 σ)	D_{2000}	229.88	$229.3^{+3.7}_{-3.7}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6188	$0.619^{+0.011}_{-0.011}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.04	—	$n_{s,0.002}$	0.975	$0.991^{+0.053}_{-0.049}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4662	$0.466^{+0.011}_{-0.011}$ (−0.6 σ)
A_{143}^{tSZ}	7.24	$4.9^{+3.9}_{-3.9}$ (+0.0 σ)	Y_P	0.245354	$0.24536^{+0.00016}_{-0.00019}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5888	$0.589^{+0.010}_{-0.010}$ (−0.1 σ)
A_{100}^{PS}	257	266^{+60}_{-50} (−0.0 σ)	Y_P^{BBN}	0.246680	$0.24669^{+0.00016}_{-0.00019}$ (+0.4 σ)	$f\sigma_8(2.33)$	0.2970	$0.2971^{+0.0052}_{-0.0050}$ (+0.0 σ)
A_{143}^{PS}	45.3	50^{+20}_{-20} (−0.1 σ)	10^5D/H	2.605	$2.600^{+0.081}_{-0.078}$ (−0.4 σ)	$\sigma_8(2.33)$	0.3062	$0.3064^{+0.0053}_{-0.0052}$ (+0.2 σ)
$A_{143 \times 217}^{\text{PS}}$	39.4	43^{+20}_{-20} (−0.0 σ)	Age/Gyr	13.799	$13.797^{+0.057}_{-0.058}$ (−0.6 σ)	$r_{0.002}$	0.000	< 0.169 (+0.1 σ)
A_{217}^{PS}	115.9	114^{+20}_{-20} (−0.0 σ)	z_*	1089.95	$1089.92^{+0.62}_{-0.62}$ (−0.6 σ)	$r_{0.01}$	0.000	< 0.163 (+0.1 σ)
A^{kSZ}	0.0	—	r_*	144.79	$144.76^{+0.64}_{-0.65}$ (+0.7 σ)	$\ln(10^{10} A_t)$	−7.24	$−0.3^{+1.9}_{-2.4}$ (+0.1 σ)
A_{100}^{dustTT}	8.96	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	$100\theta_*$	1.04125	$1.04121^{+0.00080}_{-0.00082}$ (+0.4 σ)	r_{10}	0.0000	< 0.0896 (+0.1 σ)
A_{143}^{dustTT}	10.79	$10.8^{+3.5}_{-3.4}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.905	$13.903^{+0.062}_{-0.064}$ (+0.6 σ)	$10^9 A_t$	0.000	< 0.343 (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.0	$18.4^{+6.5}_{-6.5}$ (−0.0 σ)	z_{drag}	1059.63	$1059.69^{+0.96}_{-0.98}$ (+0.2 σ)	$10^9 A_t e^{-2\tau}$	0.000	< 0.307 (+0.1 σ)
A_{217}^{dustTT}	93.8	93^{+10}_{-10} (−0.0 σ)	r_{drag}	147.49	$147.45^{+0.72}_{-0.72}$ (+0.6 σ)	f_{2000}^{143}	30.7	32^{+6}_{-6} (−0.1 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	k_D	0.14037	$0.14043^{+0.00097}_{-0.00095}$ (−0.5 σ)	$f_{2000}^{143 \times 217}$	33.34	34^{+4}_{-4} (−0.1 σ)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_D$	0.16096	$0.16091^{+0.00057}_{-0.00056}$ (−0.1 σ)	f_{2000}^{217}	107.84	$108.6^{+4.0}_{-4.1}$ (−0.1 σ)
H_0	67.69	$67.7^{+1.1}_{-1.1}$ (+0.7 σ)	z_{eq}	3374	3375^{+57}_{-57} (−0.7 σ)	χ_{small}^2	395.94	$397.4 (\nu: 1.8)$ (+0.1 σ)
Ω_Λ	0.6905	$0.690^{+0.014}_{-0.014}$ (+0.7 σ)	k_{eq}	0.010298	$0.01030^{+0.00017}_{-0.00017}$ (−0.7 σ)	χ_{lowl}^2	22.22	$23.2 (\nu: 2.1)$ (−0.2 σ)
Ω_m	0.3095	$0.310^{+0.014}_{-0.014}$ (−0.7 σ)	$100\theta_{\text{eq}}$	0.8182	$0.818^{+0.011}_{-0.010}$ (+0.7 σ)	χ_{plik}^2	760.6	$774.0 (\nu: 16.1)$ (+0.1 σ)
$\Omega_m h^2$	0.14184	$0.1419^{+0.0024}_{-0.0024}$ (−0.7 σ)	$100\theta_{s,\text{eq}}$	0.4520	$0.4519^{+0.0055}_{-0.0053}$ (+0.7 σ)	$\chi_{6\text{DF}}^2$	0.017	0.055 ($\nu: 0.0$)
$\Omega_m h^3$	0.09601	$0.09606^{+0.00098}_{-0.00096}$ (−0.0 σ)	$H(0.15)$	72.95	$72.96^{+0.95}_{-0.92}$ (+0.7 σ)	χ_{MGS}^2	1.34	1.38 ($\nu: 0.1$)
σ_8	0.8066	$0.807^{+0.015}_{-0.015}$ (−0.5 σ)	$D_M(0.15)$	640.6	$640.5^{+9.2}_{-9.2}$ (−0.7 σ)	χ_{DR12BAO}^2	4.08	4.7 ($\nu: 1.2$)
S_8	0.8193	$0.820^{+0.029}_{-0.030}$ (−0.7 σ)	$H(0.38)$	83.02	$83.04^{+0.72}_{-0.69}$ (+0.7 σ)	χ_{prior}^2	1.5	7.4 ($\nu: 6.9$) (+0.0 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4488	$0.449^{+0.016}_{-0.016}$ (−0.7 σ)	$D_M(0.38)$	1528.2	1528^{+18}_{-19} (−0.7 σ)	χ_{BAO}^2	5.44	6.2 ($\nu: 0.8$)
$\sigma_8 \Omega_m^{0.25}$	0.6016	$0.602^{+0.016}_{-0.016}$ (−0.7 σ)	$H(0.51)$	89.72	$89.73^{+0.60}_{-0.57}$ (+0.7 σ)	χ_{CMB}^2	1178.8	$1194.6 (\nu: 16.8)$ (−0.0 σ)
$\sigma_8/h^{0.5}$	0.9804	$0.981^{+0.023}_{-0.023}$ (−0.6 σ)	$D_M(0.51)$	1980.0	1980^{+22}_{-22} (−0.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1185.74$; $\Delta\chi_{\text{eff}}^2 = -0.01$; $\bar{\chi}_{\text{eff}}^2 = 1208.12$; $\Delta\bar{\chi}_{\text{eff}}^2 = 2.09$; $R - 1 = 0.01047$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.00) MGS: 1.34 (Δ 0.06) DR12BAO: 4.08 (Δ -0.10) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.94 (Δ 0.06) commander_dx12_v3_2_29: 22.22 (Δ -0.61) plik_rd12_HM_v22_TT: 760.60 (Δ 0.50)

15.3 base_nrun_r_plikHM_TT_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022399	$0.02247^{+0.00047}_{-0.00044}$ (+1.1 σ)	$\sigma_8/h^{0.5}$	0.9706	$0.968^{+0.029}_{-0.028}$ (−1.4 σ)	$H(0.51)$	90.07	$90.20^{+0.83}_{-0.82}$ (+1.7 σ)
$\Omega_c h^2$	0.11731	$0.1170^{+0.0037}_{-0.0035}$ (−1.6 σ)	$r_{\text{drag}} h$	101.12	$101.4^{+3.0}_{-2.9}$ (+1.7 σ)	$D_M(0.51)$	1965.4	1961^{+33}_{-31} (−1.7 σ)
$100\theta_{\text{MC}}$	1.04121	$1.04133^{+0.00087}_{-0.00092}$ (+1.1 σ)	$\langle d^2 \rangle^{1/2}$	2.400	$2.385^{+0.072}_{-0.071}$ (−1.4 σ)	$H(0.61)$	95.60	$95.71^{+0.67}_{-0.68}$ (+1.7 σ)
τ	0.0566	$0.058^{+0.018}_{-0.017}$ (+0.5 σ)	z_{re}	7.86	$8.0^{+1.8}_{-1.7}$ (+0.4 σ)	$D_M(0.61)$	2288.5	2284^{+35}_{-33} (−1.7 σ)
$\ln(10^{10} A_s)$	3.0428	$3.046^{+0.037}_{-0.037}$ (+0.1 σ)	$10^9 A_s$	2.096	$2.104^{+0.078}_{-0.076}$ (+0.1 σ)	$H(2.33)$	234.85	$234.7^{+2.3}_{-2.2}$ (−1.5 σ)
n_s	0.9706	$0.971^{+0.010}_{-0.011}$ (+1.4 σ)	$10^9 A_s e^{-2\tau}$	1.8722	$1.872^{+0.028}_{-0.026}$ (−1.0 σ)	$D_M(2.33)$	5752.0	5747^{+31}_{-32} (−1.5 σ)
$dn_s/d \ln k$	−0.0020	$−0.009^{+0.016}_{-0.017}$ (−0.1 σ)	D_{40}	1212.9	1220^{+45}_{-41} (−0.6 σ)	$f\sigma_8(0.15)$	0.4450	$0.443^{+0.022}_{-0.020}$ (−1.6 σ)
r	0.000	< 0.191 (+0.3 σ)	D_{220}	5733	5727^{+74}_{-79} (+0.4 σ)	$\sigma_8(0.15)$	0.7431	$0.742^{+0.015}_{-0.016}$ (−0.9 σ)
y_{cal}	1.00062	$1.0005^{+0.0049}_{-0.0048}$ (+0.0 σ)	D_{810}	2537.0	2537^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.38)$	0.4658	$0.464^{+0.017}_{-0.017}$ (−1.5 σ)
A_{217}^{CIB}	49.8	48^{+10}_{-10} (−0.0 σ)	D_{1420}	817.1	$816.0^{+9.8}_{-9.6}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6600	$0.659^{+0.013}_{-0.014}$ (−0.6 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.14	—	D_{2000}	230.57	$229.8^{+3.5}_{-3.5}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4658	$0.464^{+0.015}_{-0.015}$ (−1.5 σ)
A_{143}^{tSZ}	7.23	$5.0^{+4.0}_{-3.9}$ (+0.1 σ)	$n_{s,0.002}$	0.977	$0.999^{+0.053}_{-0.050}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6182	$0.618^{+0.012}_{-0.012}$ (−0.4 σ)
A_{100}^{PS}	255	264^{+60}_{-50} (−0.1 σ)	Y_{P}	0.245407	$0.24543^{+0.00019}_{-0.00018}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4618	$0.461^{+0.014}_{-0.013}$ (−1.4 σ)
A_{143}^{PS}	45.8	49^{+20}_{-20} (−0.2 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246734	$0.24676^{+0.00019}_{-0.00018}$ (+1.0 σ)	$\sigma_8(0.61)$	0.5885	$0.588^{+0.011}_{-0.011}$ (−0.3 σ)
$A_{143 \times 217}^{\text{PS}}$	41.3	42^{+20}_{-20} (−0.1 σ)	$10^5 \text{D}/\text{H}$	2.580	$2.569^{+0.083}_{-0.084}$ (−1.1 σ)	$f\sigma_8(2.33)$	0.2972	$0.2972^{+0.0054}_{-0.0054}$ (+0.0 σ)
A_{217}^{PS}	116.5	114^{+20}_{-20} (−0.1 σ)	Age/Gyr	13.774	$13.762^{+0.070}_{-0.072}$ (−1.5 σ)	$\sigma_8(2.33)$	0.3070	$0.3070^{+0.0057}_{-0.0054}$ (+0.4 σ)
A^{kSZ}	0.0	—	z_*	1089.65	$1089.54^{+0.73}_{-0.71}$ (−1.5 σ)	$r_{0.002}$	0.000	< 0.208 (+0.4 σ)
A_{100}^{dustTT}	8.93	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	r_*	145.11	$145.13^{+0.97}_{-0.90}$ (+1.4 σ)	$r_{0.01}$	0.000	< 0.194 (+0.3 σ)
A_{143}^{dustTT}	10.81	$10.8^{+3.3}_{-3.5}$ (−0.0 σ)	$100\theta_*$	1.04140	$1.04150^{+0.00084}_{-0.00091}$ (+1.0 σ)	$\ln(10^{10} A_t)$	−6.44	$−0.1^{+2.0}_{-2.4}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.2	$18.4^{+6.6}_{-6.3}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.934	$13.935^{+0.092}_{-0.084}$ (+1.3 σ)	r_{10}	0.000	< 0.111 (+0.3 σ)
A_{217}^{dustTT}	94.3	93^{+10}_{-10} (+0.0 σ)	z_{drag}	1059.82	$1059.9^{+1.1}_{-1.0}$ (+0.7 σ)	$10^9 A_t$	0.000	< 0.402 (+0.3 σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0011}$ (−0.0 σ)	r_{drag}	147.77	$147.8^{+1.0}_{-0.93}$ (+1.3 σ)	$10^9 A_t e^{-2\tau}$	0.000	< 0.358 (+0.3 σ)
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	k_{D}	0.14017	$0.1402^{+0.0011}_{-0.0012}$ (−0.8 σ)	f_{2000}^{143}	30.2	31^{+6}_{-6} (−0.3 σ)
H_0	68.43	$68.6^{+1.5}_{-1.6}$ (+1.7 σ)	$100\theta_{\text{D}}$	0.16085	$0.16079^{+0.00057}_{-0.00056}$ (−0.6 σ)	$f_{2000}^{143 \times 217}$	32.92	34^{+4}_{-4} (−0.3 σ)
Ω_{Λ}	0.7003	$0.702^{+0.021}_{-0.022}$ (+1.6 σ)	z_{eq}	3339	3334^{+85}_{-84} (−1.6 σ)	f_{2000}^{217}	107.45	$108.2^{+4.1}_{-4.0}$ (−0.3 σ)
Ω_{m}	0.2997	$0.298^{+0.022}_{-0.021}$ (−1.6 σ)	k_{eq}	0.010190	$0.01018^{+0.00026}_{-0.00026}$ (−1.6 σ)	χ_{simall}^2	396.3	$397.9 (\nu: 2.8)$ (+0.3 σ)
$\Omega_{\text{m}} h^2$	0.14036	$0.1402^{+0.0036}_{-0.0035}$ (−1.6 σ)	$100\theta_{\text{eq}}$	0.8251	$0.826^{+0.016}_{-0.016}$ (+1.7 σ)	χ_{lowl}^2	21.83	$22.6 (\nu: 1.6)$ (−0.5 σ)
$\Omega_{\text{m}} h^3$	0.09605	$0.0962^{+0.0011}_{-0.00098}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.4555	$0.4562^{+0.0081}_{-0.0083}$ (+1.6 σ)	χ_{plik}^2	762.7	$777.2 (\nu: 21.3)$ (+0.6 σ)
σ_8	0.8029	$0.802^{+0.018}_{-0.018}$ (−1.0 σ)	$H(0.15)$	73.58	$73.8^{+1.3}_{-1.4}$ (+1.7 σ)	χ_{H073p45}^2	9.1	$8.7 (\nu: 4.4)$
S_8	0.8026	$0.799^{+0.041}_{-0.040}$ (−1.6 σ)	$D_M(0.15)$	634.4	633^{+14}_{-13} (−1.7 σ)	χ_{prior}^2	1.5	$7.5 (\nu: 7.0)$ (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4396	$0.438^{+0.023}_{-0.022}$ (−1.6 σ)	$H(0.38)$	83.48	$83.6^{+1.0}_{-1.0}$ (+1.7 σ)	χ_{CMB}^2	1180.8	$1197.6 (\nu: 22.5)$ (+0.5 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5941	$0.592^{+0.021}_{-0.021}$ (−1.5 σ)	$D_M(0.38)$	1515.7	1512^{+28}_{-26} (−1.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1191.50$; $\Delta\chi_{\text{eff}}^2 = -0.07$; $\bar{\chi}_{\text{eff}}^2 = 1213.73$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.65$; $R - 1 = 0.05584$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.27 (Δ 0.20) commander_dx12_v3.2.29: 21.83 (Δ -0.26) plik_rd12_HM_v22_TT: 762.71 (Δ -0.31) Hubble - H073p45: 9.14 (Δ 0.16)

15.4 base_nrun_r_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02222^{+0.00047}_{-0.00045} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.031}_{-0.032} \quad (+0.1\sigma)$	$H(0.51)$	$89.45^{+0.91}_{-0.85} \quad (+0.0\sigma)$
$\Omega_{\text{c}} h^2$	$0.1204^{+0.0041}_{-0.0041} \quad (-0.0\sigma)$	$r_{\text{drag}} h$	$98.7^{+3.2}_{-3.1} \quad (+0.0\sigma)$	$D_{\text{M}}(0.51)$	$1992^{+36}_{-37} \quad (-0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04083^{+0.00093}_{-0.00095} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.077}_{-0.078} \quad (+0.0\sigma)$	$H(0.61)$	$95.12^{+0.74}_{-0.68} \quad (+0.0\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	z_{re}	$< 9.05 \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	$2317^{+39}_{-40} \quad (-0.0\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.048^{+0.031}_{-0.029} \quad (+0.2\sigma)$	$10^9 A_{\text{s}}$	$2.107^{+0.066}_{-0.060} \quad (+0.2\sigma)$	$H(2.33)$	$236.7^{+2.5}_{-2.5} \quad (-0.0\sigma)$
n_{s}	$0.963^{+0.012}_{-0.011} \quad (+0.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.887^{+0.028}_{-0.028} \quad (-0.0\sigma)$	$D_{\text{M}}(2.33)$	$5772^{+32}_{-33} \quad (-0.0\sigma)$
$\text{d}n_{\text{s}}/\text{d} \ln k$	$-0.008^{+0.016}_{-0.017} \quad (-0.0\sigma)$	D_{40}	$1233^{+46}_{-43} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.024}_{-0.024} \quad (+0.0\sigma)$
r	$< 0.155 \quad (+0.0\sigma)$	D_{220}	$5711^{+80}_{-81} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.014}_{-0.014} \quad (+0.1\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	D_{810}	$2539^{+28}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.018}_{-0.019} \quad (+0.0\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{1420}	$814^{+10}_{-9.9} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.012}_{-0.011} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.0^{+3.8}_{-3.7} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.016}_{-0.016} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.0\sigma)$	$n_{\text{s},0.002}$	$0.989^{+0.053}_{-0.050} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0094} \quad (+0.1\sigma)$
A_{100}^{PS}	$267^{+60}_{-60} \quad (-0.0\sigma)$	Y_{P}	$0.24533^{+0.00018}_{-0.00021} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.014}_{-0.015} \quad (+0.1\sigma)$
A_{143}^{PS}	$51^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00018}_{-0.00021} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0098}_{-0.0086} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.614^{+0.086}_{-0.085} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0045}_{-0.0043} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.816^{+0.073}_{-0.074} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0047}_{-0.0044} \quad (+0.2\sigma)$
A^{kSZ}	—	z_*	$1090.14^{+0.81}_{-0.81} \quad (-0.0\sigma)$	$r_{0.002}$	$< 0.159 \quad (+0.0\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.44^{+0.97}_{-0.96} \quad (+0.0\sigma)$	$r_{0.01}$	$< 0.154 \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.04103^{+0.00091}_{-0.00093} \quad (+0.0\sigma)$	$\ln(10^{10} A_{\text{t}})$	$-0.4^{+1.9}_{-2.5} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.4}_{-6.5} \quad (-0.0\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.875^{+0.089}_{-0.089} \quad (+0.0\sigma)$	r_{10}	$< 0.0839 \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.62^{+0.99}_{-0.95} \quad (+0.0\sigma)$	$10^9 A_{\text{t}}$	$< 0.327 \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.15^{+0.98}_{-0.98} \quad (+0.0\sigma)$	$10^9 A_{\text{t}} e^{-2\tau}$	$< 0.292 \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{D}	$0.1407^{+0.0011}_{-0.0011} \quad (+0.0\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$67.1^{+1.9}_{-1.8} \quad (+0.0\sigma)$	$100\theta_{\text{D}}$	$0.16094^{+0.00056}_{-0.00056} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.0\sigma)$
Ω_{Λ}	$0.681^{+0.025}_{-0.026} \quad (+0.0\sigma)$	z_{eq}	$3409^{+95}_{-95} \quad (-0.0\sigma)$	f_{2000}^{217}	$108.8^{+4.1}_{-4.1} \quad (-0.0\sigma)$
Ω_{m}	$0.319^{+0.026}_{-0.025} \quad (-0.0\sigma)$	k_{eq}	$0.01040^{+0.00029}_{-0.00029} \quad (-0.0\sigma)$	χ_{simall}^2	$397.2 \quad (\nu: 1.6) \quad (-0.1\sigma)$
$\Omega_{\text{m}} h^2$	$0.1433^{+0.0040}_{-0.0040} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	$0.812^{+0.018}_{-0.017} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 2.5) \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.09608^{+0.00098}_{-0.00097} \quad (+0.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.4487^{+0.0092}_{-0.0089} \quad (+0.0\sigma)$	χ_{plik}^2	$773.6 \quad (\nu: 17.0) \quad (-0.0\sigma)$
σ_8	$0.812^{+0.017}_{-0.017} \quad (+0.1\sigma)$	$H(0.15)$	$72.4^{+1.6}_{-1.5} \quad (+0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (-0.0\sigma)$
S_8	$0.837^{+0.047}_{-0.047} \quad (+0.0\sigma)$	$D_{\text{M}}(0.15)$	$646^{+16}_{-16} \quad (-0.0\sigma)$	χ_{CMB}^2	$1194.4 \quad (\nu: 17.2) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.459^{+0.026}_{-0.026} \quad (+0.0\sigma)$	$H(0.38)$	$82.7^{+1.2}_{-1.1} \quad (+0.0\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.610^{+0.023}_{-0.023} \quad (+0.0\sigma)$	$D_{\text{M}}(0.38)$	$1539^{+31}_{-32} \quad (-0.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1201.72; \Delta \bar{\chi}_{\text{eff}}^2 = 2.40; R - 1 = 0.00869$$

15.5 base_nrun_r_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02231^{+0.00043}_{-0.00042} \quad (+0.4\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.9}_{-1.8} \quad (+0.7\sigma)$	$H(0.61)$	$95.34^{+0.51}_{-0.49} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1189^{+0.0024}_{-0.0024} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.417^{+0.057}_{-0.057} \quad (-0.5\sigma)$	$D_M(0.61)$	$2304^{+24}_{-24} \quad (-0.7\sigma)$
$100\theta_{\text{MC}}$	$1.04102^{+0.00082}_{-0.00084} \quad (+0.4\sigma)$	z_{re}	$< 9.15 \quad (+0.3\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.6} \quad (-0.7\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.3\sigma)$	$10^9 A_s$	$2.105^{+0.067}_{-0.062} \quad (+0.1\sigma)$	$D_M(2.33)$	$5763^{+25}_{-25} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.032}_{-0.030} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.025}_{-0.024} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-0.7\sigma)$
n_s	$0.9663^{+0.0088}_{-0.0087} \quad (+0.6\sigma)$	D_{40}	$1228^{+46}_{-42} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.3\sigma)$
$dn_s/d \ln k$	$-0.008^{+0.016}_{-0.017} \quad (-0.0\sigma)$	D_{220}	$5717^{+80}_{-80} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.012} \quad (-0.6\sigma)$
r	$< 0.165 \quad (+0.1\sigma)$	D_{810}	$2538^{+28}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.010} \quad (-0.1\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0048} \quad (+0.0\sigma)$	D_{1420}	$815^{+10}_{-9.7} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{2000}	$229.3^{+3.7}_{-3.7} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6197^{+0.0098}_{-0.0095} \quad (-0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$n_{\text{s},0.002}$	$0.992^{+0.053}_{-0.049} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.010} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.0\sigma)$	Y_{P}	$0.24537^{+0.00016}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5897^{+0.0093}_{-0.0089} \quad (-0.0\sigma)$
A_{100}^{PS}	$266^{+60}_{-60} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24669^{+0.00016}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0046}_{-0.0044} \quad (+0.1\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.1\sigma)$	10^5D/H	$2.598^{+0.080}_{-0.077} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0048}_{-0.0045} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.796^{+0.057}_{-0.058} \quad (-0.6\sigma)$	$r_{0.002}$	$< 0.170 \quad (+0.1\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	z_*	$1089.91^{+0.61}_{-0.61} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.164 \quad (+0.1\sigma)$
A^{kSZ}	—	r_*	$144.76^{+0.64}_{-0.65} \quad (+0.7\sigma)$	$\ln(10^{10} A_{\text{t}})$	$-0.3^{+1.9}_{-2.4} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04121^{+0.00080}_{-0.00083} \quad (+0.4\sigma)$	r_{10}	$< 0.0904 \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.4} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.903^{+0.062}_{-0.063} \quad (+0.6\sigma)$	$10^9 A_{\text{t}}$	$< 0.347 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.5}_{-6.5} \quad (-0.0\sigma)$	z_{drag}	$1059.71^{+0.95}_{-0.96} \quad (+0.2\sigma)$	$10^9 A_{\text{t}} e^{-2\tau}$	$< 0.310 \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	r_{drag}	$147.45^{+0.72}_{-0.72} \quad (+0.6\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{D}	$0.14044^{+0.00096}_{-0.00095} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_{\text{D}}$	$0.16090^{+0.00057}_{-0.00055} \quad (-0.2\sigma)$	f_{2000}^{217}	$108.6^{+4.0}_{-4.1} \quad (-0.1\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.7\sigma)$	z_{eq}	$3375^{+57}_{-57} \quad (-0.7\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 1.9) \quad (+0.0\sigma)$
Ω_{Λ}	$0.690^{+0.014}_{-0.014} \quad (+0.7\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-0.7\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 2.1) \quad (-0.2\sigma)$
Ω_{m}	$0.310^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.818^{+0.011}_{-0.010} \quad (+0.7\sigma)$	χ_{plik}^2	$773.9 \quad (\nu: 16.1) \quad (+0.0\sigma)$
$\Omega_{\text{m}} h^2$	$0.1419^{+0.0024}_{-0.0024} \quad (-0.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4519^{+0.0055}_{-0.0053} \quad (+0.7\sigma)$	$\chi_{6\text{DF}}^2$	$0.054 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09607^{+0.00099}_{-0.00096} \quad (+0.0\sigma)$	$H(0.15)$	$72.97^{+0.94}_{-0.92} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.39 \quad (\nu: 0.1)$
σ_8	$0.808^{+0.015}_{-0.014} \quad (-0.4\sigma)$	$D_M(0.15)$	$640.4^{+9.2}_{-9.1} \quad (-0.7\sigma)$	χ_{DR12BAO}^2	$4.7 \quad (\nu: 1.2)$
S_8	$0.820^{+0.029}_{-0.029} \quad (-0.7\sigma)$	$H(0.38)$	$83.05^{+0.71}_{-0.69} \quad (+0.7\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_M(0.38)$	$1528^{+18}_{-19} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.603^{+0.015}_{-0.015} \quad (-0.6\sigma)$	$H(0.51)$	$89.74^{+0.59}_{-0.57} \quad (+0.7\sigma)$	χ_{CMB}^2	$1194.4 \quad (\nu: 16.6) \quad (-0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.982^{+0.022}_{-0.022} \quad (-0.6\sigma)$	$D_M(0.51)$	$1979^{+22}_{-22} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1207.94; \Delta \bar{\chi}_{\text{eff}}^2 = 2.18; R - 1 = 0.01172$$

15.6 base_nrun_r_plikHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02247^{+0.00047}_{-0.00044} \quad (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.968^{+0.029}_{-0.028} \quad (-1.4\sigma)$	$H(0.51)$	$90.21^{+0.82}_{-0.82} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1170^{+0.0037}_{-0.0037} \quad (-1.6\sigma)$	$r_{\text{drag}} h$	$101.4^{+3.0}_{-2.9} \quad (+1.7\sigma)$	$D_M(0.51)$	$1961^{+32}_{-30} \quad (-1.7\sigma)$
$100\theta_{\text{MC}}$	$1.04133^{+0.00087}_{-0.00092} \quad (+1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.386^{+0.071}_{-0.066} \quad (-1.3\sigma)$	$H(0.61)$	$95.72^{+0.67}_{-0.67} \quad (+1.7\sigma)$
τ	$0.059^{+0.017}_{-0.015} \quad (+0.6\sigma)$	z_{re}	$< 9.46 \quad (+0.5\sigma)$	$D_M(0.61)$	$2284^{+35}_{-33} \quad (-1.7\sigma)$
$\ln(10^{10} A_s)$	$3.048^{+0.035}_{-0.033} \quad (+0.2\sigma)$	$10^9 A_s$	$2.107^{+0.075}_{-0.068} \quad (+0.2\sigma)$	$H(2.33)$	$234.7^{+2.3}_{-2.2} \quad (-1.5\sigma)$
n_s	$0.971^{+0.010}_{-0.011} \quad (+1.4\sigma)$	$10^9 A_s e^{-2\tau}$	$1.872^{+0.027}_{-0.026} \quad (-1.0\sigma)$	$D_M(2.33)$	$5746^{+31}_{-32} \quad (-1.6\sigma)$
$dn_s/d \ln k$	$-0.009^{+0.016}_{-0.017} \quad (-0.1\sigma)$	D_{40}	$1220^{+45}_{-41} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.022}_{-0.020} \quad (-1.6\sigma)$
r	$< 0.192 \quad (+0.3\sigma)$	D_{220}	$5727^{+75}_{-79} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.743^{+0.015}_{-0.014} \quad (-0.8\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.017}_{-0.017} \quad (-1.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{1420}	$816.0^{+9.9}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.9^{+3.5}_{-3.5} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.015}_{-0.015} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-3.9} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.999^{+0.055}_{-0.050} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{100}^{PS}	$263^{+60}_{-50} \quad (-0.1\sigma)$	Y_{P}	$0.24543^{+0.00019}_{-0.00018} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.013}_{-0.013} \quad (-1.4\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.2\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24676^{+0.00019}_{-0.00018} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.010} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.568^{+0.083}_{-0.085} \quad (-1.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	Age/Gyr	$13.762^{+0.070}_{-0.072} \quad (-1.5\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0052}_{-0.0050} \quad (+0.5\sigma)$
A^{kSZ}	—	z_*	$1089.53^{+0.74}_{-0.68} \quad (-1.5\sigma)$	$r_{0.002}$	$< 0.210 \quad (+0.4\sigma)$
A_{100}^{dustTT}	$9.1^{+3.6}_{-3.6} \quad (+0.1\sigma)$	r_*	$145.13^{+0.97}_{-0.90} \quad (+1.4\sigma)$	$r_{0.01}$	$< 0.194 \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.8^{+3.3}_{-3.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.04151^{+0.00084}_{-0.00091} \quad (+1.0\sigma)$	$\ln(10^{10} A_t)$	$-0.1^{+1.9}_{-2.4} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.4^{+6.6}_{-6.3} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.935^{+0.092}_{-0.084} \quad (+1.3\sigma)$	r_{10}	$< 0.111 \quad (+0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1060.0^{+1.0}_{-0.98} \quad (+0.7\sigma)$	$10^9 A_t$	$< 0.403 \quad (+0.3\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.8^{+1.0}_{-0.93} \quad (+1.3\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.359 \quad (+0.3\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.1402^{+0.0011}_{-0.0012} \quad (-0.8\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.3\sigma)$
H_0	$68.6^{+1.5}_{-1.6} \quad (+1.7\sigma)$	$100\theta_{\text{D}}$	$0.16078^{+0.00057}_{-0.00056} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.3\sigma)$
Ω_{Λ}	$0.702^{+0.021}_{-0.022} \quad (+1.7\sigma)$	z_{eq}	$3333^{+85}_{-84} \quad (-1.6\sigma)$	f_{2000}^{217}	$108.2^{+4.1}_{-3.9} \quad (-0.3\sigma)$
Ω_{m}	$0.298^{+0.022}_{-0.021} \quad (-1.7\sigma)$	k_{eq}	$0.01017^{+0.00026}_{-0.00026} \quad (-1.6\sigma)$	χ_{small}^2	$397.8 \quad (\nu: 2.8) \quad (+0.3\sigma)$
$\Omega_{\text{m}} h^2$	$0.1401^{+0.0036}_{-0.0035} \quad (-1.6\sigma)$	$100\theta_{\text{eq}}$	$0.827^{+0.017}_{-0.016} \quad (+1.7\sigma)$	χ_{lowl}^2	$22.5 \quad (\nu: 1.6) \quad (-0.5\sigma)$
$\Omega_{\text{m}} h^3$	$0.0962^{+0.0010}_{-0.0010} \quad (+0.2\sigma)$	$100\theta_{s,\text{eq}}$	$0.4562^{+0.0086}_{-0.0083} \quad (+1.6\sigma)$	χ_{plik}^2	$777.1 \quad (\nu: 21.1) \quad (+0.6\sigma)$
σ_8	$0.802^{+0.018}_{-0.016} \quad (-1.0\sigma)$	$H(0.15)$	$73.8^{+1.3}_{-1.4} \quad (+1.7\sigma)$	χ_{H073p45}^2	$8.6 \quad (\nu: 4.3)$
S_8	$0.799^{+0.042}_{-0.039} \quad (-1.6\sigma)$	$D_M(0.15)$	$633^{+14}_{-13} \quad (-1.7\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 7.0) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.438^{+0.023}_{-0.021} \quad (-1.6\sigma)$	$H(0.38)$	$83.64^{+0.99}_{-1.0} \quad (+1.8\sigma)$	χ_{CMB}^2	$1197.5 \quad (\nu: 22.3) \quad (+0.5\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.593^{+0.021}_{-0.020} \quad (-1.5\sigma)$	$D_M(0.38)$	$1512^{+28}_{-25} \quad (-1.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1213.56; \Delta \bar{\chi}_{\text{eff}}^2 = 1.75; R - 1 = 0.05904$$

15.7 base_nrun_r_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022399	$0.02241^{+0.00031}_{-0.00030}$ (+0.9 σ)	σ_8	0.8129	$0.812^{+0.015}_{-0.015}$ (+0.1 σ)	$H(0.38)$	82.84	$82.87^{+0.77}_{-0.74}$ (+0.4 σ)
$\Omega_c h^2$	0.12022	$0.1202^{+0.0028}_{-0.0027}$ (−0.2 σ)	S_8	0.8348	$0.833^{+0.033}_{-0.032}$ (−0.1 σ)	$D_M(0.38)$	1534.5	1534^{+21}_{-21} (−0.4 σ)
$100\theta_{MC}$	1.04090	$1.04091^{+0.00061}_{-0.00063}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4572	$0.456^{+0.018}_{-0.018}$ (−0.1 σ)	$H(0.51)$	89.61	$89.64^{+0.60}_{-0.58}$ (+0.5 σ)
τ	0.0561	$0.056^{+0.016}_{-0.016}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6097	$0.609^{+0.017}_{-0.017}$ (−0.1 σ)	$D_M(0.51)$	1987.0	1986^{+24}_{-24} (−0.4 σ)
$\ln(10^{10} A_s)$	3.0495	$3.050^{+0.034}_{-0.033}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9910	$0.989^{+0.024}_{-0.024}$ (−0.1 σ)	$H(0.61)$	95.272	$95.30^{+0.49}_{-0.46}$ (+0.5 σ)
n_s	0.9647	$0.9643^{+0.0093}_{-0.0093}$ (+0.3 σ)	$r_{drag} h$	98.92	$99.0^{+2.1}_{-2.1}$ (+0.2 σ)	$D_M(0.61)$	2311.5	2311^{+26}_{-26} (−0.4 σ)
$dn_s/d \ln k$	−0.0044	$−0.009^{+0.014}_{-0.015}$ (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.444	$2.433^{+0.059}_{-0.061}$ (−0.1 σ)	$H(2.33)$	236.73	$236.7^{+1.7}_{-1.6}$ (−0.0 σ)
r	0.000	< 0.168 (+0.2 σ)	z_{re}	7.86	$7.9^{+1.6}_{-1.6}$ (+0.3 σ)	$D_M(2.33)$	5763.3	5762^{+21}_{-22} (−0.6 σ)
y_{cal}	1.00053	$1.0007^{+0.0050}_{-0.0048}$ (+0.1 σ)	$10^9 A_s$	2.110	$2.113^{+0.073}_{-0.070}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4614	$0.461^{+0.017}_{-0.016}$ (−0.1 σ)
A_{217}^{CIB}	48.9	48^{+10}_{-10} (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8865	$1.888^{+0.024}_{-0.024}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7507	$0.750^{+0.013}_{-0.013}$ (+0.1 σ)
$\xi^{tSZ \times CIB}$	0.26	—	D_{40}	1221.1	1232^{+43}_{-39} (−0.0 σ)	$f\sigma_8(0.38)$	0.4787	$0.478^{+0.014}_{-0.014}$ (−0.1 σ)
A_{143}^{tSZ}	7.29	$5.1^{+3.8}_{-4.0}$ (+0.1 σ)	D_{220}	5730	5726^{+77}_{-76} (+0.4 σ)	$\sigma_8(0.38)$	0.6649	$0.664^{+0.011}_{-0.011}$ (+0.2 σ)
A_{100}^{PS}	253	264^{+60}_{-50} (−0.1 σ)	D_{810}	2541.9	2543^{+27}_{-26} (+0.3 σ)	$f\sigma_8(0.51)$	0.4768	$0.476^{+0.012}_{-0.012}$ (−0.1 σ)
A_{143}^{PS}	46.8	49^{+20}_{-20} (−0.3 σ)	D_{1420}	817.1	$816.0^{+9.8}_{-9.5}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6220	$0.621^{+0.010}_{-0.010}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	44.0	43^{+20}_{-20} (−0.1 σ)	D_{2000}	230.61	$229.9^{+3.6}_{-3.5}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4714	$0.471^{+0.011}_{-0.011}$ (−0.0 σ)
A_{217}^{PS}	118.0	115^{+20}_{-20} (+0.0 σ)	$n_{s,0.002}$	0.9789	$0.995^{+0.048}_{-0.044}$ (+0.3 σ)	$\sigma_8(0.61)$	0.5917	$0.5911^{+0.0098}_{-0.0098}$ (+0.3 σ)
A^{kSZ}	0.0	—	Y_P	0.245407	$0.24541^{+0.00011}_{-0.00012}$ (+0.8 σ)	$f\sigma_8(2.33)$	0.29816	$0.2979^{+0.0050}_{-0.0049}$ (+0.3 σ)
A_{100}^{dustTT}	8.90	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P^{BBN}	0.246733	$0.24674^{+0.00012}_{-0.00012}$ (+0.8 σ)	$\sigma_8(2.33)$	0.3072	$0.3069^{+0.0052}_{-0.0051}$ (+0.3 σ)
A_{143}^{dustTT}	11.06	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$10^5 D/H$	2.580	$2.578^{+0.056}_{-0.055}$ (−0.9 σ)	$r_{0.002}$	0.000	< 0.174 (+0.2 σ)
$A_{143 \times 217}^{dustTT}$	19.7	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	Age/Gyr	13.7963	$13.794^{+0.048}_{-0.049}$ (−0.6 σ)	$r_{0.01}$	0.000	< 0.167 (+0.2 σ)
A_{217}^{dustTT}	94.6	93^{+10}_{-10} (+0.0 σ)	z_*	1089.90	$1089.88^{+0.56}_{-0.56}$ (−0.7 σ)	$\ln(10^{10} A_t)$	−6.53	$−0.1^{+1.8}_{-2.4}$ (+0.2 σ)
A_{100}^{dustTE}	0.114	$0.116^{+0.075}_{-0.075}$	r_*	144.35	$144.36^{+0.62}_{-0.61}$ (−0.1 σ)	r_{10}	0.0000	< 0.0923 (+0.2 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.136^{+0.057}_{-0.058}$	$100\theta_*$	1.04107	$1.04109^{+0.00060}_{-0.00062}$ (+0.2 σ)	$10^9 A_t$	0.000	< 0.355 (+0.2 σ)
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.16}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.866	$13.866^{+0.058}_{-0.057}$ (−0.2 σ)	$10^9 A_t e^{-2\tau}$	0.000	< 0.316 (+0.2 σ)
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	z_{drag}	1060.01	$1060.05^{+0.65}_{-0.61}$ (+0.9 σ)	f_{2000}^{143}	29.9	31^{+6}_{-6} (−0.3 σ)
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.16}_{-0.16}$	r_{drag}	147.00	$147.00^{+0.62}_{-0.61}$ (−0.3 σ)	$f_{2000}^{143 \times 217}$	32.71	33^{+4}_{-4} (−0.4 σ)
A_{217}^{dustTE}	2.09	$2.08^{+0.52}_{-0.52}$	k_D	0.14098	$0.14099^{+0.00067}_{-0.00067}$ (+0.5 σ)	f_{2000}^{217}	107.32	$108.1^{+4.0}_{-3.9}$ (−0.4 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_D$	0.160708	$0.16069^{+0.00036}_{-0.00036}$ (−0.9 σ)	χ_{simall}^2	396.34	$397.6 (\nu: 2.0)$ (+0.2 σ)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3408	3407^{+62}_{-62} (−0.1 σ)	χ_{lowl}^2	22.29	$23.3 (\nu: 1.7)$ (−0.2 σ)
H_0	67.29	$67.3^{+1.2}_{-1.2}$ (+0.3 σ)	k_{eq}	0.010402	$0.01040^{+0.00019}_{-0.00019}$ (−0.1 σ)	χ_{plik}^2	2344.9	$2361.1 (\nu: 18.7)$ (+272.2 σ)
Ω_Λ	0.6836	$0.684^{+0.017}_{-0.017}$ (+0.3 σ)	$100\theta_{eq}$	0.8123	$0.813^{+0.012}_{-0.012}$ (+0.1 σ)	χ_{prior}^2	1.9	$11.6 (\nu: 10.4)$ (+1.2 σ)
Ω_m	0.3164	$0.316^{+0.017}_{-0.017}$ (−0.3 σ)	$100\theta_{s,eq}$	0.4488	$0.4490^{+0.0060}_{-0.0059}$ (+0.1 σ)	χ_{CMB}^2	2763.6	$2782.0 (\nu: 19.3)$ (+268.9 σ)
$\Omega_m h^2$	0.14326	$0.1432^{+0.0026}_{-0.0026}$ (−0.1 σ)	$H(0.15)$	72.63	$72.7^{+1.1}_{-1.0}$ (+0.4 σ)			
$\Omega_m h^3$	0.09640	$0.09643^{+0.00061}_{-0.00061}$ (+0.7 σ)	$D_M(0.15)$	643.9	644^{+10}_{-10} (−0.3 σ)			

Best-fit $\chi_{eff}^2 = 2765.44$; $\Delta\chi_{eff}^2 = -0.33$; $\bar{\chi}_{eff}^2 = 2793.62$; $\Delta\bar{\chi}_{eff}^2 = 1.86$; $R - 1 = 0.01370$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.35 (Δ 0.30) commander_dx12_v3.2.29: 22.29 (Δ -0.96) plik_rd12_HM_v22b_TTTEEE: 2344.95 (Δ 0.30)

15.8 base_nrun_r_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022443	$0.02247^{+0.00028}_{-0.00028}$ (+1.1 σ)	S_8	0.8261	$0.824^{+0.026}_{-0.025}$ (−0.5 σ)	$H(0.51)$	89.770	$89.82^{+0.46}_{-0.46}$ (+0.9 σ)
$\Omega_c h^2$	0.11944	$0.1193^{+0.0020}_{-0.0020}$ (−0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4525	$0.451^{+0.014}_{-0.014}$ (−0.5 σ)	$D_M(0.51)$	1980.2	1978^{+18}_{-18} (−0.8 σ)
$100\theta_{MC}$	1.04101	$1.04102^{+0.00057}_{-0.00058}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6057	$0.604^{+0.014}_{-0.014}$ (−0.5 σ)	$H(0.61)$	95.395	$95.44^{+0.38}_{-0.38}$ (+0.9 σ)
τ	0.0568	$0.057^{+0.016}_{-0.016}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9858	$0.984^{+0.020}_{-0.021}$ (−0.4 σ)	$D_M(0.61)$	2304.2	2302^{+19}_{-19} (−0.8 σ)
$\ln(10^{10} A_s)$	3.0489	$3.051^{+0.034}_{-0.034}$ (+0.3 σ)	$r_{drag} h$	99.54	$99.7^{+1.5}_{-1.5}$ (+0.6 σ)	$H(2.33)$	236.27	$236.2^{+1.2}_{-1.2}$ (−0.4 σ)
n_s	0.9667	$0.9665^{+0.0080}_{-0.0080}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.432	$2.420^{+0.052}_{-0.054}$ (−0.5 σ)	$D_M(2.33)$	5758.2	5756^{+18}_{-18} (−1.0 σ)
$dn_s/d \ln k$	−0.0038	$−0.009^{+0.014}_{-0.015}$ (−0.2 σ)	z_{re}	7.91	$7.9^{+1.6}_{-1.6}$ (+0.4 σ)	$f\sigma_8(0.15)$	0.4571	$0.456^{+0.013}_{-0.013}$ (−0.5 σ)
r	0.001	< 0.176 (+0.3 σ)	$10^9 A_s$	2.109	$2.113^{+0.073}_{-0.070}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7491	$0.748^{+0.013}_{-0.013}$ (−0.1 σ)
y_{cal}	1.00054	$1.0008^{+0.0050}_{-0.0048}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8827	$1.884^{+0.022}_{-0.022}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4754	$0.474^{+0.011}_{-0.011}$ (−0.5 σ)
A_{217}^{CIB}	48.8	48^{+10}_{-10} (−0.1 σ)	D_{40}	1218.7	1230^{+42}_{-38} (−0.2 σ)	$\sigma_8(0.38)$	0.6641	$0.663^{+0.011}_{-0.011}$ (+0.1 σ)
$\xi^{tSZ \times CIB}$	0.25	—	D_{220}	5733	5729^{+77}_{-75} (+0.4 σ)	$f\sigma_8(0.51)$	0.4740	$0.473^{+0.010}_{-0.010}$ (−0.4 σ)
A_{143}^{tSZ}	7.28	$5.2^{+3.8}_{-4.0}$ (+0.2 σ)	D_{810}	2541.1	2542^{+27}_{-26} (+0.2 σ)	$\sigma_8(0.51)$	0.6214	$0.621^{+0.010}_{-0.010}$ (+0.1 σ)
A_{100}^{PS}	253	263^{+60}_{-50} (−0.1 σ)	D_{1420}	817.7	$816.6^{+9.8}_{-9.6}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4690	$0.4682^{+0.0095}_{-0.0097}$ (−0.4 σ)
A_{143}^{PS}	45.9	48^{+20}_{-20} (−0.4 σ)	D_{2000}	230.87	$230.2^{+3.5}_{-3.5}$ (+0.6 σ)	$\sigma_8(0.61)$	0.5913	$0.5908^{+0.0097}_{-0.0097}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	43.2	42^{+20}_{-20} (−0.1 σ)	$n_{s,0.002}$	0.9788	$0.996^{+0.048}_{-0.044}$ (+0.3 σ)	$f\sigma_8(2.33)$	0.29815	$0.2979^{+0.0049}_{-0.0049}$ (+0.3 σ)
A_{217}^{PS}	117.6	114^{+20}_{-20} (−0.0 σ)	Y_P	0.245424	$0.24543^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3074	$0.3072^{+0.0051}_{-0.0051}$ (+0.5 σ)
A^{kSZ}	0.0	—	Y_P^{BBN}	0.246750	$0.24676^{+0.00010}_{-0.00011}$ (+1.1 σ)	$r_{0.002}$	0.001	< 0.185 (+0.3 σ)
A_{100}^{dustTT}	8.89	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$10^5 D/H$	2.572	$2.567^{+0.051}_{-0.050}$ (−1.1 σ)	$r_{0.01}$	0.001	< 0.176 (+0.3 σ)
A_{143}^{dustTT}	11.01	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	Age/Gyr	13.7853	$13.781^{+0.041}_{-0.041}$ (−1.0 σ)	$\ln(10^{10} A_t)$	−3.97	$0.0^{+1.7}_{-2.4}$ (+0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.6	$18.6^{+6.3}_{-6.3}$ (+0.1 σ)	z_*	1089.778	$1089.73^{+0.44}_{-0.44}$ (−1.0 σ)	r_{10}	0.0004	< 0.0980 (+0.3 σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (+0.0 σ)	r_*	144.521	$144.54^{+0.48}_{-0.48}$ (+0.2 σ)	$10^9 A_t$	0.002	< 0.373 (+0.3 σ)
A_{100}^{dustTE}	0.115	$0.116^{+0.074}_{-0.074}$ (+0.1 σ)	$100\theta_*$	1.04118	$1.04119^{+0.00056}_{-0.00058}$ (+0.4 σ)	$10^9 A_t e^{-2\tau}$	0.002	< 0.332 (+0.3 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.057}_{-0.058}$ (+0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.8806	$13.882^{+0.046}_{-0.046}$ (+0.2 σ)	f_{2000}^{143}	29.5	31^{+6}_{-6} (−0.5 σ)
$A_{100 \times 217}^{dustTE}$	0.478	$0.48^{+0.16}_{-0.16}$ (+0.1 σ)	z_{drag}	1060.05	$1060.12^{+0.61}_{-0.61}$ (+1.0 σ)	$f_{2000}^{143 \times 217}$	32.42	33^{+4}_{-4} (−0.5 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$ (+0.1 σ)	r_{drag}	147.16	$147.17^{+0.50}_{-0.50}$ (+0.1 σ)	f_{2000}^{217}	107.07	$107.9^{+4.0}_{-3.9}$ (−0.5 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.66^{+0.15}_{-0.15}$ (+0.1 σ)	k_D	0.14085	$0.14086^{+0.00061}_{-0.00061}$ (+0.3 σ)	χ_{small}^2	396.43	$397.8 (\nu: 2.3)$ (+0.3 σ)
A_{217}^{dustTE}	2.07	$2.07^{+0.52}_{-0.53}$ (+0.1 σ)	$100\theta_D$	0.160689	$0.16066^{+0.00035}_{-0.00035}$ (−1.0 σ)	χ_{lowl}^2	22.15	$23.1 (\nu: 1.6)$ (−0.3 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{eq}	3390.5	3387^{+46}_{-45} (−0.5 σ)	χ_{plik}^2	2345.5	$2361.2 (\nu: 19.1)$ (+272.2 σ)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{eq}	0.010348	$0.01034^{+0.00014}_{-0.00014}$ (−0.5 σ)	χ_{6DF}^2	0.038	$0.053 (\nu: 0.0)$
H_0	67.64	$67.73^{+0.89}_{-0.90}$ (+0.8 σ)	$100\theta_{eq}$	0.8157	$0.8164^{+0.0085}_{-0.0086}$ (+0.5 σ)	χ_{MGS}^2	1.16	$1.29 (\nu: 0.1)$
Ω_Λ	0.6885	$0.690^{+0.012}_{-0.012}$ (+0.7 σ)	$100\theta_{s,eq}$	0.45057	$0.4509^{+0.0044}_{-0.0044}$ (+0.5 σ)	$\chi_{DR12BAO}^2$	4.63	$4.8 (\nu: 1.0)$
Ω_m	0.3115	$0.310^{+0.012}_{-0.012}$ (−0.7 σ)	$H(0.15)$	72.93	$73.01^{+0.76}_{-0.77}$ (+0.8 σ)	χ_{prior}^2	1.8	$11.6 (\nu: 10.2)$ (+1.1 σ)
$\Omega_m h^2$	0.14252	$0.1424^{+0.0019}_{-0.0019}$ (−0.5 σ)	$D_M(0.15)$	640.9	$640.2^{+7.7}_{-7.5}$ (−0.8 σ)	χ_{BAO}^2	5.82	$6.1 (\nu: 0.7)$
$\Omega_m h^3$	0.09640	$0.09643^{+0.00060}_{-0.00061}$ (+0.7 σ)	$H(0.38)$	83.05	$83.11^{+0.57}_{-0.56}$ (+0.8 σ)	χ_{CMB}^2	2764.1	$2782.0 (\nu: 19.4)$ (+268.9 σ)
σ_8	0.8107	$0.810^{+0.014}_{-0.014}$ (−0.2 σ)	$D_M(0.38)$	1528.6	1527^{+15}_{-15} (−0.8 σ)			

Best-fit $\chi_{eff}^2 = 2771.67$; $\Delta\chi_{eff}^2 = -0.25$; $\bar{\chi}_{eff}^2 = 2799.74$; $\Delta\bar{\chi}_{eff}^2 = 1.83$; $R - 1 = 0.01808$
 χ_{eff}^2 : BAO - 6DF: 0.04 (Δ 0.01) MGS: 1.16 (Δ -0.06) DR12BAO: 4.63 (Δ 0.21) CMB - simall_100x143.offlike5_EE_Aplanck.B: 396.43 (Δ 0.23) commander_dx12.v3.2.29: 22.15 (Δ -0.72) plik_rd12_HM.v22b_TTTEEE: 2345.48 (Δ -0.02)

15.9 base_nrun_r_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022512	$0.02255^{+0.00030}_{-0.00030}$ (+1.4 σ)	$\Omega_m h^3$	0.09644	$0.09648^{+0.00061}_{-0.00061}$ (+0.8 σ)	$H(0.15)$	73.22	$73.3^{+1.0}_{-0.99}$ (+1.2 σ)
$\Omega_c h^2$	0.11871	$0.1185^{+0.0026}_{-0.0028}$ (−0.9 σ)	σ_8	0.8089	$0.808^{+0.016}_{-0.016}$ (−0.4 σ)	$D_M(0.15)$	638.0	$637.1^{+9.8}_{-9.8}$ (−1.2 σ)
$100\theta_{MC}$	1.04108	$1.04112^{+0.00059}_{-0.00060}$ (+0.6 σ)	S_8	0.8183	$0.815^{+0.031}_{-0.035}$ (−0.9 σ)	$H(0.38)$	83.26	$83.34^{+0.73}_{-0.72}$ (+1.2 σ)
τ	0.0578	$0.059^{+0.017}_{-0.016}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4482	$0.446^{+0.017}_{-0.019}$ (−0.9 σ)	$D_M(0.38)$	1522.8	1521^{+20}_{-19} (−1.2 σ)
$\ln(10^{10} A_s)$	3.0493	$3.051^{+0.036}_{-0.035}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6021	$0.600^{+0.016}_{-0.018}$ (−0.8 σ)	$H(0.51)$	89.94	$90.01^{+0.58}_{-0.57}$ (+1.3 σ)
n_s	0.9688	$0.9684^{+0.0089}_{-0.0089}$ (+1.0 σ)	$\sigma_8/h^{0.5}$	0.9811	$0.979^{+0.023}_{-0.026}$ (−0.8 σ)	$D_M(0.51)$	1973.3	1971^{+23}_{-23} (−1.2 σ)
$dn_s/d \ln k$	−0.0033	$−0.009^{+0.014}_{-0.015}$ (−0.2 σ)	$r_{drag} h$	100.12	$100.3^{+2.2}_{-2.0}$ (+1.0 σ)	$H(0.61)$	95.529	$95.58^{+0.46}_{-0.46}$ (+1.3 σ)
r	0.001	< 0.187 (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.422	$2.408^{+0.058}_{-0.063}$ (−0.8 σ)	$D_M(0.61)$	2296.8	2294^{+25}_{-25} (−1.2 σ)
y_{cal}	1.00059	$1.0008^{+0.0050}_{-0.0047}$ (+0.1 σ)	z_{re}	7.98	$8.0^{+1.6}_{-1.6}$ (+0.4 σ)	$H(2.33)$	235.87	$235.8^{+1.6}_{-1.6}$ (−0.7 σ)
A_{217}^{CIB}	47.3	48^{+10}_{-10} (−0.1 σ)	$10^9 A_s$	2.110	$2.115^{+0.078}_{-0.074}$ (+0.4 σ)	$D_M(2.33)$	5752.4	5750^{+21}_{-21} (−1.3 σ)
$\xi^{tSZ \times CIB}$	0.45	—	$10^9 A_s e^{-2\tau}$	1.8798	$1.881^{+0.023}_{-0.022}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4531	$0.451^{+0.016}_{-0.018}$ (−0.9 σ)
A_{143}^{tSZ}	7.22	$5.2^{+3.8}_{-4.0}$ (+0.2 σ)	D_{40}	1215.8	1227^{+42}_{-39} (−0.3 σ)	$\sigma_8(0.15)$	0.7480	$0.747^{+0.014}_{-0.014}$ (−0.3 σ)
A_{100}^{PS}	250	263^{+60}_{-50} (−0.2 σ)	D_{220}	5738	5734^{+75}_{-73} (+0.6 σ)	$f\sigma_8(0.38)$	0.4725	$0.471^{+0.013}_{-0.015}$ (−0.8 σ)
A_{143}^{PS}	48.1	47^{+20}_{-20} (−0.4 σ)	D_{810}	2541.3	2542^{+28}_{-25} (+0.2 σ)	$\sigma_8(0.38)$	0.6635	$0.663^{+0.012}_{-0.012}$ (−0.0 σ)
$A_{143 \times 217}^{PS}$	48.3	42^{+20}_{-20} (−0.2 σ)	D_{1420}	818.7	$817^{+10}_{-9.5}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4716	$0.470^{+0.012}_{-0.013}$ (−0.7 σ)
A_{217}^{PS}	119.7	114^{+20}_{-20} (−0.0 σ)	D_{2000}	231.32	$230.5^{+3.5}_{-3.6}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6211	$0.620^{+0.011}_{-0.011}$ (+0.1 σ)
A^{kSZ}	0.0	—	$n_{s,0.002}$	0.9793	$0.999^{+0.050}_{-0.044}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4670	$0.466^{+0.011}_{-0.012}$ (−0.7 σ)
A_{100}^{dustTT}	8.90	$9.0^{+3.6}_{-3.7}$ (+0.0 σ)	Y_P	0.245449	$0.24546^{+0.00011}_{-0.00011}$ (+1.3 σ)	$\sigma_8(0.61)$	0.5911	$0.590^{+0.010}_{-0.010}$ (+0.1 σ)
A_{143}^{dustTT}	11.05	$11.0^{+3.4}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246775	$0.24679^{+0.00011}_{-0.00011}$ (+1.3 σ)	$f\sigma_8(2.33)$	0.2982	$0.2980^{+0.0053}_{-0.0050}$ (+0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.3}_{-6.1}$ (+0.1 σ)	$10^5 D/H$	2.560	$2.554^{+0.054}_{-0.053}$ (−1.4 σ)	$\sigma_8(2.33)$	0.3077	$0.3074^{+0.0056}_{-0.0052}$ (+0.5 σ)
A_{217}^{dustTT}	95.1	93^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7727	$13.767^{+0.047}_{-0.046}$ (−1.3 σ)	$r_{0.002}$	0.000	< 0.202 (+0.4 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.075}$	z_*	1089.63	$1089.57^{+0.52}_{-0.52}$ (−1.4 σ)	$r_{0.01}$	0.000	< 0.190 (+0.4 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.136^{+0.057}_{-0.060}$	r_*	144.66	$144.69^{+0.61}_{-0.59}$ (+0.5 σ)	$\ln(10^{10} A_t)$	−4.52	$0.0^{+1.7}_{-2.4}$ (+0.3 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.16}_{-0.16}$	$100\theta_*$	1.04126	$1.04129^{+0.00058}_{-0.00060}$ (+0.6 σ)	r_{10}	0.000	< 0.107 (+0.4 σ)
A_{143}^{dustTE}	0.224	$0.23^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.892	$13.895^{+0.060}_{-0.055}$ (+0.5 σ)	$10^9 A_t$	0.001	< 0.401 (+0.4 σ)
$A_{143 \times 217}^{dustTE}$	0.662	$0.66^{+0.15}_{-0.15}$	z_{drag}	1060.16	$1060.24^{+0.61}_{-0.61}$ (+1.3 σ)	$10^9 A_t e^{-2\tau}$	0.001	< 0.350 (+0.4 σ)
A_{217}^{dustTE}	2.06	$2.06^{+0.51}_{-0.54}$	r_{drag}	147.28	$147.29^{+0.63}_{-0.59}$ (+0.3 σ)	χ_{small}^2	396.57	398.0 (ν : 2.9) (+0.4 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14078	$0.14079^{+0.00066}_{-0.00071}$ (+0.2 σ)	χ_{lowl}^2	21.95	22.9 (ν : 1.4) (−0.4 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160631	$0.16060^{+0.00036}_{-0.00034}$ (−1.2 σ)	χ_{plik}^2	2346.6	2362.7 (ν : 21.6) (+272.5 σ)
H_0	67.98	$68.1^{+1.2}_{-1.2}$ (+1.2 σ)	z_{eq}	3375	3371^{+59}_{-61} (−0.8 σ)	$\chi_{H073p45}^2$	10.85	10.5 (ν : 2.6)
Ω_Λ	0.6930	$0.694^{+0.016}_{-0.016}$ (+1.0 σ)	k_{eq}	0.010300	$0.01029^{+0.00018}_{-0.00019}$ (−0.8 σ)	χ_{prior}^2	1.7	11.5 (ν : 10.1) (+1.1 σ)
Ω_m	0.3070	$0.306^{+0.016}_{-0.016}$ (−1.0 σ)	$100\theta_{eq}$	0.8187	$0.820^{+0.012}_{-0.011}$ (+0.9 σ)	χ_{CMB}^2	2765.1	2783.5 (ν : 21.7) (+269.2 σ)
$\Omega_m h^2$	0.14187	$0.1417^{+0.0025}_{-0.0025}$ (−0.8 σ)	$100\theta_{s,eq}$	0.4521	$0.4526^{+0.0061}_{-0.0057}$ (+0.9 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2777.70$; $\Delta\chi_{\text{eff}}^2 = -0.24$; $\bar{\chi}_{\text{eff}}^2 = 2805.57$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.41$; $R - 1 = 0.02989$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.57 (Δ 0.10) commander_dx12_v3.2.29: 21.95 (Δ -0.59) plik_rd12_HM_v22b_TTTEEE: 2346.61 (Δ -0.15) Hubble
- H073p45: 10.85 (Δ 0.27)

15.10 base_nrun_r_plikHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02242^{+0.00031}_{-0.00030}$ (+0.9 σ)	σ_8	$0.812^{+0.015}_{-0.014}$ (+0.1 σ)	$H(0.38)$	$82.88^{+0.76}_{-0.74}$ (+0.4 σ)
$\Omega_c h^2$	$0.1201^{+0.0028}_{-0.0027}$ (−0.2 σ)	S_8	$0.834^{+0.033}_{-0.032}$ (−0.1 σ)	$D_M(0.38)$	1534^{+21}_{-21} (−0.4 σ)
$100\theta_{MC}$	$1.04091^{+0.00061}_{-0.00063}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	$0.457^{+0.018}_{-0.017}$ (−0.1 σ)	$H(0.51)$	$89.64^{+0.60}_{-0.58}$ (+0.5 σ)
τ	$0.057^{+0.014}_{-0.013}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.017}_{-0.016}$ (−0.1 σ)	$D_M(0.51)$	1986^{+24}_{-24} (−0.4 σ)
$\ln(10^{10} A_s)$	$3.052^{+0.031}_{-0.029}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	$0.990^{+0.024}_{-0.023}$ (−0.0 σ)	$H(0.61)$	$95.30^{+0.49}_{-0.46}$ (+0.5 σ)
n_s	$0.9643^{+0.0093}_{-0.0093}$ (+0.3 σ)	$r_{drag} h$	$99.0^{+2.1}_{-2.1}$ (+0.2 σ)	$D_M(0.61)$	2310^{+26}_{-26} (−0.4 σ)
$dn_s/d \ln k$	$-0.0095^{+0.014}_{-0.015}$ (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.059}_{-0.059}$ (−0.1 σ)	$H(2.33)$	$236.7^{+1.7}_{-1.6}$ (−0.0 σ)
r	< 0.168 (+0.2 σ)	z_{re}	$7.9^{+1.3}_{-1.4}$ (+0.4 σ)	$D_M(2.33)$	5762^{+21}_{-22} (−0.6 σ)
y_{cal}	$1.0007^{+0.0049}_{-0.0048}$ (+0.1 σ)	$10^9 A_s$	$2.116^{+0.066}_{-0.062}$ (+0.4 σ)	$f\sigma_8(0.15)$	$0.461^{+0.017}_{-0.016}$ (−0.1 σ)
A_{217}^{CIB}	48^{+10}_{-10} (−0.1 σ)	$10^9 A_s e^{-2\tau}$	$1.888^{+0.024}_{-0.024}$ (+0.1 σ)	$\sigma_8(0.15)$	$0.750^{+0.013}_{-0.012}$ (+0.2 σ)
$\xi^{tSZ \times CIB}$	—	D_{40}	1232^{+43}_{-39} (−0.1 σ)	$f\sigma_8(0.38)$	$0.478^{+0.013}_{-0.013}$ (−0.1 σ)
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0}$ (+0.1 σ)	D_{220}	5726^{+77}_{-76} (+0.4 σ)	$\sigma_8(0.38)$	$0.665^{+0.011}_{-0.0098}$ (+0.3 σ)
A_{100}^{PS}	264^{+60}_{-60} (−0.1 σ)	D_{810}	2543^{+27}_{-26} (+0.3 σ)	$f\sigma_8(0.51)$	$0.476^{+0.012}_{-0.012}$ (−0.0 σ)
A_{143}^{PS}	49^{+20}_{-20} (−0.3 σ)	D_{1420}	$816.0^{+9.8}_{-9.6}$ (+0.4 σ)	$\sigma_8(0.51)$	$0.622^{+0.010}_{-0.0089}$ (+0.3 σ)
$A_{143 \times 217}^{PS}$	43^{+20}_{-20} (−0.1 σ)	D_{2000}	$229.9^{+3.6}_{-3.5}$ (+0.5 σ)	$f\sigma_8(0.61)$	$0.471^{+0.011}_{-0.011}$ (+0.0 σ)
A_{217}^{PS}	115^{+20}_{-20} (+0.0 σ)	$n_{s,0.002}$	$0.995^{+0.048}_{-0.044}$ (+0.3 σ)	$\sigma_8(0.61)$	$0.5916^{+0.0091}_{-0.0087}$ (+0.3 σ)
A^{kSZ}	—	Y_P	$0.24541^{+0.00011}_{-0.00012}$ (+0.9 σ)	$f\sigma_8(2.33)$	$0.2981^{+0.0045}_{-0.0043}$ (+0.4 σ)
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P^{BBN}	$0.24674^{+0.00011}_{-0.00012}$ (+0.9 σ)	$\sigma_8(2.33)$	$0.3072^{+0.0047}_{-0.0045}$ (+0.4 σ)
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$10^5 D/H$	$2.577^{+0.056}_{-0.055}$ (−0.9 σ)	$r_{0.002}$	< 0.175 (+0.2 σ)
$A_{143 \times 217}^{dustTT}$	$18.7^{+6.4}_{-6.4}$ (+0.1 σ)	Age/Gyr	$13.793^{+0.048}_{-0.049}$ (−0.7 σ)	$r_{0.01}$	< 0.168 (+0.2 σ)
A_{217}^{dustTT}	93^{+10}_{-10} (+0.0 σ)	z_*	$1089.87^{+0.55}_{-0.55}$ (−0.7 σ)	$\ln(10^{10} A_t)$	$-0.1^{+1.8}_{-2.4}$ (+0.2 σ)
A_{100}^{dustTE}	$0.116^{+0.075}_{-0.075}$	r_*	$144.36^{+0.61}_{-0.61}$ (−0.1 σ)	r_{10}	< 0.0926 (+0.2 σ)
$A_{100 \times 143}^{dustTE}$	$0.136^{+0.058}_{-0.058}$	$100\theta_*$	$1.04109^{+0.00060}_{-0.00062}$ (+0.2 σ)	$10^9 A_t$	< 0.356 (+0.2 σ)
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.866^{+0.057}_{-0.057}$ (−0.2 σ)	$10^9 A_t e^{-2\tau}$	< 0.317 (+0.2 σ)
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.11}$	z_{drag}	$1060.06^{+0.64}_{-0.62}$ (+0.9 σ)	f_{2000}^{143}	31^{+6}_{-6} (−0.4 σ)
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.00^{+0.62}_{-0.61}$ (−0.3 σ)	$f_{2000}^{143 \times 217}$	33^{+4}_{-4} (−0.4 σ)
A_{217}^{dustTE}	$2.08^{+0.52}_{-0.52}$	k_D	$0.14099^{+0.00067}_{-0.00067}$ (+0.5 σ)	f_{2000}^{217}	$108.1^{+4.0}_{-3.9}$ (−0.4 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_D$	$0.16069^{+0.00036}_{-0.00036}$ (−0.9 σ)	χ_{small}^2	397.6 (ν : 2.0) (+0.1 σ)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3407^{+62}_{-61} (−0.1 σ)	χ_{lowl}^2	23.3 (ν : 1.7) (−0.2 σ)
H_0	$67.3^{+1.2}_{-1.2}$ (+0.3 σ)	k_{eq}	$0.01040^{+0.00019}_{-0.00019}$ (−0.1 σ)	χ_{plik}^2	2360.9 (ν : 18.5) (+272.2 σ)
Ω_Λ	$0.684^{+0.016}_{-0.017}$ (+0.3 σ)	$100\theta_{eq}$	$0.813^{+0.012}_{-0.012}$ (+0.1 σ)	χ_{prior}^2	11.6 (ν : 10.3) (+1.2 σ)
Ω_m	$0.316^{+0.017}_{-0.016}$ (−0.3 σ)	$100\theta_{s,eq}$	$0.4490^{+0.0059}_{-0.0059}$ (+0.1 σ)	χ_{CMB}^2	2781.8 (ν : 18.9) (+268.9 σ)
$\Omega_m h^2$	$0.1432^{+0.0026}_{-0.0026}$ (−0.1 σ)	$H(0.15)$	$72.7^{+1.0}_{-1.0}$ (+0.4 σ)		
$\Omega_m h^3$	$0.09643^{+0.00061}_{-0.00061}$ (+0.7 σ)	$D_M(0.15)$	643^{+10}_{-10} (−0.4 σ)		

$$\bar{\chi}_{\text{eff}}^2 = 2793.42; \Delta \bar{\chi}_{\text{eff}}^2 = 1.88; R - 1 = 0.01323$$

15.11 base_nrun_r_plikHM_TTTEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02248^{+0.00028}_{-0.00028} \quad (+1.1\sigma)$	S_8	$0.824^{+0.025}_{-0.025} \quad (-0.5\sigma)$	$H(0.51)$	$89.82^{+0.46}_{-0.45} \quad (+0.9\sigma)$
$\Omega_c h^2$	$0.1193^{+0.0020}_{-0.0020} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.014}_{-0.014} \quad (-0.5\sigma)$	$D_M(0.51)$	$1978^{+18}_{-18} \quad (-0.8\sigma)$
$100\theta_{MC}$	$1.04102^{+0.00057}_{-0.00058} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.014}_{-0.013} \quad (-0.4\sigma)$	$H(0.61)$	$95.44^{+0.38}_{-0.38} \quad (+0.9\sigma)$
τ	$0.058^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.020}_{-0.020} \quad (-0.4\sigma)$	$D_M(0.61)$	$2302^{+19}_{-19} \quad (-0.8\sigma)$
$\ln(10^{10} A_s)$	$3.052^{+0.031}_{-0.030} \quad (+0.4\sigma)$	$r_{\text{drag}} h$	$99.7^{+1.5}_{-1.5} \quad (+0.6\sigma)$	$H(2.33)$	$236.2^{+1.2}_{-1.2} \quad (-0.4\sigma)$
n_s	$0.9665^{+0.0080}_{-0.0079} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.051}_{-0.052} \quad (-0.4\sigma)$	$D_M(2.33)$	$5756^{+18}_{-18} \quad (-1.0\sigma)$
$dn_s/d \ln k$	$-0.009^{+0.014}_{-0.015} \quad (-0.2\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013} \quad (-0.5\sigma)$
r	$< 0.177 \quad (+0.3\sigma)$	$10^9 A_s$	$2.116^{+0.067}_{-0.063} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.013}_{-0.011} \quad (-0.0\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.884^{+0.022}_{-0.022} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{40}	$1230^{+42}_{-38} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.0096} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{220}	$5729^{+76}_{-75} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.010}_{-0.0099} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.0} \quad (+0.2\sigma)$	D_{810}	$2542^{+27}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0089} \quad (+0.2\sigma)$
A_{100}^{PS}	$263^{+60}_{-50} \quad (-0.1\sigma)$	D_{1420}	$816.6^{+9.7}_{-9.6} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4684^{+0.0094}_{-0.0092} \quad (-0.3\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.4\sigma)$	D_{2000}	$230.2^{+3.5}_{-3.5} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0094}_{-0.0084} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.997^{+0.048}_{-0.044} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0046}_{-0.0044} \quad (+0.4\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24543^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0049}_{-0.0044} \quad (+0.5\sigma)$
A^{kSZ}	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24676^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$r_{0.002}$	$< 0.186 \quad (+0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	10^5D/H	$2.567^{+0.051}_{-0.050} \quad (-1.1\sigma)$	$r_{0.01}$	$< 0.178 \quad (+0.3\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Age/Gyr	$13.781^{+0.041}_{-0.040} \quad (-1.0\sigma)$	$\ln(10^{10} A_t)$	$0.0^{+1.7}_{-2.4} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.4}_{-6.3} \quad (+0.1\sigma)$	z_*	$1089.72^{+0.44}_{-0.44} \quad (-1.1\sigma)$	r_{10}	$< 0.0981 \quad (+0.3\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.54^{+0.47}_{-0.47} \quad (+0.2\sigma)$	$10^9 A_t$	$< 0.374 \quad (+0.3\sigma)$
A_{100}^{dustTE}	$0.116^{+0.074}_{-0.073}$	$100\theta_*$	$1.04119^{+0.00056}_{-0.00058} \quad (+0.4\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.334 \quad (+0.3\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.057}_{-0.058}$	$D_M(z_*)/\text{Gpc}$	$13.882^{+0.046}_{-0.046} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.16}_{-0.16}$	z_{drag}	$1060.13^{+0.61}_{-0.61} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_{drag}	$147.17^{+0.50}_{-0.50} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.9^{+3.9}_{-3.8} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.15}$	k_{D}	$0.14086^{+0.00061}_{-0.00061} \quad (+0.3\sigma)$	χ_{simall}^2	$397.7 \quad (\nu: 2.3) \quad (+0.2\sigma)$
A_{217}^{dustTE}	$2.07^{+0.51}_{-0.53}$	$100\theta_{\text{D}}$	$0.16065^{+0.00035}_{-0.00035} \quad (-1.0\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 1.6) \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	$3387^{+46}_{-45} \quad (-0.5\sigma)$	χ_{plik}^2	$2361.0 \quad (\nu: 18.8) \quad (+272.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{eq}	$0.01034^{+0.00014}_{-0.00014} \quad (-0.5\sigma)$	$\chi_{6\text{DF}}^2$	$0.053 \quad (\nu: 0.0)$
H_0	$67.74^{+0.88}_{-0.89} \quad (+0.8\sigma)$	$100\theta_{\text{eq}}$	$0.8164^{+0.0084}_{-0.0086} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4509^{+0.0043}_{-0.0044} \quad (+0.5\sigma)$	χ_{DR12BAO}^2	$4.8 \quad (\nu: 1.0)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$H(0.15)$	$73.01^{+0.76}_{-0.77} \quad (+0.8\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.1\sigma)$
$\Omega_{\text{m}} h^2$	$0.1424^{+0.0019}_{-0.0019} \quad (-0.5\sigma)$	$D_M(0.15)$	$640.1^{+7.7}_{-7.4} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
$\Omega_{\text{m}} h^3$	$0.09644^{+0.00060}_{-0.00061} \quad (+0.8\sigma)$	$H(0.38)$	$83.11^{+0.56}_{-0.56} \quad (+0.8\sigma)$	χ_{CMB}^2	$2781.9 \quad (\nu: 18.9) \quad (+268.9\sigma)$
σ_8	$0.810^{+0.014}_{-0.013} \quad (-0.1\sigma)$	$D_M(0.38)$	$1527^{+15}_{-15} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2799.55; \Delta \bar{\chi}_{\text{eff}}^2 = 1.83; R - 1 = 0.01821$$

15.12 base_nrun_r_plikHM_TTTEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02255^{+0.00029}_{-0.00029} \quad (+1.4\sigma)$	σ_8	$0.808^{+0.015}_{-0.015} \quad (-0.3\sigma)$	$H(0.38)$	$83.34^{+0.72}_{-0.71} \quad (+1.2\sigma)$
$\Omega_c h^2$	$0.1185^{+0.0026}_{-0.0028} \quad (-0.9\sigma)$	S_8	$0.816^{+0.031}_{-0.032} \quad (-0.9\sigma)$	$D_M(0.38)$	$1521^{+20}_{-19} \quad (-1.2\sigma)$
$100\theta_{MC}$	$1.04112^{+0.00059}_{-0.00060} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.447^{+0.017}_{-0.018} \quad (-0.9\sigma)$	$H(0.51)$	$90.01^{+0.57}_{-0.56} \quad (+1.3\sigma)$
τ	$0.059^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.601^{+0.016}_{-0.017} \quad (-0.8\sigma)$	$D_M(0.51)$	$1971^{+23}_{-23} \quad (-1.2\sigma)$
$\ln(10^{10} A_s)$	$3.053^{+0.033}_{-0.031} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.023}_{-0.024} \quad (-0.7\sigma)$	$H(0.61)$	$95.59^{+0.46}_{-0.46} \quad (+1.3\sigma)$
n_s	$0.9684^{+0.0090}_{-0.0090} \quad (+1.0\sigma)$	$r_{drag} h$	$100.3^{+2.1}_{-2.0} \quad (+1.0\sigma)$	$D_M(0.61)$	$2294^{+25}_{-24} \quad (-1.2\sigma)$
$dn_s/d \ln k$	$-0.0095^{+0.014}_{-0.015} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.410^{+0.057}_{-0.059} \quad (-0.7\sigma)$	$H(2.33)$	$235.8^{+1.5}_{-1.7} \quad (-0.7\sigma)$
r	$< 0.188 \quad (+0.4\sigma)$	z_{re}	$8.1^{+1.4}_{-1.5} \quad (+0.5\sigma)$	$D_M(2.33)$	$5750^{+21}_{-20} \quad (-1.4\sigma)$
y_{cal}	$1.0008^{+0.0050}_{-0.0047} \quad (+0.1\sigma)$	$10^9 A_s$	$2.117^{+0.070}_{-0.065} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.016}_{-0.017} \quad (-0.9\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{40}	$1227^{+42}_{-39} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.0} \quad (+0.2\sigma)$	D_{220}	$5734^{+75}_{-73} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.011} \quad (+0.0\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (-0.2\sigma)$	D_{810}	$2542^{+28}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (-0.4\sigma)$	D_{1420}	$817^{+10}_{-9.5} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0098} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{2000}	$230.5^{+3.5}_{-3.6} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.999^{+0.049}_{-0.044} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5909^{+0.0095}_{-0.0092} \quad (+0.2\sigma)$
A^{kSZ}	—	Y_P	$0.24546^{+0.00011}_{-0.00011} \quad (+1.3\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0048}_{-0.0046} \quad (+0.4\sigma)$
A_{100}^{dustTT}	$9.0^{+3.5}_{-3.6} \quad (+0.0\sigma)$	Y_P^{BBN}	$0.24679^{+0.00011}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0049}_{-0.0047} \quad (+0.6\sigma)$
A_{143}^{dustTT}	$11.0^{+3.4}_{-3.4} \quad (+0.1\sigma)$	$10^5 D/H$	$2.554^{+0.054}_{-0.052} \quad (-1.4\sigma)$	$r_{0.002}$	$< 0.204 \quad (+0.4\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.4}_{-6.1} \quad (+0.1\sigma)$	Age/Gyr	$13.767^{+0.047}_{-0.046} \quad (-1.4\sigma)$	$r_{0.01}$	$< 0.190 \quad (+0.4\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.57^{+0.52}_{-0.51} \quad (-1.4\sigma)$	$\ln(10^{10} A_t)$	$0.0^{+1.7}_{-2.4} \quad (+0.3\sigma)$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.075}$	r_*	$144.68^{+0.61}_{-0.58} \quad (+0.5\sigma)$	r_{10}	$< 0.107 \quad (+0.4\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.060}$	$100\theta_*$	$1.04128^{+0.00057}_{-0.00060} \quad (+0.6\sigma)$	$10^9 A_t$	$< 0.403 \quad (+0.4\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.16}$	$D_M(z_*)/Gpc$	$13.895^{+0.060}_{-0.055} \quad (+0.5\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.352 \quad (+0.4\sigma)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.11}$	z_{drag}	$1060.24^{+0.61}_{-0.61} \quad (+1.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.6\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.15}_{-0.15}$	r_{drag}	$147.29^{+0.63}_{-0.58} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.06^{+0.51}_{-0.54}$	k_D	$0.14079^{+0.00066}_{-0.00071} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.7^{+4.0}_{-3.8} \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	$0.16059^{+0.00036}_{-0.00034} \quad (-1.2\sigma)$	χ_{small}^2	$398.0 (\nu: 3.0) \quad (+0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3371^{+58}_{-63} \quad (-0.8\sigma)$	χ_{lowl}^2	$22.9 (\nu: 1.4) \quad (-0.4\sigma)$
H_0	$68.1^{+1.2}_{-1.1} \quad (+1.2\sigma)$	k_{eq}	$0.01029^{+0.00018}_{-0.00019} \quad (-0.8\sigma)$	χ_{plik}^2	$2362.5 (\nu: 21.4) \quad (+272.5\sigma)$
Ω_Λ	$0.694^{+0.016}_{-0.016} \quad (+1.0\sigma)$	$100\theta_{eq}$	$0.820^{+0.012}_{-0.011} \quad (+0.9\sigma)$	$\chi_{H073p45}^2$	$10.5 (\nu: 2.6)$
Ω_m	$0.306^{+0.016}_{-0.016} \quad (-1.0\sigma)$	$100\theta_{s,eq}$	$0.4526^{+0.0062}_{-0.0056} \quad (+0.9\sigma)$	χ_{prior}^2	$11.5 (\nu: 10.0) \quad (+1.1\sigma)$
$\Omega_m h^2$	$0.1417^{+0.0024}_{-0.0026} \quad (-0.8\sigma)$	$H(0.15)$	$73.32^{+0.99}_{-0.98} \quad (+1.2\sigma)$	χ_{CMB}^2	$2783.4 (\nu: 21.4) \quad (+269.2\sigma)$
$\Omega_m h^3$	$0.09649^{+0.00061}_{-0.00060} \quad (+0.8\sigma)$	$D_M(0.15)$	$637.1^{+9.7}_{-9.7} \quad (-1.2\sigma)$		

$$\bar{\chi}_{eff}^2 = 2805.37; \Delta \bar{\chi}_{eff}^2 = 1.49; R - 1 = 0.03153$$

15.13 base_nrun_r_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022137	$0.02222^{+0.00048}_{-0.00046}$ (+0.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6117	$0.608^{+0.023}_{-0.023}$ (−0.2 σ)	$D_{\mathrm{M}}(0.38)$	1543.1	1537^{+31}_{-32} (−0.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.12088	$0.1202^{+0.0041}_{-0.0042}$ (−0.1 σ)	$\sigma_8/h^{0.5}$	0.9937	$0.988^{+0.032}_{-0.031}$ (−0.2 σ)	$H(0.51)$	89.31	$89.49^{+0.93}_{-0.86}$ (+0.1 σ)
$100\theta_{\mathrm{MC}}$	1.04081	$1.04089^{+0.00092}_{-0.00092}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	98.30	$98.9^{+3.3}_{-3.1}$ (+0.2 σ)	$D_{\mathrm{M}}(0.51)$	1997.4	1990^{+37}_{-37} (−0.1 σ)
τ	0.0529	$0.053^{+0.017}_{-0.016}$ (−0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.451	$2.432^{+0.076}_{-0.077}$ (−0.2 σ)	$H(0.61)$	95.00	$95.15^{+0.75}_{-0.69}$ (+0.1 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0421	$3.042^{+0.036}_{-0.035}$ (−0.1 σ)	z_{re}	7.60	$7.6^{+1.6}_{-1.7}$ (−0.0 σ)	$D_{\mathrm{M}}(0.61)$	2322.9	2315^{+39}_{-40} (−0.1 σ)
n_{s}	0.9616	$0.964^{+0.012}_{-0.012}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}$	2.095	$2.095^{+0.076}_{-0.072}$ (−0.1 σ)	$H(2.33)$	236.90	$236.5^{+2.5}_{-2.5}$ (−0.1 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	−0.0039	$−0.007^{+0.016}_{-0.017}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8847	$1.883^{+0.028}_{-0.028}$ (−0.3 σ)	$D_{\mathrm{M}}(2.33)$	5777.0	5771^{+33}_{-34} (−0.1 σ)
r	0.000	< 0.158 (+0.1 σ)	D_{40}	1224.4	1232^{+45}_{-43} (−0.1 σ)	$f\sigma_8(0.15)$	0.4645	$0.460^{+0.024}_{-0.024}$ (−0.2 σ)
y_{cal}	1.00043	$1.0005^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{220}	5704	5701^{+82}_{-81} (−0.2 σ)	$\sigma_8(0.15)$	0.7495	$0.748^{+0.015}_{-0.015}$ (−0.1 σ)
A_{100}^{PS}	247.5	246^{+50}_{-50} (−0.8 σ)	D_{810}	2534.8	2536^{+28}_{-28} (−0.2 σ)	$f\sigma_8(0.38)$	0.4805	$0.477^{+0.019}_{-0.019}$ (−0.2 σ)
A_{143}^{PS}	39.7	43^{+20}_{-20} (−1.0 σ)	D_{1420}	812.8	814^{+10}_{-10} (−0.0 σ)	$\sigma_8(0.38)$	0.6633	$0.662^{+0.012}_{-0.012}$ (−0.1 σ)
A_{217}^{PS}	98.2	100^{+30}_{-30} (−1.4 σ)	D_{2000}	228.81	$229.0^{+3.9}_{-3.9}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4779	$0.475^{+0.016}_{-0.016}$ (−0.2 σ)
A_{217}^{CIB}	44.6	42^{+20}_{-10} (−1.0 σ)	$n_{\mathrm{s},0.002}$	0.974	$0.986^{+0.054}_{-0.050}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6203	$0.619^{+0.011}_{-0.011}$ (−0.1 σ)
A_{143}^{tSZ}	4.35	< 7.32 (−0.6 σ)	Y_{P}	0.245300	$0.24533^{+0.00019}_{-0.00022}$ (+0.0 σ)	$f\sigma_8(0.61)$	0.4721	$0.470^{+0.014}_{-0.014}$ (−0.2 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.548	$0.64^{+0.25}_{-0.24}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246626	$0.24666^{+0.00019}_{-0.00022}$ (+0.0 σ)	$\sigma_8(0.61)$	0.5899	$0.589^{+0.010}_{-0.010}$ (−0.1 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.68	—	$10^5\mathrm{D}/\mathrm{H}$	2.630	$2.614^{+0.089}_{-0.088}$ (−0.0 σ)	$f\sigma_8(2.33)$	0.2971	$0.2969^{+0.0051}_{-0.0050}$ (−0.1 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.00	—	Age/Gyr	13.828	$13.814^{+0.074}_{-0.076}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3058	$0.3059^{+0.0054}_{-0.0053}$ (−0.0 σ)
A^{kSZ}	3.8	—	z_*	1090.30	$1090.12^{+0.82}_{-0.83}$ (−0.1 σ)	$r_{0.002}$	0.000	< 0.162 (+0.1 σ)
A_{100}^{dust}	1.019	$1.01^{+0.39}_{-0.39}$	r_*	144.38	$144.50^{+0.98}_{-0.94}$ (+0.1 σ)	$r_{0.01}$	0.000	< 0.157 (+0.1 σ)
A_{143}^{dust}	0.984	$0.98^{+0.34}_{-0.35}$	$100\theta_*$	1.04101	$1.04109^{+0.00091}_{-0.00091}$ (+0.1 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−6.04	$−0.3^{+1.9}_{-2.5}$ (+0.0 σ)
A_{217}^{dust}	0.959	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.869	$13.880^{+0.090}_{-0.088}$ (+0.1 σ)	r_{10}	0.0001	< 0.0856 (+0.1 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.006	$1.03^{+0.32}_{-0.32}$	z_{drag}	1059.47	$1059.6^{+1.0}_{-1.0}$ (+0.0 σ)	$10^9 A_{\mathrm{t}}$	0.000	< 0.331 (+0.1 σ)
c_{100}	0.99743	$0.9975^{+0.0021}_{-0.0021}$ (−3.5 σ)	r_{drag}	147.12	$147.2^{+1.0}_{-0.96}$ (+0.1 σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.000	< 0.297 (+0.1 σ)
c_{217}	1.00143	$1.0013^{+0.0031}_{-0.0031}$ (+4.8 σ)	k_{D}	0.14066	$0.1406^{+0.0011}_{-0.0011}$ (−0.1 σ)	f_{2000}^{143}	32.3	32^{+7}_{-7} (−0.2 σ)
H_0	66.82	$67.2^{+1.9}_{-1.8}$ (+0.1 σ)	$100\theta_{\mathrm{D}}$	0.16104	$0.16096^{+0.00058}_{-0.00057}$ (+0.0 σ)	f_{2000}^{217}	108.47	$108.2^{+4.3}_{-4.4}$ (−0.3 σ)
Ω_{Λ}	0.6782	$0.683^{+0.025}_{-0.026}$ (+0.1 σ)	z_{eq}	3418	3403^{+93}_{-95} (−0.1 σ)	$f_{2000}^{143\times 217}$	33.88	34^{+5}_{-5} (−0.3 σ)
Ω_{m}	0.3218	$0.317^{+0.026}_{-0.025}$ (−0.1 σ)	k_{eq}	0.010431	$0.01039^{+0.00028}_{-0.00029}$ (−0.1 σ)	χ_{small}^2	395.90	397.3 (ν : 1.5) (−0.0 σ)
$\Omega_{\mathrm{m}}h^2$	0.14366	$0.1430^{+0.0039}_{-0.0040}$ (−0.1 σ)	$100\theta_{\mathrm{eq}}$	0.8098	$0.813^{+0.018}_{-0.017}$ (+0.1 σ)	χ_{lowl}^2	22.71	23.7 (ν : 2.6) (+0.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.09599	$0.09606^{+0.00099}_{-0.00096}$ (+0.0 σ)	$100\theta_{\mathrm{s,eq}}$	0.4477	$0.4493^{+0.0093}_{-0.0088}$ (+0.1 σ)	$\chi_{\mathrm{CamSpec}}^2$	7050.5	7065.1 (ν : 16.5)
σ_8	0.8122	$0.810^{+0.018}_{-0.018}$ (−0.1 σ)	$H(0.15)$	72.21	$72.5^{+1.6}_{-1.5}$ (+0.1 σ)	χ_{prior}^2	2.4	7.7 (ν : 6.1) (+0.1 σ)
S_8	0.8412	$0.833^{+0.048}_{-0.047}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	648.1	645^{+16}_{-16} (−0.1 σ)	χ_{CMB}^2	7469.1	7486.1 (ν : 17.1) (+1065.9 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4607	$0.456^{+0.026}_{-0.026}$ (−0.2 σ)	$H(0.38)$	82.49	$82.7^{+1.2}_{-1.1}$ (+0.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 7471.53$; $\Delta\chi_{\mathrm{eff}}^2 = -0.20$; $\bar{\chi}_{\mathrm{eff}}^2 = 7493.80$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.26$; $R - 1 = 0.00512$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.90 (Δ 0.07) commander_dx12_v3.2.29: 22.71 (Δ -0.68) CamSpec like_10.7HM: 7050.49 (Δ 0.15)

15.14 base_nrun_r_CamSpecHM_TT_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00044}_{-0.00043} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+22}_{-22} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.8} \quad (+0.8\sigma)$	$H(0.61)$	$95.35^{+0.52}_{-0.49} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00081}_{-0.00079} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.412^{+0.057}_{-0.059} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+24}_{-24} \quad (-0.8\sigma)$
τ	$0.055^{+0.017}_{-0.016} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+1.6}_{-1.6} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.036}_{-0.034} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.076}_{-0.071} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+25}_{-25} \quad (-0.6\sigma)$
n_{s}	$0.9673^{+0.0091}_{-0.0089} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.024}_{-0.024} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.015}_{-0.015} \quad (-0.8\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.006^{+0.016}_{-0.017} \quad (+0.2\sigma)$	D_{40}	$1228^{+45}_{-42} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.013} \quad (-0.5\sigma)$
r	$< 0.169 \quad (+0.2\sigma)$	D_{220}	$5707^{+81}_{-80} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.013} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	D_{810}	$2535^{+27}_{-28} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.012}_{-0.011} \quad (-0.3\sigma)$
A_{100}^{PS}	$245^{+50}_{-50} \quad (-0.8\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.1\sigma)$	D_{2000}	$229.3^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.988^{+0.055}_{-0.050} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{217}^{CIB}	$42^{+10}_{-10} \quad (-1.0\sigma)$	Y_{P}	$0.24536^{+0.00017}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.010} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.37 \quad (-0.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00017}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0052}_{-0.0050} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.24}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.600^{+0.081}_{-0.079} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0053}_{-0.0052} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Age/Gyr	$13.796^{+0.057}_{-0.059} \quad (-0.6\sigma)$	$r_{0.002}$	$< 0.175 \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_*	$1089.91^{+0.62}_{-0.61} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.169 \quad (+0.2\sigma)$
A^{kSZ}	—	r_*	$144.78^{+0.66}_{-0.65} \quad (+0.7\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.2^{+1.9}_{-2.5} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$100\theta_*$	$1.04125^{+0.00080}_{-0.00078} \quad (+0.5\sigma)$	r_{10}	$< 0.0923 \quad (+0.2\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.064}_{-0.064} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.355 \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_{drag}	$1059.7^{+1.0}_{-0.97} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.316 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_{drag}	$147.48^{+0.74}_{-0.73} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{D}	$0.14040^{+0.00099}_{-0.00098} \quad (-0.5\sigma)$	f_{2000}^{217}	$108.0^{+4.2}_{-4.3} \quad (-0.4\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16092^{+0.00059}_{-0.00057} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.4\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.8\sigma)$	z_{eq}	$3373^{+57}_{-57} \quad (-0.8\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 1.6) \quad (+0.0\sigma)$
Ω_{Λ}	$0.691^{+0.014}_{-0.014} \quad (+0.8\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 2.2) \quad (-0.2\sigma)$
Ω_{m}	$0.309^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.010} \quad (+0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7065.3 \quad (\nu: 15.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4521^{+0.0055}_{-0.0054} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.052 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.09606^{+0.00099}_{-0.00096} \quad (-0.0\sigma)$	$H(0.15)$	$73.00^{+0.95}_{-0.92} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.43 \quad (\nu: 0.1)$
σ_8	$0.806^{+0.015}_{-0.015} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.2^{+9.1}_{-9.2} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.1)$
S_8	$0.818^{+0.029}_{-0.029} \quad (-0.8\sigma)$	$H(0.38)$	$83.06^{+0.72}_{-0.69} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.016}_{-0.016} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+18}_{-19} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.51)$	$89.75^{+0.60}_{-0.57} \quad (+0.7\sigma)$	χ_{CMB}^2	$7486.0 \quad (\nu: 16.4) \quad (+1065.9\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 7499.85; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 2.30; R - 1 = 0.00974$$

15.15 base_nrun_r_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00048}_{-0.00046} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+31}_{-32} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0041}_{-0.0041} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.032}_{-0.031} \quad (-0.1\sigma)$	$H(0.51)$	$89.51^{+0.93}_{-0.85} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04090^{+0.00092}_{-0.00091} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$98.9^{+3.3}_{-3.1} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+36}_{-37} \quad (-0.2\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.076}_{-0.076} \quad (-0.1\sigma)$	$H(0.61)$	$95.17^{+0.75}_{-0.68} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.031}_{-0.029} \quad (+0.0\sigma)$	z_{re}	$< 9.03 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2314^{+39}_{-40} \quad (-0.2\sigma)$
n_{s}	$0.964^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.066}_{-0.060} \quad (+0.0\sigma)$	$H(2.33)$	$236.5^{+2.5}_{-2.5} \quad (-0.2\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.007^{+0.016}_{-0.017} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.028}_{-0.028} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5770^{+32}_{-34} \quad (-0.2\sigma)$
r	$< 0.159 \quad (+0.1\sigma)$	D_{40}	$1231^{+46}_{-43} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.024}_{-0.024} \quad (-0.1\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5702^{+82}_{-81} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.014} \quad (-0.0\sigma)$
A_{100}^{PS}	$245^{+50}_{-50} \quad (-0.8\sigma)$	D_{810}	$2536^{+28}_{-28} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.019}_{-0.019} \quad (-0.1\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.011} \quad (+0.0\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	D_{2000}	$229.1^{+3.8}_{-3.8} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.016}_{-0.016} \quad (-0.1\sigma)$
A_{217}^{CIB}	$42^{+20}_{-10} \quad (-1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.987^{+0.054}_{-0.050} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.011}_{-0.0093} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$< 7.32 \quad (-0.6\sigma)$	Y_{P}	$0.24534^{+0.00018}_{-0.00021} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.014}_{-0.014} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.24}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00019}_{-0.00021} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5901^{+0.0093}_{-0.0089} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.612^{+0.088}_{-0.087} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0045}_{-0.0043} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.812^{+0.073}_{-0.076} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0047}_{-0.0044} \quad (+0.1\sigma)$
A^{kSZ}	—	z_*	$1090.11^{+0.81}_{-0.82} \quad (-0.1\sigma)$	$r_{0.002}$	$< 0.163 \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	r_*	$144.51^{+0.97}_{-0.94} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.158 \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	$100\theta_*$	$1.04109^{+0.00091}_{-0.00090} \quad (+0.2\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.3^{+1.9}_{-2.5} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.881^{+0.090}_{-0.088} \quad (+0.2\sigma)$	r_{10}	$< 0.0865 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{drag}	$1059.62^{+0.99}_{-0.99} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.335 \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	r_{drag}	$147.2^{+1.0}_{-0.97} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.300 \quad (+0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	k_{D}	$0.1406^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	f_{2000}^{143}	$32^{+7}_{-7} \quad (-0.2\sigma)$
H_0	$67.2^{+1.9}_{-1.8} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16095^{+0.00058}_{-0.00057} \quad (-0.0\sigma)$	f_{2000}^{217}	$108.1^{+4.3}_{-4.4} \quad (-0.3\sigma)$
Ω_{Λ}	$0.683^{+0.025}_{-0.026} \quad (+0.2\sigma)$	z_{eq}	$3401^{+93}_{-94} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (-0.3\sigma)$
Ω_{m}	$0.317^{+0.026}_{-0.025} \quad (-0.2\sigma)$	k_{eq}	$0.01038^{+0.00028}_{-0.00029} \quad (-0.2\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.5) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1430^{+0.0039}_{-0.0040} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.018}_{-0.017} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 2.5) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09607^{+0.00099}_{-0.00096} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4494^{+0.0093}_{-0.0088} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7065.0 \quad (\nu: 16.4)$
σ_8	$0.811^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$H(0.15)$	$72.5^{+1.6}_{-1.5} \quad (+0.2\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
S_8	$0.833^{+0.048}_{-0.047} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+16}_{-16} \quad (-0.2\sigma)$	χ_{CMB}^2	$7485.8 \quad (\nu: 16.8) \quad (+1065.9\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.026}_{-0.026} \quad (-0.2\sigma)$	$H(0.38)$	$82.7^{+1.2}_{-1.1} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7493.58$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 2.32$; $R - 1 = 0.00549$

15.16 base_nrun_r_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00044}_{-0.00043} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.022}_{-0.021} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+22}_{-22} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1188^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.8} \quad (+0.8\sigma)$	$H(0.61)$	$95.36^{+0.51}_{-0.49} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00081}_{-0.00080} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.414^{+0.056}_{-0.056} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+23}_{-24} \quad (-0.8\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.3\sigma)$	z_{re}	$< 9.10 \quad (+0.2\sigma)$	$H(2.33)$	$235.7^{+1.6}_{-1.6} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.032}_{-0.029} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.067}_{-0.061} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+25}_{-25} \quad (-0.6\sigma)$
n_{s}	$0.9673^{+0.0091}_{-0.0089} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.024}_{-0.024} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.015}_{-0.015} \quad (-0.7\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.007^{+0.016}_{-0.018} \quad (+0.1\sigma)$	D_{40}	$1227^{+45}_{-42} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.013}_{-0.012} \quad (-0.4\sigma)$
r	$< 0.169 \quad (+0.2\sigma)$	D_{220}	$5706^{+82}_{-80} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.012} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	D_{810}	$2535^{+28}_{-28} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.0097} \quad (-0.2\sigma)$
A_{100}^{PS}	$245^{+50}_{-50} \quad (-0.8\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.1\sigma)$	D_{2000}	$229.3^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6192^{+0.0098}_{-0.0093} \quad (-0.2\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.989^{+0.054}_{-0.050} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.010}_{-0.010} \quad (-0.6\sigma)$
A_{217}^{CIB}	$42^{+10}_{-10} \quad (-1.0\sigma)$	Y_{P}	$0.24536^{+0.00017}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5893^{+0.0093}_{-0.0088} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00017}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0046}_{-0.0043} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.24}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.599^{+0.082}_{-0.079} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0048}_{-0.0045} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Age/Gyr	$13.795^{+0.057}_{-0.059} \quad (-0.6\sigma)$	$r_{0.002}$	$< 0.176 \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_*	$1089.91^{+0.62}_{-0.61} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.169 \quad (+0.2\sigma)$
A^{kSZ}	—	r_*	$144.78^{+0.66}_{-0.65} \quad (+0.7\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.2^{+1.9}_{-2.5} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$100\theta_*$	$1.04125^{+0.00080}_{-0.00078} \quad (+0.5\sigma)$	r_{10}	$< 0.0926 \quad (+0.2\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.064}_{-0.064} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.355 \quad (+0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_{drag}	$1059.7^{+1.0}_{-0.98} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.318 \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_{drag}	$147.48^{+0.74}_{-0.72} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{D}	$0.14041^{+0.00099}_{-0.00098} \quad (-0.5\sigma)$	f_{2000}^{217}	$107.9^{+4.3}_{-4.3} \quad (-0.4\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.16091^{+0.00059}_{-0.00056} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.4\sigma)$
H_0	$67.8^{+1.1}_{-1.1} \quad (+0.8\sigma)$	z_{eq}	$3373^{+57}_{-57} \quad (-0.8\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.6) \quad (-0.0\sigma)$
Ω_{Λ}	$0.691^{+0.014}_{-0.014} \quad (+0.8\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 2.2) \quad (-0.2\sigma)$
Ω_{m}	$0.309^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.010}_{-0.010} \quad (+0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7065.3 \quad (\nu: 15.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4522^{+0.0055}_{-0.0054} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.09606^{+0.00099}_{-0.00097} \quad (-0.0\sigma)$	$H(0.15)$	$73.01^{+0.95}_{-0.92} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.44 \quad (\nu: 0.1)$
σ_8	$0.807^{+0.015}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.1^{+9.1}_{-9.2} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.1)$
S_8	$0.819^{+0.029}_{-0.028} \quad (-0.7\sigma)$	$H(0.38)$	$83.07^{+0.72}_{-0.69} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+18}_{-19} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.015}_{-0.015} \quad (-0.7\sigma)$	$H(0.51)$	$89.76^{+0.60}_{-0.57} \quad (+0.7\sigma)$	χ_{CMB}^2	$7485.8 \quad (\nu: 16.1) \quad (+1065.9\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 7499.67; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 2.35; R - 1 = 0.00851$$

15.17 base_nrun_r_plikHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022185	$0.02223^{+0.00047}_{-0.00045} (+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9883	$0.988^{+0.021}_{-0.021} (-0.2\sigma)$	$H(0.51)$	89.46	$89.49^{+0.74}_{-0.71} (+0.1\sigma)$
$\Omega_c h^2$	0.11999	$0.1201^{+0.0030}_{-0.0031} (-0.2\sigma)$	$r_{\text{drag}} h$	98.95	$98.9^{+2.4}_{-2.3} (+0.2\sigma)$	$D_M(0.51)$	1990.3	$1990^{+28}_{-29} (-0.2\sigma)$
$100\theta_{\text{MC}}$	1.04084	$1.04084^{+0.00085}_{-0.00087} (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.441	$2.435^{+0.055}_{-0.054} (-0.1\sigma)$	$H(0.61)$	95.12	$95.15^{+0.62}_{-0.59} (+0.1\sigma)$
τ	0.0528	$0.054^{+0.017}_{-0.015} (+0.0\sigma)$	z_{re}	7.56	$7.6^{+1.6}_{-1.6} (+0.0\sigma)$	$D_M(0.61)$	2315.4	$2315^{+30}_{-31} (-0.2\sigma)$
$\ln(10^{10} A_s)$	3.0406	$3.044^{+0.032}_{-0.030} (-0.0\sigma)$	$10^9 A_s$	2.092	$2.099^{+0.067}_{-0.063} (-0.0\sigma)$	$H(2.33)$	236.36	$236.5^{+1.9}_{-1.9} (-0.2\sigma)$
n_s	0.9646	$0.9635^{+0.0098}_{-0.0098} (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8821	$1.885^{+0.023}_{-0.023} (-0.1\sigma)$	$D_M(2.33)$	5772.5	$5771^{+29}_{-30} (-0.1\sigma)$
$dn_s/d \ln k$	-0.0010	$-0.006^{+0.015}_{-0.016} (+0.2\sigma)$	D_{40}	1226.7	$1235^{+44}_{-41} (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4599	$0.460^{+0.016}_{-0.016} (-0.2\sigma)$
r	0.000	$< 0.144 (-0.1\sigma)$	D_{220}	5715	$5716^{+78}_{-82} (+0.1\sigma)$	$\sigma_8(0.15)$	0.7480	$0.748^{+0.011}_{-0.011} (-0.1\sigma)$
y_{cal}	1.00026	$1.0006^{+0.0047}_{-0.0049} (+0.0\sigma)$	D_{810}	2537.2	$2539^{+26}_{-26} (-0.0\sigma)$	$f\sigma_8(0.38)$	0.4771	$0.477^{+0.012}_{-0.013} (-0.2\sigma)$
A_{217}^{CIB}	49.7	$49^{+10}_{-10} (-0.0\sigma)$	D_{1420}	815.3	$814^{+10}_{-10} (+0.1\sigma)$	$\sigma_8(0.38)$	0.6625	$0.6626^{+0.0095}_{-0.0095} (-0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.22	—	D_{2000}	229.84	$229.2^{+3.8}_{-3.8} (+0.1\sigma)$	$f\sigma_8(0.51)$	0.4751	$0.475^{+0.010}_{-0.011} (-0.2\sigma)$
A_{143}^{tSZ}	6.99	$4.9^{+3.8}_{-3.9} (+0.0\sigma)$	$n_{s,0.002}$	0.968	$0.983^{+0.052}_{-0.048} (-0.2\sigma)$	$\sigma_8(0.51)$	0.6198	$0.6198^{+0.0091}_{-0.0089} (-0.0\sigma)$
A_{100}^{PS}	256	$266^{+60}_{-60} (-0.0\sigma)$	Y_{P}	0.245320	$0.24533^{+0.00018}_{-0.00021} (+0.1\sigma)$	$f\sigma_8(0.61)$	0.4697	$0.4698^{+0.0092}_{-0.0097} (-0.1\sigma)$
A_{143}^{PS}	48.4	$50^{+20}_{-20} (-0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	0.246646	$0.24666^{+0.00018}_{-0.00021} (+0.1\sigma)$	$\sigma_8(0.61)$	0.5896	$0.5896^{+0.0088}_{-0.0085} (-0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	44.4	$43^{+20}_{-20} (-0.0\sigma)$	10^5D/H	2.621	$2.613^{+0.087}_{-0.086} (-0.1\sigma)$	$f\sigma_8(2.33)$	0.29709	$0.2971^{+0.0046}_{-0.0045} (+0.0\sigma)$
A_{217}^{PS}	117.9	$114^{+20}_{-20} (-0.0\sigma)$	Age/Gyr	13.818	$13.815^{+0.066}_{-0.068} (-0.1\sigma)$	$\sigma_8(2.33)$	0.3061	$0.3061^{+0.0051}_{-0.0050} (+0.0\sigma)$
A^{kSZ}	0.0	—	z_*	1090.15	$1090.11^{+0.72}_{-0.74} (-0.1\sigma)$	$r_{0.002}$	0.000	$< 0.145 (-0.1\sigma)$
A_{100}^{dustTT}	9.07	$9.0^{+3.6}_{-3.6} (+0.0\sigma)$	r_*	144.57	$144.52^{+0.74}_{-0.73} (+0.2\sigma)$	$r_{0.01}$	0.000	$< 0.142 (-0.1\sigma)$
A_{143}^{dustTT}	10.88	$10.8^{+3.5}_{-3.5} (-0.0\sigma)$	$100\theta_*$	1.04105	$1.04104^{+0.00083}_{-0.00086} (+0.0\sigma)$	$\ln(10^{10} A_t)$	-8.76	$-0.4^{+1.9}_{-2.5} (-0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.3	$18.3^{+6.5}_{-6.5} (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.887	$13.882^{+0.070}_{-0.069} (+0.2\sigma)$	r_{10}	0.0000	$< 0.0762 (-0.1\sigma)$
A_{217}^{dustTT}	94.3	$93^{+10}_{-10} (-0.0\sigma)$	z_{drag}	1059.51	$1059.6^{+1.0}_{-0.97} (+0.0\sigma)$	$10^9 A_t$	0.000	$< 0.304 (-0.1\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012} (+0.0\sigma)$	r_{drag}	147.30	$147.23^{+0.79}_{-0.77} (+0.2\sigma)$	$10^9 A_t e^{-2\tau}$	0.000	$< 0.272 (-0.1\sigma)$
c_{217}	0.99830	$0.9983^{+0.0012}_{-0.0012} (+0.0\sigma)$	k_{D}	0.14050	$0.14061^{+0.00097}_{-0.00097} (-0.1\sigma)$	f_{2000}^{143}	30.6	$32^{+6}_{-6} (-0.1\sigma)$
H_0	67.18	$67.2^{+1.4}_{-1.4} (+0.2\sigma)$	$100\theta_{\text{D}}$	0.16101	$0.16095^{+0.00058}_{-0.00058} (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	33.38	$34^{+4}_{-4} (-0.1\sigma)$
Ω_{Λ}	0.6835	$0.683^{+0.019}_{-0.019} (+0.2\sigma)$	z_{eq}	3398	$3401^{+70}_{-70} (-0.2\sigma)$	f_{2000}^{217}	107.82	$108.6^{+4.0}_{-4.1} (-0.1\sigma)$
Ω_{m}	0.3165	$0.317^{+0.019}_{-0.019} (-0.2\sigma)$	k_{eq}	0.010370	$0.01038^{+0.00021}_{-0.00021} (-0.2\sigma)$	χ^2_{lensing}	8.89	$9.69 (\nu: 0.5)$
$\Omega_{\text{m}} h^2$	0.14282	$0.1430^{+0.0029}_{-0.0029} (-0.2\sigma)$	$100\theta_{\text{eq}}$	0.8136	$0.813^{+0.013}_{-0.013} (+0.2\sigma)$	χ^2_{small}	395.90	$397.2 (\nu: 1.4) (-0.1\sigma)$
$\Omega_{\text{m}} h^3$	0.09595	$0.09604^{+0.00099}_{-0.00095} (-0.1\sigma)$	$100\theta_{s,\text{eq}}$	0.4497	$0.4494^{+0.0068}_{-0.0066} (+0.2\sigma)$	χ^2_{lowl}	23.09	$23.9 (\nu: 2.6) (+0.1\sigma)$
σ_8	0.8100	$0.810^{+0.012}_{-0.013} (-0.1\sigma)$	$H(0.15)$	72.51	$72.5^{+1.2}_{-1.2} (+0.2\sigma)$	χ^2_{plik}	759.3	$772.8 (\nu: 15.2) (-0.1\sigma)$
S_8	0.8320	$0.833^{+0.032}_{-0.032} (-0.2\sigma)$	$D_M(0.15)$	645.0	$645^{+12}_{-12} (-0.2\sigma)$	χ^2_{prior}	1.4	$7.3 (\nu: 6.7) (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4557	$0.456^{+0.018}_{-0.018} (-0.2\sigma)$	$H(0.38)$	82.70	$82.72^{+0.92}_{-0.87} (+0.1\sigma)$	χ^2_{CMB}	1187.1	$1203.5 (\nu: 17.2) (+1.5\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6076	$0.608^{+0.015}_{-0.016} (-0.2\sigma)$	$D_M(0.38)$	1537.0	$1537^{+24}_{-25} (-0.2\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 1188.53$; $\Delta\chi^2_{\text{eff}} = -0.03$; $\bar{\chi}^2_{\text{eff}} = 1210.83$; $\Delta\bar{\chi}^2_{\text{eff}} = 2.42$; $R - 1 = 0.00920$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.88 (Δ -0.02) small_100x143_offlike5_EE_Aplanck_B: 395.90 (Δ 0.04) commander_dx12.v3.2.29: 23.09 (Δ -0.15) plik_rd12_HM_v22_TT: 759.26 (Δ -0.06)

15.18 base_nrun_r_plikHM_TT_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022206	$0.02230^{+0.00046}_{-0.00042} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	99.62	$99.7^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$H(0.61)$	95.235	$95.32^{+0.50}_{-0.48} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.11914	$0.1191^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4294	$2.424^{+0.047}_{-0.047} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	2307.9	$2305^{+22}_{-22} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	1.04098	$1.04099^{+0.00079}_{-0.00082} \quad (+0.4\sigma)$	z_{re}	7.73	$7.9^{+1.5}_{-1.5} \quad (+0.3\sigma)$	$H(2.33)$	235.84	$235.9^{+1.4}_{-1.4} \quad (-0.6\sigma)$
τ	0.0545	$0.056^{+0.016}_{-0.014} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	2.095	$2.107^{+0.067}_{-0.062} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	5768.0	$5764^{+25}_{-26} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0420	$3.048^{+0.031}_{-0.030} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8782	$1.882^{+0.021}_{-0.022} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	0.4557	$0.455^{+0.012}_{-0.012} \quad (-0.6\sigma)$
n_{s}	0.9667	$0.9660^{+0.0081}_{-0.0083} \quad (+0.6\sigma)$	D_{40}	1222.0	$1232^{+45}_{-40} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	0.7471	$0.747^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.00099	$-0.006^{+0.015}_{-0.017} \quad (+0.2\sigma)$	D_{220}	5714	$5723^{+78}_{-79} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	0.4740	$0.4738^{+0.0097}_{-0.010} \quad (-0.5\sigma)$
r	0.000	$< 0.153 \quad (+0.0\sigma)$	D_{810}	2536.3	$2540^{+25}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	0.6623	$0.6627^{+0.0097}_{-0.0095} \quad (-0.0\sigma)$
y_{cal}	1.00043	$1.0008^{+0.0047}_{-0.0047} \quad (+0.1\sigma)$	D_{1420}	815.6	$815.4^{+9.7}_{-9.8} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	0.4726	$0.4725^{+0.0087}_{-0.0091} \quad (-0.5\sigma)$
A_{217}^{CIB}	50.1	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{2000}	229.95	$229.6^{+3.7}_{-3.7} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	0.6198	$0.6202^{+0.0091}_{-0.0089} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.14	—	$n_{\mathrm{s},0.002}$	0.970	$0.986^{+0.053}_{-0.048} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	0.4677	$0.4676^{+0.0080}_{-0.0083} \quad (-0.4\sigma)$
A_{143}^{tSZ}	7.13	$4.9^{+3.8}_{-3.9} \quad (+0.0\sigma)$	Y_{P}	0.245328	$0.24536^{+0.00017}_{-0.00019} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	0.5897	$0.5902^{+0.0087}_{-0.0084} \quad (+0.1\sigma)$
A_{100}^{PS}	256	$265^{+60}_{-60} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246655	$0.24669^{+0.00018}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	0.29736	$0.2976^{+0.0045}_{-0.0043} \quad (+0.2\sigma)$
A_{143}^{PS}	47.0	$50^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.617	$2.600^{+0.080}_{-0.083} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	0.30657	$0.3069^{+0.0048}_{-0.0045} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	42.2	$43^{+20}_{-20} \quad (-0.1\sigma)$	Age/Gyr	13.809	$13.799^{+0.057}_{-0.060} \quad (-0.5\sigma)$	$r_{0.002}$	0.000	$< 0.157 \quad (+0.0\sigma)$
A_{217}^{PS}	117.2	$115^{+20}_{-20} \quad (-0.0\sigma)$	z_{*}	1090.06	$1089.93^{+0.61}_{-0.64} \quad (-0.6\sigma)$	$r_{0.01}$	0.000	$< 0.152 \quad (+0.0\sigma)$
A^{kSZ}	0.0	—	r_{*}	144.78	$144.73^{+0.59}_{-0.59} \quad (+0.6\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	-6.05	$-0.3^{+1.9}_{-2.5} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.96	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$100\theta_{*}$	1.04117	$1.04118^{+0.00077}_{-0.00081} \quad (+0.3\sigma)$	r_{10}	0.0001	$< 0.0825 \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.87	$10.7^{+3.4}_{-3.4} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.905	$13.901^{+0.059}_{-0.058} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}$	0.000	$< 0.324 \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.2	$18.3^{+6.6}_{-6.5} \quad (-0.0\sigma)$	z_{drag}	1059.47	$1059.7^{+1.0}_{-0.95} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	0.000	$< 0.288 \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.1	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_{drag}	147.50	$147.42^{+0.67}_{-0.68} \quad (+0.6\sigma)$	f_{2000}^{143}	30.7	$32^{+6}_{-6} \quad (-0.2\sigma)$
c_{100}	0.99962	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	0.14031	$0.14046^{+0.00094}_{-0.00092} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	33.40	$34^{+4}_{-4} \quad (-0.2\sigma)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0013} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	0.16102	$0.16090^{+0.00056}_{-0.00058} \quad (-0.2\sigma)$	f_{2000}^{217}	107.88	$108.4^{+3.9}_{-4.0} \quad (-0.2\sigma)$
H_0	67.54	$67.65^{+0.99}_{-0.99} \quad (+0.7\sigma)$	z_{eq}	3378	$3378^{+51}_{-50} \quad (-0.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.96	$9.49 \quad (\nu: 0.3)$
Ω_{Λ}	0.6887	$0.690^{+0.013}_{-0.013} \quad (+0.7\sigma)$	k_{eq}	0.010309	$0.01031^{+0.00016}_{-0.00015} \quad (-0.7\sigma)$	χ_{small}^2	396.06	$397.5 \quad (\nu: 1.7) \quad (+0.1\sigma)$
Ω_{m}	0.3113	$0.310^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	0.8173	$0.8175^{+0.0092}_{-0.0093} \quad (+0.7\sigma)$	χ_{lowl}^2	22.68	$23.5 \quad (\nu: 2.3) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.14200	$0.1420^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.45158	$0.4516^{+0.0048}_{-0.0048} \quad (+0.7\sigma)$	χ_{plik}^2	759.8	$773.1 \quad (\nu: 14.9) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.09590	$0.09606^{+0.00099}_{-0.00098} \quad (-0.0\sigma)$	$H(0.15)$	72.81	$72.91^{+0.87}_{-0.86} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.031	$0.054 \quad (\nu: 0.0)$
σ_8	0.8085	$0.809^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	641.9	$641.0^{+8.5}_{-8.4} \quad (-0.7\sigma)$	χ_{MGS}^2	1.22	$1.32 \quad (\nu: 0.1)$
S_8	0.8236	$0.823^{+0.023}_{-0.024} \quad (-0.6\sigma)$	$H(0.38)$	82.91	$83.00^{+0.68}_{-0.66} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.41	$4.7 \quad (\nu: 1.1)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4511	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	1531.0	$1529^{+17}_{-17} \quad (-0.7\sigma)$	χ_{prior}^2	1.6	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6039	$0.604^{+0.012}_{-0.013} \quad (-0.5\sigma)$	$H(0.51)$	89.62	$89.71^{+0.57}_{-0.55} \quad (+0.6\sigma)$	χ_{CMB}^2	1187.5	$1203.5 \quad (\nu: 16.4) \quad (+1.5\sigma)$
$\sigma_8/h^{0.5}$	0.9838	$0.983^{+0.017}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	1983.3	$1981^{+20}_{-20} \quad (-0.7\sigma)$	χ_{BAO}^2	5.66	$6.1 \quad (\nu: 0.7)$

Best-fit $\chi_{\mathrm{eff}}^2 = 1194.69$; $\Delta\chi_{\mathrm{eff}}^2 = 0.01$; $\bar{\chi}_{\mathrm{eff}}^2 = 1216.99$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.26$; $R - 1 = 0.01565$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.41 (Δ 0.04) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.96 (Δ 0.08) small_100x143_offlike5_EE_Aplanck.L
396.06 (Δ -0.03) commander_dx12_v3.2_29: 22.68 (Δ -0.28) plik_rd12_HM_v22_TT: 759.76 (Δ -0.04)

15.19 base_nrun_r_plikHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02224^{+0.00047}_{-0.00045} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.020}_{-0.021} \quad (-0.1\sigma)$	$H(0.51)$	$89.51^{+0.73}_{-0.69} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0030}_{-0.0031} \quad (-0.2\sigma)$	$r_{\mathrm{drag}}h$	$99.0^{+2.4}_{-2.3} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1989^{+27}_{-28} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04085^{+0.00085}_{-0.00087} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.055}_{-0.054} \quad (-0.1\sigma)$	$H(0.61)$	$95.17^{+0.61}_{-0.58} \quad (+0.2\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	z_{re}	$< 8.99 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2314^{+29}_{-31} \quad (-0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.026} \quad (+0.1\sigma)$	10^9A_{s}	$2.104^{+0.059}_{-0.054} \quad (+0.1\sigma)$	$H(2.33)$	$236.4^{+1.8}_{-1.9} \quad (-0.2\sigma)$
n_{s}	$0.9638^{+0.0096}_{-0.0097} \quad (+0.2\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.884^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5770^{+29}_{-30} \quad (-0.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.006^{+0.015}_{-0.016} \quad (+0.2\sigma)$	D_{40}	$1234^{+44}_{-41} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.016}_{-0.016} \quad (-0.2\sigma)$
r	$< 0.146 \quad (-0.0\sigma)$	D_{220}	$5716^{+78}_{-82} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.010} \quad (-0.0\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0049} \quad (+0.0\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.012}_{-0.013} \quad (-0.2\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6632^{+0.0091}_{-0.0083} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$229.3^{+3.8}_{-3.7} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.010}_{-0.011} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$4.9^{+3.8}_{-3.9} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.984^{+0.052}_{-0.048} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6204^{+0.0082}_{-0.0079} \quad (+0.1\sigma)$
A_{100}^{PS}	$266^{+60}_{-60} \quad (-0.0\sigma)$	Y_{P}	$0.24534^{+0.00018}_{-0.00021} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4700^{+0.0092}_{-0.0097} \quad (-0.1\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00018}_{-0.00021} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0079}_{-0.0075} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.611^{+0.086}_{-0.085} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0041}_{-0.0039} \quad (+0.1\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.813^{+0.065}_{-0.067} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0045}_{-0.0042} \quad (+0.2\sigma)$
A^{kSZ}	—	z_*	$1090.09^{+0.71}_{-0.73} \quad (-0.2\sigma)$	$r_{0.002}$	$< 0.147 \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.54^{+0.73}_{-0.71} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.144 \quad (-0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.04105^{+0.00083}_{-0.00086} \quad (+0.1\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.4^{+1.9}_{-2.5} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.884^{+0.069}_{-0.068} \quad (+0.2\sigma)$	r_{10}	$< 0.0774 \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.62^{+0.99}_{-0.99} \quad (+0.0\sigma)$	10^9A_{t}	$< 0.308 \quad (-0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.25^{+0.78}_{-0.76} \quad (+0.2\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.275 \quad (-0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14060^{+0.00097}_{-0.00097} \quad (-0.2\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.1\sigma)$
H_0	$67.2^{+1.4}_{-1.3} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16094^{+0.00058}_{-0.00058} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.1\sigma)$
Ω_{Λ}	$0.684^{+0.019}_{-0.019} \quad (+0.2\sigma)$	z_{eq}	$3399^{+68}_{-69} \quad (-0.2\sigma)$	f_{2000}^{217}	$108.6^{+4.0}_{-4.1} \quad (-0.1\sigma)$
Ω_{m}	$0.316^{+0.019}_{-0.019} \quad (-0.2\sigma)$	k_{eq}	$0.01037^{+0.00021}_{-0.00021} \quad (-0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.67 \quad (\nu: 0.4)$
$\Omega_{\mathrm{m}}h^2$	$0.1429^{+0.0028}_{-0.0029} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.013}_{-0.012} \quad (+0.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.4) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09604^{+0.00098}_{-0.00096} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4496^{+0.0067}_{-0.0064} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 2.6) \quad (+0.1\sigma)$
σ_8	$0.811^{+0.012}_{-0.012} \quad (-0.1\sigma)$	$H(0.15)$	$72.6^{+1.2}_{-1.2} \quad (+0.2\sigma)$	χ_{plik}^2	$772.7 \quad (\nu: 15.2) \quad (-0.2\sigma)$
S_8	$0.832^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+12}_{-12} \quad (-0.2\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.017}_{-0.018} \quad (-0.2\sigma)$	$H(0.38)$	$82.75^{+0.90}_{-0.85} \quad (+0.2\sigma)$	χ_{CMB}^2	$1203.3 \quad (\nu: 16.9) \quad (+1.5\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.015}_{-0.016} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+23}_{-24} \quad (-0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1210.63; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 2.47; R - 1 = 0.00844$$

15.20 base_nrun_r_plikHM_TT_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02230^{+0.00045}_{-0.00042} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.7}_{-1.6} \quad (+0.7\sigma)$	$H(0.61)$	$95.32^{+0.50}_{-0.48} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1190^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.047}_{-0.047} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+22}_{-22} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04099^{+0.00079}_{-0.00082} \quad (+0.4\sigma)$	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-0.7\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.109^{+0.061}_{-0.057} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+25}_{-26} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.049^{+0.029}_{-0.027} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.021}_{-0.022} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.012}_{-0.012} \quad (-0.6\sigma)$
n_{s}	$0.9660^{+0.0081}_{-0.0083} \quad (+0.6\sigma)$	D_{40}	$1232^{+45}_{-40} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.006^{+0.015}_{-0.017} \quad (+0.2\sigma)$	D_{220}	$5723^{+78}_{-79} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4739^{+0.0097}_{-0.010} \quad (-0.5\sigma)$
r	$< 0.154 \quad (+0.0\sigma)$	D_{810}	$2540^{+25}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.6630^{+0.0094}_{-0.0086} \quad (+0.0\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	D_{1420}	$815.4^{+9.7}_{-9.8} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4727^{+0.0086}_{-0.0090} \quad (-0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{2000}	$229.6^{+3.7}_{-3.7} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0088}_{-0.0080} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.987^{+0.053}_{-0.048} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.4678^{+0.0079}_{-0.0082} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-3.9} \quad (+0.0\sigma)$	Y_{P}	$0.24536^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0085}_{-0.0076} \quad (+0.1\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00017}_{-0.00019} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0044}_{-0.0039} \quad (+0.3\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.600^{+0.080}_{-0.082} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0045}_{-0.0042} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.798^{+0.057}_{-0.060} \quad (-0.5\sigma)$	$r_{0.002}$	$< 0.159 \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	z_*	$1089.93^{+0.60}_{-0.64} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.153 \quad (+0.0\sigma)$
A^{kSZ}	—	r_*	$144.73^{+0.59}_{-0.59} \quad (+0.6\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.3^{+1.9}_{-2.5} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$100\theta_*$	$1.04118^{+0.00077}_{-0.00081} \quad (+0.4\sigma)$	r_{10}	$< 0.0832 \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.4}_{-3.5} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.059}_{-0.058} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.326 \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.6} \quad (-0.0\sigma)$	z_{drag}	$1059.70^{+0.99}_{-0.95} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.290 \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_{drag}	$147.43^{+0.67}_{-0.68} \quad (+0.6\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14046^{+0.00094}_{-0.00092} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16090^{+0.00056}_{-0.00058} \quad (-0.2\sigma)$	f_{2000}^{217}	$108.4^{+3.9}_{-4.0} \quad (-0.2\sigma)$
H_0	$67.66^{+0.98}_{-0.98} \quad (+0.7\sigma)$	z_{eq}	$3378^{+51}_{-50} \quad (-0.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.46 \quad (\nu: 0.3)$
Ω_{Λ}	$0.690^{+0.013}_{-0.013} \quad (+0.7\sigma)$	k_{eq}	$0.01031^{+0.00016}_{-0.00015} \quad (-0.7\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 1.8) \quad (+0.1\sigma)$
Ω_{m}	$0.310^{+0.013}_{-0.013} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8176^{+0.0092}_{-0.0092} \quad (+0.7\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 2.3) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0048}_{-0.0048} \quad (+0.7\sigma)$	χ_{plik}^2	$773.0 \quad (\nu: 14.9) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0961^{+0.0010}_{-0.00098} \quad (-0.0\sigma)$	$H(0.15)$	$72.93^{+0.87}_{-0.85} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.052 \quad (\nu: 0.0)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.9^{+8.4}_{-8.4} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.33 \quad (\nu: 0.1)$
S_8	$0.823^{+0.023}_{-0.024} \quad (-0.6\sigma)$	$H(0.38)$	$83.01^{+0.67}_{-0.65} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.0)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+17}_{-17} \quad (-0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.013} \quad (-0.5\sigma)$	$H(0.51)$	$89.71^{+0.57}_{-0.55} \quad (+0.6\sigma)$	χ_{CMB}^2	$1203.4 \quad (\nu: 16.3) \quad (+1.5\sigma)$
$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+20}_{-20} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1216.87; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 2.29; R - 1 = 0.01475$$

15.21 base_nrun_r_plikHM_TTTEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022398	$0.02243^{+0.00031}_{-0.00030}$ (+0.9 σ)	σ_8	0.8121	$0.811^{+0.012}_{-0.012}$ (−0.0 σ)	$H(0.38)$	82.86	$82.93^{+0.68}_{-0.65}$ (+0.5 σ)
$\Omega_c h^2$	0.12015	$0.1199^{+0.0023}_{-0.0024}$ (−0.3 σ)	S_8	0.8333	$0.830^{+0.025}_{-0.025}$ (−0.3 σ)	$D_M(0.38)$	1533.9	1532^{+18}_{-18} (−0.5 σ)
$100\theta_{MC}$	1.04094	$1.04093^{+0.00060}_{-0.00058}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4564	$0.455^{+0.014}_{-0.013}$ (−0.3 σ)	$H(0.51)$	89.63	$89.69^{+0.54}_{-0.52}$ (+0.6 σ)
τ	0.0546	$0.056^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6088	$0.607^{+0.012}_{-0.012}$ (−0.2 σ)	$D_M(0.51)$	1986.3	1984^{+21}_{-21} (−0.5 σ)
$\ln(10^{10} A_s)$	3.0464	$3.049^{+0.031}_{-0.030}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9897	$0.987^{+0.018}_{-0.018}$ (−0.2 σ)	$H(0.61)$	95.286	$95.33^{+0.44}_{-0.43}$ (+0.6 σ)
n_s	0.9654	$0.9647^{+0.0088}_{-0.0086}$ (+0.3 σ)	$r_{drag} h$	98.99	$99.2^{+1.8}_{-1.8}$ (+0.3 σ)	$D_M(0.61)$	2310.7	2308^{+23}_{-23} (−0.5 σ)
$dn_s/d \ln k$	−0.0025	$−0.008^{+0.014}_{-0.015}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4423	$2.431^{+0.047}_{-0.047}$ (−0.2 σ)	$H(2.33)$	236.69	$236.6^{+1.4}_{-1.4}$ (−0.1 σ)
r	0.001	< 0.159 (+0.2 σ)	z_{re}	7.71	$7.8^{+1.5}_{-1.5}$ (+0.2 σ)	$D_M(2.33)$	5762.6	5761^{+20}_{-21} (−0.7 σ)
y_{cal}	1.00064	$1.0007^{+0.0049}_{-0.0049}$ (+0.1 σ)	$10^9 A_s$	2.104	$2.110^{+0.067}_{-0.062}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4606	$0.459^{+0.013}_{-0.012}$ (−0.3 σ)
A_{217}^{CIB}	47.4	48^{+10}_{-10} (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8862	$1.886^{+0.022}_{-0.022}$ (−0.0 σ)	$\sigma_8(0.15)$	0.7500	$0.749^{+0.011}_{-0.011}$ (+0.0 σ)
$\xi^{tSZ \times CIB}$	0.47	—	D_{40}	1224.7	1233^{+42}_{-38} (−0.0 σ)	$f\sigma_8(0.38)$	0.4780	$0.477^{+0.010}_{-0.010}$ (−0.2 σ)
A_{143}^{tSZ}	7.12	$5.2^{+3.8}_{-4.0}$ (+0.2 σ)	D_{220}	5733	5729^{+78}_{-77} (+0.4 σ)	$\sigma_8(0.38)$	0.6643	$0.6636^{+0.0096}_{-0.0092}$ (+0.1 σ)
A_{100}^{PS}	251	264^{+60}_{-60} (−0.1 σ)	D_{810}	2542.8	2542^{+27}_{-26} (+0.2 σ)	$f\sigma_8(0.51)$	0.4761	$0.4749^{+0.0089}_{-0.0089}$ (−0.2 σ)
A_{143}^{PS}	49.3	48^{+20}_{-20} (−0.3 σ)	D_{1420}	818.1	$816.2^{+9.8}_{-9.6}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6215	$0.6209^{+0.0091}_{-0.0087}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	49.2	43^{+20}_{-20} (−0.1 σ)	D_{2000}	231.06	$230.0^{+3.6}_{-3.5}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4708	$0.4697^{+0.0081}_{-0.0081}$ (−0.2 σ)
A_{217}^{PS}	120.2	115^{+20}_{-20} (−0.0 σ)	$n_{s,0.002}$	0.9735	$0.992^{+0.046}_{-0.044}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5912	$0.5907^{+0.0088}_{-0.0083}$ (+0.2 σ)
A^{kSZ}	0.0	—	Y_P	0.245407	$0.24542^{+0.00011}_{-0.00012}$ (+0.9 σ)	$f\sigma_8(2.33)$	0.29793	$0.2977^{+0.0046}_{-0.0043}$ (+0.3 σ)
A_{100}^{dustTT}	8.87	$9.0^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P^{BBN}	0.246733	$0.24674^{+0.00011}_{-0.00012}$ (+0.9 σ)	$\sigma_8(2.33)$	0.30696	$0.3068^{+0.0049}_{-0.0046}$ (+0.3 σ)
A_{143}^{dustTT}	11.05	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	$10^5 D/H$	2.580	$2.575^{+0.056}_{-0.055}$ (−0.9 σ)	$r_{0.002}$	0.001	< 0.164 (+0.2 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.7^{+6.4}_{-6.5}$ (+0.1 σ)	Age/Gyr	13.7949	$13.791^{+0.046}_{-0.046}$ (−0.7 σ)	$r_{0.01}$	0.001	< 0.158 (+0.2 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.0 σ)	z_*	1089.90	$1089.84^{+0.51}_{-0.51}$ (−0.8 σ)	$\ln(10^{10} A_t)$	−4.27	$−0.2^{+1.8}_{-2.4}$ (+0.2 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.075}_{-0.075}$	r_*	144.37	$144.41^{+0.52}_{-0.52}$ (−0.0 σ)	r_{10}	0.0003	< 0.0866 (+0.2 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.136^{+0.057}_{-0.058}$	$100\theta_*$	1.04111	$1.04111^{+0.00059}_{-0.00058}$ (+0.2 σ)	$10^9 A_t$	0.001	< 0.336 (+0.2 σ)
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.16}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	13.8670	$13.871^{+0.049}_{-0.050}$ (−0.1 σ)	$10^9 A_t e^{-2\tau}$	0.001	< 0.300 (+0.2 σ)
A_{143}^{dustTE}	0.224	$0.23^{+0.11}_{-0.11}$	z_{drag}	1060.01	$1060.06^{+0.63}_{-0.63}$ (+0.9 σ)	f_{2000}^{143}	29.3	31^{+6}_{-6} (−0.4 σ)
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.16}_{-0.15}$	r_{drag}	147.02	$147.05^{+0.53}_{-0.54}$ (−0.2 σ)	$f_{2000}^{143 \times 217}$	32.38	33^{+4}_{-4} (−0.5 σ)
A_{217}^{dustTE}	2.09	$2.08^{+0.53}_{-0.52}$	k_D	0.14096	$0.14095^{+0.00063}_{-0.00061}$ (+0.5 σ)	f_{2000}^{217}	106.91	$108.0^{+3.9}_{-4.0}$ (−0.4 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_D$	0.160717	$0.16068^{+0.00036}_{-0.00037}$ (−0.9 σ)	$\chi_{lensing}^2$	8.96	9.56 (ν : 0.3)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3406	3401^{+53}_{-53} (−0.2 σ)	χ_{small}^2	396.06	397.4 (ν : 1.7) (+0.1 σ)
H_0	67.33	$67.4^{+1.1}_{-1.0}$ (+0.4 σ)	k_{eq}	0.010397	$0.01038^{+0.00016}_{-0.00016}$ (−0.2 σ)	χ_{lowl}^2	22.66	23.4 (ν : 1.8) (−0.1 σ)
Ω_Λ	0.6841	$0.686^{+0.014}_{-0.015}$ (+0.4 σ)	$100\theta_{eq}$	0.8126	$0.814^{+0.010}_{-0.0098}$ (+0.2 σ)	χ_{plik}^2	2345.1	2360.6 (ν : 17.6) (+272.1 σ)
Ω_m	0.3159	$0.314^{+0.015}_{-0.014}$ (−0.4 σ)	$100\theta_{s,eq}$	0.4490	$0.4495^{+0.0051}_{-0.0050}$ (+0.2 σ)	χ_{prior}^2	1.7	11.6 (ν : 10.5) (+1.2 σ)
$\Omega_m h^2$	0.14319	$0.1430^{+0.0022}_{-0.0022}$ (−0.2 σ)	$H(0.15)$	72.66	$72.76^{+0.92}_{-0.89}$ (+0.5 σ)	χ_{CMB}^2	2772.8	2791.0 (ν : 19.4) (+270.5 σ)
$\Omega_m h^3$	0.09641	$0.09642^{+0.00062}_{-0.00059}$ (+0.7 σ)	$D_M(0.15)$	643.6	$642.6^{+9.0}_{-9.1}$ (−0.5 σ)			

Best-fit $\chi_{eff}^2 = 2774.45$; $\Delta\chi_{eff}^2 = -0.18$; $\bar{\chi}_{eff}^2 = 2802.59$; $\Delta\bar{\chi}_{eff}^2 = 1.90$; $R - 1 = 0.00905$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.96 (Δ 0.09) small_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ 0.01) commander_dx12_v3.2_29: 22.66 (Δ -0.59) plik_rd12_HM_v22b_TTTEE: 2345.10 (Δ 0.17)

15.22 base_nrun_r_plikHM_TTTEE_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022442	$0.02248^{+0.00028}_{-0.00028}$ (+1.1 σ)	S_8	0.8260	$0.824^{+0.021}_{-0.020}$ (−0.5 σ)	$H(0.51)$	89.767	$89.82^{+0.44}_{-0.43}$ (+0.9 σ)
$\Omega_{\mathrm{c}}h^2$	0.11941	$0.1193^{+0.0019}_{-0.0018}$ (−0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4524	$0.451^{+0.011}_{-0.011}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1980.2	1978^{+17}_{-17} (−0.8 σ)
$100\theta_{\mathrm{MC}}$	1.04098	$1.04101^{+0.00056}_{-0.00056}$ (+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6056	$0.605^{+0.011}_{-0.011}$ (−0.4 σ)	$H(0.61)$	95.390	$95.44^{+0.37}_{-0.36}$ (+0.9 σ)
τ	0.0569	$0.058^{+0.015}_{-0.014}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9857	$0.984^{+0.016}_{-0.016}$ (−0.4 σ)	$D_{\mathrm{M}}(0.61)$	2304.2	2302^{+18}_{-18} (−0.8 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0493	$3.052^{+0.031}_{-0.029}$ (+0.4 σ)	$r_{\mathrm{drag}}h$	99.54	$99.7^{+1.4}_{-1.4}$ (+0.6 σ)	$H(2.33)$	236.25	$236.2^{+1.2}_{-1.1}$ (−0.4 σ)
n_{s}	0.9664	$0.9664^{+0.0080}_{-0.0078}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.4332	$2.424^{+0.044}_{-0.045}$ (−0.4 σ)	$D_{\mathrm{M}}(2.33)$	5758.5	5756^{+18}_{-18} (−1.0 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	−0.0037	$−0.008^{+0.014}_{-0.015}$ (−0.1 σ)	z_{re}	7.92	$8.0^{+1.5}_{-1.4}$ (+0.4 σ)	$f\sigma_8(0.15)$	0.4570	$0.456^{+0.011}_{-0.011}$ (−0.5 σ)
r	0.000	< 0.164 (+0.2 σ)	$10^9 A_{\mathrm{s}}$	2.110	$2.115^{+0.067}_{-0.061}$ (+0.4 σ)	$\sigma_8(0.15)$	0.7491	$0.749^{+0.011}_{-0.011}$ (−0.0 σ)
y_{cal}	1.00069	$1.0008^{+0.0049}_{-0.0049}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8831	$1.884^{+0.021}_{-0.021}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4754	$0.4746^{+0.0090}_{-0.0089}$ (−0.4 σ)
A_{217}^{CIB}	49.0	48^{+10}_{-10} (−0.1 σ)	D_{40}	1219.6	1231^{+41}_{-39} (−0.1 σ)	$\sigma_8(0.38)$	0.6640	$0.6638^{+0.0098}_{-0.0092}$ (+0.1 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.19	—	D_{220}	5736	5733^{+78}_{-77} (+0.5 σ)	$f\sigma_8(0.51)$	0.4740	$0.4733^{+0.0082}_{-0.0081}$ (−0.4 σ)
A_{143}^{tSZ}	7.30	$5.2^{+3.7}_{-4.0}$ (+0.2 σ)	D_{810}	2541.5	2542^{+27}_{-26} (+0.2 σ)	$\sigma_8(0.51)$	0.6214	$0.6212^{+0.0092}_{-0.0086}$ (+0.2 σ)
A_{100}^{PS}	253	263^{+60}_{-50} (−0.1 σ)	D_{1420}	817.6	$816.8^{+9.6}_{-9.6}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4690	$0.4684^{+0.0077}_{-0.0076}$ (−0.3 σ)
A_{143}^{PS}	45.1	48^{+20}_{-20} (−0.4 σ)	D_{2000}	230.85	$230.3^{+3.6}_{-3.4}$ (+0.7 σ)	$\sigma_8(0.61)$	0.5913	$0.5912^{+0.0088}_{-0.0082}$ (+0.3 σ)
$A_{143\times 217}^{\mathrm{PS}}$	41.9	42^{+20}_{-20} (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9785	$0.993^{+0.047}_{-0.045}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.29815	$0.2981^{+0.0045}_{-0.0042}$ (+0.4 σ)
A_{217}^{PS}	117.4	114^{+20}_{-20} (−0.0 σ)	Y_{P}	0.245423	$0.24543^{+0.00011}_{-0.00011}$ (+1.1 σ)	$\sigma_8(2.33)$	0.30738	$0.3074^{+0.0048}_{-0.0044}$ (+0.5 σ)
A^{kSZ}	0.0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246750	$0.24676^{+0.00011}_{-0.00011}$ (+1.1 σ)	$r_{0.002}$	0.000	< 0.171 (+0.2 σ)
$A_{100}^{\mathrm{dust}TT}$	8.93	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.572	$2.567^{+0.052}_{-0.051}$ (−1.1 σ)	$r_{0.01}$	0.000	< 0.164 (+0.2 σ)
$A_{143}^{\mathrm{dust}TT}$	11.01	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	Age/Gyr	13.7860	$13.781^{+0.040}_{-0.040}$ (−1.0 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−4.68	$−0.1^{+1.7}_{-2.4}$ (+0.2 σ)
$A_{143\times 217}^{\mathrm{dust}TT}$	19.4	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	z_{\ast}	1089.777	$1089.72^{+0.44}_{-0.43}$ (−1.1 σ)	r_{10}	0.0002	< 0.0896 (+0.2 σ)
$A_{217}^{\mathrm{dust}TT}$	94.4	93^{+10}_{-10} (+0.0 σ)	r_{\ast}	144.529	$144.54^{+0.42}_{-0.45}$ (+0.2 σ)	$10^9 A_{\mathrm{t}}$	0.001	< 0.348 (+0.2 σ)
$A_{100}^{\mathrm{dust}TE}$	0.114	$0.115^{+0.075}_{-0.077}$	$100\theta_{\ast}$	1.04115	$1.04118^{+0.00056}_{-0.00056}$ (+0.4 σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.001	< 0.309 (+0.2 σ)
$A_{100\times 143}^{\mathrm{dust}TE}$	0.136	$0.136^{+0.057}_{-0.058}$	$D_{\mathrm{M}}(z_{\ast})/\mathrm{Gpc}$	13.8817	$13.883^{+0.040}_{-0.043}$ (+0.2 σ)	f_{2000}^{143}	29.6	31^{+6}_{-6} (−0.5 σ)
$A_{100\times 217}^{\mathrm{dust}TE}$	0.481	$0.48^{+0.16}_{-0.16}$	z_{drag}	1060.05	$1060.12^{+0.61}_{-0.61}$ (+1.0 σ)	$f_{2000}^{143\times 217}$	32.52	33^{+4}_{-4} (−0.6 σ)
$A_{143}^{\mathrm{dust}TE}$	0.225	$0.23^{+0.10}_{-0.11}$	r_{drag}	147.169	$147.17^{+0.45}_{-0.47}$ (+0.1 σ)	f_{2000}^{217}	107.22	$107.9^{+3.9}_{-3.9}$ (−0.5 σ)
$A_{143\times 217}^{\mathrm{dust}TE}$	0.663	$0.66^{+0.16}_{-0.15}$	k_{D}	0.14084	$0.14086^{+0.00059}_{-0.00057}$ (+0.3 σ)	$\chi_{\mathrm{lensing}}^2$	8.84	9.42 (ν : 0.2)
$A_{217}^{\mathrm{dust}TE}$	2.07	$2.07^{+0.53}_{-0.52}$	$100\theta_{\mathrm{D}}$	0.160687	$0.16065^{+0.00036}_{-0.00036}$ (−1.0 σ)	χ_{small}^2	396.45	397.7 (ν : 2.1) (+0.2 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{eq}	3389.8	3387^{+42}_{-41} (−0.5 σ)	χ_{lowl}^2	22.19	23.2 (ν : 1.8) (−0.2 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{eq}	0.010346	$0.01034^{+0.00013}_{-0.00013}$ (−0.5 σ)	χ_{plik}^2	2345.4	2360.6 (ν : 17.5) (+272.1 σ)
H_0	67.64	$67.73^{+0.84}_{-0.84}$ (+0.8 σ)	$100\theta_{\mathrm{eq}}$	0.8158	$0.8164^{+0.0078}_{-0.0079}$ (+0.5 σ)	$\chi_{6\mathrm{DF}}^2$	0.037	0.049 (ν : 0.0)
Ω_{Λ}	0.6885	$0.690^{+0.011}_{-0.011}$ (+0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.45062	$0.4509^{+0.0040}_{-0.0040}$ (+0.5 σ)	χ_{MGS}^2	1.16	1.29 (ν : 0.1)
Ω_{m}	0.3115	$0.310^{+0.011}_{-0.011}$ (−0.7 σ)	$H(0.15)$	72.92	$73.01^{+0.73}_{-0.72}$ (+0.8 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.62	4.7 (ν : 0.8)
$\Omega_{\mathrm{m}}h^2$	0.14250	$0.1424^{+0.0018}_{-0.0017}$ (−0.5 σ)	$D_{\mathrm{M}}(0.15)$	640.9	$640.1^{+7.2}_{-7.1}$ (−0.8 σ)	χ_{prior}^2	1.9	11.7 (ν : 10.4) (+1.2 σ)
$\Omega_{\mathrm{m}}h^3$	0.09638	$0.09643^{+0.00061}_{-0.00059}$ (+0.7 σ)	$H(0.38)$	83.04	$83.11^{+0.54}_{-0.54}$ (+0.8 σ)	χ_{CMB}^2	2772.8	2790.9 (ν : 19.1) (+270.4 σ)
σ_8	0.8107	$0.810^{+0.012}_{-0.012}$ (−0.1 σ)	$D_{\mathrm{M}}(0.38)$	1528.6	1527^{+14}_{-14} (−0.8 σ)	χ_{BAO}^2	5.81	6.1 (ν : 0.5)

Best-fit $\chi_{\mathrm{eff}}^2 = 2780.54$; $\Delta\chi_{\mathrm{eff}}^2 = -0.16$; $\bar{\chi}_{\mathrm{eff}}^2 = 2808.64$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.79$; $R - 1 = 0.01143$

χ_{eff}^2 : BAO - 6DF: 0.04 (Δ 0.01) MGS: 1.16 (Δ -0.06) DR12BAO: 4.62 (Δ 0.20) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.84 (Δ 0.11) small_100x143_offlike5_EE_Aplanck: 396.45 (Δ -0.07) commander_dx12_v3.2_29: 22.19 (Δ -0.71) plik_rd12_HM_v22b_TTTEE: 2345.36 (Δ 0.04)

15.23 base_nrun_r_plikHM_TTTEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02243^{+0.00031}_{-0.00030} \quad (+0.9\sigma)$	σ_8	$0.811^{+0.012}_{-0.011} \quad (+0.0\sigma)$	$H(0.38)$	$82.95^{+0.67}_{-0.64} \quad (+0.5\sigma)$
$\Omega_c h^2$	$0.1199^{+0.0023}_{-0.0023} \quad (-0.3\sigma)$	S_8	$0.830^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$D_M(0.38)$	$1532^{+18}_{-18} \quad (-0.5\sigma)$
$100\theta_{MC}$	$1.04094^{+0.00060}_{-0.00058} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$H(0.51)$	$89.70^{+0.54}_{-0.51} \quad (+0.6\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.012}_{-0.012} \quad (-0.2\sigma)$	$D_M(0.51)$	$1984^{+21}_{-21} \quad (-0.5\sigma)$
$\ln(10^{10} A_s)$	$3.051^{+0.028}_{-0.027} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$H(0.61)$	$95.34^{+0.44}_{-0.42} \quad (+0.7\sigma)$
n_s	$0.9649^{+0.0087}_{-0.0085} \quad (+0.4\sigma)$	$r_{drag} h$	$99.2^{+1.8}_{-1.8} \quad (+0.4\sigma)$	$D_M(0.61)$	$2308^{+22}_{-23} \quad (-0.5\sigma)$
$dn_s/d \ln k$	$-0.009^{+0.014}_{-0.015} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.046}_{-0.047} \quad (-0.2\sigma)$	$H(2.33)$	$236.5^{+1.4}_{-1.4} \quad (-0.1\sigma)$
r	$< 0.160 \quad (+0.2\sigma)$	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.3\sigma)$	$D_M(2.33)$	$5760^{+20}_{-20} \quad (-0.7\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s$	$2.113^{+0.060}_{-0.056} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.886^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0096} \quad (+0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{40}	$1233^{+42}_{-38} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.0} \quad (+0.2\sigma)$	D_{220}	$5729^{+78}_{-77} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0089}_{-0.0085} \quad (+0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.1\sigma)$	D_{810}	$2542^{+27}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4751^{+0.0088}_{-0.0088} \quad (-0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.3\sigma)$	D_{1420}	$816.2^{+9.8}_{-9.6} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6213^{+0.0084}_{-0.0080} \quad (+0.2\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$230.0^{+3.6}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4699^{+0.0080}_{-0.0080} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.992^{+0.046}_{-0.044} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0080}_{-0.0076} \quad (+0.2\sigma)$
A^{kSZ}	—	Y_P	$0.24542^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0041}_{-0.0039} \quad (+0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24674^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0045}_{-0.0042} \quad (+0.4\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$10^5 D/H$	$2.574^{+0.055}_{-0.055} \quad (-0.9\sigma)$	$r_{0.002}$	$< 0.165 \quad (+0.2\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.7^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.790^{+0.045}_{-0.046} \quad (-0.7\sigma)$	$r_{0.01}$	$< 0.159 \quad (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.83^{+0.50}_{-0.51} \quad (-0.8\sigma)$	$\ln(10^{10} A_t)$	$-0.2^{+1.8}_{-2.3} \quad (+0.2\sigma)$
A_{100}^{dustTE}	$0.115^{+0.075}_{-0.075}$	r_*	$144.42^{+0.52}_{-0.52} \quad (-0.0\sigma)$	r_{10}	$< 0.0873 \quad (+0.2\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.136^{+0.057}_{-0.058}$	$100\theta_*$	$1.04111^{+0.00059}_{-0.00057} \quad (+0.2\sigma)$	$10^9 A_t$	$< 0.338 \quad (+0.2\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.16}$	$D_M(z_*)/Gpc$	$13.872^{+0.049}_{-0.049} \quad (-0.0\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.302 \quad (+0.2\sigma)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.11}$	z_{drag}	$1060.07^{+0.63}_{-0.63} \quad (+0.9\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.4\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.15}$	r_{drag}	$147.06^{+0.52}_{-0.53} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.5\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	k_D	$0.14095^{+0.00063}_{-0.00061} \quad (+0.5\sigma)$	f_{2000}^{217}	$108.0^{+3.9}_{-4.0} \quad (-0.4\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	$0.16068^{+0.00036}_{-0.00036} \quad (-0.9\sigma)$	$\chi_{lensing}^2$	$9.55 \quad (\nu: 0.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3400^{+52}_{-52} \quad (-0.2\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 1.8) \quad (+0.0\sigma)$
H_0	$67.5^{+1.1}_{-1.0} \quad (+0.5\sigma)$	k_{eq}	$0.01038^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 1.8) \quad (-0.1\sigma)$
Ω_Λ	$0.686^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$100\theta_{eq}$	$0.814^{+0.010}_{-0.0096} \quad (+0.3\sigma)$	χ_{plik}^2	$2360.5 \quad (\nu: 17.5) \quad (+272.1\sigma)$
Ω_m	$0.314^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$100\theta_{s,eq}$	$0.4496^{+0.0051}_{-0.0050} \quad (+0.2\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.5) \quad (+1.2\sigma)$
$\Omega_m h^2$	$0.1429^{+0.0022}_{-0.0022} \quad (-0.2\sigma)$	$H(0.15)$	$72.78^{+0.91}_{-0.88} \quad (+0.5\sigma)$	χ_{CMB}^2	$2790.8 \quad (\nu: 19.1) \quad (+270.4\sigma)$
$\Omega_m h^3$	$0.09642^{+0.00062}_{-0.00059} \quad (+0.7\sigma)$	$D_M(0.15)$	$642.5^{+8.8}_{-9.0} \quad (-0.5\sigma)$		

$$\bar{\chi}_{eff}^2 = 2802.46; \Delta \bar{\chi}_{eff}^2 = 1.95; R - 1 = 0.01057$$

15.24 base_nrun_r_plikHM_TTTEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02248^{+0.00028}_{-0.00028} \quad (+1.1\sigma)$	S_8	$0.824^{+0.021}_{-0.021} \quad (-0.5\sigma)$	$H(0.51)$	$89.83^{+0.44}_{-0.43} \quad (+0.9\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0019}_{-0.0018} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_M(0.51)$	$1978^{+17}_{-17} \quad (-0.8\sigma)$
$100\theta_{MC}$	$1.04101^{+0.00056}_{-0.00056} \quad (+0.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.4\sigma)$	$H(0.61)$	$95.44^{+0.37}_{-0.36} \quad (+0.9\sigma)$
τ	$0.058^{+0.014}_{-0.013} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$D_M(0.61)$	$2302^{+18}_{-18} \quad (-0.8\sigma)$
$\ln(10^{10} A_s)$	$3.052^{+0.029}_{-0.027} \quad (+0.4\sigma)$	$r_{drag} h$	$99.7^{+1.4}_{-1.4} \quad (+0.7\sigma)$	$H(2.33)$	$236.2^{+1.1}_{-1.1} \quad (-0.4\sigma)$
n_s	$0.9664^{+0.0080}_{-0.0078} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.044}_{-0.045} \quad (-0.4\sigma)$	$D_M(2.33)$	$5756^{+18}_{-18} \quad (-1.0\sigma)$
$dn_s/d \ln k$	$-0.008^{+0.014}_{-0.015} \quad (-0.1\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.5\sigma)$
r	$< 0.164 \quad (+0.2\sigma)$	$10^9 A_s$	$2.117^{+0.062}_{-0.058} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0098} \quad (+0.0\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.884^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4746^{+0.0090}_{-0.0089} \quad (-0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{40}	$1231^{+41}_{-39} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0096}_{-0.0086} \quad (+0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5733^{+78}_{-77} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.4734^{+0.0081}_{-0.0080} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.2^{+3.7}_{-4.0} \quad (+0.2\sigma)$	D_{810}	$2542^{+27}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0090}_{-0.0080} \quad (+0.2\sigma)$
A_{100}^{PS}	$263^{+60}_{-50} \quad (-0.1\sigma)$	D_{1420}	$816.8^{+9.6}_{-9.6} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0077}_{-0.0074} \quad (-0.3\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.4\sigma)$	D_{2000}	$230.3^{+3.6}_{-3.4} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0086}_{-0.0076} \quad (+0.3\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.994^{+0.047}_{-0.045} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0042}_{-0.0040} \quad (+0.4\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.24543^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0045}_{-0.0043} \quad (+0.6\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24676^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$r_{0.002}$	$< 0.172 \quad (+0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$10^5 D/H$	$2.566^{+0.053}_{-0.050} \quad (-1.1\sigma)$	$r_{0.01}$	$< 0.164 \quad (+0.2\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Age/Gyr	$13.781^{+0.040}_{-0.040} \quad (-1.0\sigma)$	$\ln(10^{10} A_t)$	$-0.1^{+1.7}_{-2.4} \quad (+0.2\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.4}_{-6.4} \quad (+0.1\sigma)$	z_*	$1089.72^{+0.44}_{-0.43} \quad (-1.1\sigma)$	r_{10}	$< 0.0901 \quad (+0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.55^{+0.42}_{-0.45} \quad (+0.2\sigma)$	$10^9 A_t$	$< 0.350 \quad (+0.2\sigma)$
A_{100}^{dustTE}	$0.115^{+0.075}_{-0.077}$	$100\theta_*$	$1.04119^{+0.00056}_{-0.00055} \quad (+0.4\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.310 \quad (+0.2\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.136^{+0.057}_{-0.058}$	$D_M(z_*)/Gpc$	$13.883^{+0.040}_{-0.043} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.5\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.16}$	z_{drag}	$1060.13^{+0.61}_{-0.62} \quad (+1.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.6\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	r_{drag}	$147.17^{+0.45}_{-0.48} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.8^{+3.9}_{-3.9} \quad (-0.5\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.15}$	k_D	$0.14086^{+0.00060}_{-0.00057} \quad (+0.3\sigma)$	$\chi_{lensing}^2$	$9.40 \quad (\nu: 0.2)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.52}$	$100\theta_D$	$0.16065^{+0.00036}_{-0.00036} \quad (-1.0\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 2.1) \quad (+0.2\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	$3387^{+42}_{-41} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.8) \quad (-0.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{eq}	$0.01034^{+0.00013}_{-0.00013} \quad (-0.5\sigma)$	χ_{plik}^2	$2360.5 \quad (\nu: 17.5) \quad (+272.1\sigma)$
H_0	$67.74^{+0.84}_{-0.83} \quad (+0.8\sigma)$	$100\theta_{eq}$	$0.8165^{+0.0078}_{-0.0078} \quad (+0.6\sigma)$	χ_{6DF}^2	$0.048 \quad (\nu: 0.0)$
Ω_Λ	$0.690^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$100\theta_{s,eq}$	$0.4510^{+0.0040}_{-0.0040} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.30 \quad (\nu: 0.1)$
Ω_m	$0.310^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.15)$	$73.02^{+0.72}_{-0.72} \quad (+0.8\sigma)$	$\chi_{DR12BAO}^2$	$4.7 \quad (\nu: 0.8)$
$\Omega_m h^2$	$0.1424^{+0.0018}_{-0.0017} \quad (-0.5\sigma)$	$D_M(0.15)$	$640.1^{+7.2}_{-7.1} \quad (-0.8\sigma)$	χ_{prior}^2	$11.7 \quad (\nu: 10.3) \quad (+1.2\sigma)$
$\Omega_m h^3$	$0.09644^{+0.00061}_{-0.00059} \quad (+0.7\sigma)$	$H(0.38)$	$83.12^{+0.54}_{-0.53} \quad (+0.8\sigma)$	χ_{CMB}^2	$2790.8 \quad (\nu: 19.0) \quad (+270.4\sigma)$
σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$D_M(0.38)$	$1527^{+14}_{-14} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.5)$

$$\bar{\chi}_{eff}^2 = 2808.56; \Delta \bar{\chi}_{eff}^2 = 1.84; R - 1 = 0.01181$$

15.25 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022298	$0.02234^{+0.00032}_{-0.00032}$ $(+0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4534	$0.453^{+0.014}_{-0.014}$ (-0.4σ)	$D_M(0.38)$	1533.3	1532^{+19}_{-19} (-0.5σ)
$\Omega_c h^2$	0.11968	$0.1195^{+0.0025}_{-0.0024}$ (-0.5σ)	$\sigma_8 \Omega_m^{0.25}$	0.6056	$0.605^{+0.013}_{-0.013}$ (-0.4σ)	$H(0.51)$	89.59	$89.65^{+0.57}_{-0.55}$ $(+0.5\sigma)$
$100\theta_{MC}$	1.04085	$1.04088^{+0.00062}_{-0.00062}$ $(+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9855	$0.985^{+0.018}_{-0.018}$ (-0.4σ)	$D_M(0.51)$	1985.9	1984^{+22}_{-22} (-0.5σ)
τ	0.0534	$0.055^{+0.016}_{-0.015}$ $(+0.1\sigma)$	$r_{drag}h$	99.23	$99.4^{+1.9}_{-1.9}$ $(+0.5\sigma)$	$H(0.61)$	95.231	$95.28^{+0.46}_{-0.45}$ $(+0.5\sigma)$
$\ln(10^{10} A_s)$	3.0405	$3.044^{+0.032}_{-0.030}$ (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.4347	$2.425^{+0.048}_{-0.048}$ (-0.3σ)	$D_M(0.61)$	2310.5	2308^{+24}_{-24} (-0.5σ)
n_s	0.9659	$0.9663^{+0.0090}_{-0.0091}$ $(+0.6\sigma)$	z_{re}	7.60	$7.7^{+1.5}_{-1.6}$ $(+0.1\sigma)$	$H(2.33)$	236.27	$236.2^{+1.5}_{-1.5}$ (-0.4σ)
$dn_s/d \ln k$	-0.0008	$-0.005^{+0.014}_{-0.015}$ $(+0.3\sigma)$	$10^9 A_s$	2.092	$2.099^{+0.068}_{-0.062}$ (-0.0σ)	$D_M(2.33)$	5766.9	5764^{+21}_{-22} (-0.5σ)
r	0.020	< 0.180 $(+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	1.8798	$1.881^{+0.022}_{-0.022}$ (-0.4σ)	$f\sigma_8(0.15)$	0.4578	$0.457^{+0.013}_{-0.013}$ (-0.4σ)
y_{cal}	1.00052	$1.0006^{+0.0048}_{-0.0050}$ $(+0.1\sigma)$	D_{40}	1231.4	1239^{+43}_{-40} $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7473	$0.747^{+0.011}_{-0.011}$ (-0.2σ)
A_{100}^{PS}	235.5	242^{+50}_{-50} (-0.9σ)	D_{220}	5718	5714^{+78}_{-78} $(+0.1\sigma)$	$f\sigma_8(0.38)$	0.4755	$0.475^{+0.010}_{-0.010}$ (-0.4σ)
A_{143}^{PS}	39.5	41^{+20}_{-20} (-1.2σ)	D_{810}	2536.2	2537^{+27}_{-27} (-0.1σ)	$\sigma_8(0.38)$	0.6621	$0.6623^{+0.0097}_{-0.0093}$ (-0.1σ)
A_{217}^{PS}	101.9	102^{+30}_{-30} (-1.2σ)	D_{1420}	816.0	815^{+10}_{-10} $(+0.3\sigma)$	$f\sigma_8(0.51)$	0.4738	$0.4733^{+0.0090}_{-0.0092}$ (-0.4σ)
A_{217}^{CIB}	44.6	40^{+10}_{-10} (-1.2σ)	D_{2000}	230.28	$229.9^{+3.7}_{-3.7}$ $(+0.5\sigma)$	$\sigma_8(0.51)$	0.6195	$0.6197^{+0.0092}_{-0.0087}$ (-0.1σ)
A_{143}^{tSZ}	6.54	< 7.39 (-0.5σ)	$n_{s,0.002}$	0.9685	$0.984^{+0.049}_{-0.045}$ (-0.2σ)	$f\sigma_8(0.61)$	0.4686	$0.4683^{+0.0083}_{-0.0084}$ (-0.4σ)
$r_{143 \times 217}^{PS}$	0.586	$0.65^{+0.25}_{-0.25}$	Y_P	0.245367	$0.24538^{+0.00012}_{-0.00013}$ $(+0.5\sigma)$	$\sigma_8(0.61)$	0.5894	$0.5896^{+0.0088}_{-0.0084}$ (-0.0σ)
$r_{143 \times 217}^{CIB}$	0.78	—	Y_P^{BBN}	0.246693	$0.24671^{+0.00012}_{-0.00014}$ $(+0.5\sigma)$	$f\sigma_8(2.33)$	0.29708	$0.2972^{+0.0046}_{-0.0044}$ $(+0.1\sigma)$
$\xi^{tSZ \times CIB}$	0.07	—	$10^5 D/H$	2.599	$2.593^{+0.062}_{-0.058}$ (-0.5σ)	$\sigma_8(2.33)$	0.30616	$0.3064^{+0.0050}_{-0.0048}$ $(+0.2\sigma)$
A^{kSZ}	0.0	—	Age/Gyr	13.8054	$13.800^{+0.048}_{-0.048}$ (-0.5σ)	$r_{0.002}$	0.018	< 0.186 $(+0.4\sigma)$
A_{100}^{dust}	1.009	$1.01^{+0.38}_{-0.38}$	z_*	1089.98	$1089.92^{+0.55}_{-0.54}$ (-0.6σ)	$r_{0.01}$	0.019	< 0.180 $(+0.5\sigma)$
A_{143}^{dust}	0.969	$0.96^{+0.35}_{-0.35}$	r_*	144.57	$144.58^{+0.55}_{-0.56}$ $(+0.3\sigma)$	$\ln(10^{10} A_t)$	-0.86	$0.1^{+1.6}_{-2.2}$ $(+0.4\sigma)$
A_{217}^{dust}	0.969	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	1.04104	$1.04107^{+0.00062}_{-0.00061}$ $(+0.1\sigma)$	r_{10}	0.0094	< 0.0975 $(+0.4\sigma)$
$A_{143 \times 217}^{dust}$	1.003	$1.02^{+0.32}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	13.887	$13.888^{+0.052}_{-0.053}$ $(+0.3\sigma)$	$10^9 A_t$	0.042	< 0.380 $(+0.5\sigma)$
c_{100}	0.99769	$0.9975^{+0.0020}_{-0.0021}$ (-3.4σ)	z_{drag}	1059.74	$1059.82^{+0.68}_{-0.69}$ $(+0.4\sigma)$	$10^9 A_t e^{-2\tau}$	0.038	< 0.339 $(+0.5\sigma)$
c_{217}	1.00132	$1.0012^{+0.0031}_{-0.0031}$ $(+4.7\sigma)$	r_{drag}	147.26	$147.26^{+0.57}_{-0.57}$ $(+0.2\sigma)$	f_{2000}^{143}	30.1	30^{+7}_{-6} (-0.6σ)
c_{TE}	0.9966	$0.9963^{+0.0098}_{-0.0096}$	k_D	0.14064	$0.14066^{+0.00067}_{-0.00069}$ (-0.0σ)	f_{2000}^{217}	106.89	$107.4^{+4.3}_{-4.2}$ (-0.7σ)
c_{EE}	0.9922	$0.9921^{+0.0097}_{-0.0097}$	$100\theta_D$	0.160856	$0.16082^{+0.00040}_{-0.00039}$ (-0.5σ)	$f_{2000}^{143 \times 217}$	32.12	33^{+5}_{-5} (-0.8σ)
H_0	67.38	$67.5^{+1.1}_{-1.1}$ $(+0.5\sigma)$	z_{eq}	3393	3390^{+56}_{-55} (-0.4σ)	$\chi^2_{lensing}$	8.89	9.56 $(\nu: 0.3)$
Ω_Λ	0.6859	$0.687^{+0.015}_{-0.015}$ $(+0.5\sigma)$	k_{eq}	0.010355	$0.01035^{+0.00017}_{-0.00017}$ (-0.4σ)	χ^2_{small}	396.00	397.4 $(\nu: 1.5)$ $(+0.0\sigma)$
Ω_m	0.3141	$0.313^{+0.015}_{-0.015}$ (-0.5σ)	$100\theta_{eq}$	0.8147	$0.815^{+0.010}_{-0.010}$ $(+0.4\sigma)$	χ^2_{lowl}	23.48	24.3 $(\nu: 2.5)$ $(+0.3\sigma)$
$\Omega_m h^2$	0.14263	$0.1425^{+0.0023}_{-0.0023}$ (-0.4σ)	$100\theta_{s,eq}$	0.4502	$0.4505^{+0.0054}_{-0.0053}$ $(+0.4\sigma)$	$\chi^2_{CamSpec}$	11499.1	11514.1 $(\nu: 16.9)$
$\Omega_m h^3$	0.09611	$0.09616^{+0.00064}_{-0.00066}$ $(+0.2\sigma)$	$H(0.15)$	72.69	$72.78^{+0.95}_{-0.94}$ $(+0.5\sigma)$	χ^2_{prior}	2.1	7.8 $(\nu: 5.9)$ $(+0.1\sigma)$
σ_8	0.8090	$0.809^{+0.012}_{-0.012}$ (-0.3σ)	$D_M(0.15)$	643.2	$642.3^{+9.5}_{-9.4}$ (-0.5σ)	χ^2_{CMB}	11927.5	11945.3 $(\nu: 18.1)$ $(+1821.4\sigma)$
S_8	0.8278	$0.826^{+0.026}_{-0.025}$ (-0.4σ)	$H(0.38)$	82.85	$82.92^{+0.70}_{-0.69}$ $(+0.5\sigma)$			

Best-fit $\chi^2_{eff} = 11929.59$; $\Delta\chi^2_{eff} = -0.06$; $\bar{\chi}^2_{eff} = 11953.15$; $\Delta\bar{\chi}^2_{eff} = 1.71$; $R - 1 = 0.01351$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp.p_teb_consext8: 8.89 (Δ 0.06) small_100x143_offlike5_EE_Aplanck_B: 396.00 (Δ 0.13) commander_dx12.v3.2_29: 23.48 (Δ 0.26) CamSpec like_10.7HM_1400_unified: 11499.08 (Δ -0.58)

15.26 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02237^{+0.00030}_{-0.00030}$ $(+0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.012}_{-0.011}$ (-0.6σ)	$D_{\mathrm{M}}(0.51)$	1979^{+17}_{-17} (-0.8σ)
$\Omega_{\mathrm{c}}h^2$	$0.1190^{+0.0019}_{-0.0019}$ (-0.7σ)	$\sigma_8/h^{0.5}$	$0.982^{+0.017}_{-0.016}$ (-0.5σ)	$H(0.61)$	$95.37^{+0.39}_{-0.37}$ $(+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00060}_{-0.00059}$ $(+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.5}_{-1.4}$ $(+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	2303^{+18}_{-19} (-0.8σ)
τ	$0.056^{+0.016}_{-0.014}$ $(+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.419^{+0.045}_{-0.045}$ (-0.5σ)	$H(2.33)$	$235.9^{+1.2}_{-1.2}$ (-0.6σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.032}_{-0.029}$ $(+0.1\sigma)$	z_{re}	$7.9^{+1.5}_{-1.5}$ $(+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	5761^{+18}_{-19} (-0.7σ)
n_{s}	$0.9676^{+0.0081}_{-0.0082}$ $(+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.068}_{-0.061}$ $(+0.1\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.011}$ (-0.6σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.005^{+0.014}_{-0.016}$ $(+0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.021}_{-0.022}$ (-0.5σ)	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011}$ (-0.2σ)
r	< 0.184 $(+0.5\sigma)$	D_{40}	1238^{+44}_{-39} $(+0.2\sigma)$	$f\sigma_8(0.38)$	$0.4731^{+0.0093}_{-0.0090}$ (-0.6σ)
y_{cal}	$1.0008^{+0.0048}_{-0.0049}$ $(+0.1\sigma)$	D_{220}	5718^{+77}_{-79} $(+0.2\sigma)$	$\sigma_8(0.38)$	$0.6624^{+0.0099}_{-0.0093}$ (-0.1σ)
A_{100}^{PS}	241^{+50}_{-50} (-0.9σ)	D_{810}	2538^{+26}_{-27} (-0.1σ)	$f\sigma_8(0.51)$	$0.4719^{+0.0084}_{-0.0081}$ (-0.6σ)
A_{143}^{PS}	40^{+20}_{-20} (-1.3σ)	D_{1420}	$816.1^{+9.9}_{-9.9}$ $(+0.4\sigma)$	$\sigma_8(0.51)$	$0.6200^{+0.0093}_{-0.0088}$ (-0.0σ)
A_{217}^{PS}	102^{+30}_{-30} (-1.2σ)	D_{2000}	$230.1^{+3.7}_{-3.6}$ $(+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4671^{+0.0078}_{-0.0077}$ (-0.5σ)
A_{217}^{CIB}	40^{+10}_{-10} (-1.3σ)	$n_{\mathrm{s},0.002}$	$0.985^{+0.050}_{-0.045}$ (-0.1σ)	$\sigma_8(0.61)$	$0.5900^{+0.0089}_{-0.0084}$ $(+0.0\sigma)$
A_{143}^{tSZ}	< 7.39 (-0.5σ)	Y_{P}	$0.24539^{+0.00011}_{-0.00012}$ $(+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0046}_{-0.0043}$ $(+0.2\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012}$ $(+0.7\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0049}_{-0.0046}$ $(+0.3\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.586^{+0.056}_{-0.054}$ (-0.7σ)	$r_{0.002}$	< 0.190 $(+0.5\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.792^{+0.042}_{-0.042}$ (-0.7σ)	$r_{0.01}$	< 0.184 $(+0.5\sigma)$
A^{kSZ}	—	z_*	$1089.83^{+0.46}_{-0.46}$ (-0.8σ)	$\ln(10^{10}A_{\mathrm{t}})$	$0.1^{+1.6}_{-2.2}$ $(+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.70^{+0.45}_{-0.46}$ $(+0.5\sigma)$	r_{10}	< 0.0999 $(+0.5\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$100\theta_*$	$1.04114^{+0.00059}_{-0.00058}$ $(+0.3\sigma)$	$10^9 A_{\mathrm{t}}$	< 0.389 $(+0.5\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.044}_{-0.044}$ $(+0.5\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	< 0.346 $(+0.5\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.87^{+0.67}_{-0.66}$ $(+0.5\sigma)$	f_{2000}^{143}	30^{+7}_{-6} (-0.7σ)
c_{100}	$0.9976^{+0.0020}_{-0.0020}$ (-3.3σ)	r_{drag}	$147.36^{+0.49}_{-0.49}$ $(+0.4\sigma)$	f_{2000}^{217}	$107.3^{+4.3}_{-4.3}$ (-0.8σ)
c_{217}	$1.0012^{+0.0030}_{-0.0031}$ $(+4.7\sigma)$	k_{D}	$0.14058^{+0.00063}_{-0.00064}$ (-0.2σ)	$f_{2000}^{143\times 217}$	33^{+5}_{-5} (-0.8σ)
c_{TE}	$0.9964^{+0.0098}_{-0.0098}$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00039}_{-0.00038}$ (-0.5σ)	$\chi_{\mathrm{lensing}}^2$	9.56 $(\nu: 0.3)$
c_{EE}	$0.9923^{+0.0097}_{-0.0098}$	z_{eq}	3378^{+43}_{-43} (-0.7σ)	χ_{small}^2	397.6 $(\nu: 1.8)$ $(+0.1\sigma)$
H_0	$67.73^{+0.86}_{-0.84}$ $(+0.8\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013}$ (-0.7σ)	χ_{lowl}^2	24.1 $(\nu: 2.4)$ $(+0.2\sigma)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011}$ $(+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8178^{+0.0081}_{-0.0080}$ $(+0.7\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	11514.0 $(\nu: 16.5)$
Ω_{m}	$0.310^{+0.011}_{-0.011}$ (-0.7σ)	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0042}_{-0.0041}$ $(+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.042 $(\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0018}_{-0.0018}$ (-0.7σ)	$H(0.15)$	$72.99^{+0.74}_{-0.72}$ $(+0.8\sigma)$	χ_{MGS}^2	1.36 $(\nu: 0.1)$
$\Omega_{\mathrm{m}}h^3$	$0.09617^{+0.00064}_{-0.00065}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.2^{+7.2}_{-7.3}$ (-0.8σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.5 $(\nu: 0.7)$
σ_8	$0.808^{+0.012}_{-0.012}$ (-0.3σ)	$H(0.38)$	$83.07^{+0.55}_{-0.54}$ $(+0.8\sigma)$	χ_{prior}^2	7.9 $(\nu: 5.9)$ $(+0.1\sigma)$
S_8	$0.821^{+0.021}_{-0.020}$ (-0.7σ)	$D_{\mathrm{M}}(0.38)$	1527^{+14}_{-15} (-0.8σ)	χ_{CMB}^2	11945.2 $(\nu: 17.4)$ $(+1821.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.011}$ (-0.7σ)	$H(0.51)$	$89.77^{+0.46}_{-0.44}$ $(+0.8\sigma)$	χ_{BAO}^2	5.93 $(\nu: 0.4)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.98; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.58; R - 1 = 0.01470$$

15.27 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00032}_{-0.00032} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+18}_{-19} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1195^{+0.0024}_{-0.0024} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.51)$	$89.66^{+0.56}_{-0.53} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00062}_{-0.00062} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1983^{+22}_{-22} \quad (-0.5\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.4^{+1.9}_{-1.9} \quad (+0.5\sigma)$	$H(0.61)$	$95.29^{+0.46}_{-0.44} \quad (+0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.026} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.047}_{-0.047} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2308^{+23}_{-24} \quad (-0.5\sigma)$
n_{s}	$0.9664^{+0.0089}_{-0.0090} \quad (+0.6\sigma)$	z_{re}	$< 9.00 \quad (+0.2\sigma)$	$H(2.33)$	$236.2^{+1.5}_{-1.4} \quad (-0.4\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.006^{+0.014}_{-0.015} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.059}_{-0.055} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+21}_{-22} \quad (-0.5\sigma)$
r	$< 0.181 \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.022}_{-0.022} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0050} \quad (+0.1\sigma)$	D_{40}	$1239^{+43}_{-40} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.0096} \quad (-0.1\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{220}	$5714^{+77}_{-78} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.010}_{-0.010} \quad (-0.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.2\sigma)$	D_{810}	$2537^{+26}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6627^{+0.0094}_{-0.0082} \quad (-0.0\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4735^{+0.0089}_{-0.0091} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{2000}	$229.9^{+3.7}_{-3.7} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6201^{+0.0084}_{-0.0079} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.985^{+0.049}_{-0.045} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0081}_{-0.0082} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.24}$	Y_{P}	$0.24538^{+0.00012}_{-0.00013} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.5901^{+0.0081}_{-0.0076} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00012}_{-0.00013} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0042}_{-0.0039} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.061}_{-0.057} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0045}_{-0.0042} \quad (+0.2\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.799^{+0.047}_{-0.048} \quad (-0.5\sigma)$	$r_{0.002}$	$< 0.187 \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.91^{+0.54}_{-0.53} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.181 \quad (+0.5\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	r_*	$144.59^{+0.55}_{-0.55} \quad (+0.3\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$0.1^{+1.6}_{-2.2} \quad (+0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04108^{+0.00061}_{-0.00061} \quad (+0.1\sigma)$	r_{10}	$< 0.0982 \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.052}_{-0.052} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.382 \quad (+0.5\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.83^{+0.68}_{-0.70} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.341 \quad (+0.5\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.27^{+0.57}_{-0.57} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+7}_{-6} \quad (-0.6\sigma)$
c_{TE}	$0.9962^{+0.0098}_{-0.0096}$	k_{D}	$0.14066^{+0.00067}_{-0.00069} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.4^{+4.3}_{-4.2} \quad (-0.7\sigma)$
c_{EE}	$0.9920^{+0.0097}_{-0.0097}$	$100\theta_{\mathrm{D}}$	$0.16081^{+0.00040}_{-0.00039} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.8\sigma)$
H_0	$67.5^{+1.1}_{-1.1} \quad (+0.5\sigma)$	z_{eq}	$3389^{+54}_{-54} \quad (-0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.53 \quad (\nu: 0.3)$
Ω_{Λ}	$0.687^{+0.014}_{-0.015} \quad (+0.5\sigma)$	k_{eq}	$0.01034^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 1.6) \quad (+0.0\sigma)$
Ω_{m}	$0.313^{+0.015}_{-0.014} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.010}_{-0.010} \quad (+0.5\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 2.5) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0023}_{-0.0023} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0053}_{-0.0052} \quad (+0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.0 \quad (\nu: 16.9)$
$\Omega_{\mathrm{m}} h^3$	$0.09616^{+0.00064}_{-0.00065} \quad (+0.2\sigma)$	$H(0.15)$	$72.80^{+0.94}_{-0.92} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$642.1^{+9.3}_{-9.3} \quad (-0.5\sigma)$	χ_{CMB}^2	$11945.1 \quad (\nu: 17.9) \quad (+1821.4\sigma)$
S_8	$0.826^{+0.026}_{-0.025} \quad (-0.4\sigma)$	$H(0.38)$	$82.94^{+0.69}_{-0.67} \quad (+0.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11953.00; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.75; R - 1 = 0.01489$$

15.28 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02238^{+0.00030}_{-0.00030} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+17}_{-17} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0019}_{-0.0019} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.017}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$95.38^{+0.38}_{-0.37} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00060}_{-0.00059} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.4}_{-1.4} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+18}_{-19} \quad (-0.8\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.420^{+0.045}_{-0.044} \quad (-0.5\sigma)$	$H(2.33)$	$235.9^{+1.2}_{-1.2} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.029}_{-0.027} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5760^{+18}_{-19} \quad (-0.7\sigma)$
n_{s}	$0.9677^{+0.0081}_{-0.0082} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.061}_{-0.058} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.006^{+0.014}_{-0.016} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.021}_{-0.022} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0097} \quad (-0.2\sigma)$
r	$< 0.185 \quad (+0.5\sigma)$	D_{40}	$1238^{+44}_{-39} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.4733^{+0.0092}_{-0.0090} \quad (-0.6\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5718^{+77}_{-80} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6627^{+0.0092}_{-0.0088} \quad (-0.0\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.9\sigma)$	D_{810}	$2538^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.4721^{+0.0083}_{-0.0079} \quad (-0.5\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	D_{1420}	$816.1^{+9.9}_{-10} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6203^{+0.0087}_{-0.0082} \quad (+0.0\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{2000}	$230.1^{+3.7}_{-3.6} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4673^{+0.0078}_{-0.0074} \quad (-0.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.985^{+0.049}_{-0.045} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5903^{+0.0083}_{-0.0078} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.5\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0042}_{-0.0040} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0045}_{-0.0043} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.585^{+0.056}_{-0.054} \quad (-0.7\sigma)$	$r_{0.002}$	$< 0.191 \quad (+0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.791^{+0.042}_{-0.043} \quad (-0.7\sigma)$	$r_{0.01}$	$< 0.185 \quad (+0.5\sigma)$
A^{kSZ}	—	z_*	$1089.82^{+0.46}_{-0.46} \quad (-0.8\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$0.1^{+1.6}_{-2.2} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.70^{+0.45}_{-0.46} \quad (+0.5\sigma)$	r_{10}	$< 0.101 \quad (+0.5\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	$100\theta_*$	$1.04114^{+0.00060}_{-0.00058} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.390 \quad (+0.5\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.044}_{-0.044} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.348 \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.87^{+0.67}_{-0.66} \quad (+0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-6} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	r_{drag}	$147.37^{+0.49}_{-0.49} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.3^{+4.3}_{-4.3} \quad (-0.8\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0031} \quad (+4.7\sigma)$	k_{D}	$0.14058^{+0.00063}_{-0.00064} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.8\sigma)$
c_{TE}	$0.9964^{+0.0098}_{-0.0098}$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00039}_{-0.00038} \quad (-0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.52 \quad (\nu: 0.3)$
c_{EE}	$0.9923^{+0.0097}_{-0.0098}$	z_{eq}	$3377^{+43}_{-42} \quad (-0.7\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 1.8) \quad (+0.1\sigma)$
H_0	$67.74^{+0.86}_{-0.83} \quad (+0.8\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.7\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 2.4) \quad (+0.2\sigma)$
Ω_{Λ}	$0.691^{+0.011}_{-0.011} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8179^{+0.0080}_{-0.0079} \quad (+0.7\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.9 \quad (\nu: 16.5)$
Ω_{m}	$0.309^{+0.011}_{-0.011} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4518^{+0.0041}_{-0.0041} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.040 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0018}_{-0.0018} \quad (-0.7\sigma)$	$H(0.15)$	$73.00^{+0.73}_{-0.71} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09617^{+0.00064}_{-0.00065} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.1^{+7.1}_{-7.2} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.7)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$H(0.38)$	$83.08^{+0.55}_{-0.54} \quad (+0.8\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.821^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+14}_{-14} \quad (-0.8\sigma)$	χ_{CMB}^2	$11945.1 \quad (\nu: 17.3) \quad (+1821.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.011} \quad (-0.6\sigma)$	$H(0.51)$	$89.77^{+0.46}_{-0.43} \quad (+0.8\sigma)$	χ_{BAO}^2	$5.90 \quad (\nu: 0.4)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.86; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.60; R - 1 = 0.01525$$

15.29 base_nrun_r_plikHM_TT_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022119	$0.02215^{+0.00046}_{-0.00045}$ (-0.3σ)	$\Omega_{\mathrm{m}}h^3$	0.09601	$0.09605^{+0.00097}_{-0.00098}$ (-0.0σ)	$D_{\mathrm{M}}(0.15)$	651.0	650^{+15}_{-15} $(+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12167	$0.1213^{+0.0041}_{-0.0040}$ $(+0.4\sigma)$	σ_8	0.8159	$0.815^{+0.017}_{-0.017}$ $(+0.4\sigma)$	$H(0.38)$	82.29	$82.4^{+1.1}_{-1.1}$ (-0.4σ)
$100\theta_{\mathrm{MC}}$	1.04064	$1.04072^{+0.00093}_{-0.00093}$ (-0.2σ)	S_8	0.8516	$0.848^{+0.047}_{-0.046}$ $(+0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	1549.0	1546^{+31}_{-30} $(+0.4\sigma)$
τ	0.0531	$0.054^{+0.017}_{-0.016}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4665	$0.464^{+0.026}_{-0.025}$ $(+0.5\sigma)$	$H(0.51)$	89.16	$89.25^{+0.86}_{-0.82}$ (-0.4σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0459	$3.048^{+0.036}_{-0.034}$ $(+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6169	$0.615^{+0.023}_{-0.022}$ $(+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	2004.1	2001^{+35}_{-35} $(+0.4\sigma)$
n_{s}	0.9607	$0.961^{+0.011}_{-0.011}$ (-0.3σ)	$\sigma_8/h^{0.5}$	1.0007	$0.998^{+0.031}_{-0.031}$ $(+0.5\sigma)$	$H(0.61)$	94.89	$94.97^{+0.70}_{-0.65}$ (-0.4σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.0042	$-0.006^{+0.015}_{-0.015}$ $(+0.2\sigma)$	$r_{\mathrm{drag}}h$	97.68	$98.0^{+3.1}_{-3.1}$ (-0.4σ)	$D_{\mathrm{M}}(0.61)$	2330.1	2326^{+38}_{-38} $(+0.4\sigma)$
r	0.0135	< 0.0615 (-0.6σ)	$\langle d^2 \rangle^{1/2}$	2.465	$2.459^{+0.073}_{-0.073}$ $(+0.5\sigma)$	$H(2.33)$	237.39	$237.2^{+2.5}_{-2.5}$ $(+0.4\sigma)$
y_{cal}	1.00039	$1.0006^{+0.0048}_{-0.0049}$ $(+0.1\sigma)$	z_{re}	7.64	$7.7^{+1.7}_{-1.7}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5781.6	5778^{+31}_{-32} $(+0.3\sigma)$
$A_{B,\mathrm{dust}}$	4.64	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	2.103	$2.107^{+0.077}_{-0.070}$ $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4698	$0.468^{+0.024}_{-0.023}$ $(+0.5\sigma)$
$A_{B,\mathrm{sync}}$	1.47	< 3.66	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8909	$1.891^{+0.028}_{-0.028}$ $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7525	$0.752^{+0.015}_{-0.015}$ $(+0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.54	—	D_{40}	1232.0	1232^{+42}_{-41} (-0.0σ)	$f\sigma_8(0.38)$	0.4848	$0.483^{+0.018}_{-0.018}$ $(+0.5\sigma)$
$\beta_{B,\mathrm{dust}}$	1.578	$1.60^{+0.19}_{-0.19}$	D_{220}	5707	5712^{+81}_{-80} $(+0.0\sigma)$	$\sigma_8(0.38)$	0.6653	$0.665^{+0.012}_{-0.012}$ $(+0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.33	—	D_{810}	2539.7	2540^{+28}_{-27} $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4815	$0.480^{+0.016}_{-0.016}$ $(+0.5\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.03	$-3.10^{+0.52}_{-0.55}$	D_{1420}	814.2	814^{+10}_{-10} (-0.0σ)	$\sigma_8(0.51)$	0.6220	$0.622^{+0.011}_{-0.011}$ $(+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.35	$-0.35^{+0.52}_{-0.57}$	D_{2000}	229.30	$229.0^{+3.8}_{-3.7}$ $(+0.0\sigma)$	$f\sigma_8(0.61)$	0.4753	$0.474^{+0.014}_{-0.014}$ $(+0.5\sigma)$
A_{217}^{CIB}	50.7	49^{+10}_{-10} (-0.0σ)	$n_{\mathrm{s},0.002}$	0.9741	$0.981^{+0.047}_{-0.046}$ (-0.3σ)	$\sigma_8(0.61)$	0.5914	$0.591^{+0.010}_{-0.010}$ $(+0.3\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.09	—	Y_{P}	0.245292	$0.24530^{+0.00018}_{-0.00021}$ (-0.3σ)	$f\sigma_8(2.33)$	0.2976	$0.2976^{+0.0053}_{-0.0049}$ $(+0.2\sigma)$
A_{143}^{tSZ}	7.06	$4.9^{+3.9}_{-3.9}$ $(+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246618	$0.24663^{+0.00018}_{-0.00021}$ (-0.3σ)	$\sigma_8(2.33)$	0.3062	$0.3063^{+0.0056}_{-0.0052}$ $(+0.1\sigma)$
A_{100}^{PS}	258	267^{+60}_{-60} (-0.0σ)	$10^5\mathrm{D}/\mathrm{H}$	2.633	$2.628^{+0.087}_{-0.085}$ $(+0.3\sigma)$	$r_{0.002}$	0.0122	< 0.0584 (-0.6σ)
A_{143}^{PS}	47.8	51^{+20}_{-20} $(+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	13.838	$13.831^{+0.071}_{-0.073}$ $(+0.3\sigma)$	$r_{0.01}$	0.0128	< 0.0592 (-0.6σ)
$A_{143\times 217}^{\mathrm{PS}}$	41.8	44^{+20}_{-20} $(+0.0\sigma)$	z_*	1090.38	$1090.32^{+0.80}_{-0.80}$ $(+0.4\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	-1.26	$-0.9^{+1.5}_{-2.1}$ (-0.4σ)
A_{217}^{PS}	117.3	115^{+20}_{-20} $(+0.0\sigma)$	r_*	144.19	$144.26^{+0.95}_{-0.94}$ (-0.3σ)	r_{10}	0.0063	< 0.0304 (-0.6σ)
A^{kSZ}	0.0	—	$100\theta_*$	1.04086	$1.04093^{+0.00091}_{-0.00091}$ (-0.2σ)	$10^9 A_{\mathrm{t}}$	0.028	< 0.130 (-0.6σ)
$A_{100}^{\mathrm{dustTT}}$	8.89	$9.0^{+3.6}_{-3.6}$ $(+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.853	$13.859^{+0.089}_{-0.087}$ (-0.3σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.026	< 0.116 (-0.6σ)
$A_{143}^{\mathrm{dustTT}}$	10.80	$10.7^{+3.5}_{-3.5}$ (-0.0σ)	z_{drag}	1059.47	$1059.52^{+0.99}_{-0.96}$ (-0.2σ)	f_{2000}^{143}	31.4	32^{+6}_{-6} (-0.0σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.1	$18.4^{+6.5}_{-6.5}$ (-0.0σ)	r_{drag}	146.93	$146.99^{+0.98}_{-0.96}$ (-0.3σ)	$f_{2000}^{143\times 217}$	33.96	34^{+4}_{-4} (-0.0σ)
$A_{217}^{\mathrm{dustTT}}$	94.0	93^{+10}_{-10} $(+0.0\sigma)$	k_{D}	0.14084	$0.1408^{+0.0011}_{-0.0011}$ $(+0.2\sigma)$	f_{2000}^{217}	108.43	$108.9^{+4.0}_{-4.0}$ $(+0.0\sigma)$
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$100\theta_{\mathrm{D}}$	0.16102	$0.16100^{+0.00057}_{-0.00056}$ $(+0.2\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	734.70	739.1 $(\nu: 3.7)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (-0.0σ)	z_{eq}	3436	3429^{+94}_{-92} $(+0.4\sigma)$	χ_{simall}^2	396.03	397.3 $(\nu: 1.9)$ (-0.0σ)
H_0	66.48	$66.7^{+1.8}_{-1.8}$ (-0.4σ)	k_{eq}	0.010487	$0.01046^{+0.00029}_{-0.00028}$ $(+0.4\sigma)$	χ_{lowl}^2	23.33	23.6 $(\nu: 2.4)$ (-0.0σ)
Ω_{Λ}	0.6732	$0.675^{+0.025}_{-0.026}$ (-0.4σ)	$100\theta_{\mathrm{eq}}$	0.8064	$0.808^{+0.017}_{-0.017}$ (-0.4σ)	χ_{plik}^2	759.2	772.8 $(\nu: 16.2)$ (-0.1σ)
Ω_{m}	0.3268	$0.325^{+0.026}_{-0.025}$ $(+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4460	$0.4468^{+0.0089}_{-0.0087}$ (-0.4σ)	χ_{prior}^2	1.5	8.9 $(\nu: 8.1)$ $(+0.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14443	$0.1441^{+0.0039}_{-0.0038}$ $(+0.4\sigma)$	$H(0.15)$	71.92	$72.1^{+1.5}_{-1.5}$ (-0.4σ)	χ_{CMB}^2	1913.3	1932.8 $(\nu: 19.7)$ $(+125.1\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 1914.80$; $\bar{\chi}_{\mathrm{eff}}^2 = 1941.72$; $R - 1 = 0.00186$

χ_{eff}^2 : CMB - BK15_dust: 734.70 simall_100x143_offlike5_EE_Aplanck_B: 396.03 commander_dx12_v3_2_29: 23.33 plik_rd12_HM_v22_TT: 759.19

15.30 base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022241	$0.02227^{+0.00042}_{-0.00042}$ (+0.2 σ)	S_8	0.8255	$0.825^{+0.029}_{-0.029}$ (−0.5 σ)	$D_M(0.51)$	1983.5	1983^{+22}_{-22} (−0.6 σ)
$\Omega_c h^2$	0.11928	$0.1192^{+0.0024}_{-0.0024}$ (−0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4522	$0.452^{+0.016}_{-0.016}$ (−0.5 σ)	$H(0.61)$	95.249	$95.28^{+0.50}_{-0.49}$ (+0.5 σ)
$100\theta_{MC}$	1.04097	$1.04100^{+0.00082}_{-0.00084}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6051	$0.605^{+0.016}_{-0.016}$ (−0.4 σ)	$D_M(0.61)$	2308.0	2307^{+23}_{-23} (−0.6 σ)
τ	0.0559	$0.056^{+0.018}_{-0.016}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9854	$0.985^{+0.023}_{-0.022}$ (−0.4 σ)	$H(2.33)$	235.96	$236.0^{+1.6}_{-1.6}$ (−0.6 σ)
$\ln(10^{10} A_s)$	3.0462	$3.048^{+0.037}_{-0.034}$ (+0.2 σ)	$r_{drag} h$	99.54	$99.6^{+1.8}_{-1.8}$ (+0.6 σ)	$D_M(2.33)$	5766.8	5765^{+25}_{-25} (−0.4 σ)
n_s	0.9660	$0.9655^{+0.0087}_{-0.0086}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.430	$2.428^{+0.057}_{-0.056}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4567	$0.456^{+0.015}_{-0.015}$ (−0.5 σ)
$dn_s/d \ln k$	−0.0041	$−0.006^{+0.015}_{-0.015}$ (+0.2 σ)	z_{re}	7.86	$7.9^{+1.7}_{-1.6}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7481	$0.748^{+0.014}_{-0.013}$ (−0.1 σ)
r	0.0146	< 0.0654 (−0.5 σ)	$10^9 A_s$	2.104	$2.107^{+0.079}_{-0.071}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4750	$0.475^{+0.013}_{-0.013}$ (−0.4 σ)
y_{cal}	1.00057	$1.0008^{+0.0048}_{-0.0049}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8810	$1.882^{+0.024}_{-0.024}$ (−0.3 σ)	$\sigma_8(0.38)$	0.6631	$0.663^{+0.012}_{-0.011}$ (+0.0 σ)
$A_{B,dust}$	4.66	$4.9^{+2.1}_{-1.9}$	D_{40}	1221.6	1225^{+41}_{-40} (−0.4 σ)	$f\sigma_8(0.51)$	0.4735	$0.473^{+0.012}_{-0.011}$ (−0.4 σ)
$A_{B,sync}$	1.51	< 3.63	D_{220}	5717	5721^{+80}_{-78} (+0.2 σ)	$\sigma_8(0.51)$	0.6206	$0.621^{+0.011}_{-0.010}$ (+0.1 σ)
$\alpha_{B,dust}$	−0.50	—	D_{810}	2538.4	2539^{+28}_{-27} (−0.0 σ)	$f\sigma_8(0.61)$	0.4685	$0.468^{+0.011}_{-0.010}$ (−0.3 σ)
$\beta_{B,dust}$	1.577	$1.60^{+0.19}_{-0.19}$	D_{1420}	815.4	$815.0^{+9.9}_{-10}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5905	$0.590^{+0.011}_{-0.0099}$ (+0.1 σ)
$\alpha_{B,sync}$	−0.16	—	D_{2000}	229.73	$229.5^{+3.7}_{-3.7}$ (+0.3 σ)	$f\sigma_8(2.33)$	0.2977	$0.2977^{+0.0054}_{-0.0049}$ (+0.2 σ)
$\beta_{B,sync}$	−3.03	$−3.10^{+0.51}_{-0.55}$	$n_{s,0.002}$	0.9793	$0.984^{+0.049}_{-0.047}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3069	$0.3069^{+0.0056}_{-0.0051}$ (+0.4 σ)
$\epsilon_{dust,sync}$	−0.33	$−0.35^{+0.53}_{-0.57}$	Y_P	0.245343	$0.24535^{+0.00016}_{-0.00019}$ (+0.2 σ)	$r_{0.002}$	0.0134	< 0.0632 (−0.5 σ)
A_{217}^{CIB}	50.8	48^{+10}_{-10} (−0.0 σ)	Y_P^{BBN}	0.246669	$0.24668^{+0.00016}_{-0.00019}$ (+0.2 σ)	$r_{0.01}$	0.0139	< 0.0636 (−0.5 σ)
$\xi^{tSZ \times CIB}$	0.05	—	$10^5 D/H$	2.610	$2.606^{+0.081}_{-0.076}$ (−0.2 σ)	$\ln(10^{10} A_t)$	−1.18	$−0.8^{+1.4}_{-2.0}$ (−0.3 σ)
A_{143}^{tSZ}	7.11	$4.9^{+3.9}_{-3.9}$ (+0.0 σ)	Age/Gyr	13.806	$13.803^{+0.058}_{-0.057}$ (−0.4 σ)	r_{10}	0.0069	< 0.0328 (−0.5 σ)
A_{100}^{PS}	259	266^{+60}_{-60} (−0.0 σ)	z_*	1090.02	$1089.99^{+0.61}_{-0.59}$ (−0.4 σ)	$10^9 A_t$	0.031	< 0.138 (−0.5 σ)
A_{143}^{PS}	46.8	50^{+20}_{-20} (−0.1 σ)	r_*	144.72	$144.71^{+0.65}_{-0.65}$ (+0.6 σ)	$10^9 A_t e^{-2\tau}$	0.027	< 0.123 (−0.5 σ)
$A_{143 \times 217}^{PS}$	40.4	43^{+20}_{-20} (−0.1 σ)	$100\theta_*$	1.04117	$1.04119^{+0.00081}_{-0.00083}$ (+0.4 σ)	f_{2000}^{143}	31.2	32^{+6}_{-6} (−0.2 σ)
A_{217}^{PS}	116.5	114^{+20}_{-20} (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.899	$13.898^{+0.063}_{-0.063}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	33.76	34^{+4}_{-4} (−0.2 σ)
A^{kSZ}	0.0	—	z_{drag}	1059.59	$1059.64^{+0.94}_{-0.96}$ (+0.1 σ)	f_{2000}^{217}	108.25	$108.5^{+4.0}_{-4.0}$ (−0.2 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	r_{drag}	147.43	$147.41^{+0.73}_{-0.72}$ (+0.5 σ)	$\chi_{BKPLANCK}^2$	735.55	739.8 (ν : 3.5)
A_{143}^{dustTT}	10.80	$10.8^{+3.5}_{-3.5}$ (−0.0 σ)	k_D	0.14042	$0.14045^{+0.00097}_{-0.00097}$ (−0.4 σ)	χ_{small}^2	396.34	397.5 (ν : 2.4) (+0.1 σ)
$A_{143 \times 217}^{dustTT}$	19.1	$18.3^{+6.7}_{-6.6}$ (−0.0 σ)	$100\theta_D$	0.16097	$0.16094^{+0.00057}_{-0.00055}$ (−0.0 σ)	χ_{lowl}^2	22.42	23.0 (ν : 1.9) (−0.3 σ)
A_{217}^{dustTT}	94.0	93^{+10}_{-10} (+0.0 σ)	z_{eq}	3382	3382^{+57}_{-56} (−0.6 σ)	χ_{plik}^2	760.1	773.1 (ν : 16.2) (−0.1 σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	k_{eq}	0.010322	$0.01032^{+0.00017}_{-0.00017}$ (−0.6 σ)	χ_{6DF}^2	0.038	0.070 (ν : 0.0)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_{eq}$	0.8166	$0.817^{+0.010}_{-0.010}$ (+0.6 σ)	χ_{MGS}^2	1.16	1.25 (ν : 0.1)
H_0	67.52	$67.6^{+1.1}_{-1.1}$ (+0.6 σ)	$100\theta_{s,eq}$	0.4512	$0.4513^{+0.0054}_{-0.0053}$ (+0.6 σ)	$\chi_{DR12BAO}^2$	4.57	5.1 (ν : 1.7)
Ω_Λ	0.6881	$0.688^{+0.014}_{-0.015}$ (+0.6 σ)	$H(0.15)$	72.80	$72.84^{+0.92}_{-0.91}$ (+0.6 σ)	χ_{prior}^2	1.6	9.0 (ν : 8.0) (+0.4 σ)
Ω_m	0.3119	$0.312^{+0.015}_{-0.014}$ (−0.6 σ)	$D_M(0.15)$	642.1	$641.7^{+9.1}_{-9.0}$ (−0.6 σ)	χ_{BAO}^2	5.76	6.4 (ν : 1.1)
$\Omega_m h^2$	0.14217	$0.1422^{+0.0024}_{-0.0023}$ (−0.6 σ)	$H(0.38)$	82.91	$82.95^{+0.70}_{-0.68}$ (+0.5 σ)	χ_{CMB}^2	1914.4	1933.4 (ν : 20.0) (+125.2 σ)
$\Omega_m h^3$	0.09599	$0.09604^{+0.00098}_{-0.00098}$ (−0.1 σ)	$D_M(0.38)$	1531.2	1530^{+18}_{-18} (−0.6 σ)			
σ_8	0.8097	$0.810^{+0.016}_{-0.015}$ (−0.2 σ)	$H(0.51)$	89.63	$89.66^{+0.58}_{-0.57}$ (+0.5 σ)			

Best-fit $\chi_{eff}^2 = 1921.76$; $\bar{\chi}_{eff}^2 = 1948.77$; $R - 1 = 0.00528$
 χ_{eff}^2 : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.57 CMB - BK15_dust: 735.55 small_100x143.offlike5_EE_Aplanck_B: 396.34 commander_dx12.v3.2.29: 22.42 plik_rd12_HM.v22_TT: 760.08

15.31 base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022183	$0.02218^{+0.00045}_{-0.00044} \quad (-0.1\sigma)$	σ_8	0.8121	$0.812^{+0.012}_{-0.012} \quad (+0.1\sigma)$	$D_M(0.38)$	1540.3	$1540^{+24}_{-24} \quad (+0.0\sigma)$
$\Omega_c h^2$	0.12050	$0.1205^{+0.0030}_{-0.0030} \quad (-0.0\sigma)$	S_8	0.8380	$0.837^{+0.032}_{-0.031} \quad (+0.0\sigma)$	$H(0.51)$	89.39	$89.39^{+0.72}_{-0.70} \quad (-0.1\sigma)$
$100\theta_{MC}$	1.04080	$1.04079^{+0.00089}_{-0.00089} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4590	$0.459^{+0.017}_{-0.017} \quad (+0.0\sigma)$	$D_M(0.51)$	1994.0	$1994^{+28}_{-28} \quad (+0.0\sigma)$
τ	0.0534	$0.054^{+0.017}_{-0.016} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6105	$0.610^{+0.015}_{-0.015} \quad (+0.0\sigma)$	$H(0.61)$	95.07	$95.07^{+0.60}_{-0.58} \quad (-0.1\sigma)$
$\ln(10^{10} A_s)$	3.0435	$3.044^{+0.032}_{-0.031} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	0.9922	$0.992^{+0.020}_{-0.020} \quad (+0.0\sigma)$	$D_M(0.61)$	2319.3	$2319^{+30}_{-30} \quad (+0.0\sigma)$
n_s	0.9632	$0.9625^{+0.0097}_{-0.0096} \quad (-0.0\sigma)$	$r_{\text{drag}} h$	98.58	$98.6^{+2.4}_{-2.3} \quad (-0.0\sigma)$	$H(2.33)$	236.69	$236.7^{+1.9}_{-1.9} \quad (-0.0\sigma)$
$dn_s/d \ln k$	$-289 \cdot 10^{-5}$	$-0.005^{+0.014}_{-0.015} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.448	$2.445^{+0.052}_{-0.052} \quad (+0.2\sigma)$	$D_M(2.33)$	5774.4	$5774^{+29}_{-29} \quad (+0.1\sigma)$
r	0.0134	$< 0.0624 \quad (-0.6\sigma)$	z_{re}	7.64	$7.6^{+1.6}_{-1.6} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	0.4629	$0.463^{+0.016}_{-0.016} \quad (+0.0\sigma)$
y_{cal}	1.00048	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s$	2.098	$2.100^{+0.068}_{-0.064} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	0.7496	$0.749^{+0.011}_{-0.011} \quad (+0.1\sigma)$
$A_{B,\text{dust}}$	4.66	$4.9^{+2.1}_{-1.9}$	$10^9 A_s e^{-2\tau}$	1.8854	$1.886^{+0.023}_{-0.023} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	0.4795	$0.479^{+0.012}_{-0.012} \quad (+0.0\sigma)$
$A_{B,\text{sync}}$	1.44	< 3.65	D_{40}	1230.1	$1232^{+41}_{-40} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6636	$0.6633^{+0.0097}_{-0.0094} \quad (+0.1\sigma)$
$\alpha_{B,\text{dust}}$	-0.52	—	D_{220}	5714	$5715^{+80}_{-80} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	0.4772	$0.477^{+0.010}_{-0.010} \quad (+0.0\sigma)$
$\beta_{B,\text{dust}}$	1.575	$1.60^{+0.19}_{-0.19}$	D_{810}	2538.4	$2538^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	0.6207	$0.6204^{+0.0093}_{-0.0089} \quad (+0.1\sigma)$
$\alpha_{B,\text{sync}}$	-0.44	—	D_{1420}	814.9	$814^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	0.4715	$0.4712^{+0.0091}_{-0.0093} \quad (+0.0\sigma)$
$\beta_{B,\text{sync}}$	-3.04	$-3.10^{+0.51}_{-0.54}$	D_{2000}	229.60	$229.2^{+3.8}_{-3.7} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	0.5904	$0.5901^{+0.0089}_{-0.0085} \quad (+0.1\sigma)$
$\epsilon_{\text{dust,sync}}$	-0.34	$-0.35^{+0.53}_{-0.58}$	$n_{s,0.002}$	0.9725	$0.978^{+0.047}_{-0.046} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	0.29736	$0.2972^{+0.0048}_{-0.0045} \quad (+0.1\sigma)$
A_{217}^{CIB}	50.8	$48^{+10}_{-10} \quad (-0.0\sigma)$	Y_P	0.245319	$0.24531^{+0.00018}_{-0.00021} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	0.3062	$0.3061^{+0.0052}_{-0.0050} \quad (+0.1\sigma)$
$\xi^{\text{tSZ}} \times \text{CIB}$	0.06	—	Y_P^{BBN}	0.246645	$0.24664^{+0.00018}_{-0.00021} \quad (-0.1\sigma)$	$r_{0.002}$	0.0121	$< 0.0592 \quad (-0.6\sigma)$
A_{143}^{tSZ}	7.17	$4.9^{+3.9}_{-3.9} \quad (+0.0\sigma)$	$10^5 D/H$	2.621	$2.623^{+0.084}_{-0.082} \quad (+0.1\sigma)$	$r_{0.01}$	0.0127	$< 0.0602 \quad (-0.6\sigma)$
A_{100}^{PS}	259	$266^{+50}_{-60} \quad (-0.0\sigma)$	Age/Gyr	13.822	$13.822^{+0.066}_{-0.067} \quad (+0.1\sigma)$	$\ln(10^{10} A_t)$	-1.27	$-0.9^{+1.5}_{-2.0} \quad (-0.4\sigma)$
A_{143}^{PS}	46.8	$50^{+20}_{-20} \quad (-0.1\sigma)$	z_*	1090.20	$1090.21^{+0.71}_{-0.71} \quad (+0.1\sigma)$	r_{10}	0.0062	$< 0.0307 \quad (-0.5\sigma)$
$A_{143 \times 217}^{\text{PS}}$	40.7	$44^{+20}_{-20} \quad (-0.0\sigma)$	r_*	144.45	$144.46^{+0.74}_{-0.72} \quad (+0.1\sigma)$	$10^9 A_t$	0.028	$< 0.131 \quad (-0.6\sigma)$
A_{217}^{PS}	116.5	$115^{+20}_{-20} \quad (+0.0\sigma)$	$100\theta_*$	1.04100	$1.04100^{+0.00087}_{-0.00088} \quad (-0.0\sigma)$	$10^9 A_t e^{-2\tau}$	0.025	$< 0.118 \quad (-0.6\sigma)$
A^{kSZ}	0.0	—	$D_M(z_*)/\text{Gpc}$	13.876	$13.877^{+0.070}_{-0.068} \quad (+0.1\sigma)$	f_{2000}^{143}	31.2	$32^{+6}_{-6} \quad (-0.1\sigma)$
A_{100}^{dustTT}	8.93	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_{drag}	1059.55	$1059.52^{+0.98}_{-0.96} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	33.77	$34^{+4}_{-4} \quad (-0.1\sigma)$
A_{143}^{dustTT}	10.86	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	r_{drag}	147.17	$147.18^{+0.78}_{-0.76} \quad (+0.1\sigma)$	f_{2000}^{217}	108.24	$108.7^{+4.0}_{-4.0} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.1	$18.4^{+6.6}_{-6.5} \quad (-0.0\sigma)$	k_D	0.14064	$0.14062^{+0.00095}_{-0.00097} \quad (-0.1\sigma)$	χ_{lensing}^2	9.08	$9.7 \quad (\nu: 0.6)$
A_{217}^{dustTT}	93.9	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_D$	0.16099	$0.16100^{+0.00057}_{-0.00056} \quad (+0.2\sigma)$	χ_{BKPLANCK}^2	735.20	$739.4 \quad (\nu: 3.5)$
c_{100}	0.99962	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{eq}	3410	$3409^{+70}_{-70} \quad (-0.0\sigma)$	χ_{small}^2	396.02	$397.1 \quad (\nu: 1.4) \quad (-0.1\sigma)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{eq}	0.010407	$0.01040^{+0.00021}_{-0.00021} \quad (-0.0\sigma)$	χ_{lowl}^2	23.21	$23.6 \quad (\nu: 2.4) \quad (-0.0\sigma)$
H_0	66.98	$67.0^{+1.4}_{-1.4} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	0.8114	$0.812^{+0.013}_{-0.013} \quad (+0.0\sigma)$	χ_{plik}^2	759.0	$772.3 \quad (\nu: 15.3) \quad (-0.2\sigma)$
Ω_Λ	0.6806	$0.681^{+0.019}_{-0.020} \quad (-0.0\sigma)$	$100\theta_{s,\text{eq}}$	0.4485	$0.4486^{+0.0067}_{-0.0066} \quad (+0.0\sigma)$	χ_{prior}^2	1.7	$8.9 \quad (\nu: 8.1) \quad (+0.4\sigma)$
Ω_m	0.3194	$0.319^{+0.020}_{-0.019} \quad (+0.0\sigma)$	$H(0.15)$	72.35	$72.4^{+1.2}_{-1.2} \quad (-0.0\sigma)$	χ_{CMB}^2	1922.5	$1942.2 \quad (\nu: 19.9) \quad (+126.7\sigma)$
$\Omega_m h^2$	0.14333	$0.1433^{+0.0029}_{-0.0029} \quad (-0.0\sigma)$	$D_M(0.15)$	646.6	$647^{+12}_{-12} \quad (+0.0\sigma)$			
$\Omega_m h^3$	0.09601	$0.09599^{+0.00097}_{-0.00096} \quad (-0.2\sigma)$	$H(0.38)$	82.59	$82.60^{+0.89}_{-0.86} \quad (-0.1\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 1924.17$; $\bar{\chi}_{\text{eff}}^2 = 1951.15$; $R - 1 = 0.00356$

χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 9.09 BK15_dust: 735.20 small_100x143_offlike5_EE_Aplanck_B: 396.02 commander_dx12_v3.2.29: 23.21 plik_rd12_HM_v22.TT: 758.99

15.32 base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022250	$0.02226^{+0.00042}_{-0.00042}$ $(+0.2\sigma)$	S_8	0.8257	$0.826^{+0.023}_{-0.023}$ (-0.5σ)	$D_M(0.51)$	1983.3	1983^{+20}_{-20} (-0.5σ)
$\Omega_c h^2$	0.11929	$0.1193^{+0.0022}_{-0.0021}$ (-0.6σ)	$\sigma_8 \Omega_m^{0.5}$	0.4523	$0.452^{+0.013}_{-0.013}$ (-0.5σ)	$H(0.61)$	95.256	$95.27^{+0.48}_{-0.48}$ $(+0.5\sigma)$
$100\theta_{MC}$	1.04098	$1.04098^{+0.00083}_{-0.00084}$ $(+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6052	$0.605^{+0.012}_{-0.012}$ (-0.4σ)	$D_M(0.61)$	2307.8	2307^{+22}_{-22} (-0.5σ)
τ	0.0558	$0.057^{+0.016}_{-0.015}$ $(+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9856	$0.986^{+0.018}_{-0.017}$ (-0.3σ)	$H(2.33)$	235.98	$236.0^{+1.4}_{-1.4}$ (-0.6σ)
$\ln(10^{10} A_s)$	3.0466	$3.049^{+0.032}_{-0.030}$ $(+0.2\sigma)$	$r_{drag} h$	99.54	$99.6^{+1.6}_{-1.6}$ $(+0.6\sigma)$	$D_M(2.33)$	5766.4	5766^{+25}_{-24} (-0.4σ)
n_s	0.9656	$0.9653^{+0.0083}_{-0.0083}$ $(+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4331	$2.432^{+0.046}_{-0.046}$ (-0.2σ)	$f\sigma_8(0.15)$	0.4568	$0.457^{+0.012}_{-0.012}$ (-0.4σ)
$dn_s/d \ln k$	-0.0032	$-0.005^{+0.014}_{-0.015}$ $(+0.3\sigma)$	z_{re}	7.84	$7.9^{+1.5}_{-1.5}$ $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7483	$0.749^{+0.011}_{-0.011}$ (-0.0σ)
r	0.0155	< 0.0642 (-0.5σ)	$10^9 A_s$	2.104	$2.109^{+0.069}_{-0.062}$ $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4751	$0.4751^{+0.0099}_{-0.0098}$ (-0.4σ)
y_{cal}	1.00083	$1.0008^{+0.0047}_{-0.0049}$ $(+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	1.8823	$1.882^{+0.022}_{-0.022}$ (-0.3σ)	$\sigma_8(0.38)$	0.6633	$0.664^{+0.010}_{-0.0094}$ $(+0.1\sigma)$
$A_{B,dust}$	4.62	$4.9^{+2.1}_{-1.9}$	D_{40}	1226.6	1227^{+40}_{-39} (-0.3σ)	$f\sigma_8(0.51)$	0.4736	$0.4737^{+0.0088}_{-0.0088}$ (-0.3σ)
$A_{B,sync}$	1.46	< 3.65	D_{220}	5726	5724^{+79}_{-78} $(+0.3\sigma)$	$\sigma_8(0.51)$	0.6207	$0.6210^{+0.0094}_{-0.0088}$ $(+0.2\sigma)$
$\alpha_{B,dust}$	-0.50	—	D_{810}	2539.9	2539^{+27}_{-27} $(+0.0\sigma)$	$f\sigma_8(0.61)$	0.4686	$0.4687^{+0.0082}_{-0.0081}$ (-0.3σ)
$\beta_{B,dust}$	1.577	$1.60^{+0.19}_{-0.19}$	D_{1420}	816.0	$815.2^{+9.9}_{-10}$ $(+0.3\sigma)$	$\sigma_8(0.61)$	0.5906	$0.5908^{+0.0091}_{-0.0084}$ $(+0.2\sigma)$
$\alpha_{B,sync}$	-0.24	—	D_{2000}	229.97	$229.6^{+3.6}_{-3.7}$ $(+0.4\sigma)$	$f\sigma_8(2.33)$	0.29778	$0.2979^{+0.0047}_{-0.0043}$ $(+0.3\sigma)$
$\beta_{B,sync}$	-3.04	$-3.10^{+0.50}_{-0.55}$	$n_{s,0.002}$	0.9759	$0.981^{+0.048}_{-0.046}$ (-0.2σ)	$\sigma_8(2.33)$	0.30698	$0.3071^{+0.0050}_{-0.0046}$ $(+0.4\sigma)$
$\epsilon_{dust,sync}$	-0.34	$-0.35^{+0.53}_{-0.58}$	Y_P	0.245346	$0.24535^{+0.00016}_{-0.00019}$ $(+0.2\sigma)$	$r_{0.002}$	0.0142	< 0.0618 (-0.5σ)
A_{217}^{CIB}	50.9	48^{+10}_{-10} (-0.1σ)	Y_P^{BBN}	0.246673	$0.24667^{+0.00016}_{-0.00019}$ $(+0.2\sigma)$	$r_{0.01}$	0.0148	< 0.0624 (-0.5σ)
$\xi^{tSZ \times CIB}$	0.06	—	$10^5 D/H$	2.608	$2.607^{+0.080}_{-0.076}$ (-0.2σ)	$\ln(10^{10} A_t)$	-1.12	$-0.8^{+1.4}_{-2.0}$ (-0.4σ)
A_{143}^{tSZ}	7.12	$5.0^{+3.8}_{-4.0}$ $(+0.1\sigma)$	Age/Gyr	13.805	$13.804^{+0.058}_{-0.056}$ (-0.4σ)	r_{10}	0.0073	< 0.0320 (-0.5σ)
A_{100}^{PS}	259	265^{+60}_{-60} (-0.1σ)	z_*	1090.01	$1090.00^{+0.60}_{-0.59}$ (-0.4σ)	$10^9 A_t$	0.033	< 0.136 (-0.5σ)
A_{143}^{PS}	46.6	50^{+20}_{-20} (-0.1σ)	r_*	144.71	$144.71^{+0.59}_{-0.58}$ $(+0.6\sigma)$	$10^9 A_t e^{-2\tau}$	0.029	< 0.121 (-0.5σ)
$A_{143 \times 217}^{PS}$	40.3	43^{+20}_{-20} (-0.0σ)	$100\theta_*$	1.04117	$1.04118^{+0.00082}_{-0.00083}$ $(+0.3\sigma)$	f_{2000}^{143}	31.1	32^{+6}_{-6} (-0.2σ)
A_{217}^{PS}	116.3	115^{+20}_{-20} $(+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.898	$13.898^{+0.058}_{-0.058}$ $(+0.5\sigma)$	$f_{2000}^{143 \times 217}$	33.60	34^{+4}_{-4} (-0.2σ)
A^{kSZ}	0.0	—	z_{drag}	1059.59	$1059.63^{+0.96}_{-0.95}$ $(+0.0\sigma)$	f_{2000}^{217}	108.13	$108.5^{+4.0}_{-4.0}$ (-0.2σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	r_{drag}	147.41	$147.41^{+0.67}_{-0.66}$ $(+0.5\sigma)$	$\chi^2_{lensing}$	8.87	9.38 $(\nu: 0.2)$
A_{143}^{dustTT}	10.72	$10.7^{+3.5}_{-3.5}$ (-0.0σ)	k_D	0.14044	$0.14044^{+0.00091}_{-0.00092}$ (-0.4σ)	$\chi^2_{BKPLANCK}$	735.50	739.8 $(\nu: 3.4)$
$A_{143 \times 217}^{dustTT}$	19.0	$18.3^{+6.6}_{-6.6}$ (-0.0σ)	$100\theta_D$	0.16096	$0.16095^{+0.00057}_{-0.00055}$ (-0.0σ)	χ^2_{simall}	396.35	397.5 $(\nu: 2.0)$ $(+0.1\sigma)$
A_{217}^{dustTT}	93.8	93^{+10}_{-10} $(+0.0\sigma)$	z_{eq}	3382	3382^{+50}_{-49} (-0.6σ)	χ^2_{lowl}	22.81	23.2 $(\nu: 2.1)$ (-0.2σ)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	k_{eq}	0.010323	$0.01032^{+0.00015}_{-0.00015}$ (-0.6σ)	χ^2_{plik}	759.8	772.6 $(\nu: 15.6)$ (-0.2σ)
c_{217}	0.99828	$0.9983^{+0.0012}_{-0.0012}$ (-0.0σ)	$100\theta_{eq}$	0.8166	$0.8167^{+0.0091}_{-0.0091}$ $(+0.6\sigma)$	χ^2_{6DF}	0.037	0.064 $(\nu: 0.0)$
H_0	67.52	$67.55^{+0.98}_{-0.97}$ $(+0.6\sigma)$	$100\theta_{s,eq}$	0.45118	$0.4513^{+0.0047}_{-0.0048}$ $(+0.6\sigma)$	χ^2_{MGS}	1.16	1.24 $(\nu: 0.1)$
Ω_Λ	0.6881	$0.688^{+0.013}_{-0.013}$ $(+0.6\sigma)$	$H(0.15)$	72.80	$72.83^{+0.86}_{-0.84}$ $(+0.5\sigma)$	$\chi^2_{DR12BAO}$	4.57	5.0 $(\nu: 1.3)$
Ω_m	0.3119	$0.312^{+0.013}_{-0.013}$ (-0.6σ)	$D_M(0.15)$	642.0	$641.8^{+8.4}_{-8.4}$ (-0.6σ)	χ^2_{prior}	1.6	9.0 $(\nu: 8.0)$ $(+0.4\sigma)$
$\Omega_m h^2$	0.14219	$0.1422^{+0.0021}_{-0.0021}$ (-0.6σ)	$H(0.38)$	82.92	$82.94^{+0.66}_{-0.64}$ $(+0.5\sigma)$	χ^2_{CMB}	1923.3	1942.4 $(\nu: 20.1)$ $(+126.7\sigma)$
$\Omega_m h^3$	0.09601	$0.09602^{+0.00097}_{-0.00097}$ (-0.1σ)	$D_M(0.38)$	1531.1	1531^{+17}_{-17} (-0.6σ)	χ^2_{BAO}	5.76	6.3 $(\nu: 0.9)$
σ_8	0.8099	$0.810^{+0.012}_{-0.012}$ (-0.1σ)	$H(0.51)$	89.64	$89.65^{+0.56}_{-0.54}$ $(+0.5\sigma)$			

Best-fit $\chi^2_{eff} = 1930.66$; $\bar{\chi}^2_{eff} = 1957.70$; $R - 1 = 0.00643$
 χ^2_{eff} : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.57 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.87 BK15_dust: 735.50 simall_100x143_offlike5_EE_Aplanck_B: 396.35 commander_dx12_v3.2.29: 22.81 plik_rd12_HM_v22.TT: 759.81

15.33 base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02216^{+0.00046}_{-0.00044} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09606^{+0.00097}_{-0.00098} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$649^{+15}_{-15} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1213^{+0.0041}_{-0.0040} \quad (+0.4\sigma)$	σ_8	$0.816^{+0.017}_{-0.016} \quad (+0.5\sigma)$	$H(0.38)$	$82.4^{+1.1}_{-1.0} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04073^{+0.00093}_{-0.00092} \quad (-0.2\sigma)$	S_8	$0.848^{+0.047}_{-0.046} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1545^{+30}_{-30} \quad (+0.4\sigma)$
τ	$0.055^{+0.014}_{-0.013} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.465^{+0.026}_{-0.025} \quad (+0.5\sigma)$	$H(0.51)$	$89.27^{+0.86}_{-0.81} \quad (-0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.050^{+0.032}_{-0.029} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.616^{+0.022}_{-0.022} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2000^{+35}_{-35} \quad (+0.4\sigma)$
n_{s}	$0.961^{+0.011}_{-0.011} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.999^{+0.030}_{-0.030} \quad (+0.5\sigma)$	$H(0.61)$	$94.98^{+0.69}_{-0.65} \quad (-0.3\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.007^{+0.015}_{-0.015} \quad (+0.2\sigma)$	$r_{\mathrm{drag}}h$	$98.0^{+3.1}_{-3.0} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2326^{+38}_{-38} \quad (+0.4\sigma)$
r	$< 0.0617 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.460^{+0.073}_{-0.073} \quad (+0.5\sigma)$	$H(2.33)$	$237.2^{+2.5}_{-2.5} \quad (+0.4\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 9.14 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5778^{+31}_{-32} \quad (+0.3\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	$2.112^{+0.067}_{-0.061} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.468^{+0.023}_{-0.023} \quad (+0.5\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.891^{+0.028}_{-0.028} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.014}_{-0.013} \quad (+0.5\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1232^{+42}_{-41} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.484^{+0.018}_{-0.018} \quad (+0.5\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5712^{+81}_{-81} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.012}_{-0.010} \quad (+0.5\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2540^{+28}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.481^{+0.015}_{-0.016} \quad (+0.5\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.010}_{-0.0096} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.57}$	D_{2000}	$229.0^{+3.8}_{-3.7} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.014}_{-0.014} \quad (+0.5\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.982^{+0.047}_{-0.046} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5920^{+0.0094}_{-0.0089} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	Y_{P}	$0.24530^{+0.00018}_{-0.00021} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0046}_{-0.0043} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00018}_{-0.00021} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0049}_{-0.0045} \quad (+0.3\sigma)$
A_{100}^{PS}	$267^{+60}_{-60} \quad (-0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.626^{+0.086}_{-0.084} \quad (+0.2\sigma)$	$r_{0.002}$	$< 0.0587 \quad (-0.6\sigma)$
A_{143}^{PS}	$51^{+20}_{-20} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.829^{+0.071}_{-0.072} \quad (+0.3\sigma)$	$r_{0.01}$	$< 0.0595 \quad (-0.6\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	z_*	$1090.30^{+0.79}_{-0.79} \quad (+0.3\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.1} \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	r_*	$144.27^{+0.95}_{-0.94} \quad (-0.3\sigma)$	r_{10}	$< 0.0305 \quad (-0.6\sigma)$
A^{kSZ}	—	$100\theta_*$	$1.04094^{+0.00091}_{-0.00090} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.130 \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.860^{+0.089}_{-0.087} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.116 \quad (-0.6\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	z_{drag}	$1059.54^{+0.97}_{-0.98} \quad (-0.1\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.0\sigma)$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.4^{+6.5}_{-6.5} \quad (-0.0\sigma)$	r_{drag}	$147.00^{+0.98}_{-0.96} \quad (-0.3\sigma)$	$f_{2000}^{143\times 217}$	$34^{+4}_{-4} \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	k_{D}	$0.1408^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	f_{2000}^{217}	$108.9^{+4.0}_{-4.0} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16099^{+0.00057}_{-0.00056} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.1 \quad (\nu: 3.7)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{eq}	$3427^{+93}_{-92} \quad (+0.4\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (-0.0\sigma)$
H_0	$66.7^{+1.8}_{-1.7} \quad (-0.4\sigma)$	k_{eq}	$0.01046^{+0.00029}_{-0.00028} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 2.3) \quad (-0.1\sigma)$
Ω_{Λ}	$0.676^{+0.024}_{-0.026} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.808^{+0.017}_{-0.017} \quad (-0.4\sigma)$	χ_{plik}^2	$772.7 \quad (\nu: 16.2) \quad (-0.2\sigma)$
Ω_{m}	$0.324^{+0.026}_{-0.024} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4469^{+0.0089}_{-0.0087} \quad (-0.4\sigma)$	χ_{prior}^2	$8.9 \quad (\nu: 8.1) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1441^{+0.0039}_{-0.0038} \quad (+0.4\sigma)$	$H(0.15)$	$72.1^{+1.5}_{-1.5} \quad (-0.4\sigma)$	χ_{CMB}^2	$1932.6 \quad (\nu: 19.4) \quad (+125.0\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 1941.52$; $R - 1 = 0.00204$

15.34 base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02227^{+0.00042}_{-0.00042} \quad (+0.2\sigma)$	S_8	$0.825^{+0.029}_{-0.029} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+22}_{-22} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1192^{+0.0024}_{-0.0024} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$95.28^{+0.50}_{-0.49} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00082}_{-0.00084} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.016}_{-0.015} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+23}_{-23} \quad (-0.6\sigma)$
τ	$0.057^{+0.015}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.022}_{-0.022} \quad (-0.3\sigma)$	$H(2.33)$	$236.0^{+1.6}_{-1.6} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.049^{+0.033}_{-0.031} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.8}_{-1.8} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+25}_{-25} \quad (-0.4\sigma)$
n_{s}	$0.9655^{+0.0087}_{-0.0086} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.056}_{-0.055} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.015}_{-0.015} \quad (-0.5\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.006^{+0.015}_{-0.015} \quad (+0.2\sigma)$	z_{re}	$< 9.31 \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.012} \quad (-0.0\sigma)$
r	$< 0.0654 \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.110^{+0.070}_{-0.064} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.012} \quad (-0.4\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.024}_{-0.024} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} \quad (+0.1\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	D_{40}	$1224^{+41}_{-40} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$A_{B,\mathrm{sync}}$	< 3.64	D_{220}	$5721^{+80}_{-78} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0096} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{810}	$2539^{+28}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.011}_{-0.010} \quad (-0.3\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.5909^{+0.0097}_{-0.0091} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{2000}	$229.5^{+3.7}_{-3.7} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0048}_{-0.0045} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.51}_{-0.55}$	$n_{\mathrm{s},0.002}$	$0.985^{+0.048}_{-0.047} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0050}_{-0.0046} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.58}$	Y_{P}	$0.24535^{+0.00016}_{-0.00019} \quad (+0.2\sigma)$	$r_{0.002}$	$< 0.0633 \quad (-0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24668^{+0.00016}_{-0.00019} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.0635 \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.605^{+0.080}_{-0.076} \quad (-0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.8^{+1.4}_{-1.9} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.802^{+0.058}_{-0.057} \quad (-0.4\sigma)$	r_{10}	$< 0.0329 \quad (-0.5\sigma)$
A_{100}^{PS}	$266^{+50}_{-60} \quad (-0.0\sigma)$	z_*	$1089.98^{+0.61}_{-0.59} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.138 \quad (-0.5\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.1\sigma)$	r_*	$144.71^{+0.65}_{-0.65} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.123 \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$100\theta_*$	$1.04119^{+0.00081}_{-0.00083} \quad (+0.4\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.2\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.064}_{-0.063} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.2\sigma)$
A^{kSZ}	—	z_{drag}	$1059.65^{+0.93}_{-0.97} \quad (+0.1\sigma)$	f_{2000}^{217}	$108.5^{+4.0}_{-4.0} \quad (-0.2\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_{drag}	$147.41^{+0.73}_{-0.72} \quad (+0.5\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.8 \quad (\nu: 3.5)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	k_{D}	$0.14046^{+0.00097}_{-0.00097} \quad (-0.4\sigma)$	χ_{simall}^2	$397.5 \quad (\nu: 2.5) \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.3^{+6.7}_{-6.6} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16094^{+0.00057}_{-0.00055} \quad (-0.0\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 1.9) \quad (-0.3\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{eq}	$3382^{+57}_{-56} \quad (-0.6\sigma)$	χ_{plik}^2	$773.0 \quad (\nu: 16.1) \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{eq}	$0.01032^{+0.00017}_{-0.00017} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.069 \quad (\nu: 0.0)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.010}_{-0.010} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.26 \quad (\nu: 0.1)$
H_0	$67.6^{+1.1}_{-1.0} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0054}_{-0.0053} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.6)$
Ω_{Λ}	$0.689^{+0.014}_{-0.015} \quad (+0.6\sigma)$	$H(0.15)$	$72.85^{+0.92}_{-0.91} \quad (+0.6\sigma)$	χ_{prior}^2	$9.0 \quad (\nu: 8.0) \quad (+0.4\sigma)$
Ω_{m}	$0.311^{+0.015}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.6^{+9.1}_{-9.0} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 1.1)$
$\Omega_{\mathrm{m}}h^2$	$0.1421^{+0.0024}_{-0.0024} \quad (-0.6\sigma)$	$H(0.38)$	$82.95^{+0.70}_{-0.68} \quad (+0.6\sigma)$	χ_{CMB}^2	$1933.2 \quad (\nu: 19.6) \quad (+125.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09604^{+0.00098}_{-0.00098} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+18}_{-18} \quad (-0.6\sigma)$		
σ_8	$0.810^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$H(0.51)$	$89.67^{+0.58}_{-0.56} \quad (+0.5\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1948.61$; $R - 1 = 0.00617$

15.35 base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00044}_{-0.00043} \quad (-0.1\sigma)$	σ_8	$0.812^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1539^{+23}_{-24} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1204^{+0.0029}_{-0.0030} \quad (-0.1\sigma)$	S_8	$0.837^{+0.031}_{-0.031} \quad (+0.0\sigma)$	$H(0.51)$	$89.42^{+0.70}_{-0.67} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04081^{+0.00089}_{-0.00089} \quad (-0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.017}_{-0.017} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+27}_{-28} \quad (-0.0\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.015}_{-0.015} \quad (+0.0\sigma)$	$H(0.61)$	$95.09^{+0.59}_{-0.57} \quad (-0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.020}_{-0.020} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+29}_{-30} \quad (-0.0\sigma)$
n_{s}	$0.9628^{+0.0095}_{-0.0094} \quad (+0.0\sigma)$	$r_{\mathrm{drag}}h$	$98.7^{+2.3}_{-2.3} \quad (+0.0\sigma)$	$H(2.33)$	$236.6^{+1.8}_{-1.8} \quad (-0.1\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.005^{+0.014}_{-0.015} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.052}_{-0.052} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5774^{+28}_{-29} \quad (+0.1\sigma)$
r	$< 0.0629 \quad (-0.6\sigma)$	z_{re}	$< 8.99 \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} \quad (+0.0\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.060}_{-0.054} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.011}_{-0.0098} \quad (+0.1\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.886^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.012} \quad (+0.0\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	D_{40}	$1231^{+40}_{-40} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6639^{+0.0090}_{-0.0085} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{220}	$5715^{+80}_{-80} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.010}_{-0.010} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{810}	$2538^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0084}_{-0.0079} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.4714^{+0.0090}_{-0.0093} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.51}_{-0.55}$	D_{2000}	$229.2^{+3.8}_{-3.7} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0080}_{-0.0075} \quad (+0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.58}$	$n_{\mathrm{s},0.002}$	$0.979^{+0.047}_{-0.046} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0042}_{-0.0039} \quad (+0.2\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	Y_{P}	$0.24532^{+0.00017}_{-0.00020} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0046}_{-0.0043} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ}} \times \mathrm{CIB}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00017}_{-0.00020} \quad (-0.1\sigma)$	$r_{0.002}$	$< 0.0596 \quad (-0.5\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (+0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.620^{+0.083}_{-0.081} \quad (+0.1\sigma)$	$r_{0.01}$	$< 0.0605 \quad (-0.6\sigma)$
A_{100}^{PS}	$266^{+50}_{-60} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.820^{+0.064}_{-0.066} \quad (+0.1\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.0} \quad (-0.4\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.1\sigma)$	z_*	$1090.18^{+0.69}_{-0.69} \quad (+0.0\sigma)$	r_{10}	$< 0.0310 \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	r_*	$144.48^{+0.73}_{-0.71} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.132 \quad (-0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$100\theta_*$	$1.04101^{+0.00087}_{-0.00087} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.118 \quad (-0.6\sigma)$
A^{kSZ}	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.879^{+0.069}_{-0.067} \quad (+0.1\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_{drag}	$1059.54^{+0.97}_{-0.98} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.5} \quad (-0.0\sigma)$	r_{drag}	$147.20^{+0.78}_{-0.75} \quad (+0.1\sigma)$	f_{2000}^{217}	$108.7^{+4.0}_{-4.0} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.4^{+6.6}_{-6.5} \quad (-0.0\sigma)$	k_{D}	$0.14061^{+0.00095}_{-0.00097} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.7 \quad (\nu: 0.6)$
$A_{217}^{\mathrm{dust}TT}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16099^{+0.00057}_{-0.00056} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.4 \quad (\nu: 3.5)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{eq}	$3406^{+68}_{-68} \quad (-0.1\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.5) \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{eq}	$0.01040^{+0.00021}_{-0.00021} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 2.3) \quad (-0.1\sigma)$
H_0	$67.0^{+1.4}_{-1.3} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.013}_{-0.012} \quad (+0.1\sigma)$	χ_{plik}^2	$772.2 \quad (\nu: 15.3) \quad (-0.2\sigma)$
Ω_{Λ}	$0.681^{+0.018}_{-0.019} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4488^{+0.0066}_{-0.0064} \quad (+0.1\sigma)$	χ_{prior}^2	$8.9 \quad (\nu: 8.1) \quad (+0.4\sigma)$
Ω_{m}	$0.319^{+0.019}_{-0.018} \quad (-0.0\sigma)$	$H(0.15)$	$72.4^{+1.2}_{-1.1} \quad (+0.0\sigma)$	χ_{CMB}^2	$1942.0 \quad (\nu: 19.5) \quad (+126.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0028}_{-0.0028} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+12}_{-12} \quad (-0.0\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.09600^{+0.00097}_{-0.00096} \quad (-0.1\sigma)$	$H(0.38)$	$82.63^{+0.88}_{-0.84} \quad (-0.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1950.93; R - 1 = 0.00327$$

15.36 base_nrun_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02226^{+0.00042}_{-0.00042} \quad (+0.2\sigma)$	S_8	$0.826^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1983^{+20}_{-20} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1192^{+0.0021}_{-0.0021} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$H(0.61)$	$95.28^{+0.48}_{-0.47} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04099^{+0.00083}_{-0.00084} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+22}_{-22} \quad (-0.6\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$H(2.33)$	$236.0^{+1.4}_{-1.4} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.050^{+0.029}_{-0.028} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.6}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+25}_{-24} \quad (-0.4\sigma)$
n_{s}	$0.9654^{+0.0083}_{-0.0083} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.046}_{-0.046} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.005^{+0.014}_{-0.015} \quad (+0.3\sigma)$	z_{re}	$8.0^{+1.3}_{-1.4} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0099} \quad (+0.0\sigma)$
r	$< 0.0642 \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.111^{+0.062}_{-0.058} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4752^{+0.0098}_{-0.0098} \quad (-0.4\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.6638^{+0.0095}_{-0.0089} \quad (+0.1\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	D_{40}	$1227^{+40}_{-39} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.4738^{+0.0088}_{-0.0086} \quad (-0.3\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	D_{220}	$5724^{+79}_{-78} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.6212^{+0.0088}_{-0.0083} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{810}	$2539^{+27}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.4688^{+0.0081}_{-0.0079} \quad (-0.3\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{1420}	$815.2^{+9.9}_{-10} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0084}_{-0.0080} \quad (+0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{2000}	$229.6^{+3.6}_{-3.7} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0043}_{-0.0041} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.51}_{-0.55}$	$n_{\mathrm{s},0.002}$	$0.982^{+0.048}_{-0.046} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0046}_{-0.0043} \quad (+0.5\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.58}$	Y_{P}	$0.24535^{+0.00016}_{-0.00019} \quad (+0.2\sigma)$	$r_{0.002}$	$< 0.0619 \quad (-0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24667^{+0.00016}_{-0.00019} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.0624 \quad (-0.5\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.606^{+0.080}_{-0.076} \quad (-0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.8^{+1.4}_{-2.0} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.0^{+3.8}_{-4.0} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.803^{+0.057}_{-0.056} \quad (-0.4\sigma)$	r_{10}	$< 0.0321 \quad (-0.5\sigma)$
A_{100}^{PS}	$265^{+60}_{-60} \quad (-0.1\sigma)$	z_*	$1089.99^{+0.60}_{-0.58} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.136 \quad (-0.5\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (-0.1\sigma)$	r_*	$144.71^{+0.58}_{-0.58} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.121 \quad (-0.5\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$100\theta_*$	$1.04118^{+0.00082}_{-0.00083} \quad (+0.3\sigma)$	f_{2000}^{143}	$32^{+6}_{-6} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.899^{+0.057}_{-0.058} \quad (+0.5\sigma)$	$f_{2000}^{143\times 217}$	$34^{+4}_{-4} \quad (-0.2\sigma)$
A^{kSZ}	—	z_{drag}	$1059.63^{+0.95}_{-0.96} \quad (+0.1\sigma)$	f_{2000}^{217}	$108.5^{+4.0}_{-4.0} \quad (-0.2\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_{drag}	$147.41^{+0.67}_{-0.66} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.36 \quad (\nu: 0.2)$
$A_{143}^{\mathrm{dust}TT}$	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	k_{D}	$0.14044^{+0.00092}_{-0.00091} \quad (-0.4\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.7 \quad (\nu: 3.3)$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.3^{+6.6}_{-6.5} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16094^{+0.00057}_{-0.00055} \quad (-0.0\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.1) \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{eq}	$3381^{+50}_{-49} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 2.0) \quad (-0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{eq}	$0.01032^{+0.00015}_{-0.00015} \quad (-0.6\sigma)$	χ_{plik}^2	$772.6 \quad (\nu: 15.5) \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8168^{+0.0091}_{-0.0091} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
H_0	$67.56^{+0.98}_{-0.96} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0047}_{-0.0047} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.25 \quad (\nu: 0.1)$
Ω_{Λ}	$0.688^{+0.012}_{-0.013} \quad (+0.6\sigma)$	$H(0.15)$	$72.84^{+0.86}_{-0.84} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.3)$
Ω_{m}	$0.312^{+0.013}_{-0.012} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.7^{+8.3}_{-8.3} \quad (-0.6\sigma)$	χ_{prior}^2	$9.0 \quad (\nu: 8.0) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1421^{+0.0021}_{-0.0021} \quad (-0.6\sigma)$	$H(0.38)$	$82.94^{+0.66}_{-0.64} \quad (+0.5\sigma)$	χ_{CMB}^2	$1942.4 \quad (\nu: 19.9) \quad (+126.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09603^{+0.00097}_{-0.00096} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+17}_{-17} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$H(0.51)$	$89.66^{+0.55}_{-0.54} \quad (+0.5\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1957.58$; $R - 1 = 0.00713$

15.37 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022384	$0.02238^{+0.00030}_{-0.00030}$ (+0.7 σ)	H_0	67.14	$67.1^{+1.2}_{-1.2}$ (+0.1 σ)	$100\theta_{s,eq}$	0.4480	$0.4480^{+0.0060}_{-0.0059}$ (−0.1 σ)
$\Omega_c h^2$	0.12062	$0.1206^{+0.0027}_{-0.0027}$ (+0.1 σ)	Ω_Λ	0.6813	$0.681^{+0.017}_{-0.017}$ (+0.0 σ)	$H(0.15)$	72.50	$72.5^{+1.0}_{-1.0}$ (+0.1 σ)
$100\theta_{MC}$	1.04088	$1.04087^{+0.00062}_{-0.00062}$ (+0.1 σ)	Ω_m	0.3187	$0.319^{+0.017}_{-0.017}$ (−0.0 σ)	$D_M(0.15)$	645.2	645^{+10}_{-10} (−0.1 σ)
τ	0.0559	$0.057^{+0.017}_{-0.016}$ (+0.4 σ)	$\Omega_m h^2$	0.14365	$0.1436^{+0.0026}_{-0.0026}$ (+0.1 σ)	$H(0.38)$	82.75	$82.75^{+0.75}_{-0.73}$ (+0.2 σ)
$\ln(10^{10} A_s)$	3.0504	$3.053^{+0.036}_{-0.033}$ (+0.5 σ)	$\Omega_m h^3$	0.09644	$0.09643^{+0.00060}_{-0.00061}$ (+0.7 σ)	$D_M(0.38)$	1537.1	1537^{+21}_{-21} (−0.2 σ)
n_s	0.9637	$0.9629^{+0.0091}_{-0.0092}$ (+0.0 σ)	σ_8	0.8139	$0.814^{+0.015}_{-0.015}$ (+0.3 σ)	$H(0.51)$	89.55	$89.55^{+0.59}_{-0.58}$ (+0.3 σ)
$dn_s/d \ln k$	−0.0063	$−0.008^{+0.014}_{-0.014}$ (−0.0 σ)	S_8	0.8389	$0.839^{+0.032}_{-0.032}$ (+0.1 σ)	$D_M(0.51)$	1990.0	1990^{+24}_{-24} (−0.2 σ)
r	0.0167	< 0.0663 (−0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4595	$0.460^{+0.018}_{-0.017}$ (+0.1 σ)	$H(0.61)$	95.226	$95.23^{+0.47}_{-0.46}$ (+0.3 σ)
y_{cal}	1.00052	$1.0008^{+0.0049}_{-0.0049}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6116	$0.612^{+0.016}_{-0.016}$ (+0.2 σ)	$D_M(0.61)$	2314.7	2315^{+26}_{-26} (−0.2 σ)
$A_{B,dust}$	4.62	$4.9^{+2.1}_{-1.9}$	$\sigma_8/h^{0.5}$	0.9934	$0.994^{+0.023}_{-0.023}$ (+0.2 σ)	$H(2.33)$	236.98	$237.0^{+1.6}_{-1.6}$ (+0.2 σ)
$A_{B,sync}$	1.49	< 3.63	$r_{drag} h$	98.63	$98.7^{+2.1}_{-2.1}$ (+0.0 σ)	$D_M(2.33)$	5765.0	5765^{+22}_{-22} (−0.4 σ)
$\alpha_{B,dust}$	−0.51	—	$\langle d^2 \rangle^{1/2}$	2.446	$2.447^{+0.057}_{-0.057}$ (+0.2 σ)	$f\sigma_8(0.15)$	0.4635	$0.464^{+0.016}_{-0.016}$ (+0.1 σ)
$\beta_{B,dust}$	1.579	$1.60^{+0.19}_{-0.19}$	z_{re}	7.85	$7.9^{+1.7}_{-1.6}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7514	$0.752^{+0.013}_{-0.013}$ (+0.4 σ)
$\alpha_{B,sync}$	−0.32	—	$10^9 A_s$	2.112	$2.118^{+0.076}_{-0.069}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4803	$0.480^{+0.013}_{-0.013}$ (+0.2 σ)
$\beta_{B,sync}$	−3.04	$−3.10^{+0.52}_{-0.55}$	$10^9 A_s e^{-2\tau}$	1.8888	$1.890^{+0.024}_{-0.024}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6653	$0.666^{+0.011}_{-0.011}$ (+0.4 σ)
$\epsilon_{dust,sync}$	−0.35	$−0.36^{+0.52}_{-0.57}$	D_{40}	1224.0	1227^{+37}_{-37} (−0.3 σ)	$f\sigma_8(0.51)$	0.4780	$0.478^{+0.012}_{-0.012}$ (+0.2 σ)
A_{217}^{CIB}	49.5	48^{+10}_{-10} (−0.1 σ)	D_{220}	5727	5730^{+76}_{-75} (+0.5 σ)	$\sigma_8(0.51)$	0.6223	$0.623^{+0.011}_{-0.010}$ (+0.5 σ)
$\xi^{tSZ \times CIB}$	0.17	—	D_{810}	2542.7	2543^{+27}_{-26} (+0.3 σ)	$f\sigma_8(0.61)$	0.4725	$0.473^{+0.011}_{-0.011}$ (+0.2 σ)
A_{143}^{tSZ}	7.27	$5.1^{+3.8}_{-4.0}$ (+0.1 σ)	D_{1420}	816.6	$816.0^{+9.8}_{-9.7}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5919	$0.592^{+0.010}_{-0.0096}$ (+0.5 σ)
A_{100}^{PS}	255	264^{+60}_{-60} (−0.1 σ)	D_{2000}	230.31	$230.0^{+3.6}_{-3.5}$ (+0.5 σ)	$f\sigma_8(2.33)$	0.2982	$0.2983^{+0.0051}_{-0.0048}$ (+0.5 σ)
A_{143}^{PS}	46.6	49^{+20}_{-20} (−0.3 σ)	$n_{s,0.002}$	0.9840	$0.989^{+0.042}_{-0.042}$ (+0.0 σ)	$\sigma_8(2.33)$	0.3071	$0.3073^{+0.0054}_{-0.0051}$ (+0.5 σ)
$A_{143 \times 217}^{PS}$	42.4	43^{+20}_{-20} (−0.1 σ)	Y_P	0.245401	$0.24540^{+0.00011}_{-0.00012}$ (+0.7 σ)	$r_{0.002}$	0.0155	< 0.0638 (−0.5 σ)
A_{217}^{PS}	117.6	115^{+20}_{-20} (+0.0 σ)	Y_P^{BBN}	0.246728	$0.24672^{+0.00011}_{-0.00012}$ (+0.7 σ)	$r_{0.01}$	0.0160	< 0.0642 (−0.5 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.583	$2.584^{+0.057}_{-0.055}$ (−0.7 σ)	$\ln(10^{10} A_t)$	−1.04	$−0.8^{+1.4}_{-2.0}$ (−0.3 σ)
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Age/Gyr	13.7998	$13.800^{+0.049}_{-0.048}$ (−0.5 σ)	r_{10}	0.0080	< 0.0332 (−0.5 σ)
A_{143}^{dustTT}	11.02	$11.0^{+3.5}_{-3.5}$ (+0.1 σ)	z_*	1089.96	$1089.96^{+0.55}_{-0.54}$ (−0.5 σ)	$10^9 A_t$	0.035	< 0.140 (−0.5 σ)
$A_{143 \times 217}^{dustTT}$	19.6	$18.7^{+6.5}_{-6.5}$ (+0.1 σ)	r_*	144.26	$144.27^{+0.62}_{-0.61}$ (−0.3 σ)	$10^9 A_t e^{-2\tau}$	0.032	< 0.125 (−0.5 σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (+0.0 σ)	$100\theta_*$	1.04106	$1.04105^{+0.00061}_{-0.00061}$ (+0.1 σ)	f_{2000}^{143}	30.4	31^{+6}_{-6} (−0.4 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.075}_{-0.075}$	$D_M(z_*)/\text{Gpc}$	13.857	$13.858^{+0.058}_{-0.057}$ (−0.3 σ)	$f_{2000}^{143 \times 217}$	33.07	33^{+4}_{-4} (−0.4 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	z_{drag}	1060.01	$1060.01^{+0.61}_{-0.61}$ (+0.8 σ)	f_{2000}^{217}	107.65	$108.1^{+3.9}_{-3.9}$ (−0.4 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	r_{drag}	146.91	$146.92^{+0.61}_{-0.60}$ (−0.4 σ)	$\chi_{BKPLANCK}^2$	735.07	739.4 (ν : 3.6)
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	k_D	0.14107	$0.14106^{+0.00066}_{-0.00067}$ (+0.6 σ)	χ_{small}^2	396.36	397.6 (ν : 2.5) (+0.2 σ)
$A_{143 \times 217}^{dustTE}$	0.665	$0.66^{+0.16}_{-0.16}$	$100\theta_D$	0.160712	$0.16072^{+0.00036}_{-0.00036}$ (−0.8 σ)	χ_{lowl}^2	22.43	22.9 (ν : 1.4) (−0.3 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.52}$	z_{eq}	3417	3417^{+62}_{-62} (+0.1 σ)	χ_{plik}^2	2345.1	2360.7 (ν : 18.6) (+272.2 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{eq}	0.010430	$0.01043^{+0.00019}_{-0.00019}$ (+0.1 σ)	χ_{prior}^2	1.9	13.2 (ν : 11.6) (+1.6 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{eq}$	0.8106	$0.811^{+0.012}_{-0.011}$ (−0.1 σ)	χ_{CMB}^2	3499.0	3520.6 (ν : 22.1) (+394.1 σ)

Best-fit $\chi_{eff}^2 = 3500.83$; $\bar{\chi}_{eff}^2 = 3533.84$; $R - 1 = 0.00338$

χ_{eff}^2 : CMB - BK15_dust: 735.07 small.100x143_offlike5_EE_Aplanck_B: 396.36 commander_dx12.v3.2.29: 22.43 plik_rd12_HM_v22b_TTTEE: 2345.11

15.38 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022446	$0.02245^{+0.00028}_{-0.00028}$ (+1.0 σ)	Ω_m	0.3125	$0.312^{+0.012}_{-0.012}$ (−0.6 σ)	$D_M(0.38)$	1529.6	1529^{+15}_{-15} (−0.7 σ)
$\Omega_c h^2$	0.11961	$0.1195^{+0.0020}_{-0.0020}$ (−0.5 σ)	$\Omega_m h^2$	0.14270	$0.1426^{+0.0019}_{-0.0019}$ (−0.4 σ)	$H(0.51)$	89.747	$89.77^{+0.46}_{-0.44}$ (+0.8 σ)
$100\theta_{MC}$	1.04098	$1.04099^{+0.00058}_{-0.00058}$ (+0.4 σ)	$\Omega_m h^3$	0.09643	$0.09643^{+0.00060}_{-0.00061}$ (+0.7 σ)	$D_M(0.51)$	1981.3	1981^{+18}_{-18} (−0.7 σ)
τ	0.0580	$0.058^{+0.017}_{-0.016}$ (+0.6 σ)	σ_8	0.8126	$0.812^{+0.015}_{-0.014}$ (+0.1 σ)	$H(0.61)$	95.379	$95.40^{+0.38}_{-0.37}$ (+0.8 σ)
$\ln(10^{10} A_s)$	3.0531	$3.054^{+0.036}_{-0.033}$ (+0.5 σ)	S_8	0.8293	$0.828^{+0.025}_{-0.025}$ (−0.4 σ)	$D_M(0.61)$	2305.4	2305^{+19}_{-19} (−0.7 σ)
n_s	0.9664	$0.9656^{+0.0077}_{-0.0079}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4542	$0.453^{+0.014}_{-0.014}$ (−0.4 σ)	$H(2.33)$	236.39	$236.3^{+1.2}_{-1.2}$ (−0.3 σ)
$dn_s/d \ln k$	−0.0053	$−0.007^{+0.014}_{-0.014}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6075	$0.607^{+0.014}_{-0.014}$ (−0.3 σ)	$D_M(2.33)$	5758.6	5758^{+18}_{-18} (−0.9 σ)
r	0.0218	< 0.0683 (−0.5 σ)	$\sigma_8/h^{0.5}$	0.9885	$0.987^{+0.021}_{-0.020}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4588	$0.458^{+0.013}_{-0.013}$ (−0.3 σ)
y_{cal}	1.00101	$1.0009^{+0.0049}_{-0.0049}$ (+0.2 σ)	$r_{drag} h$	99.41	$99.5^{+1.5}_{-1.5}$ (+0.5 σ)	$\sigma_8(0.15)$	0.7508	$0.750^{+0.014}_{-0.013}$ (+0.2 σ)
$A_{B,dust}$	4.61	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	2.436	$2.433^{+0.051}_{-0.051}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4769	$0.476^{+0.011}_{-0.011}$ (−0.3 σ)
$A_{B,sync}$	1.40	< 3.65	z_{re}	8.03	$8.1^{+1.6}_{-1.6}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6654	$0.665^{+0.012}_{-0.011}$ (+0.3 σ)
$\alpha_{B,dust}$	−0.51	—	$10^9 A_s$	2.118	$2.119^{+0.078}_{-0.070}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4754	$0.475^{+0.010}_{-0.010}$ (−0.2 σ)
$\beta_{B,dust}$	1.580	$1.60^{+0.18}_{-0.19}$	$10^9 A_s e^{-2\tau}$	1.8862	$1.885^{+0.023}_{-0.023}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6226	$0.622^{+0.011}_{-0.010}$ (+0.4 σ)
$\alpha_{B,sync}$	−0.37	—	D_{40}	1224.1	1224^{+37}_{-36} (−0.4 σ)	$f\sigma_8(0.61)$	0.4703	$0.4697^{+0.0099}_{-0.0094}$ (−0.2 σ)
$\beta_{B,sync}$	−3.04	$−3.11^{+0.52}_{-0.55}$	D_{220}	5736	5735^{+75}_{-75} (+0.6 σ)	$\sigma_8(0.61)$	0.5924	$0.592^{+0.010}_{-0.0095}$ (+0.4 σ)
$\epsilon_{dust,sync}$	−0.37	$−0.35^{+0.53}_{-0.58}$	D_{810}	2544.5	2543^{+27}_{-27} (+0.3 σ)	$f\sigma_8(2.33)$	0.2987	$0.2985^{+0.0053}_{-0.0048}$ (+0.5 σ)
A_{217}^{CIB}	48.6	48^{+10}_{-10} (−0.1 σ)	D_{1420}	818.3	$816.8^{+9.8}_{-9.6}$ (+0.6 σ)	$\sigma_8(2.33)$	0.3079	$0.3077^{+0.0055}_{-0.0051}$ (+0.6 σ)
$\xi^{tSZ \times CIB}$	0.31	—	D_{2000}	231.01	$230.4^{+3.6}_{-3.5}$ (+0.7 σ)	$r_{0.002}$	0.0203	< 0.0665 (−0.5 σ)
A_{143}^{tSZ}	7.22	$5.2^{+3.8}_{-4.0}$ (+0.2 σ)	$n_{s,0.002}$	0.9835	$0.989^{+0.042}_{-0.042}$ (+0.1 σ)	$r_{0.01}$	0.0209	< 0.0665 (−0.5 σ)
A_{100}^{PS}	253	263^{+60}_{-50} (−0.2 σ)	Y_P	0.245425	$0.24543^{+0.00010}_{-0.00011}$ (+1.0 σ)	$\ln(10^{10} A_t)$	−0.77	$−0.7^{+1.4}_{-1.9}$ (−0.3 σ)
A_{143}^{PS}	47.4	48^{+20}_{-20} (−0.4 σ)	Y_P^{BBN}	0.246752	$0.24675^{+0.00010}_{-0.00011}$ (+1.0 σ)	r_{10}	0.0104	< 0.0345 (−0.5 σ)
$A_{143 \times 217}^{PS}$	45.4	43^{+20}_{-20} (−0.1 σ)	$10^5 D/H$	2.572	$2.571^{+0.052}_{-0.049}$ (−1.0 σ)	$10^9 A_t$	0.046	< 0.145 (−0.5 σ)
A_{217}^{PS}	118.7	115^{+20}_{-20} (−0.0 σ)	Age/Gyr	13.7861	$13.785^{+0.040}_{-0.040}$ (−0.9 σ)	$10^9 A_t e^{-2\tau}$	0.041	< 0.129 (−0.5 σ)
A^{kSZ}	0.0	—	z_*	1089.790	$1089.78^{+0.44}_{-0.44}$ (−0.9 σ)	f_{2000}^{143}	29.7	31^{+6}_{-6} (−0.5 σ)
A_{100}^{dustTT}	8.84	$9.0^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	144.474	$144.49^{+0.48}_{-0.48}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	32.63	33^{+4}_{-4} (−0.6 σ)
A_{143}^{dustTT}	11.02	$11.0^{+3.4}_{-3.5}$ (+0.1 σ)	$100\theta_*$	1.04117	$1.04117^{+0.00058}_{-0.00057}$ (+0.3 σ)	f_{2000}^{217}	107.27	$107.8^{+3.9}_{-3.9}$ (−0.5 σ)
$A_{143 \times 217}^{dustTT}$	19.6	$18.7^{+6.5}_{-6.5}$ (+0.1 σ)	$D_M(z_*)/Gpc$	13.8762	$13.878^{+0.046}_{-0.046}$ (+0.1 σ)	$\chi_{BKPLANCK}^2$	735.29	739.8 (ν : 3.6)
A_{217}^{dustTT}	94.5	94^{+10}_{-10} (+0.0 σ)	z_{drag}	1060.09	$1060.09^{+0.60}_{-0.62}$ (+1.0 σ)	χ_{small}^2	396.77	397.9 (ν : 3.0) (+0.3 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.075}_{-0.074}$	r_{drag}	147.11	$147.13^{+0.50}_{-0.50}$ (−0.0 σ)	χ_{lowl}^2	22.40	22.6 (ν : 1.3) (−0.5 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.058}_{-0.058}$	k_D	0.14090	$0.14089^{+0.00061}_{-0.00061}$ (+0.4 σ)	χ_{plik}^2	2345.0	2360.4 (ν : 18.2) (+272.1 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_D$	0.160677	$0.16067^{+0.00035}_{-0.00035}$ (−1.0 σ)	χ_{6DF}^2	0.049	0.068 (ν : 0.0)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	z_{eq}	3394.7	3393^{+46}_{-46} (−0.4 σ)	χ_{MGS}^2	1.10	1.18 (ν : 0.1)
$A_{143 \times 217}^{dustTE}$	0.665	$0.66^{+0.16}_{-0.15}$	k_{eq}	0.010361	$0.01035^{+0.00014}_{-0.00014}$ (−0.4 σ)	$\chi_{DR12BAO}^2$	4.88	5.1 (ν : 1.3)
A_{217}^{dustTE}	2.07	$2.07^{+0.52}_{-0.53}$	$100\theta_{eq}$	0.8149	$0.8153^{+0.0085}_{-0.0085}$ (+0.4 σ)	χ_{prior}^2	1.9	13.2 (ν : 12.0) (+1.6 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{s,eq}$	0.45016	$0.4504^{+0.0044}_{-0.0044}$ (+0.4 σ)	χ_{BAO}^2	6.02	6.4 (ν : 0.9)
c_{217}	0.99821	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$H(0.15)$	72.87	$72.91^{+0.76}_{-0.75}$ (+0.7 σ)	χ_{CMB}^2	3499.5	3520.8 (ν : 22.0) (+394.1 σ)
H_0	67.58	$67.62^{+0.89}_{-0.88}$ (+0.6 σ)	$D_M(0.15)$	641.5	$641.1^{+7.6}_{-7.5}$ (−0.6 σ)			
Ω_Λ	0.6875	$0.688^{+0.012}_{-0.012}$ (+0.6 σ)	$H(0.38)$	83.01	$83.04^{+0.56}_{-0.55}$ (+0.7 σ)			

Best-fit $\chi^2_{eff} = 3507.39$; $\bar{\chi}^2_{eff} = 3540.38$; $R - 1 = 0.00677$
 χ^2_{eff} : BAO - 6DF: 0.05 MGS: 1.10 DR12BAO: 4.88 CMB - BK15_dust: 735.29 small_100x143_offlike5_EE_Aplanck_B: 396.77 commander_dx12_v3_2_29: 22.40 plik_rd12_HM_v22b_TTTEF 2345.00

15.39 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00030}_{-0.00030} \quad (+0.7\sigma)$	H_0	$67.2^{+1.2}_{-1.2} \quad (+0.1\sigma)$	$100\theta_{s,eq}$	$0.4481^{+0.0060}_{-0.0058} \quad (-0.1\sigma)$
$\Omega_c h^2$	$0.1206^{+0.0027}_{-0.0027} \quad (+0.0\sigma)$	Ω_Λ	$0.681^{+0.017}_{-0.017} \quad (+0.1\sigma)$	$H(0.15)$	$72.5^{+1.0}_{-1.0} \quad (+0.2\sigma)$
$100\theta_{MC}$	$1.04087^{+0.00062}_{-0.00062} \quad (+0.1\sigma)$	Ω_m	$0.319^{+0.017}_{-0.017} \quad (-0.1\sigma)$	$D_M(0.15)$	$645^{+10}_{-10} \quad (-0.2\sigma)$
τ	$0.058^{+0.015}_{-0.014} \quad (+0.5\sigma)$	$\Omega_m h^2$	$0.1436^{+0.0026}_{-0.0026} \quad (+0.1\sigma)$	$H(0.38)$	$82.76^{+0.74}_{-0.73} \quad (+0.2\sigma)$
$\ln(10^{10} A_s)$	$3.054^{+0.032}_{-0.030} \quad (+0.5\sigma)$	$\Omega_m h^3$	$0.09643^{+0.00060}_{-0.00060} \quad (+0.7\sigma)$	$D_M(0.38)$	$1537^{+20}_{-20} \quad (-0.2\sigma)$
n_s	$0.9630^{+0.0091}_{-0.0092} \quad (+0.1\sigma)$	σ_8	$0.815^{+0.015}_{-0.014} \quad (+0.4\sigma)$	$H(0.51)$	$89.56^{+0.59}_{-0.57} \quad (+0.3\sigma)$
$dn_s/d \ln k$	$-0.008^{+0.013}_{-0.014} \quad (-0.0\sigma)$	S_8	$0.840^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$D_M(0.51)$	$1990^{+24}_{-24} \quad (-0.2\sigma)$
r	$< 0.0664 \quad (-0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.460^{+0.017}_{-0.017} \quad (+0.1\sigma)$	$H(0.61)$	$95.23^{+0.47}_{-0.46} \quad (+0.4\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.612^{+0.016}_{-0.016} \quad (+0.2\sigma)$	$D_M(0.61)$	$2314^{+26}_{-26} \quad (-0.2\sigma)$
$A_{B,dust}$	$4.9^{+2.1}_{-1.9}$	$\sigma_8/h^{0.5}$	$0.994^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$H(2.33)$	$236.9^{+1.6}_{-1.6} \quad (+0.2\sigma)$
$A_{B,sync}$	< 3.63	$r_{drag} h$	$98.7^{+2.1}_{-2.1} \quad (+0.0\sigma)$	$D_M(2.33)$	$5765^{+21}_{-22} \quad (-0.5\sigma)$
$\alpha_{B,dust}$	—	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.056}_{-0.056} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.016}_{-0.016} \quad (+0.1\sigma)$
$\beta_{B,dust}$	$1.60^{+0.19}_{-0.19}$	z_{re}	$8.0^{+1.3}_{-1.5} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.013}_{-0.012} \quad (+0.5\sigma)$
$\alpha_{B,sync}$	—	$10^9 A_s$	$2.121^{+0.067}_{-0.063} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.013}_{-0.013} \quad (+0.2\sigma)$
$\beta_{B,sync}$	$-3.10^{+0.52}_{-0.55}$	$10^9 A_s e^{-2\tau}$	$1.890^{+0.024}_{-0.024} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.011}_{-0.010} \quad (+0.5\sigma)$
$\epsilon_{dust,sync}$	$-0.36^{+0.52}_{-0.57}$	D_{40}	$1227^{+37}_{-36} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.012}_{-0.012} \quad (+0.2\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5730^{+76}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6230^{+0.0098}_{-0.0094} \quad (+0.5\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{810}	$2543^{+27}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.011}_{-0.010} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.1\sigma)$	D_{1420}	$816.0^{+9.8}_{-9.7} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5926^{+0.0092}_{-0.0089} \quad (+0.5\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.1\sigma)$	D_{2000}	$230.0^{+3.6}_{-3.5} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0046}_{-0.0044} \quad (+0.6\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.3\sigma)$	$n_{s,0.002}$	$0.989^{+0.042}_{-0.041} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0048}_{-0.0046} \quad (+0.6\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_P	$0.24540^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$r_{0.002}$	$< 0.0640 \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P^{BBN}	$0.24673^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$r_{0.01}$	$< 0.0643 \quad (-0.5\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.583^{+0.057}_{-0.054} \quad (-0.7\sigma)$	$\ln(10^{10} A_t)$	$-0.8^{+1.4}_{-2.0} \quad (-0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Age/Gyr	$13.800^{+0.048}_{-0.048} \quad (-0.5\sigma)$	r_{10}	$< 0.0333 \quad (-0.5\sigma)$
A_{143}^{dustTT}	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	z_*	$1089.95^{+0.55}_{-0.54} \quad (-0.5\sigma)$	$10^9 A_t$	$< 0.141 \quad (-0.5\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	r_*	$144.27^{+0.62}_{-0.61} \quad (-0.3\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.126 \quad (-0.5\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04105^{+0.00061}_{-0.00062} \quad (+0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.4\sigma)$
A_{100}^{dustTE}	$0.115^{+0.075}_{-0.075}$	$D_M(z_*)/Gpc$	$13.859^{+0.058}_{-0.057} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.058}$	z_{drag}	$1060.01^{+0.61}_{-0.61} \quad (+0.8\sigma)$	f_{2000}^{217}	$108.1^{+3.9}_{-3.9} \quad (-0.4\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	r_{drag}	$146.93^{+0.62}_{-0.60} \quad (-0.4\sigma)$	$\chi_{BKPLANCK}^2$	$739.4 \quad (\nu: 3.6)$
A_{143}^{dustTE}	$0.23^{+0.10}_{-0.11}$	k_D	$0.14105^{+0.00067}_{-0.00067} \quad (+0.6\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 2.5) \quad (+0.2\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	$100\theta_D$	$0.16071^{+0.00036}_{-0.00036} \quad (-0.8\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 1.4) \quad (-0.4\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	z_{eq}	$3416^{+61}_{-62} \quad (+0.1\sigma)$	χ_{plik}^2	$2360.6 \quad (\nu: 18.4) \quad (+272.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{eq}	$0.01043^{+0.00019}_{-0.00019} \quad (+0.1\sigma)$	χ_{prior}^2	$13.2 \quad (\nu: 11.6) \quad (+1.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{eq}$	$0.811^{+0.012}_{-0.011} \quad (-0.1\sigma)$	χ_{CMB}^2	$3520.5 \quad (\nu: 21.6) \quad (+394.0\sigma)$

$$\bar{\chi}_{eff}^2 = 3533.65; R - 1 = 0.00314$$

15.40 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02245^{+0.00027}_{-0.00028}$ (+1.0 σ)	Ω_{m}	$0.312^{+0.012}_{-0.012}$ (−0.6 σ)	$D_{\mathrm{M}}(0.38)$	1529^{+15}_{-15} (−0.7 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1195^{+0.0020}_{-0.0020}$ (−0.5 σ)	$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0019}_{-0.0019}$ (−0.4 σ)	$H(0.51)$	$89.77^{+0.46}_{-0.44}$ (+0.8 σ)
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00058}_{-0.00058}$ (+0.4 σ)	$\Omega_{\mathrm{m}}h^3$	$0.09643^{+0.00060}_{-0.00061}$ (+0.7 σ)	$D_{\mathrm{M}}(0.51)$	1980^{+18}_{-18} (−0.7 σ)
τ	$0.059^{+0.015}_{-0.014}$ (+0.6 σ)	σ_8	$0.812^{+0.014}_{-0.014}$ (+0.1 σ)	$H(0.61)$	$95.40^{+0.37}_{-0.37}$ (+0.8 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.055^{+0.033}_{-0.031}$ (+0.6 σ)	S_8	$0.828^{+0.025}_{-0.025}$ (−0.4 σ)	$D_{\mathrm{M}}(0.61)$	2304^{+19}_{-19} (−0.7 σ)
n_{s}	$0.9656^{+0.0077}_{-0.0079}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014}$ (−0.4 σ)	$H(2.33)$	$236.3^{+1.2}_{-1.2}$ (−0.3 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.007^{+0.014}_{-0.014}$ (+0.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.014}_{-0.013}$ (−0.2 σ)	$D_{\mathrm{M}}(2.33)$	5758^{+18}_{-18} (−0.9 σ)
r	< 0.0684 (−0.5 σ)	$\sigma_8/h^{0.5}$	$0.988^{+0.021}_{-0.019}$ (−0.2 σ)	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013}$ (−0.3 σ)
y_{cal}	$1.0009^{+0.0049}_{-0.0049}$ (+0.2 σ)	$r_{\mathrm{drag}}h$	$99.5^{+1.5}_{-1.5}$ (+0.5 σ)	$\sigma_8(0.15)$	$0.750^{+0.012}_{-0.012}$ (+0.2 σ)
$A_{B,\mathrm{dust}}$	$4.8^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.051}_{-0.050}$ (−0.1 σ)	$f\sigma_8(0.38)$	$0.476^{+0.011}_{-0.011}$ (−0.2 σ)
$A_{B,\mathrm{sync}}$	< 3.65	z_{re}	$8.1^{+1.4}_{-1.5}$ (+0.6 σ)	$\sigma_8(0.38)$	$0.665^{+0.011}_{-0.010}$ (+0.4 σ)
$\alpha_{B,\mathrm{dust}}$	—	10^9A_{s}	$2.122^{+0.070}_{-0.066}$ (+0.6 σ)	$f\sigma_8(0.51)$	$0.475^{+0.010}_{-0.0098}$ (−0.2 σ)
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.18}_{-0.19}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.885^{+0.023}_{-0.023}$ (−0.1 σ)	$\sigma_8(0.51)$	$0.622^{+0.010}_{-0.0097}$ (+0.4 σ)
$\alpha_{B,\mathrm{sync}}$	—	D_{40}	1223^{+37}_{-36} (−0.4 σ)	$f\sigma_8(0.61)$	$0.4700^{+0.0097}_{-0.0091}$ (−0.1 σ)
$\beta_{B,\mathrm{sync}}$	$-3.11^{+0.52}_{-0.54}$	D_{220}	5735^{+75}_{-75} (+0.6 σ)	$\sigma_8(0.61)$	$0.5923^{+0.0095}_{-0.0091}$ (+0.5 σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.58}$	D_{810}	2543^{+27}_{-27} (+0.3 σ)	$f\sigma_8(2.33)$	$0.2986^{+0.0048}_{-0.0046}$ (+0.6 σ)
A_{217}^{CIB}	48^{+10}_{-10} (−0.1 σ)	D_{1420}	$816.8^{+9.8}_{-9.6}$ (+0.6 σ)	$\sigma_8(2.33)$	$0.3078^{+0.0050}_{-0.0048}$ (+0.7 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	D_{2000}	$230.4^{+3.6}_{-3.5}$ (+0.7 σ)	$r_{0.002}$	< 0.0666 (−0.5 σ)
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.0}$ (+0.2 σ)	$n_{\mathrm{s},0.002}$	$0.990^{+0.042}_{-0.042}$ (+0.1 σ)	$r_{0.01}$	< 0.0666 (−0.5 σ)
A_{100}^{PS}	263^{+60}_{-50} (−0.2 σ)	Y_{P}	$0.24543^{+0.00010}_{-0.00011}$ (+1.0 σ)	$\ln(10^{10}A_{\mathrm{t}})$	$-0.7^{+1.4}_{-1.9}$ (−0.3 σ)
A_{143}^{PS}	48^{+20}_{-20} (−0.4 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00010}_{-0.00011}$ (+1.0 σ)	r_{10}	< 0.0346 (−0.5 σ)
$A_{143\times 217}^{\mathrm{PS}}$	43^{+20}_{-20} (−0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	$2.571^{+0.051}_{-0.049}$ (−1.0 σ)	10^9A_{t}	< 0.145 (−0.5 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.0 σ)	$\mathrm{Age}/\mathrm{Gyr}$	$13.785^{+0.040}_{-0.040}$ (−0.9 σ)	$10^9A_{\mathrm{t}}e^{-2\tau}$	< 0.129 (−0.5 σ)
A^{kSZ}	—	z_*	$1089.77^{+0.44}_{-0.44}$ (−0.9 σ)	f_{2000}^{143}	31^{+6}_{-6} (−0.5 σ)
$A_{100}^{\mathrm{dust}TT}$	$9.0^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	$144.49^{+0.48}_{-0.48}$ (+0.1 σ)	$f_{2000}^{143\times 217}$	33^{+4}_{-4} (−0.6 σ)
$A_{143}^{\mathrm{dust}TT}$	$11.0^{+3.4}_{-3.5}$ (+0.1 σ)	$100\theta_*$	$1.04117^{+0.00058}_{-0.00057}$ (+0.3 σ)	f_{2000}^{217}	$107.8^{+3.9}_{-3.9}$ (−0.5 σ)
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.7^{+6.5}_{-6.5}$ (+0.1 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.878^{+0.046}_{-0.046}$ (+0.1 σ)	$\chi_{\mathrm{BKPLANCK}}^2$	739.8 (ν : 3.6)
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10} (+0.0 σ)	z_{drag}	$1060.09^{+0.60}_{-0.62}$ (+1.0 σ)	χ_{simall}^2	397.9 (ν : 3.1) (+0.3 σ)
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.075}_{-0.074}$	r_{drag}	$147.13^{+0.51}_{-0.50}$ (−0.0 σ)	χ_{lowl}^2	22.6 (ν : 1.3) (−0.5 σ)
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	k_{D}	$0.14089^{+0.00061}_{-0.00061}$ (+0.4 σ)	χ_{plik}^2	2360.3 (ν : 18.1) (+272.1 σ)
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_{\mathrm{D}}$	$0.16067^{+0.00035}_{-0.00035}$ (−1.0 σ)	$\chi_{6\mathrm{DF}}^2$	0.067 (ν : 0.0)
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	z_{eq}	3393^{+46}_{-46} (−0.4 σ)	χ_{MGS}^2	1.19 (ν : 0.1)
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.15}$	k_{eq}	$0.01035^{+0.00014}_{-0.00014}$ (−0.4 σ)	$\chi_{\mathrm{DR12BAO}}^2$	5.1 (ν : 1.3)
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.52}_{-0.53}$	$100\theta_{\mathrm{eq}}$	$0.8153^{+0.0086}_{-0.0085}$ (+0.4 σ)	χ_{prior}^2	13.2 (ν : 12.0) (+1.6 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4504^{+0.0044}_{-0.0044}$ (+0.4 σ)	χ_{BAO}^2	6.4 (ν : 0.9)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$H(0.15)$	$72.91^{+0.76}_{-0.75}$ (+0.7 σ)	χ_{CMB}^2	3520.7 (ν : 21.7) (+394.1 σ)
H_0	$67.62^{+0.89}_{-0.88}$ (+0.6 σ)	$D_{\mathrm{M}}(0.15)$	$641.1^{+7.5}_{-7.5}$ (−0.6 σ)		
Ω_{Λ}	$0.688^{+0.012}_{-0.012}$ (+0.6 σ)	$H(0.38)$	$83.04^{+0.57}_{-0.55}$ (+0.7 σ)		

 $\bar{\chi}_{\mathrm{eff}}^2 = 3540.25$; $R - 1 = 0.00710$

15.41 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022129	$0.02215^{+0.00046}_{-0.00046} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.09605	$0.09606^{+0.00097}_{-0.00096} \quad (-0.0\sigma)$	$H(0.38)$	82.39	$82.5^{+1.1}_{-1.1} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12137	$0.1211^{+0.0041}_{-0.0041} \quad (+0.3\sigma)$	σ_8	0.8144	$0.814^{+0.017}_{-0.018} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	1546.2	$1544^{+31}_{-31} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.04079	$1.04080^{+0.00094}_{-0.00093} \quad (-0.0\sigma)$	S_8	0.8472	$0.845^{+0.047}_{-0.046} \quad (+0.3\sigma)$	$H(0.51)$	89.24	$89.30^{+0.88}_{-0.83} \quad (-0.3\sigma)$
τ	0.0534	$0.054^{+0.018}_{-0.016} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4640	$0.463^{+0.026}_{-0.025} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	2000.9	$1999^{+36}_{-36} \quad (+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0451	$3.046^{+0.036}_{-0.034} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6147	$0.614^{+0.022}_{-0.023} \quad (+0.4\sigma)$	$H(0.61)$	94.96	$95.00^{+0.71}_{-0.66} \quad (-0.3\sigma)$
n_{s}	0.9605	$0.962^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9977	$0.997^{+0.031}_{-0.031} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	2326.7	$2324^{+38}_{-39} \quad (+0.3\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.0056	$-0.005^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	97.95	$98.1^{+3.1}_{-3.1} \quad (-0.3\sigma)$	$H(2.33)$	237.21	$237.1^{+2.5}_{-2.5} \quad (+0.3\sigma)$
r	0.0137	$< 0.0631 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	2.457	$2.454^{+0.074}_{-0.074} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	5778.8	$5777^{+32}_{-33} \quad (+0.3\sigma)$
y_{cal}	1.00067	$1.0007^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	7.66	$7.7^{+1.7}_{-1.7} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4675	$0.467^{+0.024}_{-0.023} \quad (+0.4\sigma)$
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	2.101	$2.103^{+0.078}_{-0.071} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7512	$0.751^{+0.015}_{-0.015} \quad (+0.3\sigma)$
$A_{B,\mathrm{sync}}$	1.48	< 3.65	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8884	$1.887^{+0.028}_{-0.028} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	0.4830	$0.482^{+0.018}_{-0.019} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.53	—	D_{40}	1227.8	$1231^{+42}_{-41} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6645	$0.665^{+0.012}_{-0.012} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{dust}}$	1.579	$1.60^{+0.19}_{-0.19}$	D_{220}	5704	$5703^{+82}_{-81} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	0.4800	$0.479^{+0.016}_{-0.016} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.25	—	D_{810}	2536.8	$2537^{+28}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6213	$0.621^{+0.011}_{-0.011} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.52}_{-0.55}$	D_{1420}	812.8	$814^{+10}_{-10} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	0.4740	$0.473^{+0.014}_{-0.014} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.34	$-0.35^{+0.53}_{-0.57}$	D_{2000}	228.70	$229.0^{+3.9}_{-3.9} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	0.5908	$0.591^{+0.011}_{-0.010} \quad (+0.2\sigma)$
A_{100}^{PS}	249.5	$246^{+50}_{-50} \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	0.9786	$0.979^{+0.047}_{-0.046} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	0.2974	$0.2975^{+0.0053}_{-0.0050} \quad (+0.2\sigma)$
A_{143}^{PS}	39.5	$43^{+20}_{-20} \quad (-1.0\sigma)$	Y_{P}	0.245296	$0.24530^{+0.00018}_{-0.00022} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	0.3060	$0.3063^{+0.0056}_{-0.0052} \quad (+0.1\sigma)$
A_{217}^{PS}	97.9	$100^{+30}_{-30} \quad (-1.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246622	$0.24663^{+0.00018}_{-0.00022} \quad (-0.3\sigma)$	$r_{0.002}$	0.0125	$< 0.0597 \quad (-0.6\sigma)$
A_{217}^{CIB}	44.0	$42^{+10}_{-10} \quad (-1.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.632	$2.628^{+0.088}_{-0.085} \quad (+0.3\sigma)$	$r_{0.01}$	0.0130	$< 0.0608 \quad (-0.6\sigma)$
A_{143}^{tSZ}	3.85	$< 7.28 \quad (-0.6\sigma)$	Age/Gyr	13.831	$13.827^{+0.072}_{-0.074} \quad (+0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	-1.25	$-0.9^{+1.5}_{-2.0} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.542	$0.64^{+0.25}_{-0.25}$	z_{*}	1090.35	$1090.30^{+0.81}_{-0.81} \quad (+0.3\sigma)$	r_{10}	0.0065	$< 0.0310 \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.66	—	r_{*}	144.26	$144.31^{+0.95}_{-0.94} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{t}}$	0.029	$< 0.133 \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.00	—	$100\theta_{*}$	1.04099	$1.04101^{+0.00093}_{-0.00091} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.026	$< 0.119 \quad (-0.6\sigma)$
A^{kSZ}	4.7	—	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.858	$13.862^{+0.088}_{-0.087} \quad (-0.3\sigma)$	f_{2000}^{143}	32.5	$32^{+7}_{-6} \quad (-0.1\sigma)$
A_{100}^{dust}	1.015	$1.01^{+0.38}_{-0.38}$	z_{drag}	1059.47	$1059.51^{+0.96}_{-0.99} \quad (-0.2\sigma)$	f_{2000}^{217}	108.75	$108.3^{+4.3}_{-4.3} \quad (-0.3\sigma)$
A_{143}^{dust}	0.984	$0.98^{+0.35}_{-0.34}$	r_{drag}	147.00	$147.04^{+0.98}_{-0.96} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	34.09	$34^{+5}_{-5} \quad (-0.3\sigma)$
A_{217}^{dust}	0.962	$0.97^{+0.20}_{-0.20}$	k_{D}	0.14078	$0.1408^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	734.9	$739.2 \quad (\nu: 3.7)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.007	$1.03^{+0.32}_{-0.32}$	$100\theta_{\mathrm{D}}$	0.16103	$0.16101^{+0.00058}_{-0.00056} \quad (+0.2\sigma)$	χ_{small}^2	396.03	$397.3 \quad (\nu: 1.9) \quad (-0.0\sigma)$
c_{100}	0.99739	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{eq}	3429	$3424^{+93}_{-92} \quad (+0.3\sigma)$	χ_{lowl}^2	22.86	$23.6 \quad (\nu: 2.4) \quad (-0.0\sigma)$
c_{217}	1.00143	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	k_{eq}	0.010466	$0.01045^{+0.00028}_{-0.00028} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	7050.6	$7064.4 \quad (\nu: 15.8)$
H_0	66.63	$66.7^{+1.8}_{-1.7} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	0.8078	$0.809^{+0.017}_{-0.017} \quad (-0.3\sigma)$	χ_{prior}^2	2.6	$9.3 \quad (\nu: 7.4) \quad (+0.5\sigma)$
Ω_{Λ}	0.6753	$0.677^{+0.025}_{-0.026} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4467	$0.4472^{+0.0090}_{-0.0087} \quad (-0.3\sigma)$	χ_{CMB}^2	8204.4	$8224.5 \quad (\nu: 20.0) \quad (+1191.0\sigma)$
Ω_{m}	0.3247	$0.323^{+0.026}_{-0.025} \quad (+0.3\sigma)$	$H(0.15)$	72.05	$72.2^{+1.5}_{-1.5} \quad (-0.3\sigma)$			
$\Omega_{\mathrm{m}}h^2$	0.14414	$0.1439^{+0.0039}_{-0.0039} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	649.7	$649^{+15}_{-15} \quad (+0.3\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 8206.96$; $\bar{\chi}_{\mathrm{eff}}^2 = 8233.85$; $R - 1 = 0.00340$

χ_{eff}^2 : CMB - BK15_dust: 734.86 simall_100x143_offlike5_EE_Aplanck_B: 396.03 commander_dx12_v3_2_29: 22.86 CamSpec like_10.7HM: 7050.61

15.42 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022242	$0.02226^{+0.00042}_{-0.00042}$ $(+0.2\sigma)$	σ_8	0.8082	$0.809^{+0.016}_{-0.015}$ (-0.2σ)	$H(0.51)$	89.66	$89.68^{+0.60}_{-0.57}$ $(+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11917	$0.1192^{+0.0024}_{-0.0023}$ (-0.6σ)	S_8	0.8229	$0.824^{+0.029}_{-0.029}$ (-0.5σ)	$D_{\mathrm{M}}(0.51)$	1982.2	1982^{+22}_{-22} (-0.6σ)
$100\theta_{\mathrm{MC}}$	1.04104	$1.04106^{+0.00082}_{-0.00085}$ $(+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4507	$0.451^{+0.016}_{-0.016}$ (-0.5σ)	$H(0.61)$	95.28	$95.29^{+0.51}_{-0.49}$ $(+0.5\sigma)$
τ	0.0553	$0.056^{+0.018}_{-0.016}$ $(+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6035	$0.604^{+0.016}_{-0.015}$ (-0.5σ)	$D_{\mathrm{M}}(0.61)$	2306.6	2306^{+23}_{-24} (-0.6σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0438	$3.046^{+0.038}_{-0.034}$ $(+0.0\sigma)$	$\sigma_8/h^{0.5}$	0.9831	$0.984^{+0.023}_{-0.022}$ (-0.4σ)	$H(2.33)$	235.89	$235.9^{+1.6}_{-1.5}$ (-0.6σ)
n_{s}	0.9657	$0.9663^{+0.0090}_{-0.0089}$ $(+0.6\sigma)$	$r_{\mathrm{drag}}h$	99.65	$99.6^{+1.9}_{-1.8}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	5765.6	5765^{+25}_{-25} (-0.5σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.0048	$-0.005^{+0.015}_{-0.015}$ $(+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.424	$2.426^{+0.056}_{-0.057}$ (-0.3σ)	$f\sigma_8(0.15)$	0.4553	$0.456^{+0.015}_{-0.015}$ (-0.5σ)
r	0.0170	< 0.0661 (-0.5σ)	z_{re}	7.80	$7.8^{+1.7}_{-1.6}$ $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7468	$0.748^{+0.014}_{-0.013}$ (-0.1σ)
y_{cal}	1.0008	$1.0008^{+0.0050}_{-0.0050}$ $(+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	2.098	$2.103^{+0.081}_{-0.071}$ $(+0.0\sigma)$	$f\sigma_8(0.38)$	0.4737	$0.474^{+0.013}_{-0.013}$ (-0.5σ)
$A_{B,\mathrm{dust}}$	4.60	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8789	$1.879^{+0.024}_{-0.024}$ (-0.5σ)	$\sigma_8(0.38)$	0.6621	$0.663^{+0.012}_{-0.011}$ (-0.0σ)
$A_{B,\mathrm{sync}}$	1.45	< 3.63	D_{40}	1220.0	1224^{+40}_{-39} (-0.4σ)	$f\sigma_8(0.51)$	0.4724	$0.473^{+0.012}_{-0.011}$ (-0.4σ)
$\alpha_{B,\mathrm{dust}}$	-0.50	—	D_{220}	5713	5712^{+80}_{-80} $(+0.0\sigma)$	$\sigma_8(0.51)$	0.6196	$0.620^{+0.011}_{-0.011}$ $(+0.0\sigma)$
$\beta_{B,\mathrm{dust}}$	1.575	$1.60^{+0.19}_{-0.19}$	D_{810}	2535.7	2537^{+27}_{-28} (-0.2σ)	$f\sigma_8(0.61)$	0.4675	$0.468^{+0.011}_{-0.010}$ (-0.4σ)
$\alpha_{B,\mathrm{sync}}$	-0.38	—	D_{1420}	814.3	815^{+10}_{-10} $(+0.2\sigma)$	$\sigma_8(0.61)$	0.5896	$0.590^{+0.011}_{-0.010}$ $(+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.05	$-3.10^{+0.52}_{-0.54}$	D_{2000}	229.30	$229.6^{+3.9}_{-3.8}$ $(+0.3\sigma)$	$f\sigma_8(2.33)$	0.2973	$0.2976^{+0.0055}_{-0.0050}$ $(+0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.34	$-0.35^{+0.53}_{-0.59}$	$n_{\mathrm{s},0.002}$	0.9811	$0.982^{+0.047}_{-0.046}$ (-0.2σ)	$\sigma_8(2.33)$	0.3065	$0.3068^{+0.0058}_{-0.0051}$ $(+0.3\sigma)$
A_{100}^{PS}	249.0	245^{+50}_{-50} (-0.8σ)	Y_{P}	0.245343	$0.24535^{+0.00017}_{-0.00018}$ $(+0.2\sigma)$	$r_{0.002}$	0.0157	< 0.0635 (-0.5σ)
A_{143}^{PS}	41.7	42^{+20}_{-20} (-1.1σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246670	$0.24667^{+0.00017}_{-0.00018}$ $(+0.2\sigma)$	$r_{0.01}$	0.0162	< 0.0641 (-0.5σ)
A_{217}^{PS}	98.5	100^{+30}_{-30} (-1.4σ)	$10^5\mathrm{D}/\mathrm{H}$	2.610	$2.607^{+0.080}_{-0.077}$ (-0.2σ)	$\ln(10^{10}A_{\mathrm{t}})$	-1.03	$-0.8^{+1.5}_{-2.0}$ (-0.3σ)
A_{217}^{CIB}	42.9	42^{+10}_{-10} (-1.1σ)	Age/Gyr	13.803	$13.801^{+0.057}_{-0.058}$ (-0.4σ)	r_{10}	0.0081	< 0.0329 (-0.5σ)
A_{143}^{tSZ}	3.55	< 7.33 (-0.6σ)	z_*	1090.01	$1089.99^{+0.61}_{-0.62}$ (-0.4σ)	$10^9 A_{\mathrm{t}}$	0.036	< 0.139 (-0.5σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.583	$0.64^{+0.25}_{-0.25}$	r_*	144.74	$144.72^{+0.63}_{-0.64}$ $(+0.6\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.032	< 0.125 (-0.5σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.68	—	$100\theta_*$	1.04124	$1.04125^{+0.00081}_{-0.00084}$ $(+0.5\sigma)$	f_{2000}^{143}	32.0	31^{+7}_{-6} (-0.3σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.29	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.901	$13.899^{+0.062}_{-0.063}$ $(+0.5\sigma)$	f_{2000}^{217}	108.26	$108.0^{+4.3}_{-4.2}$ (-0.4σ)
A^{kSZ}	5.1	—	z_{drag}	1059.59	$1059.62^{+0.96}_{-0.98}$ $(+0.0\sigma)$	$f_{2000}^{143\times 217}$	33.61	33^{+5}_{-5} (-0.5σ)
A_{100}^{dust}	1.016	$1.01^{+0.38}_{-0.38}$	r_{drag}	147.45	$147.43^{+0.72}_{-0.72}$ $(+0.6\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	735.64	740.0 $(\nu: 3.6)$
A_{143}^{dust}	0.988	$0.97^{+0.35}_{-0.35}$	k_{D}	0.14039	$0.14043^{+0.00095}_{-0.00096}$ (-0.5σ)	χ_{simall}^2	396.20	397.5 $(\nu: 2.5)$ $(+0.1\sigma)$
A_{217}^{dust}	0.966	$0.97^{+0.21}_{-0.21}$	$100\theta_{\mathrm{D}}$	0.16098	$0.16096^{+0.00057}_{-0.00056}$ $(+0.0\sigma)$	χ_{lowl}^2	22.26	23.0 $(\nu: 1.9)$ (-0.3σ)
$A_{143\times 217}^{\mathrm{dust}}$	0.996	$1.03^{+0.32}_{-0.33}$	z_{eq}	3379	3380^{+56}_{-55} (-0.6σ)	$\chi_{\mathrm{CamSpec}}^2$	7051.6	7064.6 $(\nu: 15.3)$
c_{100}	0.99743	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	k_{eq}	0.010314	$0.01032^{+0.00017}_{-0.00017}$ (-0.6σ)	$\chi_{6\mathrm{DF}}^2$	0.029	0.066 $(\nu: 0.0)$
c_{217}	1.00144	$1.0013^{+0.0030}_{-0.0031}$ $(+4.8\sigma)$	$100\theta_{\mathrm{eq}}$	0.8172	$0.817^{+0.010}_{-0.010}$ $(+0.6\sigma)$	χ_{MGS}^2	1.22	1.29 $(\nu: 0.1)$
H_0	67.58	$67.6^{+1.1}_{-1.1}$ $(+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4515	$0.4514^{+0.0053}_{-0.0053}$ $(+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.37	5.0 $(\nu: 1.5)$
Ω_{Λ}	0.6890	$0.689^{+0.014}_{-0.015}$ $(+0.6\sigma)$	$H(0.15)$	72.85	$72.87^{+0.93}_{-0.91}$ $(+0.6\sigma)$	χ_{prior}^2	2.5	9.4 $(\nu: 7.4)$ $(+0.6\sigma)$
Ω_{m}	0.3110	$0.311^{+0.015}_{-0.014}$ (-0.6σ)	$D_{\mathrm{M}}(0.15)$	641.5	$641.5^{+9.1}_{-9.1}$ (-0.6σ)	χ_{BAO}^2	5.61	6.3 $(\nu: 1.1)$
$\Omega_{\mathrm{m}}h^2$	0.14205	$0.1421^{+0.0024}_{-0.0023}$ (-0.6σ)	$H(0.38)$	82.95	$82.97^{+0.71}_{-0.68}$ $(+0.6\sigma)$	χ_{CMB}^2	8205.7	8225.0 $(\nu: 19.8)$ $(+1191.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09600	$0.09605^{+0.00097}_{-0.00097}$ (-0.0σ)	$D_{\mathrm{M}}(0.38)$	1530.1	1530^{+18}_{-19} (-0.6σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 8213.81$; $\bar{\chi}_{\mathrm{eff}}^2 = 8240.71$; $R - 1 = 0.00691$
 χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.37 CMB - BK15_dust: 735.64 simall_100x143_offlike5_EE_Aplanck_B: 396.20 commander_dx12_v3_2_29: 22.25 CamSpec like_10.7HM: 7051.59

15.43 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022141	$0.02217^{+0.00045}_{-0.00044} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.09596	$0.09601^{+0.00095}_{-0.00094} \quad (-0.1\sigma)$	$H(0.38)$	82.54	$82.61^{+0.91}_{-0.87} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12063	$0.1205^{+0.0031}_{-0.0031} \quad (+0.0\sigma)$	σ_8	0.8119	$0.812^{+0.012}_{-0.012} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1541.6	$1540^{+24}_{-25} \quad (+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	1.04082	$1.04085^{+0.00089}_{-0.00089} \quad (+0.1\sigma)$	S_8	0.8389	$0.838^{+0.032}_{-0.031} \quad (+0.0\sigma)$	$H(0.51)$	89.34	$89.40^{+0.74}_{-0.70} \quad (-0.1\sigma)$
τ	0.0535	$0.054^{+0.017}_{-0.015} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4595	$0.459^{+0.017}_{-0.017} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	1995.6	$1994^{+28}_{-29} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0430	$3.043^{+0.033}_{-0.030} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6108	$0.610^{+0.015}_{-0.015} \quad (+0.0\sigma)$	$H(0.61)$	95.03	$95.08^{+0.62}_{-0.58} \quad (-0.1\sigma)$
n_{s}	0.9620	$0.963^{+0.010}_{-0.0099} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9925	$0.992^{+0.020}_{-0.020} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2321.0	$2319^{+31}_{-31} \quad (+0.0\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.0041	$-0.004^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	98.48	$98.6^{+2.4}_{-2.4} \quad (-0.0\sigma)$	$H(2.33)$	236.74	$236.7^{+1.9}_{-1.9} \quad (-0.0\sigma)$
r	0.0130	$< 0.0628 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	2.448	$2.445^{+0.053}_{-0.052} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	5776.2	$5774^{+29}_{-30} \quad (+0.1\sigma)$
y_{cal}	1.00061	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	7.66	$7.7^{+1.6}_{-1.6} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	0.4634	$0.463^{+0.016}_{-0.016} \quad (+0.0\sigma)$
$A_{B,\mathrm{dust}}$	4.63	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	2.097	$2.098^{+0.070}_{-0.063} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	0.7493	$0.749^{+0.011}_{-0.011} \quad (+0.1\sigma)$
$A_{B,\mathrm{sync}}$	1.47	< 3.64	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8842	$1.884^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	0.4797	$0.479^{+0.012}_{-0.012} \quad (+0.0\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.52	—	D_{40}	1227.6	$1231^{+41}_{-40} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6633	$0.663^{+0.010}_{-0.0093} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	1.577	$1.60^{+0.19}_{-0.19}$	D_{220}	5706	$5706^{+82}_{-81} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4773	$0.477^{+0.010}_{-0.010} \quad (+0.1\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.26	—	D_{810}	2535.1	$2536^{+27}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	0.6203	$0.6205^{+0.0095}_{-0.0088} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.52}_{-0.55}$	D_{1420}	812.9	$814^{+11}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4716	$0.4713^{+0.0093}_{-0.0092} \quad (+0.1\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.33	$-0.35^{+0.53}_{-0.58}$	D_{2000}	228.81	$229.2^{+4.0}_{-3.9} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	0.5900	$0.5902^{+0.0092}_{-0.0085} \quad (+0.1\sigma)$
A_{100}^{PS}	248.9	$245^{+50}_{-50} \quad (-0.8\sigma)$	$n_{\mathrm{s},0.002}$	0.9754	$0.976^{+0.047}_{-0.046} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	0.29715	$0.2973^{+0.0049}_{-0.0045} \quad (+0.1\sigma)$
A_{143}^{PS}	39.5	$42^{+20}_{-20} \quad (-1.0\sigma)$	Y_{P}	0.245301	$0.24531^{+0.00018}_{-0.00021} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	0.3060	$0.3062^{+0.0054}_{-0.0049} \quad (+0.1\sigma)$
A_{217}^{PS}	97.7	$100^{+30}_{-30} \quad (-1.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246627	$0.24664^{+0.00018}_{-0.00021} \quad (-0.2\sigma)$	$r_{0.002}$	0.0118	$< 0.0593 \quad (-0.5\sigma)$
A_{217}^{CIB}	44.5	$42^{+10}_{-10} \quad (-1.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.629	$2.623^{+0.086}_{-0.083} \quad (+0.2\sigma)$	$r_{0.01}$	0.0124	$< 0.0604 \quad (-0.6\sigma)$
A_{143}^{tSZ}	4.11	$< 7.33 \quad (-0.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	13.826	$13.821^{+0.066}_{-0.068} \quad (+0.1\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	-1.30	$-0.9^{+1.5}_{-2.0} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.544	$0.64^{+0.25}_{-0.25}$	z_{*}	1090.27	$1090.21^{+0.73}_{-0.72} \quad (+0.1\sigma)$	r_{10}	0.0061	$< 0.0308 \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.67	—	r_{*}	144.44	$144.45^{+0.74}_{-0.73} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{t}}$	0.027	$< 0.132 \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.00	—	$100\theta_{*}$	1.04102	$1.04106^{+0.00088}_{-0.00087} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.025	$< 0.118 \quad (-0.6\sigma)$
A^{kSZ}	4.2	—	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.875	$13.876^{+0.070}_{-0.068} \quad (+0.0\sigma)$	f_{2000}^{143}	32.4	$32^{+7}_{-6} \quad (-0.2\sigma)$
A_{100}^{dust}	1.018	$1.01^{+0.38}_{-0.38}$	z_{drag}	1059.44	$1059.52^{+0.95}_{-0.96} \quad (-0.2\sigma)$	f_{2000}^{217}	108.53	$108.1^{+4.3}_{-4.3} \quad (-0.4\sigma)$
A_{143}^{dust}	0.979	$0.98^{+0.35}_{-0.34}$	r_{drag}	147.18	$147.18^{+0.78}_{-0.76} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	33.93	$34^{+5}_{-5} \quad (-0.4\sigma)$
A_{217}^{dust}	0.959	$0.97^{+0.20}_{-0.20}$	k_{D}	0.14059	$0.14062^{+0.00094}_{-0.00095} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	9.11	$9.71 \quad (\nu: 0.5)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.005	$1.03^{+0.32}_{-0.32}$	$100\theta_{\mathrm{D}}$	0.16104	$0.16101^{+0.00058}_{-0.00056} \quad (+0.2\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	735.18	$739.5 \quad (\nu: 3.5)$
c_{100}	0.99744	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{eq}	3412	$3409^{+70}_{-71} \quad (-0.0\sigma)$	χ_{small}^2	396.02	$397.1 \quad (\nu: 1.6) \quad (-0.1\sigma)$
c_{217}	1.00145	$1.0013^{+0.0030}_{-0.0031} \quad (+4.8\sigma)$	k_{eq}	0.010413	$0.01041^{+0.00021}_{-0.00022} \quad (-0.0\sigma)$	χ_{lowl}^2	22.95	$23.7 \quad (\nu: 2.5) \quad (-0.0\sigma)$
H_0	66.91	$67.0^{+1.4}_{-1.4} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	0.8109	$0.811^{+0.013}_{-0.013} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	7050.4	$7063.8 \quad (\nu: 14.7)$
Ω_{Λ}	0.6797	$0.681^{+0.019}_{-0.020} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4483	$0.4486^{+0.0069}_{-0.0066} \quad (+0.0\sigma)$	χ_{prior}^2	2.5	$9.3 \quad (\nu: 7.3) \quad (+0.5\sigma)$
Ω_{m}	0.3203	$0.319^{+0.020}_{-0.019} \quad (+0.0\sigma)$	$H(0.15)$	72.28	$72.4^{+1.2}_{-1.2} \quad (-0.0\sigma)$	χ_{CMB}^2	8213.7	$8233.8 \quad (\nu: 19.8) \quad (+1192.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14341	$0.1433^{+0.0029}_{-0.0030} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	647.3	$647^{+12}_{-12} \quad (+0.0\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 8216.23$; $\bar{\chi}_{\mathrm{eff}}^2 = 8243.12$; $R - 1 = 0.00347$

χ_{eff}^2 : CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 9.11 BK15.dust: 735.18 small.100x143.offlike5.EE.Aplanck.B: 396.02 commander_dx12.v3.2.29: 22.95 CamSpec like_10.7HM: 7050.44

15.44 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022257	$0.02226^{+0.00042}_{-0.00042}$ $(+0.2\sigma)$	σ_8	0.8095	$0.810^{+0.012}_{-0.012}$ (-0.1σ)	$H(0.51)$	89.65	$89.66^{+0.56}_{-0.55}$ $(+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11935	$0.1193^{+0.0022}_{-0.0021}$ (-0.6σ)	S_8	0.8255	$0.826^{+0.023}_{-0.023}$ (-0.5σ)	$D_{\mathrm{M}}(0.51)$	1983.1	1983^{+20}_{-21} (-0.6σ)
$100\theta_{\mathrm{MC}}$	1.04105	$1.04104^{+0.00082}_{-0.00084}$ $(+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4521	$0.452^{+0.013}_{-0.013}$ (-0.5σ)	$H(0.61)$	95.272	$95.28^{+0.49}_{-0.48}$ $(+0.5\sigma)$
τ	0.0563	$0.057^{+0.017}_{-0.015}$ $(+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6050	$0.605^{+0.012}_{-0.012}$ (-0.4σ)	$D_{\mathrm{M}}(0.61)$	2307.5	2307^{+22}_{-22} (-0.6σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0461	$3.048^{+0.033}_{-0.030}$ $(+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9851	$0.986^{+0.017}_{-0.017}$ (-0.3σ)	$H(2.33)$	236.03	$236.0^{+1.4}_{-1.4}$ (-0.6σ)
n_{s}	0.9652	$0.9661^{+0.0086}_{-0.0086}$ $(+0.6\sigma)$	$r_{\mathrm{drag}}h$	99.53	$99.6^{+1.6}_{-1.7}$ $(+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	5765.4	5765^{+25}_{-25} (-0.4σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.0045	$-0.004^{+0.015}_{-0.015}$ $(+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4306	$2.431^{+0.046}_{-0.045}$ (-0.2σ)	$f\sigma_8(0.15)$	0.4567	$0.457^{+0.012}_{-0.012}$ (-0.4σ)
r	0.0155	< 0.0645 (-0.5σ)	z_{re}	7.89	$7.9^{+1.6}_{-1.5}$ $(+0.4\sigma)$	$\sigma_8(0.15)$	0.7480	$0.749^{+0.011}_{-0.011}$ (-0.0σ)
y_{cal}	1.00075	$1.0010^{+0.0050}_{-0.0049}$ $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.103	$2.107^{+0.072}_{-0.062}$ $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4749	$0.4752^{+0.0098}_{-0.0096}$ (-0.4σ)
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8796	$1.880^{+0.023}_{-0.022}$ (-0.5σ)	$\sigma_8(0.38)$	0.6630	$0.664^{+0.010}_{-0.0095}$ $(+0.1\sigma)$
$A_{B,\mathrm{sync}}$	1.42	< 3.65	D_{40}	1222.2	1227^{+39}_{-39} (-0.3σ)	$f\sigma_8(0.51)$	0.4734	$0.4738^{+0.0088}_{-0.0086}$ (-0.3σ)
$\alpha_{B,\mathrm{dust}}$	-0.51	—	D_{220}	5716	5716^{+80}_{-80} $(+0.1\sigma)$	$\sigma_8(0.51)$	0.6204	$0.6211^{+0.0097}_{-0.0089}$ $(+0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	1.574	$1.60^{+0.19}_{-0.19}$	D_{810}	2535.7	2537^{+27}_{-27} (-0.1σ)	$f\sigma_8(0.61)$	0.4684	$0.4688^{+0.0081}_{-0.0080}$ (-0.3σ)
$\alpha_{B,\mathrm{sync}}$	-0.48	—	D_{1420}	814.2	815^{+10}_{-10} $(+0.3\sigma)$	$\sigma_8(0.61)$	0.5903	$0.5910^{+0.0093}_{-0.0085}$ $(+0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.52}_{-0.54}$	D_{2000}	229.35	$229.7^{+3.8}_{-3.8}$ $(+0.4\sigma)$	$f\sigma_8(2.33)$	0.29764	$0.2980^{+0.0048}_{-0.0044}$ $(+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.34	$-0.34^{+0.53}_{-0.58}$	$n_{\mathrm{s},0.002}$	0.9796	$0.980^{+0.047}_{-0.046}$ (-0.3σ)	$\sigma_8(2.33)$	0.30683	$0.3072^{+0.0052}_{-0.0047}$ $(+0.5\sigma)$
A_{100}^{PS}	248.2	245^{+50}_{-50} (-0.8σ)	Y_{P}	0.245349	$0.24535^{+0.00017}_{-0.00018}$ $(+0.2\sigma)$	$r_{0.002}$	0.0143	< 0.0615 (-0.5σ)
A_{143}^{PS}	39.5	42^{+20}_{-20} (-1.1σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246676	$0.24667^{+0.00017}_{-0.00018}$ $(+0.2\sigma)$	$r_{0.01}$	0.0148	< 0.0625 (-0.5σ)
A_{217}^{PS}	98.1	101^{+30}_{-30} (-1.4σ)	$10^5\mathrm{D}/\mathrm{H}$	2.607	$2.608^{+0.080}_{-0.077}$ (-0.2σ)	$\ln(10^{10}A_{\mathrm{t}})$	-1.12	$-0.8^{+1.5}_{-2.0}$ (-0.4σ)
A_{217}^{CIB}	43.7	41^{+10}_{-10} (-1.1σ)	Age/Gyr	13.803	$13.802^{+0.057}_{-0.057}$ (-0.4σ)	r_{10}	0.0073	< 0.0318 (-0.5σ)
A_{143}^{tSZ}	3.97	< 7.36 (-0.6σ)	z_*	1090.01	$1090.00^{+0.60}_{-0.60}$ (-0.4σ)	$10^9 A_{\mathrm{t}}$	0.033	< 0.136 (-0.5σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.561	$0.64^{+0.25}_{-0.25}$	r_*	144.69	$144.71^{+0.58}_{-0.58}$ $(+0.6\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.029	< 0.121 (-0.5σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.66	—	$100\theta_*$	1.04124	$1.04124^{+0.00081}_{-0.00083}$ $(+0.5\sigma)$	f_{2000}^{143}	31.9	31^{+7}_{-6} (-0.3σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.09	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.896	$13.898^{+0.057}_{-0.057}$ $(+0.5\sigma)$	f_{2000}^{217}	108.19	$107.9^{+4.3}_{-4.2}$ (-0.5σ)
A^{kSZ}	4.5	—	z_{drag}	1059.63	$1059.62^{+0.96}_{-0.94}$ $(+0.0\sigma)$	$f_{2000}^{143\times 217}$	33.55	33^{+5}_{-5} (-0.5σ)
A_{100}^{dust}	1.017	$1.01^{+0.38}_{-0.38}$	r_{drag}	147.39	$147.41^{+0.66}_{-0.66}$ $(+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	9.03	9.45 $(\nu: 0.3)$
A_{143}^{dust}	0.984	$0.97^{+0.35}_{-0.35}$	k_{D}	0.14047	$0.14044^{+0.00090}_{-0.00091}$ (-0.4σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.56	739.8 $(\nu: 3.5)$
A_{217}^{dust}	0.960	$0.97^{+0.20}_{-0.20}$	$100\theta_{\mathrm{D}}$	0.16095	$0.16096^{+0.00056}_{-0.00056}$ $(+0.0\sigma)$	χ_{simall}^2	396.42	397.5 $(\nu: 2.4)$ $(+0.1\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	1.006	$1.03^{+0.32}_{-0.32}$	z_{eq}	3384	3382^{+51}_{-50} (-0.6σ)	χ_{lowl}^2	22.43	23.2 $(\nu: 2.1)$ (-0.2σ)
c_{100}	0.99745	$0.9975^{+0.0021}_{-0.0021}$ (-3.3σ)	k_{eq}	0.010328	$0.01032^{+0.00016}_{-0.00015}$ (-0.6σ)	$\chi_{\mathrm{CamSpec}}^2$	7051.2	7064.1 $(\nu: 14.7)$
c_{217}	1.00137	$1.0013^{+0.0030}_{-0.0031}$ $(+4.8\sigma)$	$100\theta_{\mathrm{eq}}$	0.8164	$0.8167^{+0.0093}_{-0.0092}$ $(+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.038	0.064 $(\nu: 0.0)$
H_0	67.53	$67.6^{+1.0}_{-0.98}$ $(+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.45107	$0.4512^{+0.0048}_{-0.0048}$ $(+0.6\sigma)$	χ_{MGS}^2	1.16	1.25 $(\nu: 0.1)$
Ω_{Λ}	0.6881	$0.688^{+0.013}_{-0.013}$ $(+0.6\sigma)$	$H(0.15)$	72.81	$72.84^{+0.87}_{-0.85}$ $(+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.57	5.0 $(\nu: 1.3)$
Ω_{m}	0.3119	$0.312^{+0.013}_{-0.013}$ (-0.6σ)	$D_{\mathrm{M}}(0.15)$	641.9	$641.8^{+8.5}_{-8.5}$ (-0.6σ)	χ_{prior}^2	2.5	9.3 $(\nu: 7.4)$ $(+0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14225	$0.1422^{+0.0021}_{-0.0021}$ (-0.6σ)	$H(0.38)$	82.93	$82.95^{+0.68}_{-0.65}$ $(+0.5\sigma)$	χ_{CMB}^2	8214.6	8234.1 $(\nu: 19.7)$ $(+1192.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09606	$0.09605^{+0.00095}_{-0.00095}$ (-0.0σ)	$D_{\mathrm{M}}(0.38)$	1530.9	1531^{+17}_{-17} (-0.6σ)	χ_{BAO}^2	5.77	6.3 $(\nu: 0.9)$

Best-fit $\chi_{\mathrm{eff}}^2 = 8222.87$; $\bar{\chi}_{\mathrm{eff}}^2 = 8249.75$; $R - 1 = 0.00778$
 χ_{eff}^2 : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.57 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.03 BK15_dust: 735.56 simall_100x143_offlike5_EE_Aplanck_B: 396.42 commander_dx12_v3.2.29: 22.43 CamSpec like_10.7HM: 7051.18

15.45 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02216^{+0.00046}_{-0.00045} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09607^{+0.00097}_{-0.00095} \quad (+0.0\sigma)$	$H(0.38)$	$82.5^{+1.1}_{-1.1} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1211^{+0.0041}_{-0.0040} \quad (+0.3\sigma)$	σ_8	$0.815^{+0.017}_{-0.016} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1544^{+30}_{-31} \quad (+0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04081^{+0.00094}_{-0.00093} \quad (-0.0\sigma)$	S_8	$0.846^{+0.047}_{-0.046} \quad (+0.4\sigma)$	$H(0.51)$	$89.31^{+0.88}_{-0.82} \quad (-0.3\sigma)$
τ	$0.055^{+0.014}_{-0.013} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.463^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1998^{+35}_{-36} \quad (+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.048^{+0.032}_{-0.029} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.022}_{-0.022} \quad (+0.4\sigma)$	$H(0.61)$	$95.02^{+0.71}_{-0.66} \quad (-0.2\sigma)$
n_{s}	$0.962^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.997^{+0.030}_{-0.030} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2324^{+38}_{-39} \quad (+0.3\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.006^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$98.2^{+3.1}_{-3.0} \quad (-0.3\sigma)$	$H(2.33)$	$237.1^{+2.5}_{-2.5} \quad (+0.3\sigma)$
r	$< 0.0631 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.074}_{-0.072} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5776^{+32}_{-33} \quad (+0.2\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 9.13 \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.467^{+0.023}_{-0.023} \quad (+0.4\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	$2.108^{+0.067}_{-0.062} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.014}_{-0.013} \quad (+0.4\sigma)$
$A_{B,\mathrm{sync}}$	< 3.66	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.887^{+0.028}_{-0.028} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.483^{+0.018}_{-0.018} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1230^{+42}_{-41} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.012}_{-0.010} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5703^{+82}_{-81} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.480^{+0.015}_{-0.016} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2537^{+28}_{-28} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.010}_{-0.0097} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{1420}	$814^{+10}_{-10} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.014}_{-0.014} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.57}$	D_{2000}	$229.1^{+3.9}_{-3.9} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5917^{+0.0096}_{-0.0090} \quad (+0.4\sigma)$
A_{100}^{PS}	$246^{+50}_{-50} \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.980^{+0.047}_{-0.046} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0047}_{-0.0044} \quad (+0.3\sigma)$
A_{143}^{PS}	$43^{+20}_{-20} \quad (-1.0\sigma)$	Y_{P}	$0.24530^{+0.00018}_{-0.00021} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0050}_{-0.0045} \quad (+0.2\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00018}_{-0.00022} \quad (-0.2\sigma)$	$r_{0.002}$	$< 0.0599 \quad (-0.6\sigma)$
A_{217}^{CIB}	$42^{+10}_{-10} \quad (-1.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.626^{+0.087}_{-0.085} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.0608 \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.28 \quad (-0.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.826^{+0.071}_{-0.073} \quad (+0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.0} \quad (-0.4\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	z_*	$1090.28^{+0.81}_{-0.80} \quad (+0.3\sigma)$	r_{10}	$< 0.0311 \quad (-0.5\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	r_*	$144.32^{+0.95}_{-0.94} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.133 \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$100\theta_*$	$1.04101^{+0.00093}_{-0.00091} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.119 \quad (-0.6\sigma)$
A^{kSZ}	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.863^{+0.088}_{-0.087} \quad (-0.2\sigma)$	f_{2000}^{143}	$32^{+7}_{-6} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_{drag}	$1059.52^{+0.98}_{-0.97} \quad (-0.2\sigma)$	f_{2000}^{217}	$108.3^{+4.3}_{-4.3} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.98^{+0.35}_{-0.34}$	r_{drag}	$147.04^{+0.97}_{-0.96} \quad (-0.2\sigma)$	$f_{2000}^{143\times 217}$	$34^{+5}_{-5} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	k_{D}	$0.1408^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.2 \quad (\nu: 3.7)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00057}_{-0.00056} \quad (+0.2\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.0) \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{eq}	$3423^{+93}_{-92} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 2.4) \quad (-0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	k_{eq}	$0.01045^{+0.00028}_{-0.00028} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.3 \quad (\nu: 15.7)$
H_0	$66.8^{+1.8}_{-1.7} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.809^{+0.017}_{-0.017} \quad (-0.3\sigma)$	χ_{prior}^2	$9.3 \quad (\nu: 7.4) \quad (+0.5\sigma)$
Ω_{Λ}	$0.677^{+0.025}_{-0.026} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4473^{+0.0089}_{-0.0086} \quad (-0.3\sigma)$	χ_{CMB}^2	$8224.3 \quad (\nu: 19.6) \quad (+1191.0\sigma)$
Ω_{m}	$0.323^{+0.026}_{-0.025} \quad (+0.3\sigma)$	$H(0.15)$	$72.2^{+1.5}_{-1.5} \quad (-0.3\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1439^{+0.0039}_{-0.0038} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$649^{+15}_{-15} \quad (+0.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8233.63; R - 1 = 0.00394$$

15.46 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02226^{+0.00042}_{-0.00041} \quad (+0.2\sigma)$	σ_8	$0.810^{+0.015}_{-0.014} \quad (-0.2\sigma)$	$H(0.51)$	$89.68^{+0.60}_{-0.56} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1192^{+0.0024}_{-0.0023} \quad (-0.6\sigma)$	S_8	$0.824^{+0.029}_{-0.028} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+22}_{-22} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04106^{+0.00082}_{-0.00085} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$95.30^{+0.51}_{-0.49} \quad (+0.5\sigma)$
τ	$0.057^{+0.015}_{-0.014} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.016}_{-0.015} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2306^{+23}_{-24} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.033}_{-0.031} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.021} \quad (-0.4\sigma)$	$H(2.33)$	$235.9^{+1.6}_{-1.5} \quad (-0.6\sigma)$
n_{s}	$0.9663^{+0.0089}_{-0.0089} \quad (+0.6\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.9}_{-1.8} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+24}_{-25} \quad (-0.5\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.005^{+0.015}_{-0.015} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.055}_{-0.054} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.015}_{-0.015} \quad (-0.5\sigma)$
r	$< 0.0659 \quad (-0.5\sigma)$	z_{re}	$< 9.29 \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.013} \quad (-0.1\sigma)$
y_{cal}	$1.0008^{+0.0050}_{-0.0050} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.071}_{-0.065} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.012} \quad (-0.4\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.024}_{-0.024} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.011} \quad (+0.1\sigma)$
$A_{B,\mathrm{sync}}$	< 3.64	D_{40}	$1223^{+40}_{-39} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{220}	$5712^{+80}_{-80} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0097} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{810}	$2537^{+27}_{-28} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.0099} \quad (-0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0099}_{-0.0092} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.54}$	D_{2000}	$229.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0050}_{-0.0046} \quad (+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.59}$	$n_{\mathrm{s},0.002}$	$0.983^{+0.047}_{-0.046} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0052}_{-0.0048} \quad (+0.4\sigma)$
A_{100}^{PS}	$245^{+50}_{-50} \quad (-0.8\sigma)$	Y_{P}	$0.24535^{+0.00016}_{-0.00019} \quad (+0.2\sigma)$	$r_{0.002}$	$< 0.0635 \quad (-0.5\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24667^{+0.00016}_{-0.00019} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.0641 \quad (-0.5\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.606^{+0.079}_{-0.077} \quad (-0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.8^{+1.5}_{-2.0} \quad (-0.3\sigma)$
A_{217}^{CIB}	$42^{+10}_{-10} \quad (-1.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.801^{+0.057}_{-0.058} \quad (-0.5\sigma)$	r_{10}	$< 0.0329 \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.34 \quad (-0.6\sigma)$	z_*	$1089.99^{+0.60}_{-0.61} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.139 \quad (-0.5\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	r_*	$144.72^{+0.64}_{-0.64} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.124 \quad (-0.5\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$100\theta_*$	$1.04125^{+0.00081}_{-0.00084} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.899^{+0.062}_{-0.063} \quad (+0.5\sigma)$	f_{2000}^{217}	$108.0^{+4.3}_{-4.2} \quad (-0.4\sigma)$
A^{kSZ}	—	z_{drag}	$1059.63^{+0.95}_{-0.95} \quad (+0.0\sigma)$	$f_{2000}^{143\times 217}$	$33^{+5}_{-5} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_{drag}	$147.43^{+0.71}_{-0.72} \quad (+0.6\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.9 \quad (\nu: 3.6)$
A_{143}^{dust}	$0.98^{+0.35}_{-0.34}$	k_{D}	$0.14043^{+0.00095}_{-0.00096} \quad (-0.5\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.6) \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_{\mathrm{D}}$	$0.16096^{+0.00056}_{-0.00056} \quad (+0.0\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 1.8) \quad (-0.3\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.33}$	z_{eq}	$3380^{+56}_{-55} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.5 \quad (\nu: 15.1)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{eq}	$0.01032^{+0.00017}_{-0.00017} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.065 \quad (\nu: 0.0)$
c_{217}	$1.0013^{+0.0030}_{-0.0031} \quad (+4.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.010}_{-0.010} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
H_0	$67.6^{+1.1}_{-1.1} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4514^{+0.0053}_{-0.0053} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.5)$
Ω_{Λ}	$0.689^{+0.014}_{-0.015} \quad (+0.6\sigma)$	$H(0.15)$	$72.87^{+0.93}_{-0.91} \quad (+0.6\sigma)$	χ_{prior}^2	$9.4 \quad (\nu: 7.4) \quad (+0.6\sigma)$
Ω_{m}	$0.311^{+0.015}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.4^{+9.1}_{-9.1} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1421^{+0.0024}_{-0.0023} \quad (-0.6\sigma)$	$H(0.38)$	$82.97^{+0.71}_{-0.68} \quad (+0.6\sigma)$	χ_{CMB}^2	$8224.8 \quad (\nu: 19.4) \quad (+1191.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09605^{+0.00097}_{-0.00096} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+18}_{-19} \quad (-0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8240.52; \quad R - 1 = 0.00672$$

15.47 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02218^{+0.00045}_{-0.00044} \quad (-0.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09602^{+0.00095}_{-0.00094} \quad (-0.1\sigma)$	$H(0.38)$	$82.64^{+0.89}_{-0.84} \quad (+0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1204^{+0.0030}_{-0.0030} \quad (-0.0\sigma)$	σ_8	$0.812^{+0.012}_{-0.012} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1539^{+23}_{-24} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04087^{+0.00089}_{-0.00089} \quad (+0.1\sigma)$	S_8	$0.837^{+0.032}_{-0.031} \quad (+0.0\sigma)$	$H(0.51)$	$89.43^{+0.73}_{-0.68} \quad (-0.0\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.459^{+0.017}_{-0.017} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+27}_{-28} \quad (-0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.029}_{-0.027} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$H(0.61)$	$95.10^{+0.61}_{-0.57} \quad (-0.0\sigma)$
n_{s}	$0.963^{+0.010}_{-0.0097} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.020}_{-0.020} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+29}_{-31} \quad (-0.0\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.004^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$98.7^{+2.4}_{-2.3} \quad (+0.0\sigma)$	$H(2.33)$	$236.6^{+1.8}_{-1.9} \quad (-0.1\sigma)$
r	$< 0.0628 \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.445^{+0.052}_{-0.051} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5773^{+28}_{-30} \quad (+0.0\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 9.03 \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.016}_{-0.016} \quad (+0.0\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.060}_{-0.056} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.011}_{-0.0099} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	< 3.66	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.884^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1230^{+40}_{-40} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0095}_{-0.0084} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5706^{+82}_{-81} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.010}_{-0.010} \quad (+0.1\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2536^{+27}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0086}_{-0.0081} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.4715^{+0.0092}_{-0.0091} \quad (+0.1\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.58}$	D_{2000}	$229.2^{+3.9}_{-3.9} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5908^{+0.0082}_{-0.0077} \quad (+0.2\sigma)$
A_{100}^{PS}	$245^{+50}_{-50} \quad (-0.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.977^{+0.046}_{-0.046} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0043}_{-0.0040} \quad (+0.2\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.0\sigma)$	Y_{P}	$0.24531^{+0.00018}_{-0.00021} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0048}_{-0.0044} \quad (+0.2\sigma)$
A_{217}^{PS}	$100^{+30}_{-30} \quad (-1.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00018}_{-0.00021} \quad (-0.1\sigma)$	$r_{0.002}$	$< 0.0595 \quad (-0.5\sigma)$
A_{217}^{CIB}	$42^{+10}_{-10} \quad (-1.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.621^{+0.084}_{-0.082} \quad (+0.1\sigma)$	$r_{0.01}$	$< 0.0605 \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.32 \quad (-0.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.819^{+0.064}_{-0.067} \quad (+0.0\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.0} \quad (-0.4\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	z_*	$1090.19^{+0.70}_{-0.71} \quad (+0.1\sigma)$	r_{10}	$< 0.0309 \quad (-0.5\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	r_*	$144.47^{+0.73}_{-0.71} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.132 \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$100\theta_*$	$1.04107^{+0.00087}_{-0.00087} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.118 \quad (-0.6\sigma)$
A^{kSZ}	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.877^{+0.069}_{-0.068} \quad (+0.1\sigma)$	f_{2000}^{143}	$32^{+7}_{-6} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_{drag}	$1059.53^{+0.97}_{-0.97} \quad (-0.1\sigma)$	f_{2000}^{217}	$108.1^{+4.3}_{-4.2} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.98^{+0.35}_{-0.34}$	r_{drag}	$147.20^{+0.77}_{-0.75} \quad (+0.1\sigma)$	$f_{2000}^{143\times 217}$	$34^{+5}_{-5} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	k_{D}	$0.14061^{+0.00094}_{-0.00095} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.70 \quad (\nu: 0.5)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_{\mathrm{D}}$	$0.16100^{+0.00057}_{-0.00056} \quad (+0.2\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.5 \quad (\nu: 3.5)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{eq}	$3407^{+68}_{-70} \quad (-0.1\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (-0.1\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	k_{eq}	$0.01040^{+0.00021}_{-0.00021} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 2.4) \quad (-0.0\sigma)$
H_0	$67.1^{+1.4}_{-1.3} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.013}_{-0.012} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.8 \quad (\nu: 14.7)$
Ω_{Λ}	$0.681^{+0.019}_{-0.019} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4488^{+0.0068}_{-0.0064} \quad (+0.1\sigma)$	χ_{prior}^2	$9.3 \quad (\nu: 7.3) \quad (+0.5\sigma)$
Ω_{m}	$0.319^{+0.019}_{-0.019} \quad (-0.0\sigma)$	$H(0.15)$	$72.4^{+1.2}_{-1.1} \quad (+0.0\sigma)$	χ_{CMB}^2	$8233.6 \quad (\nu: 19.5) \quad (+1192.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0028}_{-0.0029} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+12}_{-12} \quad (-0.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8242.90; R - 1 = 0.00417$$

15.48 base_nrun_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02226^{+0.00042}_{-0.00042} \quad (+0.2\sigma)$	σ_8	$0.811^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$H(0.51)$	$89.67^{+0.56}_{-0.54} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1193^{+0.0022}_{-0.0021} \quad (-0.6\sigma)$	S_8	$0.826^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+20}_{-20} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00082}_{-0.00084} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.012} \quad (-0.5\sigma)$	$H(0.61)$	$95.28^{+0.49}_{-0.48} \quad (+0.5\sigma)$
τ	$0.057^{+0.015}_{-0.013} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+22}_{-22} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.049^{+0.030}_{-0.029} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$H(2.33)$	$236.0^{+1.4}_{-1.4} \quad (-0.6\sigma)$
n_{s}	$0.9661^{+0.0086}_{-0.0085} \quad (+0.6\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.6}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+24}_{-25} \quad (-0.4\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.004^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.046}_{-0.045} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.012}_{-0.012} \quad (-0.4\sigma)$
r	$< 0.0644 \quad (-0.5\sigma)$	z_{re}	$8.0^{+1.4}_{-1.4} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.010} \quad (+0.0\sigma)$
y_{cal}	$1.0010^{+0.0050}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.109^{+0.064}_{-0.060} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.4753^{+0.0098}_{-0.0096} \quad (-0.4\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.010}_{-0.0088} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	D_{40}	$1226^{+39}_{-39} \quad (-0.3\sigma)$	$f\sigma_8(0.51)$	$0.4739^{+0.0087}_{-0.0085} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{220}	$5716^{+80}_{-80} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6214^{+0.0095}_{-0.0083} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{810}	$2537^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0080}_{-0.0078} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{1420}	$815^{+10}_{-10} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0087}_{-0.0082} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.54}$	D_{2000}	$229.7^{+3.8}_{-3.8} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0045}_{-0.0042} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.34^{+0.53}_{-0.58}$	$n_{\mathrm{s},0.002}$	$0.980^{+0.047}_{-0.046} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0048}_{-0.0045} \quad (+0.5\sigma)$
A_{100}^{PS}	$245^{+50}_{-50} \quad (-0.8\sigma)$	Y_{P}	$0.24535^{+0.00017}_{-0.00018} \quad (+0.2\sigma)$	$r_{0.002}$	$< 0.0615 \quad (-0.5\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-1.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24667^{+0.00017}_{-0.00018} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.0625 \quad (-0.5\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.607^{+0.080}_{-0.077} \quad (-0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.8^{+1.5}_{-2.0} \quad (-0.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.802^{+0.056}_{-0.057} \quad (-0.4\sigma)$	r_{10}	$< 0.0318 \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.37 \quad (-0.6\sigma)$	z_*	$1090.00^{+0.59}_{-0.61} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.136 \quad (-0.5\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.64^{+0.25}_{-0.25}$	r_*	$144.71^{+0.58}_{-0.58} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.121 \quad (-0.5\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$100\theta_*$	$1.04124^{+0.00081}_{-0.00083} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+7}_{-6} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.057}_{-0.057} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.9^{+4.3}_{-4.2} \quad (-0.5\sigma)$
A^{kSZ}	—	z_{drag}	$1059.62^{+0.96}_{-0.95} \quad (+0.0\sigma)$	$f_{2000}^{143\times 217}$	$33^{+5}_{-5} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_{drag}	$147.41^{+0.66}_{-0.66} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.42 \quad (\nu: 0.2)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	k_{D}	$0.14044^{+0.00090}_{-0.00091} \quad (-0.4\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.8 \quad (\nu: 3.5)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_{\mathrm{D}}$	$0.16096^{+0.00056}_{-0.00055} \quad (+0.0\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.4) \quad (+0.1\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{eq}	$3382^{+51}_{-50} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 2.0) \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	k_{eq}	$0.01032^{+0.00015}_{-0.00015} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.1 \quad (\nu: 14.7)$
c_{217}	$1.0013^{+0.0030}_{-0.0031} \quad (+4.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8168^{+0.0092}_{-0.0092} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
H_0	$67.57^{+0.99}_{-0.97} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0048}_{-0.0047} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.26 \quad (\nu: 0.1)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$H(0.15)$	$72.85^{+0.87}_{-0.84} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.3)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.7^{+8.4}_{-8.4} \quad (-0.6\sigma)$	χ_{prior}^2	$9.3 \quad (\nu: 7.4) \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1422^{+0.0021}_{-0.0021} \quad (-0.6\sigma)$	$H(0.38)$	$82.95^{+0.68}_{-0.65} \quad (+0.6\sigma)$	χ_{CMB}^2	$8234.0 \quad (\nu: 19.6) \quad (+1192.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09605^{+0.00095}_{-0.00095} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+17}_{-17} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 8249.63; \quad R - 1 = 0.00812$$

15.49 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022290	$0.02230^{+0.00032}_{-0.00031} \quad (+0.4\sigma)$	Ω_{m}	0.3158	$0.315^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$H(0.15)$	72.60	$72.6^{+1.0}_{-1.0} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.11998	$0.1198^{+0.0027}_{-0.0027} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}} h^2$	0.14292	$0.1428^{+0.0026}_{-0.0026} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	644.2	$644^{+10}_{-10} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.04085	$1.04085^{+0.00060}_{-0.00061} \quad (+0.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	0.09614	$0.09613^{+0.00065}_{-0.00064} \quad (+0.1\sigma)$	$H(0.38)$	82.78	$82.82^{+0.75}_{-0.72} \quad (+0.3\sigma)$
τ	0.0542	$0.054^{+0.017}_{-0.015} \quad (+0.1\sigma)$	σ_8	0.8105	$0.810^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	1535.2	$1534^{+20}_{-20} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0437	$3.043^{+0.035}_{-0.032} \quad (-0.1\sigma)$	S_8	0.8316	$0.830^{+0.032}_{-0.032} \quad (-0.3\sigma)$	$H(0.51)$	89.55	$89.57^{+0.59}_{-0.57} \quad (+0.3\sigma)$
n_{s}	0.9649	$0.9652^{+0.0093}_{-0.0093} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4555	$0.455^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	1988.1	$1987^{+24}_{-24} \quad (-0.3\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	-0.0032	$-0.004^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6076	$0.607^{+0.016}_{-0.016} \quad (-0.3\sigma)$	$H(0.61)$	95.198	$95.22^{+0.48}_{-0.46} \quad (+0.3\sigma)$
r	0.0243	$< 0.0730 \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9882	$0.987^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	2312.9	$2312^{+25}_{-26} \quad (-0.3\sigma)$
y_{cal}	1.00074	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	99.01	$99.1^{+2.1}_{-2.1} \quad (+0.3\sigma)$	$H(2.33)$	236.46	$236.4^{+1.7}_{-1.7} \quad (-0.3\sigma)$
$A_{B,\mathrm{dust}}$	4.60	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	2.438	$2.434^{+0.057}_{-0.057} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5768.0	$5767^{+21}_{-22} \quad (-0.3\sigma)$
$A_{B,\mathrm{sync}}$	1.38	< 3.64	z_{re}	7.69	$7.7^{+1.6}_{-1.6} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	0.4597	$0.459^{+0.016}_{-0.016} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.52	—	$10^9 A_{\mathrm{s}}$	2.098	$2.098^{+0.074}_{-0.067} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	0.7485	$0.748^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	1.584	$1.60^{+0.19}_{-0.19}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8826	$1.882^{+0.024}_{-0.024} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	0.4771	$0.476^{+0.013}_{-0.013} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.42	—	D_{40}	1229.4	$1230^{+37}_{-36} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6630	$0.663^{+0.011}_{-0.011} \quad (-0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.52}_{-0.56}$	D_{220}	5717	$5715^{+78}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	0.4752	$0.474^{+0.012}_{-0.012} \quad (-0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.37	$-0.36^{+0.52}_{-0.57}$	D_{810}	2537.8	$2537^{+27}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6203	$0.620^{+0.011}_{-0.010} \quad (-0.0\sigma)$
A_{100}^{PS}	237.1	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{1420}	815.6	$815.3^{+9.9}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	0.4699	$0.469^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{143}^{PS}	40.4	$41^{+20}_{-20} \quad (-1.2\sigma)$	D_{2000}	230.00	$229.9^{+3.7}_{-3.6} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	0.5901	$0.590^{+0.010}_{-0.0095} \quad (-0.0\sigma)$
A_{217}^{PS}	100.9	$102^{+30}_{-30} \quad (-1.2\sigma)$	$n_{\mathrm{s},0.002}$	0.9751	$0.977^{+0.042}_{-0.042} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	0.29736	$0.2972^{+0.0051}_{-0.0048} \quad (+0.1\sigma)$
A_{217}^{CIB}	45.6	$40^{+10}_{-10} \quad (-1.2\sigma)$	Y_{P}	0.245363	$0.24536^{+0.00012}_{-0.00013} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	0.3064	$0.3063^{+0.0053}_{-0.0050} \quad (+0.1\sigma)$
A_{143}^{tSZ}	6.54	$< 7.41 \quad (-0.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246689	$0.24669^{+0.00012}_{-0.00013} \quad (+0.4\sigma)$	$r_{0.002}$	0.0222	$< 0.0693 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.578	$0.65^{+0.25}_{-0.25}$	$10^5 \mathrm{D}/\mathrm{H}$	2.601	$2.599^{+0.060}_{-0.059} \quad (-0.4\sigma)$	$r_{0.01}$	0.0231	$< 0.0705 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.79	—	Age/Gyr	13.8078	$13.806^{+0.048}_{-0.048} \quad (-0.3\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	-0.68	$-0.6^{+1.4}_{-1.8} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.05	—	z_{*}	1090.02	$1090.00^{+0.55}_{-0.55} \quad (-0.4\sigma)$	r_{10}	0.0114	$< 0.0359 \quad (-0.4\sigma)$
A^{kSZ}	0.1	—	r_{*}	144.50	$144.53^{+0.64}_{-0.63} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}}$	0.051	$< 0.153 \quad (-0.4\sigma)$
A_{100}^{dust}	1.009	$1.01^{+0.38}_{-0.38}$	$100\theta_{*}$	1.04104	$1.04104^{+0.00059}_{-0.00060} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	0.046	$< 0.137 \quad (-0.4\sigma)$
A_{143}^{dust}	0.974	$0.96^{+0.34}_{-0.35}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.880	$13.883^{+0.060}_{-0.059} \quad (+0.2\sigma)$	f_{2000}^{143}	30.8	$30^{+6}_{-6} \quad (-0.6\sigma)$
A_{217}^{dust}	0.966	$0.97^{+0.20}_{-0.20}$	z_{drag}	1059.74	$1059.76^{+0.67}_{-0.67} \quad (+0.3\sigma)$	f_{2000}^{217}	107.36	$107.4^{+4.2}_{-4.2} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.000	$1.03^{+0.32}_{-0.32}$	r_{drag}	147.19	$147.21^{+0.65}_{-0.65} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	32.69	$33^{+5}_{-5} \quad (-0.8\sigma)$
c_{100}	0.99764	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{D}	0.14071	$0.14068^{+0.00073}_{-0.00074} \quad (-0.0\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	735.3	$740.0 \quad (\nu: 3.8)$
c_{217}	1.00138	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	$100\theta_{\mathrm{D}}$	0.160858	$0.16085^{+0.00040}_{-0.00040} \quad (-0.3\sigma)$	χ_{small}^2	396.13	$397.2 \quad (\nu: 1.8) \quad (-0.1\sigma)$
c_{TE}	0.9962	$0.9963^{+0.0097}_{-0.0096}$	z_{eq}	3400	$3397^{+62}_{-62} \quad (-0.3\sigma)$	χ_{lowl}^2	23.09	$23.5 \quad (\nu: 1.9) \quad (-0.1\sigma)$
c_{EE}	0.9919	$0.9919^{+0.0097}_{-0.0096}$	k_{eq}	0.010377	$0.01037^{+0.00019}_{-0.00019} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	11499.2	$11514.7 \quad (\nu: 17.3)$
H_0	67.27	$67.3^{+1.2}_{-1.2} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	0.8134	$0.814^{+0.012}_{-0.012} \quad (+0.3\sigma)$	χ_{prior}^2	2.4	$9.5 \quad (\nu: 7.2) \quad (+0.6\sigma)$
Ω_{Λ}	0.6842	$0.685^{+0.016}_{-0.017} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4495	$0.4498^{+0.0060}_{-0.0059} \quad (+0.3\sigma)$	χ_{CMB}^2	12653.8	$12675.4 \quad (\nu: 21.3) \quad (+1945.1\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 12656.13$; $\bar{\chi}_{\mathrm{eff}}^2 = 12684.91$; $R - 1 = 0.00385$

χ_{eff}^2 : CMB - BK15_dust: 735.31 small_100x143_offlike5_EE_Aplanck_B: 396.13 commander_dx12_v3_2_29: 23.09 CamSpec like_10.7HM_1400_unified: 11499.22

15.50 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022346	$0.02234^{+0.00030}_{-0.00029}$ (+0.6 σ)	$\Omega_{\mathrm{m}}h^3$	0.09617	$0.09612^{+0.00064}_{-0.00065}$ (+0.1 σ)	$H(0.51)$	89.724	$89.73^{+0.46}_{-0.45}$ (+0.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.11919	$0.1191^{+0.0020}_{-0.0020}$ (−0.7 σ)	σ_8	0.8078	$0.808^{+0.015}_{-0.014}$ (−0.4 σ)	$D_{\mathrm{M}}(0.51)$	1980.7	1980^{+18}_{-18} (−0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04099	$1.04094^{+0.00056}_{-0.00058}$ (+0.3 σ)	S_8	0.8221	$0.821^{+0.025}_{-0.025}$ (−0.6 σ)	$H(0.61)$	95.338	$95.34^{+0.38}_{-0.37}$ (+0.7 σ)
τ	0.0546	$0.055^{+0.017}_{-0.015}$ (+0.2 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4503	$0.450^{+0.014}_{-0.014}$ (−0.6 σ)	$D_{\mathrm{M}}(0.61)$	2304.9	2304^{+19}_{-19} (−0.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0419	$3.043^{+0.035}_{-0.033}$ (−0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6031	$0.603^{+0.014}_{-0.014}$ (−0.6 σ)	$H(2.33)$	236.01	$235.9^{+1.3}_{-1.2}$ (−0.6 σ)
n_{s}	0.9669	$0.9671^{+0.0083}_{-0.0083}$ (+0.7 σ)	$\sigma_8/h^{0.5}$	0.9822	$0.982^{+0.021}_{-0.020}$ (−0.6 σ)	$D_{\mathrm{M}}(2.33)$	5762.0	5762^{+18}_{-18} (−0.6 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-277 \cdot 10^{-5}$	$-0.003^{+0.014}_{-0.014}$ (+0.5 σ)	$r_{\mathrm{drag}}h$	99.65	$99.7^{+1.5}_{-1.5}$ (+0.7 σ)	$f\sigma_8(0.15)$	0.4549	$0.455^{+0.013}_{-0.013}$ (−0.6 σ)
r	0.0247	< 0.0743 (−0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.424	$2.423^{+0.052}_{-0.051}$ (−0.4 σ)	$\sigma_8(0.15)$	0.7465	$0.747^{+0.013}_{-0.013}$ (−0.3 σ)
y_{cal}	1.00050	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.70	$7.7^{+1.6}_{-1.6}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4734	$0.473^{+0.011}_{-0.011}$ (−0.6 σ)
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	2.095	$2.098^{+0.074}_{-0.067}$ (−0.1 σ)	$\sigma_8(0.38)$	0.6618	$0.662^{+0.011}_{-0.011}$ (−0.2 σ)
$A_{B,\mathrm{sync}}$	1.37	< 3.64	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8780	$1.878^{+0.022}_{-0.022}$ (−0.6 σ)	$f\sigma_8(0.51)$	0.4721	$0.472^{+0.010}_{-0.010}$ (−0.6 σ)
$\alpha_{B,\mathrm{dust}}$	−0.50	—	D_{40}	1225.4	1228^{+36}_{-36} (−0.2 σ)	$\sigma_8(0.51)$	0.6193	$0.619^{+0.011}_{-0.010}$ (−0.1 σ)
$\beta_{B,\mathrm{dust}}$	1.583	$1.60^{+0.19}_{-0.19}$	D_{220}	5717	5719^{+77}_{-76} (+0.2 σ)	$f\sigma_8(0.61)$	0.4672	$0.4670^{+0.0097}_{-0.0096}$ (−0.5 σ)
$\alpha_{B,\mathrm{sync}}$	−0.48	—	D_{810}	2535.9	2536^{+27}_{-26} (−0.2 σ)	$\sigma_8(0.61)$	0.5893	$0.589^{+0.010}_{-0.0095}$ (−0.1 σ)
$\beta_{B,\mathrm{sync}}$	−3.05	$-3.10^{+0.51}_{-0.56}$	D_{1420}	815.8	$815.8^{+9.9}_{-9.7}$ (+0.4 σ)	$f\sigma_8(2.33)$	0.29718	$0.2973^{+0.0051}_{-0.0048}$ (+0.1 σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	−0.38	$-0.36^{+0.53}_{-0.58}$	D_{2000}	230.16	$230.1^{+3.7}_{-3.6}$ (+0.6 σ)	$\sigma_8(2.33)$	0.3064	$0.3065^{+0.0053}_{-0.0049}$ (+0.2 σ)
A_{100}^{PS}	235.9	241^{+50}_{-50} (−0.9 σ)	$n_{\mathrm{s},0.002}$	0.9759	$0.978^{+0.043}_{-0.042}$ (−0.4 σ)	$r_{0.002}$	0.0228	< 0.0709 (−0.4 σ)
A_{143}^{PS}	40.8	40^{+20}_{-20} (−1.3 σ)	Y_{P}	0.245386	$0.24538^{+0.00011}_{-0.00012}$ (+0.6 σ)	$r_{0.01}$	0.0236	< 0.0721 (−0.4 σ)
A_{217}^{PS}	101.3	102^{+30}_{-30} (−1.3 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246712	$0.24671^{+0.00011}_{-0.00012}$ (+0.6 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−0.66	$-0.6^{+1.4}_{-1.8}$ (−0.2 σ)
A_{217}^{CIB}	44.9	40^{+20}_{-10} (−1.2 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.590	$2.591^{+0.056}_{-0.054}$ (−0.6 σ)	r_{10}	0.0117	< 0.0366 (−0.4 σ)
A_{143}^{tSZ}	6.46	< 7.45 (−0.5 σ)	Age/Gyr	13.7946	$13.795^{+0.041}_{-0.041}$ (−0.6 σ)	$10^9 A_{\mathrm{t}}$	0.052	< 0.156 (−0.4 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.592	$0.65^{+0.26}_{-0.25}$	z_*	1089.879	$1089.87^{+0.46}_{-0.46}$ (−0.7 σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.046	< 0.139 (−0.4 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.80	—	r_*	144.66	$144.70^{+0.50}_{-0.51}$ (+0.5 σ)	f_{2000}^{143}	30.6	30^{+6}_{-6} (−0.7 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.12	—	$100\theta_*$	1.04117	$1.04113^{+0.00055}_{-0.00057}$ (+0.2 σ)	f_{2000}^{217}	107.16	$107.2^{+4.2}_{-4.3}$ (−0.8 σ)
A^{kSZ}	0.3	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8938	$13.898^{+0.048}_{-0.048}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	32.51	32^{+5}_{-5} (−0.9 σ)
A_{100}^{dust}	1.008	$1.01^{+0.38}_{-0.38}$	z_{drag}	1059.82	$1059.81^{+0.66}_{-0.64}$ (+0.4 σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.7	740.2 (ν : 3.7)
A_{143}^{dust}	0.977	$0.96^{+0.35}_{-0.35}$	r_{drag}	147.33	$147.37^{+0.54}_{-0.54}$ (+0.5 σ)	χ_{simall}^2	396.13	397.3 (ν : 2.0) (−0.0 σ)
A_{217}^{dust}	0.968	$0.97^{+0.20}_{-0.20}$	k_{D}	0.14059	$0.14055^{+0.00068}_{-0.00067}$ (−0.2 σ)	χ_{lowl}^2	22.83	23.3 (ν : 1.8) (−0.2 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	0.998	$1.02^{+0.31}_{-0.31}$	$100\theta_{\mathrm{D}}$	0.160829	$0.16083^{+0.00039}_{-0.00039}$ (−0.4 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.5	11514.5 (ν : 16.9)
c_{100}	0.99760	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	z_{eq}	3382.3	3379^{+47}_{-46} (−0.6 σ)	$\chi_{6\mathrm{DF}}^2$	0.029	0.050 (ν : 0.0)
c_{217}	1.00137	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	k_{eq}	0.010323	$0.01031^{+0.00014}_{-0.00014}$ (−0.6 σ)	χ_{MGS}^2	1.22	1.32 (ν : 0.1)
c_{TE}	0.9965	$0.9965^{+0.0096}_{-0.0096}$	$100\theta_{\mathrm{eq}}$	0.8168	$0.8174^{+0.0086}_{-0.0086}$ (+0.7 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.40	4.7 (ν : 0.9)
c_{EE}	0.9921	$0.9923^{+0.0098}_{-0.0094}$	$100\theta_{\mathrm{s,eq}}$	0.45125	$0.4516^{+0.0044}_{-0.0045}$ (+0.6 σ)	χ_{prior}^2	2.4	9.5 (ν : 7.2) (+0.6 σ)
H_0	67.64	$67.67^{+0.89}_{-0.88}$ (+0.7 σ)	$H(0.15)$	72.91	$72.94^{+0.76}_{-0.75}$ (+0.7 σ)	χ_{BAO}^2	5.64	6.1 (ν : 0.6)
Ω_{Λ}	0.6892	$0.690^{+0.012}_{-0.012}$ (+0.7 σ)	$D_{\mathrm{M}}(0.15)$	641.0	$640.7^{+7.5}_{-7.5}$ (−0.7 σ)	χ_{CMB}^2	12654.2	12675.4 (ν : 20.8) (+1945.1 σ)
Ω_{m}	0.3108	$0.310^{+0.012}_{-0.012}$ (−0.7 σ)	$H(0.38)$	83.01	$83.03^{+0.57}_{-0.56}$ (+0.7 σ)			
$\Omega_{\mathrm{m}}h^2$	0.14218	$0.1420^{+0.0020}_{-0.0019}$ (−0.6 σ)	$D_{\mathrm{M}}(0.38)$	1528.9	1528^{+15}_{-15} (−0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 12662.16$; $\bar{\chi}_{\mathrm{eff}}^2 = 12690.95$; $R - 1 = 0.00720$
 χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.40 CMB - BK15_dust: 735.68 simall_100x143_offlike5_EE_Aplanck_B: 396.13 commander_dx12_v3.2.29: 22.83 CamSpec like_10.7HM_1400_unified: 11499.52

15.51 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022287	$0.02230^{+0.00032}_{-0.00031}$ (+0.4 σ)	$\Omega_{\mathrm{m}}h^2$	0.14282	$0.1428^{+0.0023}_{-0.0023}$ (−0.3 σ)	$H(0.38)$	82.80	$82.83^{+0.69}_{-0.66}$ (+0.3 σ)
$\Omega_{\mathrm{c}}h^2$	0.11988	$0.1198^{+0.0024}_{-0.0024}$ (−0.3 σ)	$\Omega_{\mathrm{m}}h^3$	0.09611	$0.09613^{+0.00064}_{-0.00064}$ (+0.1 σ)	$D_{\mathrm{M}}(0.38)$	1534.8	1534^{+18}_{-19} (−0.3 σ)
$100\theta_{\mathrm{MC}}$	1.04084	$1.04085^{+0.00059}_{-0.00060}$ (+0.1 σ)	σ_8	0.8099	$0.810^{+0.012}_{-0.012}$ (−0.1 σ)	$H(0.51)$	89.55	$89.58^{+0.55}_{-0.52}$ (+0.3 σ)
τ	0.0536	$0.055^{+0.016}_{-0.014}$ (+0.1 σ)	S_8	0.8303	$0.830^{+0.025}_{-0.025}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1987.5	1987^{+21}_{-22} (−0.3 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0420	$3.044^{+0.031}_{-0.029}$ (−0.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4548	$0.455^{+0.014}_{-0.014}$ (−0.3 σ)	$H(0.61)$	95.203	$95.22^{+0.45}_{-0.43}$ (+0.3 σ)
n_{s}	0.9652	$0.9652^{+0.0089}_{-0.0087}$ (+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6069	$0.607^{+0.012}_{-0.013}$ (−0.2 σ)	$D_{\mathrm{M}}(0.61)$	2312.3	2311^{+23}_{-24} (−0.3 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	−0.0018	$-0.003^{+0.014}_{-0.014}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9872	$0.987^{+0.018}_{-0.018}$ (−0.2 σ)	$H(2.33)$	236.39	$236.4^{+1.5}_{-1.5}$ (−0.3 σ)
r	0.0215	< 0.0710 (−0.4 σ)	$r_{\mathrm{drag}}h$	99.07	$99.1^{+1.9}_{-1.8}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5768.0	5767^{+20}_{-21} (−0.3 σ)
y_{cal}	1.00078	$1.0007^{+0.0048}_{-0.0048}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4375	$2.436^{+0.045}_{-0.046}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4591	$0.459^{+0.013}_{-0.013}$ (−0.3 σ)
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	z_{re}	7.62	$7.7^{+1.5}_{-1.5}$ (+0.1 σ)	$\sigma_8(0.15)$	0.7480	$0.748^{+0.011}_{-0.011}$ (−0.1 σ)
$A_{B,\mathrm{sync}}$	1.42	< 3.64	$10^9 A_{\mathrm{s}}$	2.095	$2.099^{+0.066}_{-0.060}$ (−0.0 σ)	$f\sigma_8(0.38)$	0.4765	$0.476^{+0.010}_{-0.010}$ (−0.2 σ)
$\alpha_{B,\mathrm{dust}}$	−0.51	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8820	$1.882^{+0.022}_{-0.022}$ (−0.4 σ)	$\sigma_8(0.38)$	0.6626	$0.6629^{+0.0096}_{-0.0093}$ (−0.0 σ)
$\beta_{B,\mathrm{dust}}$	1.583	$1.60^{+0.19}_{-0.19}$	D_{40}	1231.2	1233^{+37}_{-36} (−0.0 σ)	$f\sigma_8(0.51)$	0.4747	$0.4747^{+0.0089}_{-0.0090}$ (−0.2 σ)
$\alpha_{B,\mathrm{sync}}$	−0.38	—	D_{220}	5720	5718^{+77}_{-76} (+0.2 σ)	$\sigma_8(0.51)$	0.6199	$0.6202^{+0.0090}_{-0.0087}$ (+0.0 σ)
$\beta_{B,\mathrm{sync}}$	−3.04	$-3.10^{+0.52}_{-0.56}$	D_{810}	2537.8	2537^{+26}_{-26} (−0.1 σ)	$f\sigma_8(0.61)$	0.4694	$0.4694^{+0.0082}_{-0.0082}$ (−0.2 σ)
$\epsilon_{\mathrm{dust,sync}}$	−0.36	$-0.36^{+0.52}_{-0.58}$	D_{1420}	816.0	$815.5^{+9.9}_{-9.7}$ (+0.3 σ)	$\sigma_8(0.61)$	0.5898	$0.5901^{+0.0086}_{-0.0083}$ (+0.1 σ)
A_{100}^{PS}	237.0	242^{+50}_{-50} (−0.9 σ)	D_{2000}	230.20	$230.0^{+3.7}_{-3.6}$ (+0.5 σ)	$f\sigma_8(2.33)$	0.29722	$0.2974^{+0.0045}_{-0.0043}$ (+0.1 σ)
A_{143}^{PS}	42.9	40^{+20}_{-20} (−1.3 σ)	$n_{\mathrm{s},0.002}$	0.9710	$0.975^{+0.042}_{-0.041}$ (−0.5 σ)	$\sigma_8(2.33)$	0.30626	$0.3065^{+0.0049}_{-0.0046}$ (+0.2 σ)
A_{217}^{PS}	102.2	102^{+30}_{-30} (−1.2 σ)	Y_{P}	0.245362	$0.24536^{+0.00012}_{-0.00013}$ (+0.4 σ)	$r_{0.002}$	0.0196	< 0.0675 (−0.4 σ)
A_{217}^{CIB}	43.6	40^{+20}_{-10} (−1.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246688	$0.24669^{+0.00012}_{-0.00013}$ (+0.4 σ)	$r_{0.01}$	0.0205	< 0.0687 (−0.4 σ)
A_{143}^{tSZ}	5.77	< 7.42 (−0.5 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.601	$2.599^{+0.059}_{-0.058}$ (−0.4 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−0.80	$-0.7^{+1.4}_{-1.9}$ (−0.2 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.630	$0.65^{+0.25}_{-0.25}$	Age/Gyr	13.8078	$13.806^{+0.046}_{-0.047}$ (−0.3 σ)	r_{10}	0.0100	< 0.0350 (−0.5 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.77	—	z_{*}	1090.02	$1089.99^{+0.52}_{-0.52}$ (−0.4 σ)	$10^9 A_{\mathrm{t}}$	0.045	< 0.149 (−0.4 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.31	—	r_{*}	144.52	$144.53^{+0.56}_{-0.55}$ (+0.2 σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.040	< 0.134 (−0.4 σ)
A^{kSZ}	1.3	—	$100\theta_{*}$	1.04103	$1.04104^{+0.00058}_{-0.00059}$ (+0.0 σ)	f_{2000}^{143}	30.5	30^{+6}_{-6} (−0.6 σ)
A_{100}^{dust}	1.013	$1.01^{+0.38}_{-0.38}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.883	$13.884^{+0.053}_{-0.052}$ (+0.2 σ)	f_{2000}^{217}	107.19	$107.3^{+4.2}_{-4.2}$ (−0.7 σ)
A_{143}^{dust}	0.973	$0.96^{+0.34}_{-0.35}$	z_{drag}	1059.74	$1059.76^{+0.67}_{-0.66}$ (+0.3 σ)	$f_{2000}^{143\times 217}$	32.49	33^{+5}_{-5} (−0.8 σ)
A_{217}^{dust}	0.970	$0.97^{+0.20}_{-0.20}$	r_{drag}	147.21	$147.22^{+0.58}_{-0.57}$ (+0.2 σ)	$\chi_{\mathrm{lensing}}^2$	8.90	9.39 (ν : 0.2)
$A_{143\times 217}^{\mathrm{dust}}$	1.004	$1.02^{+0.31}_{-0.31}$	k_{D}	0.14067	$0.14068^{+0.00068}_{-0.00069}$ (−0.0 σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.38	739.9 (ν : 3.7)
c_{100}	0.99766	$0.9975^{+0.0021}_{-0.0021}$ (−3.3 σ)	$100\theta_{\mathrm{D}}$	0.160865	$0.16085^{+0.00039}_{-0.00039}$ (−0.3 σ)	χ_{small}^2	396.03	397.2 (ν : 1.5) (−0.1 σ)
c_{217}	1.00131	$1.0012^{+0.0031}_{-0.0031}$ (+4.6 σ)	z_{eq}	3397	3396^{+54}_{-55} (−0.3 σ)	χ_{lowl}^2	23.34	23.7 (ν : 2.0) (+0.0 σ)
c_{TE}	0.9964	$0.9963^{+0.0097}_{-0.0096}$	k_{eq}	0.010369	$0.01037^{+0.00017}_{-0.00017}$ (−0.3 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.2	11514.2 (ν : 16.4)
c_{EE}	0.9920	$0.9920^{+0.0097}_{-0.0095}$	$100\theta_{\mathrm{eq}}$	0.8139	$0.814^{+0.010}_{-0.010}$ (+0.3 σ)	χ_{prior}^2	2.3	9.5 (ν : 7.2) (+0.6 σ)
H_0	67.30	$67.3^{+1.1}_{-1.1}$ (+0.3 σ)	$100\theta_{\mathrm{s,eq}}$	0.4497	$0.4499^{+0.0054}_{-0.0052}$ (+0.3 σ)	χ_{CMB}^2	12662.8	12684.4 (ν : 21.2) (+1946.6 σ)
Ω_{Λ}	0.6847	$0.685^{+0.015}_{-0.015}$ (+0.3 σ)	$H(0.15)$	72.62	$72.66^{+0.93}_{-0.91}$ (+0.3 σ)			
Ω_{m}	0.3153	$0.315^{+0.015}_{-0.015}$ (−0.3 σ)	$D_{\mathrm{M}}(0.15)$	643.9	$643.6^{+9.2}_{-9.2}$ (−0.3 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 12665.09$; $\bar{\chi}_{\mathrm{eff}}^2 = 12693.83$; $R - 1 = 0.00535$
 χ_{eff}^2 : CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 8.90 BK15_dust: 735.38 small.100x143_offlike5.EE.Aplanck_B: 396.03 commander_dx12.v3.2.29: 23.34
CamSpec like_10.7HM.1400_unified: 11499.17

15.52 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022335	$0.02234^{+0.00030}_{-0.00029}$ (+0.5 σ)	$\Omega_{\mathrm{m}}h^3$	0.09612	$0.09613^{+0.00063}_{-0.00064}$ (+0.1 σ)	$H(0.51)$	89.703	$89.71^{+0.45}_{-0.43}$ (+0.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.11917	$0.1191^{+0.0019}_{-0.0019}$ (−0.6 σ)	σ_8	0.8088	$0.809^{+0.012}_{-0.012}$ (−0.2 σ)	$D_{\mathrm{M}}(0.51)$	1981.2	1981^{+17}_{-17} (−0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04092	$1.04093^{+0.00056}_{-0.00057}$ (+0.2 σ)	S_8	0.8234	$0.824^{+0.021}_{-0.021}$ (−0.5 σ)	$H(0.61)$	95.317	$95.33^{+0.38}_{-0.37}$ (+0.6 σ)
τ	0.0558	$0.056^{+0.016}_{-0.014}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4510	$0.451^{+0.011}_{-0.011}$ (−0.5 σ)	$D_{\mathrm{M}}(0.61)$	2305.5	2305^{+18}_{-19} (−0.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0452	$3.046^{+0.031}_{-0.029}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6040	$0.604^{+0.011}_{-0.011}$ (−0.5 σ)	$H(2.33)$	235.98	$236.0^{+1.2}_{-1.2}$ (−0.6 σ)
n_{s}	0.9667	$0.9668^{+0.0081}_{-0.0081}$ (+0.7 σ)	$\sigma_8/h^{0.5}$	0.9836	$0.984^{+0.016}_{-0.016}$ (−0.4 σ)	$D_{\mathrm{M}}(2.33)$	5763.2	5763^{+18}_{-18} (−0.6 σ)
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	−0.0031	$−0.003^{+0.014}_{-0.014}$ (+0.6 σ)	$r_{\mathrm{drag}}h$	99.64	$99.7^{+1.5}_{-1.4}$ (+0.6 σ)	$f\sigma_8(0.15)$	0.4556	$0.456^{+0.011}_{-0.011}$ (−0.5 σ)
r	0.0248	< 0.0725 (−0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4278	$2.429^{+0.044}_{-0.043}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7475	$0.748^{+0.011}_{-0.011}$ (−0.1 σ)
y_{cal}	1.00077	$1.0009^{+0.0048}_{-0.0048}$ (+0.2 σ)	z_{re}	7.83	$7.9^{+1.5}_{-1.4}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.4741	$0.4743^{+0.0090}_{-0.0090}$ (−0.5 σ)
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	2.102	$2.104^{+0.065}_{-0.060}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6626	$0.6630^{+0.0097}_{-0.0093}$ (+0.0 σ)
$A_{B,\mathrm{sync}}$	1.40	< 3.64	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8795	$1.879^{+0.021}_{-0.021}$ (−0.5 σ)	$f\sigma_8(0.51)$	0.4727	$0.4729^{+0.0082}_{-0.0082}$ (−0.4 σ)
$\alpha_{B,\mathrm{dust}}$	−0.52	—	D_{40}	1226.4	1231^{+36}_{-36} (−0.1 σ)	$\sigma_8(0.51)$	0.6201	$0.6205^{+0.0092}_{-0.0087}$ (+0.1 σ)
$\beta_{B,\mathrm{dust}}$	1.584	$1.60^{+0.19}_{-0.19}$	D_{220}	5722	5723^{+76}_{-75} (+0.3 σ)	$f\sigma_8(0.61)$	0.4678	$0.4680^{+0.0077}_{-0.0076}$ (−0.4 σ)
$\alpha_{B,\mathrm{sync}}$	−0.35	—	D_{810}	2537.6	2538^{+26}_{-26} (−0.1 σ)	$\sigma_8(0.61)$	0.5901	$0.5905^{+0.0087}_{-0.0083}$ (+0.1 σ)
$\beta_{B,\mathrm{sync}}$	−3.04	$−3.10^{+0.51}_{-0.56}$	D_{1420}	816.1	$816.2^{+9.8}_{-9.8}$ (+0.5 σ)	$f\sigma_8(2.33)$	0.29756	$0.2977^{+0.0045}_{-0.0042}$ (+0.3 σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	−0.37	$−0.36^{+0.53}_{-0.57}$	D_{2000}	230.19	$230.3^{+3.6}_{-3.6}$ (+0.7 σ)	$\sigma_8(2.33)$	0.30679	$0.3070^{+0.0048}_{-0.0045}$ (+0.4 σ)
A_{100}^{PS}	235.9	241^{+50}_{-50} (−0.9 σ)	$n_{\mathrm{s},0.002}$	0.9768	$0.976^{+0.042}_{-0.042}$ (−0.5 σ)	$r_{0.002}$	0.0229	< 0.0690 (−0.4 σ)
A_{143}^{PS}	39.2	40^{+20}_{-20} (−1.3 σ)	Y_{P}	0.245382	$0.24538^{+0.00011}_{-0.00012}$ (+0.6 σ)	$r_{0.01}$	0.0238	< 0.0702 (−0.4 σ)
A_{217}^{PS}	101.7	102^{+30}_{-30} (−1.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246708	$0.24671^{+0.00011}_{-0.00012}$ (+0.6 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−0.65	$−0.6^{+1.4}_{-1.9}$ (−0.2 σ)
A_{217}^{CIB}	45.2	40^{+20}_{-10} (−1.3 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.592	$2.591^{+0.056}_{-0.055}$ (−0.5 σ)	r_{10}	0.0117	< 0.0356 (−0.4 σ)
A_{143}^{tSZ}	6.65	< 7.48 (−0.5 σ)	Age/Gyr	13.7974	$13.796^{+0.041}_{-0.041}$ (−0.6 σ)	$10^9 A_{\mathrm{t}}$	0.052	< 0.152 (−0.4 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.577	$0.65^{+0.26}_{-0.25}$	z_{\ast}	1089.890	$1089.88^{+0.45}_{-0.45}$ (−0.7 σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.047	< 0.136 (−0.4 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.77	—	r_{\ast}	144.673	$144.67^{+0.47}_{-0.47}$ (+0.5 σ)	f_{2000}^{143}	30.5	30^{+6}_{-6} (−0.7 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.02	—	$100\theta_{\ast}$	1.04111	$1.04112^{+0.00055}_{-0.00057}$ (+0.2 σ)	f_{2000}^{217}	107.22	$107.1^{+4.2}_{-4.2}$ (−0.8 σ)
A^{kSZ}	0.0	—	$D_{\mathrm{M}}(z_{\ast})/\mathrm{Gpc}$	13.8960	$13.896^{+0.045}_{-0.045}$ (+0.5 σ)	$f_{2000}^{143\times 217}$	32.47	32^{+5}_{-5} (−0.9 σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	z_{drag}	1059.78	$1059.81^{+0.66}_{-0.64}$ (+0.4 σ)	$\chi_{\mathrm{lensing}}^2$	8.97	9.34 (ν : 0.2)
A_{143}^{dust}	0.967	$0.96^{+0.35}_{-0.34}$	r_{drag}	147.35	$147.35^{+0.51}_{-0.51}$ (+0.4 σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.57	740.1 (ν : 3.6)
A_{217}^{dust}	0.967	$0.97^{+0.20}_{-0.20}$	k_{D}	0.14057	$0.14057^{+0.00066}_{-0.00065}$ (−0.2 σ)	χ_{simall}^2	396.36	397.4 (ν : 1.9) (+0.0 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.004	$1.02^{+0.31}_{-0.31}$	$100\theta_{\mathrm{D}}$	0.160834	$0.16083^{+0.00039}_{-0.00039}$ (−0.4 σ)	χ_{lowl}^2	22.82	23.5 (ν : 1.9) (−0.1 σ)
c_{100}	0.99771	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	z_{eq}	3381.5	3381^{+43}_{-43} (−0.6 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.5	11514.0 (ν : 16.3)
c_{217}	1.00132	$1.0012^{+0.0031}_{-0.0031}$ (+4.6 σ)	k_{eq}	0.010321	$0.01032^{+0.00013}_{-0.00013}$ (−0.6 σ)	χ_{6DF}^2	0.030	0.051 (ν : 0.0)
c_{TE}	0.9964	$0.9964^{+0.0096}_{-0.0096}$	$100\theta_{\mathrm{eq}}$	0.8169	$0.8170^{+0.0081}_{-0.0079}$ (+0.6 σ)	χ_{MGS}^2	1.22	1.27 (ν : 0.1)
c_{EE}	0.9925	$0.9923^{+0.0097}_{-0.0094}$	$100\theta_{\mathrm{s,eq}}$	0.45130	$0.4513^{+0.0042}_{-0.0041}$ (+0.6 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.43	4.8 (ν : 0.9)
H_0	67.62	$67.63^{+0.85}_{-0.83}$ (+0.7 σ)	$H(0.15)$	72.89	$72.91^{+0.74}_{-0.71}$ (+0.7 σ)	χ_{prior}^2	2.2	9.4 (ν : 7.3) (+0.6 σ)
Ω_{Λ}	0.6891	$0.689^{+0.011}_{-0.011}$ (+0.7 σ)	$D_{\mathrm{M}}(0.15)$	641.2	$641.1^{+7.1}_{-7.2}$ (−0.7 σ)	χ_{CMB}^2	12663.2	12684.4 (ν : 20.9) (+1946.6 σ)
Ω_{m}	0.3109	$0.311^{+0.011}_{-0.011}$ (−0.7 σ)	$H(0.38)$	82.99	$83.01^{+0.55}_{-0.53}$ (+0.6 σ)	χ_{BAO}^2	5.68	6.1 (ν : 0.5)
$\Omega_{\mathrm{m}}h^2$	0.14215	$0.1421^{+0.0018}_{-0.0018}$ (−0.6 σ)	$D_{\mathrm{M}}(0.38)$	1529.3	1529^{+14}_{-15} (−0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 12671.14$; $\bar{\chi}_{\mathrm{eff}}^2 = 12699.90$; $R - 1 = 0.00769$
 χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.43 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.96 BK15_dust: 735.57 simall_100x143_offlike5_EE_Aplanck_B: 396.36 commander_dx12_v3.2.29: 22.82 CamSpec like_10.7HM_1400_unified: 11499.49

15.53 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00032}_{-0.00031} \quad (+0.4\sigma)$	Ω_{m}	$0.315^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$H(0.15)$	$72.7^{+1.0}_{-1.0} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1198^{+0.0027}_{-0.0027} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}} h^2$	$0.1428^{+0.0026}_{-0.0026} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$644^{+10}_{-10} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04085^{+0.00060}_{-0.00061} \quad (+0.1\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.09614^{+0.00065}_{-0.00064} \quad (+0.1\sigma)$	$H(0.38)$	$82.83^{+0.75}_{-0.72} \quad (+0.3\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.2\sigma)$	σ_8	$0.811^{+0.015}_{-0.013} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+20}_{-20} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.030}_{-0.028} \quad (+0.0\sigma)$	S_8	$0.830^{+0.032}_{-0.031} \quad (-0.3\sigma)$	$H(0.51)$	$89.58^{+0.59}_{-0.57} \quad (+0.3\sigma)$
n_{s}	$0.9653^{+0.0093}_{-0.0093} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+24}_{-24} \quad (-0.3\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d} \ln k$	$-0.004^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$H(0.61)$	$95.23^{+0.48}_{-0.45} \quad (+0.3\sigma)$
r	$< 0.0730 \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.023}_{-0.022} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+25}_{-26} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.1^{+2.1}_{-2.1} \quad (+0.3\sigma)$	$H(2.33)$	$236.4^{+1.7}_{-1.7} \quad (-0.3\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.056}_{-0.055} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+21}_{-22} \quad (-0.3\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	z_{re}	$< 9.05 \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.016}_{-0.016} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	$10^9 A_{\mathrm{s}}$	$2.102^{+0.064}_{-0.059} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.013}_{-0.012} \quad (-0.0\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.024}_{-0.024} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{40}	$1230^{+37}_{-36} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0098} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.56}$	D_{220}	$5715^{+78}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.52}_{-0.57}$	D_{810}	$2537^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0095}_{-0.0090} \quad (+0.1\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.9\sigma)$	D_{1420}	$815.2^{+9.9}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.010}_{-0.010} \quad (-0.2\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.2\sigma)$	D_{2000}	$229.9^{+3.7}_{-3.6} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0089}_{-0.0084} \quad (+0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.978^{+0.042}_{-0.042} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0045}_{-0.0042} \quad (+0.2\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	Y_{P}	$0.24537^{+0.00012}_{-0.00013} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0047}_{-0.0043} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.5\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013} \quad (+0.4\sigma)$	$r_{0.002}$	$< 0.0695 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.599^{+0.060}_{-0.059} \quad (-0.4\sigma)$	$r_{0.01}$	$< 0.0706 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.805^{+0.048}_{-0.048} \quad (-0.3\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.6^{+1.4}_{-1.8} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_*	$1089.99^{+0.55}_{-0.55} \quad (-0.4\sigma)$	r_{10}	$< 0.0360 \quad (-0.4\sigma)$
A^{kSZ}	—	r_*	$144.53^{+0.64}_{-0.63} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.153 \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$100\theta_*$	$1.04104^{+0.00059}_{-0.00060} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.137 \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.883^{+0.060}_{-0.059} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_{drag}	$1059.77^{+0.66}_{-0.67} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.4^{+4.2}_{-4.2} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_{drag}	$147.21^{+0.65}_{-0.64} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.8\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{D}	$0.14069^{+0.00073}_{-0.00074} \quad (-0.0\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.9 \quad (\nu: 3.8)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00039}_{-0.00040} \quad (-0.4\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.8) \quad (-0.1\sigma)$
c_{TE}	$0.9962^{+0.0097}_{-0.0096}$	z_{eq}	$3396^{+62}_{-62} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 1.9) \quad (-0.1\sigma)$
c_{EE}	$0.9919^{+0.0097}_{-0.0095}$	k_{eq}	$0.01037^{+0.00019}_{-0.00019} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.6 \quad (\nu: 17.2)$
H_0	$67.3^{+1.2}_{-1.2} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.012}_{-0.011} \quad (+0.3\sigma)$	χ_{prior}^2	$9.5 \quad (\nu: 7.2) \quad (+0.6\sigma)$
Ω_{Λ}	$0.685^{+0.016}_{-0.017} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4499^{+0.0060}_{-0.0059} \quad (+0.3\sigma)$	χ_{CMB}^2	$12675.2 \quad (\nu: 20.9) \quad (+1945.1\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12684.69; R - 1 = 0.00378$$

15.54 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02235^{+0.00030}_{-0.00029} \quad (+0.6\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09613^{+0.00064}_{-0.00064} \quad (+0.1\sigma)$	$H(0.51)$	$89.74^{+0.46}_{-0.45} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1190^{+0.0020}_{-0.0020} \quad (-0.7\sigma)$	σ_8	$0.808^{+0.014}_{-0.013} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+18}_{-18} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00056}_{-0.00058} \quad (+0.3\sigma)$	S_8	$0.822^{+0.025}_{-0.025} \quad (-0.6\sigma)$	$H(0.61)$	$95.34^{+0.38}_{-0.37} \quad (+0.7\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+19}_{-19} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.031}_{-0.029} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.013} \quad (-0.5\sigma)$	$H(2.33)$	$235.9^{+1.3}_{-1.2} \quad (-0.6\sigma)$
n_{s}	$0.9672^{+0.0083}_{-0.0082} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.020}_{-0.019} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-18} \quad (-0.6\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.003^{+0.014}_{-0.014} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.5}_{-1.5} \quad (+0.7\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.013}_{-0.013} \quad (-0.6\sigma)$
r	$< 0.0743 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.051}_{-0.048} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.012} \quad (-0.2\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 9.11 \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.5\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.065}_{-0.060} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0098} \quad (-0.1\sigma)$
$A_{B,\mathrm{sync}}$	< 3.64	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.022}_{-0.022} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.010}_{-0.0096} \quad (-0.5\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1228^{+36}_{-36} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.6200^{+0.0096}_{-0.0090} \quad (-0.0\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5719^{+77}_{-76} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.4674^{+0.0094}_{-0.0088} \quad (-0.5\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2536^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0091}_{-0.0085} \quad (+0.0\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.51}_{-0.56}$	D_{1420}	$815.8^{+9.9}_{-9.7} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0045}_{-0.0042} \quad (+0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.53}_{-0.58}$	D_{2000}	$230.1^{+3.7}_{-3.6} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3068^{+0.0047}_{-0.0044} \quad (+0.3\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.978^{+0.043}_{-0.042} \quad (-0.4\sigma)$	$r_{0.002}$	$< 0.0710 \quad (-0.4\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.6\sigma)$	$r_{0.01}$	$< 0.0721 \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.6\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.6^{+1.4}_{-1.8} \quad (-0.2\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.591^{+0.056}_{-0.054} \quad (-0.6\sigma)$	r_{10}	$< 0.0366 \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.45 \quad (-0.5\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.795^{+0.041}_{-0.041} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.156 \quad (-0.4\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	z_*	$1089.87^{+0.46}_{-0.46} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.139 \quad (-0.4\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	r_*	$144.70^{+0.50}_{-0.51} \quad (+0.5\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$100\theta_*$	$1.04113^{+0.00055}_{-0.00057} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.2^{+4.3}_{-4.2} \quad (-0.8\sigma)$
A^{kSZ}	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.048}_{-0.048} \quad (+0.5\sigma)$	$f_{2000}^{143\times 217}$	$32^{+5}_{-5} \quad (-0.9\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_{drag}	$1059.81^{+0.66}_{-0.64} \quad (+0.4\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$740.2 \quad (\nu: 3.7)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	r_{drag}	$147.37^{+0.54}_{-0.54} \quad (+0.5\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.1) \quad (-0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	k_{D}	$0.14055^{+0.00068}_{-0.00067} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 1.7) \quad (-0.2\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00039}_{-0.00039} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.4 \quad (\nu: 16.9)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{eq}	$3379^{+46}_{-46} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.049 \quad (\nu: 0.0)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	k_{eq}	$0.01031^{+0.00014}_{-0.00014} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.32 \quad (\nu: 0.1)$
c_{TE}	$0.9964^{+0.0095}_{-0.0096}$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0086}_{-0.0086} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.9)$
c_{EE}	$0.9923^{+0.0098}_{-0.0094}$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0044}_{-0.0044} \quad (+0.6\sigma)$	χ_{prior}^2	$9.5 \quad (\nu: 7.3) \quad (+0.6\sigma)$
H_0	$67.68^{+0.88}_{-0.88} \quad (+0.7\sigma)$	$H(0.15)$	$72.95^{+0.76}_{-0.75} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.7^{+7.5}_{-7.5} \quad (-0.7\sigma)$	χ_{CMB}^2	$12675.2 \quad (\nu: 20.5) \quad (+1945.1\sigma)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$H(0.38)$	$83.03^{+0.57}_{-0.55} \quad (+0.7\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0019}_{-0.0019} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+15}_{-15} \quad (-0.7\sigma)$		

 $\bar{\chi}_{\mathrm{eff}}^2 = 12690.74; R - 1 = 0.00701$

15.55 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02230^{+0.00032}_{-0.00031} \quad (+0.4\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1427^{+0.0022}_{-0.0023} \quad (-0.3\sigma)$	$H(0.38)$	$82.84^{+0.68}_{-0.65} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1198^{+0.0023}_{-0.0024} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09613^{+0.00064}_{-0.00064} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+18}_{-18} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04085^{+0.00059}_{-0.00060} \quad (+0.1\sigma)$	σ_8	$0.811^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$H(0.51)$	$89.59^{+0.54}_{-0.51} \quad (+0.4\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.2\sigma)$	S_8	$0.830^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+21}_{-22} \quad (-0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.026} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$H(0.61)$	$95.23^{+0.44}_{-0.42} \quad (+0.4\sigma)$
n_{s}	$0.9653^{+0.0089}_{-0.0087} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.012}_{-0.012} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+23}_{-23} \quad (-0.4\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.003^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$H(2.33)$	$236.3^{+1.4}_{-1.5} \quad (-0.3\sigma)$
r	$< 0.0711 \quad (-0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.2^{+1.9}_{-1.8} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+20}_{-21} \quad (-0.3\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.045}_{-0.045} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-0.3\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	z_{re}	$< 9.00 \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0094} \quad (-0.0\sigma)$
$A_{B,\mathrm{sync}}$	< 3.64	$10^9 A_{\mathrm{s}}$	$2.102^{+0.058}_{-0.054} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.881^{+0.022}_{-0.022} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.6634^{+0.0088}_{-0.0084} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{40}	$1232^{+37}_{-36} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.4748^{+0.0088}_{-0.0088} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{220}	$5718^{+77}_{-76} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6207^{+0.0083}_{-0.0078} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.56}$	D_{810}	$2537^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4696^{+0.0080}_{-0.0079} \quad (-0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.52}_{-0.57}$	D_{1420}	$815.5^{+9.9}_{-9.7} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0079}_{-0.0074} \quad (+0.1\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.9\sigma)$	D_{2000}	$230.0^{+3.7}_{-3.6} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0041}_{-0.0038} \quad (+0.2\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.975^{+0.042}_{-0.042} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0044}_{-0.0041} \quad (+0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	Y_{P}	$0.24537^{+0.00012}_{-0.00013} \quad (+0.4\sigma)$	$r_{0.002}$	$< 0.0676 \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013} \quad (+0.4\sigma)$	$r_{0.01}$	$< 0.0688 \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.5\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.599^{+0.059}_{-0.058} \quad (-0.4\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.6^{+1.4}_{-1.9} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.805^{+0.046}_{-0.046} \quad (-0.3\sigma)$	r_{10}	$< 0.0350 \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	z_*	$1089.98^{+0.51}_{-0.52} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.150 \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	r_*	$144.54^{+0.56}_{-0.55} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.134 \quad (-0.4\sigma)$
A^{kSZ}	—	$100\theta_*$	$1.04104^{+0.00058}_{-0.00059} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.6\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.885^{+0.052}_{-0.051} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.3^{+4.2}_{-4.2} \quad (-0.8\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	z_{drag}	$1059.76^{+0.66}_{-0.67} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-5} \quad (-0.8\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_{drag}	$147.23^{+0.57}_{-0.57} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.37 \quad (\nu: 0.2)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	k_{D}	$0.14067^{+0.00068}_{-0.00069} \quad (-0.0\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.9 \quad (\nu: 3.7)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00039}_{-0.00039} \quad (-0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (-0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{eq}	$3395^{+53}_{-54} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.7 \quad (\nu: 2.0) \quad (+0.0\sigma)$
c_{TE}	$0.9962^{+0.0097}_{-0.0095}$	k_{eq}	$0.01036^{+0.00016}_{-0.00017} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.1 \quad (\nu: 16.3)$
c_{EE}	$0.9920^{+0.0097}_{-0.0094}$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.010}_{-0.0099} \quad (+0.3\sigma)$	χ_{prior}^2	$9.5 \quad (\nu: 7.2) \quad (+0.6\sigma)$
H_0	$67.4^{+1.1}_{-1.0} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4500^{+0.0053}_{-0.0051} \quad (+0.3\sigma)$	χ_{CMB}^2	$12684.2 \quad (\nu: 20.9) \quad (+1946.6\sigma)$
Ω_{Λ}	$0.685^{+0.015}_{-0.015} \quad (+0.4\sigma)$	$H(0.15)$	$72.68^{+0.93}_{-0.89} \quad (+0.4\sigma)$		
Ω_{m}	$0.315^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.4^{+9.0}_{-9.1} \quad (-0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 12693.65$; $R - 1 = 0.00582$

15.56 base_nrun_r_CamSpecHM_TTTEEE_lowl_lowE_BK15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02234^{+0.00030}_{-0.00029} \quad (+0.6\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09613^{+0.00063}_{-0.00064} \quad (+0.1\sigma)$	$H(0.51)$	$89.72^{+0.45}_{-0.43} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0019}_{-0.0019} \quad (-0.6\sigma)$	σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+17}_{-17} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00056}_{-0.00057} \quad (+0.2\sigma)$	S_8	$0.824^{+0.021}_{-0.021} \quad (-0.5\sigma)$	$H(0.61)$	$95.33^{+0.38}_{-0.36} \quad (+0.6\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+18}_{-19} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.028}_{-0.027} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$H(2.33)$	$236.0^{+1.2}_{-1.2} \quad (-0.6\sigma)$
n_{s}	$0.9669^{+0.0081}_{-0.0081} \quad (+0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.016}_{-0.016} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+18}_{-18} \quad (-0.6\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.003^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.5}_{-1.4} \quad (+0.6\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.5\sigma)$
r	$< 0.0725 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.043}_{-0.042} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.0097} \quad (-0.1\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0048} \quad (+0.2\sigma)$	z_{re}	$7.9^{+1.3}_{-1.3} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4744^{+0.0089}_{-0.0088} \quad (-0.5\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.060}_{-0.056} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6633^{+0.0095}_{-0.0084} \quad (+0.1\sigma)$
$A_{B,\mathrm{sync}}$	< 3.64	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.021}_{-0.021} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.4731^{+0.0081}_{-0.0080} \quad (-0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1230^{+36}_{-36} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6208^{+0.0085}_{-0.0081} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5723^{+76}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4682^{+0.0076}_{-0.0074} \quad (-0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2537^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0081}_{-0.0077} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.51}_{-0.56}$	D_{1420}	$816.2^{+9.8}_{-9.8} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0042}_{-0.0039} \quad (+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.53}_{-0.57}$	D_{2000}	$230.3^{+3.7}_{-3.6} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0044}_{-0.0042} \quad (+0.4\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.9\sigma)$	$n_{\mathrm{s},0.002}$	$0.976^{+0.042}_{-0.042} \quad (-0.5\sigma)$	$r_{0.002}$	$< 0.0690 \quad (-0.4\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.3\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.6\sigma)$	$r_{0.01}$	$< 0.0702 \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.6\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.6^{+1.4}_{-1.9} \quad (-0.2\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.591^{+0.056}_{-0.054} \quad (-0.6\sigma)$	r_{10}	$< 0.0356 \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.5\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.796^{+0.041}_{-0.041} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.153 \quad (-0.4\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	z_*	$1089.88^{+0.45}_{-0.45} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.136 \quad (-0.4\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	r_*	$144.68^{+0.47}_{-0.47} \quad (+0.5\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$100\theta_*$	$1.04112^{+0.00055}_{-0.00057} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.1^{+4.2}_{-4.2} \quad (-0.8\sigma)$
A^{kSZ}	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.896^{+0.045}_{-0.045} \quad (+0.5\sigma)$	$f_{2000}^{143\times 217}$	$32^{+5}_{-5} \quad (-0.9\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_{drag}	$1059.81^{+0.66}_{-0.64} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.31 \quad (\nu: 0.2)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	r_{drag}	$147.35^{+0.51}_{-0.50} \quad (+0.4\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$740.1 \quad (\nu: 3.6)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	k_{D}	$0.14057^{+0.00065}_{-0.00065} \quad (-0.2\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.0) \quad (+0.0\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00039}_{-0.00039} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 1.9) \quad (-0.1\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{eq}	$3381^{+43}_{-43} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.0 \quad (\nu: 16.3)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	k_{eq}	$0.01032^{+0.00013}_{-0.00013} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.050 \quad (\nu: 0.0)$
c_{TE}	$0.9963^{+0.0096}_{-0.0095}$	$100\theta_{\mathrm{eq}}$	$0.8171^{+0.0081}_{-0.0079} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.28 \quad (\nu: 0.1)$
c_{EE}	$0.9923^{+0.0097}_{-0.0094}$	$100\theta_{\mathrm{s,eq}}$	$0.4514^{+0.0042}_{-0.0041} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.8)$
H_0	$67.64^{+0.85}_{-0.82} \quad (+0.7\sigma)$	$H(0.15)$	$72.91^{+0.74}_{-0.71} \quad (+0.7\sigma)$	χ_{prior}^2	$9.4 \quad (\nu: 7.3) \quad (+0.6\sigma)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.0^{+7.1}_{-7.2} \quad (-0.7\sigma)$	χ_{CMB}^2	$12684.3 \quad (\nu: 20.7) \quad (+1946.6\sigma)$
Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.38)$	$83.01^{+0.55}_{-0.53} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}}h^2$	$0.1421^{+0.0018}_{-0.0018} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+14}_{-15} \quad (-0.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 12699.77; R - 1 = 0.00794$

15.57 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022394	$0.02240^{+0.00030}_{-0.00030}$ $(+0.8\sigma)$	Ω_{Λ}	0.6837	$0.684^{+0.014}_{-0.015}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	643.9	$643.8^{+9.1}_{-9.0}$ (-0.3σ)
$\Omega_{\mathrm{c}}h^2$	0.12021	$0.1202^{+0.0024}_{-0.0024}$ (-0.1σ)	Ω_{m}	0.3163	$0.316^{+0.015}_{-0.014}$ (-0.2σ)	$H(0.38)$	82.84	$82.85^{+0.67}_{-0.66}$ $(+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	1.04090	$1.04090^{+0.00060}_{-0.00059}$ $(+0.2\sigma)$	$\Omega_{\mathrm{m}}h^2$	0.14325	$0.1432^{+0.0022}_{-0.0022}$ (-0.1σ)	$D_{\mathrm{M}}(0.38)$	1534.4	1534^{+18}_{-18} (-0.3σ)
τ	0.0551	$0.056^{+0.016}_{-0.015}$ $(+0.3\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.09640	$0.09640^{+0.00059}_{-0.00060}$ $(+0.7\sigma)$	$H(0.51)$	89.61	$89.62^{+0.53}_{-0.52}$ $(+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0470	$3.050^{+0.030}_{-0.029}$ $(+0.3\sigma)$	σ_8	0.8117	$0.812^{+0.012}_{-0.011}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	1987.0	1987^{+21}_{-21} (-0.3σ)
n_{s}	0.9645	$0.9639^{+0.0088}_{-0.0085}$ $(+0.2\sigma)$	S_8	0.8335	$0.834^{+0.025}_{-0.024}$ (-0.1σ)	$H(0.61)$	95.272	$95.28^{+0.44}_{-0.42}$ $(+0.5\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	-0.0051	$-0.007^{+0.014}_{-0.014}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4565	$0.457^{+0.014}_{-0.013}$ (-0.1σ)	$D_{\mathrm{M}}(0.61)$	2311.5	2311^{+23}_{-23} (-0.3σ)
r	0.0194	< 0.0671 (-0.5σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6087	$0.609^{+0.012}_{-0.012}$ (-0.0σ)	$H(2.33)$	236.72	$236.7^{+1.4}_{-1.4}$ (-0.0σ)
y_{cal}	1.00035	$1.0008^{+0.0048}_{-0.0049}$ $(+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9895	$0.990^{+0.017}_{-0.017}$ (-0.0σ)	$D_{\mathrm{M}}(2.33)$	5763.3	5763^{+20}_{-20} (-0.6σ)
$A_{B,\mathrm{dust}}$	4.63	$4.9^{+2.1}_{-1.9}$	$r_{\mathrm{drag}}h$	98.93	$98.9^{+1.8}_{-1.8}$ $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4607	$0.461^{+0.013}_{-0.012}$ (-0.1σ)
$A_{B,\mathrm{sync}}$	1.41	< 3.62	$\langle d^2 \rangle^{1/2}$	2.4394	$2.440^{+0.046}_{-0.045}$ $(+0.0\sigma)$	$\sigma_8(0.15)$	0.7496	$0.750^{+0.011}_{-0.010}$ $(+0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.52	—	z_{re}	7.76	$7.8^{+1.5}_{-1.5}$ $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4780	$0.478^{+0.010}_{-0.0099}$ (-0.1σ)
$\beta_{B,\mathrm{dust}}$	1.583	$1.60^{+0.19}_{-0.19}$	$10^9 A_{\mathrm{s}}$	2.105	$2.112^{+0.065}_{-0.061}$ $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6639	$0.6644^{+0.0096}_{-0.0091}$ $(+0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.39	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8855	$1.887^{+0.022}_{-0.022}$ $(+0.0\sigma)$	$f\sigma_8(0.51)$	0.4760	$0.4763^{+0.0088}_{-0.0087}$ (-0.0σ)
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.52}_{-0.55}$	D_{40}	1225.3	1227^{+37}_{-36} (-0.3σ)	$\sigma_8(0.51)$	0.6211	$0.6216^{+0.0091}_{-0.0086}$ $(+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.36	$-0.36^{+0.52}_{-0.58}$	D_{220}	5726	5731^{+76}_{-75} $(+0.5\sigma)$	$f\sigma_8(0.61)$	0.4707	$0.4710^{+0.0080}_{-0.0079}$ $(+0.0\sigma)$
A_{217}^{CIB}	50.0	48^{+10}_{-10} (-0.1σ)	D_{810}	2540.4	2542^{+26}_{-26} $(+0.2\sigma)$	$\sigma_8(0.61)$	0.5909	$0.5913^{+0.0087}_{-0.0082}$ $(+0.3\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.09	—	D_{1420}	816.4	$816.2^{+9.8}_{-9.9}$ $(+0.5\sigma)$	$f\sigma_8(2.33)$	0.29772	$0.2980^{+0.0045}_{-0.0043}$ $(+0.3\sigma)$
A_{143}^{tSZ}	7.33	$5.2^{+3.8}_{-4.0}$ $(+0.2\sigma)$	D_{2000}	230.30	$230.1^{+3.6}_{-3.6}$ $(+0.6\sigma)$	$\sigma_8(2.33)$	0.30673	$0.3070^{+0.0049}_{-0.0046}$ $(+0.4\sigma)$
A_{100}^{PS}	256	263^{+60}_{-60} (-0.1σ)	$n_{\mathrm{s},0.002}$	0.9809	$0.986^{+0.042}_{-0.042}$ (-0.1σ)	$r_{0.002}$	0.0179	< 0.0645 (-0.5σ)
A_{143}^{PS}	44.8	48^{+20}_{-20} (-0.3σ)	Y_{P}	0.245405	$0.24540^{+0.00011}_{-0.00012}$ $(+0.8\sigma)$	$r_{0.01}$	0.0185	< 0.0650 (-0.5σ)
$A_{143\times 217}^{\mathrm{PS}}$	39.8	43^{+20}_{-20} (-0.1σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246731	$0.24673^{+0.00011}_{-0.00012}$ $(+0.8\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	-0.90	$-0.8^{+1.4}_{-1.9}$ (-0.3σ)
A_{217}^{PS}	116.2	115^{+20}_{-20} $(+0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	2.581	$2.581^{+0.056}_{-0.053}$ (-0.8σ)	r_{10}	0.0092	< 0.0335 (-0.5σ)
A^{kSZ}	0.0	—	Age/Gyr	13.7964	$13.796^{+0.046}_{-0.045}$ (-0.6σ)	$10^9 A_{\mathrm{t}}$	0.041	< 0.142 (-0.5σ)
$A_{100}^{\mathrm{dust}TT}$	8.89	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	z_{*}	1089.91	$1089.90^{+0.51}_{-0.51}$ (-0.6σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.037	< 0.127 (-0.5σ)
$A_{143}^{\mathrm{dust}TT}$	11.04	$11.0^{+3.5}_{-3.5}$ $(+0.1\sigma)$	r_{*}	144.36	$144.36^{+0.54}_{-0.53}$ (-0.1σ)	f_{2000}^{143}	30.24	$9.6^{+1.7}_{-1.2}$ (-7.0σ)
$A_{143\times 217}^{\mathrm{dust}TT}$	19.4	$18.7^{+6.4}_{-6.4}$ $(+0.1\sigma)$	$100\theta_{*}$	1.04108	$1.04108^{+0.00059}_{-0.00058}$ $(+0.1\sigma)$	$f_{2000}^{143\times 217}$	32.94	$739.6^{+5.4}_{-4.2}$ $(+314.1\sigma)$
$A_{217}^{\mathrm{dust}TT}$	94.1	94^{+10}_{-10} $(+0.0\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.866	$13.867^{+0.051}_{-0.050}$ (-0.2σ)	f_{2000}^{217}	107.52	$397.3^{+4.1}_{-1.7}$ $(+138.4\sigma)$
$A_{100}^{\mathrm{dust}TE}$	0.114	$0.115^{+0.075}_{-0.074}$	z_{drag}	1060.01	$1060.01^{+0.61}_{-0.61}$ $(+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	9.04	23.0 $(\nu: 1.5)$
$A_{100\times 143}^{\mathrm{dust}TE}$	0.134	$0.135^{+0.058}_{-0.058}$	r_{drag}	147.01	$147.01^{+0.54}_{-0.53}$ (-0.3σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.3	2360.3 $(\nu: 17.0)$
$A_{100\times 217}^{\mathrm{dust}TE}$	0.477	$0.48^{+0.17}_{-0.17}$	k_{D}	0.14097	$0.14097^{+0.00061}_{-0.00062}$ $(+0.5\sigma)$	χ_{small}^2	396.2	13.2 $(\nu: 11.8)$ (-217.6σ)
$A_{143}^{\mathrm{dust}TE}$	0.224	$0.23^{+0.11}_{-0.11}$	$100\theta_{\mathrm{D}}$	0.160716	$0.16071^{+0.00036}_{-0.00036}$ (-0.8σ)	χ_{lowl}^2	22.6	31.0 $(\nu: 4.9)$ $(+3.2\sigma)$
$A_{143\times 217}^{\mathrm{dust}TE}$	0.664	$0.66^{+0.16}_{-0.16}$	z_{eq}	3408	3407^{+53}_{-53} (-0.1σ)	χ_{plik}^2	2344.94	33.3 $(\nu: 2.3)$ (-127.0σ)
$A_{217}^{\mathrm{dust}TE}$	2.08	$2.08^{+0.53}_{-0.53}$	k_{eq}	0.010401	$0.01040^{+0.00016}_{-0.00016}$ (-0.1σ)	χ_{prior}^2	1.94	107.9 $(\nu: 2.0)$ $(+27.2\sigma)$
c_{100}	0.99968	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	0.8124	$0.812^{+0.010}_{-0.0099}$ $(+0.1\sigma)$	χ_{CMB}^2	3508.1	3529.8 $(\nu: 21.4)$ $(+395.6\sigma)$
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4489	$0.4489^{+0.0052}_{-0.0051}$ $(+0.1\sigma)$			
H_0	67.30	$67.3^{+1.1}_{-1.1}$ $(+0.3\sigma)$	$H(0.15)$	72.63	$72.64^{+0.91}_{-0.90}$ $(+0.3\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 3510.02$; $\bar{\chi}_{\mathrm{eff}}^2 = 3542.98$; $R - 1 = 0.00382$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 9.04 BK15_dust: 735.27 small_100x143_offlike5_EE_Aplanck_B: 396.20 commander_dx12_v3.2.29: 22.64 plik_rd12_HM_v22b_TTTEE: 2344.94

15.58 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022461	$0.02245^{+0.00028}_{-0.00028}$ (+1.0 σ)	Ω_m	0.3106	$0.312^{+0.011}_{-0.011}$ (−0.6 σ)	$D_M(0.38)$	1527.4	1528^{+14}_{-14} (−0.7 σ)
$\Omega_c h^2$	0.11930	$0.1194^{+0.0019}_{-0.0019}$ (−0.5 σ)	$\Omega_m h^2$	0.14240	$0.1425^{+0.0018}_{-0.0018}$ (−0.4 σ)	$H(0.51)$	89.807	$89.78^{+0.44}_{-0.43}$ (+0.8 σ)
$100\theta_{MC}$	1.04102	$1.04100^{+0.00057}_{-0.00057}$ (+0.4 σ)	$\Omega_m h^3$	0.09642	$0.09642^{+0.00058}_{-0.00059}$ (+0.7 σ)	$D_M(0.51)$	1978.7	1980^{+17}_{-17} (−0.7 σ)
τ	0.0580	$0.058^{+0.015}_{-0.014}$ (+0.5 σ)	σ_8	0.8116	$0.811^{+0.012}_{-0.011}$ (+0.0 σ)	$H(0.61)$	95.425	$95.40^{+0.36}_{-0.36}$ (+0.8 σ)
$\ln(10^{10} A_s)$	3.0514	$3.053^{+0.031}_{-0.029}$ (+0.5 σ)	S_8	0.8258	$0.827^{+0.021}_{-0.020}$ (−0.4 σ)	$D_M(0.61)$	2302.6	2304^{+18}_{-18} (−0.7 σ)
n_s	0.9677	$0.9658^{+0.0080}_{-0.0078}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4523	$0.453^{+0.011}_{-0.011}$ (−0.4 σ)	$H(2.33)$	236.20	$236.3^{+1.1}_{-1.1}$ (−0.3 σ)
$dn_s/d \ln k$	−0.0034	$−0.007^{+0.014}_{-0.014}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6059	$0.606^{+0.011}_{-0.011}$ (−0.3 σ)	$D_M(2.33)$	5756.8	5758^{+17}_{-17} (−0.9 σ)
r	0.0201	< 0.0682 (−0.5 σ)	$\sigma_8/h^{0.5}$	0.9863	$0.987^{+0.016}_{-0.016}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4570	$0.457^{+0.011}_{-0.010}$ (−0.4 σ)
y_{cal}	1.00069	$1.0009^{+0.0048}_{-0.0048}$ (+0.2 σ)	$r_{drag} h$	99.65	$99.5^{+1.4}_{-1.4}$ (+0.6 σ)	$\sigma_8(0.15)$	0.7500	$0.750^{+0.011}_{-0.010}$ (+0.1 σ)
$A_{B,dust}$	4.60	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	2.4326	$2.432^{+0.043}_{-0.042}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4756	$0.4758^{+0.0089}_{-0.0087}$ (−0.3 σ)
$A_{B,sync}$	1.43	< 3.61	z_{re}	8.02	$8.0^{+1.5}_{-1.5}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6649	$0.6647^{+0.0097}_{-0.0092}$ (+0.3 σ)
$\alpha_{B,dust}$	−0.51	—	$10^9 A_s$	2.114	$2.118^{+0.066}_{-0.061}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4742	$0.4744^{+0.0082}_{-0.0079}$ (−0.2 σ)
$\beta_{B,dust}$	1.577	$1.60^{+0.19}_{-0.19}$	$10^9 A_s e^{-2\tau}$	1.8829	$1.885^{+0.021}_{-0.021}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6223	$0.6220^{+0.0091}_{-0.0087}$ (+0.4 σ)
$\alpha_{B,sync}$	−0.32	—	D_{40}	1224.9	1225^{+37}_{-36} (−0.4 σ)	$f\sigma_8(0.61)$	0.4693	$0.4695^{+0.0077}_{-0.0074}$ (−0.2 σ)
$\beta_{B,sync}$	−3.04	$−3.10^{+0.52}_{-0.55}$	D_{220}	5734	5737^{+75}_{-75} (+0.6 σ)	$\sigma_8(0.61)$	0.5922	$0.5919^{+0.0088}_{-0.0083}$ (+0.4 σ)
$\epsilon_{dust,sync}$	−0.35	$−0.36^{+0.52}_{-0.58}$	D_{810}	2542.6	2543^{+26}_{-26} (+0.3 σ)	$f\sigma_8(2.33)$	0.29861	$0.2984^{+0.0045}_{-0.0043}$ (+0.5 σ)
A_{217}^{CIB}	46.7	48^{+10}_{-10} (−0.2 σ)	D_{1420}	818.7	$817.1^{+9.7}_{-9.8}$ (+0.6 σ)	$\sigma_8(2.33)$	0.30789	$0.3077^{+0.0048}_{-0.0046}$ (+0.6 σ)
$\xi^{tSZ \times CIB}$	0.54	—	D_{2000}	231.28	$230.5^{+3.5}_{-3.6}$ (+0.8 σ)	$r_{0.002}$	0.0186	< 0.0660 (−0.5 σ)
A_{143}^{tSZ}	7.12	$5.3^{+3.8}_{-4.0}$ (+0.2 σ)	$n_{s,0.002}$	0.9786	$0.987^{+0.042}_{-0.042}$ (−0.0 σ)	$r_{0.01}$	0.0193	< 0.0663 (−0.5 σ)
A_{100}^{PS}	250	262^{+50}_{-50} (−0.2 σ)	Y_P	0.245430	$0.24542^{+0.00010}_{-0.00011}$ (+1.0 σ)	$\ln(10^{10} A_t)$	−0.85	$−0.7^{+1.4}_{-1.9}$ (−0.3 σ)
A_{143}^{PS}	49.7	48^{+20}_{-20} (−0.4 σ)	Y_P^{BBN}	0.246757	$0.24675^{+0.00010}_{-0.00011}$ (+1.0 σ)	r_{10}	0.0095	< 0.0342 (−0.5 σ)
$A_{143 \times 217}^{PS}$	50.7	43^{+20}_{-20} (−0.1 σ)	$10^5 D/H$	2.569	$2.571^{+0.051}_{-0.050}$ (−1.0 σ)	$10^9 A_t$	0.043	< 0.145 (−0.5 σ)
A_{217}^{PS}	121.1	115^{+20}_{-20} (+0.0 σ)	Age/Gyr	13.7823	$13.785^{+0.040}_{-0.039}$ (−0.9 σ)	$10^9 A_t e^{-2\tau}$	0.038	< 0.129 (−0.5 σ)
A^{kSZ}	0.00	< 8.48 (−0.2 σ)	z_*	1089.744	$1089.77^{+0.43}_{-0.44}$ (−0.9 σ)	f_{2000}^{143}	29.0	31^{+6}_{-6} (−0.5 σ)
A_{100}^{dustTT}	8.87	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	r_*	144.543	$144.52^{+0.44}_{-0.44}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	32.21	33^{+4}_{-4} (−0.6 σ)
A_{143}^{dustTT}	11.03	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	$100\theta_*$	1.04120	$1.04118^{+0.00056}_{-0.00056}$ (+0.3 σ)	f_{2000}^{217}	106.79	$107.7^{+4.0}_{-3.9}$ (−0.5 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.7^{+6.5}_{-6.4}$ (+0.1 σ)	$D_M(z_*)/\text{Gpc}$	13.8824	$13.880^{+0.043}_{-0.042}$ (+0.1 σ)	$\chi^2_{lensing}$	8.83	9.32 (ν : 0.2)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.0 σ)	z_{drag}	1060.09	$1060.08^{+0.61}_{-0.61}$ (+1.0 σ)	$\chi^2_{BKPLANCK}$	735.47	739.8 (ν : 3.4)
A_{100}^{dustTE}	0.114	$0.115^{+0.074}_{-0.072}$	r_{drag}	147.177	$147.15^{+0.47}_{-0.46}$ (+0.0 σ)	χ^2_{small}	396.79	397.7 (ν : 2.2) (+0.2 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.057}$	k_D	0.14085	$0.14087^{+0.00058}_{-0.00059}$ (+0.3 σ)	χ^2_{lowl}	22.64	22.8 (ν : 1.4) (−0.4 σ)
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.16}_{-0.16}$	$100\theta_D$	0.160670	$0.16068^{+0.00035}_{-0.00035}$ (−0.9 σ)	χ^2_{plik}	2345.2	2360.2 (ν : 16.8) (+272.1 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	z_{eq}	3387.6	3391^{+42}_{-42} (−0.4 σ)	χ^2_{6DF}	0.029	0.060 (ν : 0.0)
$A_{143 \times 217}^{dustTE}$	0.664	$0.66^{+0.16}_{-0.16}$	k_{eq}	0.010339	$0.01035^{+0.00013}_{-0.00013}$ (−0.4 σ)	χ^2_{MGS}	1.22	1.21 (ν : 0.1)
A_{217}^{dustTE}	2.08	$2.07^{+0.52}_{-0.53}$	$100\theta_{eq}$	0.8162	$0.8157^{+0.0080}_{-0.0078}$ (+0.5 σ)	$\chi^2_{DR12BAO}$	4.43	5.0 (ν : 1.0)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{s,eq}$	0.45085	$0.4506^{+0.0041}_{-0.0040}$ (+0.4 σ)	χ^2_{prior}	1.7	13.2 (ν : 11.9) (+1.6 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$H(0.15)$	72.99	$72.93^{+0.73}_{-0.71}$ (+0.7 σ)	χ^2_{CMB}	3508.9	3529.8 (ν : 20.8) (+395.6 σ)
H_0	67.71	$67.65^{+0.84}_{-0.83}$ (+0.7 σ)	$D_M(0.15)$	640.3	$640.9^{+7.1}_{-7.1}$ (−0.7 σ)	χ^2_{BAO}	5.68	6.2 (ν : 0.7)
Ω_Λ	0.6894	$0.688^{+0.011}_{-0.011}$ (+0.6 σ)	$H(0.38)$	83.09	$83.05^{+0.54}_{-0.53}$ (+0.7 σ)			

Best-fit $\chi^2_{eff} = 3516.32$; $\bar{\chi}^2_{eff} = 3549.29$; $R - 1 = 0.00618$
 χ^2_{eff} : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.43 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.83 BK15_dust: 735.47 simall_100x143_offlike5_EE_Aplanck_B: 396.79 commander_dx12_v3_2_29: 22.64 plik_rd12_HM_v22b_TTTEEE: 2345.18

15.59 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00030}_{-0.00029} \quad (+0.8\sigma)$	Ω_{Λ}	$0.684^{+0.014}_{-0.015} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.7^{+9.0}_{-8.9} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1202^{+0.0023}_{-0.0023} \quad (-0.2\sigma)$	Ω_{m}	$0.316^{+0.015}_{-0.014} \quad (-0.2\sigma)$	$H(0.38)$	$82.86^{+0.66}_{-0.65} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00060}_{-0.00059} \quad (+0.2\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0022}_{-0.0022} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+18}_{-18} \quad (-0.3\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09640^{+0.00059}_{-0.00060} \quad (+0.7\sigma)$	$H(0.51)$	$89.63^{+0.53}_{-0.52} \quad (+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.051^{+0.028}_{-0.026} \quad (+0.4\sigma)$	σ_8	$0.813^{+0.012}_{-0.011} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+21}_{-21} \quad (-0.4\sigma)$
n_{s}	$0.9640^{+0.0087}_{-0.0084} \quad (+0.2\sigma)$	S_8	$0.834^{+0.025}_{-0.024} \quad (-0.1\sigma)$	$H(0.61)$	$95.29^{+0.43}_{-0.42} \quad (+0.5\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.007^{+0.014}_{-0.014} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.014}_{-0.013} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+23}_{-23} \quad (-0.4\sigma)$
r	$< 0.0671 \quad (-0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.012}_{-0.012} \quad (-0.0\sigma)$	$H(2.33)$	$236.7^{+1.4}_{-1.4} \quad (-0.0\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+20}_{-20} \quad (-0.6\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$r_{\mathrm{drag}}h$	$99.0^{+1.8}_{-1.8} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.013}_{-0.012} \quad (-0.1\sigma)$
$A_{B,\mathrm{sync}}$	< 3.62	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.045}_{-0.044} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.010}_{-0.0095} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.010}_{-0.0098} \quad (-0.0\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	$10^9 A_{\mathrm{s}}$	$2.114^{+0.059}_{-0.055} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6648^{+0.0089}_{-0.0085} \quad (+0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.887^{+0.022}_{-0.022} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.4765^{+0.0087}_{-0.0086} \quad (-0.0\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{40}	$1227^{+37}_{-36} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.6219^{+0.0083}_{-0.0080} \quad (+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.53}_{-0.58}$	D_{220}	$5731^{+76}_{-75} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4711^{+0.0079}_{-0.0077} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2542^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.5917^{+0.0080}_{-0.0076} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	D_{1420}	$816.2^{+9.8}_{-9.8} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0041}_{-0.0039} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-4.0} \quad (+0.2\sigma)$	D_{2000}	$230.1^{+3.6}_{-3.6} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0045}_{-0.0042} \quad (+0.4\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.986^{+0.042}_{-0.042} \quad (-0.1\sigma)$	$r_{0.002}$	$< 0.0645 \quad (-0.5\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.3\sigma)$	Y_{P}	$0.24541^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$r_{0.01}$	$< 0.0649 \quad (-0.5\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.8^{+1.4}_{-1.9} \quad (-0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.580^{+0.055}_{-0.053} \quad (-0.8\sigma)$	r_{10}	$< 0.0335 \quad (-0.5\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.795^{+0.045}_{-0.045} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.142 \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1089.90^{+0.51}_{-0.50} \quad (-0.6\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.126 \quad (-0.5\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$11.0^{+3.5}_{-3.5} \quad (+0.1\sigma)$	r_*	$144.37^{+0.54}_{-0.52} \quad (-0.1\sigma)$	f_{2000}^{143}	$9.6^{+1.7}_{-1.2} \quad (-7.0\sigma)$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.7^{+6.4}_{-6.4} \quad (+0.1\sigma)$	$100\theta_*$	$1.04109^{+0.00059}_{-0.00058} \quad (+0.2\sigma)$	$f_{2000}^{143\times 217}$	$739.6^{+5.3}_{-4.1} \quad (+314.1\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.867^{+0.050}_{-0.049} \quad (-0.1\sigma)$	f_{2000}^{217}	$397.3^{+4.1}_{-1.6} \quad (+138.4\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.075}_{-0.074}$	z_{drag}	$1060.02^{+0.60}_{-0.62} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$23.0 \quad (\nu: 1.5)$
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	r_{drag}	$147.02^{+0.54}_{-0.53} \quad (-0.2\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$2360.2 \quad (\nu: 16.9)$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	k_{D}	$0.14097^{+0.00061}_{-0.00062} \quad (+0.5\sigma)$	χ_{small}^2	$13.2 \quad (\nu: 11.7) \quad (-217.6\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.11}_{-0.11}$	$100\theta_{\mathrm{D}}$	$0.16071^{+0.00036}_{-0.00036} \quad (-0.8\sigma)$	χ_{lowl}^2	$31.0 \quad (\nu: 4.8) \quad (+3.2\sigma)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	z_{eq}	$3407^{+52}_{-53} \quad (-0.1\sigma)$	χ_{plik}^2	$33.3 \quad (\nu: 2.3) \quad (-127.0\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.53}_{-0.53}$	k_{eq}	$0.01040^{+0.00016}_{-0.00016} \quad (-0.1\sigma)$	χ_{prior}^2	$107.9 \quad (\nu: 2.0) \quad (+27.2\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.010}_{-0.0098} \quad (+0.1\sigma)$	χ_{CMB}^2	$3529.6 \quad (\nu: 21.1) \quad (+395.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4490^{+0.0051}_{-0.0050} \quad (+0.1\sigma)$		
H_0	$67.3^{+1.1}_{-1.0} \quad (+0.3\sigma)$	$H(0.15)$	$72.66^{+0.90}_{-0.89} \quad (+0.3\sigma)$		

 $\bar{\chi}_{\mathrm{eff}}^2 = 3542.82; R - 1 = 0.00386$

15.60 base_nrun_r_plikHM_TTTEE_lowl_lowE_BK15_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02245^{+0.00028}_{-0.00027} \quad (+1.0\sigma)$	Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+14}_{-14} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1194^{+0.0018}_{-0.0019} \quad (-0.5\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1425^{+0.0017}_{-0.0018} \quad (-0.4\sigma)$	$H(0.51)$	$89.78^{+0.43}_{-0.42} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00057}_{-0.00057} \quad (+0.4\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09642^{+0.00058}_{-0.00059} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+17}_{-17} \quad (-0.7\sigma)$
τ	$0.059^{+0.014}_{-0.013} \quad (+0.6\sigma)$	σ_8	$0.812^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$H(0.61)$	$95.40^{+0.36}_{-0.36} \quad (+0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.054^{+0.028}_{-0.028} \quad (+0.5\sigma)$	S_8	$0.827^{+0.021}_{-0.020} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+18}_{-18} \quad (-0.7\sigma)$
n_{s}	$0.9658^{+0.0080}_{-0.0078} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.011}_{-0.011} \quad (-0.4\sigma)$	$H(2.33)$	$236.3^{+1.1}_{-1.1} \quad (-0.3\sigma)$
$\mathrm{d}n_{\mathrm{s}}/\mathrm{d}\ln k$	$-0.007^{+0.013}_{-0.014} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.011}_{-0.011} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+17}_{-17} \quad (-0.9\sigma)$
r	$< 0.0682 \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.016}_{-0.015} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.011}_{-0.010} \quad (-0.4\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0048} \quad (+0.2\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.4}_{-1.4} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.011}_{-0.0096} \quad (+0.2\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.043}_{-0.041} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.4760^{+0.0089}_{-0.0086} \quad (-0.3\sigma)$
$A_{B,\mathrm{sync}}$	< 3.61	z_{re}	$8.1^{+1.3}_{-1.4} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6649^{+0.0095}_{-0.0084} \quad (+0.3\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	10^9A_{s}	$2.119^{+0.060}_{-0.058} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.4746^{+0.0081}_{-0.0077} \quad (-0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.885^{+0.021}_{-0.021} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6222^{+0.0090}_{-0.0079} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{40}	$1225^{+37}_{-36} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.4696^{+0.0076}_{-0.0071} \quad (-0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.54}$	D_{220}	$5737^{+75}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.5921^{+0.0082}_{-0.0079} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.52}_{-0.58}$	D_{810}	$2543^{+26}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0042}_{-0.0041} \quad (+0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.2\sigma)$	D_{1420}	$817.0^{+9.7}_{-9.7} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0045}_{-0.0043} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ}} \times \mathrm{CIB}$	—	D_{2000}	$230.5^{+3.5}_{-3.6} \quad (+0.8\sigma)$	$r_{0.002}$	$< 0.0658 \quad (-0.5\sigma)$
A_{143}^{tSZ}	$5.3^{+3.8}_{-4.0} \quad (+0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.987^{+0.042}_{-0.042} \quad (-0.0\sigma)$	$r_{0.01}$	$< 0.0663 \quad (-0.5\sigma)$
A_{100}^{PS}	$262^{+50}_{-50} \quad (-0.2\sigma)$	Y_{P}	$0.24543^{+0.00010}_{-0.00011} \quad (+1.0\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.7^{+1.4}_{-1.9} \quad (-0.3\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24675^{+0.00010}_{-0.00011} \quad (+1.0\sigma)$	r_{10}	$< 0.0342 \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.571^{+0.051}_{-0.050} \quad (-1.0\sigma)$	10^9A_{t}	$< 0.145 \quad (-0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.784^{+0.040}_{-0.039} \quad (-0.9\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.129 \quad (-0.5\sigma)$
A^{kSZ}	$< 8.48 \quad (-0.2\sigma)$	z_*	$1089.77^{+0.43}_{-0.43} \quad (-0.9\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_*	$144.52^{+0.44}_{-0.44} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.6\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$100\theta_*$	$1.04118^{+0.00056}_{-0.00056} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.7^{+4.0}_{-3.9} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.7^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.880^{+0.043}_{-0.042} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.31 \quad (\nu: 0.2)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1060.08^{+0.61}_{-0.61} \quad (+1.0\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.8 \quad (\nu: 3.4)$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.074}_{-0.072}$	r_{drag}	$147.15^{+0.47}_{-0.46} \quad (+0.0\sigma)$	χ_{simall}^2	$397.7 \quad (\nu: 2.3) \quad (+0.2\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	k_{D}	$0.14086^{+0.00058}_{-0.00059} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 1.4) \quad (-0.4\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.16}_{-0.16}$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00035}_{-0.00035} \quad (-0.9\sigma)$	χ_{plik}^2	$2360.1 \quad (\nu: 16.8) \quad (+272.1\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	z_{eq}	$3390^{+42}_{-42} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.059 \quad (\nu: 0.0)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.66^{+0.16}_{-0.16}$	k_{eq}	$0.01035^{+0.00013}_{-0.00013} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.21 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dust}TE}$	$2.07^{+0.52}_{-0.53}$	$100\theta_{\mathrm{eq}}$	$0.8157^{+0.0079}_{-0.0077} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 1.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0041}_{-0.0040} \quad (+0.4\sigma)$	χ_{prior}^2	$13.2 \quad (\nu: 11.9) \quad (+1.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$H(0.15)$	$72.94^{+0.72}_{-0.70} \quad (+0.7\sigma)$	χ_{CMB}^2	$3529.7 \quad (\nu: 20.6) \quad (+395.6\sigma)$
H_0	$67.65^{+0.84}_{-0.82} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.8^{+7.0}_{-7.1} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.6)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.6\sigma)$	$H(0.38)$	$83.06^{+0.54}_{-0.52} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3549.18; R - 1 = 0.00588$$

16 omegak

16.1 base_omegak_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02261	$0.02255^{+0.00052}_{-0.00051}$	$\sigma_8 \Omega_m^{0.5}$	0.553	$0.552^{+0.066}_{-0.065}$	$100\theta_{s,eq}$	0.4557	$0.4554^{+0.0099}_{-0.010}$
$\Omega_c h^2$	0.11712	$0.1173^{+0.0046}_{-0.0044}$	$\sigma_8 \Omega_m^{0.25}$	0.6506	$0.649^{+0.029}_{-0.029}$	$H(0.15)$	58.2	58^{+8}_{-8}
$100\theta_{MC}$	1.04130	$1.0413^{+0.0010}_{-0.00098}$	$\sigma_8/h^{0.5}$	1.0629	$1.061^{+0.046}_{-0.047}$	$D_M(0.15)$	819	820^{+100}_{-100}
τ	0.0493	$0.048^{+0.016}_{-0.019}$	$r_{drag}h$	76.7	77^{+10}_{-10}	$H(0.38)$	69.6	$69.9^{+7.5}_{-6.7}$
Ω_K	-0.0549	$-0.056^{+0.044}_{-0.050}$	$\langle d^2 \rangle^{1/2}$	2.678	$2.68^{+0.16}_{-0.16}$	$D_M(0.38)$	1902	1902^{+300}_{-200}
$\ln(10^{10} A_s)$	3.0275	$3.026^{+0.034}_{-0.039}$	z_{re}	6.91	$6.8^{+1.8}_{-1.9}$	$H(0.51)$	77.1	$77.3^{+7.1}_{-6.3}$
n_s	0.9744	$0.972^{+0.013}_{-0.012}$	$10^9 A_s$	2.065	$2.061^{+0.070}_{-0.079}$	$D_M(0.51)$	2432	2431^{+300}_{-300}
y_{cal}	0.99993	$1.0000^{+0.0049}_{-0.0049}$	$10^9 A_s e^{-2\tau}$	1.8706	$1.871^{+0.028}_{-0.027}$	$H(0.61)$	83.2	$83.5^{+6.8}_{-6.1}$
A_{217}^{CIB}	42.4	45^{+10}_{-10}	D_{40}	1197.5	1203^{+34}_{-33}	$D_M(0.61)$	2805	2803^{+300}_{-300}
$\xi^{tSZ \times CIB}$	0.999	—	D_{220}	5740	5745^{+80}_{-84}	$H(2.33)$	227.3	$227.6^{+6.1}_{-5.8}$
A_{143}^{tSZ}	6.81	$5.6^{+3.5}_{-3.8}$	D_{810}	2531.7	2529^{+28}_{-27}	$D_M(2.33)$	6471	6463^{+440}_{-430}
A_{100}^{PS}	236	250^{+60}_{-60}	D_{1420}	815.7	$813.7^{+9.9}_{-10}$	$f\sigma_8(0.15)$	0.5388	$0.537^{+0.047}_{-0.047}$
A_{143}^{PS}	48.6	42^{+20}_{-20}	D_{2000}	233.29	$232.3^{+3.9}_{-4.0}$	$\sigma_8(0.15)$	0.6909	$0.690^{+0.042}_{-0.050}$
$A_{143 \times 217}^{PS}$	56.2	40^{+20}_{-20}	$n_{s,0.002}$	0.9744	$0.972^{+0.013}_{-0.012}$	$f\sigma_8(0.38)$	0.5139	$0.512^{+0.019}_{-0.020}$
A_{217}^{PS}	122.6	114^{+20}_{-20}	Y_P	0.245485	$0.24546^{+0.00022}_{-0.00020}$	$\sigma_8(0.38)$	0.595	$0.594^{+0.047}_{-0.053}$
A^{kSZ}	0.00	< 7.22	Y_P^{BBN}	0.246811	$0.24679^{+0.00022}_{-0.00020}$	$f\sigma_8(0.51)$	0.4928	$0.491^{+0.013}_{-0.014}$
A_{100}^{dustTT}	8.96	$9.0^{+3.6}_{-3.6}$	$10^5 D/H$	2.542	$2.554^{+0.094}_{-0.094}$	$\sigma_8(0.51)$	0.550	$0.550^{+0.048}_{-0.053}$
A_{143}^{dustTT}	10.62	$10.5^{+3.5}_{-3.6}$	Age/Gyr	15.64	$15.6^{+1.2}_{-1.1}$	$f\sigma_8(0.61)$	0.4753	$0.473^{+0.014}_{-0.014}$
$A_{143 \times 217}^{dustTT}$	19.8	$18.0^{+6.3}_{-6.5}$	z_*	1089.36	$1089.46^{+0.93}_{-0.92}$	$\sigma_8(0.61)$	0.5188	$0.519^{+0.048}_{-0.052}$
A_{217}^{dustTT}	96.1	94^{+10}_{-10}	r_*	145.00	$145.00^{+0.97}_{-0.99}$	$f\sigma_8(2.33)$	0.2572	$0.257^{+0.026}_{-0.028}$
c_{100}	0.99971	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04146	$1.04143^{+0.00097}_{-0.00096}$	$\sigma_8(2.33)$	0.2561	$0.257^{+0.031}_{-0.032}$
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.922	$13.923^{+0.089}_{-0.091}$	f_{2000}^{143}	25.2	27^{+6}_{-6}
H_0	51.9	52^{+9}_{-8}	z_{drag}	1060.28	$1060.2^{+1.0}_{-1.0}$	$f_{2000}^{143 \times 217}$	29.14	30^{+5}_{-5}
Ω_Λ	0.535	$0.53^{+0.12}_{-0.13}$	r_{drag}	147.59	$147.61^{+0.94}_{-0.97}$	f_{2000}^{217}	103.80	$104.9^{+4.2}_{-4.2}$
Ω_m	0.520	$0.53^{+0.18}_{-0.16}$	k_D	0.14052	$0.1404^{+0.0010}_{-0.00098}$	χ_{small}^2	395.52	$396.8 (\nu: 1.5)$
$\Omega_m h^2$	0.14037	$0.1405^{+0.0042}_{-0.0041}$	$100\theta_D$	0.16058	$0.16066^{+0.00057}_{-0.00055}$	χ_{lowl}^2	20.97	$21.39 (\nu: 0.2)$
$\Omega_m h^3$	0.0729	$0.073^{+0.013}_{-0.012}$	z_{eq}	3339	3342^{+100}_{-98}	χ_{plik}^2	752.3	$766.6 (\nu: 14.8)$
σ_8	0.7660	$0.765^{+0.036}_{-0.043}$	k_{eq}	0.010191	$0.01020^{+0.00031}_{-0.00030}$	χ_{prior}^2	1.0	$7.1 (\nu: 6.3)$
S_8	1.009	$1.01^{+0.12}_{-0.12}$	$100\theta_{eq}$	0.8257	$0.825^{+0.020}_{-0.020}$	χ_{CMB}^2	1168.8	$1184.8 (\nu: 16.3)$

Best-fit $\chi_{eff}^2 = 1169.83$; $\Delta\chi_{eff}^2 = -9.74$; $\bar{\chi}_{eff}^2 = 1191.91$; $\Delta\bar{\chi}_{eff}^2 = -7.67$; $R - 1 = 0.01634$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.52 (Δ -0.35) commander_dx12.v3.2.29: 20.97 (Δ -2.63) plik_rd12_HM.v22.TT: 752.34 (Δ -6.41)

16.2 base_omegak_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02255^{+0.00053}_{-0.00051} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.549^{+0.064}_{-0.064} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	$0.4555^{+0.0099}_{-0.010} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1173^{+0.0046}_{-0.0043} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.650^{+0.029}_{-0.029} \quad (+0.0\sigma)$	$H(0.15)$	$59^{+8}_{-7} \quad (+0.1\sigma)$
$100\theta_{MC}$	$1.0413^{+0.0010}_{-0.00099} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$1.062^{+0.046}_{-0.046} \quad (+0.0\sigma)$	$D_M(0.15)$	$811^{+100}_{-100} \quad (-0.1\sigma)$
τ	$0.0531^{+0.011}_{-0.0089} \quad (+0.5\sigma)$	$r_{drag} h$	$78^{+10}_{-10} \quad (+0.1\sigma)$	$H(0.38)$	$70.4^{+7.3}_{-6.4} \quad (+0.1\sigma)$
Ω_K	$-0.053^{+0.042}_{-0.046} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.68^{+0.16}_{-0.16} \quad (-0.0\sigma)$	$D_M(0.38)$	$1885^{+200}_{-200} \quad (-0.1\sigma)$
$\ln(10^{10} A_s)$	$3.035^{+0.025}_{-0.022} \quad (+0.5\sigma)$	z_{re}	$< 8.36 \quad (+0.5\sigma)$	$H(0.51)$	$77.8^{+7.0}_{-6.1} \quad (+0.1\sigma)$
n_s	$0.972^{+0.013}_{-0.012} \quad (+0.0\sigma)$	$10^9 A_s$	$2.080^{+0.052}_{-0.046} \quad (+0.5\sigma)$	$D_M(0.51)$	$2411^{+300}_{-300} \quad (-0.1\sigma)$
y_{cal}	$1.0001^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.871^{+0.028}_{-0.027} \quad (-0.0\sigma)$	$H(0.61)$	$83.9^{+6.7}_{-5.9} \quad (+0.1\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1204^{+33}_{-34} \quad (+0.1\sigma)$	$D_M(0.61)$	$2781^{+300}_{-300} \quad (-0.1\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5744^{+80}_{-84} \quad (-0.0\sigma)$	$H(2.33)$	$227.8^{+6.0}_{-5.7} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.6^{+3.7}_{-3.7} \quad (-0.0\sigma)$	D_{810}	$2529^{+27}_{-28} \quad (+0.0\sigma)$	$D_M(2.33)$	$6435^{+420}_{-420} \quad (-0.1\sigma)$
A_{100}^{PS}	$250^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$813.8^{+9.6}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.536^{+0.047}_{-0.047} \quad (-0.1\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$232.4^{+3.8}_{-4.0} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.696^{+0.040}_{-0.043} \quad (+0.2\sigma)$
$A_{143 \times 217}^{PS}$	$40^{+20}_{-20} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.972^{+0.013}_{-0.012} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.513^{+0.019}_{-0.020} \quad (+0.1\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.24546^{+0.00022}_{-0.00020} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.600^{+0.045}_{-0.047} \quad (+0.2\sigma)$
A^{kSZ}	$< 7.13 \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24679^{+0.00023}_{-0.00021} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.493^{+0.012}_{-0.013} \quad (+0.3\sigma)$
A_{100}^{dustTT}	$9.0^{+3.5}_{-3.6} \quad (+0.0\sigma)$	$10^5 D/H$	$2.554^{+0.095}_{-0.094} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.555^{+0.046}_{-0.047} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.5^{+3.5}_{-3.6} \quad (+0.0\sigma)$	Age/Gyr	$15.5^{+1.2}_{-1.1} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.476^{+0.012}_{-0.012} \quad (+0.3\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.0^{+6.2}_{-6.5} \quad (+0.0\sigma)$	z_*	$1089.46^{+0.94}_{-0.92} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.524^{+0.046}_{-0.046} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$145.01^{+0.97}_{-0.99} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.260^{+0.025}_{-0.025} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_*$	$1.04143^{+0.00098}_{-0.00097} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.260^{+0.030}_{-0.029} \quad (+0.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/Gpc$	$13.924^{+0.088}_{-0.092} \quad (+0.0\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$53^{+9}_{-8} \quad (+0.1\sigma)$	z_{drag}	$1060.2^{+1.0}_{-1.0} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+5}_{-5} \quad (-0.0\sigma)$
Ω_Λ	$0.54^{+0.11}_{-0.12} \quad (+0.2\sigma)$	r_{drag}	$147.62^{+0.94}_{-0.98} \quad (+0.0\sigma)$	f_{2000}^{217}	$104.9^{+4.2}_{-4.2} \quad (-0.0\sigma)$
Ω_m	$0.51^{+0.16}_{-0.15} \quad (-0.1\sigma)$	k_D	$0.1404^{+0.0010}_{-0.00099} \quad (-0.0\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.9) \quad (-0.3\sigma)$
$\Omega_m h^2$	$0.1405^{+0.0043}_{-0.0041} \quad (-0.0\sigma)$	$100\theta_D$	$0.16066^{+0.00058}_{-0.00055} \quad (+0.0\sigma)$	χ_{lowl}^2	$21.39 \quad (\nu: 0.3) \quad (+0.0\sigma)$
$\Omega_m h^3$	$0.074^{+0.013}_{-0.012} \quad (+0.1\sigma)$	z_{eq}	$3341^{+100}_{-98} \quad (-0.0\sigma)$	χ_{plik}^2	$766.6 \quad (\nu: 15.0) \quad (-0.0\sigma)$
σ_8	$0.770^{+0.033}_{-0.037} \quad (+0.3\sigma)$	k_{eq}	$0.01020^{+0.00031}_{-0.00030} \quad (-0.0\sigma)$	χ_{prior}^2	$7.1 \quad (\nu: 6.3) \quad (-0.0\sigma)$
S_8	$1.00^{+0.12}_{-0.12} \quad (-0.1\sigma)$	$100\theta_{eq}$	$0.825^{+0.020}_{-0.020} \quad (+0.0\sigma)$	χ_{CMB}^2	$1184.4 \quad (\nu: 16.1) \quad (-0.1\sigma)$

$$\bar{\chi}_{eff}^2 = 1191.43; \Delta\bar{\chi}_{eff}^2 = -7.88; R - 1 = 0.01578$$

16.3 base_omegak_plikHM_TTTEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022632	$0.02260^{+0.00034}_{-0.00033}$ (+0.2 σ)	$\Omega_m h^2$	0.14120	$0.1413^{+0.0027}_{-0.0027}$ (+0.4 σ)	k_{eq}	0.010251	$0.01026^{+0.00020}_{-0.00019}$ (+0.4 σ)
$\Omega_c h^2$	0.11792	$0.1181^{+0.0030}_{-0.0029}$ (+0.3 σ)	$\Omega_m h^3$	0.0764	$0.077^{+0.011}_{-0.010}$ (+0.5 σ)	$100\theta_{\text{eq}}$	0.8221	$0.821^{+0.013}_{-0.013}$ (−0.4 σ)
$100\theta_{\text{MC}}$	1.04119	$1.04116^{+0.00064}_{-0.00063}$ (−0.2 σ)	σ_8	0.7750	$0.774^{+0.029}_{-0.031}$ (+0.5 σ)	$100\theta_{\text{s,eq}}$	0.4538	$0.4534^{+0.0064}_{-0.0064}$ (−0.4 σ)
τ	0.0495	$0.049^{+0.016}_{-0.017}$ (+0.0 σ)	S_8	0.983	$0.981^{+0.094}_{-0.097}$ (−0.4 σ)	$H(0.15)$	60.2	60^{+7}_{-6} (+0.5 σ)
Ω_K	−0.0438	$−0.044^{+0.033}_{-0.034}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.538	$0.537^{+0.051}_{-0.053}$ (−0.4 σ)	$D_{\text{M}}(0.15)$	789	788^{+100}_{-90} (−0.5 σ)
$\ln(10^{10} A_s)$	3.0304	$3.028^{+0.033}_{-0.035}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6460	$0.645^{+0.022}_{-0.026}$ (−0.3 σ)	$H(0.38)$	71.5	$71.8^{+6.5}_{-5.5}$ (+0.5 σ)
n_s	0.9724	$0.9706^{+0.0096}_{-0.0094}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	1.0538	$1.051^{+0.036}_{-0.042}$ (−0.4 σ)	$D_{\text{M}}(0.38)$	1841	1838^{+200}_{-190} (−0.5 σ)
y_{cal}	1.00012	$0.9999^{+0.0050}_{-0.0050}$ (−0.0 σ)	$r_{\text{drag}} h$	79.7	80^{+10}_{-10} (+0.5 σ)	$H(0.51)$	78.8	$79.1^{+6.2}_{-5.2}$ (+0.5 σ)
A_{217}^{CIB}	42.1	45^{+10}_{-10} (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.646	$2.64^{+0.12}_{-0.13}$ (−0.4 σ)	$D_{\text{M}}(0.51)$	2358	2355^{+230}_{-230} (−0.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	1.00	—	z_{re}	6.96	$6.9^{+1.6}_{-1.8}$ (+0.0 σ)	$H(0.61)$	84.9	$85.2^{+5.9}_{-5.0}$ (+0.5 σ)
A_{143}^{tSZ}	6.82	$5.8^{+3.6}_{-3.6}$ (+0.1 σ)	$10^9 A_s$	2.071	$2.066^{+0.070}_{-0.071}$ (+0.1 σ)	$D_{\text{M}}(0.61)$	2723	2719^{+260}_{-260} (−0.5 σ)
A_{100}^{PS}	238	248^{+50}_{-60} (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8754	$1.875^{+0.024}_{-0.024}$ (+0.3 σ)	$H(2.33)$	228.92	$229.2^{+4.7}_{-4.1}$ (+0.5 σ)
A_{143}^{PS}	48.5	41^{+20}_{-20} (−0.1 σ)	D_{40}	1204.9	1208^{+29}_{-28} (+0.3 σ)	$D_{\text{M}}(2.33)$	6357	6346^{+340}_{-360} (−0.5 σ)
$A_{143 \times 217}^{\text{PS}}$	56.4	41^{+20}_{-20} (+0.1 σ)	D_{220}	5748	5748^{+78}_{-75} (+0.1 σ)	$f\sigma_8(0.15)$	0.5285	$0.527^{+0.037}_{-0.043}$ (−0.4 σ)
A_{217}^{PS}	123.6	115^{+20}_{-20} (+0.1 σ)	D_{810}	2535.4	2532^{+27}_{-27} (+0.2 σ)	$\sigma_8(0.15)$	0.7017	$0.701^{+0.035}_{-0.037}$ (+0.5 σ)
A^{kSZ}	0.00	< 6.48 (−0.1 σ)	D_{1420}	817.0	$815.2^{+9.3}_{-9.3}$ (+0.3 σ)	$f\sigma_8(0.38)$	0.5110	$0.509^{+0.016}_{-0.018}$ (−0.3 σ)
A_{100}^{dustTT}	8.77	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	D_{2000}	233.33	$232.5^{+3.3}_{-3.2}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6069	$0.607^{+0.039}_{-0.040}$ (+0.5 σ)
A_{143}^{dustTT}	10.68	$10.6^{+3.5}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9724	$0.9706^{+0.0096}_{-0.0094}$ (−0.2 σ)	$f\sigma_8(0.51)$	0.4928	$0.4912^{+0.0099}_{-0.012}$ (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.1^{+6.4}_{-6.3}$ (+0.0 σ)	Y_{P}	0.245491	$0.24548^{+0.00014}_{-0.00013}$ (+0.2 σ)	$\sigma_8(0.51)$	0.5619	$0.562^{+0.039}_{-0.040}$ (+0.5 σ)
A_{217}^{dustTT}	95.6	94^{+10}_{-10} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246818	$0.24681^{+0.00014}_{-0.00013}$ (+0.2 σ)	$f\sigma_8(0.61)$	0.4771	$0.4757^{+0.0094}_{-0.010}$ (+0.3 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.074}$	10^5D/H	2.539	$2.545^{+0.061}_{-0.061}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5309	$0.531^{+0.040}_{-0.040}$ (+0.5 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.134^{+0.058}_{-0.058}$	Age/Gyr	15.33	$15.31^{+0.92}_{-0.95}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.2638	$0.264^{+0.022}_{-0.022}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	z_*	1089.41	$1089.47^{+0.62}_{-0.62}$ (+0.0 σ)	$\sigma_8(2.33)$	0.2639	$0.264^{+0.026}_{-0.025}$ (+0.5 σ)
A_{143}^{dustTE}	0.223	$0.22^{+0.10}_{-0.11}$	r_*	144.77	$144.75^{+0.61}_{-0.62}$ (−0.5 σ)	f_{2000}^{143}	25.1	26^{+6}_{-6} (−0.1 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.661	$0.66^{+0.15}_{-0.15}$	$100\theta_*$	1.04134	$1.04132^{+0.00062}_{-0.00061}$ (−0.2 σ)	$f_{2000}^{143 \times 217}$	29.16	30^{+4}_{-4} (−0.1 σ)
A_{217}^{dustTE}	2.05	$2.06^{+0.53}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.902	$13.901^{+0.056}_{-0.057}$ (−0.5 σ)	f_{2000}^{217}	103.94	$104.7^{+3.8}_{-3.8}$ (−0.1 σ)
c_{100}	0.99977	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.39	$1060.33^{+0.64}_{-0.66}$ (+0.3 σ)	χ_{small}^2	395.55	$396.7 (\nu: 1.2)$ (−0.1 σ)
c_{217}	0.99808	$0.9981^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.35	$147.35^{+0.58}_{-0.61}$ (−0.6 σ)	χ_{lowl}^2	21.16	$21.51 (\nu: 0.2)$ (+0.2 σ)
H_0	54.1	54^{+8}_{-7} (+0.5 σ)	k_{D}	0.14079	$0.14077^{+0.00061}_{-0.00061}$ (+0.6 σ)	χ_{plik}^2	2336.5	$2353.2 (\nu: 16.0)$ (+291.4 σ)
Ω_{Λ}	0.561	$0.560^{+0.090}_{-0.091}$ (+0.5 σ)	$100\theta_{\text{D}}$	0.160509	$0.16055^{+0.00037}_{-0.00036}$ (−0.4 σ)	χ_{prior}^2	1.3	$11.2 (\nu: 9.6)$ (+1.2 σ)
Ω_{m}	0.483	$0.48^{+0.12}_{-0.12}$ (−0.5 σ)	z_{eq}	3359	3362^{+65}_{-63} (+0.4 σ)	χ_{CMB}^2	2753.2	$2771.4 (\nu: 17.5)$ (+277.9 σ)

Best-fit $\chi_{\text{eff}}^2 = 2754.51$; $\Delta\chi_{\text{eff}}^2 = -11.26$; $\bar{\chi}_{\text{eff}}^2 = 2782.60$; $\Delta\bar{\chi}_{\text{eff}}^2 = -9.17$; $R - 1 = 0.01257$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.55 (Δ -0.50) commander_dx12.v3.2.29: 21.16 (Δ -2.09) plik_rd12_HM.v22b.TTTEE: 2336.53 (Δ -8.12)

16.4 base_omegak_plikHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02260^{+0.00034}_{-0.00034} \quad (+0.2\sigma)$	$\Omega_m h^2$	$0.1413^{+0.0027}_{-0.0027} \quad (+0.4\sigma)$	k_{eq}	$0.01026^{+0.00020}_{-0.00020} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0030}_{-0.0029} \quad (+0.3\sigma)$	$\Omega_m h^3$	$0.0778^{+0.011}_{-0.0095} \quad (+0.7\sigma)$	$100\theta_{\text{eq}}$	$0.822^{+0.013}_{-0.013} \quad (-0.4\sigma)$
$100\theta_{\text{MC}}$	$1.04116^{+0.00064}_{-0.00063} \quad (-0.2\sigma)$	σ_8	$0.779^{+0.026}_{-0.026} \quad (+0.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4535^{+0.0065}_{-0.0064} \quad (-0.4\sigma)$
τ	$0.0528^{+0.011}_{-0.0085} \quad (+0.5\sigma)$	S_8	$0.974^{+0.090}_{-0.096} \quad (-0.5\sigma)$	$H(0.15)$	$61.1^{+6.7}_{-6.1} \quad (+0.7\sigma)$
Ω_K	$-0.041^{+0.030}_{-0.031} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.534^{+0.049}_{-0.053} \quad (-0.5\sigma)$	$D_{\text{M}}(0.15)$	$779^{+90}_{-90} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.037^{+0.025}_{-0.022} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.645^{+0.023}_{-0.025} \quad (-0.3\sigma)$	$H(0.38)$	$72.3^{+6.0}_{-5.5} \quad (+0.7\sigma)$
n_s	$0.9708^{+0.0096}_{-0.0094} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$1.051^{+0.038}_{-0.040} \quad (-0.4\sigma)$	$D_{\text{M}}(0.38)$	$1819^{+180}_{-190} \quad (-0.7\sigma)$
y_{cal}	$0.99996^{+0.0050}_{-0.0050} \quad (-0.0\sigma)$	$r_{\text{drag}} h$	$81^{+10}_{-10} \quad (+0.6\sigma)$	$H(0.51)$	$79.6^{+5.7}_{-5.2} \quad (+0.7\sigma)$
A_{217}^{CIB}	$45^{+10}_{-10} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.64^{+0.12}_{-0.13} \quad (-0.5\sigma)$	$D_{\text{M}}(0.51)$	$2332^{+210}_{-230} \quad (-0.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	z_{re}	$< 8.38 \quad (+0.5\sigma)$	$H(0.61)$	$85.6^{+5.5}_{-5.0} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.8^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$10^9 A_s$	$2.083^{+0.053}_{-0.046} \quad (+0.6\sigma)$	$D_{\text{M}}(0.61)$	$2694^{+230}_{-250} \quad (-0.7\sigma)$
A_{100}^{PS}	$248^{+50}_{-60} \quad (-0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.874^{+0.024}_{-0.024} \quad (+0.3\sigma)$	$H(2.33)$	$229.5^{+4.7}_{-4.1} \quad (+0.6\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.1\sigma)$	D_{40}	$1209^{+29}_{-28} \quad (+0.4\sigma)$	$D_{\text{M}}(2.33)$	$6314^{+320}_{-350} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$41^{+20}_{-20} \quad (+0.1\sigma)$	D_{220}	$5748^{+78}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.525^{+0.038}_{-0.040} \quad (-0.5\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2532^{+27}_{-27} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.707^{+0.032}_{-0.031} \quad (+0.7\sigma)$
A^{kSZ}	$< 6.50 \quad (-0.2\sigma)$	D_{1420}	$815.3^{+9.5}_{-9.4} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.509^{+0.017}_{-0.019} \quad (-0.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.5} \quad (-0.0\sigma)$	D_{2000}	$232.6^{+3.3}_{-3.2} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.612^{+0.036}_{-0.034} \quad (+0.7\sigma)$
A_{143}^{dustTT}	$10.6^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\text{s},0.002}$	$0.9708^{+0.0096}_{-0.0094} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.492^{+0.010}_{-0.011} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.1^{+6.4}_{-6.4} \quad (+0.0\sigma)$	Y_{P}	$0.24548^{+0.00014}_{-0.00013} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.567^{+0.036}_{-0.035} \quad (+0.7\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24681^{+0.00014}_{-0.00013} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.4774^{+0.0082}_{-0.0084} \quad (+0.6\sigma)$
A_{100}^{dustTE}	$0.113^{+0.075}_{-0.075}$	$10^5 \text{D}/\text{H}$	$2.544^{+0.061}_{-0.061} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.536^{+0.037}_{-0.035} \quad (+0.7\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.057}_{-0.058}$	Age/Gyr	$15.22^{+0.86}_{-0.91} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.267^{+0.021}_{-0.019} \quad (+0.7\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	z_*	$1089.46^{+0.62}_{-0.62} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.268^{+0.025}_{-0.023} \quad (+0.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	r_*	$144.76^{+0.60}_{-0.63} \quad (-0.5\sigma)$	f_{2000}^{143}	$26^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.15}$	$100\theta_*$	$1.04132^{+0.00062}_{-0.00062} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dustTE}	$2.06^{+0.53}_{-0.52}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.901^{+0.055}_{-0.057} \quad (-0.5\sigma)$	f_{2000}^{217}	$104.7^{+3.8}_{-3.8} \quad (-0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1060.33^{+0.63}_{-0.66} \quad (+0.3\sigma)$	χ_{small}^2	$396.3 \quad (\nu: 0.9) \quad (-0.3\sigma)$
c_{217}	$0.9981^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.35^{+0.57}_{-0.61} \quad (-0.5\sigma)$	χ_{lowl}^2	$21.53 \quad (\nu: 0.2) \quad (+0.2\sigma)$
H_0	$55^{+7}_{-7} \quad (+0.7\sigma)$	k_{D}	$0.14077^{+0.00061}_{-0.00060} \quad (+0.6\sigma)$	χ_{plik}^2	$2353.2 \quad (\nu: 16.0) \quad (+291.3\sigma)$
Ω_{Λ}	$0.569^{+0.081}_{-0.087} \quad (+0.6\sigma)$	$100\theta_{\text{D}}$	$0.16055^{+0.00037}_{-0.00036} \quad (-0.4\sigma)$	χ_{prior}^2	$11.2 \quad (\nu: 9.7) \quad (+1.2\sigma)$
Ω_{m}	$0.47^{+0.12}_{-0.11} \quad (-0.6\sigma)$	z_{eq}	$3361^{+65}_{-64} \quad (+0.4\sigma)$	χ_{CMB}^2	$2771.0 \quad (\nu: 17.1) \quad (+277.9\sigma)$

$\bar{\chi}_{\text{eff}}^2 = 2782.22$; $\Delta\bar{\chi}_{\text{eff}}^2 = -9.31$; $R - 1 = 0.01621$

16.5 base_omegak_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02258	$0.02258^{+0.00054}_{-0.00053}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.555	$0.554^{+0.067}_{-0.068}$ (+0.1 σ)	$H(0.15)$	58.1	58^{+9}_{-8} (−0.0 σ)
$\Omega_c h^2$	0.11749	$0.1173^{+0.0045}_{-0.0045}$ (+0.0 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6521	$0.650^{+0.028}_{-0.032}$ (+0.1 σ)	$D_M(0.15)$	820	823^{+100}_{-100} (+0.1 σ)
$100\theta_{MC}$	1.04131	$1.0414^{+0.0010}_{-0.0010}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	1.0646	$1.062^{+0.046}_{-0.049}$ (+0.1 σ)	$H(0.38)$	69.6	$69.8^{+7.7}_{-6.8}$ (−0.0 σ)
τ	0.0492	$0.049^{+0.016}_{-0.016}$ (+0.1 σ)	$r_{drag} h$	76.5	77^{+10}_{-10} (−0.1 σ)	$D_M(0.38)$	1904	1909^{+300}_{-200} (+0.1 σ)
Ω_K	−0.0550	$-0.058^{+0.046}_{-0.051}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.682	$2.68^{+0.16}_{-0.17}$ (+0.0 σ)	$H(0.51)$	77.1	$77.2^{+7.0}_{-6.6}$ (−0.0 σ)
$\ln(10^{10} A_s)$	3.0265	$3.026^{+0.033}_{-0.035}$ (+0.0 σ)	z_{re}	6.91	$6.9^{+1.7}_{-1.7}$ (+0.1 σ)	$D_M(0.51)$	2435	2439^{+300}_{-300} (+0.1 σ)
n_s	0.9738	$0.973^{+0.013}_{-0.013}$ (+0.2 σ)	$10^9 A_s$	2.063	$2.062^{+0.068}_{-0.071}$ (+0.0 σ)	$H(0.61)$	83.2	$83.3^{+6.7}_{-6.4}$ (−0.0 σ)
y_{cal}	0.99980	$1.0000^{+0.0050}_{-0.0048}$ (−0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8692	$1.869^{+0.027}_{-0.027}$ (−0.1 σ)	$D_M(0.61)$	2807	2811^{+300}_{-300} (+0.1 σ)
A_{100}^{PS}	220	229^{+50}_{-50} (−0.8 σ)	D_{40}	1196.9	1199^{+33}_{-34} (−0.2 σ)	$H(2.33)$	227.6	$227.5^{+6.1}_{-5.9}$ (−0.0 σ)
A_{143}^{PS}	39.7	33^{+20}_{-20} (−1.0 σ)	D_{220}	5727	5735^{+83}_{-84} (−0.2 σ)	$D_M(2.33)$	6470	6473^{+440}_{-450} (+0.0 σ)
A_{217}^{PS}	107.4	104^{+30}_{-30} (−1.0 σ)	D_{810}	2528.2	2527^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.15)$	0.5405	$0.539^{+0.048}_{-0.050}$ (+0.1 σ)
A_{217}^{CIB}	38.2	37^{+10}_{-10} (−1.3 σ)	D_{1420}	814.4	$814^{+10}_{-9.8}$ (−0.0 σ)	$\sigma_8(0.15)$	0.6912	$0.689^{+0.045}_{-0.045}$ (−0.0 σ)
A_{143}^{tSZ}	6.27	$4.1^{+3.5}_{-4.0}$ (−0.8 σ)	D_{2000}	232.89	$232.5^{+4.4}_{-4.0}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.5149	$0.512^{+0.018}_{-0.021}$ (+0.1 σ)
$r_{143 \times 217}^{PS}$	0.742	$0.68^{+0.27}_{-0.25}$	$n_{s,0.002}$	0.9738	$0.973^{+0.013}_{-0.013}$ (+0.2 σ)	$\sigma_8(0.38)$	0.595	$0.594^{+0.048}_{-0.052}$ (−0.0 σ)
$r_{143 \times 217}^{CIB}$	0.69	—	Y_P	0.245473	$0.24547^{+0.00023}_{-0.00021}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4935	$0.491^{+0.012}_{-0.014}$ (+0.0 σ)
$\xi^{tSZ \times CIB}$	0.65	—	Y_P^{BBN}	0.246800	$0.24680^{+0.00023}_{-0.00021}$ (+0.1 σ)	$\sigma_8(0.51)$	0.550	$0.549^{+0.049}_{-0.052}$ (−0.0 σ)
A^{kSZ}	0.0	—	$10^5 D/H$	2.548	$2.549^{+0.098}_{-0.096}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4758	$0.474^{+0.014}_{-0.014}$ (+0.0 σ)
A_{100}^{dust}	0.999	$1.01^{+0.39}_{-0.38}$	Age/Gyr	15.64	$15.7^{+1.2}_{-1.2}$ (+0.0 σ)	$\sigma_8(0.61)$	0.519	$0.518^{+0.048}_{-0.051}$ (−0.0 σ)
A_{143}^{dust}	0.955	$0.95^{+0.35}_{-0.34}$	z_*	1089.44	$1089.43^{+0.97}_{-0.95}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2571	$0.257^{+0.027}_{-0.028}$ (−0.0 σ)
A_{217}^{dust}	0.980	$0.98^{+0.20}_{-0.20}$	r_*	144.92	$145.0^{+1.0}_{-0.93}$ (−0.0 σ)	$\sigma_8(2.33)$	0.2560	$0.256^{+0.032}_{-0.032}$ (−0.0 σ)
$A_{143 \times 217}^{dust}$	1.019	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	1.04147	$1.04151^{+0.00097}_{-0.00098}$ (+0.2 σ)	f_{2000}^{143}	25.5	26^{+7}_{-7} (−0.2 σ)
c_{100}	0.99778	$0.9976^{+0.0021}_{-0.0021}$ (−3.3 σ)	$D_M(z_*)/\text{Gpc}$	13.915	$13.920^{+0.091}_{-0.085}$ (−0.1 σ)	f_{2000}^{217}	103.47	$104.1^{+4.7}_{-4.5}$ (−0.4 σ)
c_{217}	1.00072	$1.0008^{+0.0030}_{-0.0030}$ (+4.2 σ)	z_{drag}	1060.24	$1060.2^{+1.1}_{-1.0}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	28.7	29^{+5}_{-5} (−0.4 σ)
H_0	51.8	52^{+9}_{-8} (−0.0 σ)	r_{drag}	147.53	$147.58^{+0.98}_{-0.90}$ (−0.1 σ)	χ_{simall}^2	395.53	396.7 (ν : 1.1) (−0.1 σ)
Ω_Λ	0.532	$0.53^{+0.12}_{-0.13}$ (−0.1 σ)	k_D	0.14056	$0.14050^{+0.00099}_{-0.0011}$ (+0.1 σ)	χ_{lowl}^2	20.98	21.28 (ν : 0.2) (−0.2 σ)
Ω_m	0.523	$0.53^{+0.18}_{-0.16}$ (+0.1 σ)	$100\theta_D$	0.16061	$0.16064^{+0.00059}_{-0.00057}$ (−0.1 σ)	$\chi_{CamSpec}^2$	7045.3	7059.5 (ν : 14.0)
$\Omega_m h^2$	0.14072	$0.1405^{+0.0042}_{-0.0041}$ (+0.0 σ)	z_{eq}	3347	3343^{+99}_{-99} (+0.0 σ)	χ_{prior}^2	1.5	7.1 (ν : 5.5) (+0.0 σ)
$\Omega_m h^3$	0.0730	$0.073^{+0.014}_{-0.012}$ (−0.0 σ)	k_{eq}	0.010216	$0.01020^{+0.00030}_{-0.00030}$ (+0.0 σ)	χ_{CMB}^2	7461.8	7477.5 (ν : 15.3) (+1102.4 σ)
σ_8	0.7666	$0.765^{+0.038}_{-0.039}$ (−0.0 σ)	$100\theta_{eq}$	0.8241	$0.825^{+0.020}_{-0.019}$ (+0.0 σ)			
S_8	1.013	$1.01^{+0.12}_{-0.12}$ (+0.1 σ)	$100\theta_{s,eq}$	0.4549	$0.455^{+0.010}_{-0.0098}$ (−0.0 σ)			

Best-fit $\chi_{eff}^2 = 7463.28$; $\Delta\chi_{eff}^2 = -8.46$; $\bar{\chi}_{eff}^2 = 7484.59$; $\Delta\bar{\chi}_{eff}^2 = -6.95$; $R - 1 = 0.03021$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.53 (Δ -0.30) commander_dx12.v3.2.29: 20.98 (Δ -2.42) CamSpec like_10.7HM: 7045.30 (Δ -5.04)

16.6 base_omegak_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}} h^2$	$0.02258^{+0.00054}_{-0.00052} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.551^{+0.068}_{-0.066} \quad (-0.0\sigma)$	$H(0.15)$	$59^{+8}_{-7} \quad (+0.1\sigma)$
$\Omega_{\text{c}} h^2$	$0.1173^{+0.0045}_{-0.0045} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.651^{+0.028}_{-0.032} \quad (+0.1\sigma)$	$D_{\text{M}}(0.15)$	$814^{+100}_{-100} \quad (-0.1\sigma)$
$100\theta_{\text{MC}}$	$1.0414^{+0.0010}_{-0.0010} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$1.063^{+0.046}_{-0.052} \quad (+0.1\sigma)$	$H(0.38)$	$70.2^{+7.7}_{-6.6} \quad (+0.1\sigma)$
τ	$0.0532^{+0.011}_{-0.0088} \quad (+0.5\sigma)$	$r_{\text{drag}} h$	$78^{+10}_{-10} \quad (+0.1\sigma)$	$D_{\text{M}}(0.38)$	$1891^{+300}_{-200} \quad (-0.1\sigma)$
Ω_K	$-0.054^{+0.043}_{-0.048} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.68^{+0.16}_{-0.17} \quad (+0.0\sigma)$	$H(0.51)$	$77.6^{+7.2}_{-6.2} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.034^{+0.025}_{-0.022} \quad (+0.5\sigma)$	z_{re}	$< 8.34 \quad (+0.5\sigma)$	$D_{\text{M}}(0.51)$	$2418^{+300}_{-300} \quad (-0.1\sigma)$
n_{s}	$0.973^{+0.013}_{-0.013} \quad (+0.2\sigma)$	$10^9 A_{\text{s}}$	$2.078^{+0.051}_{-0.046} \quad (+0.5\sigma)$	$H(0.61)$	$83.7^{+6.9}_{-6.0} \quad (+0.1\sigma)$
y_{cal}	$1.0000^{+0.0050}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.868^{+0.026}_{-0.026} \quad (-0.2\sigma)$	$D_{\text{M}}(0.61)$	$2788^{+300}_{-300} \quad (-0.1\sigma)$
A_{100}^{PS}	$229^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1200^{+34}_{-34} \quad (-0.2\sigma)$	$H(2.33)$	$227.7^{+6.0}_{-5.7} \quad (+0.0\sigma)$
A_{143}^{PS}	$33^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5734^{+84}_{-84} \quad (-0.3\sigma)$	$D_{\text{M}}(2.33)$	$6444^{+430}_{-430} \quad (-0.1\sigma)$
A_{217}^{PS}	$104^{+30}_{-30} \quad (-1.0\sigma)$	D_{810}	$2527^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.537^{+0.047}_{-0.052} \quad (-0.0\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.695^{+0.040}_{-0.043} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.0} \quad (-0.8\sigma)$	D_{2000}	$232.5^{+4.3}_{-4.0} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.513^{+0.019}_{-0.022} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.68^{+0.27}_{-0.25}$	$n_{\text{s},0.002}$	$0.973^{+0.013}_{-0.013} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.599^{+0.045}_{-0.047} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_{P}	$0.24548^{+0.00023}_{-0.00021} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.493^{+0.012}_{-0.014} \quad (+0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$Y_{\text{P}}^{\text{BBN}}$	$0.24680^{+0.00024}_{-0.00021} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.554^{+0.045}_{-0.047} \quad (+0.2\sigma)$
A^{kSZ}	—	$10^5 \text{D}/\text{H}$	$2.548^{+0.096}_{-0.097} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.476^{+0.012}_{-0.012} \quad (+0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.37}_{-0.39}$	Age/Gyr	$15.6^{+1.2}_{-1.2} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.523^{+0.045}_{-0.047} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.95^{+0.34}_{-0.34}$	z_*	$1089.42^{+0.97}_{-0.93} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.259^{+0.025}_{-0.025} \quad (+0.2\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.99^{+0.98}_{-0.94} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.259^{+0.031}_{-0.029} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04154^{+0.00097}_{-0.00098} \quad (+0.2\sigma)$	f_{2000}^{143}	$26^{+7}_{-7} \quad (-0.2\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.921^{+0.089}_{-0.085} \quad (-0.1\sigma)$	f_{2000}^{217}	$104.1^{+4.6}_{-4.5} \quad (-0.4\sigma)$
c_{217}	$1.0008^{+0.0030}_{-0.0029} \quad (+4.2\sigma)$	z_{drag}	$1060.2^{+1.1}_{-1.0} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$29^{+5}_{-5} \quad (-0.4\sigma)$
H_0	$53^{+9}_{-8} \quad (+0.1\sigma)$	r_{drag}	$147.59^{+0.95}_{-0.91} \quad (-0.0\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.8) \quad (-0.3\sigma)$
Ω_{Λ}	$0.54^{+0.11}_{-0.12} \quad (+0.1\sigma)$	k_{D}	$0.1405^{+0.0010}_{-0.0010} \quad (+0.1\sigma)$	χ_{lowl}^2	$21.27 \quad (\nu: 0.2) \quad (-0.2\sigma)$
Ω_{m}	$0.52^{+0.17}_{-0.16} \quad (-0.1\sigma)$	$100\theta_{\text{D}}$	$0.16064^{+0.00057}_{-0.00057} \quad (-0.1\sigma)$	χ_{CamSpec}^2	$7059.4 \quad (\nu: 13.9)$
$\Omega_{\text{m}} h^2$	$0.1405^{+0.0041}_{-0.0041} \quad (-0.0\sigma)$	z_{eq}	$3342^{+99}_{-99} \quad (-0.0\sigma)$	χ_{prior}^2	$7.1 \quad (\nu: 5.4) \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.074^{+0.014}_{-0.012} \quad (+0.1\sigma)$	k_{eq}	$0.01020^{+0.00030}_{-0.00030} \quad (-0.0\sigma)$	χ_{CMB}^2	$7477.1 \quad (\nu: 14.7) \quad (+1102.3\sigma)$
σ_8	$0.769^{+0.034}_{-0.036} \quad (+0.2\sigma)$	$100\theta_{\text{eq}}$	$0.825^{+0.020}_{-0.019} \quad (+0.0\sigma)$		
S_8	$1.01^{+0.12}_{-0.12} \quad (-0.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.456^{+0.010}_{-0.0097} \quad (+0.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 7484.13; \Delta \bar{\chi}_{\text{eff}}^2 = -7.13; R - 1 = 0.03650$$

16.7 base_omegak_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022535	$0.02254^{+0.00036}_{-0.00034} \quad (-0.1\sigma)$	σ_8	0.7817	$0.777^{+0.030}_{-0.031} \quad (+0.6\sigma)$	$100\theta_{\text{eq}}$	0.8226	$0.822^{+0.012}_{-0.013} \quad (-0.3\sigma)$
$\Omega_c h^2$	0.11783	$0.1179^{+0.0030}_{-0.0028} \quad (+0.3\sigma)$	S_8	0.943	$0.95^{+0.10}_{-0.10} \quad (-0.9\sigma)$	$100\theta_{\text{s,eq}}$	0.4541	$0.4540^{+0.0063}_{-0.0065} \quad (-0.3\sigma)$
$100\theta_{\text{MC}}$	1.04110	$1.04111^{+0.00064}_{-0.00061} \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.516	$0.522^{+0.056}_{-0.056} \quad (-0.9\sigma)$	$H(0.15)$	62.7	$62^{+8}_{-7} \quad (+0.9\sigma)$
τ	0.0509	$0.048^{+0.016}_{-0.017} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6353	$0.637^{+0.026}_{-0.027} \quad (-0.8\sigma)$	$D_{\text{M}}(0.15)$	754	$766^{+100}_{-90} \quad (-0.9\sigma)$
Ω_K	-0.0320	$-0.037^{+0.032}_{-0.034} \quad (+0.8\sigma)$	$\sigma_8/h^{0.5}$	1.0367	$1.039^{+0.043}_{-0.044} \quad (-0.9\sigma)$	$H(0.38)$	73.7	$73.2^{+7.0}_{-6.2} \quad (+0.9\sigma)$
$\ln(10^{10} A_s)$	3.0304	$3.025^{+0.035}_{-0.035} \quad (-0.0\sigma)$	$r_{\text{drag}} h$	83.8	$83^{+10}_{-10} \quad (+0.9\sigma)$	$D_{\text{M}}(0.38)$	1769	$1793^{+200}_{-200} \quad (-0.9\sigma)$
n_s	0.9719	$0.9713^{+0.0094}_{-0.0092} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.591	$2.60^{+0.13}_{-0.14} \quad (-0.9\sigma)$	$H(0.51)$	80.9	$80.4^{+6.6}_{-5.8} \quad (+0.9\sigma)$
y_{cal}	0.99975	$1.0000^{+0.0049}_{-0.0050} \quad (-0.0\sigma)$	z_{re}	7.15	$6.8^{+1.7}_{-1.9} \quad (+0.0\sigma)$	$D_{\text{M}}(0.51)$	2272	$2301^{+250}_{-240} \quad (-0.9\sigma)$
A_{100}^{PS}	225.5	$230^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_s$	2.070	$2.060^{+0.072}_{-0.072} \quad (-0.0\sigma)$	$H(0.61)$	86.9	$86.4^{+6.3}_{-5.6} \quad (+0.9\sigma)$
A_{143}^{PS}	42.6	$34^{+20}_{-20} \quad (-0.9\sigma)$	$10^9 A_s e^{-2\tau}$	1.8700	$1.871^{+0.024}_{-0.023} \quad (+0.0\sigma)$	$D_{\text{M}}(0.61)$	2629	$2660^{+280}_{-270} \quad (-0.9\sigma)$
A_{217}^{PS}	106.3	$104^{+20}_{-30} \quad (-1.0\sigma)$	D_{40}	1204.1	$1205^{+28}_{-28} \quad (+0.1\sigma)$	$H(2.33)$	229.98	$229.8^{+5.1}_{-4.5} \quad (+0.7\sigma)$
A_{217}^{CIB}	38.8	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	5727	$5733^{+76}_{-77} \quad (-0.3\sigma)$	$D_{\text{M}}(2.33)$	6232	$6269^{+370}_{-370} \quad (-0.9\sigma)$
A_{143}^{tSZ}	5.71	$4.1^{+3.6}_{-4.1} \quad (-0.8\sigma)$	D_{810}	2529.7	$2529^{+27}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	0.5111	$0.515^{+0.042}_{-0.046} \quad (-0.9\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.718	$0.68^{+0.26}_{-0.27}$	D_{1420}	814.9	$814.6^{+9.4}_{-9.5} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	0.7114	$0.706^{+0.036}_{-0.036} \quad (+0.7\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.74	—	D_{2000}	232.05	$231.9^{+3.4}_{-3.4} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	0.5031	$0.503^{+0.019}_{-0.021} \quad (-0.9\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.73	—	$n_{\text{s},0.002}$	0.9719	$0.9713^{+0.0094}_{-0.0092} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	0.6188	$0.613^{+0.039}_{-0.043} \quad (+0.7\sigma)$
A^{kSZ}	0.9	—	Y_{P}	0.245457	$0.24546^{+0.00014}_{-0.00013} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4890	$0.488^{+0.012}_{-0.013} \quad (-0.4\sigma)$
A_{100}^{dust}	1.005	$1.02^{+0.38}_{-0.38}$	$Y_{\text{P}}^{\text{BBN}}$	0.246784	$0.24678^{+0.00014}_{-0.00014} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.5743	$0.569^{+0.040}_{-0.043} \quad (+0.8\sigma)$
A_{143}^{dust}	0.959	$0.95^{+0.34}_{-0.34}$	$10^5 \text{D}/\text{H}$	2.556	$2.556^{+0.064}_{-0.065} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	0.4757	$0.4739^{+0.0097}_{-0.011} \quad (+0.1\sigma)$
A_{217}^{dust}	0.981	$0.98^{+0.20}_{-0.20}$	Age/Gyr	15.00	$15.1^{+1.0}_{-0.97} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	0.5435	$0.538^{+0.040}_{-0.043} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.002	$1.01^{+0.31}_{-0.32}$	z_*	1089.53	$1089.53^{+0.62}_{-0.63} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2710	$0.268^{+0.022}_{-0.024} \quad (+0.8\sigma)$
c_{100}	0.99779	$0.9976^{+0.0021}_{-0.0020} \quad (-3.3\sigma)$	r_*	144.87	$144.85^{+0.64}_{-0.65} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	0.2727	$0.269^{+0.028}_{-0.027} \quad (+0.8\sigma)$
c_{217}	1.00089	$1.0008^{+0.0031}_{-0.0030} \quad (+4.3\sigma)$	$100\theta_*$	1.04127	$1.04127^{+0.00063}_{-0.00060} \quad (-0.3\sigma)$	f_{2000}^{143}	26.9	$27^{+6}_{-6} \quad (-0.1\sigma)$
c_{TE}	0.9927	$0.992^{+0.010}_{-0.010}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.913	$13.911^{+0.058}_{-0.060} \quad (-0.3\sigma)$	f_{2000}^{217}	104.33	$104.6^{+4.1}_{-4.0} \quad (-0.1\sigma)$
c_{EE}	0.9899	$0.9897^{+0.0095}_{-0.0098}$	z_{drag}	1060.16	$1060.17^{+0.72}_{-0.69} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	29.52	$30^{+4}_{-4} \quad (-0.1\sigma)$
H_0	56.9	$56^{+8}_{-8} \quad (+0.9\sigma)$	r_{drag}	147.49	$147.47^{+0.63}_{-0.65} \quad (-0.3\sigma)$	χ_{simall}^2	395.63	$396.7 \quad (\nu: 1.4) \quad (-0.0\sigma)$
Ω_{Λ}	0.596	$0.582^{+0.090}_{-0.095} \quad (+0.8\sigma)$	k_{D}	0.14058	$0.14059^{+0.00069}_{-0.00068} \quad (+0.3\sigma)$	χ_{lowl}^2	21.16	$21.40 \quad (\nu: 0.2) \quad (+0.0\sigma)$
Ω_{m}	0.436	$0.45^{+0.13}_{-0.12} \quad (-0.8\sigma)$	$100\theta_{\text{D}}$	0.160629	$0.16063^{+0.00040}_{-0.00041} \quad (-0.1\sigma)$	χ_{CamSpec}^2	11495.3	$11511.3 \quad (\nu: 15.1)$
$\Omega_{\text{m}} h^2$	0.14101	$0.1411^{+0.0028}_{-0.0027} \quad (+0.3\sigma)$	z_{eq}	3354	$3356^{+67}_{-64} \quad (+0.3\sigma)$	χ_{prior}^2	1.9	$7.7 \quad (\nu: 5.4) \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^3$	0.0802	$0.079^{+0.012}_{-0.011} \quad (+0.9\sigma)$	k_{eq}	0.010238	$0.01024^{+0.00020}_{-0.00019} \quad (+0.3\sigma)$	χ_{CMB}^2	11912.1	$11929.5 \quad (\nu: 16.8) \quad (+1882.3\sigma)$

Best-fit $\chi_{\text{eff}}^2 = 11914.02$; $\Delta\chi_{\text{eff}}^2 = -6.75$; $\bar{\chi}_{\text{eff}}^2 = 11937.16$; $\Delta\bar{\chi}_{\text{eff}}^2 = -5.30$; $R - 1 = 0.03285$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.63 (Δ -0.27) commander_dx12.v3.2.29: 21.16 (Δ -1.84) CamSpec like_10.7HM.1400.unified: 11495.33 (Δ -4.32)

16.8 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02253^{+0.00035}_{-0.00034} \quad (-0.1\sigma)$	σ_8	$0.782^{+0.025}_{-0.026} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.012}_{-0.013} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1179^{+0.0029}_{-0.0028} \quad (+0.2\sigma)$	S_8	$0.946^{+0.098}_{-0.098} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4540^{+0.0063}_{-0.0064} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04111^{+0.00064}_{-0.00061} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.518^{+0.054}_{-0.054} \quad (-1.0\sigma)$	$H(0.15)$	$63^{+7}_{-7} \quad (+1.1\sigma)$
τ	$0.0524^{+0.010}_{-0.0083} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.636^{+0.027}_{-0.027} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$757^{+90}_{-90} \quad (-1.0\sigma)$
Ω_K	$-0.034^{+0.030}_{-0.031} \quad (+0.9\sigma)$	$\sigma_8/h^{0.5}$	$1.038^{+0.043}_{-0.044} \quad (-0.9\sigma)$	$H(0.38)$	$73.8^{+6.6}_{-6.2} \quad (+1.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.034^{+0.024}_{-0.021} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$84^{+10}_{-10} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1773^{+190}_{-190} \quad (-1.0\sigma)$
n_{s}	$0.9715^{+0.0093}_{-0.0090} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.60^{+0.13}_{-0.14} \quad (-1.0\sigma)$	$H(0.51)$	$81.0^{+6.2}_{-5.8} \quad (+1.1\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0050} \quad (-0.0\sigma)$	z_{re}	$< 8.30 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2277^{+230}_{-230} \quad (-1.0\sigma)$
A_{100}^{PS}	$230^{+50}_{-50} \quad (-0.7\sigma)$	10^9A_{s}	$2.077^{+0.051}_{-0.044} \quad (+0.4\sigma)$	$H(0.61)$	$86.9^{+6.0}_{-5.6} \quad (+1.1\sigma)$
A_{143}^{PS}	$34^{+20}_{-20} \quad (-0.9\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.871^{+0.024}_{-0.023} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2634^{+250}_{-260} \quad (-1.0\sigma)$
A_{217}^{PS}	$104^{+20}_{-30} \quad (-1.0\sigma)$	D_{40}	$1206^{+28}_{-28} \quad (+0.2\sigma)$	$H(2.33)$	$230.1^{+4.8}_{-4.6} \quad (+0.8\sigma)$
A_{217}^{CIB}	$37^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5731^{+75}_{-77} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$6236^{+340}_{-370} \quad (-1.0\sigma)$
A_{143}^{tSZ}	$4.1^{+3.6}_{-4.1} \quad (-0.8\sigma)$	D_{810}	$2529^{+27}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.512^{+0.041}_{-0.045} \quad (-1.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.26}_{-0.27}$	D_{1420}	$814.7^{+9.5}_{-9.5} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.712^{+0.031}_{-0.032} \quad (+0.9\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$231.9^{+3.4}_{-3.4} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.503^{+0.020}_{-0.022} \quad (-0.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9715^{+0.0093}_{-0.0090} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.619^{+0.036}_{-0.036} \quad (+1.0\sigma)$
A^{kSZ}	—	Y_{P}	$0.24546^{+0.00014}_{-0.00013} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.489^{+0.012}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{dust}	$1.02^{+0.39}_{-0.37}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00014}_{-0.00013} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.574^{+0.037}_{-0.036} \quad (+1.0\sigma)$
A_{143}^{dust}	$0.94^{+0.34}_{-0.34}$	$10^5\mathrm{D}/\mathrm{H}$	$2.556^{+0.063}_{-0.064} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4755^{+0.0088}_{-0.0093} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$\mathrm{Age}/\mathrm{Gyr}$	$15.01^{+0.91}_{-0.95} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.544^{+0.037}_{-0.036} \quad (+1.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.01^{+0.31}_{-0.31}$	z_*	$1089.53^{+0.61}_{-0.61} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.271^{+0.021}_{-0.020} \quad (+1.0\sigma)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	r_*	$144.86^{+0.64}_{-0.64} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.273^{+0.026}_{-0.024} \quad (+1.0\sigma)$
c_{217}	$1.0008^{+0.0031}_{-0.0030} \quad (+4.3\sigma)$	$100\theta_*$	$1.04128^{+0.00063}_{-0.00060} \quad (-0.3\sigma)$	f_{2000}^{143}	$27^{+6}_{-6} \quad (-0.0\sigma)$
c_{TE}	$0.992^{+0.010}_{-0.010}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.912^{+0.059}_{-0.061} \quad (-0.2\sigma)$	f_{2000}^{217}	$104.6^{+4.1}_{-4.0} \quad (-0.1\sigma)$
c_{EE}	$0.9898^{+0.0096}_{-0.0097}$	z_{drag}	$1060.16^{+0.73}_{-0.68} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$30^{+4}_{-4} \quad (-0.1\sigma)$
H_0	$57^{+8}_{-7} \quad (+1.1\sigma)$	r_{drag}	$147.48^{+0.64}_{-0.64} \quad (-0.3\sigma)$	χ_{small}^2	$396.2 \quad (\nu: 0.6) \quad (-0.3\sigma)$
Ω_{Λ}	$0.592^{+0.083}_{-0.087} \quad (+1.0\sigma)$	k_{D}	$0.14058^{+0.00067}_{-0.00071} \quad (+0.3\sigma)$	χ_{lowl}^2	$21.43 \quad (\nu: 0.2) \quad (+0.1\sigma)$
Ω_{m}	$0.44^{+0.12}_{-0.11} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16064^{+0.00040}_{-0.00040} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11511.3 \quad (\nu: 15.3)$
$\Omega_{\mathrm{m}}h^2$	$0.1410^{+0.0027}_{-0.0027} \quad (+0.3\sigma)$	z_{eq}	$3355^{+66}_{-64} \quad (+0.3\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.5) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.080^{+0.012}_{-0.011} \quad (+1.0\sigma)$	k_{eq}	$0.01024^{+0.00020}_{-0.00020} \quad (+0.3\sigma)$	χ_{CMB}^2	$11929.0 \quad (\nu: 16.2) \quad (+1882.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11936.68; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -5.50; R - 1 = 0.03528$$

16.9 base_omegak_plikHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022179	$0.02216^{+0.00045}_{-0.00044}$ (-1.5σ)	$\sigma_8/h^{0.5}$	0.9841	$0.984^{+0.025}_{-0.025}$ (-3.2σ)	$D_{\mathrm{M}}(0.38)$	1524.4	1525^{+27}_{-27} (-3.0σ)
$\Omega_{\mathrm{c}}h^2$	0.11988	$0.1198^{+0.0043}_{-0.0042}$ $(+1.1\sigma)$	$r_{\mathrm{drag}}h$	99.95	$99.9^{+2.0}_{-2.0}$ $(+3.6\sigma)$	$H(0.51)$	89.99	$89.9^{+1.4}_{-1.4}$ $(+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	1.04090	$1.04087^{+0.00094}_{-0.00093}$ (-0.8σ)	$\langle d^2 \rangle^{1/2}$	2.431	$2.431^{+0.058}_{-0.057}$ (-3.0σ)	$D_{\mathrm{M}}(0.51)$	1974.9	1976^{+34}_{-33} (-3.0σ)
τ	0.0527	$0.053^{+0.016}_{-0.015}$ $(+0.5\sigma)$	z_{re}	7.56	$7.6^{+1.6}_{-1.6}$ $(+0.8\sigma)$	$H(0.61)$	95.61	$95.6^{+1.4}_{-1.4}$ $(+3.7\sigma)$
Ω_K	0.0012	$0.0012^{+0.0051}_{-0.0050}$ $(+2.4\sigma)$	$10^9 A_{\mathrm{s}}$	2.091	$2.091^{+0.070}_{-0.066}$ $(+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	2298.2	2299^{+38}_{-37} (-3.1σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0401	$3.040^{+0.033}_{-0.032}$ $(+0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8815	$1.881^{+0.027}_{-0.027}$ $(+0.7\sigma)$	$H(2.33)$	236.58	$236.5^{+3.6}_{-3.5}$ $(+3.0\sigma)$
n_{s}	0.9651	$0.965^{+0.012}_{-0.012}$ (-1.1σ)	D_{40}	1228.2	1229^{+32}_{-31} $(+1.5\sigma)$	$D_{\mathrm{M}}(2.33)$	5748	5751^{+75}_{-75} (-3.2σ)
y_{cal}	1.00056	$1.0006^{+0.0050}_{-0.0049}$ $(+0.2\sigma)$	D_{220}	5714	5717^{+82}_{-78} (-0.7σ)	$f\sigma_8(0.15)$	0.4559	$0.456^{+0.017}_{-0.016}$ (-3.3σ)
A_{217}^{CIB}	49.5	48^{+10}_{-10} $(+0.4\sigma)$	D_{810}	2538.1	2537^{+27}_{-27} $(+0.6\sigma)$	$\sigma_8(0.15)$	0.7492	$0.749^{+0.019}_{-0.018}$ $(+2.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.19	—	D_{1420}	815.8	$815^{+10}_{-9.9}$ $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4745	$0.474^{+0.015}_{-0.014}$ (-3.7σ)
A_{143}^{tSZ}	7.11	$5.1^{+3.8}_{-3.9}$ (-0.3σ)	D_{2000}	230.09	$229.7^{+3.7}_{-3.6}$ (-1.3σ)	$\sigma_8(0.38)$	0.6643	$0.664^{+0.016}_{-0.016}$ $(+2.8\sigma)$
A_{100}^{PS}	256	263^{+60}_{-60} $(+0.5\sigma)$	$n_{\mathrm{s},0.002}$	0.9651	$0.965^{+0.012}_{-0.012}$ (-1.1σ)	$f\sigma_8(0.51)$	0.4733	$0.473^{+0.014}_{-0.013}$ (-2.6σ)
A_{143}^{PS}	48.0	49^{+20}_{-20} $(+0.9\sigma)$	Y_{P}	0.245317	$0.24530^{+0.00018}_{-0.00021}$ (-1.5σ)	$\sigma_8(0.51)$	0.6217	$0.621^{+0.015}_{-0.015}$ $(+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	43.7	44^{+20}_{-20} $(+0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246644	$0.24663^{+0.00018}_{-0.00021}$ (-1.5σ)	$f\sigma_8(0.61)$	0.4684	$0.468^{+0.013}_{-0.012}$ (-0.7σ)
A_{217}^{PS}	118.1	115^{+20}_{-20} $(+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.622	$2.626^{+0.085}_{-0.084}$ $(+1.5\sigma)$	$\sigma_8(0.61)$	0.5916	$0.591^{+0.015}_{-0.014}$ $(+2.9\sigma)$
A^{kSZ}	0.0	—	Age/Gyr	13.757	$13.76^{+0.19}_{-0.19}$ (-3.1σ)	$f\sigma_8(2.33)$	0.2983	$0.2982^{+0.0072}_{-0.0068}$ $(+3.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.90	$9.0^{+3.6}_{-3.7}$ (-0.0σ)	z_*	1090.15	$1090.17^{+0.85}_{-0.83}$ $(+1.5\sigma)$	$\sigma_8(2.33)$	0.3078	$0.3076^{+0.0080}_{-0.0075}$ $(+3.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.77	$10.7^{+3.5}_{-3.5}$ $(+0.1\sigma)$	r_*	144.61	$144.65^{+0.94}_{-0.95}$ (-0.7σ)	f_{2000}^{143}	30.7	31^{+6}_{-6} $(+1.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.3	$18.3^{+6.4}_{-6.5}$ $(+0.1\sigma)$	$100\theta_*$	1.04110	$1.04108^{+0.00093}_{-0.00090}$ (-0.7σ)	$f_{2000}^{143 \times 217}$	33.38	33^{+4}_{-4} $(+1.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.5	93^{+10}_{-10} (-0.0σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.890	$13.894^{+0.086}_{-0.088}$ (-0.6σ)	f_{2000}^{217}	107.87	$108.1^{+3.8}_{-3.8}$ $(+1.5\sigma)$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (-0.0σ)	z_{drag}	1059.47	$1059.43^{+0.92}_{-0.91}$ (-1.4σ)	χ_{simall}^2	395.85	$397.0 (\nu: 1.4)$ $(+0.1\sigma)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	r_{drag}	147.34	$147.39^{+0.93}_{-0.93}$ (-0.5σ)	χ_{lowl}^2	23.34	$23.6 (\nu: 1.1)$ $(+3.1\sigma)$
H_0	67.84	$67.8^{+1.4}_{-1.3}$ $(+3.6\sigma)$	k_{D}	0.14046	$0.14039^{+0.00099}_{-0.00099}$ (-0.1σ)	χ_{plik}^2	759.6	$772.4 (\nu: 14.7)$ $(+1.1\sigma)$
Ω_{Λ}	0.6887	$0.689^{+0.015}_{-0.015}$ $(+2.5\sigma)$	$100\theta_{\mathrm{D}}$	0.16102	$0.16106^{+0.00052}_{-0.00052}$ $(+1.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.011	$0.056 (\nu: 0.0)$
Ω_{m}	0.3101	$0.310^{+0.015}_{-0.014}$ (-2.5σ)	z_{eq}	3395	3392^{+96}_{-94} $(+1.0\sigma)$	χ_{MGS}^2	1.41	$1.48 (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^2$	0.14270	$0.1426^{+0.0040}_{-0.0039}$ $(+1.0\sigma)$	k_{eq}	0.010361	$0.01035^{+0.00029}_{-0.00029}$ $(+1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.66	$4.6 (\nu: 1.7)$
$\Omega_{\mathrm{m}}h^3$	0.09681	$0.0967^{+0.0036}_{-0.0035}$ $(+3.5\sigma)$	$100\theta_{\mathrm{eq}}$	0.8141	$0.815^{+0.018}_{-0.018}$ (-1.0σ)	χ_{prior}^2	1.5	$7.3 (\nu: 6.9)$ $(+0.1\sigma)$
σ_8	0.8106	$0.810^{+0.020}_{-0.020}$ $(+2.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4499	$0.4502^{+0.0093}_{-0.0092}$ (-1.0σ)	χ_{BAO}^2	5.08	$6.1 (\nu: 1.3)$
S_8	0.8241	$0.824^{+0.032}_{-0.032}$ (-3.0σ)	$H(0.15)$	73.13	$73.1^{+1.3}_{-1.3}$ $(+3.6\sigma)$	χ_{CMB}^2	1178.8	$1192.9 (\nu: 15.0)$ $(+1.4\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4514	$0.451^{+0.018}_{-0.017}$ (-3.0σ)	$D_{\mathrm{M}}(0.15)$	639.1	639^{+12}_{-12} (-2.9σ)			
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6049	$0.605^{+0.019}_{-0.018}$ (-3.0σ)	$H(0.38)$	83.26	$83.2^{+1.3}_{-1.3}$ $(+3.7\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 1185.37$; $\Delta\chi_{\mathrm{eff}}^2 = -0.38$; $\bar{\chi}_{\mathrm{eff}}^2 = 1206.26$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.24$; $R - 1 = 0.01197$

χ_{eff}^2 : BAO - 6DF: 0.01 (Δ -0.01) MGS: 1.41 (Δ 0.13) DR12BAO: 3.66 (Δ -0.52) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.85 (Δ -0.04) commander_dx12_v3_2_29: 23.34 (Δ 0.52) plik_rd12_HM_v22.TT: 759.63 (Δ -0.47)

16.10 base_omegak_plikHM_TT_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022209	$0.02217^{+0.00045}_{-0.00044} \quad (-1.5\sigma)$	$\sigma_8/h^{0.5}$	0.9849	$0.986^{+0.019}_{-0.019} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1525.9	$1526^{+27}_{-27} \quad (-3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11978	$0.1198^{+0.0039}_{-0.0038} \quad (+1.1\sigma)$	$r_{\mathrm{drag}}h$	99.84	$99.8^{+1.9}_{-1.8} \quad (+3.6\sigma)$	$H(0.51)$	89.92	$89.9^{+1.4}_{-1.4} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	1.04088	$1.04086^{+0.00094}_{-0.00090} \quad (-0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4347	$2.436^{+0.044}_{-0.043} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.51)$	1976.7	$1977^{+33}_{-33} \quad (-3.0\sigma)$
τ	0.0539	$0.054^{+0.015}_{-0.014} \quad (+0.6\sigma)$	z_{re}	7.68	$7.7^{+1.4}_{-1.5} \quad (+0.9\sigma)$	$H(0.61)$	95.54	$95.5^{+1.4}_{-1.4} \quad (+3.7\sigma)$
Ω_K	0.0010	$0.0011^{+0.0050}_{-0.0050} \quad (+2.4\sigma)$	$10^9 A_{\mathrm{s}}$	2.095	$2.097^{+0.061}_{-0.057} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	2300.3	$2301^{+39}_{-38} \quad (-3.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0422	$3.043^{+0.029}_{-0.027} \quad (+0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8811	$1.882^{+0.025}_{-0.025} \quad (+0.8\sigma)$	$H(2.33)$	236.49	$236.5^{+3.4}_{-3.3} \quad (+3.0\sigma)$
n_{s}	0.9649	$0.964^{+0.011}_{-0.011} \quad (-1.2\sigma)$	D_{40}	1229.1	$1231^{+30}_{-29} \quad (+1.6\sigma)$	$D_{\mathrm{M}}(2.33)$	5752	$5752^{+75}_{-75} \quad (-3.2\sigma)$
y_{cal}	1.00045	$1.0007^{+0.0049}_{-0.0048} \quad (+0.3\sigma)$	D_{220}	5718	$5721^{+82}_{-77} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	0.4564	$0.457^{+0.013}_{-0.013} \quad (-3.3\sigma)$
A_{217}^{CIB}	49.4	$48^{+10}_{-10} \quad (+0.4\sigma)$	D_{810}	2537.5	$2538^{+27}_{-26} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	0.7493	$0.750^{+0.015}_{-0.015} \quad (+2.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.12	—	D_{1420}	815.6	$815^{+10}_{-9.9} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	0.4749	$0.475^{+0.011}_{-0.011} \quad (-3.6\sigma)$
A_{143}^{tSZ}	7.12	$5.1^{+3.8}_{-3.9} \quad (-0.3\sigma)$	D_{2000}	230.07	$229.8^{+3.7}_{-3.5} \quad (-1.3\sigma)$	$\sigma_8(0.38)$	0.6643	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{100}^{PS}	257	$263^{+60}_{-60} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	0.9649	$0.964^{+0.011}_{-0.011} \quad (-1.2\sigma)$	$f\sigma_8(0.51)$	0.4736	$0.474^{+0.010}_{-0.010} \quad (-2.5\sigma)$
A_{143}^{PS}	46.7	$49^{+10}_{-20} \quad (+0.9\sigma)$	Y_{P}	0.245329	$0.24531^{+0.00018}_{-0.00021} \quad (-1.5\sigma)$	$\sigma_8(0.51)$	0.6217	$0.622^{+0.013}_{-0.013} \quad (+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	41.4	$44^{+20}_{-20} \quad (+0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246656	$0.24663^{+0.00018}_{-0.00021} \quad (-1.5\sigma)$	$f\sigma_8(0.61)$	0.4687	$0.4690^{+0.0097}_{-0.0096} \quad (-0.6\sigma)$
A_{217}^{PS}	117.7	$115^{+20}_{-20} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.616	$2.625^{+0.085}_{-0.082} \quad (+1.5\sigma)$	$\sigma_8(0.61)$	0.5916	$0.592^{+0.013}_{-0.012} \quad (+2.9\sigma)$
A^{kSZ}	0.0	—	Age/Gyr	13.766	$13.77^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	0.2983	$0.2985^{+0.0063}_{-0.0060} \quad (+3.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	z_*	1090.11	$1090.17^{+0.81}_{-0.79} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	0.3077	$0.3079^{+0.0072}_{-0.0070} \quad (+3.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.84	$10.7^{+3.5}_{-3.4} \quad (+0.1\sigma)$	r_*	144.61	$144.63^{+0.85}_{-0.87} \quad (-0.7\sigma)$	f_{2000}^{143}	30.6	$31^{+6}_{-6} \quad (+1.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.3	$18.3^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$100\theta_*$	1.04107	$1.04107^{+0.00092}_{-0.00088} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	33.17	$33^{+4}_{-4} \quad (+1.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.7	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.891	$13.893^{+0.078}_{-0.080} \quad (-0.7\sigma)$	f_{2000}^{217}	107.81	$108.1^{+3.8}_{-3.7} \quad (+1.5\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	1059.55	$1059.45^{+0.90}_{-0.89} \quad (-1.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.88	$9.34 \quad (\nu: 0.3)$
c_{217}	0.99825	$0.9982^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	r_{drag}	147.33	$147.36^{+0.84}_{-0.86} \quad (-0.5\sigma)$	χ_{simall}^2	396	$295 \quad (\nu: 13816.6) \quad (-59.5\sigma)$
H_0	67.77	$67.7^{+1.3}_{-1.3} \quad (+3.6\sigma)$	k_{D}	0.14049	$0.14042^{+0.00093}_{-0.00093} \quad (-0.1\sigma)$	χ_{lowl}^2	23	$125 \quad (\nu: 13829.3) \quad (+149.1\sigma)$
Ω_{Λ}	0.6884	$0.688^{+0.013}_{-0.013} \quad (+2.5\sigma)$	$100\theta_{\mathrm{D}}$	0.16098	$0.16104^{+0.00053}_{-0.00052} \quad (+1.3\sigma)$	χ_{plik}^2	759.4	$771.7 \quad (\nu: 13.5) \quad (+0.9\sigma)$
Ω_{m}	0.3106	$0.311^{+0.013}_{-0.012} \quad (-2.5\sigma)$	z_{eq}	3393	$3393^{+88}_{-87} \quad (+1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.02	$0.43 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^2$	0.14264	$0.1426^{+0.0037}_{-0.0036} \quad (+1.0\sigma)$	k_{eq}	0.010356	$0.01036^{+0.00027}_{-0.00026} \quad (+1.0\sigma)$	χ_{MGS}^2	1.34	$1.04 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}}h^3$	0.09666	$0.0966^{+0.0036}_{-0.0034} \quad (+3.5\sigma)$	$100\theta_{\mathrm{eq}}$	0.8144	$0.814^{+0.017}_{-0.016} \quad (-1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.85	$4.7 \quad (\nu: 1.8)$
σ_8	0.8108	$0.811^{+0.017}_{-0.016} \quad (+2.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4501	$0.4501^{+0.0085}_{-0.0084} \quad (-1.0\sigma)$	χ_{prior}^2	1.4	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
S_8	0.8249	$0.826^{+0.025}_{-0.025} \quad (-3.0\sigma)$	$H(0.15)$	73.06	$73.0^{+1.3}_{-1.3} \quad (+3.6\sigma)$	χ_{CMB}^2	1187.7	$1201.7 \quad (\nu: 15.2) \quad (+3.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4518	$0.452^{+0.014}_{-0.014} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	639.7	$640^{+12}_{-12} \quad (-2.9\sigma)$	χ_{BAO}^2	5.21	$6.1 \quad (\nu: 1.3)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6052	$0.606^{+0.014}_{-0.014} \quad (-2.9\sigma)$	$H(0.38)$	83.19	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 1194.36$; $\Delta\chi_{\mathrm{eff}}^2 = -0.33$; $\bar{\chi}_{\mathrm{eff}}^2 = 1215.14$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.41$; $R - 1 = 0.01348$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.34 (Δ 0.13) DR12BAO: 3.85 (Δ -0.52) CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 8.88 (Δ 0.00) simall_100x143_offlike5.EE.Aplanck
396.03 (Δ -0.07) commander_dx12_v3.2_29: 23.43 (Δ 0.47) plik_rd12_HM.v22.TT: 759.40 (Δ -0.40)

16.11 base_omegak_plikHM_TT_lowl_lowE_BAO_post_lensing_Pantheon18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02218^{+0.00045}_{-0.00044} \quad (-1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.019}_{-0.019} \quad (-3.2\sigma)$	$D_M(0.38)$	$1525^{+26}_{-26} \quad (-3.0\sigma)$
$\Omega_c h^2$	$0.1197^{+0.0039}_{-0.0038} \quad (+1.0\sigma)$	$r_{\text{drag}} h$	$99.96^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-1.3} \quad (+3.7\sigma)$
$100\theta_{\text{MC}}$	$1.04088^{+0.00094}_{-0.00090} \quad (-0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.043}_{-0.043} \quad (-3.0\sigma)$	$D_M(0.51)$	$1976^{+33}_{-33} \quad (-3.0\sigma)$
τ	$0.054^{+0.015}_{-0.014} \quad (+0.7\sigma)$	z_{re}	$7.7^{+1.4}_{-1.5} \quad (+1.0\sigma)$	$H(0.61)$	$95.6^{+1.4}_{-1.4} \quad (+3.7\sigma)$
Ω_K	$0.0011^{+0.0051}_{-0.0050} \quad (+2.4\sigma)$	$10^9 A_s$	$2.098^{+0.061}_{-0.057} \quad (+1.0\sigma)$	$D_M(0.61)$	$2299^{+38}_{-37} \quad (-3.1\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.029}_{-0.028} \quad (+1.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.882^{+0.025}_{-0.024} \quad (+0.8\sigma)$	$H(2.33)$	$236.4^{+3.4}_{-3.2} \quad (+2.9\sigma)$
n_s	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	D_{40}	$1230^{+30}_{-28} \quad (+1.6\sigma)$	$D_M(2.33)$	$5751^{+74}_{-75} \quad (-3.2\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0048} \quad (+0.3\sigma)$	D_{220}	$5722^{+81}_{-77} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-3.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.4\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.015}_{-0.015} \quad (+2.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$816^{+10}_{-9.9} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-3.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (-0.3\sigma)$	D_{2000}	$229.9^{+3.7}_{-3.5} \quad (-1.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (+0.5\sigma)$	$n_{\text{s},0.002}$	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.010}_{-0.010} \quad (-2.5\sigma)$
A_{143}^{PS}	$49^{+10}_{-20} \quad (+0.9\sigma)$	Y_{P}	$0.24531^{+0.00018}_{-0.00021} \quad (-1.4\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.013}_{-0.013} \quad (+2.9\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (+0.4\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00018}_{-0.00021} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.4686^{+0.0096}_{-0.0095} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	$10^5 \text{D}/\text{H}$	$2.622^{+0.085}_{-0.083} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.013}_{-0.012} \quad (+2.9\sigma)$
A^{kSZ}	—	Age/Gyr	$13.77^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0063}_{-0.0061} \quad (+3.0\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	z_*	$1090.14^{+0.80}_{-0.78} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3080^{+0.0072}_{-0.0070} \quad (+3.2\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.4} \quad (+0.1\sigma)$	r_*	$144.66^{+0.84}_{-0.86} \quad (-0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.3\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$100\theta_*$	$1.04109^{+0.00092}_{-0.00088} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.5\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.895^{+0.077}_{-0.079} \quad (-0.6\sigma)$	f_{2000}^{217}	$108.1^{+3.8}_{-3.7} \quad (+1.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.47^{+0.92}_{-0.91} \quad (-1.3\sigma)$	χ_{lensing}^2	$9.34 \quad (\nu: 0.3)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.39^{+0.83}_{-0.85} \quad (-0.5\sigma)$	χ_{small}^2	$294 \quad (\nu: 13920.3) \quad (-60.1\sigma)$
H_0	$67.8^{+1.3}_{-1.3} \quad (+3.6\sigma)$	k_{D}	$0.14040^{+0.00094}_{-0.00093} \quad (-0.1\sigma)$	χ_{lowl}^2	$127 \quad (\nu: 13931.4) \quad (+150.6\sigma)$
Ω_{Λ}	$0.689^{+0.012}_{-0.013} \quad (+2.6\sigma)$	$100\theta_{\text{D}}$	$0.16103^{+0.00053}_{-0.00051} \quad (+1.3\sigma)$	χ_{plik}^2	$771.8 \quad (\nu: 13.6) \quad (+0.9\sigma)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-2.5\sigma)$	z_{eq}	$3390^{+88}_{-86} \quad (+0.9\sigma)$	χ_{JLA}^2	$1035.08 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1425^{+0.0037}_{-0.0036} \quad (+0.9\sigma)$	k_{eq}	$0.01035^{+0.00027}_{-0.00026} \quad (+0.9\sigma)$	$\chi_{6\text{DF}}^2$	$0.45 \quad (\nu: 0.3)$
$\Omega_{\text{m}} h^3$	$0.0966^{+0.0036}_{-0.0034} \quad (+3.5\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.017}_{-0.016} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.08 \quad (\nu: 0.3)$
σ_8	$0.811^{+0.017}_{-0.016} \quad (+2.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4504^{+0.0085}_{-0.0084} \quad (-1.0\sigma)$	χ_{DR12BAO}^2	$4.5 \quad (\nu: 1.5)$
S_8	$0.824^{+0.024}_{-0.024} \quad (-3.0\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.6\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-3.0\sigma)$	$D_M(0.15)$	$639^{+12}_{-12} \quad (-2.9\sigma)$	χ_{CMB}^2	$1201.7 \quad (\nu: 15.1) \quad (+3.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.605^{+0.014}_{-0.014} \quad (-2.9\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 1.1)$

$$\bar{\chi}_{\text{eff}}^2 = 2250.15; \Delta \bar{\chi}_{\text{eff}}^2 = 0.37; R - 1 = 0.01337$$

16.12 base_omegak_plikHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02217^{+0.00045}_{-0.00044} \quad (-1.5\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.025}_{-0.024} \quad (-3.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+27}_{-27} \quad (-3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0043}_{-0.0042} \quad (+1.1\sigma)$	$r_{\mathrm{drag}}h$	$99.9^{+2.0}_{-2.0} \quad (+3.6\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-1.4} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00094}_{-0.00093} \quad (-0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.057}_{-0.054} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+34}_{-33} \quad (-3.0\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.7\sigma)$	z_{re}	$< 8.90 \quad (+1.0\sigma)$	$H(0.61)$	$95.6^{+1.5}_{-1.4} \quad (+3.7\sigma)$
Ω_K	$0.0011^{+0.0051}_{-0.0050} \quad (+2.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.061}_{-0.055} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2300^{+38}_{-38} \quad (-3.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.029}_{-0.026} \quad (+0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.027}_{-0.027} \quad (+0.7\sigma)$	$H(2.33)$	$236.4^{+3.6}_{-3.5} \quad (+2.9\sigma)$
n_{s}	$0.965^{+0.012}_{-0.012} \quad (-1.1\sigma)$	D_{40}	$1229^{+32}_{-31} \quad (+1.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5751^{+75}_{-75} \quad (-3.2\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0049} \quad (+0.2\sigma)$	D_{220}	$5717^{+82}_{-78} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.017}_{-0.016} \quad (-3.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.4\sigma)$	D_{810}	$2537^{+27}_{-27} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.018}_{-0.017} \quad (+2.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+10}_{-9.8} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.014}_{-0.014} \quad (-3.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.3\sigma)$	D_{2000}	$229.8^{+3.7}_{-3.5} \quad (-1.3\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.016}_{-0.015} \quad (+2.8\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.012} \quad (-1.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.013}_{-0.013} \quad (-2.5\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.9\sigma)$	Y_{P}	$0.24531^{+0.00018}_{-0.00021} \quad (-1.5\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.015}_{-0.014} \quad (+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00018}_{-0.00021} \quad (-1.5\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.012}_{-0.012} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.625^{+0.085}_{-0.083} \quad (+1.5\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.014}_{-0.013} \quad (+3.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.77^{+0.19}_{-0.20} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0070}_{-0.0065} \quad (+3.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.7} \quad (-0.0\sigma)$	z_*	$1090.16^{+0.86}_{-0.83} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3080^{+0.0078}_{-0.0074} \quad (+3.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.1\sigma)$	r_*	$144.66^{+0.94}_{-0.95} \quad (-0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$100\theta_*$	$1.04109^{+0.00092}_{-0.00091} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.895^{+0.086}_{-0.088} \quad (-0.6\sigma)$	f_{2000}^{217}	$108.1^{+3.8}_{-3.8} \quad (+1.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.44^{+0.91}_{-0.88} \quad (-1.4\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.40^{+0.93}_{-0.94} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 1.1) \quad (+3.1\sigma)$
H_0	$67.8^{+1.4}_{-1.4} \quad (+3.6\sigma)$	k_{D}	$0.1404^{+0.0010}_{-0.00099} \quad (-0.1\sigma)$	χ_{plik}^2	$772.2 \quad (\nu: 14.6) \quad (+1.0\sigma)$
Ω_{Λ}	$0.689^{+0.015}_{-0.015} \quad (+2.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16105^{+0.00052}_{-0.00052} \quad (+1.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-2.5\sigma)$	z_{eq}	$3391^{+97}_{-94} \quad (+1.0\sigma)$	χ_{MGS}^2	$1.48 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^2$	$0.1425^{+0.0041}_{-0.0039} \quad (+1.0\sigma)$	k_{eq}	$0.01035^{+0.00030}_{-0.00029} \quad (+1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.7)$
$\Omega_{\mathrm{m}}h^3$	$0.0967^{+0.0036}_{-0.0035} \quad (+3.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.018}_{-0.018} \quad (-1.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (+0.1\sigma)$
σ_8	$0.811^{+0.020}_{-0.019} \quad (+2.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4504^{+0.0093}_{-0.0093} \quad (-1.0\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.3)$
S_8	$0.825^{+0.032}_{-0.032} \quad (-3.0\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.6\sigma)$	χ_{CMB}^2	$1192.6 \quad (\nu: 14.7) \quad (+1.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.018}_{-0.018} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+12}_{-12} \quad (-2.9\sigma)$		
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.019}_{-0.018} \quad (-2.9\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1206.04$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.28$; $R - 1 = 0.01397$

16.13 base_omegak_plikHM_TT_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02217^{+0.00045}_{-0.00044} \quad (-1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.019}_{-0.018} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+27}_{-26} \quad (-3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0039}_{-0.0038} \quad (+1.1\sigma)$	$r_{\mathrm{drag}}h$	$99.9^{+1.9}_{-1.8} \quad (+3.6\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-1.4} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04087^{+0.00094}_{-0.00090} \quad (-0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.043}_{-0.042} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1977^{+34}_{-33} \quad (-3.0\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.7\sigma)$	z_{re}	$< 8.92 \quad (+1.0\sigma)$	$H(0.61)$	$95.5^{+1.4}_{-1.4} \quad (+3.7\sigma)$
Ω_K	$0.00099^{+0.0050}_{-0.0049} \quad (+2.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.055}_{-0.051} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+39}_{-38} \quad (-3.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.026}_{-0.024} \quad (+1.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.025}_{-0.024} \quad (+0.8\sigma)$	$H(2.33)$	$236.4^{+3.4}_{-3.2} \quad (+2.9\sigma)$
n_{s}	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	D_{40}	$1230^{+30}_{-28} \quad (+1.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+75}_{-74} \quad (-3.2\sigma)$
y_{cal}	$1.0007^{+0.0050}_{-0.0048} \quad (+0.3\sigma)$	D_{220}	$5721^{+82}_{-77} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-3.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.4\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.015}_{-0.015} \quad (+2.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815^{+11}_{-9.9} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-3.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.3\sigma)$	D_{2000}	$229.9^{+3.7}_{-3.5} \quad (-1.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.010} \quad (-2.4\sigma)$
A_{143}^{PS}	$49^{+10}_{-20} \quad (+0.9\sigma)$	Y_{P}	$0.24531^{+0.00018}_{-0.00021} \quad (-1.5\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.013}_{-0.012} \quad (+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00018}_{-0.00021} \quad (-1.5\sigma)$	$f\sigma_8(0.61)$	$0.4692^{+0.0097}_{-0.0093} \quad (-0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.623^{+0.085}_{-0.083} \quad (+1.5\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.012}_{-0.012} \quad (+3.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.77^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.2986^{+0.0062}_{-0.0060} \quad (+3.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	z_*	$1090.15^{+0.81}_{-0.78} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3081^{+0.0071}_{-0.0069} \quad (+3.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.4} \quad (+0.1\sigma)$	r_*	$144.65^{+0.83}_{-0.84} \quad (-0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.3}_{-6.6} \quad (+0.1\sigma)$	$100\theta_*$	$1.04108^{+0.00092}_{-0.00089} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.894^{+0.077}_{-0.079} \quad (-0.6\sigma)$	f_{2000}^{217}	$108.1^{+3.8}_{-3.7} \quad (+1.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.46^{+0.89}_{-0.90} \quad (-1.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.29 \quad (\nu: 0.2)$
c_{217}	$0.9983^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	r_{drag}	$147.38^{+0.83}_{-0.84} \quad (-0.5\sigma)$	χ_{small}^2	$296 \quad (\nu: 13777.7) \quad (-59.2\sigma)$
H_0	$67.8^{+1.3}_{-1.3} \quad (+3.6\sigma)$	k_{D}	$0.14041^{+0.00094}_{-0.00093} \quad (-0.1\sigma)$	χ_{lowl}^2	$125 \quad (\nu: 13788.8) \quad (+148.4\sigma)$
Ω_{Λ}	$0.688^{+0.013}_{-0.013} \quad (+2.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16104^{+0.00053}_{-0.00052} \quad (+1.3\sigma)$	χ_{plik}^2	$771.6 \quad (\nu: 13.5) \quad (+0.9\sigma)$
Ω_{m}	$0.311^{+0.013}_{-0.012} \quad (-2.5\sigma)$	z_{eq}	$3391^{+87}_{-85} \quad (+1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.43 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0036}_{-0.0036} \quad (+1.0\sigma)$	k_{eq}	$0.01035^{+0.00027}_{-0.00026} \quad (+1.0\sigma)$	χ_{MGS}^2	$1.04 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}}h^3$	$0.0966^{+0.0036}_{-0.0034} \quad (+3.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.016}_{-0.016} \quad (-1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.8)$
σ_8	$0.812^{+0.016}_{-0.016} \quad (+2.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0084}_{-0.0083} \quad (-1.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
S_8	$0.826^{+0.025}_{-0.025} \quad (-3.0\sigma)$	$H(0.15)$	$73.0^{+1.3}_{-1.3} \quad (+3.6\sigma)$	χ_{CMB}^2	$1201.5 \quad (\nu: 14.8) \quad (+2.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+12}_{-12} \quad (-2.9\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.3)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.014}_{-0.014} \quad (-2.9\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1214.95$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.38$; $R - 1 = 0.01494$

16.14 base_omegak_plikHM_TT_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00044}_{-0.00044} \quad (-1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.019}_{-0.018} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+26}_{-26} \quad (-3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0038}_{-0.0038} \quad (+1.0\sigma)$	$r_{\mathrm{drag}}h$	$99.97^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-1.3} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00095}_{-0.00090} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.043}_{-0.042} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+33}_{-33} \quad (-3.0\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.8\sigma)$	z_{re}	$7.8^{+1.1}_{-1.3} \quad (+1.1\sigma)$	$H(0.61)$	$95.5^{+1.4}_{-1.4} \quad (+3.7\sigma)$
Ω_K	$0.00099^{+0.0051}_{-0.0049} \quad (+2.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.055}_{-0.051} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2300^{+38}_{-37} \quad (-3.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.026}_{-0.024} \quad (+1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.025}_{-0.024} \quad (+0.7\sigma)$	$H(2.33)$	$236.3^{+3.4}_{-3.2} \quad (+2.9\sigma)$
n_{s}	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	D_{40}	$1230^{+29}_{-28} \quad (+1.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5752^{+74}_{-74} \quad (-3.2\sigma)$
y_{cal}	$1.0008^{+0.0050}_{-0.0048} \quad (+0.3\sigma)$	D_{220}	$5722^{+81}_{-77} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-3.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.4\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.015}_{-0.015} \quad (+2.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$816^{+11}_{-9.9} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-3.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.3\sigma)$	D_{2000}	$229.9^{+3.7}_{-3.6} \quad (-1.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.0099} \quad (-2.5\sigma)$
A_{143}^{PS}	$49^{+10}_{-20} \quad (+0.9\sigma)$	Y_{P}	$0.24532^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.013}_{-0.012} \quad (+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.4688^{+0.0096}_{-0.0092} \quad (-0.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.621^{+0.086}_{-0.082} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.012}_{-0.012} \quad (+3.0\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.77^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.2987^{+0.0062}_{-0.0060} \quad (+3.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	z_*	$1090.12^{+0.81}_{-0.77} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3082^{+0.0071}_{-0.0069} \quad (+3.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.4} \quad (+0.1\sigma)$	r_*	$144.68^{+0.83}_{-0.84} \quad (-0.6\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.6} \quad (+0.1\sigma)$	$100\theta_*$	$1.04109^{+0.00093}_{-0.00089} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.077}_{-0.078} \quad (-0.6\sigma)$	f_{2000}^{217}	$108.0^{+3.8}_{-3.7} \quad (+1.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.48^{+0.91}_{-0.92} \quad (-1.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.29 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.41^{+0.82}_{-0.84} \quad (-0.4\sigma)$	χ_{small}^2	$294 \quad (\nu: 13886.3) \quad (-59.9\sigma)$
H_0	$67.8^{+1.3}_{-1.3} \quad (+3.6\sigma)$	k_{D}	$0.14039^{+0.00094}_{-0.00093} \quad (-0.1\sigma)$	χ_{lowl}^2	$126 \quad (\nu: 13895.9) \quad (+150.0\sigma)$
Ω_{Λ}	$0.689^{+0.012}_{-0.012} \quad (+2.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00053}_{-0.00051} \quad (+1.3\sigma)$	χ_{plik}^2	$771.7 \quad (\nu: 13.6) \quad (+0.9\sigma)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-2.5\sigma)$	z_{eq}	$3388^{+87}_{-85} \quad (+0.9\sigma)$	χ_{JLA}^2	$1035.07 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1424^{+0.0036}_{-0.0036} \quad (+0.9\sigma)$	k_{eq}	$0.01034^{+0.00026}_{-0.00026} \quad (+0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.45 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}}h^3$	$0.0966^{+0.0036}_{-0.0034} \quad (+3.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.017}_{-0.016} \quad (-1.0\sigma)$	χ_{MGS}^2	$1.08 \quad (\nu: 0.3)$
σ_8	$0.811^{+0.016}_{-0.016} \quad (+2.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0084}_{-0.0083} \quad (-0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 1.5)$
S_8	$0.824^{+0.024}_{-0.024} \quad (-3.0\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.6\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+12}_{-12} \quad (-2.9\sigma)$	χ_{CMB}^2	$1201.5 \quad (\nu: 14.8) \quad (+2.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.014}_{-0.014} \quad (-2.9\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 1.1)$

 $\bar{\chi}_{\mathrm{eff}}^2 = 2249.97; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.34; R - 1 = 0.01495$

16.15 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022396	$0.02239^{+0.00030}_{-0.00030}$ (-0.6σ)	σ_8	0.8109	$0.811^{+0.017}_{-0.016}$ $(+2.3\sigma)$	$D_{\mathrm{M}}(0.15)$	638.9	639^{+12}_{-12} (-2.9σ)
$\Omega_{\mathrm{c}}h^2$	0.11972	$0.1197^{+0.0028}_{-0.0028}$ $(+1.0\sigma)$	S_8	0.8242	$0.824^{+0.025}_{-0.024}$ (-3.0σ)	$H(0.38)$	83.28	$83.3^{+1.3}_{-1.2}$ $(+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	1.04095	$1.04095^{+0.00061}_{-0.00061}$ (-0.6σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4515	$0.451^{+0.014}_{-0.013}$ (-3.0σ)	$D_{\mathrm{M}}(0.38)$	1523.9	1524^{+25}_{-26} (-3.0σ)
τ	0.0544	$0.055^{+0.016}_{-0.015}$ $(+0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6051	$0.605^{+0.015}_{-0.014}$ (-3.0σ)	$H(0.51)$	90.00	$90.0^{+1.3}_{-1.2}$ $(+3.7\sigma)$
Ω_K	0.00079	$0.0008^{+0.0038}_{-0.0037}$ $(+2.3\sigma)$	$\sigma_8/h^{0.5}$	0.9843	$0.984^{+0.021}_{-0.020}$ (-3.2σ)	$D_{\mathrm{M}}(0.51)$	1974.3	1974^{+31}_{-33} (-3.0σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0441	$3.044^{+0.032}_{-0.031}$ $(+1.0\sigma)$	$r_{\mathrm{drag}}h$	99.86	$99.9^{+2.0}_{-1.9}$ $(+3.6\sigma)$	$H(0.61)$	95.63	$95.6^{+1.3}_{-1.2}$ $(+3.7\sigma)$
n_{s}	0.9664	$0.9659^{+0.0089}_{-0.0087}$ (-1.0σ)	$\langle d^2 \rangle^{1/2}$	2.4336	$2.434^{+0.050}_{-0.048}$ (-3.0σ)	$D_{\mathrm{M}}(0.61)$	2297.5	2297^{+35}_{-37} (-3.1σ)
y_{cal}	1.0006	$1.0006^{+0.0050}_{-0.0050}$ $(+0.2\sigma)$	z_{re}	7.69	$7.7^{+1.5}_{-1.6}$ $(+1.0\sigma)$	$H(2.33)$	236.59	$236.6^{+2.3}_{-2.4}$ $(+3.0\sigma)$
A_{217}^{CIB}	47.4	47^{+10}_{-10} $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.099	$2.100^{+0.069}_{-0.065}$ $(+1.0\sigma)$	$D_{\mathrm{M}}(2.33)$	5746	5746^{+60}_{-64} (-3.2σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.43	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8827	$1.882^{+0.024}_{-0.023}$ $(+0.8\sigma)$	$f\sigma_8(0.15)$	0.4561	$0.456^{+0.013}_{-0.013}$ (-3.3σ)
A_{143}^{tSZ}	7.16	$5.4^{+3.6}_{-4.0}$ (-0.1σ)	D_{40}	1228.1	1229^{+26}_{-26} $(+1.5\sigma)$	$\sigma_8(0.15)$	0.7495	$0.750^{+0.016}_{-0.015}$ $(+2.6\sigma)$
A_{100}^{PS}	251	259^{+50}_{-50} $(+0.3\sigma)$	D_{220}	5733	5734^{+78}_{-78} (-0.3σ)	$f\sigma_8(0.38)$	0.4747	$0.475^{+0.012}_{-0.011}$ (-3.7σ)
A_{143}^{PS}	48.1	46^{+20}_{-20} $(+0.5\sigma)$	D_{810}	2541.2	2539^{+27}_{-27} $(+0.7\sigma)$	$\sigma_8(0.38)$	0.6646	$0.665^{+0.014}_{-0.014}$ $(+2.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	47.6	42^{+20}_{-20} $(+0.2\sigma)$	D_{1420}	818.2	$817.5^{+9.6}_{-9.4}$ $(+0.7\sigma)$	$f\sigma_8(0.51)$	0.4735	$0.473^{+0.011}_{-0.010}$ (-2.5σ)
A_{217}^{PS}	119.5	115^{+20}_{-20} $(+0.1\sigma)$	D_{2000}	231.28	$230.9^{+3.2}_{-3.1}$ (-0.7σ)	$\sigma_8(0.51)$	0.6220	$0.622^{+0.013}_{-0.013}$ $(+2.9\sigma)$
A^{kSZ}	0.00	< 8.08 $(+0.3\sigma)$	$n_{\mathrm{s},0.002}$	0.9664	$0.9659^{+0.0089}_{-0.0087}$ (-1.0σ)	$f\sigma_8(0.61)$	0.4686	$0.469^{+0.010}_{-0.0098}$ (-0.7σ)
$A_{100}^{\mathrm{dustTT}}$	8.79	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	Y_{P}	0.245406	$0.24540^{+0.00011}_{-0.00012}$ (-0.6σ)	$\sigma_8(0.61)$	0.5919	$0.592^{+0.013}_{-0.012}$ $(+2.9\sigma)$
$A_{143}^{\mathrm{dustTT}}$	11.01	$10.9^{+3.5}_{-3.5}$ $(+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246732	$0.24673^{+0.00011}_{-0.00012}$ (-0.6σ)	$f\sigma_8(2.33)$	0.2985	$0.2985^{+0.0063}_{-0.0063}$ $(+3.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.8	$18.6^{+6.4}_{-6.5}$ $(+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.581	$2.583^{+0.057}_{-0.055}$ $(+0.6\sigma)$	$\sigma_8(2.33)$	0.3079	$0.3080^{+0.0072}_{-0.0071}$ $(+3.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.9	94^{+10}_{-10} $(+0.0\sigma)$	Age/Gyr	13.755	$13.75^{+0.15}_{-0.16}$ (-3.1σ)	f_{2000}^{143}	29.1	30^{+5}_{-5} $(+0.9\sigma)$
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.115^{+0.076}_{-0.075}$	z_*	1089.86	$1089.88^{+0.55}_{-0.56}$ $(+0.9\sigma)$	$f_{2000}^{143 \times 217}$	32.10	32^{+4}_{-4} $(+1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	144.48	$144.50^{+0.62}_{-0.60}$ (-1.0σ)	f_{2000}^{217}	106.68	$107.0^{+3.5}_{-3.5}$ $(+1.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	1.04113	$1.04113^{+0.00060}_{-0.00060}$ (-0.6σ)	χ_{small}^2	396.06	397.2 $(\nu: 1.8)$ $(+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	0.225	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.878	$13.879^{+0.057}_{-0.055}$ (-1.0σ)	χ_{lowl}^2	23.21	23.4 $(\nu: 0.6)$ $(+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.666	$0.67^{+0.16}_{-0.16}$	z_{drag}	1059.97	$1059.95^{+0.59}_{-0.59}$ (-0.4σ)	χ_{plik}^2	2345.1	2360.2 $(\nu: 17.0)$ $(+292.6\sigma)$
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.53}_{-0.52}$	r_{drag}	147.14	$147.15^{+0.61}_{-0.58}$ (-0.9σ)	$\chi_{6\mathrm{DF}}^2$	0.016	0.057 $(\nu: 0.0)$
c_{100}	0.99969	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	k_{D}	0.14084	$0.14081^{+0.00063}_{-0.00064}$ $(+0.7\sigma)$	χ_{MGS}^2	1.34	1.44 $(\nu: 0.2)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.160736	$0.16075^{+0.00035}_{-0.00034}$ $(+0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.92	4.7 $(\nu: 1.9)$
H_0	67.87	$67.9^{+1.4}_{-1.3}$ $(+3.6\sigma)$	z_{eq}	3396	3396^{+62}_{-63} $(+1.0\sigma)$	χ_{prior}^2	1.7	11.6 $(\nu: 10.2)$ $(+1.3\sigma)$
Ω_{Λ}	0.6893	$0.689^{+0.012}_{-0.012}$ $(+2.6\sigma)$	k_{eq}	0.010365	$0.01036^{+0.00019}_{-0.00019}$ $(+1.0\sigma)$	χ_{BAO}^2	5.28	6.2 $(\nu: 1.4)$
Ω_{m}	0.3099	$0.310^{+0.013}_{-0.013}$ (-2.5σ)	$100\theta_{\mathrm{eq}}$	0.8145	$0.815^{+0.012}_{-0.012}$ (-1.0σ)	χ_{CMB}^2	2764.4	2780.7 $(\nu: 17.0)$ $(+279.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14276	$0.1427^{+0.0026}_{-0.0026}$ $(+1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4500	$0.4501^{+0.0062}_{-0.0059}$ (-1.0σ)			
$\Omega_{\mathrm{m}}h^3$	0.09689	$0.0969^{+0.0028}_{-0.0026}$ $(+3.6\sigma)$	$H(0.15)$	73.15	$73.2^{+1.3}_{-1.2}$ $(+3.7\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 2771.38$; $\Delta\chi_{\mathrm{eff}}^2 = -0.53$; $\bar{\chi}_{\mathrm{eff}}^2 = 2798.58$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.67$; $R - 1 = 0.01668$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.34 (Δ 0.13) DR12BAO: 3.92 (Δ -0.50) CMB - small_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ -0.14) commander_dx12_v3_2_29: 23.21 (Δ 0.34) plik_rd12_HM_v22b_TTTEEE: 2345.09 (Δ -0.42)

16.16 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022412	$0.02239^{+0.00030}_{-0.00030}$ (-0.6σ)	σ_8	0.8118	$0.812^{+0.014}_{-0.014}$ $(+2.4\sigma)$	$D_{\mathrm{M}}(0.15)$	638.8	639^{+11}_{-11} (-2.9σ)
$\Omega_{\mathrm{c}}h^2$	0.11970	$0.1197^{+0.0027}_{-0.0027}$ $(+1.0\sigma)$	S_8	0.8250	$0.825^{+0.021}_{-0.021}$ (-3.0σ)	$H(0.38)$	83.28	$83.3^{+1.2}_{-1.2}$ $(+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	1.04099	$1.04095^{+0.00061}_{-0.00061}$ (-0.6σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4519	$0.452^{+0.012}_{-0.011}$ (-3.0σ)	$D_{\mathrm{M}}(0.38)$	1523.8	1524^{+25}_{-25} (-3.0σ)
τ	0.0556	$0.056^{+0.015}_{-0.014}$ $(+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6057	$0.606^{+0.012}_{-0.011}$ (-2.9σ)	$H(0.51)$	90.00	$90.0^{+1.2}_{-1.2}$ $(+3.7\sigma)$
Ω_K	0.00073	$0.0007^{+0.0037}_{-0.0037}$ $(+2.3\sigma)$	$\sigma_8/h^{0.5}$	0.9854	$0.985^{+0.017}_{-0.016}$ (-3.2σ)	$D_{\mathrm{M}}(0.51)$	1974.2	1975^{+31}_{-31} (-3.0σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0462	$3.046^{+0.029}_{-0.028}$ $(+1.1\sigma)$	$r_{\mathrm{drag}}h$	99.86	$99.9^{+1.9}_{-1.8}$ $(+3.6\sigma)$	$H(0.61)$	95.63	$95.6^{+1.2}_{-1.2}$ $(+3.7\sigma)$
n_{s}	0.9669	$0.9658^{+0.0090}_{-0.0082}$ (-1.0σ)	$\langle d^2 \rangle^{1/2}$	2.4351	$2.437^{+0.040}_{-0.039}$ (-3.0σ)	$D_{\mathrm{M}}(0.61)$	2297.4	2298^{+35}_{-35} (-3.1σ)
y_{cal}	1.00049	$1.0007^{+0.0049}_{-0.0049}$ $(+0.3\sigma)$	z_{re}	7.80	$7.8^{+1.4}_{-1.4}$ $(+1.0\sigma)$	$H(2.33)$	236.58	$236.6^{+2.3}_{-2.3}$ $(+3.0\sigma)$
A_{217}^{CIB}	46.8	47^{+10}_{-10} $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.104	$2.104^{+0.061}_{-0.057}$ $(+1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5746	5747^{+61}_{-61} (-3.2σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.47	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8821	$1.882^{+0.022}_{-0.022}$ $(+0.8\sigma)$	$f\sigma_8(0.15)$	0.4565	$0.456^{+0.011}_{-0.011}$ (-3.3σ)
A_{143}^{tSZ}	7.20	$5.4^{+3.6}_{-4.0}$ (-0.1σ)	D_{40}	1226.9	1230^{+24}_{-25} $(+1.6\sigma)$	$\sigma_8(0.15)$	0.7503	$0.750^{+0.014}_{-0.013}$ $(+2.6\sigma)$
A_{100}^{PS}	249	259^{+50}_{-50} $(+0.3\sigma)$	D_{220}	5730	5737^{+77}_{-76} (-0.2σ)	$f\sigma_8(0.38)$	0.4752	$0.4751^{+0.0093}_{-0.0091}$ (-3.6σ)
A_{143}^{PS}	47.7	46^{+10}_{-20} $(+0.5\sigma)$	D_{810}	2540.9	2540^{+26}_{-27} $(+0.8\sigma)$	$\sigma_8(0.38)$	0.6653	$0.665^{+0.012}_{-0.012}$ $(+2.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	48.3	42^{+20}_{-20} $(+0.2\sigma)$	D_{1420}	818.4	$817.7^{+9.3}_{-9.2}$ $(+0.8\sigma)$	$f\sigma_8(0.51)$	0.4740	$0.4739^{+0.0087}_{-0.0084}$ (-2.5σ)
A_{217}^{PS}	120.2	115^{+20}_{-20} $(+0.1\sigma)$	D_{2000}	231.41	$231.0^{+3.1}_{-3.1}$ (-0.7σ)	$\sigma_8(0.51)$	0.6227	$0.622^{+0.012}_{-0.012}$ $(+2.9\sigma)$
A^{kSZ}	0.00	< 8.01 $(+0.2\sigma)$	$n_{\mathrm{s},0.002}$	0.9669	$0.9658^{+0.0090}_{-0.0082}$ (-1.0σ)	$f\sigma_8(0.61)$	0.4692	$0.4690^{+0.0082}_{-0.0079}$ (-0.6σ)
$A_{100}^{\mathrm{dustTT}}$	8.83	$8.9^{+3.6}_{-3.5}$ (-0.0σ)	Y_{P}	0.245412	$0.24540^{+0.00011}_{-0.00012}$ (-0.6σ)	$\sigma_8(0.61)$	0.5926	$0.592^{+0.011}_{-0.011}$ $(+3.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	11.00	$10.9^{+3.5}_{-3.5}$ $(+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246738	$0.24673^{+0.00011}_{-0.00012}$ (-0.6σ)	$f\sigma_8(2.33)$	0.2988	$0.2987^{+0.0059}_{-0.0057}$ $(+3.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.8	$18.6^{+6.5}_{-6.5}$ $(+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.578	$2.582^{+0.057}_{-0.054}$ $(+0.6\sigma)$	$\sigma_8(2.33)$	0.3082	$0.3081^{+0.0068}_{-0.0066}$ $(+3.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	95.1	94^{+10}_{-10} $(+0.0\sigma)$	Age/Gyr	13.755	$13.76^{+0.16}_{-0.16}$ (-3.1σ)	f_{2000}^{143}	28.6	30^{+5}_{-6} $(+0.9\sigma)$
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.077}_{-0.075}$	z_*	1089.84	$1089.86^{+0.55}_{-0.55}$ $(+0.8\sigma)$	$f_{2000}^{143 \times 217}$	31.86	32^{+4}_{-4} $(+1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.133	$0.135^{+0.057}_{-0.059}$	r_*	144.48	$144.50^{+0.60}_{-0.58}$ (-1.0σ)	f_{2000}^{217}	106.50	$107.0^{+3.7}_{-3.5}$ $(+1.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04116	$1.04113^{+0.00059}_{-0.00060}$ (-0.6σ)	$\chi_{\mathrm{lensing}}^2$	8.79	9.13 ($\nu: 0.2$)
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.877	$13.879^{+0.054}_{-0.054}$ (-1.0σ)	χ_{small}^2	396	291 ($\nu: 14169.0$) (-61.6σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.665	$0.66^{+0.15}_{-0.16}$	z_{drag}	1060.01	$1059.97^{+0.61}_{-0.61}$ (-0.4σ)	χ_{lowl}^2	23	129 ($\nu: 14165.2$) $(+154.4\sigma)$
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.08^{+0.52}_{-0.52}$	r_{drag}	147.13	$147.15^{+0.58}_{-0.56}$ (-1.0σ)	χ_{plik}^2	2345.0	2359.8 ($\nu: 16.8$) $(+292.6\sigma)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	k_{D}	0.14086	$0.14082^{+0.00061}_{-0.00062}$ $(+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.02	0.44 ($\nu: 0.2$)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	$100\theta_{\mathrm{D}}$	0.160720	$0.16074^{+0.00035}_{-0.00034}$ $(+0.3\sigma)$	χ_{MGS}^2	1.34	1.03 ($\nu: 0.3$)
H_0	67.87	$67.9^{+1.3}_{-1.2}$ $(+3.6\sigma)$	z_{eq}	3396	3395^{+61}_{-61} $(+1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.93	4.7 ($\nu: 1.8$)
Ω_{Λ}	0.6894	$0.689^{+0.011}_{-0.011}$ $(+2.6\sigma)$	k_{eq}	0.010365	$0.01036^{+0.00019}_{-0.00018}$ $(+1.0\sigma)$	χ_{prior}^2	1.7	11.5 ($\nu: 9.9$) $(+1.2\sigma)$
Ω_{m}	0.3099	$0.310^{+0.012}_{-0.012}$ (-2.5σ)	$100\theta_{\mathrm{eq}}$	0.8146	$0.815^{+0.012}_{-0.011}$ (-1.0σ)	χ_{CMB}^2	2773.2	2789.5 ($\nu: 17.6$) $(+281.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14275	$0.1427^{+0.0025}_{-0.0025}$ $(+1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4500	$0.4501^{+0.0059}_{-0.0058}$ (-1.0σ)	χ_{BAO}^2	5.29	6.2 ($\nu: 1.3$)
$\Omega_{\mathrm{m}}h^3$	0.09689	$0.0969^{+0.0027}_{-0.0026}$ $(+3.6\sigma)$	$H(0.15)$	73.16	$73.1^{+1.3}_{-1.2}$ $(+3.7\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 2780.16$; $\Delta\chi_{\mathrm{eff}}^2 = -0.54$; $\bar{\chi}_{\mathrm{eff}}^2 = 2807.21$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.36$; $R - 1 = 0.02276$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.34 (Δ 0.13) DR12BAO: 3.93 (Δ -0.49) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.79 (Δ 0.06) small_100x143_offlike5_EE_Aplanck
396.28 (Δ -0.24) commander_dx12_v3.2_29: 23.14 (Δ 0.24) plik_rd12_HM_v22b.TTTEEE: 2344.96 (Δ -0.36)

16.17 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022420	$0.02240^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	σ_8	0.8117	$0.812^{+0.014}_{-0.014} \quad (+2.4\sigma)$	$D_M(0.15)$	638.2	$638^{+11}_{-11} \quad (-2.9\sigma)$
$\Omega_c h^2$	0.11956	$0.1196^{+0.0027}_{-0.0027} \quad (+1.0\sigma)$	S_8	0.8238	$0.824^{+0.021}_{-0.020} \quad (-3.0\sigma)$	$H(0.38)$	83.32	$83.3^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$100\theta_{MC}$	1.04097	$1.04096^{+0.00061}_{-0.00061} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4512	$0.451^{+0.011}_{-0.011} \quad (-3.0\sigma)$	$D_M(0.38)$	1522.7	$1523^{+25}_{-25} \quad (-3.0\sigma)$
τ	0.0559	$0.056^{+0.014}_{-0.014} \quad (+0.9\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6052	$0.605^{+0.012}_{-0.011} \quad (-2.9\sigma)$	$H(0.51)$	90.04	$90.0^{+1.2}_{-1.2} \quad (+3.7\sigma)$
Ω_K	0.00077	$0.0008^{+0.0037}_{-0.0037} \quad (+2.3\sigma)$	$\sigma_8/h^{0.5}$	0.9848	$0.985^{+0.017}_{-0.016} \quad (-3.2\sigma)$	$D_M(0.51)$	1972.9	$1973^{+30}_{-31} \quad (-3.0\sigma)$
$\ln(10^{10} A_s)$	3.0470	$3.047^{+0.029}_{-0.027} \quad (+1.2\sigma)$	$r_{\text{drag}} h$	99.98	$99.97^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$H(0.61)$	95.66	$95.7^{+1.2}_{-1.1} \quad (+3.7\sigma)$
n_s	0.9672	$0.9660^{+0.0089}_{-0.0083} \quad (-0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4339	$2.436^{+0.040}_{-0.039} \quad (-3.0\sigma)$	$D_M(0.61)$	2296.0	$2296^{+34}_{-35} \quad (-3.1\sigma)$
y_{cal}	1.00076	$1.0007^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$	z_{re}	7.83	$7.8^{+1.4}_{-1.4} \quad (+1.1\sigma)$	$H(2.33)$	236.51	$236.5^{+2.3}_{-2.3} \quad (+3.0\sigma)$
A_{217}^{CIB}	46.4	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_s$	2.105	$2.105^{+0.061}_{-0.057} \quad (+1.2\sigma)$	$D_M(2.33)$	5745	$5745^{+60}_{-61} \quad (-3.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.61	—	$10^9 A_s e^{-2\tau}$	1.8825	$1.882^{+0.022}_{-0.022} \quad (+0.8\sigma)$	$f\sigma_8(0.15)$	0.4559	$0.456^{+0.011}_{-0.010} \quad (-3.3\sigma)$
A_{143}^{tSZ}	7.10	$5.4^{+3.6}_{-4.0} \quad (-0.1\sigma)$	D_{40}	1227.0	$1229^{+25}_{-25} \quad (+1.5\sigma)$	$\sigma_8(0.15)$	0.7503	$0.750^{+0.014}_{-0.013} \quad (+2.6\sigma)$
A_{100}^{PS}	249	$259^{+50}_{-50} \quad (+0.3\sigma)$	D_{220}	5734	$5738^{+77}_{-76} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	0.4748	$0.4748^{+0.0093}_{-0.0090} \quad (-3.7\sigma)$
A_{143}^{PS}	49.9	$46^{+10}_{-20} \quad (+0.5\sigma)$	D_{810}	2542.2	$2540^{+26}_{-26} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	0.6654	$0.665^{+0.012}_{-0.012} \quad (+2.8\sigma)$
$A_{143 \times 217}^{\text{PS}}$	51.9	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{1420}	818.9	$817.8^{+9.2}_{-9.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	0.4737	$0.4736^{+0.0086}_{-0.0083} \quad (-2.5\sigma)$
A_{217}^{PS}	121.2	$115^{+20}_{-20} \quad (+0.1\sigma)$	D_{2000}	231.57	$231.1^{+3.1}_{-3.1} \quad (-0.6\sigma)$	$\sigma_8(0.51)$	0.6228	$0.623^{+0.012}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	0.00	$< 8.01 \quad (+0.2\sigma)$	$n_{s,0.002}$	0.9672	$0.9660^{+0.0089}_{-0.0083} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	0.4689	$0.4688^{+0.0082}_{-0.0079} \quad (-0.7\sigma)$
A_{100}^{dustTT}	8.84	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Y_P	0.245415	$0.24541^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	0.5927	$0.593^{+0.011}_{-0.011} \quad (+3.0\sigma)$
A_{143}^{dustTT}	11.07	$10.9^{+3.5}_{-3.5} \quad (+0.2\sigma)$	Y_P^{BBN}	0.246742	$0.24673^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	0.2989	$0.2988^{+0.0059}_{-0.0056} \quad (+3.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	20.1	$18.6^{+6.5}_{-6.5} \quad (+0.2\sigma)$	10^5D/H	2.576	$2.580^{+0.057}_{-0.054} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	0.3084	$0.3083^{+0.0068}_{-0.0065} \quad (+3.3\sigma)$
A_{217}^{dustTT}	95.4	$94^{+10}_{-10} \quad (+0.0\sigma)$	Age/Gyr	13.752	$13.75^{+0.15}_{-0.15} \quad (-3.1\sigma)$	f_{2000}^{143}	28.6	$29^{+5}_{-6} \quad (+0.8\sigma)$
A_{100}^{dustTE}	0.114	$0.114^{+0.077}_{-0.075}$	z_*	1089.82	$1089.85^{+0.55}_{-0.55} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	31.97	$32^{+4}_{-4} \quad (+0.9\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.058}$	r_*	144.51	$144.51^{+0.59}_{-0.58} \quad (-1.0\sigma)$	f_{2000}^{217}	106.52	$107.0^{+3.7}_{-3.5} \quad (+1.0\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04115	$1.04114^{+0.00059}_{-0.00060} \quad (-0.6\sigma)$	χ^2_{lensing}	8.77	$9.13 \quad (\nu: 0.2)$
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.879	$13.880^{+0.054}_{-0.054} \quad (-0.9\sigma)$	χ^2_{small}	396	$291 \quad (\nu: 14174.2) \quad (-61.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	0.668	$0.66^{+0.15}_{-0.16}$	z_{drag}	1060.01	$1059.98^{+0.60}_{-0.58} \quad (-0.3\sigma)$	χ^2_{lowl}	23	$129 \quad (\nu: 14170.3) \quad (+154.3\sigma)$
A_{217}^{dustTE}	2.09	$2.08^{+0.51}_{-0.52}$	r_{drag}	147.15	$147.16^{+0.58}_{-0.57} \quad (-0.9\sigma)$	χ^2_{plik}	2345.1	$2359.9 \quad (\nu: 17.0) \quad (+292.6\sigma)$
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	0.14084	$0.14081^{+0.00061}_{-0.00062} \quad (+0.7\sigma)$	χ^2_{JLA}	1034.957	$1035.03 \quad (\nu: 0.0)$
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	0.160711	$0.16074^{+0.00035}_{-0.00034} \quad (+0.3\sigma)$	$\chi^2_{6\text{DF}}$	0.01	$0.46 \quad (\nu: 0.3)$
H_0	67.94	$67.9^{+1.3}_{-1.2} \quad (+3.6\sigma)$	z_{eq}	3393	$3393^{+60}_{-60} \quad (+1.0\sigma)$	χ^2_{MGS}	1.41	$1.07 \quad (\nu: 0.3)$
Ω_Λ	0.6902	$0.690^{+0.011}_{-0.011} \quad (+2.6\sigma)$	k_{eq}	0.010356	$0.01036^{+0.00018}_{-0.00018} \quad (+1.0\sigma)$	χ^2_{DR12BAO}	3.79	$4.5 \quad (\nu: 1.4)$
Ω_m	0.3090	$0.309^{+0.012}_{-0.012} \quad (-2.5\sigma)$	$100\theta_{\text{eq}}$	0.8151	$0.815^{+0.012}_{-0.011} \quad (-1.0\sigma)$	χ^2_{prior}	1.7	$11.5 \quad (\nu: 9.9) \quad (+1.2\sigma)$
$\Omega_m h^2$	0.14263	$0.1426^{+0.0025}_{-0.0025} \quad (+1.0\sigma)$	$100\theta_{s,\text{eq}}$	0.4503	$0.4503^{+0.0060}_{-0.0058} \quad (-1.0\sigma)$	χ^2_{CMB}	2773.3	$2789.6 \quad (\nu: 17.6) \quad (+281.1\sigma)$
$\Omega_m h^3$	0.09690	$0.0969^{+0.0027}_{-0.0026} \quad (+3.6\sigma)$	$H(0.15)$	73.22	$73.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$	χ^2_{BAO}	5.20	$6.1 \quad (\nu: 1.0)$

Best-fit $\chi^2_{\text{eff}} = 3815.13$; $\Delta\chi^2_{\text{eff}} = -0.54$; $\bar{\chi}^2_{\text{eff}} = 3842.20$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.34$; $R - 1 = 0.02228$
 χ^2_{eff} : BAO - 6DF: 0.01 (Δ -0.01) MGS: 1.41 (Δ 0.13) DR12BAO: 3.79 (Δ -0.46) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.77 (Δ 0.05) small_100x143_offlike5_EE_Aplanck
396.34 (Δ -0.18) commander_dx12_v3.2_29: 23.10 (Δ 0.21) plik_rd12_HM_v22b.TTTEEE: 2345.08 (Δ -0.18) SN - JLA Pantheon18: 1034.96 (Δ -0.02)

16.18 base_omegak_plikHM_TTTEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	σ_8	$0.812^{+0.016}_{-0.015} \quad (+2.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+11}_{-12} \quad (-2.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0028}_{-0.0028} \quad (+1.0\sigma)$	S_8	$0.825^{+0.025}_{-0.024} \quad (-3.0\sigma)$	$H(0.38)$	$83.3^{+1.3}_{-1.2} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00060}_{-0.00061} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+25}_{-26} \quad (-3.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.014}_{-0.013} \quad (-2.9\sigma)$	$H(0.51)$	$90.0^{+1.3}_{-1.2} \quad (+3.7\sigma)$
Ω_K	$0.0008^{+0.0038}_{-0.0037} \quad (+2.3\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.021}_{-0.019} \quad (-3.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+31}_{-33} \quad (-3.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.029}_{-0.027} \quad (+1.1\sigma)$	$r_{\mathrm{drag}}h$	$99.9^{+2.0}_{-1.9} \quad (+3.6\sigma)$	$H(0.61)$	$95.6^{+1.3}_{-1.2} \quad (+3.7\sigma)$
n_{s}	$0.9660^{+0.0088}_{-0.0085} \quad (-0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.049}_{-0.045} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+35}_{-37} \quad (-3.1\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0050} \quad (+0.2\sigma)$	z_{re}	$< 9.01 \quad (+1.1\sigma)$	$H(2.33)$	$236.6^{+2.3}_{-2.4} \quad (+3.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.061}_{-0.056} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5746^{+60}_{-64} \quad (-3.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.024}_{-0.023} \quad (+0.8\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.012} \quad (-3.3\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-4.0} \quad (-0.1\sigma)$	D_{40}	$1229^{+26}_{-26} \quad (+1.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.015}_{-0.014} \quad (+2.6\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (+0.3\sigma)$	D_{220}	$5734^{+78}_{-78} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.012}_{-0.011} \quad (-3.6\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (+0.5\sigma)$	D_{810}	$2539^{+27}_{-27} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.012} \quad (+2.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{1420}	$817.5^{+9.5}_{-9.5} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.011}_{-0.0097} \quad (-2.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	D_{2000}	$230.9^{+3.1}_{-3.1} \quad (-0.7\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.013}_{-0.012} \quad (+2.9\sigma)$
A^{kSZ}	$< 8.06 \quad (+0.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0088}_{-0.0085} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.010}_{-0.0091} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.012}_{-0.011} \quad (+3.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2988^{+0.0062}_{-0.0057} \quad (+3.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.583^{+0.057}_{-0.054} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3083^{+0.0070}_{-0.0065} \quad (+3.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.75^{+0.15}_{-0.16} \quad (-3.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.076}_{-0.075}$	z_*	$1089.87^{+0.56}_{-0.56} \quad (+0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$144.50^{+0.62}_{-0.60} \quad (-1.0\sigma)$	f_{2000}^{217}	$107.0^{+3.5}_{-3.5} \quad (+1.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.04113^{+0.00060}_{-0.00060} \quad (-0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.879^{+0.057}_{-0.055} \quad (-1.0\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.6) \quad (+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.95^{+0.59}_{-0.59} \quad (-0.4\sigma)$	χ_{plik}^2	$2360.0 \quad (\nu: 16.6) \quad (+292.6\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	r_{drag}	$147.16^{+0.61}_{-0.58} \quad (-0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14081^{+0.00063}_{-0.00064} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.45 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00035}_{-0.00034} \quad (+0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.8)$
H_0	$67.9^{+1.4}_{-1.3} \quad (+3.6\sigma)$	z_{eq}	$3395^{+62}_{-63} \quad (+1.0\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.1) \quad (+1.3\sigma)$
Ω_{Λ}	$0.689^{+0.012}_{-0.012} \quad (+2.6\sigma)$	k_{eq}	$0.01036^{+0.00019}_{-0.00019} \quad (+1.0\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.4)$
Ω_{m}	$0.310^{+0.013}_{-0.013} \quad (-2.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.012} \quad (-1.0\sigma)$	χ_{CMB}^2	$2780.5 \quad (\nu: 16.5) \quad (+279.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1427^{+0.0026}_{-0.0026} \quad (+1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4501^{+0.0062}_{-0.0059} \quad (-1.0\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.0969^{+0.0028}_{-0.0026} \quad (+3.6\sigma)$	$H(0.15)$	$73.2^{+1.3}_{-1.2} \quad (+3.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.34; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.62; R - 1 = 0.01378$$

16.19 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	σ_8	$0.812^{+0.014}_{-0.013} \quad (+2.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+11}_{-11} \quad (-2.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0027}_{-0.0027} \quad (+1.0\sigma)$	S_8	$0.825^{+0.021}_{-0.021} \quad (-3.0\sigma)$	$H(0.38)$	$83.3^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00061}_{-0.00061} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.012}_{-0.011} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+25}_{-25} \quad (-3.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.012}_{-0.011} \quad (-2.9\sigma)$	$H(0.51)$	$90.0^{+1.2}_{-1.2} \quad (+3.7\sigma)$
Ω_K	$0.0007^{+0.0037}_{-0.0037} \quad (+2.3\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.016} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+31}_{-31} \quad (-3.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.027}_{-0.025} \quad (+1.2\sigma)$	$r_{\mathrm{drag}}h$	$99.9^{+1.9}_{-1.8} \quad (+3.6\sigma)$	$H(0.61)$	$95.6^{+1.2}_{-1.2} \quad (+3.7\sigma)$
n_{s}	$0.9659^{+0.0089}_{-0.0082} \quad (-0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.040}_{-0.038} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+35}_{-35} \quad (-3.1\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+1.1\sigma)$	$H(2.33)$	$236.5^{+2.3}_{-2.3} \quad (+3.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.056}_{-0.053} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5747^{+61}_{-62} \quad (-3.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (+0.8\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.011} \quad (-3.3\sigma)$
A_{143}^{tSZ}	$5.4^{+3.7}_{-4.0} \quad (-0.1\sigma)$	D_{40}	$1229^{+24}_{-25} \quad (+1.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.013}_{-0.012} \quad (+2.6\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (+0.3\sigma)$	D_{220}	$5737^{+77}_{-76} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4752^{+0.0093}_{-0.0090} \quad (-3.6\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (+0.5\sigma)$	D_{810}	$2540^{+25}_{-27} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.012}_{-0.011} \quad (+2.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{1420}	$817.7^{+9.3}_{-9.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4740^{+0.0086}_{-0.0082} \quad (-2.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.1} \quad (-0.7\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.012}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	$< 8.01 \quad (+0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9659^{+0.0089}_{-0.0082} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.4692^{+0.0081}_{-0.0078} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.4} \quad (-0.0\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.011}_{-0.010} \quad (+3.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2989^{+0.0058}_{-0.0053} \quad (+3.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.5}_{-6.5} \quad (+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.581^{+0.057}_{-0.054} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3083^{+0.0067}_{-0.0060} \quad (+3.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.76^{+0.15}_{-0.16} \quad (-3.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.077}_{-0.075}$	z_*	$1089.86^{+0.55}_{-0.55} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+1.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$144.50^{+0.59}_{-0.58} \quad (-1.0\sigma)$	f_{2000}^{217}	$107.0^{+3.7}_{-3.5} \quad (+1.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04114^{+0.00060}_{-0.00061} \quad (-0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.11 \quad (\nu: 0.1)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.879^{+0.054}_{-0.054} \quad (-1.0\sigma)$	χ_{small}^2	$291 \quad (\nu: 14235.6) \quad (-62.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1059.97^{+0.61}_{-0.61} \quad (-0.4\sigma)$	χ_{lowl}^2	$130 \quad (\nu: 14232.1) \quad (+155.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.51}_{-0.52}$	r_{drag}	$147.16^{+0.58}_{-0.56} \quad (-0.9\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 16.6) \quad (+292.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14082^{+0.00061}_{-0.00062} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.45 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00035}_{-0.00034} \quad (+0.3\sigma)$	χ_{MGS}^2	$1.03 \quad (\nu: 0.3)$
H_0	$67.9^{+1.3}_{-1.2} \quad (+3.6\sigma)$	z_{eq}	$3395^{+61}_{-60} \quad (+1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.7)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+2.6\sigma)$	k_{eq}	$0.01036^{+0.00019}_{-0.00018} \quad (+1.0\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.8) \quad (+1.2\sigma)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-2.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.011} \quad (-1.0\sigma)$	χ_{CMB}^2	$2789.4 \quad (\nu: 17.2) \quad (+281.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1427^{+0.0025}_{-0.0025} \quad (+1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4502^{+0.0059}_{-0.0059} \quad (-1.0\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}}h^3$	$0.0969^{+0.0027}_{-0.0026} \quad (+3.6\sigma)$	$H(0.15)$	$73.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.05; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.33; R - 1 = 0.02354$$

16.20 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	σ_8	$0.812^{+0.014}_{-0.013} \quad (+2.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$638^{+11}_{-11} \quad (-2.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0027}_{-0.0027} \quad (+1.0\sigma)$	S_8	$0.824^{+0.021}_{-0.020} \quad (-3.0\sigma)$	$H(0.38)$	$83.3^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00060}_{-0.00061} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.011} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1523^{+24}_{-25} \quad (-3.0\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.012}_{-0.011} \quad (-2.9\sigma)$	$H(0.51)$	$90.0^{+1.2}_{-1.1} \quad (+3.7\sigma)$
Ω_K	$0.0008^{+0.0037}_{-0.0037} \quad (+2.3\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.016} \quad (-3.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+30}_{-31} \quad (-3.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.048^{+0.027}_{-0.025} \quad (+1.2\sigma)$	$r_{\mathrm{drag}}h$	$99.99^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$H(0.61)$	$95.7^{+1.2}_{-1.1} \quad (+3.7\sigma)$
n_{s}	$0.9661^{+0.0089}_{-0.0082} \quad (-0.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.040}_{-0.038} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2296^{+34}_{-35} \quad (-3.1\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+1.1\sigma)$	$H(2.33)$	$236.5^{+2.3}_{-2.3} \quad (+3.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.107^{+0.056}_{-0.053} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5745^{+60}_{-62} \quad (-3.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (+0.8\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.010} \quad (-3.3\sigma)$
A_{143}^{tSZ}	$5.4^{+3.6}_{-4.0} \quad (-0.1\sigma)$	D_{40}	$1229^{+24}_{-25} \quad (+1.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.013}_{-0.012} \quad (+2.6\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (+0.3\sigma)$	D_{220}	$5738^{+77}_{-76} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4749^{+0.0092}_{-0.0089} \quad (-3.7\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (+0.5\sigma)$	D_{810}	$2540^{+25}_{-26} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.012}_{-0.011} \quad (+2.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{1420}	$817.8^{+9.2}_{-9.2} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4738^{+0.0086}_{-0.0081} \quad (-2.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.1} \quad (-0.6\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.012}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	$< 7.99 \quad (+0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9661^{+0.0089}_{-0.0082} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.4690^{+0.0081}_{-0.0077} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Y_{P}	$0.24541^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.011}_{-0.010} \quad (+3.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2990^{+0.0058}_{-0.0052} \quad (+3.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.5}_{-6.5} \quad (+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.056}_{-0.054} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3085^{+0.0067}_{-0.0060} \quad (+3.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.75^{+0.15}_{-0.16} \quad (-3.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (+0.8\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.077}_{-0.075}$	z_*	$1089.84^{+0.55}_{-0.55} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.058}$	r_*	$144.52^{+0.59}_{-0.58} \quad (-1.0\sigma)$	f_{2000}^{217}	$106.9^{+3.7}_{-3.5} \quad (+1.0\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04114^{+0.00059}_{-0.00060} \quad (-0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.10 \quad (\nu: 0.1)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.881^{+0.054}_{-0.054} \quad (-0.9\sigma)$	χ_{small}^2	$291 \quad (\nu: 14237.3) \quad (-62.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.15}_{-0.16}$	z_{drag}	$1059.98^{+0.60}_{-0.58} \quad (-0.3\sigma)$	χ_{lowl}^2	$130 \quad (\nu: 14233.8) \quad (+155.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.51}_{-0.52}$	r_{drag}	$147.17^{+0.58}_{-0.57} \quad (-0.9\sigma)$	χ_{plik}^2	$2359.8 \quad (\nu: 16.8) \quad (+292.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14081^{+0.00061}_{-0.00062} \quad (+0.7\sigma)$	χ_{JLA}^2	$1035.03 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00035}_{-0.00034} \quad (+0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.46 \quad (\nu: 0.3)$
H_0	$67.9^{+1.3}_{-1.2} \quad (+3.6\sigma)$	z_{eq}	$3393^{+60}_{-60} \quad (+1.0\sigma)$	χ_{MGS}^2	$1.07 \quad (\nu: 0.3)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+2.6\sigma)$	k_{eq}	$0.01036^{+0.00018}_{-0.00018} \quad (+1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 1.4)$
Ω_{m}	$0.309^{+0.012}_{-0.012} \quad (-2.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.011} \quad (-1.0\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.9) \quad (+1.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0025}_{-0.0025} \quad (+1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0060}_{-0.0058} \quad (-1.0\sigma)$	χ_{CMB}^2	$2789.5 \quad (\nu: 17.3) \quad (+281.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0969^{+0.0027}_{-0.0026} \quad (+3.6\sigma)$	$H(0.15)$	$73.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 1.0)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 3842.05; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.31; R - 1 = 0.02292$$

16.21 base_omegak_CamSpecHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022178	$0.02217^{+0.00045}_{-0.00044}$ (-1.4σ)	$\sigma_8 \Omega_m^{0.25}$	0.6036	$0.604^{+0.020}_{-0.019}$ (-3.0σ)	$H(0.38)$	83.23	$83.3^{+1.3}_{-1.3}$ $(+3.7\sigma)$
$\Omega_c h^2$	0.11972	$0.1197^{+0.0045}_{-0.0042}$ $(+1.0\sigma)$	$\sigma_8/h^{0.5}$	0.9824	$0.982^{+0.026}_{-0.025}$ (-3.3σ)	$D_M(0.38)$	1524.9	1524^{+27}_{-26} (-3.0σ)
$100\theta_{MC}$	1.04093	$1.04094^{+0.00097}_{-0.00097}$ (-0.6σ)	$r_{drag}h$	99.96	$100.0^{+2.0}_{-2.0}$ $(+3.6\sigma)$	$H(0.51)$	89.95	$90.0^{+1.4}_{-1.3}$ $(+3.7\sigma)$
τ	0.0528	$0.053^{+0.017}_{-0.016}$ $(+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	2.428	$2.425^{+0.060}_{-0.057}$ (-3.1σ)	$D_M(0.51)$	1975.5	1975^{+34}_{-33} (-3.0σ)
Ω_K	0.0011	$0.0011^{+0.0051}_{-0.0050}$ $(+2.4\sigma)$	z_{re}	7.57	$7.5^{+1.7}_{-1.7}$ $(+0.8\sigma)$	$H(0.61)$	95.57	$95.6^{+1.4}_{-1.4}$ $(+3.7\sigma)$
$\ln(10^{10} A_s)$	3.0378	$3.038^{+0.034}_{-0.032}$ $(+0.7\sigma)$	$10^9 A_s$	2.086	$2.086^{+0.072}_{-0.066}$ $(+0.7\sigma)$	$D_M(0.61)$	2299.0	2298^{+38}_{-37} (-3.1σ)
n_s	0.9652	$0.966^{+0.012}_{-0.012}$ (-1.0σ)	$10^9 A_s e^{-2\tau}$	1.8769	$1.877^{+0.027}_{-0.027}$ $(+0.5\sigma)$	$H(2.33)$	236.44	$236.4^{+3.7}_{-3.5}$ $(+2.9\sigma)$
y_{cal}	1.00027	$1.0004^{+0.0047}_{-0.0049}$ $(+0.1\sigma)$	D_{40}	1225.3	1224^{+32}_{-31} $(+1.2\sigma)$	$D_M(2.33)$	5750	5749^{+74}_{-75} (-3.2σ)
A_{100}^{PS}	242.6	242^{+50}_{-50} (-0.3σ)	D_{220}	5703	5703^{+78}_{-81} (-1.0σ)	$f\sigma_8(0.15)$	0.4550	$0.455^{+0.018}_{-0.017}$ (-3.4σ)
A_{143}^{PS}	37.7	41^{+20}_{-20} (-0.1σ)	D_{810}	2532.5	2533^{+26}_{-27} $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7478	$0.748^{+0.020}_{-0.018}$ $(+2.5\sigma)$
A_{217}^{PS}	100.4	101^{+30}_{-30} (-1.3σ)	D_{1420}	814.0	814^{+10}_{-10} $(+0.1\sigma)$	$f\sigma_8(0.38)$	0.4736	$0.474^{+0.015}_{-0.015}$ (-3.8σ)
A_{217}^{CIB}	43.3	41^{+10}_{-10} (-0.7σ)	D_{2000}	229.53	$229.6^{+3.7}_{-3.6}$ (-1.4σ)	$\sigma_8(0.38)$	0.6631	$0.663^{+0.017}_{-0.016}$ $(+2.8\sigma)$
A_{143}^{tSZ}	4.78	< 7.42 (-1.0σ)	$n_{s,0.002}$	0.9652	$0.966^{+0.012}_{-0.012}$ (-1.0σ)	$f\sigma_8(0.51)$	0.4724	$0.472^{+0.014}_{-0.014}$ (-2.7σ)
$r_{143 \times 217}^{PS}$	0.594	$0.65^{+0.25}_{-0.25}$	Y_P	0.245317	$0.24531^{+0.00018}_{-0.00021}$ (-1.5σ)	$\sigma_8(0.51)$	0.6206	$0.621^{+0.016}_{-0.015}$ $(+2.8\sigma)$
$r_{143 \times 217}^{CIB}$	0.60	—	Y_P^{BBN}	0.246643	$0.24664^{+0.00018}_{-0.00021}$ (-1.5σ)	$f\sigma_8(0.61)$	0.4675	$0.468^{+0.013}_{-0.013}$ (-0.8σ)
$\xi^{tSZ \times CIB}$	0.01	—	$10^5 D/H$	2.622	$2.623^{+0.084}_{-0.084}$ $(+1.5\sigma)$	$\sigma_8(0.61)$	0.5906	$0.591^{+0.015}_{-0.014}$ $(+2.9\sigma)$
A^{kSZ}	3.1	—	Age/Gyr	13.764	$13.76^{+0.19}_{-0.19}$ (-3.1σ)	$f\sigma_8(2.33)$	0.2978	$0.2979^{+0.0074}_{-0.0070}$ $(+3.0\sigma)$
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.38}$	z_*	1090.14	$1090.14^{+0.87}_{-0.83}$ $(+1.4\sigma)$	$\sigma_8(2.33)$	0.3072	$0.3074^{+0.0081}_{-0.0078}$ $(+3.2\sigma)$
A_{143}^{dust}	0.971	$0.98^{+0.34}_{-0.34}$	r_*	144.65	$144.66^{+0.95}_{-0.99}$ (-0.7σ)	f_{2000}^{143}	30.9	31^{+6}_{-6} $(+1.2\sigma)$
A_{217}^{dust}	0.961	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	1.04114	$1.04114^{+0.00094}_{-0.00095}$ (-0.6σ)	f_{2000}^{217}	107.63	$107.5^{+4.0}_{-4.0}$ $(+1.2\sigma)$
$A_{143 \times 217}^{dust}$	1.040	$1.03^{+0.32}_{-0.31}$	$D_M(z_*)/\text{Gpc}$	13.893	$13.894^{+0.087}_{-0.091}$ (-0.6σ)	$f_{2000}^{143 \times 217}$	33.15	33^{+4}_{-4} $(+1.3\sigma)$
c_{100}	0.99748	$0.9975^{+0.0021}_{-0.0021}$ (-3.5σ)	z_{drag}	1059.47	$1059.46^{+0.89}_{-0.86}$ (-1.3σ)	χ_{simall}^2	395.87	$397.0 (\nu: 1.6)$ $(+0.1\sigma)$
c_{217}	1.00125	$1.0012^{+0.0031}_{-0.0030}$ $(+4.8\sigma)$	r_{drag}	147.38	$147.39^{+0.93}_{-0.98}$ (-0.5σ)	χ_{lowl}^2	23.19	$23.2 (\nu: 1.0)$ $(+2.7\sigma)$
H_0	67.82	$67.9^{+1.4}_{-1.4}$ $(+3.6\sigma)$	k_D	0.14042	$0.1404^{+0.0010}_{-0.00099}$ (-0.1σ)	$\chi_{CamSpec}^2$	7051.1	$7064.3 (\nu: 14.7)$
Ω_Λ	0.6890	$0.689^{+0.015}_{-0.016}$ $(+2.6\sigma)$	$100\theta_D$	0.16104	$0.16105^{+0.00051}_{-0.00051}$ $(+1.4\sigma)$	χ_{6DF}^2	0.011	$0.053 (\nu: 0.0)$
Ω_m	0.3099	$0.310^{+0.015}_{-0.014}$ (-2.5σ)	z_{eq}	3391	3390^{+100}_{-94} $(+0.9\sigma)$	χ_{MGS}^2	1.41	$1.52 (\nu: 0.2)$
$\Omega_m h^2$	0.14255	$0.1425^{+0.0042}_{-0.0039}$ $(+0.9\sigma)$	k_{eq}	0.010350	$0.01035^{+0.00031}_{-0.00029}$ $(+0.9\sigma)$	$\chi_{DR12BAO}^2$	3.68	$4.5 (\nu: 1.6)$
$\Omega_m h^3$	0.09668	$0.0967^{+0.0037}_{-0.0034}$ $(+3.6\sigma)$	$100\theta_{eq}$	0.8148	$0.815^{+0.018}_{-0.019}$ (-1.0σ)	χ_{prior}^2	2.3	$7.5 (\nu: 5.6)$ $(+0.1\sigma)$
σ_8	0.8091	$0.809^{+0.021}_{-0.020}$ $(+2.2\sigma)$	$100\theta_{s,eq}$	0.4503	$0.4504^{+0.0094}_{-0.0097}$ (-1.0σ)	χ_{BAO}^2	5.10	$6.1 (\nu: 1.2)$
S_8	0.8223	$0.822^{+0.034}_{-0.033}$ (-3.1σ)	$H(0.15)$	73.11	$73.1^{+1.3}_{-1.3}$ $(+3.7\sigma)$	χ_{CMB}^2	7470.1	$7484.5 (\nu: 15.1)$ $(+1103.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4504	$0.450^{+0.019}_{-0.018}$ (-3.1σ)	$D_M(0.15)$	639.3	639^{+12}_{-12} (-2.9σ)			

Best-fit $\chi_{eff}^2 = 7477.49$; $\bar{\chi}_{eff}^2 = 7498.13$; $\Delta\bar{\chi}_{eff}^2 = 0.57$; $R - 1 = 0.00836$

χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.41 DR12BAO: 3.69 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3.2_29: 23.19 CamSpec like_10.7HM: 7051.07

16.22 base_omegak_CamSpecHM_TT_lowl_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02218^{+0.00045}_{-0.00042} \quad (-1.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.014}_{-0.014} \quad (-2.9\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1199^{+0.0040}_{-0.0038} \quad (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.019}_{-0.019} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+27}_{-26} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00094}_{-0.00095} \quad (-0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.9} \quad (+3.6\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-1.3} \quad (+3.7\sigma)$
τ	$0.054^{+0.017}_{-0.015} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.044}_{-0.044} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+33}_{-33} \quad (-3.0\sigma)$
Ω_K	$0.0011^{+0.0050}_{-0.0049} \quad (+2.4\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$H(0.61)$	$95.6^{+1.4}_{-1.4} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.031}_{-0.029} \quad (+0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.065}_{-0.060} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2300^{+38}_{-38} \quad (-3.1\sigma)$
n_{s}	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (+0.6\sigma)$	$H(2.33)$	$236.6^{+3.3}_{-3.3} \quad (+3.0\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0050} \quad (+0.2\sigma)$	D_{40}	$1227^{+28}_{-28} \quad (+1.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5750^{+73}_{-74} \quad (-3.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5708^{+81}_{-83} \quad (-0.9\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-3.3\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2534^{+26}_{-27} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.015}_{-0.015} \quad (+2.6\sigma)$
A_{217}^{PS}	$101^{+20}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-3.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-0.7\sigma)$	D_{2000}	$229.7^{+3.7}_{-3.7} \quad (-1.3\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.011}_{-0.011} \quad (-1.1\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.010} \quad (-2.5\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	Y_{P}	$0.24531^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.013}_{-0.013} \quad (+2.9\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.4690^{+0.0096}_{-0.0096} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.623^{+0.082}_{-0.083} \quad (+1.5\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.013}_{-0.012} \quad (+3.0\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.76^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0064}_{-0.0061} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	z_*	$1090.16^{+0.80}_{-0.80} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3080^{+0.0073}_{-0.0070} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	r_*	$144.61^{+0.87}_{-0.88} \quad (-0.8\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.2\sigma)$
A_{217}^{dust}	$0.97^{+0.19}_{-0.20}$	$100\theta_*$	$1.04111^{+0.00092}_{-0.00093} \quad (-0.6\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-3.9} \quad (+1.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.890^{+0.079}_{-0.079} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1059.47^{+0.88}_{-0.88} \quad (-1.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.49 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0030}_{-0.0030} \quad (+4.9\sigma)$	r_{drag}	$147.34^{+0.86}_{-0.87} \quad (-0.6\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.2\sigma)$
H_0	$67.8^{+1.4}_{-1.3} \quad (+3.6\sigma)$	k_{D}	$0.14045^{+0.00094}_{-0.00096} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.8) \quad (+2.9\sigma)$
Ω_{Λ}	$0.688^{+0.013}_{-0.013} \quad (+2.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16104^{+0.00051}_{-0.00050} \quad (+1.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.5 \quad (\nu: 13.3)$
Ω_{m}	$0.311^{+0.013}_{-0.012} \quad (-2.5\sigma)$	z_{eq}	$3395^{+89}_{-86} \quad (+1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1427^{+0.0037}_{-0.0036} \quad (+1.0\sigma)$	k_{eq}	$0.01036^{+0.00027}_{-0.00026} \quad (+1.0\sigma)$	χ_{MGS}^2	$1.44 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0967^{+0.0036}_{-0.0033} \quad (+3.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.017}_{-0.017} \quad (-1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.7)$
σ_8	$0.811^{+0.017}_{-0.016} \quad (+2.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4500^{+0.0086}_{-0.0085} \quad (-1.1\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.6) \quad (+0.1\sigma)$
S_8	$0.826^{+0.026}_{-0.024} \quad (-3.0\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.6\sigma)$	χ_{CMB}^2	$7493.5 \quad (\nu: 14.9) \quad (+1105.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+12}_{-12} \quad (-2.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.3)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7507.17$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.69$; $R - 1 = 0.01378$

16.23 base_omegak_CamSpecHM_TT_lowl_lowE_BAO_post_lensing_Pantheon18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02219^{+0.00045}_{-0.00043} \quad (-1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.019}_{-0.018} \quad (-3.2\sigma)$	$H(0.51)$	$90.0^{+1.4}_{-1.3} \quad (+3.7\sigma)$
$\Omega_{\text{c}}h^2$	$0.1197^{+0.0039}_{-0.0038} \quad (+1.0\sigma)$	$r_{\text{drag}}h$	$100.0^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$D_{\text{M}}(0.51)$	$1975^{+33}_{-33} \quad (-3.0\sigma)$
$100\theta_{\text{MC}}$	$1.04094^{+0.00093}_{-0.00095} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.043}_{-0.043} \quad (-3.0\sigma)$	$H(0.61)$	$95.6^{+1.4}_{-1.4} \quad (+3.7\sigma)$
τ	$0.055^{+0.017}_{-0.015} \quad (+0.7\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+1.0\sigma)$	$D_{\text{M}}(0.61)$	$2298^{+37}_{-38} \quad (-3.1\sigma)$
Ω_K	$0.0011^{+0.0050}_{-0.0049} \quad (+2.4\sigma)$	$10^9 A_{\text{s}}$	$2.096^{+0.067}_{-0.060} \quad (+0.9\sigma)$	$H(2.33)$	$236.4^{+3.3}_{-3.3} \quad (+3.0\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.043^{+0.031}_{-0.029} \quad (+0.9\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (+0.6\sigma)$	$D_{\text{M}}(2.33)$	$5749^{+73}_{-74} \quad (-3.2\sigma)$
n_{s}	$0.966^{+0.011}_{-0.011} \quad (-1.0\sigma)$	D_{40}	$1226^{+29}_{-28} \quad (+1.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.012} \quad (-3.3\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0050} \quad (+0.2\sigma)$	D_{220}	$5710^{+80}_{-83} \quad (-0.8\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.016}_{-0.015} \quad (+2.6\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.3\sigma)$	D_{810}	$2534^{+26}_{-27} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-3.7\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$229.8^{+3.7}_{-3.6} \quad (-1.3\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.010}_{-0.0099} \quad (-2.5\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-0.7\sigma)$	$n_{\text{s},0.002}$	$0.966^{+0.011}_{-0.011} \quad (-1.0\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.013}_{-0.013} \quad (+2.9\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-1.0\sigma)$	Y_{P}	$0.24532^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.4686^{+0.0096}_{-0.0094} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.013}_{-0.012} \quad (+3.0\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$10^5 \text{D}/\text{H}$	$2.620^{+0.082}_{-0.082} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.2986^{+0.0064}_{-0.0061} \quad (+3.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Age/Gyr	$13.76^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	$0.3081^{+0.0073}_{-0.0069} \quad (+3.2\sigma)$
A^{kSZ}	—	z_*	$1090.13^{+0.79}_{-0.80} \quad (+1.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	r_*	$144.65^{+0.86}_{-0.85} \quad (-0.7\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-4.0} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	$100\theta_*$	$1.04114^{+0.00091}_{-0.00093} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.2\sigma)$
A_{217}^{dust}	$0.97^{+0.19}_{-0.20}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.893^{+0.078}_{-0.079} \quad (-0.7\sigma)$	χ_{lensing}^2	$9.50 \quad (\nu: 0.4)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.49^{+0.90}_{-0.86} \quad (-1.3\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	r_{drag}	$147.37^{+0.87}_{-0.85} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.8) \quad (+2.8\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0031} \quad (+4.9\sigma)$	k_{D}	$0.14043^{+0.00094}_{-0.00095} \quad (-0.0\sigma)$	χ_{CamSpec}^2	$7063.6 \quad (\nu: 13.3)$
H_0	$67.9^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_{\text{D}}$	$0.16103^{+0.00050}_{-0.00050} \quad (+1.3\sigma)$	χ_{JLA}^2	$1035.07 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+2.6\sigma)$	z_{eq}	$3391^{+87}_{-85} \quad (+1.0\sigma)$	χ_{6DF}^2	$0.047 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.013}_{-0.012} \quad (-2.5\sigma)$	k_{eq}	$0.01035^{+0.00027}_{-0.00026} \quad (+1.0\sigma)$	χ_{MGS}^2	$1.51 \quad (\nu: 0.2)$
$\Omega_{\text{m}}h^2$	$0.1425^{+0.0037}_{-0.0036} \quad (+1.0\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.016}_{-0.016} \quad (-1.0\sigma)$	χ_{DR12BAO}^2	$4.4 \quad (\nu: 1.4)$
$\Omega_{\text{m}}h^3$	$0.0967^{+0.0036}_{-0.0033} \quad (+3.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4504^{+0.0085}_{-0.0084} \quad (-1.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.6) \quad (+0.1\sigma)$
σ_8	$0.811^{+0.017}_{-0.016} \quad (+2.3\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.7\sigma)$	χ_{CMB}^2	$7493.6 \quad (\nu: 14.8) \quad (+1105.2\sigma)$
S_8	$0.824^{+0.025}_{-0.024} \quad (-3.0\sigma)$	$D_{\text{M}}(0.15)$	$639^{+12}_{-12} \quad (-2.9\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 1.0)$
$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.451^{+0.014}_{-0.013} \quad (-3.0\sigma)$	$H(0.38)$	$83.3^{+1.3}_{-1.3} \quad (+3.7\sigma)$		
$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.605^{+0.014}_{-0.014} \quad (-3.0\sigma)$	$D_{\text{M}}(0.38)$	$1524^{+26}_{-26} \quad (-3.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 8542.21; \Delta\bar{\chi}_{\text{eff}}^2 = 0.71; R - 1 = 0.01384$$

16.24 base_omegak_CamSpecHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02218^{+0.00045}_{-0.00044} \quad (-1.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.019}_{-0.018} \quad (-3.0\sigma)$	$H(0.38)$	$83.3^{+1.3}_{-1.3} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0046}_{-0.0042} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.026}_{-0.024} \quad (-3.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+27}_{-26} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00097}_{-0.00098} \quad (-0.6\sigma)$	$r_{\mathrm{drag}} h$	$100.0^{+2.0}_{-2.0} \quad (+3.6\sigma)$	$H(0.51)$	$90.0^{+1.4}_{-1.3} \quad (+3.7\sigma)$
τ	$0.054^{+0.014}_{-0.012} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.058}_{-0.055} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1975^{+33}_{-33} \quad (-3.0\sigma)$
Ω_K	$0.0011^{+0.0051}_{-0.0050} \quad (+2.4\sigma)$	z_{re}	$< 8.92 \quad (+1.0\sigma)$	$H(0.61)$	$95.6^{+1.4}_{-1.4} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.029}_{-0.027} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.062}_{-0.056} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+38}_{-37} \quad (-3.1\sigma)$
n_{s}	$0.966^{+0.012}_{-0.012} \quad (-1.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.028}_{-0.027} \quad (+0.5\sigma)$	$H(2.33)$	$236.4^{+3.7}_{-3.5} \quad (+2.9\sigma)$
y_{cal}	$1.0003^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{40}	$1224^{+32}_{-31} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5750^{+73}_{-75} \quad (-3.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5703^{+79}_{-81} \quad (-1.0\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.017}_{-0.017} \quad (-3.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2533^{+26}_{-27} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.019}_{-0.017} \quad (+2.6\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.015}_{-0.014} \quad (-3.7\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-0.7\sigma)$	D_{2000}	$229.6^{+3.7}_{-3.6} \quad (-1.4\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.017}_{-0.015} \quad (+2.8\sigma)$
A_{143}^{tSZ}	$< 7.46 \quad (-1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.966^{+0.012}_{-0.012} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.014}_{-0.013} \quad (-2.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	Y_{P}	$0.24531^{+0.00018}_{-0.00021} \quad (-1.4\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.015}_{-0.014} \quad (+2.9\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00018}_{-0.00021} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.013}_{-0.012} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.622^{+0.085}_{-0.083} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.015}_{-0.013} \quad (+2.9\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.76^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0071}_{-0.0064} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.13^{+0.86}_{-0.83} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0079}_{-0.0072} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	r_*	$144.67^{+0.95}_{-1.0} \quad (-0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04114^{+0.00095}_{-0.00096} \quad (-0.6\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-4.0} \quad (+1.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.895^{+0.087}_{-0.092} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	z_{drag}	$1059.47^{+0.92}_{-0.87} \quad (-1.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.8\sigma)$	r_{drag}	$147.40^{+0.94}_{-0.98} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.0) \quad (+2.7\sigma)$
H_0	$67.9^{+1.4}_{-1.4} \quad (+3.6\sigma)$	k_{D}	$0.1404^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.1 \quad (\nu: 14.5)$
Ω_{Λ}	$0.689^{+0.015}_{-0.016} \quad (+2.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16104^{+0.00051}_{-0.00051} \quad (+1.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.052 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.015}_{-0.014} \quad (-2.5\sigma)$	z_{eq}	$3389^{+100}_{-95} \quad (+0.9\sigma)$	χ_{MGS}^2	$1.53 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1425^{+0.0043}_{-0.0040} \quad (+0.9\sigma)$	k_{eq}	$0.01034^{+0.00031}_{-0.00029} \quad (+0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0967^{+0.0037}_{-0.0034} \quad (+3.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.018}_{-0.019} \quad (-1.0\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.6) \quad (+0.1\sigma)$
σ_8	$0.810^{+0.021}_{-0.019} \quad (+2.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0094}_{-0.0098} \quad (-1.0\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.2)$
S_8	$0.823^{+0.034}_{-0.032} \quad (-3.0\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.7\sigma)$	χ_{CMB}^2	$7484.3 \quad (\nu: 14.7) \quad (+1103.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.018}_{-0.018} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+12}_{-12} \quad (-2.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7497.90$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.58$; $R - 1 = 0.01053$

16.25 base_omegak_CamSpecHM_TT_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02218^{+0.00045}_{-0.00042} \quad (-1.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.014}_{-0.014} \quad (-2.9\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1198^{+0.0039}_{-0.0038} \quad (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.019}_{-0.019} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+27}_{-26} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04092^{+0.00093}_{-0.00094} \quad (-0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.9} \quad (+3.6\sigma)$	$H(0.51)$	$89.9^{+1.4}_{-1.3} \quad (+3.7\sigma)$
τ	$0.055^{+0.014}_{-0.013} \quad (+0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.043}_{-0.042} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+33}_{-33} \quad (-3.0\sigma)$
Ω_K	$0.0011^{+0.0049}_{-0.0049} \quad (+2.4\sigma)$	z_{re}	$< 8.99 \quad (+1.1\sigma)$	$H(0.61)$	$95.6^{+1.4}_{-1.4} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.027}_{-0.026} \quad (+1.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.057}_{-0.054} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2300^{+38}_{-38} \quad (-3.1\sigma)$
n_{s}	$0.965^{+0.011}_{-0.011} \quad (-1.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (+0.6\sigma)$	$H(2.33)$	$236.5^{+3.3}_{-3.3} \quad (+3.0\sigma)$
y_{cal}	$1.0005^{+0.0047}_{-0.0050} \quad (+0.2\sigma)$	D_{40}	$1227^{+29}_{-28} \quad (+1.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5751^{+72}_{-74} \quad (-3.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5708^{+81}_{-83} \quad (-0.9\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-3.3\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2534^{+26}_{-27} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.015}_{-0.015} \quad (+2.6\sigma)$
A_{217}^{PS}	$101^{+20}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-3.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-0.7\sigma)$	D_{2000}	$229.7^{+3.7}_{-3.6} \quad (-1.3\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.011}_{-0.011} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.010} \quad (-2.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	Y_{P}	$0.24531^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.013}_{-0.012} \quad (+2.9\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.4692^{+0.0094}_{-0.0095} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.622^{+0.081}_{-0.083} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.012}_{-0.012} \quad (+3.0\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.77^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$f\sigma_8(2.33)$	$0.2987^{+0.0063}_{-0.0059} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	z_*	$1090.14^{+0.79}_{-0.80} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3082^{+0.0072}_{-0.0068} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	r_*	$144.63^{+0.86}_{-0.87} \quad (-0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.2\sigma)$
A_{217}^{dust}	$0.97^{+0.19}_{-0.20}$	$100\theta_*$	$1.04112^{+0.00092}_{-0.00093} \quad (-0.6\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-3.9} \quad (+1.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.078}_{-0.079} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	z_{drag}	$1059.48^{+0.87}_{-0.88} \quad (-1.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.43 \quad (\nu: 0.3)$
c_{217}	$1.0012^{+0.0030}_{-0.0030} \quad (+4.9\sigma)$	r_{drag}	$147.36^{+0.86}_{-0.86} \quad (-0.5\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.9) \quad (+0.2\sigma)$
H_0	$67.8^{+1.4}_{-1.3} \quad (+3.6\sigma)$	k_{D}	$0.14044^{+0.00095}_{-0.00096} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.8) \quad (+2.9\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+2.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00051}_{-0.00050} \quad (+1.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.4 \quad (\nu: 13.2)$
Ω_{m}	$0.310^{+0.013}_{-0.012} \quad (-2.5\sigma)$	z_{eq}	$3393^{+88}_{-86} \quad (+1.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0037}_{-0.0036} \quad (+1.0\sigma)$	k_{eq}	$0.01035^{+0.00027}_{-0.00026} \quad (+1.0\sigma)$	χ_{MGS}^2	$1.45 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0967^{+0.0035}_{-0.0033} \quad (+3.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.017}_{-0.017} \quad (-1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.7)$
σ_8	$0.812^{+0.016}_{-0.016} \quad (+2.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4502^{+0.0085}_{-0.0085} \quad (-1.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.6) \quad (+0.1\sigma)$
S_8	$0.826^{+0.026}_{-0.025} \quad (-3.0\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.6\sigma)$	χ_{CMB}^2	$7493.3 \quad (\nu: 14.5) \quad (+1105.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+12}_{-12} \quad (-2.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.2)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7506.97$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.65$; $R - 1 = 0.01641$

16.26 base_omegak_CamSpecHM_TT_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02219^{+0.00045}_{-0.00042} \quad (-1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.018}_{-0.018} \quad (-3.2\sigma)$	$H(0.51)$	$90.0^{+1.4}_{-1.3} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0039}_{-0.0038} \quad (+1.0\sigma)$	$r_{\mathrm{drag}} h$	$100.0^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1975^{+33}_{-33} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00093}_{-0.00095} \quad (-0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.042}_{-0.042} \quad (-3.0\sigma)$	$H(0.61)$	$95.6^{+1.4}_{-1.4} \quad (+3.7\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.8\sigma)$	z_{re}	$< 9.03 \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+37}_{-38} \quad (-3.1\sigma)$
Ω_K	$0.0010^{+0.0050}_{-0.0048} \quad (+2.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.058}_{-0.054} \quad (+1.0\sigma)$	$H(2.33)$	$236.4^{+3.3}_{-3.2} \quad (+2.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.028}_{-0.026} \quad (+1.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.025}_{-0.024} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5750^{+73}_{-74} \quad (-3.2\sigma)$
n_{s}	$0.966^{+0.011}_{-0.011} \quad (-1.0\sigma)$	D_{40}	$1226^{+29}_{-28} \quad (+1.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.012} \quad (-3.3\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0050} \quad (+0.2\sigma)$	D_{220}	$5710^{+80}_{-83} \quad (-0.8\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.015}_{-0.015} \quad (+2.6\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.3\sigma)$	D_{810}	$2534^{+26}_{-27} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011} \quad (-3.7\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.014}_{-0.013} \quad (+2.8\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$229.8^{+3.7}_{-3.6} \quad (-1.3\sigma)$	$f\sigma_8(0.51)$	$0.4736^{+0.0099}_{-0.0099} \quad (-2.5\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.966^{+0.011}_{-0.011} \quad (-1.0\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.013}_{-0.012} \quad (+2.9\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-1.0\sigma)$	Y_{P}	$0.24532^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.4688^{+0.0094}_{-0.0094} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.013}_{-0.012} \quad (+3.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.619^{+0.081}_{-0.083} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.2988^{+0.0063}_{-0.0059} \quad (+3.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.76^{+0.19}_{-0.19} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	$0.3083^{+0.0072}_{-0.0067} \quad (+3.3\sigma)$
A^{kSZ}	—	z_*	$1090.11^{+0.78}_{-0.79} \quad (+1.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	r_*	$144.66^{+0.85}_{-0.85} \quad (-0.7\sigma)$	f_{2000}^{217}	$107.5^{+4.1}_{-4.0} \quad (+1.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	$100\theta_*$	$1.04115^{+0.00091}_{-0.00093} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.895^{+0.078}_{-0.079} \quad (-0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.44 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.50^{+0.89}_{-0.86} \quad (-1.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.0) \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	r_{drag}	$147.39^{+0.86}_{-0.85} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.8) \quad (+2.8\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0030} \quad (+4.9\sigma)$	k_{D}	$0.14042^{+0.00094}_{-0.00096} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.5 \quad (\nu: 13.3)$
H_0	$67.9^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00050}_{-0.00050} \quad (+1.3\sigma)$	χ_{JLA}^2	$1035.06 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.012}_{-0.013} \quad (+2.6\sigma)$	z_{eq}	$3389^{+87}_{-84} \quad (+0.9\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.013}_{-0.012} \quad (-2.5\sigma)$	k_{eq}	$0.01034^{+0.00027}_{-0.00026} \quad (+0.9\sigma)$	χ_{MGS}^2	$1.51 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1425^{+0.0037}_{-0.0035} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.016}_{-0.016} \quad (-1.0\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 1.4)$
$\Omega_{\mathrm{m}} h^3$	$0.0967^{+0.0035}_{-0.0033} \quad (+3.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0085}_{-0.0084} \quad (-1.0\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.6) \quad (+0.1\sigma)$
σ_8	$0.811^{+0.016}_{-0.016} \quad (+2.4\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.7\sigma)$	χ_{CMB}^2	$7493.4 \quad (\nu: 14.4) \quad (+1105.2\sigma)$
S_8	$0.824^{+0.025}_{-0.024} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+12}_{-12} \quad (-2.9\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 1.0)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.014}_{-0.013} \quad (-3.0\sigma)$	$H(0.38)$	$83.2^{+1.3}_{-1.3} \quad (+3.7\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.014}_{-0.014} \quad (-2.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+26}_{-26} \quad (-3.0\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8542.02; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.67; R - 1 = 0.01706$$

16.27 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022328	$0.02232^{+0.00032}_{-0.00032} \quad (-0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4488	$0.449^{+0.014}_{-0.014} \quad (-3.1\sigma)$	$H(0.38)$	83.29	$83.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.11934	$0.1192^{+0.0030}_{-0.0028} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6022	$0.602^{+0.015}_{-0.014} \quad (-3.2\sigma)$	$D_{\mathrm{M}}(0.38)$	1523.0	$1525^{+26}_{-26} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	1.04093	$1.04092^{+0.00062}_{-0.00063} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	0.9805	$0.980^{+0.021}_{-0.020} \quad (-3.4\sigma)$	$H(0.51)$	89.99	$89.9^{+1.2}_{-1.2} \quad (+3.7\sigma)$
τ	0.0531	$0.053^{+0.016}_{-0.016} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	100.08	$100.0^{+2.0}_{-1.9} \quad (+3.6\sigma)$	$D_{\mathrm{M}}(0.51)$	1973.4	$1975^{+32}_{-32} \quad (-3.0\sigma)$
Ω_K	0.00079	$0.0005^{+0.0038}_{-0.0039} \quad (+2.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4229	$2.423^{+0.049}_{-0.048} \quad (-3.1\sigma)$	$H(0.61)$	95.60	$95.5^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0392	$3.038^{+0.032}_{-0.032} \quad (+0.7\sigma)$	z_{re}	7.56	$7.5^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	2296.7	$2299^{+36}_{-36} \quad (-3.1\sigma)$
n_{s}	0.9672	$0.9668^{+0.0090}_{-0.0090} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}}$	2.089	$2.088^{+0.067}_{-0.066} \quad (+0.7\sigma)$	$H(2.33)$	236.27	$236.1^{+2.5}_{-2.4} \quad (+2.8\sigma)$
y_{cal}	1.00054	$1.0004^{+0.0049}_{-0.0048} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8784	$1.877^{+0.024}_{-0.022} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	5749	$5753^{+61}_{-62} \quad (-3.2\sigma)$
A_{100}^{PS}	234.6	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	1223.3	$1223^{+26}_{-25} \quad (+1.2\sigma)$	$f\sigma_8(0.15)$	0.4535	$0.453^{+0.013}_{-0.013} \quad (-3.4\sigma)$
A_{143}^{PS}	49.2	$39^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	5719	$5720^{+75}_{-76} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	0.7471	$0.746^{+0.015}_{-0.015} \quad (+2.5\sigma)$
A_{217}^{PS}	105.6	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	2537.3	$2534^{+27}_{-26} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	0.4725	$0.472^{+0.012}_{-0.011} \quad (-3.9\sigma)$
A_{217}^{CIB}	39.9	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	816.9	$815.8^{+9.2}_{-9.3} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	0.6626	$0.662^{+0.014}_{-0.013} \quad (+2.7\sigma)$
A_{143}^{tSZ}	4.97	$< 7.52 \quad (-0.9\sigma)$	D_{2000}	230.71	$230.3^{+3.2}_{-3.2} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	0.4714	$0.471^{+0.011}_{-0.010} \quad (-2.9\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.758	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	0.9672	$0.9668^{+0.0090}_{-0.0090} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	0.6203	$0.619^{+0.013}_{-0.012} \quad (+2.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.71	—	Y_{P}	0.245378	$0.24538^{+0.00012}_{-0.00014} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	0.4667	$0.466^{+0.010}_{-0.0099} \quad (-1.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.95	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246705	$0.24670^{+0.00012}_{-0.00014} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	0.5903	$0.590^{+0.012}_{-0.012} \quad (+2.8\sigma)$
A^{kSZ}	2.5	—	$10^5 \mathrm{D}/\mathrm{H}$	2.593	$2.595^{+0.062}_{-0.057} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	0.2977	$0.2973^{+0.0062}_{-0.0060} \quad (+2.9\sigma)$
A_{100}^{dust}	1.008	$1.01^{+0.39}_{-0.38}$	Age/Gyr	13.761	$13.77^{+0.16}_{-0.16} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	0.3072	$0.3067^{+0.0069}_{-0.0067} \quad (+3.2\sigma)$
A_{143}^{dust}	0.952	$0.97^{+0.34}_{-0.35}$	z_*	1089.92	$1089.91^{+0.61}_{-0.57} \quad (+0.9\sigma)$	f_{2000}^{143}	29.7	$30^{+6}_{-5} \quad (+0.9\sigma)$
A_{217}^{dust}	0.966	$0.97^{+0.21}_{-0.20}$	r_*	144.63	$144.67^{+0.63}_{-0.64} \quad (-0.7\sigma)$	f_{2000}^{217}	106.35	$106.8^{+3.8}_{-3.7} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	1.019	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04111	$1.04111^{+0.00061}_{-0.00062} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	32.07	$32^{+4}_{-4} \quad (+0.9\sigma)$
c_{100}	0.99785	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.892	$13.896^{+0.059}_{-0.059} \quad (-0.6\sigma)$	χ_{small}^2	395.85	$396.9 \quad (\nu: 1.4) \quad (+0.1\sigma)$
c_{217}	1.00095	$1.0011^{+0.0030}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	1059.78	$1059.77^{+0.66}_{-0.64} \quad (-0.7\sigma)$	χ_{lowl}^2	22.88	$23.0 \quad (\nu: 0.5) \quad (+2.3\sigma)$
c_{TE}	0.9969	$0.9966^{+0.0098}_{-0.0097}$	r_{drag}	147.31	$147.35^{+0.62}_{-0.63} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	11500.8	$11514.9 \quad (\nu: 15.9)$
c_{EE}	0.9922	$0.9921^{+0.0096}_{-0.0094}$	k_{D}	0.14060	$0.14056^{+0.00067}_{-0.00067} \quad (+0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.006	$0.052 \quad (\nu: 0.0)$
H_0	67.94	$67.9^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_{\mathrm{D}}$	0.160838	$0.16085^{+0.00038}_{-0.00037} \quad (+0.7\sigma)$	χ_{MGS}^2	1.47	$1.50 \quad (\nu: 0.2)$
Ω_{Λ}	0.6909	$0.691^{+0.012}_{-0.012} \quad (+2.6\sigma)$	z_{eq}	3385	$3382^{+67}_{-63} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	3.65	$4.6 \quad (\nu: 1.7)$
Ω_{m}	0.3083	$0.309^{+0.013}_{-0.013} \quad (-2.5\sigma)$	k_{eq}	0.010333	$0.01032^{+0.00020}_{-0.00019} \quad (+0.8\sigma)$	χ_{prior}^2	1.8	$7.8 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.14231	$0.1422^{+0.0028}_{-0.0027} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	0.8162	$0.817^{+0.012}_{-0.013} \quad (-0.8\sigma)$	χ_{BAO}^2	5.13	$6.2 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	0.09668	$0.0965^{+0.0027}_{-0.0026} \quad (+3.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4509	$0.4512^{+0.0062}_{-0.0064} \quad (-0.8\sigma)$	χ_{CMB}^2	11919.5	$11934.9 \quad (\nu: 16.6) \quad (+1883.3\sigma)$
σ_8	0.8082	$0.807^{+0.017}_{-0.016} \quad (+2.1\sigma)$	$H(0.15)$	73.20	$73.1^{+1.3}_{-1.3} \quad (+3.7\sigma)$			
S_8	0.8193	$0.819^{+0.026}_{-0.025} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.15)$	638.3	$639^{+12}_{-12} \quad (-2.9\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 11926.45$; $\bar{\chi}_{\mathrm{eff}}^2 = 11948.83$; $\Delta\chi_{\mathrm{eff}}^2 = 0.54$; $R - 1 = 0.01869$
 χ_{eff}^2 : BAO - 6DF: 0.01 MGS: 1.47 DR12BAO: 3.65 CMB - small_100x143.offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3.2.29: 22.88 CamSpec like_10.7HM_1400_unified: 11500.78

16.28 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00031}_{-0.00033} \quad (-0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-3.0\sigma)$	$H(0.38)$	$83.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0029}_{-0.0027} \quad (+0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+25}_{-25} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00062}_{-0.00063} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.017}_{-0.017} \quad (-3.2\sigma)$	$H(0.51)$	$89.9^{+1.2}_{-1.2} \quad (+3.7\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.8} \quad (+3.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1977^{+31}_{-32} \quad (-3.0\sigma)$
Ω_K	$0.0005^{+0.0038}_{-0.0040} \quad (+2.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.040}_{-0.040} \quad (-3.0\sigma)$	$H(0.61)$	$95.5^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.028}_{-0.028} \quad (+0.9\sigma)$	z_{re}	$7.7^{+1.4}_{-1.5} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+35}_{-36} \quad (-3.0\sigma)$
n_{s}	$0.9665^{+0.0089}_{-0.0090} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.059}_{-0.059} \quad (+1.0\sigma)$	$H(2.33)$	$236.2^{+2.4}_{-2.4} \quad (+2.9\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0047} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.023}_{-0.021} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+62}_{-63} \quad (-3.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	$1225^{+25}_{-24} \quad (+1.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-3.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	$5724^{+74}_{-75} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.013} \quad (+2.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-25} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4737^{+0.0095}_{-0.0095} \quad (-3.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	$816.1^{+9.1}_{-9.3} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.012} \quad (+2.8\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.9\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.4725^{+0.0086}_{-0.0088} \quad (-2.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9665^{+0.0089}_{-0.0090} \quad (-0.9\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.012} \quad (+2.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.4677^{+0.0084}_{-0.0084} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00013}_{-0.00013} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.011}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.594^{+0.062}_{-0.056} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0058}_{-0.0057} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.78^{+0.16}_{-0.16} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0066}_{-0.0065} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.92^{+0.61}_{-0.55} \quad (+1.0\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (+0.9\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.64^{+0.61}_{-0.62} \quad (-0.7\sigma)$	f_{2000}^{217}	$106.8^{+3.9}_{-3.8} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00060}_{-0.00062} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.893^{+0.057}_{-0.058} \quad (-0.7\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.31 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.79^{+0.64}_{-0.65} \quad (-0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.5) \quad (+0.2\sigma)$
c_{TE}	$0.9965^{+0.0096}_{-0.0098}$	r_{drag}	$147.32^{+0.61}_{-0.61} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.5) \quad (+2.5\sigma)$
c_{EE}	$0.9921^{+0.0098}_{-0.0096}$	k_{D}	$0.14059^{+0.00065}_{-0.00066} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.4 \quad (\nu: 15.7)$
H_0	$67.8^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00039}_{-0.00037} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.056 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.011}_{-0.012} \quad (+2.6\sigma)$	z_{eq}	$3385^{+64}_{-62} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.42 \quad (\nu: 0.2)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-2.5\sigma)$	k_{eq}	$0.01033^{+0.00020}_{-0.00019} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.9)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0027}_{-0.0026} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.012}_{-0.012} \quad (-0.9\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.1) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0965^{+0.0027}_{-0.0026} \quad (+3.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0061}_{-0.0062} \quad (-0.9\sigma)$	χ_{CMB}^2	$11943.9 \quad (\nu: 17.2) \quad (+1884.9\sigma)$
σ_8	$0.809^{+0.014}_{-0.014} \quad (+2.3\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.2} \quad (+3.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.3)$
S_8	$0.822^{+0.021}_{-0.021} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+12}_{-11} \quad (-2.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.96; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.56; R - 1 = 0.03026$$

16.29 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00031}_{-0.00032} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-3.1\sigma)$	$H(0.38)$	$83.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0028}_{-0.0027} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.012}_{-0.012} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+25}_{-25} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04092^{+0.00062}_{-0.00063} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.017}_{-0.017} \quad (-3.3\sigma)$	$H(0.51)$	$89.9^{+1.2}_{-1.2} \quad (+3.7\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.97^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+31}_{-31} \quad (-3.0\sigma)$
Ω_K	$0.0005^{+0.0038}_{-0.0039} \quad (+2.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.039}_{-0.039} \quad (-3.1\sigma)$	$H(0.61)$	$95.5^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.028}_{-0.028} \quad (+1.0\sigma)$	z_{re}	$7.8^{+1.4}_{-1.5} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+35}_{-35} \quad (-3.1\sigma)$
n_{s}	$0.9667^{+0.0089}_{-0.0090} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.059}_{-0.059} \quad (+1.0\sigma)$	$H(2.33)$	$236.2^{+2.4}_{-2.4} \quad (+2.9\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0047} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.023}_{-0.021} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+62}_{-63} \quad (-3.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	$1225^{+24}_{-24} \quad (+1.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-3.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	$5725^{+74}_{-75} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.014} \quad (+2.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-25} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4734^{+0.0092}_{-0.0093} \quad (-3.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	$816.2^{+9.1}_{-9.3} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.012} \quad (+2.8\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.9\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.4723^{+0.0086}_{-0.0088} \quad (-2.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9667^{+0.0089}_{-0.0090} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.012} \quad (+2.9\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.4675^{+0.0082}_{-0.0083} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.011}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.593^{+0.061}_{-0.056} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0058}_{-0.0058} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.77^{+0.16}_{-0.16} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0066}_{-0.0065} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.90^{+0.59}_{-0.55} \quad (+0.9\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (+0.9\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.66^{+0.61}_{-0.61} \quad (-0.7\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.8} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00060}_{-0.00062} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.894^{+0.056}_{-0.056} \quad (-0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.33 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.80^{+0.63}_{-0.66} \quad (-0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.2\sigma)$
c_{TE}	$0.9965^{+0.0096}_{-0.0098}$	r_{drag}	$147.33^{+0.60}_{-0.59} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.5) \quad (+2.5\sigma)$
c_{EE}	$0.9921^{+0.0098}_{-0.0096}$	k_{D}	$0.14058^{+0.00065}_{-0.00066} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.4 \quad (\nu: 15.6)$
H_0	$67.9^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00038}_{-0.00036} \quad (+0.6\sigma)$	χ_{JLA}^2	$1035.02 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.011}_{-0.011} \quad (+2.6\sigma)$	z_{eq}	$3383^{+63}_{-61} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.012}_{-0.011} \quad (-2.5\sigma)$	k_{eq}	$0.01033^{+0.00019}_{-0.00019} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.48 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0027}_{-0.0026} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0965^{+0.0027}_{-0.0027} \quad (+3.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4511^{+0.0061}_{-0.0061} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.1) \quad (+0.2\sigma)$
σ_8	$0.809^{+0.014}_{-0.014} \quad (+2.3\sigma)$	$H(0.15)$	$73.1^{+1.2}_{-1.2} \quad (+3.6\sigma)$	χ_{CMB}^2	$11944.0 \quad (\nu: 17.0) \quad (+1884.9\sigma)$
S_8	$0.821^{+0.021}_{-0.020} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+11}_{-11} \quad (-2.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12992.90; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.51; R - 1 = 0.03012$$

16.30 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02233^{+0.00031}_{-0.00032} \quad (-0.8\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.449^{+0.014}_{-0.013} \quad (-3.1\sigma)$	$H(0.38)$	$83.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\Omega_c h^2$	$0.1192^{+0.0030}_{-0.0028} \quad (+0.8\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.602^{+0.014}_{-0.014} \quad (-3.1\sigma)$	$D_M(0.38)$	$1524^{+26}_{-26} \quad (-3.0\sigma)$
$100\theta_{MC}$	$1.04092^{+0.00062}_{-0.00063} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.020}_{-0.019} \quad (-3.3\sigma)$	$H(0.51)$	$89.9^{+1.2}_{-1.2} \quad (+3.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.7\sigma)$	$r_{drag} h$	$100.0^{+2.0}_{-1.9} \quad (+3.6\sigma)$	$D_M(0.51)$	$1975^{+32}_{-32} \quad (-3.0\sigma)$
Ω_K	$0.0005^{+0.0038}_{-0.0039} \quad (+2.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.047}_{-0.045} \quad (-3.1\sigma)$	$H(0.61)$	$95.5^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.028}_{-0.026} \quad (+0.8\sigma)$	z_{re}	$< 8.87 \quad (+1.0\sigma)$	$D_M(0.61)$	$2299^{+36}_{-36} \quad (-3.1\sigma)$
n_s	$0.9669^{+0.0089}_{-0.0090} \quad (-0.8\sigma)$	$10^9 A_s$	$2.093^{+0.059}_{-0.054} \quad (+0.9\sigma)$	$H(2.33)$	$236.1^{+2.5}_{-2.4} \quad (+2.8\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.876^{+0.024}_{-0.022} \quad (+0.4\sigma)$	$D_M(2.33)$	$5753^{+62}_{-62} \quad (-3.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	$1223^{+26}_{-25} \quad (+1.2\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.013} \quad (-3.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	$5719^{+75}_{-76} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.015}_{-0.014} \quad (+2.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.011}_{-0.011} \quad (-3.9\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	$815.8^{+9.1}_{-9.4} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.013}_{-0.012} \quad (+2.7\sigma)$
A_{143}^{tSZ}	$< 7.54 \quad (-0.9\sigma)$	D_{2000}	$230.3^{+3.2}_{-3.2} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.010} \quad (-2.8\sigma)$
$r_{143 \times 217}^{PS}$	$0.66^{+0.26}_{-0.26}$	$n_{s,0.002}$	$0.9669^{+0.0089}_{-0.0090} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.012}_{-0.011} \quad (+2.8\sigma)$
$r_{143 \times 217}^{CIB}$	—	Y_P	$0.24538^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.4669^{+0.0099}_{-0.0093} \quad (-0.9\sigma)$
$\xi^{tSZ \times CIB}$	—	Y_P^{BBN}	$0.24670^{+0.00013}_{-0.00013} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.012}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	—	$10^5 D/H$	$2.594^{+0.061}_{-0.057} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0060}_{-0.0055} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	Age/Gyr	$13.77^{+0.16}_{-0.16} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0067}_{-0.0063} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	z_*	$1089.90^{+0.60}_{-0.57} \quad (+0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (+0.9\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.68^{+0.64}_{-0.64} \quad (-0.6\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.7} \quad (+0.9\sigma)$
$A_{143 \times 217}^{dust}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04111^{+0.00061}_{-0.00061} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_M(z_*)/Gpc$	$13.896^{+0.059}_{-0.059} \quad (-0.6\sigma)$	χ_{small}^2	$396.9 (\nu: 1.4) \quad (+0.0\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1059.78^{+0.65}_{-0.65} \quad (-0.7\sigma)$	χ_{lowl}^2	$23.0 (\nu: 0.5) \quad (+2.3\sigma)$
c_{TE}	$0.9965^{+0.0097}_{-0.0096}$	r_{drag}	$147.36^{+0.63}_{-0.63} \quad (-0.5\sigma)$	$\chi_{CamSpec}^2$	$11514.7 (\nu: 15.7)$
c_{EE}	$0.9921^{+0.0096}_{-0.0094}$	k_D	$0.14056^{+0.00067}_{-0.00067} \quad (+0.2\sigma)$	χ_{6DF}^2	$0.052 (\nu: 0.0)$
H_0	$67.9^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_D$	$0.16084^{+0.00038}_{-0.00037} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.51 (\nu: 0.2)$
Ω_Λ	$0.691^{+0.012}_{-0.012} \quad (+2.6\sigma)$	z_{eq}	$3382^{+67}_{-64} \quad (+0.8\sigma)$	$\chi_{DR12BAO}^2$	$4.6 (\nu: 1.7)$
Ω_m	$0.309^{+0.013}_{-0.013} \quad (-2.5\sigma)$	k_{eq}	$0.01032^{+0.00020}_{-0.00019} \quad (+0.8\sigma)$	χ_{prior}^2	$7.8 (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1422^{+0.0028}_{-0.0027} \quad (+0.8\sigma)$	$100\theta_{eq}$	$0.817^{+0.012}_{-0.013} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.2 (\nu: 1.2)$
$\Omega_m h^3$	$0.0965^{+0.0028}_{-0.0026} \quad (+3.5\sigma)$	$100\theta_{s,eq}$	$0.4513^{+0.0063}_{-0.0064} \quad (-0.8\sigma)$	χ_{CMB}^2	$11934.6 (\nu: 16.2) \quad (+1883.2\sigma)$
σ_8	$0.808^{+0.016}_{-0.015} \quad (+2.2\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.3} \quad (+3.7\sigma)$		
S_8	$0.820^{+0.025}_{-0.024} \quad (-3.1\sigma)$	$D_M(0.15)$	$639^{+12}_{-12} \quad (-2.9\sigma)$		

$$\bar{\chi}_{eff}^2 = 11948.57; \Delta\bar{\chi}_{eff}^2 = 0.58; R - 1 = 0.01907$$

16.31 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00031}_{-0.00033} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.011} \quad (-3.0\sigma)$	$H(0.38)$	$83.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0029}_{-0.0027} \quad (+0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+26}_{-25} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00063}_{-0.00062} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-3.2\sigma)$	$H(0.51)$	$89.9^{+1.2}_{-1.2} \quad (+3.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.8} \quad (+3.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1977^{+32}_{-32} \quad (-3.0\sigma)$
Ω_K	$0.0005^{+0.0038}_{-0.0040} \quad (+2.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.039}_{-0.038} \quad (-3.0\sigma)$	$H(0.61)$	$95.5^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.027}_{-0.024} \quad (+1.0\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+35}_{-36} \quad (-3.0\sigma)$
n_{s}	$0.9666^{+0.0090}_{-0.0091} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.055}_{-0.052} \quad (+1.0\sigma)$	$H(2.33)$	$236.2^{+2.4}_{-2.4} \quad (+2.9\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0047} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.022}_{-0.021} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+62}_{-63} \quad (-3.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	$1225^{+25}_{-24} \quad (+1.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-3.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	$5724^{+74}_{-75} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.013} \quad (+2.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-25} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4739^{+0.0093}_{-0.0093} \quad (-3.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	$816.1^{+9.0}_{-9.3} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.012}_{-0.012} \quad (+2.8\sigma)$
A_{143}^{tSZ}	$< 7.56 \quad (-0.9\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (-1.0\sigma)$	$f\sigma_8(0.51)$	$0.4728^{+0.0086}_{-0.0085} \quad (-2.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9666^{+0.0090}_{-0.0091} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.011}_{-0.011} \quad (+2.9\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.4679^{+0.0082}_{-0.0081} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.011}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.594^{+0.062}_{-0.056} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0057}_{-0.0054} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.78^{+0.16}_{-0.16} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0065}_{-0.0063} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.91^{+0.59}_{-0.55} \quad (+0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (+0.9\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.65^{+0.61}_{-0.61} \quad (-0.7\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.8} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00060}_{-0.00062} \quad (-0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.894^{+0.057}_{-0.058} \quad (-0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.26 \quad (\nu: 0.2)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.79^{+0.64}_{-0.66} \quad (-0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.2\sigma)$
c_{TE}	$0.9964^{+0.0096}_{-0.0098}$	r_{drag}	$147.32^{+0.60}_{-0.60} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.5) \quad (+2.5\sigma)$
c_{EE}	$0.9920^{+0.0098}_{-0.0095}$	k_{D}	$0.14059^{+0.00065}_{-0.00066} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.3 \quad (\nu: 15.6)$
H_0	$67.8^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00038}_{-0.00036} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+2.6\sigma)$	z_{eq}	$3384^{+65}_{-62} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.43 \quad (\nu: 0.2)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-2.5\sigma)$	k_{eq}	$0.01033^{+0.00020}_{-0.00019} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.9)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0027}_{-0.0026} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.012}_{-0.012} \quad (-0.9\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.2) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0965^{+0.0028}_{-0.0026} \quad (+3.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0061}_{-0.0062} \quad (-0.9\sigma)$	χ_{CMB}^2	$11943.7 \quad (\nu: 16.8) \quad (+1884.8\sigma)$
σ_8	$0.810^{+0.014}_{-0.014} \quad (+2.3\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.2} \quad (+3.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.3)$
S_8	$0.823^{+0.021}_{-0.021} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+12}_{-12} \quad (-2.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.78; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.52; R - 1 = 0.03337$$

16.32 **base_omegak_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_Pantheon18_zre6p5**

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00031}_{-0.00032} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-3.1\sigma)$	$H(0.38)$	$83.2^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0028}_{-0.0027} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1525^{+25}_{-25} \quad (-3.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04092^{+0.00062}_{-0.00062} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.017}_{-0.016} \quad (-3.2\sigma)$	$H(0.51)$	$89.9^{+1.2}_{-1.2} \quad (+3.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.9\sigma)$	$r_{\mathrm{drag}} h$	$99.99^{+1.8}_{-1.8} \quad (+3.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1975^{+31}_{-31} \quad (-3.0\sigma)$
Ω_K	$0.0005^{+0.0038}_{-0.0039} \quad (+2.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.039}_{-0.038} \quad (-3.0\sigma)$	$H(0.61)$	$95.5^{+1.2}_{-1.2} \quad (+3.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.027}_{-0.024} \quad (+1.0\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+36}_{-35} \quad (-3.1\sigma)$
n_{s}	$0.9667^{+0.0089}_{-0.0090} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.055}_{-0.053} \quad (+1.1\sigma)$	$H(2.33)$	$236.1^{+2.4}_{-2.4} \quad (+2.8\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0047} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.022}_{-0.021} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+63}_{-63} \quad (-3.2\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	$1225^{+25}_{-24} \quad (+1.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.010} \quad (-3.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	$5724^{+74}_{-75} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.013} \quad (+2.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-25} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4736^{+0.0091}_{-0.0092} \quad (-3.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	$816.2^{+9.0}_{-9.3} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.012}_{-0.012} \quad (+2.8\sigma)$
A_{143}^{tSZ}	$< 7.56 \quad (-0.9\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (-0.9\sigma)$	$f\sigma_8(0.51)$	$0.4725^{+0.0084}_{-0.0085} \quad (-2.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9667^{+0.0089}_{-0.0090} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.011}_{-0.011} \quad (+2.9\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$f\sigma_8(0.61)$	$0.4677^{+0.0080}_{-0.0080} \quad (-0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00012}_{-0.00013} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.011}_{-0.011} \quad (+2.9\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.061}_{-0.056} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0057}_{-0.0055} \quad (+3.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.77^{+0.16}_{-0.16} \quad (-3.1\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0065}_{-0.0063} \quad (+3.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	z_*	$1089.90^{+0.58}_{-0.55} \quad (+0.9\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (+0.9\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.66^{+0.61}_{-0.61} \quad (-0.7\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8} \quad (+0.9\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$100\theta_*$	$1.04111^{+0.00060}_{-0.00062} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.895^{+0.057}_{-0.055} \quad (-0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.27 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.80^{+0.63}_{-0.67} \quad (-0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.2\sigma)$
c_{TE}	$0.9964^{+0.0096}_{-0.0098}$	r_{drag}	$147.34^{+0.60}_{-0.59} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.1 \quad (\nu: 0.5) \quad (+2.5\sigma)$
c_{EE}	$0.9921^{+0.0098}_{-0.0095}$	k_{D}	$0.14058^{+0.00065}_{-0.00066} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.3 \quad (\nu: 15.5)$
H_0	$67.9^{+1.3}_{-1.3} \quad (+3.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00038}_{-0.00036} \quad (+0.6\sigma)$	χ_{JLA}^2	$1035.01 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.011}_{-0.011} \quad (+2.6\sigma)$	z_{eq}	$3383^{+63}_{-61} \quad (+0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.012}_{-0.011} \quad (-2.5\sigma)$	k_{eq}	$0.01032^{+0.00019}_{-0.00019} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.48 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0027}_{-0.0025} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0965^{+0.0027}_{-0.0027} \quad (+3.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4512^{+0.0060}_{-0.0061} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.2) \quad (+0.2\sigma)$
σ_8	$0.810^{+0.014}_{-0.014} \quad (+2.3\sigma)$	$H(0.15)$	$73.1^{+1.3}_{-1.2} \quad (+3.7\sigma)$	χ_{CMB}^2	$11943.8 \quad (\nu: 16.6) \quad (+1884.8\sigma)$
S_8	$0.821^{+0.020}_{-0.020} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$639^{+12}_{-11} \quad (-2.9\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 1.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12992.73; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.47; R - 1 = 0.03308$$

16.33 base_omegak_plikHM_TT_lowl_lowE_BAO_Riess18_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022173	$0.02217^{+0.00045}_{-0.00045}$ (-1.4σ)	$\sigma_8 \Omega_m^{0.25}$	0.6030	$0.602^{+0.018}_{-0.018}$ (-3.1σ)	$D_M(0.38)$	1508.4	1508^{+25}_{-25} (-3.1σ)
$\Omega_c h^2$	0.12004	$0.1201^{+0.0044}_{-0.0043}$ $(+1.2\sigma)$	$\sigma_8/h^{0.5}$	0.9808	$0.980^{+0.025}_{-0.025}$ (-3.4σ)	$H(0.51)$	90.70	$90.7^{+1.3}_{-1.3}$ $(+3.9\sigma)$
$100\theta_{MC}$	1.04087	$1.04086^{+0.00092}_{-0.00092}$ (-0.8σ)	$r_{drag}h$	101.16	$101.2^{+1.9}_{-1.8}$ $(+3.8\sigma)$	$D_M(0.51)$	1955.2	1954^{+31}_{-31} (-3.2σ)
τ	0.0540	$0.053^{+0.016}_{-0.016}$ $(+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	2.422	$2.420^{+0.057}_{-0.057}$ (-3.2σ)	$H(0.61)$	96.31	$96.4^{+1.4}_{-1.4}$ $(+3.9\sigma)$
Ω_K	0.00305	$0.0032^{+0.0049}_{-0.0049}$ $(+2.4\sigma)$	z_{re}	7.70	$7.6^{+1.6}_{-1.7}$ $(+0.8\sigma)$	$D_M(0.61)$	2276.2	2275^{+36}_{-35} (-3.2σ)
$\ln(10^{10} A_s)$	3.0422	$3.040^{+0.033}_{-0.033}$ $(+0.8\sigma)$	$10^9 A_s$	2.095	$2.092^{+0.070}_{-0.068}$ $(+0.8\sigma)$	$H(2.33)$	237.12	$237.2^{+3.7}_{-3.6}$ $(+3.2\sigma)$
n_s	0.9645	$0.964^{+0.012}_{-0.012}$ (-1.3σ)	$10^9 A_s e^{-2\tau}$	1.8809	$1.882^{+0.028}_{-0.028}$ $(+0.8\sigma)$	$D_M(2.33)$	5714	5712^{+73}_{-72} (-3.4σ)
α_{JLA}	0.1412	$0.141^{+0.013}_{-0.013}$	D_{40}	1229.6	1231^{+33}_{-32} $(+1.7\sigma)$	$f\sigma_8(0.15)$	0.4523	$0.452^{+0.016}_{-0.016}$ (-3.5σ)
β_{JLA}	3.101	$3.10^{+0.16}_{-0.15}$	D_{220}	5710	5717^{+87}_{-85} (-0.7σ)	$\sigma_8(0.15)$	0.7519	$0.751^{+0.019}_{-0.019}$ $(+2.7\sigma)$
y_{cal}	1.0002	$1.0004^{+0.0052}_{-0.0051}$ $(+0.1\sigma)$	D_{810}	2536.4	2537^{+29}_{-28} $(+0.6\sigma)$	$f\sigma_8(0.38)$	0.4724	$0.472^{+0.014}_{-0.014}$ (-4.0σ)
A_{217}^{CIB}	50.0	48^{+10}_{-10} $(+0.4\sigma)$	D_{1420}	815.2	815^{+10}_{-10} $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6676	$0.667^{+0.016}_{-0.016}$ $(+2.9\sigma)$
$\xi^{tSZ \times CIB}$	0.11	—	D_{2000}	229.80	$229.7^{+3.6}_{-3.7}$ (-1.3σ)	$f\sigma_8(0.51)$	0.4720	$0.471^{+0.013}_{-0.013}$ (-2.8σ)
A_{143}^{tSZ}	7.14	$5.1^{+3.8}_{-3.9}$ (-0.2σ)	$n_{s,0.002}$	0.9645	$0.964^{+0.012}_{-0.012}$ (-1.3σ)	$\sigma_8(0.51)$	0.6252	$0.625^{+0.015}_{-0.015}$ $(+3.0\sigma)$
A_{100}^{PS}	256	264^{+60}_{-50} $(+0.5\sigma)$	Y_P	0.245315	$0.24531^{+0.00018}_{-0.00022}$ (-1.5σ)	$f\sigma_8(0.61)$	0.4677	$0.467^{+0.013}_{-0.013}$ (-0.9σ)
A_{143}^{PS}	46.9	49^{+20}_{-20} $(+0.9\sigma)$	Y_P^{BBN}	0.246641	$0.24664^{+0.00018}_{-0.00022}$ (-1.5σ)	$\sigma_8(0.61)$	0.5952	$0.595^{+0.014}_{-0.015}$ $(+3.1\sigma)$
$A_{143 \times 217}^{PS}$	41.7	43^{+20}_{-20} $(+0.3\sigma)$	$10^5 D/H$	2.623	$2.624^{+0.088}_{-0.082}$ $(+1.5\sigma)$	$f\sigma_8(2.33)$	0.3003	$0.3001^{+0.0071}_{-0.0072}$ $(+3.1\sigma)$
A_{217}^{PS}	117.2	115^{+20}_{-20} $(+0.1\sigma)$	Age/Gyr	13.672	$13.67^{+0.19}_{-0.19}$ (-3.3σ)	$\sigma_8(2.33)$	0.3104	$0.3103^{+0.0079}_{-0.0080}$ $(+3.4\sigma)$
A^{kSZ}	0.0	—	z_*	1090.17	$1090.18^{+0.86}_{-0.83}$ $(+1.5\sigma)$	f_{2000}^{143}	30.8	31^{+6}_{-6} $(+1.4\sigma)$
A_{100}^{dustTT}	8.98	$8.9^{+3.6}_{-3.6}$ (-0.1σ)	r_*	144.57	$144.6^{+1.0}_{-0.97}$ (-0.9σ)	$f_{2000}^{143 \times 217}$	33.49	34^{+4}_{-4} $(+1.6\sigma)$
A_{143}^{dustTT}	10.69	$10.7^{+3.5}_{-3.5}$ $(+0.1\sigma)$	$100\theta_*$	1.04107	$1.04107^{+0.00090}_{-0.00090}$ (-0.7σ)	f_{2000}^{217}	107.97	$108.1^{+3.8}_{-3.7}$ $(+1.5\sigma)$
$A_{143 \times 217}^{dustTT}$	19.1	$18.3^{+6.5}_{-6.4}$ $(+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	13.887	$13.886^{+0.093}_{-0.090}$ (-0.8σ)	χ_{simall}^2	396.06	$397.0 (\nu: 1.5)$ $(+0.1\sigma)$
A_{217}^{dustTT}	94.3	93^{+10}_{-10} (-0.0σ)	z_{drag}	1059.47	$1059.48^{+0.91}_{-0.92}$ (-1.3σ)	χ_{lowl}^2	23.66	$23.9 (\nu: 1.2)$ $(+3.6\sigma)$
c_{100}	0.99961	$0.9996^{+0.0012}_{-0.0012}$ (-0.0σ)	r_{drag}	147.30	$147.29^{+0.99}_{-0.95}$ (-0.7σ)	χ_{plik}^2	760.0	$773.0 (\nu: 14.8)$ $(+1.2\sigma)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	k_D	0.14049	$0.1405^{+0.0010}_{-0.0011}$ $(+0.1\sigma)$	$\chi_{H073p45}^2$	8.28	$8.3 (\nu: 2.5)$
H_0	68.67	$68.7^{+1.3}_{-1.3}$ $(+3.8\sigma)$	$100\theta_D$	0.16102	$0.16103^{+0.00055}_{-0.00051}$ $(+1.3\sigma)$	χ_{JLA}^2	695.12	$697.2 (\nu: 2.0)$
Ω_Λ	0.6940	$0.694^{+0.014}_{-0.014}$ $(+2.6\sigma)$	z_{eq}	3398	3400^{+100}_{-98} $(+1.1\sigma)$	χ_{6DF}^2	0.023	$0.067 (\nu: 0.0)$
Ω_m	0.3029	$0.303^{+0.013}_{-0.013}$ (-2.6σ)	k_{eq}	0.010372	$0.01038^{+0.00030}_{-0.00030}$ $(+1.1\sigma)$	χ_{MGS}^2	2.19	$2.30 (\nu: 0.2)$
$\Omega_m h^2$	0.14285	$0.1429^{+0.0042}_{-0.0041}$ $(+1.1\sigma)$	$100\theta_{eq}$	0.8134	$0.813^{+0.019}_{-0.018}$ (-1.2σ)	$\chi_{DR12BAO}^2$	3.30	$4.1 (\nu: 0.9)$
$\Omega_m h^3$	0.09810	$0.0982^{+0.0036}_{-0.0035}$ $(+3.8\sigma)$	$100\theta_{s,eq}$	0.4496	$0.4495^{+0.0097}_{-0.0094}$ (-1.2σ)	χ_{prior}^2	1.6	$7.4 (\nu: 6.9)$ $(+0.1\sigma)$
σ_8	0.8128	$0.812^{+0.021}_{-0.021}$ $(+2.4\sigma)$	$H(0.15)$	73.93	$74.0^{+1.3}_{-1.2}$ $(+3.9\sigma)$	χ_{BAO}^2	5.52	$6.5 (\nu: 1.8)$
S_8	0.8167	$0.816^{+0.032}_{-0.031}$ (-3.2σ)	$D_M(0.15)$	631.8	631^{+11}_{-11} (-3.0σ)	χ_{CMB}^2	1179.7	$1194.0 (\nu: 15.5)$ $(+1.6\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4473	$0.447^{+0.017}_{-0.017}$ (-3.2σ)	$H(0.38)$	84.00	$84.1^{+1.3}_{-1.3}$ $(+3.9\sigma)$			

Best-fit $\chi_{eff}^2 = 1890.21$; $\bar{\chi}_{eff}^2 = 1913.25$; $R - 1 = 0.01616$
 χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 2.19 DR12BAO: 3.30 CMB - simall-100x143_offlike5_EE_Aplanck_B: 396.06 commander_dx12_v3.2.29: 23.66 plik_rd12_HM_v22_TT: 760.01
Hubble - H073p45: 8.28 SN - JLA December_2013: 695.12

16.34 base_omegak_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022181	$0.02217^{+0.00042}_{-0.00045} \quad (-1.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6052	$0.605^{+0.015}_{-0.015} \quad (-3.0\sigma)$	$D_M(0.38)$	1507.3	$1508^{+26}_{-25} \quad (-3.1\sigma)$
$\Omega_c h^2$	0.12037	$0.1204^{+0.0040}_{-0.0038} \quad (+1.3\sigma)$	$\sigma_8/h^{0.5}$	0.9839	$0.983^{+0.019}_{-0.019} \quad (-3.2\sigma)$	$H(0.51)$	90.79	$90.7^{+1.3}_{-1.3} \quad (+3.9\sigma)$
$100\theta_{MC}$	1.04081	$1.04084^{+0.00088}_{-0.00089} \quad (-0.8\sigma)$	$r_{drag}h$	101.15	$101.1^{+1.8}_{-1.8} \quad (+3.8\sigma)$	$D_M(0.51)$	1953.7	$1955^{+33}_{-30} \quad (-3.2\sigma)$
τ	0.0551	$0.055^{+0.016}_{-0.015} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4287	$2.430^{+0.045}_{-0.043} \quad (-3.1\sigma)$	$H(0.61)$	96.40	$96.4^{+1.4}_{-1.4} \quad (+3.9\sigma)$
Ω_K	0.00339	$0.0033^{+0.0047}_{-0.0050} \quad (+2.4\sigma)$	z_{re}	7.82	$7.8^{+1.5}_{-1.5} \quad (+1.0\sigma)$	$D_M(0.61)$	2274.4	$2276^{+37}_{-35} \quad (-3.2\sigma)$
$\ln(10^{10} A_s)$	3.0464	$3.046^{+0.029}_{-0.028} \quad (+1.1\sigma)$	$10^9 A_s$	2.104	$2.102^{+0.062}_{-0.058} \quad (+1.1\sigma)$	$H(2.33)$	237.43	$237.4^{+3.4}_{-3.4} \quad (+3.3\sigma)$
n_s	0.9640	$0.963^{+0.011}_{-0.011} \quad (-1.4\sigma)$	$10^9 A_s e^{-2\tau}$	1.8846	$1.884^{+0.026}_{-0.025} \quad (+1.0\sigma)$	$D_M(2.33)$	5708	$5711^{+73}_{-70} \quad (-3.4\sigma)$
y_{cal}	1.0006	$1.0006^{+0.0052}_{-0.0051} \quad (+0.2\sigma)$	D_{40}	1232.8	$1235^{+29}_{-28} \quad (+1.9\sigma)$	$f\sigma_8(0.15)$	0.4541	$0.454^{+0.013}_{-0.013} \quad (-3.4\sigma)$
α_{JLA}	0.1413	$0.141^{+0.013}_{-0.013}$	D_{220}	5716	$5722^{+87}_{-83} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	0.7545	$0.754^{+0.015}_{-0.015} \quad (+2.8\sigma)$
β_{JLA}	3.099	$3.10^{+0.16}_{-0.16}$	D_{810}	2539.8	$2538^{+28}_{-27} \quad (+0.7\sigma)$	$f\sigma_8(0.38)$	0.4742	$0.474^{+0.011}_{-0.011} \quad (-3.7\sigma)$
A_{217}^{CIB}	48.9	$48^{+10}_{-10} \quad (+0.4\sigma)$	D_{1420}	816.3	$815^{+10}_{-11} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	0.6698	$0.669^{+0.013}_{-0.014} \quad (+3.0\sigma)$
$\xi^{tSZ \times CIB}$	0.31	—	D_{2000}	230.17	$229.8^{+3.6}_{-3.7} \quad (-1.3\sigma)$	$f\sigma_8(0.51)$	0.4737	$0.473^{+0.010}_{-0.010} \quad (-2.5\sigma)$
A_{143}^{tSZ}	6.96	$5.1^{+3.9}_{-3.9} \quad (-0.2\sigma)$	$n_{s,0.002}$	0.9640	$0.963^{+0.011}_{-0.011} \quad (-1.4\sigma)$	$\sigma_8(0.51)$	0.6272	$0.627^{+0.013}_{-0.013} \quad (+3.1\sigma)$
A_{100}^{PS}	255	$263^{+50}_{-60} \quad (+0.5\sigma)$	Y_P	0.245318	$0.24531^{+0.00018}_{-0.00020} \quad (-1.5\sigma)$	$f\sigma_8(0.61)$	0.4693	$0.469^{+0.010}_{-0.010} \quad (-0.6\sigma)$
A_{143}^{PS}	49.5	$49^{+20}_{-20} \quad (+0.9\sigma)$	Y_P^{BBN}	0.246644	$0.24664^{+0.00018}_{-0.00020} \quad (-1.5\sigma)$	$\sigma_8(0.61)$	0.5971	$0.597^{+0.012}_{-0.012} \quad (+3.1\sigma)$
$A_{143 \times 217}^{PS}$	46.8	$44^{+20}_{-20} \quad (+0.4\sigma)$	$10^5 D/H$	2.622	$2.623^{+0.087}_{-0.079} \quad (+1.5\sigma)$	$f\sigma_8(2.33)$	0.3012	$0.3009^{+0.0061}_{-0.0063} \quad (+3.2\sigma)$
A_{217}^{PS}	119.2	$115^{+20}_{-20} \quad (+0.1\sigma)$	Age/Gyr	13.658	$13.66^{+0.19}_{-0.18} \quad (-3.3\sigma)$	$\sigma_8(2.33)$	0.3115	$0.3111^{+0.0070}_{-0.0072} \quad (+3.4\sigma)$
A^{kSZ}	0.02	$< 8.42 \quad (+0.4\sigma)$	z_*	1090.19	$1090.21^{+0.82}_{-0.79} \quad (+1.6\sigma)$	f_{2000}^{143}	30.4	$31^{+6}_{-6} \quad (+1.3\sigma)$
A_{100}^{dustTT}	8.85	$8.8^{+3.7}_{-3.4} \quad (-0.1\sigma)$	r_*	144.48	$144.49^{+0.88}_{-0.89} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	33.25	$34^{+4}_{-4} \quad (+1.5\sigma)$
A_{143}^{dustTT}	10.82	$10.7^{+3.6}_{-3.4} \quad (+0.1\sigma)$	$100\theta_*$	1.04102	$1.04104^{+0.00087}_{-0.00087} \quad (-0.8\sigma)$	f_{2000}^{217}	107.71	$108.1^{+3.8}_{-3.6} \quad (+1.5\sigma)$
$A_{143 \times 217}^{dustTT}$	19.3	$18.3^{+6.4}_{-6.4} \quad (+0.1\sigma)$	$D_M(z_*)/\text{Gpc}$	13.879	$13.879^{+0.082}_{-0.081} \quad (-1.0\sigma)$	$\chi^2_{lensing}$	9.04	$9.53 \quad (\nu: 0.4)$
A_{217}^{dustTT}	94.4	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	1059.51	$1059.50^{+0.89}_{-0.91} \quad (-1.3\sigma)$	χ^2_{simall}	396.29	$397.2 \quad (\nu: 1.7) \quad (+0.2\sigma)$
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	r_{drag}	147.21	$147.22^{+0.87}_{-0.86} \quad (-0.8\sigma)$	χ^2_{lowl}	23.89	$24.2 \quad (\nu: 1.0) \quad (+4.0\sigma)$
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0013} \quad (+0.1\sigma)$	k_D	0.14060	$0.14058^{+0.00094}_{-0.00099} \quad (+0.3\sigma)$	χ^2_{plik}	760.0	$772.1 \quad (\nu: 13.3) \quad (+1.0\sigma)$
H_0	68.71	$68.7^{+1.3}_{-1.2} \quad (+3.8\sigma)$	$100\theta_D$	0.16099	$0.16101^{+0.00054}_{-0.00051} \quad (+1.2\sigma)$	$\chi^2_{H073p45}$	8.14	$8.5 \quad (\nu: 2.5)$
Ω_Λ	0.6933	$0.693^{+0.012}_{-0.013} \quad (+2.6\sigma)$	z_{eq}	3407	$3406^{+91}_{-85} \quad (+1.3\sigma)$	χ^2_{JLA}	695.13	$697.2 \quad (\nu: 1.9)$
Ω_m	0.3033	$0.304^{+0.012}_{-0.012} \quad (-2.6\sigma)$	k_{eq}	0.010397	$0.01040^{+0.00028}_{-0.00026} \quad (+1.3\sigma)$	χ^2_{6DF}	0.023	$0.055 \quad (\nu: 0.0)$
$\Omega_m h^2$	0.14319	$0.1432^{+0.0038}_{-0.0036} \quad (+1.3\sigma)$	$100\theta_{eq}$	0.8119	$0.812^{+0.016}_{-0.017} \quad (-1.3\sigma)$	χ^2_{MGS}	2.19	$2.21 \quad (\nu: 0.2)$
$\Omega_m h^3$	0.09839	$0.0983^{+0.0035}_{-0.0035} \quad (+3.8\sigma)$	$100\theta_{s,eq}$	0.4488	$0.4489^{+0.0083}_{-0.0085} \quad (-1.3\sigma)$	$\chi^2_{DR12BAO}$	3.29	$4.0 \quad (\nu: 0.7)$
σ_8	0.8156	$0.815^{+0.017}_{-0.017} \quad (+2.5\sigma)$	$H(0.15)$	73.98	$73.9^{+1.3}_{-1.3} \quad (+3.8\sigma)$	χ^2_{prior}	1.3	$7.4 \quad (\nu: 7.1) \quad (+0.1\sigma)$
S_8	0.8200	$0.820^{+0.026}_{-0.025} \quad (-3.1\sigma)$	$D_M(0.15)$	631.4	$632^{+11}_{-11} \quad (-3.0\sigma)$	χ^2_{CMB}	1189.2	$1203.0 \quad (\nu: 15.3) \quad (+3.2\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4491	$0.449^{+0.014}_{-0.014} \quad (-3.1\sigma)$	$H(0.38)$	84.07	$84.0^{+1.3}_{-1.3} \quad (+3.9\sigma)$	χ^2_{BAO}	5.51	$6.2 \quad (\nu: 1.4)$

Best-fit $\chi^2_{eff} = 1899.34$; $\Delta\chi^2_{eff} = -13.47$; $\bar{\chi}^2_{eff} = 1922.24$; $\Delta\bar{\chi}^2_{eff} = -10.80$; $R - 1 = 0.02517$
 χ^2_{eff} : BAO - 6DF: 0.02 (Δ 0.02) MGS: 2.19 (Δ 0.52) DR12BAO: 3.29 (Δ -0.21) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.04 (Δ 0.09) simall_100x143_offlike5_EE_Aplanck. 396.29 (Δ -0.54) commander_dx12_v3.2.29: 23.89 (Δ 1.30) plik_rd12_HM_v22.TT: 760.03 (Δ -0.80) Hubble - H073p45: 8.14 (Δ -2.45) SN - JLA December_2013: 695.13 (Δ -11.46)

16.35 base_omegak_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02218^{+0.00044}_{-0.00045} \quad (-1.4\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.603^{+0.018}_{-0.018} \quad (-3.1\sigma)$	$D_{\text{M}}(0.38)$	$1508^{+25}_{-25} \quad (-3.1\sigma)$
$\Omega_{\text{c}}h^2$	$0.1200^{+0.0043}_{-0.0043} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.024}_{-0.023} \quad (-3.3\sigma)$	$H(0.51)$	$90.7^{+1.3}_{-1.3} \quad (+3.9\sigma)$
$100\theta_{\text{MC}}$	$1.04087^{+0.00092}_{-0.00092} \quad (-0.8\sigma)$	$r_{\text{drag}}h$	$101.2^{+1.9}_{-1.8} \quad (+3.8\sigma)$	$D_{\text{M}}(0.51)$	$1954^{+31}_{-31} \quad (-3.2\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.055}_{-0.052} \quad (-3.1\sigma)$	$H(0.61)$	$96.3^{+1.4}_{-1.4} \quad (+3.9\sigma)$
Ω_K	$0.0031^{+0.0048}_{-0.0049} \quad (+2.4\sigma)$	z_{re}	$< 8.91 \quad (+1.0\sigma)$	$D_{\text{M}}(0.61)$	$2275^{+36}_{-35} \quad (-3.2\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.043^{+0.029}_{-0.027} \quad (+1.0\sigma)$	$10^9 A_{\text{s}}$	$2.098^{+0.060}_{-0.056} \quad (+1.0\sigma)$	$H(2.33)$	$237.1^{+3.6}_{-3.6} \quad (+3.2\sigma)$
n_{s}	$0.964^{+0.011}_{-0.012} \quad (-1.2\sigma)$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.882^{+0.028}_{-0.027} \quad (+0.8\sigma)$	$D_{\text{M}}(2.33)$	$5712^{+72}_{-71} \quad (-3.4\sigma)$
α_{JLA}	$0.141^{+0.013}_{-0.013}$	D_{40}	$1231^{+32}_{-31} \quad (+1.6\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.016}_{-0.016} \quad (-3.5\sigma)$
β_{JLA}	$3.10^{+0.16}_{-0.15}$	D_{220}	$5717^{+87}_{-85} \quad (-0.7\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.018}_{-0.017} \quad (+2.7\sigma)$
y_{cal}	$1.0004^{+0.0052}_{-0.0050} \quad (+0.1\sigma)$	D_{810}	$2536^{+29}_{-28} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.014}_{-0.014} \quad (-3.9\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.4\sigma)$	D_{1420}	$815^{+10}_{-11} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.016}_{-0.015} \quad (+2.9\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.7^{+3.6}_{-3.7} \quad (-1.3\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.013}_{-0.013} \quad (-2.8\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.2\sigma)$	$n_{\text{s},0.002}$	$0.964^{+0.011}_{-0.012} \quad (-1.2\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.015}_{-0.014} \quad (+3.0\sigma)$
A_{100}^{PS}	$264^{+60}_{-50} \quad (+0.5\sigma)$	Y_{P}	$0.24531^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.9\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00018}_{-0.00020} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.014}_{-0.013} \quad (+3.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (+0.3\sigma)$	$10^5 \text{D}/\text{H}$	$2.622^{+0.087}_{-0.081} \quad (+1.4\sigma)$	$f\sigma_8(2.33)$	$0.3005^{+0.0068}_{-0.0066} \quad (+3.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	Age/Gyr	$13.67^{+0.19}_{-0.18} \quad (-3.3\sigma)$	$\sigma_8(2.33)$	$0.3107^{+0.0077}_{-0.0074} \quad (+3.4\sigma)$
A^{kSZ}	—	z_*	$1090.17^{+0.85}_{-0.82} \quad (+1.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+1.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.1\sigma)$	r_*	$144.58^{+0.99}_{-0.96} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (+1.5\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$100\theta_*$	$1.04108^{+0.00090}_{-0.00090} \quad (-0.7\sigma)$	f_{2000}^{217}	$108.1^{+3.7}_{-3.7} \quad (+1.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.887^{+0.091}_{-0.090} \quad (-0.8\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.49^{+0.90}_{-0.93} \quad (-1.3\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 1.2) \quad (+3.6\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.30^{+0.98}_{-0.94} \quad (-0.6\sigma)$	χ_{plik}^2	$772.8 \quad (\nu: 14.5) \quad (+1.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14049^{+0.00099}_{-0.0011} \quad (+0.1\sigma)$	χ_{H073p45}^2	$8.3 \quad (\nu: 2.5)$
H_0	$68.7^{+1.3}_{-1.3} \quad (+3.8\sigma)$	$100\theta_{\text{D}}$	$0.16102^{+0.00055}_{-0.00051} \quad (+1.3\sigma)$	χ_{JLA}^2	$697.1 \quad (\nu: 1.9)$
Ω_{Λ}	$0.694^{+0.014}_{-0.014} \quad (+2.6\sigma)$	z_{eq}	$3398^{+98}_{-97} \quad (+1.1\sigma)$	χ_{6DF}^2	$0.068 \quad (\nu: 0.0)$
Ω_{m}	$0.302^{+0.013}_{-0.013} \quad (-2.6\sigma)$	k_{eq}	$0.01037^{+0.00030}_{-0.00029} \quad (+1.1\sigma)$	χ_{MGS}^2	$2.31 \quad (\nu: 0.2)$
$\Omega_{\text{m}}h^2$	$0.1428^{+0.0041}_{-0.0040} \quad (+1.1\sigma)$	$100\theta_{\text{eq}}$	$0.814^{+0.019}_{-0.018} \quad (-1.1\sigma)$	χ_{DR12BAO}^2	$4.1 \quad (\nu: 0.9)$
$\Omega_{\text{m}}h^3$	$0.0982^{+0.0036}_{-0.0035} \quad (+3.8\sigma)$	$100\theta_{\text{s,eq}}$	$0.4497^{+0.0095}_{-0.0093} \quad (-1.1\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.1\sigma)$
σ_8	$0.813^{+0.020}_{-0.019} \quad (+2.4\sigma)$	$H(0.15)$	$74.0^{+1.3}_{-1.2} \quad (+3.9\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 1.9)$
S_8	$0.816^{+0.031}_{-0.030} \quad (-3.1\sigma)$	$D_{\text{M}}(0.15)$	$631^{+11}_{-11} \quad (-3.0\sigma)$	χ_{CMB}^2	$1193.6 \quad (\nu: 14.6) \quad (+1.5\sigma)$
$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.447^{+0.017}_{-0.017} \quad (-3.1\sigma)$	$H(0.38)$	$84.0^{+1.3}_{-1.3} \quad (+3.9\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1912.92$; $R - 1 = 0.02011$

16.36 base_omegak_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_{\text{b}}h^2$	$0.02218^{+0.00042}_{-0.00045}$	(-1.4σ)	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.605^{+0.015}_{-0.015}$	(-2.9σ)	$D_{\text{M}}(0.38)$	1508^{+26}_{-25}	(-3.1σ)
$\Omega_{\text{c}}h^2$	$0.1203^{+0.0039}_{-0.0038}$	$(+1.3\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.019}_{-0.019}$	(-3.2σ)	$H(0.51)$	$90.7^{+1.3}_{-1.4}$	$(+3.9\sigma)$
$100\theta_{\text{MC}}$	$1.04084^{+0.00089}_{-0.00089}$	(-0.8σ)	$r_{\text{drag}}h$	$101.1^{+1.8}_{-1.8}$	$(+3.8\sigma)$	$D_{\text{M}}(0.51)$	1955^{+33}_{-31}	(-3.2σ)
τ	$0.056^{+0.014}_{-0.013}$	$(+0.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.044}_{-0.042}$	(-3.0σ)	$H(0.61)$	$96.3^{+1.4}_{-1.4}$	$(+3.9\sigma)$
Ω_K	$0.0032^{+0.0046}_{-0.0050}$	$(+2.4\sigma)$	z_{re}	< 9.04	$(+1.1\sigma)$	$D_{\text{M}}(0.61)$	2276^{+37}_{-35}	(-3.2σ)
$\ln(10^{10}A_{\text{s}})$	$3.047^{+0.027}_{-0.025}$	$(+1.2\sigma)$	10^9A_{s}	$2.105^{+0.056}_{-0.053}$	$(+1.2\sigma)$	$H(2.33)$	$237.3^{+3.3}_{-3.3}$	$(+3.2\sigma)$
n_{s}	$0.963^{+0.011}_{-0.011}$	(-1.3σ)	$10^9A_{\text{s}}e^{-2\tau}$	$1.884^{+0.026}_{-0.025}$	$(+0.9\sigma)$	$D_{\text{M}}(2.33)$	5712^{+73}_{-69}	(-3.4σ)
y_{cal}	$1.0006^{+0.0052}_{-0.0051}$	$(+0.2\sigma)$	D_{40}	1234^{+29}_{-28}	$(+1.8\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.013}$	(-3.4σ)
α_{JLA}	$0.141^{+0.013}_{-0.013}$		D_{220}	5721^{+87}_{-82}	(-0.6σ)	$\sigma_8(0.15)$	$0.754^{+0.015}_{-0.015}$	$(+2.8\sigma)$
β_{JLA}	$3.10^{+0.16}_{-0.16}$		D_{810}	2538^{+28}_{-27}	$(+0.7\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011}$	(-3.7σ)
A_{217}^{CIB}	48^{+10}_{-10}	$(+0.4\sigma)$	D_{1420}	815^{+10}_{-11}	$(+0.3\sigma)$	$\sigma_8(0.38)$	$0.669^{+0.013}_{-0.014}$	$(+3.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—		D_{2000}	$229.8^{+3.6}_{-3.8}$	(-1.3σ)	$f\sigma_8(0.51)$	$0.474^{+0.010}_{-0.010}$	(-2.5σ)
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9}$	(-0.2σ)	$n_{\text{s},0.002}$	$0.963^{+0.011}_{-0.011}$	(-1.3σ)	$\sigma_8(0.51)$	$0.627^{+0.013}_{-0.013}$	$(+3.1\sigma)$
A_{100}^{PS}	263^{+50}_{-60}	$(+0.5\sigma)$	Y_{P}	$0.24531^{+0.00018}_{-0.00020}$	(-1.4σ)	$f\sigma_8(0.61)$	$0.4692^{+0.0098}_{-0.0099}$	(-0.6σ)
A_{143}^{PS}	49^{+20}_{-20}	$(+0.9\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00018}_{-0.00020}$	(-1.4σ)	$\sigma_8(0.61)$	$0.597^{+0.012}_{-0.012}$	$(+3.1\sigma)$
$A_{143 \times 217}^{\text{PS}}$	44^{+20}_{-20}	$(+0.4\sigma)$	$10^5\text{D}/\text{H}$	$2.622^{+0.087}_{-0.079}$	$(+1.4\sigma)$	$f\sigma_8(2.33)$	$0.3011^{+0.0059}_{-0.0061}$	$(+3.2\sigma)$
A_{217}^{PS}	115^{+20}_{-20}	$(+0.1\sigma)$	Age/Gyr	$13.67^{+0.19}_{-0.18}$	(-3.3σ)	$\sigma_8(2.33)$	$0.3113^{+0.0069}_{-0.0069}$	$(+3.4\sigma)$
A^{kSZ}	< 8.38	$(+0.4\sigma)$	z_*	$1090.19^{+0.80}_{-0.79}$	$(+1.5\sigma)$	f_{2000}^{143}	31^{+6}_{-6}	$(+1.3\sigma)$
A_{100}^{dustTT}	$8.8^{+3.7}_{-3.4}$	(-0.1σ)	r_*	$144.50^{+0.87}_{-0.88}$	(-1.0σ)	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}	$(+1.5\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.4}$	$(+0.1\sigma)$	$100\theta_*$	$1.04105^{+0.00086}_{-0.00086}$	(-0.8σ)	f_{2000}^{217}	$108.1^{+3.8}_{-3.6}$	$(+1.5\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.4}$	$(+0.1\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.881^{+0.080}_{-0.081}$	(-0.9σ)	χ_{lensing}^2	$9.48 (\nu: 0.3)$	
A_{217}^{dustTT}	93^{+10}_{-10}	(-0.0σ)	z_{drag}	$1059.51^{+0.88}_{-0.91}$	(-1.2σ)	χ_{simall}^2	$397.2 (\nu: 1.8) (+0.2\sigma)$	
c_{100}	$0.9996^{+0.0012}_{-0.0013}$	(-0.0σ)	r_{drag}	$147.23^{+0.85}_{-0.87}$	(-0.8σ)	χ_{lowl}^2	$24.1 (\nu: 1.0) (+4.0\sigma)$	
c_{217}	$0.9983^{+0.0012}_{-0.0013}$	$(+0.1\sigma)$	k_{D}	$0.14057^{+0.00093}_{-0.00099}$	$(+0.2\sigma)$	χ_{plik}^2	$772.0 (\nu: 13.1) (+1.0\sigma)$	
H_0	$68.7^{+1.3}_{-1.2}$	$(+3.8\sigma)$	$100\theta_{\text{D}}$	$0.16101^{+0.00054}_{-0.00051}$	$(+1.2\sigma)$	χ_{H073p45}^2	$8.5 (\nu: 2.5)$	
Ω_{Λ}	$0.693^{+0.012}_{-0.013}$	$(+2.6\sigma)$	z_{eq}	3405^{+90}_{-84}	$(+1.2\sigma)$	χ_{JLA}^2	$697.1 (\nu: 1.9)$	
Ω_{m}	$0.304^{+0.012}_{-0.012}$	(-2.6σ)	k_{eq}	$0.01039^{+0.00027}_{-0.00026}$	$(+1.2\sigma)$	$\chi_{6\text{DF}}^2$	$0.055 (\nu: 0.0)$	
$\Omega_{\text{m}}h^2$	$0.1431^{+0.0037}_{-0.0035}$	$(+1.2\sigma)$	$100\theta_{\text{eq}}$	$0.812^{+0.016}_{-0.016}$	(-1.3σ)	χ_{MGS}^2	$2.21 (\nu: 0.2)$	
$\Omega_{\text{m}}h^3$	$0.0983^{+0.0034}_{-0.0035}$	$(+3.8\sigma)$	$100\theta_{\text{s,eq}}$	$0.4490^{+0.0083}_{-0.0085}$	(-1.2σ)	χ_{DR12BAO}^2	$4.0 (\nu: 0.7)$	
σ_8	$0.815^{+0.017}_{-0.017}$	$(+2.6\sigma)$	$H(0.15)$	$73.9^{+1.3}_{-1.3}$	$(+3.8\sigma)$	χ_{prior}^2	$7.4 (\nu: 7.1) (+0.1\sigma)$	
S_8	$0.820^{+0.026}_{-0.025}$	(-3.1σ)	$D_{\text{M}}(0.15)$	632^{+11}_{-11}	(-3.0σ)	χ_{CMB}^2	$1202.8 (\nu: 14.6) (+3.1\sigma)$	
$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.449^{+0.014}_{-0.014}$	(-3.1σ)	$H(0.38)$	$84.0^{+1.3}_{-1.3}$	$(+3.9\sigma)$	χ_{BAO}^2	$6.2 (\nu: 1.4)$	

$$\bar{\chi}_{\text{eff}}^2 = 1922.05; \Delta\bar{\chi}_{\text{eff}}^2 = -10.90; R - 1 = 0.02915$$

16.37 base_omegak_plikHM_TTTEE_lowl_lowE_BAO_Riess18_JLA

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0982^{+0.0028}_{-0.0026} \quad (+3.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$631^{+11}_{-11} \quad (-3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1198^{+0.0028}_{-0.0027} \quad (+1.1\sigma)$	σ_8	$0.813^{+0.016}_{-0.016} \quad (+2.4\sigma)$	$H(0.38)$	$84.0^{+1.2}_{-1.2} \quad (+3.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00064}_{-0.00063} \quad (-0.6\sigma)$	S_8	$0.816^{+0.024}_{-0.024} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1508^{+25}_{-24} \quad (-3.1\sigma)$
τ	$0.056^{+0.016}_{-0.015} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.013}_{-0.013} \quad (-3.1\sigma)$	$H(0.51)$	$90.7^{+1.2}_{-1.2} \quad (+3.9\sigma)$
Ω_K	$0.0025^{+0.0039}_{-0.0037} \quad (+2.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.014} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1954^{+31}_{-30} \quad (-3.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.033}_{-0.031} \quad (+1.1\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.020}_{-0.020} \quad (-3.3\sigma)$	$H(0.61)$	$96.3^{+1.2}_{-1.2} \quad (+3.9\sigma)$
n_{s}	$0.9660^{+0.0089}_{-0.0088} \quad (-0.9\sigma)$	$r_{\mathrm{drag}}h$	$101.1^{+1.9}_{-1.9} \quad (+3.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2275^{+35}_{-34} \quad (-3.2\sigma)$
α_{JLA}	$0.141^{+0.013}_{-0.013}$	$\langle d^2 \rangle^{1/2}$	$2.423^{+0.049}_{-0.048} \quad (-3.1\sigma)$	$H(2.33)$	$237.1^{+2.4}_{-2.3} \quad (+3.2\sigma)$
β_{JLA}	$3.10^{+0.16}_{-0.16}$	z_{re}	$7.8^{+1.5}_{-1.5} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5712^{+60}_{-61} \quad (-3.4\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.070}_{-0.065} \quad (+1.1\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.013}_{-0.012} \quad (-3.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.024}_{-0.023} \quad (+0.8\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.015}_{-0.015} \quad (+2.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{40}	$1230^{+26}_{-25} \quad (+1.6\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-3.9\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (-0.0\sigma)$	D_{220}	$5734^{+76}_{-76} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.013}_{-0.013} \quad (+2.9\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (+0.3\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.010}_{-0.010} \quad (-2.8\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (+0.5\sigma)$	D_{1420}	$818.1^{+9.1}_{-9.3} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.013}_{-0.012} \quad (+3.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.1} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.4677^{+0.0097}_{-0.0097} \quad (-0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0089}_{-0.0088} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.012}_{-0.012} \quad (+3.1\sigma)$
A^{kSZ}	$< 7.95 \quad (+0.2\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.3005^{+0.0062}_{-0.0060} \quad (+3.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3106^{+0.0070}_{-0.0068} \quad (+3.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.4} \quad (+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.581^{+0.057}_{-0.054} \quad (+0.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.3} \quad (+0.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.67^{+0.15}_{-0.16} \quad (-3.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.86^{+0.57}_{-0.55} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.0^{+3.5}_{-3.5} \quad (+1.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.077}_{-0.075}$	r_*	$144.47^{+0.60}_{-0.61} \quad (-1.1\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.1) \quad (+0.3\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.059}$	$100\theta_*$	$1.04113^{+0.00063}_{-0.00061} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.6) \quad (+3.1\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.876^{+0.055}_{-0.056} \quad (-1.0\sigma)$	χ_{plik}^2	$2361.1 \quad (\nu: 17.1) \quad (+292.8\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	z_{drag}	$1059.99^{+0.59}_{-0.63} \quad (-0.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$8.2 \quad (\nu: 2.5)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.12^{+0.59}_{-0.59} \quad (-1.0\sigma)$	χ_{JLA}^2	$697.1 \quad (\nu: 2.0)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	k_{D}	$0.14086^{+0.00062}_{-0.00063} \quad (+0.8\sigma)$	χ_{6DF}^2	$0.059 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00035}_{-0.00034} \quad (+0.3\sigma)$	χ_{MGS}^2	$2.22 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	$3398^{+63}_{-61} \quad (+1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.1 \quad (\nu: 0.7)$
H_0	$68.7^{+1.3}_{-1.3} \quad (+3.8\sigma)$	k_{eq}	$0.01037^{+0.00019}_{-0.00019} \quad (+1.1\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.3\sigma)$
Ω_{Λ}	$0.695^{+0.011}_{-0.011} \quad (+2.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.012}_{-0.012} \quad (-1.1\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.5)$
Ω_{m}	$0.302^{+0.012}_{-0.012} \quad (-2.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4499^{+0.0060}_{-0.0060} \quad (-1.1\sigma)$	χ_{CMB}^2	$2781.9 \quad (\nu: 16.9) \quad (+279.8\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0026}_{-0.0025} \quad (+1.1\sigma)$	$H(0.15)$	$74.0^{+1.2}_{-1.2} \quad (+3.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 3505.21$; $R - 1 = 0.02028$

16.38 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022418	$0.02240^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	$\Omega_m h^3$	0.09813	$0.0981^{+0.0028}_{-0.0026} \quad (+3.8\sigma)$	$D_M(0.15)$	631.5	$632^{+11}_{-11} \quad (-3.0\sigma)$
$\Omega_c h^2$	0.11977	$0.1198^{+0.0027}_{-0.0027} \quad (+1.1\sigma)$	σ_8	0.8146	$0.815^{+0.014}_{-0.014} \quad (+2.5\sigma)$	$H(0.38)$	84.01	$84.0^{+1.2}_{-1.2} \quad (+3.9\sigma)$
$100\theta_{MC}$	1.04097	$1.04095^{+0.00064}_{-0.00061} \quad (-0.6\sigma)$	S_8	0.8181	$0.819^{+0.021}_{-0.020} \quad (-3.1\sigma)$	$D_M(0.38)$	1508.0	$1509^{+25}_{-24} \quad (-3.1\sigma)$
τ	0.0574	$0.057^{+0.015}_{-0.014} \quad (+1.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4481	$0.448^{+0.011}_{-0.011} \quad (-3.1\sigma)$	$H(0.51)$	90.70	$90.7^{+1.2}_{-1.2} \quad (+3.9\sigma)$
Ω_K	0.00244	$0.0024^{+0.0039}_{-0.0037} \quad (+2.4\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6042	$0.604^{+0.011}_{-0.012} \quad (-3.0\sigma)$	$D_M(0.51)$	1954.7	$1956^{+31}_{-29} \quad (-3.2\sigma)$
$\ln(10^{10} A_s)$	3.0505	$3.050^{+0.029}_{-0.027} \quad (+1.3\sigma)$	$\sigma_8/h^{0.5}$	0.9828	$0.983^{+0.016}_{-0.016} \quad (-3.2\sigma)$	$H(0.61)$	96.30	$96.3^{+1.2}_{-1.2} \quad (+3.9\sigma)$
n_s	0.9666	$0.9657^{+0.0089}_{-0.0086} \quad (-1.0\sigma)$	$r_{drag} h$	101.06	$101.0^{+1.8}_{-1.9} \quad (+3.8\sigma)$	$D_M(0.61)$	2275.7	$2277^{+35}_{-33} \quad (-3.2\sigma)$
y_{cal}	1.00063	$1.0009^{+0.0050}_{-0.0049} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4282	$2.430^{+0.040}_{-0.039} \quad (-3.1\sigma)$	$H(2.33)$	237.06	$237.1^{+2.4}_{-2.3} \quad (+3.2\sigma)$
α_{JLA}	0.1412	$0.141^{+0.013}_{-0.013}$	z_{re}	7.99	$7.9^{+1.4}_{-1.4} \quad (+1.2\sigma)$	$D_M(2.33)$	5713	$5714^{+60}_{-60} \quad (-3.4\sigma)$
β_{JLA}	3.101	$3.10^{+0.16}_{-0.15}$	$10^9 A_s$	2.113	$2.112^{+0.061}_{-0.057} \quad (+1.4\sigma)$	$f\sigma_8(0.15)$	0.4532	$0.453^{+0.011}_{-0.010} \quad (-3.4\sigma)$
A_{217}^{CIB}	46.9	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	1.8834	$1.884^{+0.023}_{-0.022} \quad (+0.9\sigma)$	$\sigma_8(0.15)$	0.7536	$0.754^{+0.013}_{-0.013} \quad (+2.8\sigma)$
$\xi^{tSZ \times CIB}$	0.48	—	D_{40}	1229.7	$1231^{+25}_{-25} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	0.4734	$0.4736^{+0.0091}_{-0.0091} \quad (-3.8\sigma)$
A_{143}^{tSZ}	7.19	$5.4^{+3.8}_{-3.7} \quad (-0.1\sigma)$	D_{220}	5734	$5738^{+75}_{-74} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	0.6691	$0.669^{+0.012}_{-0.012} \quad (+3.0\sigma)$
A_{100}^{PS}	249	$258^{+50}_{-50} \quad (+0.3\sigma)$	D_{810}	2542.2	$2541^{+26}_{-26} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	0.4731	$0.4731^{+0.0083}_{-0.0085} \quad (-2.6\sigma)$
A_{143}^{PS}	48.0	$46^{+20}_{-20} \quad (+0.5\sigma)$	D_{1420}	818.8	$818.3^{+9.2}_{-9.2} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	0.6266	$0.626^{+0.012}_{-0.011} \quad (+3.1\sigma)$
$A_{143 \times 217}^{PS}$	48.7	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{2000}	231.47	$231.2^{+3.2}_{-3.1} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	0.4688	$0.4688^{+0.0081}_{-0.0081} \quad (-0.7\sigma)$
A_{217}^{PS}	120.1	$115^{+20}_{-20} \quad (+0.1\sigma)$	$n_{s,0.002}$	0.9666	$0.9657^{+0.0089}_{-0.0086} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	0.5965	$0.596^{+0.011}_{-0.011} \quad (+3.1\sigma)$
A^{kSZ}	0.01	$< 7.94 \quad (+0.2\sigma)$	Y_P	0.245414	$0.24541^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	0.3010	$0.3009^{+0.0058}_{-0.0057} \quad (+3.2\sigma)$
A_{100}^{dustTT}	8.78	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_P^{BBN}	0.246741	$0.24673^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	0.3111	$0.3110^{+0.0067}_{-0.0065} \quad (+3.4\sigma)$
A_{143}^{dustTT}	10.89	$10.9^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$10^5 D/H$	2.577	$2.580^{+0.056}_{-0.053} \quad (+0.6\sigma)$	f_{2000}^{143}	28.6	$29^{+5}_{-5} \quad (+0.8\sigma)$
$A_{143 \times 217}^{dustTT}$	19.8	$18.6^{+6.7}_{-6.6} \quad (+0.2\sigma)$	Age/Gyr	13.672	$13.67^{+0.15}_{-0.15} \quad (-3.2\sigma)$	$f_{2000}^{143 \times 217}$	31.87	$32^{+4}_{-4} \quad (+0.9\sigma)$
A_{217}^{dustTT}	95.1	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	1089.84	$1089.87^{+0.55}_{-0.55} \quad (+0.9\sigma)$	f_{2000}^{217}	106.49	$107.0^{+3.4}_{-3.5} \quad (+1.0\sigma)$
A_{100}^{dustTE}	0.115	$0.114^{+0.076}_{-0.075}$	r_*	144.45	$144.45^{+0.58}_{-0.59} \quad (-1.1\sigma)$	$\chi^2_{lensing}$	8.87	$9.25 \quad (\nu: 0.2)$
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.059}$	$100\theta_*$	1.04116	$1.04113^{+0.00063}_{-0.00060} \quad (-0.6\sigma)$	χ^2_{small}	397	$295 \quad (\nu: 14648.9) \quad (-59.3\sigma)$
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.874	$13.874^{+0.054}_{-0.055} \quad (-1.1\sigma)$	χ^2_{lowl}	23.44	$23.7 \quad (\nu: 0.6) \quad (+3.3\sigma)$
A_{143}^{dustTE}	0.225	$0.22^{+0.10}_{-0.11}$	z_{drag}	1060.05	$1060.00^{+0.58}_{-0.60} \quad (-0.3\sigma)$	χ^2_{plik}	2345.5	$2360.5 \quad (\nu: 16.4) \quad (+292.7\sigma)$
$A_{143 \times 217}^{dustTE}$	0.665	$0.67^{+0.16}_{-0.16}$	r_{drag}	147.10	$147.10^{+0.57}_{-0.58} \quad (-1.1\sigma)$	$\chi^2_{H073p45}$	8	$110 \quad (\nu: 14639.0)$
A_{217}^{dustTE}	2.08	$2.09^{+0.52}_{-0.52}$	k_D	0.14090	$0.14088^{+0.00061}_{-0.00061} \quad (+0.8\sigma)$	χ^2_{JLA}	695.12	$697.2 \quad (\nu: 2.0)$
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	0.160709	$0.16073^{+0.00035}_{-0.00034} \quad (+0.2\sigma)$	χ^2_{6DF}	0.016	$0.051 \quad (\nu: 0.0)$
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	3398	$3399^{+61}_{-60} \quad (+1.1\sigma)$	χ^2_{MGS}	2.12	$2.14 \quad (\nu: 0.2)$
H_0	68.71	$68.7^{+1.2}_{-1.3} \quad (+3.8\sigma)$	k_{eq}	0.010371	$0.01038^{+0.00019}_{-0.00018} \quad (+1.1\sigma)$	$\chi^2_{DR12BAO}$	3.26	$4.0 \quad (\nu: 0.6)$
Ω_Λ	0.6950	$0.694^{+0.010}_{-0.011} \quad (+2.6\sigma)$	$100\theta_{eq}$	0.8143	$0.814^{+0.012}_{-0.011} \quad (-1.1\sigma)$	χ^2_{prior}	1.7	$11.6 \quad (\nu: 10.9) \quad (+1.3\sigma)$
Ω_m	0.3026	$0.303^{+0.012}_{-0.011} \quad (-2.6\sigma)$	$100\theta_{s,eq}$	0.4498	$0.4497^{+0.0059}_{-0.0058} \quad (-1.1\sigma)$	χ^2_{CMB}	2775	$2689 \quad (\nu: 14629.1) \quad (+263.5\sigma)$
$\Omega_m h^2$	0.14283	$0.1429^{+0.0026}_{-0.0025} \quad (+1.1\sigma)$	$H(0.15)$	73.95	$73.9^{+1.2}_{-1.2} \quad (+3.8\sigma)$	χ^2_{BAO}	5.39	$6.1 \quad (\nu: 1.1)$

Best-fit $\chi^2_{eff} = 3484.92$; $\Delta\chi^2_{eff} = -13.68$; $\bar{\chi}^2_{eff} = 3514.30$; $\Delta\bar{\chi}^2_{eff} = -10.57$; $R - 1 = 0.02289$
 χ^2_{eff} : BAO - 6DF: 0.02 (Δ 0.01) MGS: 2.12 (Δ 0.51) DR12BAO: 3.26 (Δ -0.35) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.87 (Δ 0.11) small_100x143_offlike5_EE_Aplanck.
396.72 (Δ -0.22) commander_dx12.v3.2.29: 23.44 (Δ 0.81) plik_rd12_HM_v22b_TTTEEE: 2345.53 (Δ -0.84) Hubble - H073p45: 8.17 (Δ -2.23) SN - JLA December_2013:
695.12 (Δ -11.48)

16.39 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0982^{+0.0028}_{-0.0026} \quad (+3.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$631^{+11}_{-11} \quad (-3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1198^{+0.0028}_{-0.0027} \quad (+1.1\sigma)$	σ_8	$0.814^{+0.016}_{-0.015} \quad (+2.5\sigma)$	$H(0.38)$	$84.0^{+1.2}_{-1.2} \quad (+3.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00065}_{-0.00063} \quad (-0.6\sigma)$	S_8	$0.817^{+0.024}_{-0.023} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1507^{+25}_{-24} \quad (-3.1\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.013}_{-0.013} \quad (-3.1\sigma)$	$H(0.51)$	$90.7^{+1.2}_{-1.2} \quad (+3.9\sigma)$
Ω_K	$0.0025^{+0.0039}_{-0.0037} \quad (+2.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.013} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1954^{+31}_{-30} \quad (-3.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.048^{+0.030}_{-0.028} \quad (+1.2\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.020}_{-0.019} \quad (-3.3\sigma)$	$H(0.61)$	$96.3^{+1.2}_{-1.2} \quad (+3.9\sigma)$
n_{s}	$0.9661^{+0.0090}_{-0.0087} \quad (-0.9\sigma)$	$r_{\mathrm{drag}}h$	$101.1^{+1.9}_{-1.9} \quad (+3.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2275^{+35}_{-34} \quad (-3.2\sigma)$
α_{JLA}	$0.141^{+0.013}_{-0.013}$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.048}_{-0.046} \quad (-3.1\sigma)$	$H(2.33)$	$237.1^{+2.4}_{-2.3} \quad (+3.2\sigma)$
β_{JLA}	$3.10^{+0.16}_{-0.16}$	z_{re}	$< 9.10 \quad (+1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5712^{+60}_{-61} \quad (-3.4\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.107^{+0.063}_{-0.058} \quad (+1.2\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.012}_{-0.012} \quad (-3.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.024}_{-0.023} \quad (+0.8\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.015}_{-0.014} \quad (+2.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{40}	$1230^{+26}_{-26} \quad (+1.6\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.011}_{-0.011} \quad (-3.9\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (-0.0\sigma)$	D_{220}	$5734^{+76}_{-77} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.013}_{-0.012} \quad (+3.0\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (+0.3\sigma)$	D_{810}	$2540^{+26}_{-27} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.010}_{-0.0098} \quad (-2.7\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (+0.5\sigma)$	D_{1420}	$818.1^{+9.2}_{-9.3} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.626^{+0.012}_{-0.012} \quad (+3.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.1} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.4680^{+0.0095}_{-0.0092} \quad (-0.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9661^{+0.0090}_{-0.0087} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.596^{+0.012}_{-0.011} \quad (+3.1\sigma)$
A^{kSZ}	$< 7.91 \quad (+0.2\sigma)$	Y_{P}	$0.24541^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.3007^{+0.0061}_{-0.0057} \quad (+3.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3108^{+0.0068}_{-0.0064} \quad (+3.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.4} \quad (+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.057}_{-0.054} \quad (+0.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.3} \quad (+0.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.67^{+0.15}_{-0.16} \quad (-3.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.86^{+0.57}_{-0.55} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.0^{+3.5}_{-3.5} \quad (+1.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.077}_{-0.075}$	r_*	$144.47^{+0.60}_{-0.61} \quad (-1.1\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.2) \quad (+0.3\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.059}$	$100\theta_*$	$1.04113^{+0.00063}_{-0.00062} \quad (-0.6\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.6) \quad (+3.1\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.876^{+0.055}_{-0.056} \quad (-1.0\sigma)$	χ_{plik}^2	$2360.9 \quad (\nu: 16.8) \quad (+292.8\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	z_{drag}	$1059.99^{+0.59}_{-0.59} \quad (-0.3\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$8.2 \quad (\nu: 2.4)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.12^{+0.59}_{-0.59} \quad (-1.0\sigma)$	χ_{JLA}^2	$697.1 \quad (\nu: 2.0)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	k_{D}	$0.14086^{+0.00062}_{-0.00063} \quad (+0.8\sigma)$	χ_{6DF}^2	$0.059 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00035}_{-0.00034} \quad (+0.3\sigma)$	χ_{MGS}^2	$2.22 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	$3397^{+63}_{-61} \quad (+1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.0 \quad (\nu: 0.7)$
H_0	$68.7^{+1.3}_{-1.3} \quad (+3.8\sigma)$	k_{eq}	$0.01037^{+0.00019}_{-0.00019} \quad (+1.1\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.3) \quad (+1.3\sigma)$
Ω_{Λ}	$0.695^{+0.011}_{-0.011} \quad (+2.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.012}_{-0.012} \quad (-1.1\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.5)$
Ω_{m}	$0.302^{+0.012}_{-0.012} \quad (-2.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4499^{+0.0060}_{-0.0060} \quad (-1.1\sigma)$	χ_{CMB}^2	$2781.7 \quad (\nu: 16.5) \quad (+279.8\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0026}_{-0.0025} \quad (+1.1\sigma)$	$H(0.15)$	$74.0^{+1.2}_{-1.2} \quad (+3.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 3505.05$; $R - 1 = 0.01737$

16.40 base_omegak_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00030}_{-0.00030} \quad (-0.6\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0981^{+0.0027}_{-0.0026} \quad (+3.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$632^{+11}_{-11} \quad (-3.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1198^{+0.0027}_{-0.0027} \quad (+1.1\sigma)$	σ_8	$0.815^{+0.014}_{-0.014} \quad (+2.5\sigma)$	$H(0.38)$	$84.0^{+1.2}_{-1.2} \quad (+3.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00064}_{-0.00060} \quad (-0.6\sigma)$	S_8	$0.819^{+0.021}_{-0.019} \quad (-3.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1509^{+25}_{-23} \quad (-3.1\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+1.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.011}_{-0.011} \quad (-3.1\sigma)$	$H(0.51)$	$90.7^{+1.2}_{-1.2} \quad (+3.9\sigma)$
Ω_K	$0.0024^{+0.0038}_{-0.0037} \quad (+2.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.011}_{-0.011} \quad (-3.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1956^{+31}_{-29} \quad (-3.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.051^{+0.028}_{-0.025} \quad (+1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-3.2\sigma)$	$H(0.61)$	$96.3^{+1.2}_{-1.2} \quad (+3.9\sigma)$
n_{s}	$0.9658^{+0.0089}_{-0.0086} \quad (-1.0\sigma)$	$r_{\mathrm{drag}}h$	$101.0^{+1.8}_{-1.9} \quad (+3.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2277^{+35}_{-33} \quad (-3.2\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0049} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.039}_{-0.038} \quad (-3.0\sigma)$	$H(2.33)$	$237.1^{+2.4}_{-2.3} \quad (+3.2\sigma)$
α_{JLA}	$0.141^{+0.013}_{-0.013}$	z_{re}	$8.0^{+1.3}_{-1.3} \quad (+1.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5714^{+60}_{-60} \quad (-3.4\sigma)$
β_{JLA}	$3.10^{+0.16}_{-0.15}$	$10^9 A_{\mathrm{s}}$	$2.113^{+0.058}_{-0.055} \quad (+1.4\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.011}_{-0.010} \quad (-3.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.884^{+0.023}_{-0.022} \quad (+0.9\sigma)$	$\sigma_8(0.15)$	$0.754^{+0.013}_{-0.013} \quad (+2.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{40}	$1231^{+25}_{-25} \quad (+1.7\sigma)$	$f\sigma_8(0.38)$	$0.4737^{+0.0090}_{-0.0089} \quad (-3.8\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.7} \quad (-0.1\sigma)$	D_{220}	$5738^{+75}_{-74} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.669^{+0.012}_{-0.012} \quad (+3.0\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (+0.3\sigma)$	D_{810}	$2541^{+26}_{-26} \quad (+0.9\sigma)$	$f\sigma_8(0.51)$	$0.4733^{+0.0082}_{-0.0083} \quad (-2.6\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (+0.5\sigma)$	D_{1420}	$818.3^{+9.3}_{-9.2} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.012}_{-0.011} \quad (+3.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	D_{2000}	$231.2^{+3.2}_{-3.1} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0080}_{-0.0080} \quad (-0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9658^{+0.0089}_{-0.0086} \quad (-1.0\sigma)$	$\sigma_8(0.61)$	$0.597^{+0.011}_{-0.011} \quad (+3.1\sigma)$
A^{kSZ}	$< 7.94 \quad (+0.2\sigma)$	Y_{P}	$0.24541^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.3010^{+0.0057}_{-0.0054} \quad (+3.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00012} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3111^{+0.0066}_{-0.0062} \quad (+3.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.056}_{-0.053} \quad (+0.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (+0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.7}_{-6.5} \quad (+0.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.67^{+0.15}_{-0.15} \quad (-3.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (+0.9\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.87^{+0.56}_{-0.55} \quad (+0.9\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.6} \quad (+1.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.075}$	r_*	$144.45^{+0.58}_{-0.59} \quad (-1.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.23 \quad (\nu: 0.2)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.059}_{-0.059}$	$100\theta_*$	$1.04113^{+0.00063}_{-0.00060} \quad (-0.6\sigma)$	χ_{small}^2	$296 \quad (\nu: 14556.4) \quad (-58.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.874^{+0.054}_{-0.054} \quad (-1.1\sigma)$	χ_{lowl}^2	$23.7 \quad (\nu: 0.6) \quad (+3.3\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	z_{drag}	$1060.00^{+0.58}_{-0.60} \quad (-0.3\sigma)$	χ_{plik}^2	$2360.4 \quad (\nu: 16.2) \quad (+292.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.10^{+0.57}_{-0.57} \quad (-1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$109 \quad (\nu: 14547.2)$
$A_{217}^{\mathrm{dustTE}}$	$2.09^{+0.52}_{-0.52}$	k_{D}	$0.14088^{+0.00061}_{-0.00061} \quad (+0.8\sigma)$	χ_{JLA}^2	$697.2 \quad (\nu: 2.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00034}_{-0.00034} \quad (+0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	$3399^{+61}_{-60} \quad (+1.1\sigma)$	χ_{MGS}^2	$2.15 \quad (\nu: 0.2)$
H_0	$68.7^{+1.2}_{-1.3} \quad (+3.8\sigma)$	k_{eq}	$0.01037^{+0.00019}_{-0.00018} \quad (+1.1\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.0 \quad (\nu: 0.6)$
Ω_{Λ}	$0.695^{+0.010}_{-0.011} \quad (+2.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.011}_{-0.011} \quad (-1.1\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.9) \quad (+1.3\sigma)$
Ω_{m}	$0.303^{+0.012}_{-0.011} \quad (-2.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4497^{+0.0059}_{-0.0058} \quad (-1.1\sigma)$	χ_{CMB}^2	$2690 \quad (\nu: 14541.4) \quad (+263.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1429^{+0.0025}_{-0.0025} \quad (+1.1\sigma)$	$H(0.15)$	$73.9^{+1.2}_{-1.2} \quad (+3.8\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.1)$

$\bar{\chi}_{\mathrm{eff}}^2 = 3514.21$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -10.57$; $R - 1 = 0.02147$

16.41 base_omegak_plikHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022317	$0.02232^{+0.00048}_{-0.00046} \quad (-0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6101	$0.610^{+0.015}_{-0.014} \quad (-2.6\sigma)$	$D_{\mathrm{M}}(0.15)$	675.7	$682^{+49}_{-46} \quad (-2.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.11806	$0.1178^{+0.0044}_{-0.0040} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9955	$0.996^{+0.021}_{-0.021} \quad (-2.7\sigma)$	$H(0.38)$	79.71	$79.2^{+4.4}_{-4.2} \quad (+2.6\sigma)$
$100\theta_{\mathrm{MC}}$	1.04107	$1.04111^{+0.00093}_{-0.00095} \quad (-0.3\sigma)$	$r_{\mathrm{drag}} h$	94.5	$93.6^{+6.9}_{-6.5} \quad (+2.6\sigma)$	$D_{\mathrm{M}}(0.38)$	1604	$1618^{+100}_{-100} \quad (-2.2\sigma)$
τ	0.0510	$0.049^{+0.016}_{-0.017} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.469	$2.473^{+0.058}_{-0.057} \quad (-2.5\sigma)$	$H(0.51)$	86.54	$86.0^{+4.2}_{-4.0} \quad (+2.6\sigma)$
Ω_K	-0.0092	$-0.011^{+0.015}_{-0.015} \quad (+1.8\sigma)$	z_{re}	7.29	$7.1^{+1.6}_{-1.8} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	2073	$2091^{+130}_{-120} \quad (-2.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0316	$3.027^{+0.033}_{-0.034} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	2.073	$2.065^{+0.069}_{-0.070} \quad (+0.1\sigma)$	$H(0.61)$	92.24	$91.8^{+4.1}_{-4.0} \quad (+2.5\sigma)$
n_{s}	0.9696	$0.969^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8719	$1.870^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	2409	$2428^{+140}_{-140} \quad (-2.3\sigma)$
y_{cal}	1.00010	$0.99998^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	1213.4	$1213^{+34}_{-33} \quad (+0.6\sigma)$	$H(2.33)$	233.28	$232.8^{+5.1}_{-4.8} \quad (+1.7\sigma)$
A_{217}^{CIB}	48.0	$47^{+10}_{-10} \quad (+0.3\sigma)$	D_{220}	5718	$5723^{+82}_{-80} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	5924	$5953^{+230}_{-220} \quad (-2.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.40	—	D_{810}	2533.1	$2531^{+27}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4700	$0.471^{+0.020}_{-0.020} \quad (-2.7\sigma)$
A_{143}^{tSZ}	7.01	$5.2^{+3.8}_{-3.9} \quad (-0.2\sigma)$	D_{1420}	815.3	$814.3^{+9.8}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7325	$0.729^{+0.026}_{-0.027} \quad (+1.7\sigma)$
A_{100}^{PS}	252	$261^{+60}_{-60} \quad (+0.4\sigma)$	D_{2000}	230.62	$230.3^{+3.6}_{-3.7} \quad (-1.0\sigma)$	$f\sigma_8(0.38)$	0.4812	$0.481^{+0.012}_{-0.012} \quad (-3.0\sigma)$
A_{143}^{PS}	48.5	$47^{+20}_{-20} \quad (+0.6\sigma)$	$n_{\mathrm{s},0.002}$	0.9696	$0.969^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	0.6457	$0.642^{+0.027}_{-0.028} \quad (+1.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	47.1	$42^{+20}_{-20} \quad (+0.2\sigma)$	Y_{P}	0.245374	$0.24537^{+0.00018}_{-0.00020} \quad (-0.9\sigma)$	$f\sigma_8(0.51)$	0.4762	$0.476^{+0.010}_{-0.0096} \quad (-2.2\sigma)$
A_{217}^{PS}	118.8	$114^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246701	$0.24670^{+0.00018}_{-0.00020} \quad (-0.9\sigma)$	$\sigma_8(0.51)$	0.6028	$0.599^{+0.027}_{-0.027} \quad (+2.0\sigma)$
A^{kSZ}	0.22	$< 8.44 \quad (+0.4\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.595	$2.595^{+0.088}_{-0.086} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	0.4688	$0.4678^{+0.0095}_{-0.0092} \quad (-0.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.97	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	Age/Gyr	14.20	$14.28^{+0.59}_{-0.56} \quad (-2.2\sigma)$	$\sigma_8(0.61)$	0.5726	$0.569^{+0.027}_{-0.027} \quad (+2.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.93	$10.7^{+3.5}_{-3.5} \quad (+0.1\sigma)$	z_*	1089.82	$1089.79^{+0.88}_{-0.87} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	0.2878	$0.286^{+0.015}_{-0.015} \quad (+2.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.3^{+6.4}_{-6.5} \quad (+0.1\sigma)$	r_*	144.97	$145.03^{+0.89}_{-0.96} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.2942	$0.292^{+0.018}_{-0.018} \quad (+2.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.6	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	1.04126	$1.04130^{+0.00092}_{-0.00093} \quad (-0.3\sigma)$	f_{2000}^{143}	29.6	$30^{+6}_{-6} \quad (+1.0\sigma)$
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.923	$13.928^{+0.082}_{-0.087} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	32.50	$33^{+4}_{-4} \quad (+1.2\sigma)$
c_{217}	0.99822	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	1059.67	$1059.67^{+0.95}_{-0.92} \quad (-0.9\sigma)$	f_{2000}^{217}	106.95	$107.2^{+4.0}_{-3.9} \quad (+1.1\sigma)$
H_0	63.96	$63.4^{+4.8}_{-4.6} \quad (+2.6\sigma)$	r_{drag}	147.67	$147.72^{+0.87}_{-0.94} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	9.44	$10.4 \quad (\nu: 2.3)$
Ω_{Λ}	0.6645	$0.660^{+0.034}_{-0.037} \quad (+2.1\sigma)$	k_{D}	0.14022	$0.14016^{+0.00099}_{-0.00090} \quad (-0.6\sigma)$	χ_{simall}^2	395.67	$396.7 \quad (\nu: 1.1) \quad (-0.0\sigma)$
Ω_{m}	0.3447	$0.352^{+0.050}_{-0.046} \quad (-2.0\sigma)$	$100\theta_{\mathrm{D}}$	0.16092	$0.16093^{+0.00055}_{-0.00053} \quad (+0.9\sigma)$	χ_{lowl}^2	21.81	$22.0 \quad (\nu: 0.7) \quad (+0.9\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.14103	$0.1408^{+0.0041}_{-0.0038} \quad (+0.1\sigma)$	z_{eq}	3355	$3349^{+99}_{-90} \quad (+0.1\sigma)$	χ_{plik}^2	757.9	$770.7 \quad (\nu: 15.1) \quad (+0.7\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.0902	$0.0893^{+0.0084}_{-0.0080} \quad (+2.4\sigma)$	k_{eq}	0.010239	$0.01022^{+0.00030}_{-0.00027} \quad (+0.1\sigma)$	χ_{prior}^2	1.4	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
σ_8	0.7962	$0.792^{+0.025}_{-0.025} \quad (+1.4\sigma)$	$100\theta_{\mathrm{eq}}$	0.8219	$0.823^{+0.018}_{-0.019} \quad (-0.2\sigma)$	χ_{CMB}^2	1184.8	$1199.8 \quad (\nu: 15.9) \quad (+2.6\sigma)$
S_8	0.8534	$0.857^{+0.043}_{-0.042} \quad (-2.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4539	$0.4545^{+0.0092}_{-0.0096} \quad (-0.2\sigma)$			
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4675	$0.470^{+0.024}_{-0.023} \quad (-2.5\sigma)$	$H(0.15)$	69.39	$68.8^{+4.6}_{-4.4} \quad (+2.6\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 1186.22$; $\Delta\chi_{\mathrm{eff}}^2 = -2.35$; $\bar{\chi}_{\mathrm{eff}}^2 = 1207.14$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.28$; $R - 1 = 0.01227$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.44 (Δ 0.54) simall_100x143_offlike5_EE_Aplanck_B: 395.67 (Δ -0.19) commander_dx12.v3.2.29: 21.81 (Δ -1.43) plik_rd12_HM_v22_TT: 757.86 (Δ -1.46)

16.42 base_omegak_plikHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02233^{+0.00049}_{-0.00046} \quad (-0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.015}_{-0.014} \quad (-2.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$679^{+46}_{-45} \quad (-2.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1177^{+0.0044}_{-0.0040} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.996^{+0.021}_{-0.021} \quad (-2.7\sigma)$	$H(0.38)$	$79.5^{+4.3}_{-4.0} \quad (+2.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04113^{+0.00093}_{-0.00096} \quad (-0.3\sigma)$	$r_{\mathrm{drag}}h$	$94.2^{+6.7}_{-6.3} \quad (+2.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1610^{+100}_{-97} \quad (-2.3\sigma)$
τ	$0.0525^{+0.012}_{-0.0095} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.473^{+0.057}_{-0.056} \quad (-2.5\sigma)$	$H(0.51)$	$86.3^{+4.1}_{-3.9} \quad (+2.6\sigma)$
Ω_K	$-0.010^{+0.014}_{-0.014} \quad (+1.9\sigma)$	z_{re}	$< 8.52 \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$2081^{+120}_{-120} \quad (-2.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.033^{+0.026}_{-0.023} \quad (+0.4\sigma)$	10^9A_{s}	$2.077^{+0.055}_{-0.049} \quad (+0.4\sigma)$	$H(0.61)$	$92.0^{+4.1}_{-3.9} \quad (+2.6\sigma)$
n_{s}	$0.970^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.870^{+0.027}_{-0.026} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2417^{+140}_{-130} \quad (-2.3\sigma)$
y_{cal}	$0.99997^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	D_{40}	$1213^{+34}_{-33} \quad (+0.6\sigma)$	$H(2.33)$	$232.9^{+5.2}_{-4.7} \quad (+1.8\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (+0.3\sigma)$	D_{220}	$5723^{+83}_{-79} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5938^{+220}_{-220} \quad (-2.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2530^{+27}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.470^{+0.020}_{-0.020} \quad (-2.7\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9} \quad (-0.2\sigma)$	D_{1420}	$814.3^{+9.8}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.731^{+0.025}_{-0.024} \quad (+1.8\sigma)$
A_{100}^{PS}	$260^{+60}_{-60} \quad (+0.4\sigma)$	D_{2000}	$230.3^{+3.6}_{-3.7} \quad (-1.0\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.012}_{-0.012} \quad (-3.0\sigma)$
A_{143}^{PS}	$47^{+20}_{-20} \quad (+0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.970^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.645^{+0.025}_{-0.025} \quad (+2.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (+0.2\sigma)$	Y_{P}	$0.24538^{+0.00019}_{-0.00020} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	$0.4760^{+0.0099}_{-0.0096} \quad (-2.2\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00019}_{-0.00020} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	$0.602^{+0.025}_{-0.025} \quad (+2.1\sigma)$
A^{kSZ}	$< 8.44 \quad (+0.4\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.594^{+0.087}_{-0.088} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0093}_{-0.0088} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$14.24^{+0.56}_{-0.55} \quad (-2.3\sigma)$	$\sigma_8(0.61)$	$0.571^{+0.025}_{-0.024} \quad (+2.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.1\sigma)$	z_*	$1089.77^{+0.86}_{-0.88} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.287^{+0.014}_{-0.013} \quad (+2.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.1\sigma)$	r_*	$145.05^{+0.89}_{-0.97} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.294^{+0.017}_{-0.016} \quad (+2.3\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.04132^{+0.00091}_{-0.00095} \quad (-0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (+1.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.930^{+0.082}_{-0.087} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+1.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.68^{+0.98}_{-0.93} \quad (-0.9\sigma)$	f_{2000}^{217}	$107.1^{+4.0}_{-3.9} \quad (+1.0\sigma)$
H_0	$63.8^{+4.7}_{-4.4} \quad (+2.7\sigma)$	r_{drag}	$147.74^{+0.87}_{-0.94} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.4 \quad (\nu: 2.3)$
Ω_{Λ}	$0.663^{+0.032}_{-0.033} \quad (+2.1\sigma)$	k_{D}	$0.14015^{+0.00099}_{-0.00090} \quad (-0.6\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
Ω_{m}	$0.347^{+0.046}_{-0.044} \quad (-2.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16092^{+0.00054}_{-0.00053} \quad (+0.9\sigma)$	χ_{lowl}^2	$22.1 \quad (\nu: 0.7) \quad (+1.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1407^{+0.0042}_{-0.0037} \quad (+0.1\sigma)$	z_{eq}	$3347^{+99}_{-90} \quad (+0.1\sigma)$	χ_{plik}^2	$770.6 \quad (\nu: 15.1) \quad (+0.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0897^{+0.0083}_{-0.0077} \quad (+2.5\sigma)$	k_{eq}	$0.01022^{+0.00030}_{-0.00027} \quad (+0.1\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.1\sigma)$
σ_8	$0.795^{+0.023}_{-0.022} \quad (+1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.018}_{-0.019} \quad (-0.2\sigma)$	χ_{CMB}^2	$1199.4 \quad (\nu: 15.4) \quad (+2.6\sigma)$
S_8	$0.855^{+0.042}_{-0.041} \quad (-2.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4547^{+0.0091}_{-0.0097} \quad (-0.1\sigma)$		
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.468^{+0.023}_{-0.023} \quad (-2.5\sigma)$	$H(0.15)$	$69.2^{+4.5}_{-4.2} \quad (+2.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1206.71; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.45; R - 1 = 0.01427$$

16.43 base_omegak_plikHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022509	$0.02249^{+0.00031}_{-0.00030}$ (-0.2σ)	$\Omega_{\mathrm{m}}h^3$	0.0906	$0.0900^{+0.0072}_{-0.0067}$ $(+2.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4528	$0.4527^{+0.0065}_{-0.0065}$ (-0.5σ)
$\Omega_{\mathrm{c}}h^2$	0.11839	$0.1185^{+0.0030}_{-0.0029}$ $(+0.5\sigma)$	σ_8	0.7974	$0.795^{+0.022}_{-0.022}$ $(+1.5\sigma)$	$H(0.15)$	69.47	$69.0^{+4.3}_{-4.0}$ $(+2.6\sigma)$
$100\theta_{\mathrm{MC}}$	1.04106	$1.04107^{+0.00061}_{-0.00064}$ (-0.4σ)	S_8	0.8554	$0.860^{+0.040}_{-0.041}$ (-2.4σ)	$D_{\mathrm{M}}(0.15)$	675.0	680^{+44}_{-43} (-2.2σ)
τ	0.0515	$0.050^{+0.016}_{-0.017}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4685	$0.471^{+0.022}_{-0.023}$ (-2.4σ)	$H(0.38)$	79.82	$79.4^{+4.0}_{-3.7}$ $(+2.6\sigma)$
Ω_K	-0.0092	$-0.011^{+0.013}_{-0.012}$ $(+1.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6112	$0.612^{+0.013}_{-0.013}$ (-2.5σ)	$D_{\mathrm{M}}(0.38)$	1602	1614^{+93}_{-92} (-2.3σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0336	$3.030^{+0.032}_{-0.035}$ $(+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9965	$0.998^{+0.019}_{-0.020}$ (-2.6σ)	$H(0.51)$	86.67	$86.3^{+3.8}_{-3.5}$ $(+2.6\sigma)$
n_{s}	0.9699	$0.9688^{+0.0090}_{-0.0094}$ (-0.5σ)	$r_{\mathrm{drag}}h$	94.4	$93.7^{+6.5}_{-6.0}$ $(+2.6\sigma)$	$D_{\mathrm{M}}(0.51)$	2071	2084^{+110}_{-110} (-2.3σ)
y_{cal}	1.00002	$0.99998^{+0.0048}_{-0.0049}$ (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.472	$2.478^{+0.054}_{-0.055}$ (-2.5σ)	$H(0.61)$	92.38	$92.0^{+3.7}_{-3.4}$ $(+2.6\sigma)$
A_{217}^{CIB}	46.8	46^{+10}_{-10} $(+0.2\sigma)$	z_{re}	7.30	$7.1^{+1.6}_{-1.8}$ $(+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	2406	2420^{+130}_{-130} (-2.3σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.52	—	$10^9 A_{\mathrm{s}}$	2.077	$2.070^{+0.067}_{-0.072}$ $(+0.2\sigma)$	$H(2.33)$	233.70	$233.6^{+3.8}_{-3.6}$ $(+2.0\sigma)$
A_{143}^{tSZ}	7.25	$5.5^{+3.7}_{-3.9}$ (-0.0σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8741	$1.874^{+0.024}_{-0.023}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	5915	5935^{+190}_{-200} (-2.4σ)
A_{100}^{PS}	247	257^{+60}_{-50} $(+0.2\sigma)$	D_{40}	1214.6	1216^{+29}_{-27} $(+0.8\sigma)$	$f\sigma_8(0.15)$	0.4710	$0.473^{+0.019}_{-0.020}$ (-2.6σ)
A_{143}^{PS}	47.2	44^{+10}_{-20} $(+0.3\sigma)$	D_{220}	5731	5735^{+73}_{-74} (-0.2σ)	$\sigma_8(0.15)$	0.7335	$0.731^{+0.023}_{-0.024}$ $(+1.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	48.3	41^{+20}_{-20} $(+0.1\sigma)$	D_{810}	2535.3	2534^{+26}_{-26} $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4821	$0.483^{+0.011}_{-0.012}$ (-2.9σ)
A_{217}^{PS}	119.1	114^{+20}_{-20} $(+0.0\sigma)$	D_{1420}	817.2	$816.2^{+9.1}_{-9.1}$ $(+0.5\sigma)$	$\sigma_8(0.38)$	0.6466	$0.644^{+0.024}_{-0.025}$ $(+2.0\sigma)$
A^{kSZ}	0.01	< 8.00 $(+0.2\sigma)$	D_{2000}	231.60	$231.2^{+3.1}_{-3.1}$ (-0.6σ)	$f\sigma_8(0.51)$	0.4770	$0.4771^{+0.0083}_{-0.0086}$ (-2.0σ)
$A_{100}^{\mathrm{dustTT}}$	8.94	$9.0^{+3.6}_{-3.5}$ $(+0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9699	$0.9688^{+0.0090}_{-0.0094}$ (-0.5σ)	$\sigma_8(0.51)$	0.6035	$0.601^{+0.024}_{-0.025}$ $(+2.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	11.10	$10.9^{+3.5}_{-3.4}$ $(+0.2\sigma)$	Y_{P}	0.245448	$0.24544^{+0.00012}_{-0.00012}$ (-0.2σ)	$f\sigma_8(0.61)$	0.4696	$0.4693^{+0.0077}_{-0.0079}$ (-0.6σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.0	$18.6^{+6.3}_{-6.4}$ $(+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246774	$0.24676^{+0.00012}_{-0.00012}$ (-0.2σ)	$\sigma_8(0.61)$	0.5733	$0.571^{+0.024}_{-0.025}$ $(+2.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	95.1	94^{+10}_{-10} (-0.0σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.560	$2.565^{+0.056}_{-0.056}$ $(+0.2\sigma)$	$f\sigma_8(2.33)$	0.2881	$0.287^{+0.013}_{-0.013}$ $(+2.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.113^{+0.075}_{-0.076}$	Age/Gyr	14.182	$14.23^{+0.49}_{-0.50}$ (-2.3σ)	$\sigma_8(2.33)$	0.2946	$0.293^{+0.017}_{-0.016}$ $(+2.3\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.058}_{-0.059}$	z_*	1089.61	$1089.64^{+0.59}_{-0.57}$ $(+0.4\sigma)$	f_{2000}^{143}	28.1	29^{+6}_{-5} $(+0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	r_*	144.74	$144.73^{+0.63}_{-0.64}$ (-0.5σ)	$f_{2000}^{143 \times 217}$	31.35	32^{+4}_{-4} $(+0.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	1.04123	$1.04124^{+0.00060}_{-0.00062}$ (-0.4σ)	f_{2000}^{217}	105.88	$106.3^{+3.6}_{-3.5}$ $(+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.660	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.901	$13.900^{+0.059}_{-0.059}$ (-0.5σ)	$\chi_{\mathrm{lensing}}^2$	9.78	$10.9 (\nu: 2.8)$
$A_{217}^{\mathrm{dustTE}}$	2.07	$2.07^{+0.52}_{-0.52}$	z_{drag}	1060.12	$1060.10^{+0.60}_{-0.58}$ (-0.1σ)	χ_{small}^2	395.65	$396.7 (\nu: 1.1)$ (-0.0σ)
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	r_{drag}	147.36	$147.36^{+0.61}_{-0.61}$ (-0.5σ)	χ_{lowl}^2	21.84	$22.15 (\nu: 0.5)$ $(+1.1\sigma)$
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	k_{D}	0.14069	$0.14067^{+0.00063}_{-0.00063}$ $(+0.4\sigma)$	χ_{plik}^2	2342.4	$2357.5 (\nu: 17.3)$ $(+292.1\sigma)$
H_0	64.03	$63.6^{+4.5}_{-4.2}$ $(+2.6\sigma)$	$100\theta_{\mathrm{D}}$	0.160641	$0.16067^{+0.00034}_{-0.00034}$ $(+0.0\sigma)$	χ_{prior}^2	1.8	$11.5 (\nu: 9.9)$ $(+1.2\sigma)$
Ω_{Λ}	0.6639	$0.659^{+0.033}_{-0.035}$ $(+2.1\sigma)$	z_{eq}	3367	3369^{+67}_{-65} $(+0.5\sigma)$	χ_{CMB}^2	2769.7	$2787.2 (\nu: 17.4)$ $(+280.7\sigma)$
Ω_{m}	0.3453	$0.352^{+0.045}_{-0.046}$ (-2.0σ)	k_{eq}	0.010277	$0.01028^{+0.00020}_{-0.00020}$ $(+0.5\sigma)$			
$\Omega_{\mathrm{m}}h^2$	0.14155	$0.1416^{+0.0028}_{-0.0027}$ $(+0.5\sigma)$	$100\theta_{\mathrm{eq}}$	0.8201	$0.820^{+0.013}_{-0.013}$ (-0.5σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2771.41$; $\Delta\chi_{\mathrm{eff}}^2 = -3.23$; $\bar{\chi}_{\mathrm{eff}}^2 = 2798.70$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.99$; $R - 1 = 0.02587$
 χ_{eff}^2 : CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb_consext8: 9.79 (Δ 0.92) simall_100x143_offlike5.EE_Aplanck.B: 395.65 (Δ -0.40) commander_dx12.v3.2.29: 21.84 (Δ -1.41) plik_rd12_HM_v22b_TTTEEE: 2342.38 (Δ -2.55)

16.44 base_omegak_plikHM_TTTEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02249^{+0.00031}_{-0.00030} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0906^{+0.0069}_{-0.0063} \quad (+2.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4527^{+0.0065}_{-0.0067} \quad (-0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1185^{+0.0031}_{-0.0029} \quad (+0.5\sigma)$	σ_8	$0.798^{+0.020}_{-0.018} \quad (+1.7\sigma)$	$H(0.15)$	$69.4^{+4.1}_{-3.7} \quad (+2.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04107^{+0.00061}_{-0.00064} \quad (-0.4\sigma)$	S_8	$0.858^{+0.039}_{-0.040} \quad (-2.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$676^{+40}_{-41} \quad (-2.3\sigma)$
τ	$0.0528^{+0.011}_{-0.0093} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.470^{+0.021}_{-0.022} \quad (-2.5\sigma)$	$H(0.38)$	$79.8^{+3.8}_{-3.4} \quad (+2.7\sigma)$
Ω_K	$-0.0096^{+0.011}_{-0.012} \quad (+1.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.013}_{-0.013} \quad (-2.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1605^{+85}_{-88} \quad (-2.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.036^{+0.026}_{-0.023} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.998^{+0.019}_{-0.020} \quad (-2.6\sigma)$	$H(0.51)$	$86.6^{+3.7}_{-3.3} \quad (+2.7\sigma)$
n_{s}	$0.9689^{+0.0090}_{-0.0093} \quad (-0.5\sigma)$	$r_{\mathrm{drag}}h$	$94.2^{+6.2}_{-5.5} \quad (+2.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$2074^{+100}_{-110} \quad (-2.4\sigma)$
y_{cal}	$0.99997^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.478^{+0.054}_{-0.055} \quad (-2.5\sigma)$	$H(0.61)$	$92.3^{+3.6}_{-3.2} \quad (+2.7\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (+0.2\sigma)$	z_{re}	$< 8.51 \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2409^{+120}_{-120} \quad (-2.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.083^{+0.054}_{-0.048} \quad (+0.6\sigma)$	$H(2.33)$	$233.7^{+3.7}_{-3.5} \quad (+2.0\sigma)$
A_{143}^{tSZ}	$5.5^{+3.6}_{-3.9} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.874^{+0.024}_{-0.023} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5919^{+180}_{-190} \quad (-2.5\sigma)$
A_{100}^{PS}	$257^{+60}_{-50} \quad (+0.2\sigma)$	D_{40}	$1217^{+29}_{-27} \quad (+0.8\sigma)$	$f\sigma_8(0.15)$	$0.472^{+0.018}_{-0.019} \quad (-2.7\sigma)$
A_{143}^{PS}	$44^{+10}_{-20} \quad (+0.3\sigma)$	D_{220}	$5734^{+73}_{-74} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.734^{+0.021}_{-0.019} \quad (+1.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$41^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2533^{+26}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.483^{+0.011}_{-0.012} \quad (-2.9\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$816.2^{+9.2}_{-9.1} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.647^{+0.022}_{-0.020} \quad (+2.1\sigma)$
A^{kSZ}	$< 7.89 \quad (+0.2\sigma)$	D_{2000}	$231.2^{+3.1}_{-3.0} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.4777^{+0.0082}_{-0.0083} \quad (-1.9\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9689^{+0.0090}_{-0.0093} \quad (-0.5\sigma)$	$\sigma_8(0.51)$	$0.604^{+0.022}_{-0.021} \quad (+2.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.4} \quad (+0.2\sigma)$	Y_{P}	$0.24544^{+0.00012}_{-0.00012} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.4701^{+0.0073}_{-0.0071} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.3}_{-6.3} \quad (+0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24677^{+0.00012}_{-0.00012} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.574^{+0.022}_{-0.020} \quad (+2.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.564^{+0.056}_{-0.055} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.288^{+0.012}_{-0.011} \quad (+2.3\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.074}_{-0.076}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.19^{+0.46}_{-0.47} \quad (-2.4\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.015}_{-0.014} \quad (+2.4\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.058}$	z_*	$1089.64^{+0.59}_{-0.57} \quad (+0.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (+0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.74^{+0.62}_{-0.65} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.11}$	$100\theta_*$	$1.04124^{+0.00060}_{-0.00063} \quad (-0.4\sigma)$	f_{2000}^{217}	$106.3^{+3.5}_{-3.5} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.059}_{-0.059} \quad (-0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.8 \quad (\nu: 2.8)$
$A_{217}^{\mathrm{dustTE}}$	$2.07^{+0.52}_{-0.52}$	z_{drag}	$1060.10^{+0.63}_{-0.59} \quad (-0.1\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.2\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.37^{+0.61}_{-0.62} \quad (-0.5\sigma)$	χ_{lowl}^2	$22.2 \quad (\nu: 0.5) \quad (+1.2\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14067^{+0.00063}_{-0.00062} \quad (+0.4\sigma)$	χ_{plik}^2	$2357.4 \quad (\nu: 17.5) \quad (+292.1\sigma)$
H_0	$64.0^{+4.3}_{-3.8} \quad (+2.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16067^{+0.00033}_{-0.00035} \quad (+0.0\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.9) \quad (+1.2\sigma)$
Ω_{Λ}	$0.662^{+0.031}_{-0.031} \quad (+2.1\sigma)$	z_{eq}	$3368^{+68}_{-65} \quad (+0.5\sigma)$	χ_{CMB}^2	$2786.8 \quad (\nu: 17.0) \quad (+280.6\sigma)$
Ω_{m}	$0.347^{+0.042}_{-0.041} \quad (-2.1\sigma)$	k_{eq}	$0.01028^{+0.00021}_{-0.00020} \quad (+0.5\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1416^{+0.0029}_{-0.0027} \quad (+0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.013}_{-0.013} \quad (-0.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.28; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.23; R - 1 = 0.02761$$

16.45 base_omegak_CamSpecHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022289	$0.02235^{+0.00049}_{-0.00047} \quad (-0.8\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4678	$0.470^{+0.023}_{-0.024} \quad (-2.5\sigma)$	$H(0.15)$	69.30	$68.7^{+4.7}_{-4.4} \quad (+2.5\sigma)$
$\Omega_c h^2$	0.11825	$0.1177^{+0.0044}_{-0.0043} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6099	$0.610^{+0.015}_{-0.014} \quad (-2.6\sigma)$	$D_M(0.15)$	676.6	$684^{+50}_{-47} \quad (-2.2\sigma)$
$100\theta_{MC}$	1.04103	$1.04119^{+0.00099}_{-0.00096} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9950	$0.996^{+0.021}_{-0.021} \quad (-2.7\sigma)$	$H(0.38)$	79.65	$79.0^{+4.4}_{-4.2} \quad (+2.5\sigma)$
τ	0.0498	$0.049^{+0.016}_{-0.017} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	94.3	$93.4^{+7.0}_{-6.5} \quad (+2.6\sigma)$	$D_M(0.38)$	1606	$1623^{+110}_{-100} \quad (-2.2\sigma)$
Ω_K	-0.0093	$-0.012^{+0.015}_{-0.015} \quad (+1.8\sigma)$	$\langle d^2 \rangle^{1/2}$	2.469	$2.472^{+0.058}_{-0.058} \quad (-2.5\sigma)$	$H(0.51)$	86.49	$85.9^{+4.4}_{-4.1} \quad (+2.5\sigma)$
$\ln(10^{10} A_s)$	3.0282	$3.026^{+0.032}_{-0.034} \quad (+0.0\sigma)$	z_{re}	7.17	$7.1^{+1.7}_{-1.8} \quad (+0.3\sigma)$	$D_M(0.51)$	2076	$2096^{+130}_{-130} \quad (-2.2\sigma)$
n_s	0.9685	$0.970^{+0.013}_{-0.012} \quad (-0.2\sigma)$	$10^9 A_s$	2.066	$2.062^{+0.067}_{-0.070} \quad (+0.0\sigma)$	$H(0.61)$	92.20	$91.6^{+4.3}_{-4.1} \quad (+2.5\sigma)$
y_{cal}	1.00026	$1.0001^{+0.0047}_{-0.0050} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8701	$1.868^{+0.027}_{-0.026} \quad (-0.2\sigma)$	$D_M(0.61)$	2411	$2434^{+150}_{-140} \quad (-2.2\sigma)$
A_{100}^{PS}	241.9	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	1213.8	$1209^{+34}_{-33} \quad (+0.4\sigma)$	$H(2.33)$	233.4	$232.6^{+5.0}_{-5.0} \quad (+1.7\sigma)$
A_{143}^{PS}	36.4	$38^{+20}_{-20} \quad (-0.4\sigma)$	D_{220}	5711	$5715^{+80}_{-80} \quad (-0.7\sigma)$	$D_M(2.33)$	5926	$5962^{+230}_{-230} \quad (-2.3\sigma)$
A_{217}^{PS}	98.4	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	2529.2	$2529^{+26}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	0.4702	$0.472^{+0.020}_{-0.021} \quad (-2.7\sigma)$
A_{217}^{CIB}	42.9	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	813.6	$814.2^{+9.8}_{-9.9} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7315	$0.727^{+0.027}_{-0.028} \quad (+1.6\sigma)$
A_{143}^{tSZ}	4.37	$< 7.47 \quad (-0.9\sigma)$	D_{2000}	230.02	$230.3^{+3.6}_{-3.6} \quad (-1.0\sigma)$	$f\sigma_8(0.38)$	0.4811	$0.481^{+0.012}_{-0.012} \quad (-3.0\sigma)$
$r_{143 \times 217}^{\text{PS}}$	0.565	$0.65^{+0.26}_{-0.26}$	$n_{s,0.002}$	0.9685	$0.970^{+0.013}_{-0.012} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	0.6446	$0.640^{+0.028}_{-0.029} \quad (+1.8\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	0.65	—	Y_P	0.245363	$0.24538^{+0.00019}_{-0.00021} \quad (-0.8\sigma)$	$f\sigma_8(0.51)$	0.4759	$0.4755^{+0.0099}_{-0.0097} \quad (-2.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.07	—	Y_P^{BBN}	0.246689	$0.24671^{+0.00019}_{-0.00021} \quad (-0.8\sigma)$	$\sigma_8(0.51)$	0.6017	$0.598^{+0.028}_{-0.028} \quad (+1.9\sigma)$
A^{kSZ}	3.8	—	$10^5 \text{D}/\text{H}$	2.601	$2.591^{+0.090}_{-0.089} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	0.4684	$0.4675^{+0.0097}_{-0.0094} \quad (-0.8\sigma)$
A_{100}^{dust}	1.010	$1.01^{+0.39}_{-0.38}$	Age/Gyr	14.21	$14.30^{+0.60}_{-0.58} \quad (-2.2\sigma)$	$\sigma_8(0.61)$	0.5715	$0.567^{+0.028}_{-0.028} \quad (+2.0\sigma)$
A_{143}^{dust}	0.989	$0.98^{+0.34}_{-0.35}$	z_*	1089.87	$1089.75^{+0.90}_{-0.89} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	0.2872	$0.285^{+0.015}_{-0.015} \quad (+2.0\sigma)$
A_{217}^{dust}	0.960	$0.97^{+0.20}_{-0.20}$	r_*	144.95	$145.06^{+0.97}_{-0.96} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.2936	$0.291^{+0.018}_{-0.019} \quad (+2.2\sigma)$
$A_{143 \times 217}^{\text{dust}}$	1.004	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	1.04123	$1.04138^{+0.00097}_{-0.00094} \quad (-0.1\sigma)$	f_{2000}^{143}	30.3	$30^{+6}_{-6} \quad (+0.9\sigma)$
c_{100}	0.99735	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$D_M(z_*)/\text{Gpc}$	13.921	$13.929^{+0.088}_{-0.088} \quad (+0.1\sigma)$	f_{2000}^{217}	107.02	$106.5^{+4.1}_{-4.2} \quad (+0.8\sigma)$
c_{217}	1.00124	$1.0011^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	1059.63	$1059.71^{+0.98}_{-0.92} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	32.32	$32^{+4}_{-5} \quad (+0.8\sigma)$
H_0	63.86	$63.2^{+4.9}_{-4.6} \quad (+2.5\sigma)$	r_{drag}	147.65	$147.74^{+0.94}_{-0.94} \quad (+0.3\sigma)$	χ^2_{lensing}	9.19	$10.3 \quad (\nu: 2.3)$
Ω_Λ	0.6631	$0.659^{+0.034}_{-0.036} \quad (+2.1\sigma)$	k_D	0.14022	$0.1402^{+0.0010}_{-0.00097} \quad (-0.6\sigma)$	χ^2_{simall}	395.64	$396.8 \quad (\nu: 1.2) \quad (-0.0\sigma)$
Ω_m	0.3461	$0.353^{+0.050}_{-0.046} \quad (-2.0\sigma)$	$100\theta_D$	0.16094	$0.16091^{+0.00054}_{-0.00054} \quad (+0.9\sigma)$	χ^2_{lowl}	21.85	$21.8 \quad (\nu: 0.6) \quad (+0.6\sigma)$
$\Omega_m h^2$	0.14118	$0.1407^{+0.0041}_{-0.0041} \quad (+0.1\sigma)$	z_{eq}	3358	$3346^{+98}_{-97} \quad (+0.1\sigma)$	χ^2_{CamSpec}	7049.2	$7062.9 \quad (\nu: 15.3)$
$\Omega_m h^3$	0.0902	$0.0889^{+0.0084}_{-0.0081} \quad (+2.4\sigma)$	k_{eq}	0.010250	$0.01021^{+0.00030}_{-0.00030} \quad (+0.1\sigma)$	χ^2_{prior}	2.4	$7.5 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	0.7952	$0.791^{+0.025}_{-0.026} \quad (+1.3\sigma)$	$100\theta_{\text{eq}}$	0.8211	$0.824^{+0.019}_{-0.019} \quad (-0.1\sigma)$	χ^2_{CMB}	7475.9	$7491.7 \quad (\nu: 15.9) \quad (+1104.9\sigma)$
S_8	0.8542	$0.858^{+0.042}_{-0.043} \quad (-2.5\sigma)$	$100\theta_{s,\text{eq}}$	0.4535	$0.4549^{+0.0098}_{-0.0097} \quad (-0.1\sigma)$			

Best-fit $\chi^2_{\text{eff}} = 7478.30$; $\Delta\chi^2_{\text{eff}} = -2.38$; $\bar{\chi}^2_{\text{eff}} = 7499.29$; $\Delta\bar{\chi}^2_{\text{eff}} = -0.96$; $R - 1 = 0.01550$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 9.19 (Δ 0.27) simall_100x143_offlike5_EE_Aplanck_B: 395.64 (Δ -0.23) commander_dx12_v3_2_29: 21.85 (Δ -1.57) CamSpec like_10.7HM: 7049.24 (Δ -0.94)

16.46 base_omegak_CamSpecHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02236^{+0.00050}_{-0.00047} \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.469^{+0.023}_{-0.023} \quad (-2.5\sigma)$	$H(0.15)$	$69.0^{+4.6}_{-4.4} \quad (+2.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1176^{+0.0044}_{-0.0043} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.015}_{-0.015} \quad (-2.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$680^{+48}_{-46} \quad (-2.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0010}_{-0.00097} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.996^{+0.021}_{-0.022} \quad (-2.7\sigma)$	$H(0.38)$	$79.4^{+4.4}_{-4.2} \quad (+2.6\sigma)$
τ	$0.0528^{+0.012}_{-0.0097} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$94.0^{+6.7}_{-6.4} \quad (+2.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1614^{+100}_{-99} \quad (-2.3\sigma)$
Ω_K	$-0.011^{+0.014}_{-0.015} \quad (+1.9\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.472^{+0.059}_{-0.059} \quad (-2.5\sigma)$	$H(0.51)$	$86.2^{+4.2}_{-4.1} \quad (+2.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.026}_{-0.023} \quad (+0.4\sigma)$	z_{re}	$< 8.51 \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$2085^{+130}_{-120} \quad (-2.3\sigma)$
n_{s}	$0.971^{+0.013}_{-0.012} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.075^{+0.053}_{-0.048} \quad (+0.4\sigma)$	$H(0.61)$	$91.9^{+4.2}_{-4.0} \quad (+2.6\sigma)$
y_{cal}	$1.0000^{+0.0047}_{-0.0050} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.867^{+0.027}_{-0.026} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2422^{+140}_{-140} \quad (-2.3\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{40}	$1209^{+34}_{-33} \quad (+0.4\sigma)$	$H(2.33)$	$232.7^{+5.0}_{-5.0} \quad (+1.7\sigma)$
A_{143}^{PS}	$38^{+20}_{-20} \quad (-0.4\sigma)$	D_{220}	$5714^{+81}_{-80} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5946^{+230}_{-220} \quad (-2.3\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2528^{+26}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.471^{+0.020}_{-0.021} \quad (-2.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-0.8\sigma)$	D_{1420}	$814.2^{+9.9}_{-9.9} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.730^{+0.025}_{-0.025} \quad (+1.8\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.9\sigma)$	D_{2000}	$230.4^{+3.6}_{-3.7} \quad (-1.0\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.012}_{-0.013} \quad (-3.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.971^{+0.013}_{-0.012} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.644^{+0.026}_{-0.026} \quad (+2.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24539^{+0.00019}_{-0.00021} \quad (-0.7\sigma)$	$f\sigma_8(0.51)$	$0.4759^{+0.0099}_{-0.0097} \quad (-2.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00019}_{-0.00021} \quad (-0.7\sigma)$	$\sigma_8(0.51)$	$0.601^{+0.026}_{-0.026} \quad (+2.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.589^{+0.090}_{-0.090} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4683^{+0.0095}_{-0.0088} \quad (-0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.26^{+0.59}_{-0.56} \quad (-2.3\sigma)$	$\sigma_8(0.61)$	$0.570^{+0.026}_{-0.026} \quad (+2.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	z_*	$1089.73^{+0.89}_{-0.90} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.287^{+0.014}_{-0.014} \quad (+2.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$145.08^{+0.95}_{-0.95} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.293^{+0.017}_{-0.017} \quad (+2.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04140^{+0.00097}_{-0.00094} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (+0.8\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.931^{+0.087}_{-0.087} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.5^{+4.1}_{-4.2} \quad (+0.7\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.72^{+0.97}_{-0.94} \quad (-0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-5} \quad (+0.8\sigma)$
H_0	$63.6^{+4.7}_{-4.5} \quad (+2.6\sigma)$	r_{drag}	$147.76^{+0.94}_{-0.93} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.3 \quad (\nu: 2.4)$
Ω_{Λ}	$0.662^{+0.032}_{-0.034} \quad (+2.1\sigma)$	k_{D}	$0.1402^{+0.0010}_{-0.00097} \quad (-0.6\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.8) \quad (-0.2\sigma)$
Ω_{m}	$0.349^{+0.048}_{-0.044} \quad (-2.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16091^{+0.00055}_{-0.00055} \quad (+0.9\sigma)$	χ_{lowl}^2	$21.8 \quad (\nu: 0.6) \quad (+0.6\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1406^{+0.0041}_{-0.0040} \quad (+0.0\sigma)$	z_{eq}	$3344^{+98}_{-96} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.0 \quad (\nu: 15.3)$
$\Omega_{\mathrm{m}} h^3$	$0.0894^{+0.0082}_{-0.0080} \quad (+2.4\sigma)$	k_{eq}	$0.01021^{+0.00030}_{-0.00029} \quad (+0.0\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.794^{+0.024}_{-0.024} \quad (+1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.824^{+0.019}_{-0.019} \quad (-0.1\sigma)$	χ_{CMB}^2	$7491.5 \quad (\nu: 15.6) \quad (+1104.8\sigma)$
S_8	$0.856^{+0.042}_{-0.043} \quad (-2.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4551^{+0.0098}_{-0.0097} \quad (-0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7498.95; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -1.06; R - 1 = 0.01796$$

16.47 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022422	$0.02242^{+0.00033}_{-0.00033}$ (-0.5σ)	S_8	0.8541	$0.857^{+0.041}_{-0.040}$ (-2.5σ)	$H(0.15)$	69.39	$69.0^{+4.1}_{-4.1}$ $(+2.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11833	$0.1182^{+0.0030}_{-0.0029}$ $(+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4678	$0.469^{+0.023}_{-0.022}$ (-2.5σ)	$D_{\mathrm{M}}(0.15)$	675.7	680^{+44}_{-43} (-2.2σ)
$100\theta_{\mathrm{MC}}$	1.04100	$1.04101^{+0.00064}_{-0.00065}$ (-0.5σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6101	$0.610^{+0.013}_{-0.013}$ (-2.6σ)	$H(0.38)$	79.74	$79.4^{+3.9}_{-3.8}$ $(+2.6\sigma)$
τ	0.0500	$0.049^{+0.016}_{-0.017}$ $(+0.0\sigma)$	$\sigma_8/h^{0.5}$	0.9949	$0.995^{+0.019}_{-0.021}$ (-2.7σ)	$D_{\mathrm{M}}(0.38)$	1604	1614^{+97}_{-90} (-2.3σ)
Ω_K	-0.0092	$-0.011^{+0.012}_{-0.013}$ $(+1.9\sigma)$	$r_{\mathrm{drag}}h$	94.3	$93.8^{+6.2}_{-6.2}$ $(+2.6\sigma)$	$H(0.51)$	86.59	$86.3^{+3.7}_{-3.7}$ $(+2.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0294	$3.027^{+0.032}_{-0.036}$ $(+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.468	$2.470^{+0.055}_{-0.056}$ (-2.6σ)	$D_{\mathrm{M}}(0.51)$	2073	2085^{+120}_{-110} (-2.3σ)
n_{s}	0.9693	$0.9694^{+0.0095}_{-0.0097}$ (-0.4σ)	z_{re}	7.16	$7.0^{+1.7}_{-1.8}$ $(+0.2\sigma)$	$H(0.61)$	92.30	$92.0^{+3.6}_{-3.6}$ $(+2.6\sigma)$
y_{cal}	0.99993	$1.0001^{+0.0048}_{-0.0047}$ $(+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	2.069	$2.063^{+0.068}_{-0.072}$ $(+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	2408	2421^{+130}_{-120} (-2.3σ)
A_{100}^{PS}	233.1	238^{+50}_{-50} (-0.4σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8717	$1.871^{+0.022}_{-0.023}$ (-0.0σ)	$H(2.33)$	233.57	$233.3^{+3.7}_{-3.6}$ $(+1.9\sigma)$
A_{143}^{PS}	46.5	37^{+20}_{-20} (-0.5σ)	D_{40}	1213.6	1212^{+29}_{-28} $(+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	5920	5939^{+200}_{-190} (-2.4σ)
A_{217}^{PS}	104.8	102^{+30}_{-30} (-1.2σ)	D_{220}	5721	5722^{+74}_{-75} (-0.6σ)	$f\sigma_8(0.15)$	0.4702	$0.471^{+0.019}_{-0.019}$ (-2.7σ)
A_{217}^{CIB}	39.1	39^{+10}_{-10} (-0.9σ)	D_{810}	2531.9	2530^{+26}_{-25} $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7319	$0.729^{+0.023}_{-0.023}$ $(+1.7\sigma)$
A_{143}^{tSZ}	4.82	< 7.56 (-0.8σ)	D_{1420}	815.4	$814.9^{+9.3}_{-9.3}$ $(+0.2\sigma)$	$f\sigma_8(0.38)$	0.4812	$0.481^{+0.011}_{-0.012}$ (-3.0σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.753	$0.66^{+0.25}_{-0.26}$	D_{2000}	230.86	$230.6^{+3.2}_{-3.2}$ (-0.9σ)	$\sigma_8(0.38)$	0.6451	$0.642^{+0.024}_{-0.025}$ $(+1.9\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	0.68	—	$n_{\mathrm{s},0.002}$	0.9693	$0.9694^{+0.0095}_{-0.0097}$ (-0.4σ)	$f\sigma_8(0.51)$	0.4761	$0.4757^{+0.0082}_{-0.0087}$ (-2.2σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.94	—	Y_{P}	0.245416	$0.24541^{+0.00012}_{-0.00013}$ (-0.5σ)	$\sigma_8(0.51)$	0.6021	$0.599^{+0.024}_{-0.025}$ $(+2.0\sigma)$
A^{kSZ}	3.0	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246743	$0.24674^{+0.00012}_{-0.00013}$ (-0.5σ)	$f\sigma_8(0.61)$	0.4686	$0.4680^{+0.0077}_{-0.0078}$ (-0.8σ)
A_{100}^{dust}	1.009	$1.01^{+0.38}_{-0.38}$	$10^5\mathrm{D}/\mathrm{H}$	2.576	$2.578^{+0.061}_{-0.059}$ $(+0.5\sigma)$	$\sigma_8(0.61)$	0.5719	$0.569^{+0.024}_{-0.025}$ $(+2.0\sigma)$
A_{143}^{dust}	0.950	$0.97^{+0.34}_{-0.35}$	Age/Gyr	14.19	$14.24^{+0.51}_{-0.48}$ (-2.3σ)	$f\sigma_8(2.33)$	0.2874	$0.286^{+0.013}_{-0.014}$ $(+2.1\sigma)$
A_{217}^{dust}	0.981	$0.97^{+0.20}_{-0.20}$	z_*	1089.71	$1089.71^{+0.60}_{-0.58}$ $(+0.5\sigma)$	$\sigma_8(2.33)$	0.2938	$0.292^{+0.016}_{-0.017}$ $(+2.2\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	1.033	$1.02^{+0.31}_{-0.31}$	r_*	144.82	$144.87^{+0.64}_{-0.64}$ (-0.3σ)	f_{2000}^{143}	28.9	29^{+6}_{-6} $(+0.6\sigma)$
c_{100}	0.99785	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	$100\theta_*$	1.04119	$1.04119^{+0.00063}_{-0.00063}$ (-0.5σ)	f_{2000}^{217}	105.89	$106.1^{+4.0}_{-3.8}$ $(+0.6\sigma)$
c_{217}	1.00113	$1.0010^{+0.0030}_{-0.0031}$ $(+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.910	$13.914^{+0.059}_{-0.059}$ (-0.2σ)	$f_{2000}^{143\times 217}$	31.50	31^{+4}_{-4} $(+0.6\sigma)$
c_{TE}	0.9957	$0.9955^{+0.0097}_{-0.0096}$	z_{drag}	1059.93	$1059.91^{+0.67}_{-0.66}$ (-0.5σ)	$\chi^2_{\mathrm{lensing}}$	9.39	10.2 $(\nu: 1.8)$
c_{EE}	0.9917	$0.9914^{+0.0094}_{-0.0098}$	r_{drag}	147.48	$147.52^{+0.63}_{-0.63}$ (-0.2σ)	χ^2_{small}	395.63	396.8 $(\nu: 1.1)$ (-0.0σ)
H_0	63.95	$63.6^{+4.3}_{-4.3}$ $(+2.6\sigma)$	k_{D}	0.14050	$0.14045^{+0.00068}_{-0.00068}$ (-0.0σ)	χ^2_{lowl}	21.83	21.93 $(\nu: 0.4)$ $(+0.8\sigma)$
Ω_{Λ}	0.6635	$0.660^{+0.034}_{-0.034}$ $(+2.1\sigma)$	$100\theta_{\mathrm{D}}$	0.160754	$0.16077^{+0.00038}_{-0.00038}$ $(+0.4\sigma)$	$\chi^2_{\mathrm{CamSpec}}$	11498.3	11513.1 $(\nu: 16.0)$
Ω_{m}	0.3457	$0.351^{+0.046}_{-0.045}$ (-2.0σ)	z_{eq}	3364	3360^{+66}_{-64} $(+0.4\sigma)$	χ^2_{prior}	2.0	7.7 $(\nu: 5.6)$ $(+0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14140	$0.1413^{+0.0028}_{-0.0027}$ $(+0.4\sigma)$	k_{eq}	0.010266	$0.01026^{+0.00020}_{-0.00019}$ $(+0.4\sigma)$	χ^2_{CMB}	11925.1	11942.0 $(\nu: 17.3)$ $(+1884.5\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.0904	$0.0898^{+0.0070}_{-0.0070}$ $(+2.5\sigma)$	$100\theta_{\mathrm{eq}}$	0.8205	$0.821^{+0.013}_{-0.013}$ (-0.4σ)			
σ_8	0.7956	$0.793^{+0.021}_{-0.021}$ $(+1.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4531	$0.4535^{+0.0064}_{-0.0065}$ (-0.4σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 11927.06$; $\Delta\chi^2_{\mathrm{eff}} = -2.59$; $\bar{\chi}^2_{\mathrm{eff}} = 11949.70$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = -1.75$; $R - 1 = 0.01965$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 9.39 (Δ 0.56) small_100x143_offlike5_EE_Aplanck_B: 395.63 (Δ -0.24) commander_dx12.v3.2.29: 21.83 (Δ -1.39) CamSpec like_10.7HM_1400_unified: 11498.26 (Δ -1.40)

16.48 base_omegak_CamSpecHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00033}_{-0.00033} \quad (-0.5\sigma)$	S_8	$0.854^{+0.039}_{-0.039} \quad (-2.5\sigma)$	$H(0.15)$	$69.5^{+3.9}_{-3.8} \quad (+2.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1181^{+0.0030}_{-0.0028} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.468^{+0.021}_{-0.021} \quad (-2.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$675^{+41}_{-39} \quad (-2.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04102^{+0.00064}_{-0.00064} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.013}_{-0.013} \quad (-2.6\sigma)$	$H(0.38)$	$79.8^{+3.6}_{-3.5} \quad (+2.7\sigma)$
τ	$0.0523^{+0.011}_{-0.0091} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.996^{+0.019}_{-0.020} \quad (-2.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1603^{+88}_{-84} \quad (-2.4\sigma)$
Ω_K	$-0.009^{+0.011}_{-0.012} \quad (+1.9\sigma)$	$r_{\mathrm{drag}} h$	$94.5^{+5.8}_{-5.7} \quad (+2.7\sigma)$	$H(0.51)$	$86.7^{+3.5}_{-3.4} \quad (+2.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.033^{+0.025}_{-0.023} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.470^{+0.054}_{-0.054} \quad (-2.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$2072^{+110}_{-100} \quad (-2.4\sigma)$
n_{s}	$0.9696^{+0.0094}_{-0.0098} \quad (-0.4\sigma)$	z_{re}	$< 8.47 \quad (+0.6\sigma)$	$H(0.61)$	$92.4^{+3.4}_{-3.3} \quad (+2.7\sigma)$
y_{cal}	$1.0001^{+0.0048}_{-0.0047} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.077^{+0.052}_{-0.047} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2407^{+120}_{-110} \quad (-2.4\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.870^{+0.023}_{-0.023} \quad (-0.0\sigma)$	$H(2.33)$	$233.5^{+3.6}_{-3.6} \quad (+2.0\sigma)$
A_{143}^{PS}	$37^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1213^{+29}_{-28} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5919^{+180}_{-180} \quad (-2.5\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5721^{+74}_{-75} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.470^{+0.019}_{-0.019} \quad (-2.8\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-0.9\sigma)$	D_{810}	$2530^{+26}_{-25} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.020}_{-0.019} \quad (+1.9\sigma)$
A_{143}^{tSZ}	$< 7.58 \quad (-0.8\sigma)$	D_{1420}	$815.0^{+9.2}_{-9.2} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.011}_{-0.012} \quad (-3.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{2000}	$230.7^{+3.2}_{-3.2} \quad (-0.8\sigma)$	$\sigma_8(0.38)$	$0.646^{+0.022}_{-0.021} \quad (+2.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9696^{+0.0094}_{-0.0098} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.4762^{+0.0081}_{-0.0086} \quad (-2.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24541^{+0.00012}_{-0.00013} \quad (-0.5\sigma)$	$\sigma_8(0.51)$	$0.603^{+0.022}_{-0.021} \quad (+2.1\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24674^{+0.00013}_{-0.00013} \quad (-0.5\sigma)$	$f\sigma_8(0.61)$	$0.4688^{+0.0073}_{-0.0071} \quad (-0.7\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.577^{+0.062}_{-0.060} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.573^{+0.022}_{-0.021} \quad (+2.2\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$14.19^{+0.47}_{-0.45} \quad (-2.4\sigma)$	$f\sigma_8(2.33)$	$0.288^{+0.012}_{-0.012} \quad (+2.3\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.70^{+0.60}_{-0.59} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.295^{+0.015}_{-0.014} \quad (+2.4\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.31}$	r_*	$144.88^{+0.63}_{-0.65} \quad (-0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (+0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04120^{+0.00062}_{-0.00063} \quad (-0.5\sigma)$	f_{2000}^{217}	$106.1^{+4.0}_{-3.9} \quad (+0.6\sigma)$
c_{217}	$1.0010^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.914^{+0.059}_{-0.060} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$31^{+4}_{-4} \quad (+0.6\sigma)$
c_{TE}	$0.9955^{+0.0098}_{-0.0095}$	z_{drag}	$1059.91^{+0.67}_{-0.66} \quad (-0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$10.1 \quad (\nu: 1.7)$
c_{EE}	$0.9915^{+0.0096}_{-0.0099}$	r_{drag}	$147.53^{+0.62}_{-0.64} \quad (-0.2\sigma)$	χ_{small}^2	$396.3 \quad (\nu: 0.6) \quad (-0.3\sigma)$
H_0	$64.1^{+4.1}_{-4.0} \quad (+2.7\sigma)$	k_{D}	$0.14044^{+0.00069}_{-0.00068} \quad (-0.0\sigma)$	χ_{lowl}^2	$21.99 \quad (\nu: 0.5) \quad (+0.9\sigma)$
Ω_{Λ}	$0.664^{+0.030}_{-0.030} \quad (+2.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16077^{+0.00038}_{-0.00038} \quad (+0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.1 \quad (\nu: 16.0)$
Ω_{m}	$0.345^{+0.041}_{-0.041} \quad (-2.1\sigma)$	z_{eq}	$3359^{+67}_{-63} \quad (+0.3\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1412^{+0.0028}_{-0.0027} \quad (+0.3\sigma)$	k_{eq}	$0.01025^{+0.00020}_{-0.00019} \quad (+0.3\sigma)$	χ_{CMB}^2	$11941.6 \quad (\nu: 16.8) \quad (+1884.4\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0905^{+0.0066}_{-0.0064} \quad (+2.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.821^{+0.013}_{-0.013} \quad (-0.4\sigma)$		
σ_8	$0.797^{+0.019}_{-0.018} \quad (+1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4535^{+0.0064}_{-0.0065} \quad (-0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.31; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.94; R - 1 = 0.03090$$

16.49 base_omegak_CleanedCamSpecHM_TT_lowl_lowE

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02253^{+0.00053}_{-0.00052} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$1.059^{+0.047}_{-0.049} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$820^{+100}_{-100} \quad (+0.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1172^{+0.0045}_{-0.0045} \quad (-0.0\sigma)$	$r_{\mathrm{drag}} h$	$77^{+10}_{-10} \quad (-0.0\sigma)$	$H(0.38)$	$69.9^{+7.7}_{-6.7} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04128^{+0.00094}_{-0.0010} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.68^{+0.16}_{-0.16} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1903^{+300}_{-200} \quad (+0.0\sigma)$
τ	$0.048^{+0.017}_{-0.017} \quad (-0.0\sigma)$	z_{re}	$6.8^{+1.8}_{-1.9} \quad (-0.0\sigma)$	$H(0.51)$	$77.3^{+7.2}_{-6.4} \quad (-0.0\sigma)$
Ω_K	$-0.057^{+0.045}_{-0.051} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.057^{+0.070}_{-0.078} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$2433^{+300}_{-300} \quad (+0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.023^{+0.035}_{-0.036} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.867^{+0.028}_{-0.027} \quad (-0.3\sigma)$	$H(0.61)$	$83.4^{+7.0}_{-6.1} \quad (-0.0\sigma)$
n_{s}	$0.972^{+0.013}_{-0.013} \quad (-0.1\sigma)$	D_{40}	$1201^{+35}_{-33} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2804^{+300}_{-300} \quad (+0.0\sigma)$
y_{cal}	$0.9998^{+0.0050}_{-0.0051} \quad (-0.1\sigma)$	D_{220}	$5734^{+83}_{-83} \quad (-0.3\sigma)$	$H(2.33)$	$227.5^{+6.1}_{-5.9} \quad (-0.0\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.4\sigma)$	D_{810}	$2523^{+27}_{-28} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$6465^{+450}_{-440} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$4.5^{+3.8}_{-4.2} \quad (-0.6\sigma)$	D_{1420}	$812^{+10}_{-11} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.536^{+0.047}_{-0.051} \quad (-0.0\sigma)$
A^{kSZ}	—	D_{2000}	$231.6^{+4.1}_{-4.1} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.689^{+0.045}_{-0.046} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$n_{\mathrm{s},0.002}$	$0.972^{+0.013}_{-0.013} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.511^{+0.019}_{-0.021} \quad (-0.1\sigma)$
A_{143}^{power}	$8.0^{+4.6}_{-4.2}$	Y_{P}	$0.24545^{+0.00023}_{-0.00021} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.594^{+0.047}_{-0.052} \quad (-0.0\sigma)$
A_{217}^{power}	$6.5^{+3.8}_{-3.2}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24678^{+0.00023}_{-0.00021} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.490^{+0.013}_{-0.015} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{power}}$	< 5.82	$10^5 \mathrm{D}/\mathrm{H}$	$2.558^{+0.098}_{-0.096} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.549^{+0.048}_{-0.052} \quad (-0.0\sigma)$
$\gamma_{143}^{\mathrm{power}}$	$1.32^{+1.1}_{-0.89}$	$\mathrm{Age}/\mathrm{Gyr}$	$15.6^{+1.2}_{-1.2} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.014}_{-0.014} \quad (-0.1\sigma)$
$\gamma_{217}^{\mathrm{power}}$	> 0.444	z_*	$1089.48^{+0.95}_{-0.94} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.518^{+0.048}_{-0.052} \quad (-0.0\sigma)$
$\gamma_{143 \times 217}^{\mathrm{power}}$	—	r_*	$145.03^{+0.99}_{-0.97} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.257^{+0.027}_{-0.028} \quad (-0.0\sigma)$
c_{100}	$0.9979^{+0.0020}_{-0.0021} \quad (-2.7\sigma)$	$100\theta_*$	$1.04145^{+0.00093}_{-0.00099} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.256^{+0.032}_{-0.032} \quad (-0.0\sigma)$
c_{217}	$0.9992^{+0.0029}_{-0.0025} \quad (+1.7\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.926^{+0.092}_{-0.088} \quad (+0.1\sigma)$	f_{2000}^{143}	$19.3^{+6.5}_{-6.2} \quad (-2.3\sigma)$
H_0	$52^{+9}_{-8} \quad (-0.0\sigma)$	z_{drag}	$1060.1^{+1.1}_{-1.1} \quad (-0.1\sigma)$	f_{2000}^{217}	$13.6^{+4.4}_{-4.5} \quad (-42.3\sigma)$
Ω_{Λ}	$0.53^{+0.12}_{-0.13} \quad (-0.0\sigma)$	r_{drag}	$147.66^{+0.97}_{-0.94} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$7.5^{+4.6}_{-4.6} \quad (-9.6\sigma)$
Ω_{m}	$0.53^{+0.18}_{-0.16} \quad (+0.0\sigma)$	k_{D}	$0.14039^{+0.00099}_{-0.0010} \quad (-0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1404^{+0.0042}_{-0.0042} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16069^{+0.00059}_{-0.00057} \quad (+0.1\sigma)$	χ_{lowl}^2	$21.39 \quad (\nu: 0.3) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.073^{+0.014}_{-0.013} \quad (-0.0\sigma)$	z_{eq}	$3340^{+100}_{-100} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$6712.6 \quad (\nu: 13.9)$
σ_8	$0.764^{+0.038}_{-0.040} \quad (-0.1\sigma)$	k_{eq}	$0.01019^{+0.00030}_{-0.00030} \quad (-0.0\sigma)$	χ_{prior}^2	$5.1 \quad (\nu: 4.0) \quad (-0.6\sigma)$
S_8	$1.01^{+0.12}_{-0.12} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.825^{+0.020}_{-0.019} \quad (+0.0\sigma)$	χ_{CMB}^2	$7130.8 \quad (\nu: 15.5) \quad (+1041.7\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.551^{+0.068}_{-0.066} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.010}_{-0.0098} \quad (+0.0\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.648^{+0.029}_{-0.032} \quad (-0.1\sigma)$	$H(0.15)$	$58^{+9}_{-8} \quad (-0.0\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7135.85$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -6.36$; $R - 1 = 0.01609$

17 r

17.1 base_r_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022127	$0.02213^{+0.00044}_{-0.00041}$	$\sigma_8/h^{0.5}$	0.9947	$0.990^{+0.032}_{-0.032}$	$D_M(0.38)$	1542.1	1540^{+31}_{-31}
$\Omega_c h^2$	0.12064	$0.1203^{+0.0041}_{-0.0040}$	$r_{\text{drag}} h$	98.45	$98.7^{+3.2}_{-3.1}$	$H(0.51)$	89.32	$89.38^{+0.89}_{-0.84}$
$100\theta_{\text{MC}}$	1.04078	$1.04082^{+0.00090}_{-0.00092}$	$\langle d^2 \rangle^{1/2}$	2.456	$2.446^{+0.075}_{-0.075}$	$D_M(0.51)$	1996.3	1994^{+36}_{-36}
τ	0.0535	$0.052^{+0.016}_{-0.016}$	z_{re}	7.66	$7.5^{+1.6}_{-1.7}$	$H(0.61)$	95.01	$95.05^{+0.72}_{-0.67}$
$\ln(10^{10} A_s)$	3.0436	$3.039^{+0.033}_{-0.032}$	$10^9 A_s$	2.098	$2.089^{+0.070}_{-0.066}$	$D_M(0.61)$	2321.8	2319^{+38}_{-39}
n_s	0.9637	$0.964^{+0.011}_{-0.011}$	$10^9 A_s e^{-2\tau}$	1.8853	$1.883^{+0.027}_{-0.026}$	$H(2.33)$	236.73	$236.5^{+2.5}_{-2.5}$
r	0.000	< 0.109	D_{40}	1231.7	1244^{+37}_{-33}	$D_M(2.33)$	5777.4	5776^{+31}_{-32}
y_{cal}	1.00047	$1.0005^{+0.0049}_{-0.0049}$	D_{220}	5711	5711^{+80}_{-79}	$f\sigma_8(0.15)$	0.4644	$0.462^{+0.024}_{-0.024}$
A_{217}^{CIB}	49.0	48^{+10}_{-10}	D_{810}	2538.4	2537^{+27}_{-27}	$\sigma_8(0.15)$	0.7508	$0.748^{+0.015}_{-0.015}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.28	—	D_{1420}	815.6	$815^{+10}_{-9.9}$	$f\sigma_8(0.38)$	0.4808	$0.478^{+0.019}_{-0.019}$
A_{143}^{tSZ}	7.00	$5.1^{+3.8}_{-3.9}$	D_{2000}	230.00	$229.7^{+3.5}_{-3.4}$	$\sigma_8(0.38)$	0.6645	$0.663^{+0.012}_{-0.012}$
A_{100}^{PS}	255	263^{+50}_{-50}	$n_{s,0.002}$	0.9637	$0.964^{+0.011}_{-0.011}$	$f\sigma_8(0.51)$	0.4783	$0.476^{+0.016}_{-0.016}$
A_{143}^{PS}	49.3	49^{+20}_{-20}	Y_{P}	0.245295	$0.24529^{+0.00018}_{-0.00020}$	$\sigma_8(0.51)$	0.6215	$0.620^{+0.011}_{-0.011}$
$A_{143 \times 217}^{\text{PS}}$	46.2	44^{+20}_{-20}	$Y_{\text{P}}^{\text{BBN}}$	0.246621	$0.24662^{+0.00018}_{-0.00020}$	$f\sigma_8(0.61)$	0.4726	$0.470^{+0.014}_{-0.015}$
A_{217}^{PS}	119.2	115^{+20}_{-20}	$10^5 D/H$	2.632	$2.632^{+0.080}_{-0.082}$	$\sigma_8(0.61)$	0.5911	$0.589^{+0.010}_{-0.010}$
A^{kSZ}	0.01	< 8.41	Age/Gyr	13.829	$13.826^{+0.070}_{-0.072}$	$f\sigma_8(2.33)$	0.2977	$0.2969^{+0.0051}_{-0.0049}$
A_{100}^{dustTT}	8.91	$8.9^{+3.6}_{-3.6}$	z_*	1090.29	$1090.26^{+0.79}_{-0.79}$	$\sigma_8(2.33)$	0.3065	$0.3058^{+0.0053}_{-0.0051}$
A_{143}^{dustTT}	10.76	$10.7^{+3.5}_{-3.5}$	r_*	144.45	$144.54^{+0.93}_{-0.92}$	$r_{0.002}$	0.000	< 0.102
$A_{143 \times 217}^{\text{dustTT}}$	19.3	$18.3^{+6.5}_{-6.4}$	$100\theta_*$	1.04098	$1.04102^{+0.00088}_{-0.00091}$	$r_{0.01}$	0.000	< 0.106
A_{217}^{dustTT}	94.4	93^{+10}_{-10}	$D_M(z_*)/\text{Gpc}$	13.877	$13.884^{+0.087}_{-0.085}$	$\ln(10^{10} A_t)$	-6.27	$-0.7^{+1.9}_{-2.5}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	1059.40	$1059.39^{+0.89}_{-0.87}$	r_{10}	0.0000	< 0.0528
c_{217}	0.99828	$0.9983^{+0.0012}_{-0.0012}$	r_{drag}	147.20	$147.28^{+0.95}_{-0.92}$	$10^9 A_t$	0.000	< 0.228
H_0	66.88	$67.0^{+1.8}_{-1.8}$	k_{D}	0.14057	$0.14048^{+0.00099}_{-0.0010}$	$10^9 A_t e^{-2\tau}$	0.000	< 0.206
Ω_{Λ}	0.6794	$0.681^{+0.025}_{-0.026}$	$100\theta_{\text{D}}$	0.16106	$0.16108^{+0.00051}_{-0.00051}$	f_{2000}^{143}	30.5	31^{+6}_{-6}
Ω_{m}	0.3206	$0.319^{+0.026}_{-0.025}$	z_{eq}	3412	3404^{+93}_{-92}	$f_{2000}^{143 \times 217}$	33.32	33^{+4}_{-4}
$\Omega_{\text{m}} h^2$	0.14341	$0.1431^{+0.0039}_{-0.0039}$	k_{eq}	0.010413	$0.01039^{+0.00029}_{-0.00028}$	f_{2000}^{217}	107.81	$108.0^{+3.8}_{-3.8}$
$\Omega_{\text{m}} h^3$	0.09592	$0.09588^{+0.00088}_{-0.00087}$	$100\theta_{\text{eq}}$	0.8108	$0.812^{+0.018}_{-0.017}$	χ_{small}^2	396.03	$397.1 (\nu: 1.4)$
σ_8	0.8135	$0.811^{+0.018}_{-0.018}$	$100\theta_{\text{s,eq}}$	0.4483	$0.4490^{+0.0090}_{-0.0088}$	χ_{lowl}^2	23.61	$25.0 (\nu: 1.6)$
S_8	0.8409	$0.836^{+0.048}_{-0.046}$	$H(0.15)$	72.26	$72.4^{+1.5}_{-1.5}$	χ_{plik}^2	758.6	$771.7 (\nu: 14.6)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4606	$0.458^{+0.027}_{-0.025}$	$D_M(0.15)$	647.5	647^{+16}_{-15}	χ_{prior}^2	1.4	$7.3 (\nu: 6.9)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6121	$0.609^{+0.023}_{-0.023}$	$H(0.38)$	82.52	$82.6^{+1.1}_{-1.1}$	χ_{CMB}^2	1178.2	$1193.7 (\nu: 16.0)$

Best-fit $\chi_{\text{eff}}^2 = 1179.62$; $\Delta\chi_{\text{eff}}^2 = 0.04$; $\bar{\chi}_{\text{eff}}^2 = 1201.03$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.45$; $R - 1 = 0.00654$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.03 (Δ 0.15) commander_dx12_v3.2.29: 23.61 (Δ 0.01) plik_rd12_HM_v22_TT: 758.60 (Δ -0.15)

17.2 base_r_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022246	$0.02222^{+0.00039}_{-0.00038}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.424	$2.423^{+0.055}_{-0.053}$ (−0.6 σ)	$D_M(0.61)$	2305.8	2305^{+23}_{-23} (−0.7 σ)
$\Omega_c h^2$	0.11896	$0.1188^{+0.0025}_{-0.0024}$ (−0.7 σ)	z_{re}	7.58	$7.6^{+1.6}_{-1.6}$ (+0.1 σ)	$H(2.33)$	235.76	$235.6^{+1.6}_{-1.5}$ (−0.7 σ)
$100\theta_{\text{MC}}$	1.04096	$1.04101^{+0.00081}_{-0.00082}$ (+0.4 σ)	$10^9 A_s$	2.087	$2.088^{+0.070}_{-0.065}$ (−0.0 σ)	$D_M(2.33)$	5766.0	5766^{+24}_{-24} (−0.6 σ)
τ	0.0532	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8761	$1.877^{+0.023}_{-0.023}$ (−0.5 σ)	$f\sigma_8(0.15)$	0.4539	$0.453^{+0.015}_{-0.015}$ (−0.7 σ)
$\ln(10^{10} A_s)$	3.0383	$3.038^{+0.033}_{-0.032}$ (−0.0 σ)	D_{40}	1222.0	1238^{+34}_{-31} (−0.3 σ)	$\sigma_8(0.15)$	0.7455	$0.745^{+0.014}_{-0.013}$ (−0.4 σ)
n_s	0.9675	$0.9673^{+0.0084}_{-0.0084}$ (+0.6 σ)	D_{220}	5714	5717^{+80}_{-77} (+0.2 σ)	$f\sigma_8(0.38)$	0.4725	$0.472^{+0.013}_{-0.013}$ (−0.7 σ)
r	0.000	< 0.116 (+0.1 σ)	D_{810}	2535.0	2536^{+27}_{-27} (−0.1 σ)	$\sigma_8(0.38)$	0.6610	$0.661^{+0.012}_{-0.011}$ (−0.3 σ)
y_{cal}	1.00014	$1.0006^{+0.0050}_{-0.0048}$ (+0.0 σ)	D_{1420}	815.9	$815.8^{+9.7}_{-9.8}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4712	$0.471^{+0.012}_{-0.011}$ (−0.6 σ)
A_{217}^{CIB}	48.9	48^{+10}_{-10} (−0.0 σ)	D_{2000}	230.18	$230.1^{+3.4}_{-3.4}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6186	$0.619^{+0.011}_{-0.010}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.28	—	$n_{s,0.002}$	0.9675	$0.9673^{+0.0084}_{-0.0084}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4664	$0.466^{+0.011}_{-0.010}$ (−0.6 σ)
A_{143}^{tSZ}	7.11	$5.2^{+3.7}_{-3.9}$ (+0.0 σ)	Y_{P}	0.245345	$0.24533^{+0.00015}_{-0.00017}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5887	$0.589^{+0.010}_{-0.0097}$ (−0.2 σ)
A_{100}^{PS}	254	262^{+60}_{-50} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246671	$0.24666^{+0.00015}_{-0.00018}$ (+0.4 σ)	$f\sigma_8(2.33)$	0.2969	$0.2969^{+0.0051}_{-0.0048}$ (−0.0 σ)
A_{143}^{PS}	48.1	48^{+20}_{-20} (−0.1 σ)	10^5D/H	2.609	$2.615^{+0.073}_{-0.071}$ (−0.4 σ)	$\sigma_8(2.33)$	0.3061	$0.3062^{+0.0053}_{-0.0051}$ (+0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	45.5	43^{+20}_{-20} (−0.1 σ)	Age/Gyr	13.804	$13.806^{+0.055}_{-0.055}$ (−0.6 σ)	$r_{0.002}$	0.000	< 0.110 (+0.1 σ)
A_{217}^{PS}	118.4	115^{+20}_{-20} (−0.0 σ)	z_*	1089.99	$1090.02^{+0.58}_{-0.57}$ (−0.6 σ)	$r_{0.01}$	0.000	< 0.113 (+0.1 σ)
A^{kSZ}	0.01	< 8.36 (−0.0 σ)	r_*	144.79	$144.85^{+0.63}_{-0.62}$ (+0.7 σ)	$\ln(10^{10} A_t)$	−5.91	$-0.6^{+1.9}_{-2.6}$ (+0.1 σ)
A_{100}^{dustTT}	8.92	$8.9^{+3.7}_{-3.7}$ (+0.0 σ)	$100\theta_*$	1.04116	$1.04121^{+0.00079}_{-0.00081}$ (+0.4 σ)	r_{10}	0.0001	< 0.0565 (+0.1 σ)
A_{143}^{dustTT}	10.83	$10.7^{+3.5}_{-3.6}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.907	$13.912^{+0.062}_{-0.061}$ (+0.6 σ)	$10^9 A_t$	0.000	< 0.242 (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.3^{+6.4}_{-6.5}$ (+0.0 σ)	z_{drag}	1059.59	$1059.49^{+0.86}_{-0.86}$ (+0.2 σ)	$10^9 A_t e^{-2\tau}$	0.000	< 0.218 (+0.1 σ)
A_{217}^{dustTT}	94.5	94^{+10}_{-10} (+0.0 σ)	r_{drag}	147.50	$147.57^{+0.69}_{-0.67}$ (+0.6 σ)	f_{2000}^{143}	30.1	31^{+6}_{-6} (−0.1 σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	k_{D}	0.14034	$0.14024^{+0.00087}_{-0.00088}$ (−0.5 σ)	$f_{2000}^{143 \times 217}$	33.00	33^{+4}_{-4} (−0.1 σ)
c_{217}	0.99827	$0.9983^{+0.0013}_{-0.0012}$ (−0.0 σ)	$100\theta_{\text{D}}$	0.16097	$0.16103^{+0.00051}_{-0.00051}$ (−0.2 σ)	f_{2000}^{217}	107.41	$107.8^{+3.7}_{-3.6}$ (−0.1 σ)
H_0	67.63	$67.7^{+1.1}_{-1.1}$ (+0.7 σ)	z_{eq}	3374	3371^{+57}_{-55} (−0.7 σ)	χ_{small}^2	395.88	$397.2 (\nu: 1.6)$ (+0.0 σ)
Ω_{Λ}	0.6899	$0.690^{+0.014}_{-0.015}$ (+0.7 σ)	k_{eq}	0.010299	$0.01029^{+0.00017}_{-0.00017}$ (−0.7 σ)	χ_{lowl}^2	22.78	$24.3 (\nu: 1.2)$ (−0.4 σ)
Ω_{m}	0.3101	$0.310^{+0.015}_{-0.014}$ (−0.7 σ)	$100\theta_{\text{eq}}$	0.8180	$0.819^{+0.010}_{-0.010}$ (+0.7 σ)	χ_{plik}^2	760.2	$772.4 (\nu: 15.0)$ (+0.1 σ)
$\Omega_{\text{m}} h^2$	0.14185	$0.1417^{+0.0024}_{-0.0023}$ (−0.7 σ)	$100\theta_{\text{s,eq}}$	0.4519	$0.4523^{+0.0054}_{-0.0054}$ (+0.7 σ)	$\chi_{6\text{DF}}^2$	0.022	$0.053 (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	0.09593	$0.09588^{+0.00089}_{-0.00091}$ (+0.0 σ)	$H(0.15)$	72.89	$72.92^{+0.92}_{-0.92}$ (+0.7 σ)	χ_{MGS}^2	1.28	$1.41 (\nu: 0.1)$
σ_8	0.8066	$0.806^{+0.016}_{-0.015}$ (−0.5 σ)	$D_M(0.15)$	641.1	$640.8^{+9.2}_{-9.0}$ (−0.7 σ)	χ_{DR12BAO}^2	4.21	$4.6 (\nu: 1.2)$
S_8	0.8202	$0.819^{+0.030}_{-0.029}$ (−0.7 σ)	$H(0.38)$	82.97	$82.99^{+0.70}_{-0.68}$ (+0.7 σ)	χ_{prior}^2	1.4	$7.4 (\nu: 7.0)$ (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4492	$0.449^{+0.016}_{-0.016}$ (−0.7 σ)	$D_M(0.38)$	1529.4	1529^{+18}_{-18} (−0.7 σ)	χ_{BAO}^2	5.51	$6.1 (\nu: 0.8)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6020	$0.601^{+0.016}_{-0.015}$ (−0.6 σ)	$H(0.51)$	89.67	$89.68^{+0.57}_{-0.56}$ (+0.7 σ)	χ_{CMB}^2	1178.8	$1193.8 (\nu: 16.2)$ (+0.0 σ)
$\sigma_8/h^{0.5}$	0.9809	$0.980^{+0.023}_{-0.022}$ (−0.6 σ)	$D_M(0.51)$	1981.4	1981^{+22}_{-21} (−0.7 σ)			
$r_{\text{drag}} h$	99.76	$99.9^{+1.8}_{-1.9}$ (+0.7 σ)	$H(0.61)$	95.276	$95.28^{+0.48}_{-0.48}$ (+0.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1185.79$; $\Delta\chi_{\text{eff}}^2 = 0.05$; $\bar{\chi}_{\text{eff}}^2 = 1207.29$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.27$; $R - 1 = 0.01115$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ 0.00) MGS: 1.28 (Δ 0.00) DR12BAO: 4.21 (Δ 0.03) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 (Δ -0.01) commander_dx12_v3_2_29: 22.79 (Δ -0.04) plik_rd12_HM_v22_TT: 760.17 (Δ 0.07)

17.3 base_r_plikHM_TT_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022389	$0.02237^{+0.00039}_{-0.00041}$ (+1.1 σ)	$r_{\text{drag}} h$	101.15	$101.3^{+2.6}_{-2.7}$ (+1.6 σ)	$D_{\text{M}}(0.51)$	1965.2	1964^{+31}_{-29} (−1.6 σ)
$\Omega_c h^2$	0.11728	$0.1171^{+0.0035}_{-0.0032}$ (−1.5 σ)	$\langle d^2 \rangle^{1/2}$	2.400	$2.396^{+0.067}_{-0.070}$ (−1.3 σ)	$H(0.61)$	95.60	$95.61^{+0.63}_{-0.63}$ (+1.6 σ)
$100\theta_{\text{MC}}$	1.04124	$1.04126^{+0.00094}_{-0.00085}$ (+1.0 σ)	z_{re}	7.83	$7.7^{+1.7}_{-1.7}$ (+0.3 σ)	$D_{\text{M}}(0.61)$	2288.3	2287^{+33}_{-31} (−1.6 σ)
τ	0.0562	$0.055^{+0.018}_{-0.016}$ (+0.4 σ)	$10^9 A_{\text{s}}$	2.093	$2.087^{+0.074}_{-0.068}$ (−0.0 σ)	$H(2.33)$	234.82	$234.7^{+2.1}_{-1.9}$ (−1.4 σ)
$\ln(10^{10} A_{\text{s}})$	3.0414	$3.038^{+0.035}_{-0.033}$ (−0.0 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8706	$1.870^{+0.025}_{-0.025}$ (−1.0 σ)	$D_{\text{M}}(2.33)$	5752.1	5752^{+29}_{-30} (−1.5 σ)
n_{s}	0.9720	$0.9715^{+0.0096}_{-0.010}$ (+1.3 σ)	D_{40}	1214.1	1231^{+37}_{-33} (−0.7 σ)	$f\sigma_8(0.15)$	0.4450	$0.444^{+0.021}_{-0.020}$ (−1.5 σ)
r	0.000	< 0.129 (+0.2 σ)	D_{220}	5726	5729^{+76}_{-79} (+0.4 σ)	$\sigma_8(0.15)$	0.7433	$0.742^{+0.015}_{-0.015}$ (−0.9 σ)
y_{cal}	1.00044	$1.0007^{+0.0048}_{-0.0049}$ (+0.1 σ)	D_{810}	2536.6	2536^{+26}_{-29} (−0.1 σ)	$f\sigma_8(0.38)$	0.4659	$0.464^{+0.017}_{-0.018}$ (−1.4 σ)
A_{217}^{CIB}	47.5	47^{+10}_{-10} (−0.0 σ)	D_{1420}	818.0	817^{+10}_{-10} (+0.5 σ)	$\sigma_8(0.38)$	0.6602	$0.659^{+0.013}_{-0.012}$ (−0.6 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.48	—	D_{2000}	231.05	$230.7^{+3.5}_{-3.5}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4659	$0.465^{+0.015}_{-0.016}$ (−1.4 σ)
A_{143}^{tSZ}	7.05	$5.3^{+3.9}_{-3.8}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9720	$0.9715^{+0.0096}_{-0.010}$ (+1.3 σ)	$\sigma_8(0.51)$	0.6184	$0.617^{+0.012}_{-0.011}$ (−0.5 σ)
A_{100}^{PS}	251	260^{+50}_{-60} (−0.1 σ)	Y_{P}	0.245403	$0.24539^{+0.00016}_{-0.00017}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4619	$0.461^{+0.013}_{-0.014}$ (−1.3 σ)
A_{143}^{PS}	49.3	47^{+20}_{-10} (−0.3 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246730	$0.24672^{+0.00016}_{-0.00017}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5888	$0.588^{+0.011}_{-0.010}$ (−0.4 σ)
$A_{143 \times 217}^{\text{PS}}$	49.5	42^{+20}_{-20} (−0.2 σ)	10^5D/H	2.582	$2.587^{+0.077}_{-0.071}$ (−1.1 σ)	$f\sigma_8(2.33)$	0.2973	$0.2968^{+0.0054}_{-0.0051}$ (−0.1 σ)
A_{217}^{PS}	120.0	114^{+20}_{-20} (−0.1 σ)	Age/Gyr	13.774	$13.775^{+0.065}_{-0.065}$ (−1.4 σ)	$\sigma_8(2.33)$	0.3071	$0.3066^{+0.0057}_{-0.0052}$ (+0.3 σ)
A^{kSZ}	0.00	< 8.30 (−0.1 σ)	z_*	1089.66	$1089.68^{+0.70}_{-0.65}$ (−1.4 σ)	$r_{0.002}$	0.000	< 0.123 (+0.2 σ)
A_{100}^{dustTT}	8.90	$8.9^{+3.6}_{-3.7}$ (+0.0 σ)	r_*	145.12	$145.18^{+0.77}_{-0.79}$ (+1.4 σ)	$r_{0.01}$	0.000	< 0.126 (+0.2 σ)
A_{143}^{dustTT}	10.84	$10.7^{+3.4}_{-3.4}$ (+0.0 σ)	$100\theta_*$	1.04142	$1.04145^{+0.00093}_{-0.00084}$ (+0.9 σ)	$\ln(10^{10} A_{\text{t}})$	−7.17	$−0.5^{+1.9}_{-2.5}$ (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.6	$18.4^{+6.7}_{-6.5}$ (+0.0 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.935	$13.940^{+0.072}_{-0.074}$ (+1.3 σ)	r_{10}	0.0000	< 0.0636 (+0.2 σ)
A_{217}^{dustTT}	94.9	94^{+10}_{-10} (+0.0 σ)	z_{drag}	1059.78	$1059.72^{+0.90}_{-0.85}$ (+0.7 σ)	$10^9 A_{\text{t}}$	0.000	< 0.267 (+0.2 σ)
c_{100}	0.99968	$0.9996^{+0.0012}_{-0.0011}$ (−0.0 σ)	r_{drag}	147.79	$147.86^{+0.79}_{-0.82}$ (+1.2 σ)	$10^9 A_{\text{t}} e^{-2\tau}$	0.000	< 0.241 (+0.2 σ)
c_{217}	0.99826	$0.9983^{+0.0013}_{-0.0013}$ (+0.0 σ)	k_{D}	0.14014	$0.14005^{+0.00096}_{-0.00091}$ (−0.8 σ)	f_{2000}^{143}	29.2	30^{+5}_{-6} (−0.3 σ)
H_0	68.44	$68.5^{+1.5}_{-1.6}$ (+1.6 σ)	$100\theta_{\text{D}}$	0.160868	$0.16091^{+0.00049}_{-0.00048}$ (−0.6 σ)	$f_{2000}^{143 \times 217}$	32.40	33^{+4}_{-4} (−0.4 σ)
Ω_{Λ}	0.7004	$0.701^{+0.018}_{-0.021}$ (+1.5 σ)	z_{eq}	3338	3334^{+79}_{-73} (−1.5 σ)	f_{2000}^{217}	106.87	$107.4^{+3.7}_{-3.8}$ (−0.3 σ)
Ω_{m}	0.2996	$0.299^{+0.021}_{-0.018}$ (−1.5 σ)	k_{eq}	0.010187	$0.01017^{+0.00024}_{-0.00022}$ (−1.5 σ)	χ_{simall}^2	396.24	$397.4 (\nu: 2.1)$ (+0.2 σ)
$\Omega_{\text{m}} h^2$	0.14032	$0.1401^{+0.0033}_{-0.0031}$ (−1.5 σ)	$100\theta_{\text{eq}}$	0.8253	$0.826^{+0.015}_{-0.015}$ (+1.6 σ)	χ_{lowl}^2	22.08	$23.6 (\nu: 1.3)$ (−0.8 σ)
$\Omega_{\text{m}} h^3$	0.09603	$0.09597^{+0.00085}_{-0.00088}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.4556	$0.4561^{+0.0074}_{-0.0078}$ (+1.5 σ)	χ_{plik}^2	762.9	$775.1 (\nu: 19.0)$ (+0.6 σ)
σ_8	0.8031	$0.801^{+0.018}_{-0.018}$ (−1.0 σ)	$H(0.15)$	73.59	$73.6^{+1.3}_{-1.3}$ (+1.6 σ)	χ_{H073p45}^2	9.1	$9.1 (\nu: 3.9)$
S_8	0.8025	$0.800^{+0.040}_{-0.039}$ (−1.5 σ)	$D_{\text{M}}(0.15)$	634.3	634^{+13}_{-12} (−1.6 σ)	χ_{prior}^2	1.3	$7.4 (\nu: 6.7)$ (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4396	$0.438^{+0.022}_{-0.021}$ (−1.5 σ)	$H(0.38)$	83.49	$83.51^{+0.95}_{-0.97}$ (+1.6 σ)	χ_{CMB}^2	1181.2	$1196.1 (\nu: 19.4)$ (+0.4 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5942	$0.592^{+0.021}_{-0.022}$ (−1.4 σ)	$D_{\text{M}}(0.38)$	1515.6	1515^{+26}_{-25} (−1.6 σ)			
$\sigma_8/h^{0.5}$	0.9708	$0.968^{+0.029}_{-0.030}$ (−1.4 σ)	$H(0.51)$	90.08	$90.09^{+0.77}_{-0.77}$ (+1.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1191.61$; $\Delta\chi_{\text{eff}}^2 = 0.03$; $\bar{\chi}_{\text{eff}}^2 = 1212.59$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.51$; $R - 1 = 0.05992$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.24 (Δ 0.17) commander_dx12_v3.2.29: 22.08 (Δ -0.00) plik_rd12_HM_v22_TT: 762.86 (Δ -0.16) Hubble - H073p45: 9.11 (Δ 0.12)

17.4 base_r_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02213^{+0.00044}_{-0.00041} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$D_M(0.38)$	$1539^{+31}_{-30} \quad (-0.0\sigma)$
$\Omega_c h^2$	$0.1202^{+0.0041}_{-0.0040} \quad (-0.0\sigma)$	$r_{\text{drag}} h$	$98.8^{+3.2}_{-3.1} \quad (+0.0\sigma)$	$H(0.51)$	$89.40^{+0.89}_{-0.83} \quad (+0.0\sigma)$
$100\theta_{\text{MC}}$	$1.04083^{+0.00090}_{-0.00091} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.075}_{-0.073} \quad (+0.1\sigma)$	$D_M(0.51)$	$1993^{+36}_{-36} \quad (-0.0\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	z_{re}	$< 8.83 \quad (+0.2\sigma)$	$H(0.61)$	$95.07^{+0.71}_{-0.66} \quad (+0.0\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.028}_{-0.026} \quad (+0.2\sigma)$	$10^9 A_s$	$2.096^{+0.059}_{-0.054} \quad (+0.2\sigma)$	$D_M(0.61)$	$2318^{+38}_{-38} \quad (-0.0\sigma)$
n_s	$0.964^{+0.011}_{-0.011} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$H(2.33)$	$236.5^{+2.5}_{-2.4} \quad (-0.0\sigma)$
r	$< 0.109 \quad (+0.0\sigma)$	D_{40}	$1244^{+37}_{-33} \quad (-0.0\sigma)$	$D_M(2.33)$	$5775^{+31}_{-32} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	D_{220}	$5711^{+81}_{-79} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.024}_{-0.024} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.014} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815^{+10}_{-9.8} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.019}_{-0.019} \quad (+0.0\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.4} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} \quad (+0.2\sigma)$
A_{100}^{PS}	$262^{+50}_{-50} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.964^{+0.011}_{-0.011} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24529^{+0.00018}_{-0.00020} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.010}_{-0.0091} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24662^{+0.00018}_{-0.00020} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.014}_{-0.014} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.631^{+0.080}_{-0.082} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0092}_{-0.0087} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.34 \quad (-0.0\sigma)$	Age/Gyr	$13.825^{+0.070}_{-0.072} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0044}_{-0.0041} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.24^{+0.78}_{-0.79} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0046}_{-0.0042} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.55^{+0.93}_{-0.93} \quad (+0.0\sigma)$	$r_{0.002}$	$< 0.102 \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (-0.0\sigma)$	$100\theta_*$	$1.04104^{+0.00088}_{-0.00090} \quad (+0.0\sigma)$	$r_{0.01}$	$< 0.106 \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.885^{+0.087}_{-0.085} \quad (+0.0\sigma)$	$\ln(10^{10} A_t)$	$-0.7^{+1.9}_{-2.6} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.40^{+0.91}_{-0.88} \quad (+0.0\sigma)$	r_{10}	$< 0.0528 \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.29^{+0.94}_{-0.92} \quad (+0.0\sigma)$	$10^9 A_t$	$< 0.229 \quad (+0.0\sigma)$
H_0	$67.1^{+1.8}_{-1.8} \quad (+0.0\sigma)$	k_{D}	$0.14047^{+0.00099}_{-0.0010} \quad (-0.0\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.206 \quad (+0.0\sigma)$
Ω_Λ	$0.682^{+0.024}_{-0.026} \quad (+0.0\sigma)$	$100\theta_{\text{D}}$	$0.16107^{+0.00051}_{-0.00051} \quad (-0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
Ω_{m}	$0.318^{+0.026}_{-0.024} \quad (-0.0\sigma)$	z_{eq}	$3402^{+93}_{-92} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^2$	$0.1430^{+0.0039}_{-0.0038} \quad (-0.0\sigma)$	k_{eq}	$0.01038^{+0.00028}_{-0.00028} \quad (-0.0\sigma)$	f_{2000}^{217}	$108.0^{+3.8}_{-3.7} \quad (-0.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.09588^{+0.00089}_{-0.00088} \quad (+0.0\sigma)$	$100\theta_{\text{eq}}$	$0.813^{+0.017}_{-0.017} \quad (+0.0\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (-0.1\sigma)$
σ_8	$0.812^{+0.017}_{-0.017} \quad (+0.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.4492^{+0.0090}_{-0.0088} \quad (+0.0\sigma)$	χ_{lowl}^2	$25.0 \quad (\nu: 1.6) \quad (+0.0\sigma)$
S_8	$0.836^{+0.048}_{-0.046} \quad (+0.0\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.5} \quad (+0.0\sigma)$	χ_{plik}^2	$771.5 \quad (\nu: 14.4) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.458^{+0.026}_{-0.025} \quad (+0.0\sigma)$	$D_M(0.15)$	$646^{+15}_{-15} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.610^{+0.023}_{-0.023} \quad (+0.1\sigma)$	$H(0.38)$	$82.6^{+1.1}_{-1.1} \quad (+0.0\sigma)$	χ_{CMB}^2	$1193.4 \quad (\nu: 15.6) \quad (-0.1\sigma)$

$\bar{\chi}_{\text{eff}}^2 = 1200.73$; $\Delta \bar{\chi}_{\text{eff}}^2 = 1.41$; $R - 1 = 0.00675$

17.5 base_r_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02222^{+0.00039}_{-0.00038} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.054}_{-0.052} \quad (-0.5\sigma)$	$D_M(0.61)$	$2305^{+23}_{-23} \quad (-0.7\sigma)$
$\Omega_c h^2$	$0.1188^{+0.0025}_{-0.0024} \quad (-0.7\sigma)$	z_{re}	$< 8.91 \quad (+0.3\sigma)$	$H(2.33)$	$235.6^{+1.6}_{-1.5} \quad (-0.7\sigma)$
$100\theta_{\text{MC}}$	$1.04101^{+0.00081}_{-0.00082} \quad (+0.4\sigma)$	$10^9 A_s$	$2.093^{+0.061}_{-0.054} \quad (+0.1\sigma)$	$D_M(2.33)$	$5766^{+24}_{-24} \quad (-0.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$10^9 A_s e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.029}_{-0.026} \quad (+0.1\sigma)$	D_{40}	$1238^{+34}_{-32} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.013}_{-0.012} \quad (-0.3\sigma)$
n_s	$0.9674^{+0.0086}_{-0.0084} \quad (+0.6\sigma)$	D_{220}	$5717^{+80}_{-77} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.013} \quad (-0.6\sigma)$
r	$< 0.116 \quad (+0.1\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.0099} \quad (-0.1\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0048} \quad (+0.0\sigma)$	D_{1420}	$815.8^{+9.7}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{2000}	$230.1^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6194^{+0.0097}_{-0.0090} \quad (-0.0\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$n_{s,0.002}$	$0.9674^{+0.0086}_{-0.0084} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.010} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$5.2^{+3.7}_{-3.9} \quad (+0.0\sigma)$	Y_{P}	$0.24533^{+0.00015}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5895^{+0.0091}_{-0.0085} \quad (+0.0\sigma)$
A_{100}^{PS}	$261^{+60}_{-50} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24666^{+0.00015}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0045}_{-0.0042} \quad (+0.1\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	10^5D/H	$2.615^{+0.074}_{-0.072} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0046}_{-0.0042} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Age/Gyr	$13.805^{+0.055}_{-0.055} \quad (-0.6\sigma)$	$r_{0.002}$	$< 0.110 \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	z_*	$1090.01^{+0.58}_{-0.58} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.113 \quad (+0.1\sigma)$
A^{kSZ}	$< 8.29 \quad (-0.0\sigma)$	r_*	$144.86^{+0.63}_{-0.62} \quad (+0.7\sigma)$	$\ln(10^{10} A_t)$	$-0.6^{+1.9}_{-2.6} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	$100\theta_*$	$1.04121^{+0.00080}_{-0.00081} \quad (+0.4\sigma)$	r_{10}	$< 0.0567 \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.912^{+0.062}_{-0.061} \quad (+0.6\sigma)$	$10^9 A_t$	$< 0.244 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.0\sigma)$	z_{drag}	$1059.50^{+0.89}_{-0.86} \quad (+0.2\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.218 \quad (+0.1\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_{drag}	$147.58^{+0.69}_{-0.67} \quad (+0.6\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14024^{+0.00087}_{-0.00090} \quad (-0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
c_{217}	$0.9983^{+0.0013}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_{\text{D}}$	$0.16102^{+0.00051}_{-0.00051} \quad (-0.2\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.6} \quad (-0.1\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.7\sigma)$	z_{eq}	$3370^{+57}_{-55} \quad (-0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (-0.0\sigma)$
Ω_{Λ}	$0.691^{+0.014}_{-0.015} \quad (+0.7\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00017} \quad (-0.7\sigma)$	χ_{lowl}^2	$24.3 \quad (\nu: 1.2) \quad (-0.4\sigma)$
Ω_{m}	$0.309^{+0.015}_{-0.014} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.819^{+0.010}_{-0.010} \quad (+0.7\sigma)$	χ_{plik}^2	$772.2 \quad (\nu: 14.7) \quad (+0.1\sigma)$
$\Omega_{\text{m}} h^2$	$0.1417^{+0.0024}_{-0.0023} \quad (-0.7\sigma)$	$100\theta_{s,\text{eq}}$	$0.4523^{+0.0054}_{-0.0054} \quad (+0.7\sigma)$	$\chi_{6\text{DF}}^2$	$0.053 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.09588^{+0.00089}_{-0.00091} \quad (+0.0\sigma)$	$H(0.15)$	$72.93^{+0.92}_{-0.92} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.42 \quad (\nu: 0.1)$
σ_8	$0.807^{+0.015}_{-0.013} \quad (-0.3\sigma)$	$D_M(0.15)$	$640.7^{+9.2}_{-9.0} \quad (-0.7\sigma)$	χ_{DR12BAO}^2	$4.6 \quad (\nu: 1.2)$
S_8	$0.820^{+0.029}_{-0.029} \quad (-0.7\sigma)$	$H(0.38)$	$83.00^{+0.69}_{-0.68} \quad (+0.7\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 7.0) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_M(0.38)$	$1529^{+18}_{-18} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.602^{+0.016}_{-0.015} \quad (-0.6\sigma)$	$H(0.51)$	$89.69^{+0.57}_{-0.56} \quad (+0.7\sigma)$	χ_{CMB}^2	$1193.6 \quad (\nu: 15.8) \quad (-0.0\sigma)$
$\sigma_8/h^{0.5}$	$0.982^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$D_M(0.51)$	$1981^{+22}_{-21} \quad (-0.7\sigma)$		
$r_{\text{drag}} h$	$99.9^{+1.8}_{-1.9} \quad (+0.7\sigma)$	$H(0.61)$	$95.28^{+0.49}_{-0.47} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1207.00; \Delta \bar{\chi}_{\text{eff}}^2 = 1.24; R - 1 = 0.01158$$

17.6 base_r_plikHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00041}_{-0.00041} \quad (+1.1\sigma)$	$r_{\text{drag}} h$	$101.3^{+2.5}_{-2.7} \quad (+1.6\sigma)$	$D_M(0.51)$	$1964^{+31}_{-29} \quad (-1.6\sigma)$
$\Omega_c h^2$	$0.1171^{+0.0035}_{-0.0033} \quad (-1.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.399^{+0.066}_{-0.070} \quad (-1.3\sigma)$	$H(0.61)$	$95.62^{+0.62}_{-0.63} \quad (+1.6\sigma)$
$100\theta_{\text{MC}}$	$1.04127^{+0.00094}_{-0.00085} \quad (+1.0\sigma)$	z_{re}	$< 9.13 \quad (+0.4\sigma)$	$D_M(0.61)$	$2287^{+33}_{-31} \quad (-1.6\sigma)$
τ	$0.056^{+0.015}_{-0.013} \quad (+0.5\sigma)$	$10^9 A_s$	$2.092^{+0.066}_{-0.059} \quad (+0.1\sigma)$	$H(2.33)$	$234.7^{+2.0}_{-2.0} \quad (-1.5\sigma)$
$\ln(10^{10} A_s)$	$3.041^{+0.031}_{-0.028} \quad (+0.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.870^{+0.024}_{-0.025} \quad (-1.0\sigma)$	$D_M(2.33)$	$5752^{+29}_{-30} \quad (-1.5\sigma)$
n_s	$0.972^{+0.011}_{-0.0099} \quad (+1.4\sigma)$	D_{40}	$1231^{+37}_{-33} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.021}_{-0.020} \quad (-1.5\sigma)$
r	$< 0.128 \quad (+0.2\sigma)$	D_{220}	$5729^{+77}_{-79} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.742^{+0.015}_{-0.014} \quad (-0.8\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{810}	$2535^{+27}_{-29} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.017}_{-0.016} \quad (-1.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.0\sigma)$	D_{1420}	$817^{+10}_{-10} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$230.7^{+3.5}_{-3.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.465^{+0.015}_{-0.014} \quad (-1.3\sigma)$
A_{143}^{tSZ}	$5.3^{+3.9}_{-3.8} \quad (+0.1\sigma)$	$n_{s,0.002}$	$0.972^{+0.011}_{-0.0099} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.0098} \quad (-0.3\sigma)$
A_{100}^{PS}	$260^{+50}_{-60} \quad (-0.1\sigma)$	Y_{P}	$0.24539^{+0.00016}_{-0.00017} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.461^{+0.013}_{-0.013} \quad (-1.3\sigma)$
A_{143}^{PS}	$47^{+20}_{-10} \quad (-0.3\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24672^{+0.00016}_{-0.00017} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.010}_{-0.0094} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	10^5D/H	$2.586^{+0.077}_{-0.074} \quad (-1.1\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0049}_{-0.0045} \quad (+0.1\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.1\sigma)$	Age/Gyr	$13.774^{+0.065}_{-0.065} \quad (-1.4\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0050}_{-0.0046} \quad (+0.4\sigma)$
A^{kSZ}	$< 8.33 \quad (-0.1\sigma)$	z_*	$1089.67^{+0.70}_{-0.65} \quad (-1.5\sigma)$	$r_{0.002}$	$< 0.123 \quad (+0.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.7} \quad (+0.0\sigma)$	r_*	$145.19^{+0.77}_{-0.79} \quad (+1.4\sigma)$	$r_{0.01}$	$< 0.125 \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.7^{+3.4}_{-3.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.04145^{+0.00093}_{-0.00084} \quad (+0.9\sigma)$	$\ln(10^{10} A_t)$	$-0.5^{+1.9}_{-2.5} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.8}_{-6.4} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.941^{+0.072}_{-0.074} \quad (+1.3\sigma)$	r_{10}	$< 0.0635 \quad (+0.2\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.73^{+0.93}_{-0.86} \quad (+0.7\sigma)$	$10^9 A_t$	$< 0.266 \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0011} \quad (-0.0\sigma)$	r_{drag}	$147.87^{+0.79}_{-0.81} \quad (+1.2\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.240 \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0013}_{-0.0013} \quad (+0.0\sigma)$	k_{D}	$0.14005^{+0.00096}_{-0.00091} \quad (-0.8\sigma)$	f_{2000}^{143}	$30^{+5}_{-6} \quad (-0.3\sigma)$
H_0	$68.5^{+1.4}_{-1.5} \quad (+1.6\sigma)$	$100\theta_{\text{D}}$	$0.16091^{+0.00049}_{-0.00049} \quad (-0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
Ω_{Λ}	$0.701^{+0.018}_{-0.021} \quad (+1.6\sigma)$	z_{eq}	$3333^{+79}_{-72} \quad (-1.5\sigma)$	f_{2000}^{217}	$107.4^{+3.7}_{-3.8} \quad (-0.4\sigma)$
Ω_{m}	$0.299^{+0.021}_{-0.018} \quad (-1.6\sigma)$	k_{eq}	$0.01017^{+0.00024}_{-0.00022} \quad (-1.5\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.2) \quad (+0.1\sigma)$
$\Omega_{\text{m}} h^2$	$0.1401^{+0.0033}_{-0.0030} \quad (-1.5\sigma)$	$100\theta_{\text{eq}}$	$0.826^{+0.015}_{-0.015} \quad (+1.6\sigma)$	χ_{lowl}^2	$23.6 \quad (\nu: 1.3) \quad (-0.8\sigma)$
$\Omega_{\text{m}} h^3$	$0.09598^{+0.00086}_{-0.00088} \quad (+0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.4561^{+0.0075}_{-0.0077} \quad (+1.6\sigma)$	χ_{plik}^2	$774.9 \quad (\nu: 18.9) \quad (+0.6\sigma)$
σ_8	$0.802^{+0.017}_{-0.017} \quad (-0.9\sigma)$	$H(0.15)$	$73.6^{+1.3}_{-1.3} \quad (+1.6\sigma)$	χ_{H073p45}^2	$9.1 \quad (\nu: 3.9)$
S_8	$0.800^{+0.040}_{-0.040} \quad (-1.5\sigma)$	$D_M(0.15)$	$634^{+13}_{-12} \quad (-1.6\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.6) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.438^{+0.022}_{-0.022} \quad (-1.5\sigma)$	$H(0.38)$	$83.52^{+0.94}_{-0.97} \quad (+1.6\sigma)$	χ_{CMB}^2	$1195.9 \quad (\nu: 19.2) \quad (+0.4\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.593^{+0.020}_{-0.019} \quad (-1.4\sigma)$	$D_M(0.38)$	$1515^{+26}_{-24} \quad (-1.6\sigma)$		
$\sigma_8/h^{0.5}$	$0.969^{+0.028}_{-0.028} \quad (-1.3\sigma)$	$H(0.51)$	$90.10^{+0.76}_{-0.77} \quad (+1.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1212.36; \Delta \bar{\chi}_{\text{eff}}^2 = 0.55; R - 1 = 0.06373$$

17.7 base_r_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022376	$0.02236^{+0.00028}_{-0.00029}$ (+1.1 σ)	σ_8	0.8119	$0.811^{+0.015}_{-0.014}$ (+0.1 σ)	$D_M(0.15)$	643.6	644^{+10}_{-10} (−0.4 σ)
$\Omega_c h^2$	0.12007	$0.1200^{+0.0027}_{-0.0027}$ (−0.1 σ)	S_8	0.8328	$0.832^{+0.032}_{-0.031}$ (−0.2 σ)	$H(0.38)$	82.85	$82.85^{+0.74}_{-0.73}$ (+0.5 σ)
$100\theta_{MC}$	1.04090	$1.04091^{+0.00060}_{-0.00059}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4562	$0.456^{+0.017}_{-0.017}$ (−0.2 σ)	$D_M(0.38)$	1533.9	1534^{+21}_{-20} (−0.4 σ)
τ	0.0543	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6086	$0.608^{+0.016}_{-0.016}$ (−0.1 σ)	$H(0.51)$	89.62	$89.61^{+0.58}_{-0.57}$ (+0.5 σ)
$\ln(10^{10} A_s)$	3.0449	$3.043^{+0.032}_{-0.030}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9895	$0.989^{+0.023}_{-0.023}$ (−0.1 σ)	$D_M(0.51)$	1986.4	1986^{+24}_{-24} (−0.4 σ)
n_s	0.9661	$0.9657^{+0.0086}_{-0.0087}$ (+0.3 σ)	$r_{drag} h$	99.02	$99.0^{+2.1}_{-2.1}$ (+0.2 σ)	$H(0.61)$	95.271	$95.27^{+0.47}_{-0.45}$ (+0.6 σ)
r	0.000	< 0.113 (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.445	$2.443^{+0.055}_{-0.054}$ (−0.1 σ)	$D_M(0.61)$	2310.9	2311^{+26}_{-25} (−0.4 σ)
y_{cal}	1.00059	$1.0007^{+0.0048}_{-0.0047}$ (+0.1 σ)	z_{re}	7.68	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$H(2.33)$	236.61	$236.6^{+1.6}_{-1.6}$ (+0.0 σ)
A_{217}^{CIB}	46.5	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.101	$2.098^{+0.068}_{-0.063}$ (+0.3 σ)	$D_M(2.33)$	5763.7	5764^{+21}_{-21} (−0.7 σ)
$\xi^{tSZ \times CIB}$	0.55	—	$10^9 A_s e^{-2\tau}$	1.8845	$1.883^{+0.023}_{-0.022}$ (+0.0 σ)	$f\sigma_8(0.15)$	0.4604	$0.460^{+0.016}_{-0.016}$ (−0.1 σ)
A_{143}^{tSZ}	7.14	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	D_{40}	1229.2	1244^{+33}_{-31} (+0.0 σ)	$\sigma_8(0.15)$	0.7499	$0.749^{+0.013}_{-0.013}$ (+0.1 σ)
A_{100}^{PS}	248	258^{+60}_{-50} (−0.2 σ)	D_{220}	5731	5730^{+74}_{-73} (+0.5 σ)	$f\sigma_8(0.38)$	0.4779	$0.477^{+0.013}_{-0.013}$ (−0.1 σ)
A_{143}^{PS}	49.3	46^{+10}_{-20} (−0.4 σ)	D_{810}	2541.7	2540^{+26}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6643	$0.664^{+0.011}_{-0.011}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	50.7	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.5	$817.8^{+9.1}_{-9.0}$ (+0.5 σ)	$f\sigma_8(0.51)$	0.4760	$0.475^{+0.012}_{-0.012}$ (−0.1 σ)
A_{217}^{PS}	121.1	115^{+20}_{-20} (+0.0 σ)	D_{2000}	231.34	$231.1^{+3.1}_{-3.0}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6215	$0.621^{+0.010}_{-0.0098}$ (+0.2 σ)
A^{kSZ}	0.00	< 7.93 (−0.2 σ)	$n_{s,0.002}$	0.9661	$0.9657^{+0.0086}_{-0.0087}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4707	$0.470^{+0.011}_{-0.010}$ (−0.0 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.245398	$0.24539^{+0.00011}_{-0.00012}$ (+1.0 σ)	$\sigma_8(0.61)$	0.5912	$0.5907^{+0.0097}_{-0.0093}$ (+0.2 σ)
A_{143}^{dustTT}	10.99	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.246725	$0.24672^{+0.00011}_{-0.00012}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.29793	$0.2977^{+0.0049}_{-0.0046}$ (+0.3 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.6^{+6.5}_{-6.5}$ (+0.1 σ)	$10^5 D/H$	2.584	$2.588^{+0.055}_{-0.051}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3070	$0.3067^{+0.0052}_{-0.0049}$ (+0.3 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7975	$13.799^{+0.047}_{-0.048}$ (−0.8 σ)	$r_{0.002}$	0.000	< 0.107 (+0.1 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.075}_{-0.074}$	z_*	1089.92	$1089.93^{+0.55}_{-0.53}$ (−0.8 σ)	$r_{0.01}$	0.000	< 0.110 (+0.1 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.059}_{-0.058}$	r_*	144.41	$144.43^{+0.60}_{-0.60}$ (−0.2 σ)	$\ln(10^{10} A_t)$	−6.12	$-0.6^{+1.8}_{-2.4}$ (+0.1 σ)
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	1.04109	$1.04109^{+0.00059}_{-0.00058}$ (+0.1 σ)	r_{10}	0.0000	< 0.0550 (+0.1 σ)
A_{143}^{dustTE}	0.225	$0.23^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.871	$13.873^{+0.055}_{-0.056}$ (−0.2 σ)	$10^9 A_t$	0.000	< 0.237 (+0.1 σ)
$A_{143 \times 217}^{dustTE}$	0.667	$0.67^{+0.16}_{-0.15}$	z_{drag}	1059.97	$1059.92^{+0.59}_{-0.59}$ (+1.2 σ)	$10^9 A_t e^{-2\tau}$	0.000	< 0.213 (+0.1 σ)
A_{217}^{dustTE}	2.09	$2.08^{+0.52}_{-0.52}$	r_{drag}	147.07	$147.10^{+0.59}_{-0.59}$ (−0.4 σ)	f_{2000}^{143}	28.7	29^{+5}_{-5} (−0.6 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14090	$0.14086^{+0.00063}_{-0.00063}$ (+0.7 σ)	$f_{2000}^{143 \times 217}$	31.98	32^{+4}_{-4} (−0.7 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160745	$0.16077^{+0.00034}_{-0.00033}$ (−1.2 σ)	f_{2000}^{217}	106.60	$106.9^{+3.5}_{-3.5}$ (−0.6 σ)
H_0	67.33	$67.3^{+1.2}_{-1.2}$ (+0.4 σ)	z_{eq}	3404	3403^{+62}_{-60} (−0.0 σ)	χ_{small}^2	396.05	$397.2 (\nu: 1.7)$ (+0.1 σ)
Ω_Λ	0.6844	$0.684^{+0.016}_{-0.017}$ (+0.3 σ)	k_{eq}	0.010389	$0.01039^{+0.00019}_{-0.00018}$ (−0.0 σ)	χ_{lowl}^2	23.24	$24.8 (\nu: 1.3)$ (−0.1 σ)
Ω_m	0.3156	$0.316^{+0.017}_{-0.016}$ (−0.3 σ)	$100\theta_{eq}$	0.8130	$0.813^{+0.011}_{-0.011}$ (+0.1 σ)	χ_{plik}^2	2344.9	$2359.6 (\nu: 16.8)$ (+294.2 σ)
$\Omega_m h^2$	0.14309	$0.1430^{+0.0026}_{-0.0025}$ (−0.0 σ)	$100\theta_{s,eq}$	0.4492	$0.4494^{+0.0059}_{-0.0058}$ (+0.1 σ)	χ_{prior}^2	1.6	$11.6 (\nu: 10.2)$ (+1.1 σ)
$\Omega_m h^3$	0.09634	$0.09631^{+0.00057}_{-0.00057}$ (+1.0 σ)	$H(0.15)$	72.66	$72.7^{+1.0}_{-1.0}$ (+0.4 σ)	χ_{CMB}^2	2764.1	$2781.6 (\nu: 18.0)$ (+280.9 σ)

Best-fit $\chi_{eff}^2 = 2765.76$; $\Delta\chi_{eff}^2 = -0.01$; $\bar{\chi}_{eff}^2 = 2793.18$; $\Delta\bar{\chi}_{eff}^2 = 1.41$; $R - 1 = 0.00988$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.05 (Δ 0.00) commander_dx12_v3.2.29: 23.24 (Δ -0.01) plik_rd12_HM_v22b_TTTEEE: 2344.85 (Δ 0.20)

17.8 base_r_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}} h^2$	0.022440	$0.02241^{+0.00026}_{-0.00026}$ (+1.3 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4518	$0.451^{+0.014}_{-0.013}$ (−0.5 σ)	$D_{\text{M}}(0.51)$	1979.1	1979^{+18}_{-17} (−0.8 σ)
$\Omega_{\text{c}} h^2$	0.11926	$0.1192^{+0.0020}_{-0.0020}$ (−0.5 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6051	$0.604^{+0.013}_{-0.013}$ (−0.4 σ)	$H(0.61)$	95.406	$95.39^{+0.36}_{-0.36}$ (+1.0 σ)
$100\theta_{\text{MC}}$	1.04099	$1.04100^{+0.00057}_{-0.00055}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9852	$0.983^{+0.020}_{-0.020}$ (−0.4 σ)	$D_{\text{M}}(0.61)$	2303.0	2303^{+19}_{-19} (−0.8 σ)
τ	0.0565	$0.055^{+0.016}_{-0.014}$ (+0.4 σ)	$r_{\text{drag}} h$	99.66	$99.7^{+1.5}_{-1.5}$ (+0.6 σ)	$H(2.33)$	236.15	$236.1^{+1.2}_{-1.2}$ (−0.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.0472	$3.044^{+0.032}_{-0.030}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.4350	$2.431^{+0.048}_{-0.046}$ (−0.4 σ)	$D_{\text{M}}(2.33)$	5757.9	5759^{+17}_{-17} (−1.1 σ)
n_{s}	0.9680	$0.9677^{+0.0073}_{-0.0073}$ (+0.7 σ)	z_{re}	7.88	$7.7^{+1.6}_{-1.5}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4564	$0.456^{+0.013}_{-0.012}$ (−0.5 σ)
r	0.000	< 0.119 (+0.2 σ)	$10^9 A_{\text{s}}$	2.106	$2.099^{+0.069}_{-0.063}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7491	$0.748^{+0.013}_{-0.012}$ (−0.1 σ)
y_{cal}	1.00048	$1.0008^{+0.0047}_{-0.0047}$ (+0.1 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8806	$1.880^{+0.021}_{-0.021}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4750	$0.474^{+0.011}_{-0.011}$ (−0.4 σ)
A_{217}^{CIB}	46.1	47^{+10}_{-10} (−0.2 σ)	D_{40}	1225.2	1241^{+32}_{-30} (−0.2 σ)	$\sigma_8(0.38)$	0.6642	$0.663^{+0.011}_{-0.010}$ (+0.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.63	—	D_{220}	5734	5733^{+73}_{-71} (+0.5 σ)	$f\sigma_8(0.51)$	0.4737	$0.4728^{+0.0099}_{-0.0098}$ (−0.4 σ)
A_{143}^{tSZ}	7.12	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	D_{810}	2540.4	2540^{+25}_{-25} (+0.2 σ)	$\sigma_8(0.51)$	0.6216	$0.620^{+0.010}_{-0.0097}$ (+0.1 σ)
A_{100}^{PS}	249	258^{+60}_{-50} (−0.2 σ)	D_{1420}	818.8	$818.3^{+9.1}_{-8.8}$ (+0.6 σ)	$f\sigma_8(0.61)$	0.4688	$0.4679^{+0.0093}_{-0.0091}$ (−0.4 σ)
A_{143}^{PS}	49.9	45^{+10}_{-20} (−0.5 σ)	D_{2000}	231.53	$231.3^{+3.0}_{-2.9}$ (+0.9 σ)	$\sigma_8(0.61)$	0.5915	$0.5904^{+0.0099}_{-0.0092}$ (+0.2 σ)
$A_{143 \times 217}^{\text{PS}}$	52.3	42^{+20}_{-20} (−0.2 σ)	$n_{\text{s},0.002}$	0.9680	$0.9677^{+0.0073}_{-0.0073}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.29826	$0.2977^{+0.0049}_{-0.0047}$ (+0.3 σ)
A_{217}^{PS}	121.3	115^{+20}_{-20} (−0.0 σ)	Y_{P}	0.245422	$0.245411^{+0.000095}_{-0.00011}$ (+1.3 σ)	$\sigma_8(2.33)$	0.3075	$0.3070^{+0.0052}_{-0.0048}$ (+0.4 σ)
A^{kSZ}	0.01	< 7.85 (−0.2 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246749	$0.246738^{+0.000096}_{-0.00011}$ (+1.3 σ)	$r_{0.002}$	0.000	< 0.112 (+0.2 σ)
A_{100}^{dustTT}	8.83	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$10^5 \text{D}/\text{H}$	2.5726	$2.578^{+0.050}_{-0.046}$ (−1.3 σ)	$r_{0.01}$	0.000	< 0.115 (+0.2 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	Age/Gyr	13.7850	$13.787^{+0.039}_{-0.039}$ (−1.1 σ)	$\ln(10^{10} A_{\text{t}})$	−6.22	$−0.5^{+1.8}_{-2.4}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.1	$18.6^{+6.4}_{-6.8}$ (+0.1 σ)	z_*	1089.767	$1089.80^{+0.43}_{-0.42}$ (−1.1 σ)	r_{10}	0.0000	< 0.0579 (+0.2 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.0 σ)	r_*	144.570	$144.60^{+0.46}_{-0.46}$ (+0.1 σ)	$10^9 A_{\text{t}}$	0.000	< 0.249 (+0.2 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.075}_{-0.074}$	$100\theta_*$	1.04118	$1.04118^{+0.00056}_{-0.00055}$ (+0.3 σ)	$10^9 A_{\text{t}} e^{-2\tau}$	0.000	< 0.222 (+0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.136^{+0.058}_{-0.057}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.8852	$13.888^{+0.045}_{-0.044}$ (+0.1 σ)	f_{2000}^{143}	28.5	29^{+5}_{-5} (−0.7 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.16}_{-0.16}$	z_{drag}	1060.05	$1059.98^{+0.56}_{-0.58}$ (+1.3 σ)	$f_{2000}^{143 \times 217}$	31.78	$31.9^{+3.5}_{-3.5}$ (−0.8 σ)
A_{143}^{dustTE}	0.224	$0.23^{+0.11}_{-0.11}$	r_{drag}	147.209	$147.25^{+0.48}_{-0.47}$ (−0.1 σ)	f_{2000}^{217}	106.28	$106.8^{+3.5}_{-3.4}$ (−0.7 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.662	$0.66^{+0.16}_{-0.16}$	k_{D}	0.14079	$0.14073^{+0.00056}_{-0.00058}$ (+0.5 σ)	χ_{small}^2	396	1323 (ν : 479840.6) (+554.9 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.53}$	$100\theta_{\text{D}}$	0.160698	$0.16074^{+0.00033}_{-0.00032}$ (−1.3 σ)	χ_{lowl}^2	22.92	24.5 (ν : 1.2) (−0.3 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{eq}	3386.2	3385^{+45}_{-44} (−0.4 σ)	χ_{plik}^2	2345	1435 (ν : 479779.1) (+122.8 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{eq}	0.010335	$0.01033^{+0.00014}_{-0.00013}$ (−0.4 σ)	$\chi_{6\text{DF}}^2$	0.029	0.052 (ν : 0.0)
H_0	67.70	$67.70^{+0.86}_{-0.87}$ (+0.7 σ)	$100\theta_{\text{eq}}$	0.8164	$0.8167^{+0.0085}_{-0.0084}$ (+0.5 σ)	χ_{MGS}^2	1.22	1.29 (ν : 0.1)
Ω_{Λ}	0.6894	$0.689^{+0.012}_{-0.012}$ (+0.6 σ)	$100\theta_{\text{s,eq}}$	0.45097	$0.4511^{+0.0043}_{-0.0043}$ (+0.5 σ)	χ_{DR12BAO}^2	4.42	4.8 (ν : 0.9)
Ω_{m}	0.3106	$0.311^{+0.012}_{-0.012}$ (−0.6 σ)	$H(0.15)$	72.97	$72.97^{+0.74}_{-0.75}$ (+0.8 σ)	χ_{prior}^2	1.6	11.5 (ν : 10.2) (+1.1 σ)
$\Omega_{\text{m}} h^2$	0.14234	$0.1423^{+0.0019}_{-0.0018}$ (−0.4 σ)	$D_{\text{M}}(0.15)$	640.5	$640.5^{+7.5}_{-7.3}$ (−0.8 σ)	χ_{BAO}^2	5.67	6.1 (ν : 0.6)
$\Omega_{\text{m}} h^3$	0.09636	$0.09631^{+0.00058}_{-0.00057}$ (+1.0 σ)	$H(0.38)$	83.08	$83.07^{+0.55}_{-0.55}$ (+0.8 σ)	χ_{CMB}^2	2764.7	2781.6 (ν : 17.4) (+280.9 σ)
σ_8	0.8106	$0.809^{+0.014}_{-0.014}$ (−0.2 σ)	$D_{\text{M}}(0.38)$	1527.7	1528^{+15}_{-15} (−0.8 σ)			
S_8	0.8248	$0.823^{+0.025}_{-0.024}$ (−0.5 σ)	$H(0.51)$	89.790	$89.78^{+0.44}_{-0.44}$ (+0.9 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2771.96$; $\Delta\chi_{\text{eff}}^2 = 0.05$; $\bar{\chi}_{\text{eff}}^2 = 2799.17$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.27$; $R - 1 = 0.01744$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.42 (Δ 0.00) CMB - simall_100x143.offlike5_EE_Aplanck_B: 396.48 (Δ 0.28) commander_dx12_v3_2_29: 22.92 (Δ 0.05) plik_rd12_HM_v22b_TTTEEE: 2345.31 (Δ -0.19)

17.9 base_r_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022506	$0.02248^{+0.00029}_{-0.00028}$ (+1.6 σ)	σ_8	0.8085	$0.807^{+0.015}_{-0.015}$ (−0.4 σ)	$D_M(0.15)$	637.7	$637.5^{+9.4}_{-10}$ (−1.1 σ)
$\Omega_c h^2$	0.11860	$0.1185^{+0.0025}_{-0.0027}$ (−0.9 σ)	S_8	0.8170	$0.815^{+0.030}_{-0.033}$ (−0.9 σ)	$H(0.38)$	83.29	$83.29^{+0.76}_{-0.69}$ (+1.2 σ)
$100\theta_{MC}$	1.04111	$1.04110^{+0.00060}_{-0.00057}$ (+0.6 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4475	$0.446^{+0.016}_{-0.018}$ (−0.9 σ)	$D_M(0.38)$	1522.1	1522^{+19}_{-21} (−1.2 σ)
τ	0.0570	$0.056^{+0.016}_{-0.014}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6015	$0.600^{+0.016}_{-0.017}$ (−0.7 σ)	$H(0.51)$	89.96	$89.96^{+0.59}_{-0.55}$ (+1.3 σ)
$\ln(10^{10} A_s)$	3.0466	$3.045^{+0.032}_{-0.031}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9803	$0.979^{+0.023}_{-0.024}$ (−0.7 σ)	$D_M(0.51)$	1972.5	1972^{+22}_{-24} (−1.2 σ)
n_s	0.9699	$0.9695^{+0.0079}_{-0.0082}$ (+1.0 σ)	$r_{drag} h$	100.21	$100.3^{+2.2}_{-1.9}$ (+1.0 σ)	$H(0.61)$	95.540	$95.53^{+0.48}_{-0.44}$ (+1.4 σ)
r	0.001	< 0.122 (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.423	$2.420^{+0.057}_{-0.054}$ (−0.7 σ)	$D_M(0.61)$	2295.9	2296^{+24}_{-26} (−1.2 σ)
y_{cal}	1.00048	$1.0008^{+0.0047}_{-0.0046}$ (+0.1 σ)	z_{re}	7.90	$7.8^{+1.6}_{-1.5}$ (+0.4 σ)	$H(2.33)$	235.79	$235.7^{+1.5}_{-1.6}$ (−0.7 σ)
A_{217}^{CIB}	46.1	46^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.104	$2.100^{+0.068}_{-0.064}$ (+0.3 σ)	$D_M(2.33)$	5752.1	5753^{+20}_{-22} (−1.4 σ)
$\xi^{tSZ \times CIB}$	0.59	—	$10^9 A_s e^{-2\tau}$	1.8777	$1.877^{+0.023}_{-0.023}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4525	$0.451^{+0.015}_{-0.017}$ (−0.8 σ)
A_{143}^{tSZ}	7.16	$5.6^{+3.8}_{-3.8}$ (+0.2 σ)	D_{40}	1221.4	1238^{+34}_{-32} (−0.3 σ)	$\sigma_8(0.15)$	0.7476	$0.746^{+0.014}_{-0.013}$ (−0.2 σ)
A_{100}^{PS}	247	257^{+50}_{-60} (−0.2 σ)	D_{220}	5737	5738^{+73}_{-73} (+0.7 σ)	$f\sigma_8(0.38)$	0.4719	$0.471^{+0.013}_{-0.014}$ (−0.8 σ)
A_{143}^{PS}	48.3	45^{+20}_{-20} (−0.5 σ)	D_{810}	2540.3	2539^{+25}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6633	$0.662^{+0.012}_{-0.011}$ (−0.0 σ)
$A_{143 \times 217}^{PS}$	50.5	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.5	$818.9^{+8.9}_{-8.9}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4711	$0.470^{+0.011}_{-0.012}$ (−0.7 σ)
A_{217}^{PS}	120.6	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.83	$231.6^{+3.0}_{-2.9}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6210	$0.620^{+0.011}_{-0.010}$ (+0.1 σ)
A^{kSZ}	0.00	< 7.59 (−0.2 σ)	$n_{s,0.002}$	0.9699	$0.9695^{+0.0079}_{-0.0082}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4666	$0.466^{+0.010}_{-0.011}$ (−0.7 σ)
A_{100}^{dustTT}	8.87	$8.8^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.245447	$0.24544^{+0.00011}_{-0.00011}$ (+1.5 σ)	$\sigma_8(0.61)$	0.5910	$0.590^{+0.010}_{-0.0097}$ (+0.1 σ)
A_{143}^{dustTT}	10.99	$10.9^{+3.3}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246773	$0.24676^{+0.00011}_{-0.00011}$ (+1.5 σ)	$f\sigma_8(2.33)$	0.29819	$0.2978^{+0.0050}_{-0.0047}$ (+0.3 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.6^{+6.3}_{-6.7}$ (+0.1 σ)	$10^5 D/H$	2.561	$2.565^{+0.052}_{-0.052}$ (−1.6 σ)	$\sigma_8(2.33)$	0.3077	$0.3073^{+0.0052}_{-0.0048}$ (+0.5 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.7721	$13.774^{+0.044}_{-0.047}$ (−1.4 σ)	$r_{0.002}$	0.000	< 0.117 (+0.3 σ)
A_{100}^{dustTE}	0.112	$0.115^{+0.073}_{-0.077}$	z_*	1089.63	$1089.64^{+0.50}_{-0.50}$ (−1.5 σ)	$r_{0.01}$	0.000	< 0.119 (+0.2 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.057}_{-0.057}$	r_*	144.69	$144.74^{+0.58}_{-0.57}$ (+0.4 σ)	$\ln(10^{10} A_t)$	−4.52	$−0.5^{+1.8}_{-2.4}$ (+0.2 σ)
$A_{100 \times 217}^{dustTE}$	0.479	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04128	$1.04127^{+0.00059}_{-0.00057}$ (+0.5 σ)	r_{10}	0.0002	< 0.0602 (+0.2 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	13.895	$13.900^{+0.057}_{-0.054}$ (+0.4 σ)	$10^9 A_t$	0.001	< 0.255 (+0.2 σ)
$A_{143 \times 217}^{dustTE}$	0.663	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.16	$1060.09^{+0.57}_{-0.58}$ (+1.5 σ)	$10^9 A_t e^{-2\tau}$	0.001	< 0.229 (+0.2 σ)
A_{217}^{dustTE}	2.06	$2.06^{+0.52}_{-0.53}$	r_{drag}	147.31	$147.37^{+0.58}_{-0.57}$ (+0.2 σ)	χ_{simall}^2	396	1327 (ν : 480602.9) (+557.8 σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14074	$0.14066^{+0.00062}_{-0.00061}$ (+0.4 σ)	χ_{lowl}^2	22.59	24.2 (ν : 1.2) (−0.4 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160647	$0.16068^{+0.00033}_{-0.00032}$ (−1.5 σ)	χ_{plik}^2	2346	1431 (ν : 480721.2) (+122.2 σ)
H_0	68.02	$68.0^{+1.2}_{-1.1}$ (+1.1 σ)	z_{eq}	3372	3368^{+57}_{-61} (−0.8 σ)	$\chi_{H073p45}^2$	10.68	10.7 (ν : 2.5)
Ω_Λ	0.6937	$0.694^{+0.016}_{-0.015}$ (+1.0 σ)	k_{eq}	0.010291	$0.01028^{+0.00017}_{-0.00018}$ (−0.8 σ)	χ_{prior}^2	1.7	11.5 (ν : 10.3) (+1.1 σ)
Ω_m	0.3063	$0.306^{+0.015}_{-0.016}$ (−1.0 σ)	$100\theta_{eq}$	0.8193	$0.820^{+0.012}_{-0.011}$ (+0.9 σ)	χ_{CMB}^2	2765.6	2782.9 (ν : 19.8) (+281.1 σ)
$\Omega_m h^2$	0.14175	$0.1416^{+0.0024}_{-0.0025}$ (−0.8 σ)	$100\theta_{s,eq}$	0.4524	$0.4527^{+0.0060}_{-0.0055}$ (+0.8 σ)			
$\Omega_m h^3$	0.09642	$0.09635^{+0.00060}_{-0.00057}$ (+1.1 σ)	$H(0.15)$	73.26	$73.3^{+1.1}_{-0.95}$ (+1.2 σ)			

Best-fit $\chi_{eff}^2 = 2777.94$; $\Delta\chi_{eff}^2 = 0.01$; $\bar{\chi}_{eff}^2 = 2805.11$; $\Delta\bar{\chi}_{eff}^2 = 0.94$; $R - 1 = 0.02628$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.48 (Δ 0.01) commander_dx12_v3_2_29: 22.59 (Δ 0.05) plik_rd12_HM_v22b_TTTEEE: 2346.48 (Δ -0.28) Hubble - H073p45: 10.68 (Δ 0.10)

17.10 base_r_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02236^{+0.00028}_{-0.00029} \quad (+1.1\sigma)$	σ_8	$0.812^{+0.014}_{-0.013} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+10}_{-10} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0027}_{-0.0027} \quad (-0.2\sigma)$	S_8	$0.832^{+0.032}_{-0.031} \quad (-0.1\sigma)$	$H(0.38)$	$82.86^{+0.73}_{-0.72} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00060}_{-0.00059} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.017}_{-0.017} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+20}_{-20} \quad (-0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$H(0.51)$	$89.62^{+0.58}_{-0.57} \quad (+0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.026} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.023}_{-0.022} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+24}_{-23} \quad (-0.4\sigma)$
n_{s}	$0.9659^{+0.0085}_{-0.0087} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.1^{+2.1}_{-2.0} \quad (+0.2\sigma)$	$H(0.61)$	$95.27^{+0.47}_{-0.46} \quad (+0.6\sigma)$
r	$< 0.114 \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.445^{+0.054}_{-0.053} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+25}_{-25} \quad (-0.4\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 8.94 \quad (+0.3\sigma)$	$H(2.33)$	$236.5^{+1.6}_{-1.6} \quad (+0.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.060}_{-0.054} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+21}_{-21} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.883^{+0.023}_{-0.022} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.016}_{-0.016} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1244^{+33}_{-31} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.012}_{-0.011} \quad (+0.2\sigma)$
A_{100}^{PS}	$258^{+60}_{-50} \quad (-0.2\sigma)$	D_{220}	$5730^{+74}_{-73} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.013}_{-0.013} \quad (-0.1\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (-0.4\sigma)$	D_{810}	$2540^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.010}_{-0.0095} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.8^{+9.1}_{-9.0} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.0} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0092}_{-0.0087} \quad (+0.3\sigma)$
A^{kSZ}	$< 7.90 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9659^{+0.0085}_{-0.0087} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.010}_{-0.010} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.24539^{+0.00011}_{-0.00012} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.5913^{+0.0087}_{-0.0081} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0043}_{-0.0040} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.587^{+0.055}_{-0.051} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0045}_{-0.0041} \quad (+0.5\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.798^{+0.047}_{-0.047} \quad (-0.8\sigma)$	$r_{0.002}$	$< 0.107 \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.075}_{-0.074}$	z_*	$1089.93^{+0.55}_{-0.53} \quad (-0.8\sigma)$	$r_{0.01}$	$< 0.110 \quad (+0.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.059}_{-0.058}$	r_*	$144.44^{+0.60}_{-0.60} \quad (-0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.6^{+1.8}_{-2.4} \quad (+0.1\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	$1.04110^{+0.00059}_{-0.00058} \quad (+0.2\sigma)$	r_{10}	$< 0.0550 \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.874^{+0.055}_{-0.056} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.238 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.15}$	z_{drag}	$1059.92^{+0.58}_{-0.60} \quad (+1.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.214 \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.52}$	r_{drag}	$147.10^{+0.59}_{-0.59} \quad (-0.4\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14085^{+0.00063}_{-0.00063} \quad (+0.7\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16077^{+0.00034}_{-0.00033} \quad (-1.2\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.5} \quad (-0.6\sigma)$
H_0	$67.4^{+1.2}_{-1.2} \quad (+0.4\sigma)$	z_{eq}	$3402^{+61}_{-60} \quad (-0.0\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.8) \quad (+0.0\sigma)$
Ω_{Λ}	$0.685^{+0.016}_{-0.017} \quad (+0.3\sigma)$	k_{eq}	$0.01038^{+0.00019}_{-0.00018} \quad (-0.0\sigma)$	χ_{lowl}^2	$24.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{m}	$0.315^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.011}_{-0.011} \quad (+0.1\sigma)$	χ_{plik}^2	$2359.4 \quad (\nu: 16.6) \quad (+294.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1430^{+0.0026}_{-0.0025} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4494^{+0.0058}_{-0.0058} \quad (+0.1\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09631^{+0.00058}_{-0.00057} \quad (+1.0\sigma)$	$H(0.15)$	$72.7^{+1.0}_{-1.0} \quad (+0.4\sigma)$	χ_{CMB}^2	$2781.4 \quad (\nu: 17.7) \quad (+280.8\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2792.94; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.40; R - 1 = 0.01114$$

17.11 base_r_plikHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02242^{+0.00026}_{-0.00026} \quad (+1.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+18}_{-17} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1192^{+0.0020}_{-0.0020} \quad (-0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.61)$	$95.40^{+0.36}_{-0.37} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04101^{+0.00057}_{-0.00056} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.019}_{-0.018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+19}_{-18} \quad (-0.8\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.5}_{-1.5} \quad (+0.6\sigma)$	$H(2.33)$	$236.1^{+1.2}_{-1.2} \quad (-0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.029}_{-0.027} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.047}_{-0.044} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5759^{+17}_{-17} \quad (-1.1\sigma)$
n_{s}	$0.9678^{+0.0072}_{-0.0073} \quad (+0.7\sigma)$	z_{re}	$< 9.03 \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.012} \quad (-0.5\sigma)$
r	$< 0.119 \quad (+0.2\sigma)$	10^9A_{s}	$2.103^{+0.061}_{-0.056} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.012}_{-0.011} \quad (+0.0\sigma)$
y_{cal}	$1.0008^{+0.0047}_{-0.0047} \quad (+0.1\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	D_{40}	$1241^{+32}_{-30} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.010}_{-0.0095} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{220}	$5733^{+73}_{-71} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.4731^{+0.0097}_{-0.0093} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{810}	$2540^{+25}_{-25} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0094}_{-0.0087} \quad (+0.2\sigma)$
A_{100}^{PS}	$258^{+60}_{-50} \quad (-0.2\sigma)$	D_{1420}	$818.3^{+9.1}_{-8.8} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4682^{+0.0091}_{-0.0085} \quad (-0.3\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.5\sigma)$	D_{2000}	$231.3^{+3.0}_{-2.9} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.5909^{+0.0089}_{-0.0083} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9678^{+0.0072}_{-0.0073} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0045}_{-0.0041} \quad (+0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.245412^{+0.000095}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0046}_{-0.0042} \quad (+0.5\sigma)$
A^{kSZ}	$< 7.83 \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246738^{+0.000095}_{-0.00011} \quad (+1.3\sigma)$	$r_{0.002}$	$< 0.113 \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.577^{+0.049}_{-0.046} \quad (-1.3\sigma)$	$r_{0.01}$	$< 0.116 \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.787^{+0.039}_{-0.039} \quad (-1.1\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.5^{+1.8}_{-2.4} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.8} \quad (+0.1\sigma)$	z_*	$1089.79^{+0.43}_{-0.42} \quad (-1.2\sigma)$	r_{10}	$< 0.0580 \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.60^{+0.46}_{-0.46} \quad (+0.1\sigma)$	10^9A_{t}	$< 0.249 \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.116^{+0.074}_{-0.074}$	$100\theta_*$	$1.04119^{+0.00056}_{-0.00055} \quad (+0.4\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.223 \quad (+0.2\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.136^{+0.057}_{-0.057}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.045}_{-0.045} \quad (+0.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.16}$	z_{drag}	$1059.99^{+0.56}_{-0.55} \quad (+1.3\sigma)$	$f_{2000}^{143 \times 217}$	$31.8^{+3.5}_{-3.5} \quad (-0.8\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.11}_{-0.11}$	r_{drag}	$147.25^{+0.48}_{-0.48} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.8^{+3.5}_{-3.4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	k_{D}	$0.14073^{+0.00056}_{-0.00059} \quad (+0.5\sigma)$	χ_{small}^2	$1323 \quad (\nu: 479776.2) \quad (+554.9\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00033}_{-0.00032} \quad (-1.3\sigma)$	χ_{lowl}^2	$24.5 \quad (\nu: 1.2) \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	$3384^{+45}_{-44} \quad (-0.4\sigma)$	χ_{plik}^2	$1434 \quad (\nu: 479709.9) \quad (+122.8\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{eq}	$0.01033^{+0.00014}_{-0.00013} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
H_0	$67.70^{+0.85}_{-0.88} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8168^{+0.0085}_{-0.0084} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.30 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4512^{+0.0043}_{-0.0043} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.9)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$H(0.15)$	$72.98^{+0.74}_{-0.75} \quad (+0.8\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1423^{+0.0019}_{-0.0018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.4^{+7.5}_{-7.2} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}}h^3$	$0.09631^{+0.00058}_{-0.00057} \quad (+1.0\sigma)$	$H(0.38)$	$83.07^{+0.54}_{-0.55} \quad (+0.8\sigma)$	χ_{CMB}^2	$2781.4 \quad (\nu: 17.2) \quad (+280.8\sigma)$
σ_8	$0.810^{+0.014}_{-0.012} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+15}_{-15} \quad (-0.8\sigma)$		
S_8	$0.824^{+0.025}_{-0.024} \quad (-0.5\sigma)$	$H(0.51)$	$89.78^{+0.43}_{-0.44} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.95; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.23; R - 1 = 0.02065$$

17.12 base_r_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02249^{+0.00027}_{-0.00028} \quad (+1.6\sigma)$	S_8	$0.815^{+0.030}_{-0.032} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+19}_{-20} \quad (-1.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1185^{+0.0025}_{-0.0027} \quad (-0.9\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.016}_{-0.018} \quad (-0.8\sigma)$	$H(0.51)$	$89.96^{+0.59}_{-0.54} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04110^{+0.00059}_{-0.00057} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.016}_{-0.017} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+22}_{-23} \quad (-1.2\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.022}_{-0.024} \quad (-0.7\sigma)$	$H(0.61)$	$95.54^{+0.46}_{-0.44} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.029}_{-0.028} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$100.3^{+2.2}_{-1.9} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+24}_{-25} \quad (-1.2\sigma)$
n_{s}	$0.9696^{+0.0079}_{-0.0082} \quad (+1.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.053}_{-0.053} \quad (-0.6\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.6} \quad (-0.7\sigma)$
r	$< 0.123 \quad (+0.2\sigma)$	z_{re}	$< 9.17 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+20}_{-22} \quad (-1.4\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0046} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.062}_{-0.058} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.015}_{-0.017} \quad (-0.8\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{40}	$1238^{+34}_{-32} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.013}_{-0.014} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.6^{+3.9}_{-3.8} \quad (+0.2\sigma)$	D_{220}	$5738^{+73}_{-73} \quad (+0.7\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.010} \quad (+0.0\sigma)$
A_{100}^{PS}	$257^{+50}_{-60} \quad (-0.2\sigma)$	D_{810}	$2539^{+25}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.011}_{-0.012} \quad (-0.7\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.5\sigma)$	D_{1420}	$818.9^{+8.9}_{-8.9} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0098}_{-0.0094} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{2000}	$231.6^{+3.0}_{-2.9} \quad (+1.0\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.010}_{-0.011} \quad (-0.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9696^{+0.0079}_{-0.0082} \quad (+1.0\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0092}_{-0.0088} \quad (+0.2\sigma)$
A^{kSZ}	$< 7.53 \quad (-0.2\sigma)$	Y_{P}	$0.24544^{+0.00010}_{-0.00011} \quad (+1.5\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0045}_{-0.0043} \quad (+0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.8^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24676^{+0.00010}_{-0.00011} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0047}_{-0.0044} \quad (+0.6\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.3}_{-3.4} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.565^{+0.051}_{-0.049} \quad (-1.6\sigma)$	$r_{0.002}$	$< 0.118 \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.3}_{-6.7} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.774^{+0.044}_{-0.046} \quad (-1.4\sigma)$	$r_{0.01}$	$< 0.120 \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.64^{+0.50}_{-0.49} \quad (-1.5\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.5^{+1.8}_{-2.4} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.073}_{-0.077}$	r_*	$144.75^{+0.59}_{-0.57} \quad (+0.4\sigma)$	r_{10}	$< 0.0606 \quad (+0.2\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.057}$	$100\theta_*$	$1.04127^{+0.00059}_{-0.00057} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.258 \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.056}_{-0.054} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.231 \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1060.09^{+0.57}_{-0.58} \quad (+1.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.8\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.37^{+0.58}_{-0.57} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$31.6^{+3.4}_{-3.5} \quad (-0.9\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.06^{+0.52}_{-0.53}$	k_{D}	$0.14065^{+0.00062}_{-0.00061} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.5^{+3.6}_{-3.3} \quad (-0.8\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16068^{+0.00033}_{-0.00032} \quad (-1.5\sigma)$	χ_{small}^2	$1329 \quad (\nu: 480628.4) \quad (+558.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3368^{+57}_{-62} \quad (-0.8\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 1.2) \quad (-0.4\sigma)$
H_0	$68.1^{+1.2}_{-1.1} \quad (+1.1\sigma)$	k_{eq}	$0.01028^{+0.00017}_{-0.00019} \quad (-0.8\sigma)$	χ_{plik}^2	$1430 \quad (\nu: 480704.3) \quad (+121.9\sigma)$
Ω_{Λ}	$0.694^{+0.016}_{-0.015} \quad (+1.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.012}_{-0.011} \quad (+0.9\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.7 \quad (\nu: 2.5)$
Ω_{m}	$0.306^{+0.015}_{-0.016} \quad (-1.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4528^{+0.0060}_{-0.0055} \quad (+0.8\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1416^{+0.0024}_{-0.0026} \quad (-0.8\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-0.95} \quad (+1.2\sigma)$	χ_{CMB}^2	$2782.7 \quad (\nu: 19.4) \quad (+281.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09635^{+0.00060}_{-0.00057} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$637.4^{+9.4}_{-9.9} \quad (-1.1\sigma)$		
σ_8	$0.808^{+0.015}_{-0.014} \quad (-0.3\sigma)$	$H(0.38)$	$83.30^{+0.75}_{-0.69} \quad (+1.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2804.92; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.03; R - 1 = 0.02655$$

17.13 base_r_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022148	$0.02214^{+0.00045}_{-0.00043}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9893	$0.989^{+0.032}_{-0.032}$ (−0.1 σ)	$H(0.51)$	89.44	$89.43^{+0.92}_{-0.87}$ (+0.1 σ)
$\Omega_c h^2$	0.12010	$0.1201^{+0.0042}_{-0.0042}$ (−0.1 σ)	$r_{\text{drag}} h$	98.89	$98.9^{+3.3}_{-3.2}$ (+0.1 σ)	$D_{\text{M}}(0.51)$	1991.4	1992^{+37}_{-37} (−0.1 σ)
$100\theta_{\text{MC}}$	1.04090	$1.04087^{+0.00093}_{-0.00094}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.443	$2.440^{+0.077}_{-0.076}$ (−0.2 σ)	$H(0.61)$	95.09	$95.09^{+0.74}_{-0.69}$ (+0.1 σ)
τ	0.0527	$0.052^{+0.016}_{-0.016}$ (+0.0 σ)	z_{re}	7.56	$7.5^{+1.6}_{-1.7}$ (+0.0 σ)	$D_{\text{M}}(0.61)$	2316.5	2317^{+40}_{-40} (−0.1 σ)
$\ln(10^{10} A_{\text{s}})$	3.0397	$3.038^{+0.032}_{-0.032}$ (−0.1 σ)	$10^9 A_{\text{s}}$	2.090	$2.086^{+0.068}_{-0.066}$ (−0.1 σ)	$H(2.33)$	236.40	$236.4^{+2.6}_{-2.5}$ (−0.1 σ)
n_{s}	0.9648	$0.965^{+0.012}_{-0.012}$ (+0.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8810	$1.880^{+0.027}_{-0.027}$ (−0.3 σ)	$D_{\text{M}}(2.33)$	5773.7	5774^{+32}_{-33} (−0.1 σ)
r	0.000	< 0.113 (+0.1 σ)	D_{40}	1227.6	1240^{+38}_{-34} (−0.2 σ)	$f\sigma_8(0.15)$	0.4606	$0.460^{+0.025}_{-0.024}$ (−0.1 σ)
y_{cal}	1.00069	$1.0005^{+0.0049}_{-0.0049}$ (−0.0 σ)	D_{220}	5706	5700^{+83}_{-81} (−0.3 σ)	$\sigma_8(0.15)$	0.7484	$0.748^{+0.015}_{-0.015}$ (−0.1 σ)
A_{100}^{PS}	239.9	242^{+50}_{-50} (−0.7 σ)	D_{810}	2535.5	2534^{+27}_{-27} (−0.2 σ)	$f\sigma_8(0.38)$	0.4776	$0.477^{+0.019}_{-0.019}$ (−0.1 σ)
A_{143}^{PS}	44.7	41^{+20}_{-20} (−1.0 σ)	D_{1420}	815.0	815^{+10}_{-10} (−0.1 σ)	$\sigma_8(0.38)$	0.6628	$0.662^{+0.012}_{-0.012}$ (−0.1 σ)
A_{217}^{PS}	101.0	102^{+30}_{-30} (−1.4 σ)	D_{2000}	229.80	$229.7^{+3.6}_{-3.6}$ (−0.0 σ)	$f\sigma_8(0.51)$	0.4756	$0.475^{+0.016}_{-0.017}$ (−0.1 σ)
A_{217}^{CIB}	43.6	41^{+10}_{-10} (−1.1 σ)	$n_{\text{s},0.002}$	0.9648	$0.965^{+0.012}_{-0.012}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6200	$0.619^{+0.011}_{-0.011}$ (−0.1 σ)
A_{143}^{tSZ}	5.20	< 7.42 (−0.7 σ)	Y_{P}	0.245304	$0.24530^{+0.00018}_{-0.00021}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4702	$0.470^{+0.014}_{-0.015}$ (−0.1 σ)
$r_{143 \times 217}^{\text{PS}}$	0.633	$0.65^{+0.25}_{-0.25}$	$Y_{\text{P}}^{\text{BBN}}$	0.246630	$0.24662^{+0.00018}_{-0.00021}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5898	$0.589^{+0.010}_{-0.010}$ (−0.1 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.79	—	$10^5 \text{D}/\text{H}$	2.628	$2.629^{+0.084}_{-0.083}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.29717	$0.2968^{+0.0050}_{-0.0049}$ (−0.0 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.41	—	Age/Gyr	13.821	$13.822^{+0.073}_{-0.074}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3061	$0.3058^{+0.0053}_{-0.0051}$ (−0.0 σ)
A^{kSZ}	2.2	—	z_*	1090.21	$1090.22^{+0.82}_{-0.82}$ (−0.1 σ)	$r_{0.002}$	0.000	< 0.106 (+0.1 σ)
A_{100}^{dust}	1.011	$1.01^{+0.38}_{-0.38}$	r_*	144.57	$144.57^{+0.95}_{-0.96}$ (+0.1 σ)	$r_{0.01}$	0.000	< 0.110 (+0.1 σ)
A_{143}^{dust}	0.987	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	1.04110	$1.04108^{+0.00092}_{-0.00093}$ (+0.1 σ)	$\ln(10^{10} A_{\text{t}})$	−7.90	$−0.7^{+1.9}_{-2.5}$ (+0.0 σ)
A_{217}^{dust}	0.969	$0.97^{+0.20}_{-0.20}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.887	$13.887^{+0.088}_{-0.088}$ (+0.1 σ)	r_{10}	0.0000	< 0.0549 (+0.1 σ)
$A_{143 \times 217}^{\text{dust}}$	0.998	$1.03^{+0.32}_{-0.32}$	z_{drag}	1059.44	$1059.41^{+0.90}_{-0.89}$ (+0.1 σ)	$10^9 A_{\text{t}}$	0.000	< 0.236 (+0.1 σ)
c_{100}	0.99756	$0.9974^{+0.0021}_{-0.0021}$ (−3.5 σ)	r_{drag}	147.31	$147.31^{+0.95}_{-0.96}$ (+0.1 σ)	$10^9 A_{\text{t}} e^{-2\tau}$	0.000	< 0.212 (+0.1 σ)
c_{217}	1.00143	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	k_{D}	0.14046	$0.1405^{+0.0010}_{-0.0010}$ (−0.0 σ)	f_{2000}^{143}	31.1	31^{+6}_{-6} (−0.1 σ)
H_0	67.13	$67.1^{+1.9}_{-1.8}$ (+0.1 σ)	$100\theta_{\text{D}}$	0.16106	$0.16107^{+0.00053}_{-0.00053}$ (−0.0 σ)	f_{2000}^{217}	107.56	$107.5^{+4.0}_{-4.0}$ (−0.3 σ)
Ω_{Λ}	0.6829	$0.682^{+0.025}_{-0.027}$ (+0.1 σ)	z_{eq}	3399	3400^{+96}_{-95} (−0.1 σ)	$f_{2000}^{143 \times 217}$	32.96	33^{+4}_{-4} (−0.3 σ)
Ω_{m}	0.3171	$0.318^{+0.027}_{-0.025}$ (−0.1 σ)	k_{eq}	0.010375	$0.01038^{+0.00029}_{-0.00029}$ (−0.1 σ)	χ_{simall}^2	395.88	$397.1 (\nu: 1.3)$ (−0.0 σ)
$\Omega_{\text{m}} h^2$	0.14289	$0.1429^{+0.0040}_{-0.0040}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8132	$0.813^{+0.018}_{-0.018}$ (+0.1 σ)	χ_{lowl}^2	23.22	$24.7 (\nu: 1.6)$ (−0.2 σ)
$\Omega_{\text{m}} h^3$	0.09592	$0.09590^{+0.00090}_{-0.00089}$ (+0.1 σ)	$100\theta_{\text{s,eq}}$	0.4495	$0.4495^{+0.0093}_{-0.0091}$ (+0.1 σ)	χ_{CamSpec}^2	7050.5	$7063.7 (\nu: 15.1)$
σ_8	0.8105	$0.810^{+0.018}_{-0.018}$ (−0.1 σ)	$H(0.15)$	72.46	$72.5^{+1.6}_{-1.6}$ (+0.1 σ)	χ_{prior}^2	2.2	$7.6 (\nu: 6.0)$ (+0.1 σ)
S_8	0.8333	$0.833^{+0.049}_{-0.047}$ (−0.1 σ)	$D_{\text{M}}(0.15)$	645.4	646^{+16}_{-16} (−0.1 σ)	χ_{CMB}^2	7469.6	$7485.5 (\nu: 16.4)$ (+1112.9 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4564	$0.456^{+0.027}_{-0.026}$ (−0.1 σ)	$H(0.38)$	82.67	$82.7^{+1.2}_{-1.1}$ (+0.1 σ)			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6082	$0.608^{+0.024}_{-0.023}$ (−0.1 σ)	$D_{\text{M}}(0.38)$	1538.0	1538^{+32}_{-32} (−0.1 σ)			

Best-fit $\chi_{\text{eff}}^2 = 7471.85$; $\Delta\chi_{\text{eff}}^2 = 0.12$; $\bar{\chi}_{\text{eff}}^2 = 7493.09$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.55$; $R - 1 = 0.00732$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 (Δ 0.05) commander_dx12_v3.2.29: 23.22 (Δ -0.18) CamSpec like_10.7HM: 7050.52 (Δ 0.19)

17.14 base_r_CamSpecHM_TT_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00039}_{-0.00039} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.8} \quad (+0.8\sigma)$	$H(0.61)$	$95.30^{+0.50}_{-0.48} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1188^{+0.0024}_{-0.0024} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.419^{+0.055}_{-0.054} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+23}_{-24} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04105^{+0.00082}_{-0.00082} \quad (+0.5\sigma)$	z_{re}	$7.6^{+1.6}_{-1.6} \quad (+0.1\sigma)$	$H(2.33)$	$235.6^{+1.6}_{-1.5} \quad (-0.7\sigma)$
τ	$0.053^{+0.016}_{-0.015} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.085^{+0.069}_{-0.066} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+24}_{-24} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.037^{+0.033}_{-0.032} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.015}_{-0.015} \quad (-0.7\sigma)$
n_{s}	$0.9682^{+0.0086}_{-0.0085} \quad (+0.8\sigma)$	D_{40}	$1235^{+34}_{-33} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.014}_{-0.013} \quad (-0.4\sigma)$
r	$< 0.118 \quad (+0.1\sigma)$	D_{220}	$5704^{+81}_{-80} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.013} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.012}_{-0.011} \quad (-0.3\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.012}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{2000}	$229.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.9682^{+0.0086}_{-0.0085} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.010}_{-0.0098} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.7\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0052}_{-0.0049} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.615^{+0.074}_{-0.072} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0053}_{-0.0051} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Age/Gyr	$13.804^{+0.055}_{-0.055} \quad (-0.6\sigma)$	$r_{0.002}$	$< 0.112 \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_*	$1090.01^{+0.58}_{-0.58} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.115 \quad (+0.1\sigma)$
A^{kSZ}	—	r_*	$144.86^{+0.63}_{-0.63} \quad (+0.7\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.6^{+1.9}_{-2.5} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$100\theta_*$	$1.04125^{+0.00081}_{-0.00081} \quad (+0.5\sigma)$	r_{10}	$< 0.0580 \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.35}_{-0.34}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.912^{+0.061}_{-0.061} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.246 \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_{drag}	$1059.50^{+0.89}_{-0.86} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.221 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	r_{drag}	$147.58^{+0.68}_{-0.68} \quad (+0.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	k_{D}	$0.14023^{+0.00088}_{-0.00086} \quad (-0.5\sigma)$	f_{2000}^{217}	$107.3^{+3.9}_{-3.9} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00051}_{-0.00051} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.7\sigma)$	z_{eq}	$3370^{+56}_{-56} \quad (-0.7\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.5) \quad (+0.0\sigma)$
Ω_{Λ}	$0.691^{+0.014}_{-0.015} \quad (+0.8\sigma)$	k_{eq}	$0.01028^{+0.00017}_{-0.00017} \quad (-0.7\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 1.3) \quad (-0.5\sigma)$
Ω_{m}	$0.309^{+0.015}_{-0.014} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.011}_{-0.010} \quad (+0.7\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.2 \quad (\nu: 14.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1417^{+0.0024}_{-0.0023} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4524^{+0.0054}_{-0.0053} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.051 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.09590^{+0.00091}_{-0.00088} \quad (+0.0\sigma)$	$H(0.15)$	$72.95^{+0.94}_{-0.92} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.44 \quad (\nu: 0.1)$
σ_8	$0.806^{+0.015}_{-0.015} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.6^{+9.2}_{-9.1} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.1)$
S_8	$0.818^{+0.030}_{-0.029} \quad (-0.7\sigma)$	$H(0.38)$	$83.01^{+0.71}_{-0.69} \quad (+0.7\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+19}_{-19} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.016}_{-0.015} \quad (-0.7\sigma)$	$H(0.51)$	$89.70^{+0.58}_{-0.56} \quad (+0.7\sigma)$	χ_{CMB}^2	$7485.4 \quad (\nu: 15.8) \quad (+1112.9\sigma)$
$\sigma_8/h^{0.5}$	$0.980^{+0.023}_{-0.022} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+22}_{-22} \quad (-0.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7499.09$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.54$; $R - 1 = 0.01122$

17.15 base_r_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02215^{+0.00044}_{-0.00043} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.032}_{-0.031} \quad (-0.1\sigma)$	$H(0.51)$	$89.45^{+0.92}_{-0.86} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1200^{+0.0042}_{-0.0042} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.9^{+3.3}_{-3.2} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1991^{+37}_{-37} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00093}_{-0.00094} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.442^{+0.076}_{-0.074} \quad (-0.1\sigma)$	$H(0.61)$	$95.11^{+0.73}_{-0.69} \quad (+0.2\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	z_{re}	$< 8.82 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2316^{+39}_{-40} \quad (-0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.059}_{-0.054} \quad (+0.1\sigma)$	$H(2.33)$	$236.4^{+2.6}_{-2.5} \quad (-0.1\sigma)$
n_{s}	$0.965^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.028}_{-0.027} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5773^{+32}_{-33} \quad (-0.2\sigma)$
r	$< 0.112 \quad (+0.0\sigma)$	D_{40}	$1240^{+38}_{-34} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.024}_{-0.024} \quad (-0.1\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	D_{220}	$5700^{+83}_{-81} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.014} \quad (+0.0\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.019}_{-0.019} \quad (-0.1\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.010} \quad (+0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$229.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.016}_{-0.016} \quad (-0.1\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.010}_{-0.0091} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.7\sigma)$	Y_{P}	$0.24530^{+0.00018}_{-0.00020} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.014}_{-0.014} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00018}_{-0.00020} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0090}_{-0.0087} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.628^{+0.083}_{-0.082} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0044}_{-0.0041} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.821^{+0.072}_{-0.074} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0045}_{-0.0042} \quad (+0.2\sigma)$
A^{kSZ}	—	z_*	$1090.21^{+0.80}_{-0.81} \quad (-0.1\sigma)$	$r_{0.002}$	$< 0.105 \quad (+0.1\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	r_*	$144.59^{+0.95}_{-0.96} \quad (+0.1\sigma)$	$r_{0.01}$	$< 0.109 \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	$1.04109^{+0.00091}_{-0.00093} \quad (+0.1\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.7^{+1.9}_{-2.5} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.088}_{-0.088} \quad (+0.1\sigma)$	r_{10}	$< 0.0544 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{drag}	$1059.43^{+0.93}_{-0.91} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.234 \quad (+0.1\sigma)$
c_{100}	$0.9974^{+0.0021}_{-0.0020} \quad (-3.5\sigma)$	r_{drag}	$147.33^{+0.95}_{-0.96} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.210 \quad (+0.0\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	k_{D}	$0.1404^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
H_0	$67.2^{+1.9}_{-1.8} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16106^{+0.00052}_{-0.00053} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.4^{+4.0}_{-4.0} \quad (-0.3\sigma)$
Ω_{Λ}	$0.683^{+0.025}_{-0.027} \quad (+0.1\sigma)$	z_{eq}	$3398^{+96}_{-95} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
Ω_{m}	$0.317^{+0.027}_{-0.025} \quad (-0.1\sigma)$	k_{eq}	$0.01037^{+0.00029}_{-0.00029} \quad (-0.1\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.3) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1428^{+0.0040}_{-0.0040} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.018}_{-0.018} \quad (+0.1\sigma)$	χ_{lowl}^2	$24.6 \quad (\nu: 1.6) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09590^{+0.00090}_{-0.00088} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4497^{+0.0093}_{-0.0091} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.6 \quad (\nu: 15.0)$
σ_8	$0.811^{+0.017}_{-0.017} \quad (+0.0\sigma)$	$H(0.15)$	$72.5^{+1.6}_{-1.6} \quad (+0.2\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.833^{+0.049}_{-0.048} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+16}_{-16} \quad (-0.2\sigma)$	χ_{CMB}^2	$7485.2 \quad (\nu: 15.8) \quad (+1112.9\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.027}_{-0.026} \quad (-0.1\sigma)$	$H(0.38)$	$82.7^{+1.2}_{-1.1} \quad (+0.2\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1538^{+32}_{-32} \quad (-0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7492.76; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.50; R - 1 = 0.00713$$

17.16 base_r_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00039}_{-0.00038} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.9^{+1.9}_{-1.8} \quad (+0.8\sigma)$	$H(0.61)$	$95.30^{+0.50}_{-0.47} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1188^{+0.0024}_{-0.0024} \quad (-0.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.054}_{-0.050} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+23}_{-24} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04105^{+0.00082}_{-0.00082} \quad (+0.5\sigma)$	z_{re}	$< 8.91 \quad (+0.3\sigma)$	$H(2.33)$	$235.6^{+1.6}_{-1.5} \quad (-0.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.090^{+0.060}_{-0.055} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+24}_{-24} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.029}_{-0.027} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.873^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.015}_{-0.015} \quad (-0.7\sigma)$
n_{s}	$0.9683^{+0.0086}_{-0.0085} \quad (+0.8\sigma)$	D_{40}	$1234^{+34}_{-32} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.012}_{-0.012} \quad (-0.3\sigma)$
r	$< 0.118 \quad (+0.1\sigma)$	D_{220}	$5704^{+81}_{-80} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.012} \quad (-0.6\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.010}_{-0.0099} \quad (-0.2\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{1420}	$815^{+10}_{-9.9} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{2000}	$230.0^{+3.7}_{-3.5} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6192^{+0.0096}_{-0.0091} \quad (-0.1\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.9683^{+0.0086}_{-0.0085} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.010}_{-0.0099} \quad (-0.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00016} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5892^{+0.0091}_{-0.0085} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.7\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0045}_{-0.0042} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.614^{+0.074}_{-0.072} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0047}_{-0.0043} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Age/Gyr	$13.803^{+0.055}_{-0.055} \quad (-0.6\sigma)$	$r_{0.002}$	$< 0.111 \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_*	$1090.00^{+0.58}_{-0.59} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.114 \quad (+0.1\sigma)$
A^{kSZ}	—	r_*	$144.86^{+0.63}_{-0.63} \quad (+0.7\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.6^{+1.9}_{-2.5} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$100\theta_*$	$1.04125^{+0.00081}_{-0.00081} \quad (+0.5\sigma)$	r_{10}	$< 0.0575 \quad (+0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.35}_{-0.34}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.912^{+0.061}_{-0.061} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.245 \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_{drag}	$1059.50^{+0.89}_{-0.87} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.220 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_{drag}	$147.58^{+0.68}_{-0.68} \quad (+0.6\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	k_{D}	$0.14023^{+0.00088}_{-0.00086} \quad (-0.5\sigma)$	f_{2000}^{217}	$107.2^{+4.0}_{-3.9} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00051}_{-0.00051} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
H_0	$67.7^{+1.1}_{-1.1} \quad (+0.8\sigma)$	z_{eq}	$3369^{+56}_{-56} \quad (-0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.5) \quad (-0.0\sigma)$
Ω_{Λ}	$0.691^{+0.014}_{-0.015} \quad (+0.8\sigma)$	k_{eq}	$0.01028^{+0.00017}_{-0.00017} \quad (-0.7\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 1.3) \quad (-0.5\sigma)$
Ω_{m}	$0.309^{+0.015}_{-0.014} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.819^{+0.011}_{-0.010} \quad (+0.7\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.0 \quad (\nu: 14.7)$
$\Omega_{\mathrm{m}} h^2$	$0.1416^{+0.0023}_{-0.0023} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4524^{+0.0055}_{-0.0053} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.050 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.09590^{+0.00091}_{-0.00088} \quad (+0.1\sigma)$	$H(0.15)$	$72.96^{+0.94}_{-0.92} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.44 \quad (\nu: 0.1)$
σ_8	$0.807^{+0.015}_{-0.013} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.5^{+9.2}_{-9.1} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 1.1)$
S_8	$0.819^{+0.029}_{-0.029} \quad (-0.7\sigma)$	$H(0.38)$	$83.02^{+0.71}_{-0.68} \quad (+0.7\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+18}_{-19} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.016}_{-0.015} \quad (-0.6\sigma)$	$H(0.51)$	$89.71^{+0.58}_{-0.56} \quad (+0.7\sigma)$	χ_{CMB}^2	$7485.2 \quad (\nu: 15.5) \quad (+1112.9\sigma)$
$\sigma_8/h^{0.5}$	$0.981^{+0.022}_{-0.021} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+22}_{-22} \quad (-0.8\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7498.81$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.50$; $R - 1 = 0.01239$

17.17 base_r_CamSpecHM_TTTEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022286	$0.02230^{+0.00033}_{-0.00032}$ (+0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4524	$0.451^{+0.018}_{-0.018}$ (−0.5 σ)	$H(0.38)$	82.86	$82.93^{+0.79}_{-0.75}$ (+0.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.11958	$0.1193^{+0.0028}_{-0.0028}$ (−0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6046	$0.603^{+0.017}_{-0.017}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1532.8	1531^{+21}_{-22} (−0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04088	$1.04090^{+0.00063}_{-0.00064}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9839	$0.982^{+0.024}_{-0.024}$ (−0.5 σ)	$H(0.51)$	89.60	$89.65^{+0.63}_{-0.60}$ (+0.6 σ)
τ	0.0524	$0.052^{+0.015}_{-0.015}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	99.30	$99.5^{+2.2}_{-2.1}$ (+0.5 σ)	$D_{\mathrm{M}}(0.51)$	1985.3	1983^{+24}_{-25} (−0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0375	$3.037^{+0.031}_{-0.031}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.431	$2.426^{+0.057}_{-0.058}$ (−0.5 σ)	$H(0.61)$	95.234	$95.28^{+0.50}_{-0.48}$ (+0.6 σ)
n_{s}	0.9666	$0.9673^{+0.0093}_{-0.0092}$ (+0.6 σ)	z_{re}	7.49	$7.5^{+1.5}_{-1.6}$ (+0.0 σ)	$D_{\mathrm{M}}(0.61)$	2309.9	2308^{+26}_{-27} (−0.6 σ)
r	0.010	< 0.147 (+0.6 σ)	10^9A_{s}	2.085	$2.084^{+0.066}_{-0.064}$ (−0.1 σ)	$H(2.33)$	236.20	$236.1^{+1.6}_{-1.7}$ (−0.4 σ)
y_{cal}	1.00042	$1.0005^{+0.0049}_{-0.0049}$ (−0.0 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8780	$1.877^{+0.023}_{-0.023}$ (−0.4 σ)	$D_{\mathrm{M}}(2.33)$	5766.9	5765^{+22}_{-23} (−0.7 σ)
A_{100}^{PS}	234.2	239^{+50}_{-50} (−0.8 σ)	D_{40}	1227.1	1243^{+37}_{-35} (−0.1 σ)	$f\sigma_8(0.15)$	0.4568	$0.455^{+0.017}_{-0.017}$ (−0.5 σ)
A_{143}^{PS}	39.9	39^{+20}_{-20} (−1.2 σ)	D_{220}	5712	5713^{+78}_{-78} (+0.1 σ)	$\sigma_8(0.15)$	0.7463	$0.746^{+0.013}_{-0.013}$ (−0.3 σ)
A_{217}^{PS}	102.1	103^{+30}_{-30} (−1.2 σ)	D_{810}	2534.9	2535^{+27}_{-26} (−0.1 σ)	$f\sigma_8(0.38)$	0.4746	$0.473^{+0.013}_{-0.014}$ (−0.5 σ)
A_{217}^{CIB}	44.4	39^{+10}_{-10} (−1.2 σ)	D_{1420}	816.0	$816.1^{+9.4}_{-9.5}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6613	$0.661^{+0.011}_{-0.011}$ (−0.3 σ)
A_{143}^{tSZ}	6.41	< 7.53 (−0.6 σ)	D_{2000}	230.33	$230.4^{+3.2}_{-3.2}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4730	$0.472^{+0.012}_{-0.012}$ (−0.5 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.599	$0.66^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9666	$0.9673^{+0.0093}_{-0.0092}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6188	$0.618^{+0.010}_{-0.010}$ (−0.2 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.77	—	Y_{P}	0.245362	$0.24536^{+0.00012}_{-0.00013}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4679	$0.467^{+0.011}_{-0.011}$ (−0.5 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.11	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246688	$0.24669^{+0.00012}_{-0.00014}$ (+0.8 σ)	$\sigma_8(0.61)$	0.5887	$0.5884^{+0.0098}_{-0.0095}$ (−0.2 σ)
A^{kSZ}	0.1	—	$10^5\mathrm{D}/\mathrm{H}$	2.601	$2.599^{+0.061}_{-0.060}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.29677	$0.2967^{+0.0049}_{-0.0047}$ (−0.1 σ)
A_{100}^{dust}	1.014	$1.00^{+0.38}_{-0.38}$	Age/Gyr	13.806	$13.802^{+0.050}_{-0.050}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3059	$0.3058^{+0.0051}_{-0.0049}$ (+0.0 σ)
A_{143}^{dust}	0.973	$0.96^{+0.34}_{-0.34}$	z_*	1089.99	$1089.95^{+0.57}_{-0.58}$ (−0.8 σ)	$r_{0.002}$	0.009	< 0.141 (+0.6 σ)
A_{217}^{dust}	0.971	$0.97^{+0.20}_{-0.20}$	r_*	144.60	$144.66^{+0.64}_{-0.62}$ (+0.3 σ)	$r_{0.01}$	0.0098	< 0.144 (+0.6 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.008	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04106	$1.04109^{+0.00063}_{-0.00063}$ (+0.2 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−1.54	$−0.2^{+1.6}_{-2.3}$ (+0.4 σ)
c_{100}	0.99764	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.890	$13.895^{+0.060}_{-0.057}$ (+0.2 σ)	r_{10}	0.0048	< 0.0731 (+0.6 σ)
c_{217}	1.00129	$1.0011^{+0.0030}_{-0.0030}$ (+4.5 σ)	z_{drag}	1059.70	$1059.72^{+0.67}_{-0.67}$ (+0.7 σ)	10^9A_{t}	0.022	< 0.305 (+0.6 σ)
c_{TE}	0.9966	$0.9968^{+0.0098}_{-0.0095}$	r_{drag}	147.30	$147.34^{+0.63}_{-0.62}$ (+0.1 σ)	$10^9A_{\mathrm{t}}e^{-2\tau}$	0.019	< 0.274 (+0.6 σ)
c_{EE}	0.9921	$0.9923^{+0.0096}_{-0.0096}$	k_{D}	0.14059	$0.14055^{+0.00069}_{-0.00070}$ (+0.1 σ)	f_{2000}^{143}	29.9	29^{+6}_{-6} (−0.5 σ)
H_0	67.41	$67.5^{+1.3}_{-1.2}$ (+0.6 σ)	$100\theta_{\mathrm{D}}$	0.160879	$0.16088^{+0.00039}_{-0.00039}$ (−0.8 σ)	f_{2000}^{217}	106.83	$106.7^{+3.8}_{-3.8}$ (−0.7 σ)
Ω_{Λ}	0.6864	$0.688^{+0.017}_{-0.017}$ (+0.5 σ)	z_{eq}	3390	3385^{+62}_{-63} (−0.4 σ)	$f_{2000}^{143\times 217}$	32.08	32^{+4}_{-4} (−0.7 σ)
Ω_{m}	0.3136	$0.312^{+0.017}_{-0.017}$ (−0.5 σ)	k_{eq}	0.010347	$0.01033^{+0.00019}_{-0.00019}$ (−0.4 σ)	χ_{simall}^2	395.84	$397.1(\nu:1.2)$ (+0.0 σ)
$\Omega_{\mathrm{m}}h^2$	0.14252	$0.1423^{+0.0026}_{-0.0026}$ (−0.4 σ)	$100\theta_{\mathrm{eq}}$	0.8152	$0.816^{+0.012}_{-0.012}$ (+0.4 σ)	χ_{lowl}^2	23.19	$24.9(\nu:1.8)$ (−0.0 σ)
$\Omega_{\mathrm{m}}h^3$	0.09608	$0.09607^{+0.00063}_{-0.00062}$ (+0.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.4504	$0.4510^{+0.0062}_{-0.0060}$ (+0.4 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.5	$11513.6(\nu:16.6)$
σ_8	0.8079	$0.807^{+0.015}_{-0.015}$ (−0.4 σ)	$H(0.15)$	72.72	$72.8^{+1.1}_{-1.0}$ (+0.6 σ)	χ_{prior}^2	2.2	$7.8(\nu:5.8)$ (+0.1 σ)
S_8	0.8260	$0.823^{+0.032}_{-0.033}$ (−0.5 σ)	$D_{\mathrm{M}}(0.15)$	642.9	642^{+10}_{-11} (−0.6 σ)	χ_{CMB}^2	11918.6	$11935.7(\nu:17.7)$ (+1900.1 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 11920.72$; $\Delta\chi_{\mathrm{eff}}^2 = -0.04$; $\bar{\chi}_{\mathrm{eff}}^2 = 11943.49$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.03$; $R - 1 = 0.01020$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.84 (Δ -0.06) commander_dx12.v3.2.29: 23.20 (Δ 0.19) CamSpec like_10.7HM_1400_unified: 11499.52 (Δ -0.12)

17.18 base_r_CamSpecHM_TTTEEE_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00030}_{-0.00029} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.978^{+0.021}_{-0.020} \quad (-0.7\sigma)$	$H(0.61)$	$95.37^{+0.39}_{-0.38} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1188^{+0.0020}_{-0.0021} \quad (-0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+20}_{-20} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04097^{+0.00059}_{-0.00059} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.418^{+0.050}_{-0.049} \quad (-0.8\sigma)$	$H(2.33)$	$235.7^{+1.3}_{-1.3} \quad (-0.6\sigma)$
τ	$0.053^{+0.015}_{-0.015} \quad (+0.2\sigma)$	z_{re}	$7.5^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+19}_{-18} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.037^{+0.032}_{-0.031} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.085^{+0.067}_{-0.064} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.452^{+0.013}_{-0.013} \quad (-0.8\sigma)$
n_{s}	$0.9686^{+0.0082}_{-0.0079} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.022}_{-0.022} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.012} \quad (-0.5\sigma)$
r	$< 0.150 \quad (+0.7\sigma)$	D_{40}	$1241^{+37}_{-34} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.471^{+0.011}_{-0.011} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	$5716^{+78}_{-77} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.470^{+0.010}_{-0.010} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{1420}	$816.5^{+9.3}_{-9.4} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.010}_{-0.0099} \quad (-0.3\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{2000}	$230.5^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4653^{+0.0096}_{-0.0095} \quad (-0.7\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9686^{+0.0082}_{-0.0079} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.5882^{+0.0097}_{-0.0094} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.59 \quad (-0.6\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2967^{+0.0049}_{-0.0047} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3060^{+0.0051}_{-0.0049} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.055}_{-0.054} \quad (-1.0\sigma)$	$r_{0.002}$	$< 0.145 \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.794^{+0.042}_{-0.042} \quad (-0.9\sigma)$	$r_{0.01}$	$< 0.147 \quad (+0.7\sigma)$
A^{kSZ}	—	z_*	$1089.86^{+0.47}_{-0.47} \quad (-1.0\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.1^{+1.6}_{-2.2} \quad (+0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.77^{+0.50}_{-0.49} \quad (+0.5\sigma)$	r_{10}	$< 0.0749 \quad (+0.7\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	$100\theta_*$	$1.04116^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.312 \quad (+0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.048}_{-0.047} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.281 \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	z_{drag}	$1059.77^{+0.66}_{-0.64} \quad (+0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	r_{drag}	$147.45^{+0.52}_{-0.51} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.6^{+3.7}_{-3.8} \quad (-0.7\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.5\sigma)$	k_{D}	$0.14046^{+0.00062}_{-0.00063} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{TE}	$0.9968^{+0.0098}_{-0.0096}$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00038}_{-0.00038} \quad (-0.9\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.3) \quad (+0.1\sigma)$
c_{EE}	$0.9925^{+0.0098}_{-0.0098}$	z_{eq}	$3372^{+47}_{-47} \quad (-0.7\sigma)$	χ_{lowl}^2	$24.7 \quad (\nu: 1.7) \quad (-0.1\sigma)$
H_0	$67.78^{+0.92}_{-0.91} \quad (+0.8\sigma)$	k_{eq}	$0.01029^{+0.00014}_{-0.00014} \quad (-0.7\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.5 \quad (\nu: 16.1)$
Ω_{Λ}	$0.691^{+0.012}_{-0.012} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8187^{+0.0090}_{-0.0087} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.040 \quad (\nu: 0.0)$
Ω_{m}	$0.309^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4522^{+0.0046}_{-0.0045} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.44 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0019}_{-0.0020} \quad (-0.7\sigma)$	$H(0.15)$	$73.03^{+0.79}_{-0.78} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.09608^{+0.00063}_{-0.00062} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.9^{+7.8}_{-7.7} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.7) \quad (+0.1\sigma)$
σ_8	$0.805^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.38)$	$83.09^{+0.60}_{-0.57} \quad (+0.9\sigma)$	χ_{BAO}^2	$5.89 \quad (\nu: 0.4)$
S_8	$0.817^{+0.026}_{-0.025} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+16}_{-16} \quad (-0.8\sigma)$	χ_{CMB}^2	$11935.4 \quad (\nu: 16.9) \quad (+1900.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.447^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$H(0.51)$	$89.77^{+0.47}_{-0.46} \quad (+0.9\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.600^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+18}_{-18} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.07; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.79; R - 1 = 0.01061$$

17.19 base_r_CamSpecHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00033}_{-0.00032} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$H(0.38)$	$82.94^{+0.79}_{-0.75} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0027}_{-0.0028} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.016}_{-0.017} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+21}_{-21} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00063}_{-0.00064} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.023}_{-0.023} \quad (-0.4\sigma)$	$H(0.51)$	$89.66^{+0.63}_{-0.60} \quad (+0.6\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$99.5^{+2.2}_{-2.1} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1983^{+24}_{-25} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.027}_{-0.025} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.055}_{-0.056} \quad (-0.5\sigma)$	$H(0.61)$	$95.28^{+0.50}_{-0.48} \quad (+0.7\sigma)$
n_{s}	$0.9675^{+0.0094}_{-0.0092} \quad (+0.6\sigma)$	z_{re}	$< 8.78 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+26}_{-27} \quad (-0.6\sigma)$
r	$< 0.147 \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.091^{+0.057}_{-0.052} \quad (+0.1\sigma)$	$H(2.33)$	$236.0^{+1.6}_{-1.7} \quad (-0.4\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0050} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+22}_{-23} \quad (-0.7\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1243^{+37}_{-35} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.016}_{-0.017} \quad (-0.5\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5713^{+78}_{-79} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.014} \quad (-0.4\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.1^{+9.5}_{-9.6} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0091} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9675^{+0.0094}_{-0.0092} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.6194^{+0.0091}_{-0.0085} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00012}_{-0.00013} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.5894^{+0.0086}_{-0.0079} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.598^{+0.060}_{-0.059} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0042}_{-0.0039} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.801^{+0.050}_{-0.050} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0043}_{-0.0040} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_*	$1089.94^{+0.57}_{-0.58} \quad (-0.8\sigma)$	$r_{0.002}$	$< 0.142 \quad (+0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.66^{+0.63}_{-0.62} \quad (+0.3\sigma)$	$r_{0.01}$	$< 0.145 \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00062}_{-0.00063} \quad (+0.2\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.2^{+1.6}_{-2.3} \quad (+0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.895^{+0.059}_{-0.057} \quad (+0.3\sigma)$	r_{10}	$< 0.0732 \quad (+0.6\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.5\sigma)$	z_{drag}	$1059.73^{+0.66}_{-0.64} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.307 \quad (+0.6\sigma)$
c_{TE}	$0.9966^{+0.0098}_{-0.0094}$	r_{drag}	$147.35^{+0.63}_{-0.62} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.276 \quad (+0.6\sigma)$
c_{EE}	$0.9922^{+0.0097}_{-0.0097}$	k_{D}	$0.14054^{+0.00069}_{-0.00069} \quad (+0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
H_0	$67.5^{+1.3}_{-1.2} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16087^{+0.00039}_{-0.00039} \quad (-0.8\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8} \quad (-0.7\sigma)$
Ω_{Λ}	$0.688^{+0.017}_{-0.017} \quad (+0.5\sigma)$	z_{eq}	$3384^{+62}_{-63} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
Ω_{m}	$0.312^{+0.017}_{-0.017} \quad (-0.5\sigma)$	k_{eq}	$0.01033^{+0.00019}_{-0.00019} \quad (-0.4\sigma)$	χ_{small}^2	$397.0 (\nu: 1.2) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0026}_{-0.0026} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.012}_{-0.012} \quad (+0.5\sigma)$	χ_{lowl}^2	$24.9 (\nu: 1.8) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09607^{+0.00063}_{-0.00062} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4511^{+0.0062}_{-0.0059} \quad (+0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.5 (\nu: 16.6)$
σ_8	$0.808^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$H(0.15)$	$72.8^{+1.1}_{-1.0} \quad (+0.6\sigma)$	χ_{prior}^2	$7.8 (\nu: 5.8) \quad (+0.1\sigma)$
S_8	$0.824^{+0.032}_{-0.033} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$642^{+10}_{-11} \quad (-0.6\sigma)$	χ_{CMB}^2	$11935.4 (\nu: 17.4) \quad (+1900.0\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11943.24; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.05; R - 1 = 0.00947$$

17.20 base_r_CamSpecHM_TTTEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00030}_{-0.00029} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.020}_{-0.019} \quad (-0.7\sigma)$	$H(0.61)$	$95.37^{+0.40}_{-0.38} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1187^{+0.0020}_{-0.0021} \quad (-0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.96^{+1.6}_{-1.6} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2302^{+20}_{-20} \quad (-0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04098^{+0.00059}_{-0.00059} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.420^{+0.048}_{-0.046} \quad (-0.7\sigma)$	$H(2.33)$	$235.7^{+1.3}_{-1.3} \quad (-0.6\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.3\sigma)$	z_{re}	$< 8.82 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+19}_{-18} \quad (-0.9\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.027}_{-0.025} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.091^{+0.057}_{-0.053} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.013}_{-0.013} \quad (-0.7\sigma)$
n_{s}	$0.9688^{+0.0083}_{-0.0079} \quad (+0.9\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.022}_{-0.022} \quad (-0.6\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.012}_{-0.011} \quad (-0.4\sigma)$
r	$< 0.150 \quad (+0.7\sigma)$	D_{40}	$1241^{+37}_{-34} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0050} \quad (+0.0\sigma)$	D_{220}	$5715^{+77}_{-78} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6612^{+0.0098}_{-0.0092} \quad (-0.2\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.010}_{-0.0097} \quad (-0.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{1420}	$816.5^{+9.4}_{-9.4} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.6190^{+0.0090}_{-0.0085} \quad (-0.1\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4659^{+0.0093}_{-0.0089} \quad (-0.6\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9688^{+0.0083}_{-0.0079} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.5890^{+0.0085}_{-0.0080} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.59 \quad (-0.6\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0042}_{-0.0039} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0043}_{-0.0041} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.055}_{-0.054} \quad (-1.0\sigma)$	$r_{0.002}$	$< 0.146 \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.794^{+0.042}_{-0.042} \quad (-0.9\sigma)$	$r_{0.01}$	$< 0.148 \quad (+0.7\sigma)$
A^{kSZ}	—	z_*	$1089.85^{+0.47}_{-0.47} \quad (-1.0\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.1^{+1.6}_{-2.2} \quad (+0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.78^{+0.50}_{-0.49} \quad (+0.5\sigma)$	r_{10}	$< 0.0753 \quad (+0.7\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	$100\theta_*$	$1.04116^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.314 \quad (+0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.047}_{-0.047} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.281 \quad (+0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	z_{drag}	$1059.78^{+0.65}_{-0.64} \quad (+0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	r_{drag}	$147.46^{+0.52}_{-0.51} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.6^{+3.7}_{-3.8} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.5\sigma)$	k_{D}	$0.14046^{+0.00062}_{-0.00063} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{TE}	$0.9966^{+0.0099}_{-0.0096}$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00038}_{-0.00038} \quad (-0.9\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.3) \quad (-0.0\sigma)$
c_{EE}	$0.9925^{+0.0099}_{-0.0099}$	z_{eq}	$3372^{+46}_{-47} \quad (-0.7\sigma)$	χ_{lowl}^2	$24.7 \quad (\nu: 1.7) \quad (-0.1\sigma)$
H_0	$67.79^{+0.92}_{-0.90} \quad (+0.8\sigma)$	k_{eq}	$0.01029^{+0.00014}_{-0.00014} \quad (-0.7\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.4 \quad (\nu: 16.1)$
Ω_{Λ}	$0.692^{+0.012}_{-0.012} \quad (+0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8188^{+0.0090}_{-0.0087} \quad (+0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.039 \quad (\nu: 0.0)$
Ω_{m}	$0.308^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4523^{+0.0046}_{-0.0045} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.45 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1417^{+0.0019}_{-0.0020} \quad (-0.7\sigma)$	$H(0.15)$	$73.04^{+0.79}_{-0.78} \quad (+0.9\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.09608^{+0.00063}_{-0.00062} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.8^{+7.8}_{-7.7} \quad (-0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.7) \quad (+0.1\sigma)$
σ_8	$0.807^{+0.013}_{-0.012} \quad (-0.4\sigma)$	$H(0.38)$	$83.09^{+0.59}_{-0.57} \quad (+0.9\sigma)$	χ_{BAO}^2	$5.88 \quad (\nu: 0.4)$
S_8	$0.818^{+0.025}_{-0.025} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+16}_{-16} \quad (-0.9\sigma)$	χ_{CMB}^2	$11935.2 \quad (\nu: 16.7) \quad (+1900.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.014}_{-0.014} \quad (-0.7\sigma)$	$H(0.51)$	$89.78^{+0.48}_{-0.46} \quad (+0.9\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1978^{+18}_{-18} \quad (-0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11948.86; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.87; R - 1 = 0.01058$$

17.21 base_r_plikHM_TE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022491	$0.02248^{+0.00050}_{-0.00048}$ (+1.6 σ)	z_{re}	7.13	$7.1^{+1.7}_{-1.8}$ (−0.5 σ)	$D_{\text{M}}(0.38)$	1516.0	1515^{+30}_{-30} (−1.6 σ)
$\Omega_c h^2$	0.11778	$0.1177^{+0.0039}_{-0.0041}$ (−1.3 σ)	$10^9 A_s$	2.046	$2.043^{+0.077}_{-0.084}$ (−1.3 σ)	$H(0.51)$	90.12	$90.14^{+0.94}_{-0.87}$ (+1.7 σ)
$100\theta_{\text{MC}}$	1.04137	$1.0414^{+0.0010}_{-0.0010}$ (+1.2 σ)	$10^9 A_s e^{-2\tau}$	1.8530	$1.851^{+0.036}_{-0.035}$ (−2.3 σ)	$D_{\text{M}}(0.51)$	1965.4	1965^{+35}_{-36} (−1.6 σ)
τ	0.0495	$0.049^{+0.016}_{-0.018}$ (−0.3 σ)	D_{40}	1215	1253^{+85}_{-76} (+0.5 σ)	$H(0.61)$	95.66	$95.68^{+0.78}_{-0.71}$ (+1.8 σ)
$\ln(10^{10} A_s)$	3.0184	$3.017^{+0.037}_{-0.042}$ (−1.4 σ)	D_{220}	5699	5686^{+110}_{-110} (−0.6 σ)	$D_{\text{M}}(0.61)$	2288.4	2288^{+37}_{-39} (−1.6 σ)
n_s	0.9663	$0.968^{+0.022}_{-0.022}$ (+0.7 σ)	D_{810}	2508.0	2507^{+48}_{-49} (−2.2 σ)	$H(2.33)$	235.26	$235.2^{+2.4}_{-2.4}$ (−1.1 σ)
r	0.000	< 0.299 (+2.3 σ)	D_{1420}	807.3	808^{+23}_{-23} (−1.5 σ)	$D_{\text{M}}(2.33)$	5747.3	5747^{+32}_{-34} (−1.8 σ)
A_{100}^{dustTE}	0.113	$0.116^{+0.075}_{-0.075}$	D_{2000}	227.7	$227.8^{+8.3}_{-8.2}$ (−1.1 σ)	$f\sigma_8(0.15)$	0.4409	$0.440^{+0.024}_{-0.024}$ (−1.7 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.138^{+0.057}_{-0.058}$	$n_{s,0.002}$	0.9663	$0.968^{+0.022}_{-0.022}$ (+0.7 σ)	$\sigma_8(0.15)$	0.7344	$0.734^{+0.018}_{-0.020}$ (−1.9 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.478	$0.48^{+0.17}_{-0.17}$	Y_{P}	0.245441	$0.24543^{+0.00020}_{-0.00020}$ (+1.5 σ)	$f\sigma_8(0.38)$	0.4611	$0.461^{+0.020}_{-0.020}$ (−1.8 σ)
A_{143}^{dustTE}	0.221	$0.22^{+0.11}_{-0.10}$	$Y_{\text{P}}^{\text{BBN}}$	0.246768	$0.24676^{+0.00020}_{-0.00020}$ (+1.5 σ)	$\sigma_8(0.38)$	0.6521	$0.652^{+0.015}_{-0.016}$ (−1.8 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.659	$0.66^{+0.16}_{-0.16}$	10^5D/H	2.563	$2.567^{+0.091}_{-0.089}$ (−1.6 σ)	$f\sigma_8(0.51)$	0.4609	$0.460^{+0.017}_{-0.018}$ (−1.9 σ)
A_{217}^{dustTE}	2.04	$2.03^{+0.53}_{-0.54}$	Age/Gyr	13.762	$13.762^{+0.072}_{-0.076}$ (−1.8 σ)	$\sigma_8(0.51)$	0.6107	$0.610^{+0.014}_{-0.015}$ (−1.7 σ)
c_{100}	1.00017	$1.0002^{+0.0013}_{-0.0014}$ (+0.9 σ)	z_*	1089.57	$1089.59^{+0.81}_{-0.82}$ (−1.7 σ)	$f\sigma_8(0.61)$	0.4569	$0.456^{+0.016}_{-0.017}$ (−1.9 σ)
c_{217}	0.99799	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	r_*	144.91	$144.95^{+0.95}_{-0.92}$ (+0.9 σ)	$\sigma_8(0.61)$	0.5814	$0.581^{+0.013}_{-0.014}$ (−1.6 σ)
y_{cal}	1.00008	$1.0000^{+0.0049}_{-0.0049}$ (−0.2 σ)	$100\theta_*$	1.04155	$1.04157^{+0.00098}_{-0.00099}$ (+1.2 σ)	$f\sigma_8(2.33)$	0.2935	$0.2934^{+0.0066}_{-0.0070}$ (−1.4 σ)
H_0	68.39	$68.4^{+1.8}_{-1.7}$ (+1.5 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.913	$13.917^{+0.089}_{-0.086}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3031	$0.3030^{+0.0068}_{-0.0073}$ (−1.1 σ)
Ω_{Λ}	0.6987	$0.699^{+0.023}_{-0.023}$ (+1.4 σ)	z_{drag}	1060.05	$1060.0^{+1.1}_{-1.0}$ (+1.4 σ)	$r_{0.002}$	0.000	< 0.307 (+2.5 σ)
Ω_{m}	0.3013	$0.301^{+0.023}_{-0.023}$ (−1.4 σ)	r_{drag}	147.55	$147.59^{+0.98}_{-0.94}$ (+0.7 σ)	$r_{0.01}$	0.000	< 0.302 (+2.4 σ)
$\Omega_{\text{m}} h^2$	0.14092	$0.1408^{+0.0037}_{-0.0038}$ (−1.2 σ)	k_{D}	0.14048	$0.1404^{+0.0011}_{-0.0011}$ (−0.1 σ)	$\ln(10^{10} A_{\text{t}})$	−11.51	$0.5^{+1.7}_{-2.3}$ (+1.0 σ)
$\Omega_{\text{m}} h^3$	0.09638	$0.0963^{+0.0010}_{-0.0010}$ (+1.0 σ)	$100\theta_{\text{D}}$	0.16073	$0.16076^{+0.00062}_{-0.00060}$ (−1.2 σ)	r_{10}	0.000	< 0.161 (+2.5 σ)
σ_8	0.7937	$0.793^{+0.021}_{-0.022}$ (−1.9 σ)	z_{eq}	3352	3349^{+89}_{-92} (−1.2 σ)	$10^9 A_{\text{t}}$	0.000	< 0.611 (+2.3 σ)
S_8	0.7954	$0.794^{+0.046}_{-0.047}$ (−1.7 σ)	k_{eq}	0.010231	$0.01022^{+0.00027}_{-0.00028}$ (−1.2 σ)	$10^9 A_{\text{t}} e^{-2\tau}$	0.000	< 0.553 (+2.3 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4356	$0.435^{+0.025}_{-0.026}$ (−1.7 σ)	$100\theta_{\text{eq}}$	0.8230	$0.824^{+0.018}_{-0.017}$ (+1.3 σ)	χ_{simall}^2	395.70	$397.4 (\nu: 1.4)$ (+0.2 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5880	$0.587^{+0.024}_{-0.024}$ (−1.8 σ)	$100\theta_{\text{s,eq}}$	0.4544	$0.4547^{+0.0093}_{-0.0086}$ (+1.2 σ)	χ_{plikTE}^2	852.9	$860.3 (\nu: 7.1)$
$\sigma_8/h^{0.5}$	0.9597	$0.959^{+0.034}_{-0.035}$ (−1.9 σ)	$H(0.15)$	73.57	$73.6^{+1.6}_{-1.5}$ (+1.6 σ)	χ_{prior}^2	0.4	$7.4 (\nu: 6.9)$ (+0.0 σ)
$r_{\text{drag}} h$	100.91	$101.0^{+3.3}_{-3.0}$ (+1.4 σ)	$D_{\text{M}}(0.15)$	634.6	634^{+15}_{-15} (−1.5 σ)	χ_{CMB}^2	1248.6	$1257.8 (\nu: 8.9)$ (+11.3 σ)
$\langle d^2 \rangle^{1/2}$	2.388	$2.382^{+0.083}_{-0.084}$ (−1.7 σ)	$H(0.38)$	83.50	$83.5^{+1.2}_{-1.1}$ (+1.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1249.01$; $\Delta\chi_{\text{eff}}^2 = 0.02$; $\bar{\chi}_{\text{eff}}^2 = 1265.18$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.17$; $R - 1 = 0.00716$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.70 (Δ 0.01) plik_rd12_HM.v22_TE: 852.88 (Δ 0.02)

17.22 base_r_plikHM_TE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022448	$0.02244^{+0.00044}_{-0.00046}$ (+1.5 σ)	$10^9 A_s$	2.046	$2.043^{+0.076}_{-0.084}$ (−1.3 σ)	$D_M(0.51)$	1969.5	1969^{+22}_{-22} (−1.3 σ)
$\Omega_c h^2$	0.11823	$0.1181^{+0.0024}_{-0.0024}$ (−1.0 σ)	$10^9 A_s e^{-2\tau}$	1.8552	$1.853^{+0.033}_{-0.032}$ (−2.2 σ)	$H(0.61)$	95.58	$95.59^{+0.52}_{-0.50}$ (+1.5 σ)
$100\theta_{MC}$	1.04134	$1.04135^{+0.00090}_{-0.00092}$ (+1.1 σ)	D_{40}	1218	1255^{+81}_{-72} (+0.6 σ)	$D_M(0.61)$	2292.7	2292^{+23}_{-23} (−1.4 σ)
τ	0.0489	$0.049^{+0.016}_{-0.018}$ (−0.4 σ)	D_{220}	5698	5685^{+110}_{-110} (−0.6 σ)	$H(2.33)$	235.51	$235.4^{+1.6}_{-1.6}$ (−0.8 σ)
$\ln(10^{10} A_s)$	3.0183	$3.017^{+0.037}_{-0.042}$ (−1.3 σ)	D_{810}	2508.4	2507^{+49}_{-49} (−2.2 σ)	$D_M(2.33)$	5750.7	5750^{+26}_{-25} (−1.6 σ)
n_s	0.9651	$0.967^{+0.020}_{-0.020}$ (+0.5 σ)	D_{1420}	806.9	807^{+23}_{-22} (−1.6 σ)	$f\sigma_8(0.15)$	0.4433	$0.443^{+0.016}_{-0.016}$ (−1.5 σ)
r	0.001	< 0.297 (+2.3 σ)	D_{2000}	227.5	$227.6^{+8.3}_{-8.2}$ (−1.2 σ)	$\sigma_8(0.15)$	0.7353	$0.735^{+0.017}_{-0.019}$ (−1.7 σ)
y_{cal}	1.00010	$0.99998^{+0.0048}_{-0.0048}$ (−0.2 σ)	$n_{s,0.002}$	0.9651	$0.967^{+0.020}_{-0.020}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4630	$0.463^{+0.014}_{-0.015}$ (−1.6 σ)
A_{100}^{dustTE}	0.113	$0.116^{+0.075}_{-0.073}$	Y_P	0.245425	$0.24542^{+0.00017}_{-0.00019}$ (+1.4 σ)	$\sigma_8(0.38)$	0.6526	$0.652^{+0.015}_{-0.016}$ (−1.6 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.138^{+0.057}_{-0.058}$	Y_P^{BBN}	0.246752	$0.24675^{+0.00018}_{-0.00019}$ (+1.4 σ)	$f\sigma_8(0.51)$	0.4625	$0.462^{+0.013}_{-0.014}$ (−1.7 σ)
$A_{100 \times 217}^{dustTE}$	0.476	$0.48^{+0.17}_{-0.17}$	$10^5 D/H$	2.571	$2.573^{+0.086}_{-0.080}$ (−1.4 σ)	$\sigma_8(0.51)$	0.6110	$0.611^{+0.014}_{-0.015}$ (−1.6 σ)
A_{143}^{dustTE}	0.220	$0.22^{+0.11}_{-0.11}$	Age/Gyr	13.769	$13.769^{+0.059}_{-0.058}$ (−1.6 σ)	$f\sigma_8(0.61)$	0.4582	$0.458^{+0.012}_{-0.013}$ (−1.7 σ)
$A_{143 \times 217}^{dustTE}$	0.658	$0.66^{+0.16}_{-0.16}$	z_*	1089.67	$1089.67^{+0.64}_{-0.63}$ (−1.5 σ)	$\sigma_8(0.61)$	0.5816	$0.582^{+0.013}_{-0.014}$ (−1.5 σ)
A_{217}^{dustTE}	2.06	$2.04^{+0.53}_{-0.54}$	r_*	144.83	$144.86^{+0.66}_{-0.64}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.2936	$0.2935^{+0.0066}_{-0.0071}$ (−1.3 σ)
c_{100}	1.00016	$1.0002^{+0.0014}_{-0.0013}$ (+0.9 σ)	$100\theta_*$	1.04152	$1.04152^{+0.00090}_{-0.00091}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3030	$0.3030^{+0.0068}_{-0.0073}$ (−1.1 σ)
c_{217}	0.99801	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	$D_M(z_*)/\text{Gpc}$	13.906	$13.908^{+0.065}_{-0.064}$ (+0.6 σ)	$r_{0.002}$	0.001	< 0.303 (+2.4 σ)
H_0	68.19	$68.2^{+1.1}_{-1.1}$ (+1.3 σ)	z_{drag}	1059.97	$1059.97^{+0.99}_{-1.0}$ (+1.3 σ)	$r_{0.01}$	0.001	< 0.300 (+2.4 σ)
Ω_Λ	0.6960	$0.696^{+0.014}_{-0.014}$ (+1.2 σ)	r_{drag}	147.48	$147.50^{+0.75}_{-0.72}$ (+0.5 σ)	$\ln(10^{10} A_t)$	−3.90	$0.5^{+1.7}_{-2.3}$ (+1.0 σ)
Ω_m	0.3040	$0.304^{+0.014}_{-0.014}$ (−1.2 σ)	k_D	0.14052	$0.14049^{+0.00097}_{-0.0010}$ (+0.0 σ)	r_{10}	0.000	< 0.159 (+2.5 σ)
$\Omega_m h^2$	0.14132	$0.1412^{+0.0024}_{-0.0024}$ (−0.9 σ)	$100\theta_D$	0.16077	$0.16079^{+0.00062}_{-0.00060}$ (−1.1 σ)	$10^9 A_t$	0.002	< 0.606 (+2.2 σ)
$\Omega_m h^3$	0.09636	$0.0963^{+0.0010}_{-0.0010}$ (+1.0 σ)	z_{eq}	3362	3360^{+57}_{-56} (−0.9 σ)	$10^9 A_t e^{-2\tau}$	0.002	< 0.550 (+2.3 σ)
σ_8	0.7949	$0.795^{+0.019}_{-0.020}$ (−1.8 σ)	k_{eq}	0.010260	$0.01025^{+0.00017}_{-0.00017}$ (−0.9 σ)	χ_{small}^2	395.69	$397.4 (\nu: 1.4)$ (+0.2 σ)
S_8	0.8001	$0.799^{+0.030}_{-0.031}$ (−1.5 σ)	$100\theta_{eq}$	0.8212	$0.822^{+0.011}_{-0.010}$ (+1.0 σ)	χ_{plikTE}^2	853.0	$859.7 (\nu: 6.4)$
$\sigma_8 \Omega_m^{0.5}$	0.4382	$0.438^{+0.016}_{-0.017}$ (−1.5 σ)	$100\theta_{s,eq}$	0.4534	$0.4537^{+0.0055}_{-0.0054}$ (+1.0 σ)	χ_{6DF}^2	0.000	$0.037 (\nu: 0.0)$
$\sigma_8 \Omega_m^{0.25}$	0.5902	$0.590^{+0.017}_{-0.018}$ (−1.6 σ)	$H(0.15)$	73.39	$73.42^{+0.94}_{-0.92}$ (+1.3 σ)	χ_{MGS}^2	1.75	$1.85 (\nu: 0.2)$
$\sigma_8/h^{0.5}$	0.9626	$0.962^{+0.025}_{-0.028}$ (−1.7 σ)	$D_M(0.15)$	636.3	$636.1^{+9.1}_{-9.0}$ (−1.3 σ)	$\chi_{DR12BAO}^2$	3.43	$3.97 (\nu: 0.4)$
$r_{drag} h$	100.56	$100.6^{+1.8}_{-1.8}$ (+1.2 σ)	$H(0.38)$	83.38	$83.39^{+0.71}_{-0.69}$ (+1.4 σ)	χ_{prior}^2	0.4	$7.4 (\nu: 6.6)$ (+0.0 σ)
$\langle d^2 \rangle^{1/2}$	2.395	$2.389^{+0.062}_{-0.065}$ (−1.5 σ)	$D_M(0.38)$	1519.4	1519^{+18}_{-18} (−1.3 σ)	χ_{BAO}^2	5.18	$5.86 (\nu: 0.5)$
z_{re}	7.08	$7.1^{+1.7}_{-1.8}$ (−0.5 σ)	$H(0.51)$	90.02	$90.03^{+0.60}_{-0.57}$ (+1.5 σ)	χ_{CMB}^2	1248.6	$1257.2 (\nu: 8.1)$ (+11.2 σ)

Best-fit $\chi_{eff}^2 = 1254.24$; $\Delta\chi_{eff}^2 = 0.00$; $\bar{\chi}_{eff}^2 = 1270.41$; $\Delta\bar{\chi}_{eff}^2 = 0.99$; $R - 1 = 0.01140$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ 0.00) MGS: 1.75 (Δ 0.00) DR12BAO: 3.44 (Δ -0.00) CMB - small_100x143_offlike5_EE_Aplanck_B: 395.69 (Δ 0.03) plik_rd12_HM_v22_TE: 852.95 (Δ 0.02)

17.23 base_r_plikHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02249^{+0.00050}_{-0.00048} \quad (+1.7\sigma)$	z_{re}	$< 8.51 \quad (-0.0\sigma)$	$D_{\text{M}}(0.38)$	$1515^{+30}_{-31} \quad (-1.6\sigma)$
$\Omega_c h^2$	$0.1176^{+0.0039}_{-0.0041} \quad (-1.3\sigma)$	$10^9 A_{\text{s}}$	$2.057^{+0.063}_{-0.060} \quad (-0.9\sigma)$	$H(0.51)$	$90.16^{+0.95}_{-0.88} \quad (+1.8\sigma)$
$100\theta_{\text{MC}}$	$1.04141^{+0.00099}_{-0.0010} \quad (+1.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.851^{+0.035}_{-0.035} \quad (-2.3\sigma)$	$D_{\text{M}}(0.51)$	$1964^{+35}_{-36} \quad (-1.6\sigma)$
τ	$0.0526^{+0.012}_{-0.0095} \quad (+0.1\sigma)$	D_{40}	$1252^{+85}_{-77} \quad (+0.4\sigma)$	$H(0.61)$	$95.70^{+0.78}_{-0.71} \quad (+1.8\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.024^{+0.031}_{-0.029} \quad (-0.9\sigma)$	D_{220}	$5686^{+110}_{-110} \quad (-0.6\sigma)$	$D_{\text{M}}(0.61)$	$2287^{+38}_{-39} \quad (-1.6\sigma)$
n_{s}	$0.969^{+0.022}_{-0.022} \quad (+0.9\sigma)$	D_{810}	$2508^{+48}_{-49} \quad (-2.1\sigma)$	$H(2.33)$	$235.2^{+2.4}_{-2.5} \quad (-1.1\sigma)$
r	$< 0.299 \quad (+2.3\sigma)$	D_{1420}	$808^{+22}_{-23} \quad (-1.3\sigma)$	$D_{\text{M}}(2.33)$	$5746^{+32}_{-35} \quad (-1.8\sigma)$
A_{100}^{dustTE}	$0.116^{+0.075}_{-0.075}$	D_{2000}	$228.2^{+8.2}_{-8.2} \quad (-0.9\sigma)$	$f\sigma_8(0.15)$	$0.442^{+0.024}_{-0.024} \quad (-1.6\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.138^{+0.058}_{-0.058}$	$n_{\text{s},0.002}$	$0.969^{+0.022}_{-0.022} \quad (+0.9\sigma)$	$\sigma_8(0.15)$	$0.737^{+0.017}_{-0.016} \quad (-1.5\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	Y_{P}	$0.24544^{+0.00021}_{-0.00020} \quad (+1.6\sigma)$	$f\sigma_8(0.38)$	$0.462^{+0.019}_{-0.020} \quad (-1.7\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24677^{+0.00021}_{-0.00020} \quad (+1.6\sigma)$	$\sigma_8(0.38)$	$0.654^{+0.014}_{-0.013} \quad (-1.4\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.15}_{-0.16}$	10^5D/H	$2.564^{+0.090}_{-0.090} \quad (-1.6\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.017}_{-0.017} \quad (-1.7\sigma)$
A_{217}^{dustTE}	$2.03^{+0.54}_{-0.54}$	Age/Gyr	$13.760^{+0.072}_{-0.076} \quad (-1.8\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.013}_{-0.012} \quad (-1.3\sigma)$
c_{100}	$1.0002^{+0.0013}_{-0.0014} \quad (+0.9\sigma)$	z_*	$1089.56^{+0.82}_{-0.82} \quad (-1.7\sigma)$	$f\sigma_8(0.61)$	$0.458^{+0.015}_{-0.016} \quad (-1.7\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	r_*	$144.96^{+0.96}_{-0.92} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.583^{+0.012}_{-0.011} \quad (-1.2\sigma)$
y_{cal}	$1.0000^{+0.0049}_{-0.0049} \quad (-0.2\sigma)$	$100\theta_*$	$1.04159^{+0.00098}_{-0.0010} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2945^{+0.0059}_{-0.0052} \quad (-0.9\sigma)$
H_0	$68.5^{+1.8}_{-1.8} \quad (+1.6\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.917^{+0.090}_{-0.086} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3042^{+0.0058}_{-0.0055} \quad (-0.6\sigma)$
Ω_{Λ}	$0.700^{+0.023}_{-0.024} \quad (+1.4\sigma)$	z_{drag}	$1060.0^{+1.0}_{-1.1} \quad (+1.4\sigma)$	$r_{0.002}$	$< 0.307 \quad (+2.5\sigma)$
Ω_{m}	$0.300^{+0.024}_{-0.023} \quad (-1.4\sigma)$	r_{drag}	$147.59^{+0.99}_{-0.94} \quad (+0.7\sigma)$	$r_{0.01}$	$< 0.302 \quad (+2.4\sigma)$
$\Omega_{\text{m}} h^2$	$0.1408^{+0.0037}_{-0.0039} \quad (-1.2\sigma)$	k_{D}	$0.1404^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	$\ln(10^{10} A_{\text{t}})$	$0.5^{+1.7}_{-2.3} \quad (+1.0\sigma)$
$\Omega_{\text{m}} h^3$	$0.0964^{+0.0010}_{-0.0010} \quad (+1.1\sigma)$	$100\theta_{\text{D}}$	$0.16075^{+0.00062}_{-0.00060} \quad (-1.3\sigma)$	r_{10}	$< 0.161 \quad (+2.5\sigma)$
σ_8	$0.796^{+0.019}_{-0.020} \quad (-1.6\sigma)$	z_{eq}	$3348^{+89}_{-93} \quad (-1.2\sigma)$	$10^9 A_{\text{t}}$	$< 0.614 \quad (+2.3\sigma)$
S_8	$0.796^{+0.046}_{-0.047} \quad (-1.6\sigma)$	k_{eq}	$0.01022^{+0.00027}_{-0.00028} \quad (-1.2\sigma)$	$10^9 A_{\text{t}} e^{-2\tau}$	$< 0.554 \quad (+2.3\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.436^{+0.025}_{-0.025} \quad (-1.6\sigma)$	$100\theta_{\text{eq}}$	$0.824^{+0.018}_{-0.017} \quad (+1.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 0.8) \quad (-0.1\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.589^{+0.023}_{-0.024} \quad (-1.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4548^{+0.0093}_{-0.0087} \quad (+1.3\sigma)$	χ_{plikTE}^2	$860.4 \quad (\nu: 7.1)$
$\sigma_8/h^{0.5}$	$0.962^{+0.032}_{-0.033} \quad (-1.7\sigma)$	$H(0.15)$	$73.6^{+1.6}_{-1.5} \quad (+1.6\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.9) \quad (+0.0\sigma)$
$r_{\text{drag}} h$	$101.1^{+3.3}_{-3.1} \quad (+1.5\sigma)$	$D_{\text{M}}(0.15)$	$634^{+15}_{-15} \quad (-1.6\sigma)$	χ_{CMB}^2	$1257.4 \quad (\nu: 8.5) \quad (+11.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.388^{+0.082}_{-0.080} \quad (-1.5\sigma)$	$H(0.38)$	$83.6^{+1.2}_{-1.1} \quad (+1.7\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1264.77$; $\Delta \bar{\chi}_{\text{eff}}^2 = 1.13$; $R - 1 = 0.00680$

17.24 base_r_plikHM_TE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02246^{+0.00043}_{-0.00045} \quad (+1.5\sigma)$	$10^9 A_s$	$2.058^{+0.062}_{-0.059} \quad (-0.9\sigma)$	$D_M(0.51)$	$1968^{+22}_{-22} \quad (-1.4\sigma)$
$\Omega_c h^2$	$0.1181^{+0.0024}_{-0.0024} \quad (-1.1\sigma)$	$10^9 A_s e^{-2\tau}$	$1.853^{+0.032}_{-0.032} \quad (-2.2\sigma)$	$H(0.61)$	$95.61^{+0.52}_{-0.50} \quad (+1.6\sigma)$
$100\theta_{MC}$	$1.04136^{+0.00089}_{-0.00093} \quad (+1.2\sigma)$	D_{40}	$1255^{+82}_{-72} \quad (+0.6\sigma)$	$D_M(0.61)$	$2292^{+24}_{-23} \quad (-1.4\sigma)$
τ	$0.0524^{+0.011}_{-0.0093} \quad (+0.1\sigma)$	D_{220}	$5684^{+110}_{-110} \quad (-0.6\sigma)$	$H(2.33)$	$235.4^{+1.5}_{-1.6} \quad (-0.8\sigma)$
$\ln(10^{10} A_s)$	$3.024^{+0.030}_{-0.029} \quad (-0.9\sigma)$	D_{810}	$2508^{+48}_{-48} \quad (-2.1\sigma)$	$D_M(2.33)$	$5750^{+25}_{-25} \quad (-1.6\sigma)$
n_s	$0.967^{+0.020}_{-0.020} \quad (+0.6\sigma)$	D_{1420}	$808^{+23}_{-22} \quad (-1.4\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.015}_{-0.015} \quad (-1.4\sigma)$
r	$< 0.299 \quad (+2.3\sigma)$	D_{2000}	$228.0^{+8.2}_{-8.2} \quad (-1.0\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.016}_{-0.014} \quad (-1.4\sigma)$
y_{cal}	$0.99998^{+0.0049}_{-0.0048} \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.967^{+0.020}_{-0.020} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.464^{+0.013}_{-0.013} \quad (-1.5\sigma)$
A_{100}^{dustTE}	$0.116^{+0.075}_{-0.073}$	Y_P	$0.24543^{+0.00017}_{-0.00018} \quad (+1.4\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.013}_{-0.012} \quad (-1.2\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.138^{+0.057}_{-0.058}$	Y_P^{BBN}	$0.24675^{+0.00017}_{-0.00019} \quad (+1.4\sigma)$	$f\sigma_8(0.51)$	$0.464^{+0.012}_{-0.012} \quad (-1.5\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.16}$	$10^5 D/H$	$2.571^{+0.085}_{-0.078} \quad (-1.5\sigma)$	$\sigma_8(0.51)$	$0.613^{+0.012}_{-0.011} \quad (-1.2\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	Age/Gyr	$13.768^{+0.059}_{-0.057} \quad (-1.6\sigma)$	$f\sigma_8(0.61)$	$0.460^{+0.011}_{-0.011} \quad (-1.5\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.15}_{-0.16}$	z_*	$1089.65^{+0.64}_{-0.62} \quad (-1.5\sigma)$	$\sigma_8(0.61)$	$0.584^{+0.012}_{-0.010} \quad (-1.1\sigma)$
A_{217}^{dustTE}	$2.04^{+0.54}_{-0.54}$	r_*	$144.85^{+0.67}_{-0.64} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2947^{+0.0059}_{-0.0051} \quad (-0.9\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0013} \quad (+0.9\sigma)$	$100\theta_*$	$1.04154^{+0.00089}_{-0.00092} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3042^{+0.0058}_{-0.0055} \quad (-0.6\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0012} \quad (-0.4\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.908^{+0.066}_{-0.063} \quad (+0.5\sigma)$	$r_{0.002}$	$< 0.305 \quad (+2.5\sigma)$
H_0	$68.2^{+1.1}_{-1.1} \quad (+1.3\sigma)$	z_{drag}	$1060.00^{+0.97}_{-1.0} \quad (+1.3\sigma)$	$r_{0.01}$	$< 0.301 \quad (+2.4\sigma)$
Ω_Λ	$0.697^{+0.014}_{-0.014} \quad (+1.2\sigma)$	r_{drag}	$147.50^{+0.75}_{-0.71} \quad (+0.5\sigma)$	$\ln(10^{10} A_t)$	$0.5^{+1.7}_{-2.3} \quad (+1.0\sigma)$
Ω_m	$0.303^{+0.014}_{-0.014} \quad (-1.2\sigma)$	k_D	$0.14050^{+0.00096}_{-0.0010} \quad (+0.1\sigma)$	r_{10}	$< 0.160 \quad (+2.5\sigma)$
$\Omega_m h^2$	$0.1412^{+0.0024}_{-0.0024} \quad (-0.9\sigma)$	$100\theta_D$	$0.16077^{+0.00062}_{-0.00058} \quad (-1.2\sigma)$	$10^9 A_t$	$< 0.613 \quad (+2.3\sigma)$
$\Omega_m h^3$	$0.0964^{+0.0010}_{-0.0010} \quad (+1.1\sigma)$	z_{eq}	$3359^{+57}_{-56} \quad (-0.9\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.555 \quad (+2.3\sigma)$
σ_8	$0.798^{+0.017}_{-0.016} \quad (-1.4\sigma)$	k_{eq}	$0.01025^{+0.00017}_{-0.00017} \quad (-0.9\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 0.8) \quad (-0.1\sigma)$
S_8	$0.802^{+0.029}_{-0.030} \quad (-1.4\sigma)$	$100\theta_{eq}$	$0.822^{+0.011}_{-0.010} \quad (+1.1\sigma)$	χ_{plikTE}^2	$859.8 \quad (\nu: 6.2)$
$\sigma_8 \Omega_m^{0.5}$	$0.439^{+0.016}_{-0.016} \quad (-1.4\sigma)$	$100\theta_{s,eq}$	$0.4537^{+0.0055}_{-0.0054} \quad (+1.0\sigma)$	χ_{6DF}^2	$0.037 \quad (\nu: 0.0)$
$\sigma_8 \Omega_m^{0.25}$	$0.592^{+0.016}_{-0.016} \quad (-1.5\sigma)$	$H(0.15)$	$73.44^{+0.93}_{-0.93} \quad (+1.4\sigma)$	χ_{MGS}^2	$1.87 \quad (\nu: 0.2)$
$\sigma_8/h^{0.5}$	$0.966^{+0.023}_{-0.023} \quad (-1.5\sigma)$	$D_M(0.15)$	$635.9^{+9.2}_{-8.9} \quad (-1.3\sigma)$	$\chi_{DR12BAO}^2$	$3.96 \quad (\nu: 0.4)$
$r_{drag} h$	$100.6^{+1.8}_{-1.8} \quad (+1.2\sigma)$	$H(0.38)$	$83.41^{+0.72}_{-0.70} \quad (+1.4\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.396^{+0.059}_{-0.058} \quad (-1.3\sigma)$	$D_M(0.38)$	$1519^{+19}_{-18} \quad (-1.4\sigma)$	χ_{BAO}^2	$5.87 \quad (\nu: 0.5)$
z_{re}	$< 8.49 \quad (-0.0\sigma)$	$H(0.51)$	$90.05^{+0.60}_{-0.58} \quad (+1.5\sigma)$	χ_{CMB}^2	$1256.8 \quad (\nu: 7.6) \quad (+11.1\sigma)$

$\bar{\chi}_{eff}^2 = 1269.96$; $\Delta \bar{\chi}_{eff}^2 = 0.97$; $R - 1 = 0.01240$

17.25 base_r_plikHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02387	$0.0239^{+0.0025}_{-0.0023}$ (+8.1 σ)	D_{810}	2586	2583^{+76}_{-76} (+3.4 σ)	$D_M(0.51)$	1924	1920^{+110}_{-110} (−4.0 σ)
$\Omega_c h^2$	0.1144	$0.1138^{+0.0096}_{-0.0093}$ (−3.1 σ)	D_{1420}	845.3	846^{+37}_{-37} (+6.1 σ)	$H(0.61)$	96.75	$96.9^{+3.0}_{-2.9}$ (+5.3 σ)
$100\theta_{MC}$	1.04018	$1.0402^{+0.0017}_{-0.0017}$ (−1.3 σ)	D_{2000}	241.8	242^{+14}_{-14} (+6.9 σ)	$D_M(0.61)$	2243	2238^{+120}_{-120} (−4.1 σ)
τ	0.0537	$0.053^{+0.017}_{-0.018}$ (+0.1 σ)	$n_{s,0.002}$	0.9879	$0.993^{+0.035}_{-0.032}$ (+5.1 σ)	$H(2.33)$	234.31	$233.9^{+4.6}_{-4.3}$ (−2.0 σ)
$\ln(10^{10} A_s)$	3.0476	$3.043^{+0.045}_{-0.047}$ (+0.2 σ)	Y_P	0.24600	$0.24599^{+0.00094}_{-0.00097}$ (+7.3 σ)	$D_M(2.33)$	5695	5691^{+130}_{-140} (−5.2 σ)
n_s	0.9879	$0.993^{+0.035}_{-0.032}$ (+5.1 σ)	Y_P^{BBN}	0.24733	$0.24732^{+0.00095}_{-0.00098}$ (+7.3 σ)	$f\sigma_8(0.15)$	0.427	$0.423^{+0.059}_{-0.057}$ (−3.2 σ)
r	0.187	< 0.578 (+6.6 σ)	$10^5 D/H$	2.329	$2.34^{+0.41}_{-0.36}$ (−7.1 σ)	$\sigma_8(0.15)$	0.7355	$0.732^{+0.029}_{-0.032}$ (−2.1 σ)
y_{cal}	1.00017	$1.0001^{+0.0049}_{-0.0048}$ (−0.2 σ)	Age/Gyr	13.644	$13.64^{+0.29}_{-0.31}$ (−5.2 σ)	$f\sigma_8(0.38)$	0.4512	$0.448^{+0.046}_{-0.048}$ (−3.2 σ)
H_0	70.4	$70.7^{+5.6}_{-5.4}$ (+4.0 σ)	z_*	1087.68	$1087.7^{+3.5}_{-3.1}$ (−6.3 σ)	$\sigma_8(0.38)$	0.6554	$0.653^{+0.021}_{-0.022}$ (−1.6 σ)
Ω_Λ	0.719	$0.721^{+0.056}_{-0.059}$ (+3.1 σ)	r_*	144.74	$144.9^{+1.6}_{-1.5}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.4535	$0.450^{+0.039}_{-0.042}$ (−3.1 σ)
Ω_m	0.281	$0.279^{+0.059}_{-0.056}$ (−3.1 σ)	$100\theta_*$	1.04020	$1.0402^{+0.0017}_{-0.0016}$ (−1.7 σ)	$\sigma_8(0.51)$	0.6148	$0.613^{+0.018}_{-0.019}$ (−1.3 σ)
$\Omega_m h^2$	0.1389	$0.1383^{+0.0079}_{-0.0075}$ (−2.4 σ)	$D_M(z_*)/\text{Gpc}$	13.915	$13.93^{+0.14}_{-0.14}$ (+1.0 σ)	$f\sigma_8(0.61)$	0.4512	$0.448^{+0.034}_{-0.037}$ (−3.1 σ)
$\Omega_m h^3$	0.09774	$0.0977^{+0.0037}_{-0.0034}$ (+4.0 σ)	z_{drag}	1062.91	$1062.9^{+4.9}_{-4.8}$ (+7.7 σ)	$\sigma_8(0.61)$	0.5860	$0.584^{+0.016}_{-0.017}$ (−1.1 σ)
σ_8	0.7926	$0.789^{+0.036}_{-0.040}$ (−2.4 σ)	r_{drag}	146.93	$147.1^{+1.7}_{-1.6}$ (−0.4 σ)	$f\sigma_8(2.33)$	0.2967	$0.2958^{+0.0071}_{-0.0074}$ (−0.4 σ)
S_8	0.767	$0.76^{+0.12}_{-0.11}$ (−3.1 σ)	k_D	0.14207	$0.1418^{+0.0027}_{-0.0028}$ (+2.7 σ)	$\sigma_8(2.33)$	0.3074	$0.3068^{+0.0074}_{-0.0072}$ (+0.3 σ)
$\sigma_8 \Omega_m^{0.5}$	0.420	$0.416^{+0.064}_{-0.060}$ (−3.1 σ)	$100\theta_D$	0.15892	$0.1590^{+0.0026}_{-0.0025}$ (−7.9 σ)	$r_{0.002}$	0.194	< 0.764 (+8.5 σ)
$\sigma_8 \Omega_m^{0.25}$	0.577	$0.573^{+0.055}_{-0.056}$ (−3.1 σ)	z_{eq}	3304	3289^{+190}_{-180} (−2.4 σ)	$r_{0.01}$	0.191	< 0.660 (+7.5 σ)
$\sigma_8/h^{0.5}$	0.945	$0.939^{+0.078}_{-0.080}$ (−3.1 σ)	k_{eq}	0.01008	$0.01004^{+0.00057}_{-0.00055}$ (−2.4 σ)	$\ln(10^{10} A_t)$	1.37	$1.4^{+1.4}_{-2.0}$ (+1.7 σ)
$r_{drag} h$	103.4	$104.0^{+8.4}_{-8.2}$ (+3.3 σ)	$100\theta_{eq}$	0.8349	$0.838^{+0.041}_{-0.040}$ (+2.9 σ)	r_{10}	0.100	< 0.413 (+8.7 σ)
$\langle d^2 \rangle^{1/2}$	2.341	$2.32^{+0.16}_{-0.17}$ (−3.3 σ)	$100\theta_{s,eq}$	0.4595	$0.461^{+0.020}_{-0.019}$ (+2.7 σ)	$10^9 A_t$	0.39	< 1.20 (+6.6 σ)
z_{re}	7.22	$7.1^{+1.7}_{-1.7}$ (−0.4 σ)	$H(0.15)$	75.33	$75.6^{+5.1}_{-4.8}$ (+4.2 σ)	$10^9 A_t e^{-2\tau}$	0.35	< 1.08 (+6.6 σ)
$10^9 A_s$	2.106	$2.097^{+0.097}_{-0.096}$ (+0.2 σ)	$D_M(0.15)$	618.3	616^{+45}_{-43} (−3.8 σ)	χ_{small}^2	396.53	398.4 (ν : 2.2) (+0.8 σ)
$10^9 A_s e^{-2\tau}$	1.892	$1.886^{+0.052}_{-0.053}$ (+0.2 σ)	$H(0.38)$	84.93	$85.2^{+4.1}_{-3.7}$ (+4.5 σ)	χ_{plikEE}^2	737.6	742.5 (ν : 5.1)
D_{40}	1275	1297^{+110}_{-100} (+2.9 σ)	$D_M(0.38)$	1482	1478^{+93}_{-91} (−3.9 σ)	χ_{prior}^2	0.00	0.99 (ν : 1.0) (−1.7 σ)
D_{220}	5905	5880^{+390}_{-400} (+4.1 σ)	$H(0.51)$	91.36	$91.6^{+3.5}_{-3.2}$ (+4.9 σ)	χ_{CMB}^2	1134.1	1140.9 (ν : 6.9) (−9.3 σ)

Best-fit $\chi_{eff}^2 = 1134.13$; $\Delta\chi_{eff}^2 = -0.43$; $\bar{\chi}_{eff}^2 = 1141.89$; $\Delta\bar{\chi}_{eff}^2 = 0.28$; $R - 1 = 0.00830$

χ_{eff}^2 : CMB - small_100x143_offlike5_EE_Aplanck_B: 396.53 (Δ 0.94) plik_rd12_HM_v22_EE: 737.59 (Δ -1.37)

17.26 base_r_plikHM_EE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02330	$0.0230^{+0.0014}_{-0.0014}$ (+4.2 σ)	D_{2000}	238.3	238^{+11}_{-11} (+4.7 σ)	$D_M(2.33)$	5731	5741^{+62}_{-61} (-2.2 σ)
$\Omega_c h^2$	0.11753	$0.1174^{+0.0029}_{-0.0029}$ (-1.4 σ)	$n_{s,0.002}$	0.9767	$0.983^{+0.023}_{-0.022}$ (+3.4 σ)	$f\sigma_8(0.15)$	0.4457	$0.445^{+0.019}_{-0.019}$ (-1.3 σ)
$100\theta_{MC}$	1.03986	$1.0399^{+0.0015}_{-0.0015}$ (-1.9 σ)	Y_P	0.24579	$0.24567^{+0.00055}_{-0.00058}$ (+3.9 σ)	$\sigma_8(0.15)$	0.7436	$0.743^{+0.017}_{-0.018}$ (-0.8 σ)
τ	0.0532	$0.051^{+0.016}_{-0.018}$ (-0.1 σ)	Y_P^{BBN}	0.24712	$0.24699^{+0.00055}_{-0.00058}$ (+3.9 σ)	$f\sigma_8(0.38)$	0.4663	$0.466^{+0.016}_{-0.016}$ (-1.3 σ)
$\ln(10^{10} A_s)$	3.0493	$3.040^{+0.043}_{-0.044}$ (+0.1 σ)	$10^5 D/H$	2.422	$2.47^{+0.25}_{-0.23}$ (-3.9 σ)	$\sigma_8(0.38)$	0.6603	$0.659^{+0.015}_{-0.015}$ (-0.5 σ)
n_s	0.9767	$0.983^{+0.023}_{-0.022}$ (+3.4 σ)	Age/Gyr	13.725	$13.75^{+0.15}_{-0.14}$ (-2.2 σ)	$f\sigma_8(0.51)$	0.4663	$0.466^{+0.014}_{-0.015}$ (-1.2 σ)
r	0.065	< 0.540 (+6.0 σ)	z_*	1088.59	$1088.9^{+1.8}_{-1.6}$ (-3.4 σ)	$\sigma_8(0.51)$	0.6185	$0.618^{+0.014}_{-0.014}$ (-0.4 σ)
y_{cal}	1.00017	$1.0001^{+0.0050}_{-0.0047}$ (-0.2 σ)	r_*	144.36	$144.6^{+1.1}_{-1.2}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4623	$0.462^{+0.013}_{-0.014}$ (-1.2 σ)
H_0	68.65	$68.5^{+1.7}_{-1.6}$ (+1.6 σ)	$100\theta_*$	1.03995	$1.0400^{+0.0015}_{-0.0016}$ (-2.1 σ)	$\sigma_8(0.61)$	0.5888	$0.588^{+0.013}_{-0.013}$ (-0.3 σ)
Ω_Λ	0.6998	$0.699^{+0.017}_{-0.018}$ (+1.4 σ)	$D_M(z_*)/\text{Gpc}$	13.881	$13.90^{+0.11}_{-0.12}$ (+0.4 σ)	$f\sigma_8(2.33)$	0.2973	$0.2969^{+0.0064}_{-0.0067}$ (-0.0 σ)
Ω_m	0.3002	$0.301^{+0.018}_{-0.017}$ (-1.4 σ)	z_{drag}	1061.88	$1061.3^{+3.0}_{-3.1}$ (+4.2 σ)	$\sigma_8(2.33)$	0.3071	$0.3066^{+0.0067}_{-0.0070}$ (+0.3 σ)
$\Omega_m h^2$	0.14147	$0.1411^{+0.0030}_{-0.0029}$ (-1.0 σ)	r_{drag}	146.72	$147.0^{+1.5}_{-1.6}$ (-0.5 σ)	$r_{0.002}$	0.062	< 0.670 (+7.4 σ)
$\Omega_m h^3$	0.09711	$0.0967^{+0.0026}_{-0.0025}$ (+1.7 σ)	k_D	0.14194	$0.1414^{+0.0025}_{-0.0026}$ (+1.8 σ)	$r_{0.01}$	0.064	< 0.597 (+6.6 σ)
σ_8	0.8034	$0.802^{+0.020}_{-0.020}$ (-0.9 σ)	$100\theta_D$	0.15945	$0.1598^{+0.0019}_{-0.0017}$ (-4.8 σ)	$\ln(10^{10} A_t)$	0.32	$1.3^{+1.4}_{-2.0}$ (+1.6 σ)
S_8	0.8038	$0.803^{+0.037}_{-0.037}$ (-1.4 σ)	z_{eq}	3365	3355^{+72}_{-69} (-1.0 σ)	r_{10}	0.032	< 0.362 (+7.6 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4402	$0.440^{+0.020}_{-0.020}$ (-1.4 σ)	k_{eq}	0.010271	$0.01024^{+0.00022}_{-0.00021}$ (-1.0 σ)	$10^9 A_t$	0.14	< 1.12 (+6.0 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5947	$0.594^{+0.019}_{-0.020}$ (-1.3 σ)	$100\theta_{eq}$	0.8217	$0.823^{+0.012}_{-0.012}$ (+1.2 σ)	$10^9 A_t e^{-2\tau}$	0.12	< 1.01 (+6.0 σ)
$\sigma_8/h^{0.5}$	0.9697	$0.969^{+0.029}_{-0.029}$ (-1.3 σ)	$100\theta_{s,eq}$	0.4530	$0.4539^{+0.0064}_{-0.0065}$ (+1.1 σ)	χ_{simall}^2	395.97	$398.3 (\nu: 2.2)$ (+0.7 σ)
$r_{drag} h$	100.71	$100.8^{+2.3}_{-2.2}$ (+1.3 σ)	$H(0.15)$	73.82	$73.7^{+1.6}_{-1.5}$ (+1.7 σ)	χ_{plikEE}^2	738.6	$742.1 (\nu: 4.1)$
$\langle d^2 \rangle^{1/2}$	2.400	$2.377^{+0.076}_{-0.079}$ (-1.8 σ)	$D_M(0.15)$	632.3	633^{+14}_{-14} (-1.6 σ)	χ_{6DF}^2	0.002	$0.057 (\nu: 0.0)$
z_{re}	7.33	$7.2^{+1.7}_{-1.9}$ (-0.4 σ)	$H(0.38)$	83.77	$83.6^{+1.3}_{-1.3}$ (+1.8 σ)	χ_{MGS}^2	1.82	$1.94 (\nu: 0.3)$
$10^9 A_s$	2.110	$2.091^{+0.091}_{-0.091}$ (+0.1 σ)	$D_M(0.38)$	1510.8	1513^{+30}_{-30} (-1.7 σ)	$\chi_{DR12BAO}^2$	3.61	$4.4 (\nu: 0.7)$
$10^9 A_s e^{-2\tau}$	1.897	$1.888^{+0.051}_{-0.049}$ (+0.3 σ)	$H(0.51)$	90.39	$90.2^{+1.2}_{-1.2}$ (+1.9 σ)	χ_{prior}^2	0.00	$0.98 (\nu: 0.9)$ (-1.7 σ)
D_{40}	1247	1295^{+110}_{-99} (+2.8 σ)	$D_M(0.51)$	1958.9	1962^{+37}_{-37} (-1.7 σ)	χ_{BAO}^2	5.43	$6.4 (\nu: 0.9)$
D_{220}	5855	5773^{+290}_{-310} (+1.5 σ)	$H(0.61)$	95.94	$95.8^{+1.1}_{-1.1}$ (+2.1 σ)	χ_{CMB}^2	1134.5	$1140.4 (\nu: 6.1)$ (-9.4 σ)
D_{810}	2575	2567^{+68}_{-66} (+2.2 σ)	$D_M(0.61)$	2280.9	2285^{+41}_{-40} (-1.7 σ)			
D_{1420}	836.4	836^{+29}_{-29} (+4.1 σ)	$H(2.33)$	235.76	$235.4^{+2.2}_{-2.1}$ (-0.9 σ)			

Best-fit $\chi_{eff}^2 = 1139.97$; $\Delta\chi_{eff}^2 = -0.19$; $\bar{\chi}_{eff}^2 = 1147.71$; $\Delta\bar{\chi}_{eff}^2 = 0.35$; $R - 1 = 0.01154$

χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.82 (Δ -0.07) DR12BAO: 3.61 (Δ 0.01) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.97 (Δ 0.36) plik_rd12_HM_v22_EE: 738.57 (Δ -0.47)

17.27 base_r_plikHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0239^{+0.0025}_{-0.0023} \quad (+7.9\sigma)$	D_{810}	$2582^{+77}_{-75} \quad (+3.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1921^{+110}_{-110} \quad (-4.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1138^{+0.0095}_{-0.0092} \quad (-3.1\sigma)$	D_{1420}	$846^{+37}_{-37} \quad (+6.0\sigma)$	$H(0.61)$	$96.9^{+3.0}_{-2.8} \quad (+5.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0402^{+0.0017}_{-0.0017} \quad (-1.3\sigma)$	D_{2000}	$242^{+14}_{-14} \quad (+6.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2239^{+120}_{-120} \quad (-4.0\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.5\sigma)$	$n_{\mathrm{s},0.002}$	$0.993^{+0.035}_{-0.031} \quad (+5.2\sigma)$	$H(2.33)$	$233.9^{+4.5}_{-4.4} \quad (-2.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.049^{+0.041}_{-0.038} \quad (+0.6\sigma)$	Y_{P}	$0.24598^{+0.00093}_{-0.00096} \quad (+7.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5692^{+130}_{-140} \quad (-5.1\sigma)$
n_{s}	$0.993^{+0.035}_{-0.031} \quad (+5.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24731^{+0.00094}_{-0.00096} \quad (+7.2\sigma)$	$f\sigma_8(0.15)$	$0.425^{+0.059}_{-0.057} \quad (-3.0\sigma)$
r	$< 0.578 \quad (+6.6\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.34^{+0.40}_{-0.36} \quad (-7.0\sigma)$	$\sigma_8(0.15)$	$0.735^{+0.027}_{-0.030} \quad (-1.7\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0049} \quad (-0.2\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.64^{+0.29}_{-0.31} \quad (-5.1\sigma)$	$f\sigma_8(0.38)$	$0.449^{+0.046}_{-0.047} \quad (-3.0\sigma)$
H_0	$70.6^{+5.6}_{-5.4} \quad (+3.9\sigma)$	z_*	$1087.7^{+3.5}_{-3.1} \quad (-6.2\sigma)$	$\sigma_8(0.38)$	$0.655^{+0.019}_{-0.021} \quad (-1.2\sigma)$
Ω_{Λ}	$0.721^{+0.056}_{-0.059} \quad (+3.1\sigma)$	r_*	$144.9^{+1.6}_{-1.5} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.452^{+0.039}_{-0.041} \quad (-2.9\sigma)$
Ω_{m}	$0.279^{+0.059}_{-0.056} \quad (-3.1\sigma)$	$100\theta_*$	$1.0402^{+0.0017}_{-0.0016} \quad (-1.7\sigma)$	$\sigma_8(0.51)$	$0.615^{+0.016}_{-0.018} \quad (-0.9\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1383^{+0.0078}_{-0.0076} \quad (-2.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.93^{+0.14}_{-0.14} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.450^{+0.034}_{-0.036} \quad (-2.8\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0976^{+0.0037}_{-0.0033} \quad (+3.8\sigma)$	z_{drag}	$1062.8^{+4.8}_{-4.7} \quad (+7.6\sigma)$	$\sigma_8(0.61)$	$0.586^{+0.014}_{-0.015} \quad (-0.7\sigma)$
σ_8	$0.792^{+0.035}_{-0.038} \quad (-2.1\sigma)$	r_{drag}	$147.1^{+1.7}_{-1.6} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0064}_{-0.0062} \quad (-0.0\sigma)$
S_8	$0.76^{+0.12}_{-0.11} \quad (-3.0\sigma)$	k_{D}	$0.1418^{+0.0026}_{-0.0028} \quad (+2.6\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0064}_{-0.0061} \quad (+0.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.418^{+0.064}_{-0.059} \quad (-3.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1590^{+0.0026}_{-0.0024} \quad (-7.7\sigma)$	$r_{0.002}$	$< 0.767 \quad (+8.6\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.575^{+0.055}_{-0.054} \quad (-2.9\sigma)$	z_{eq}	$3290^{+190}_{-180} \quad (-2.4\sigma)$	$r_{0.01}$	$< 0.661 \quad (+7.5\sigma)$
$\sigma_8/h^{0.5}$	$0.943^{+0.077}_{-0.078} \quad (-2.9\sigma)$	k_{eq}	$0.01004^{+0.00057}_{-0.00055} \quad (-2.4\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$1.4^{+1.4}_{-2.0} \quad (+1.7\sigma)$
$r_{\mathrm{drag}}h$	$103.9^{+8.3}_{-8.1} \quad (+3.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.838^{+0.041}_{-0.039} \quad (+2.9\sigma)$	r_{10}	$< 0.413 \quad (+8.7\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.33^{+0.16}_{-0.16} \quad (-3.1\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.461^{+0.020}_{-0.019} \quad (+2.6\sigma)$	10^9A_{t}	$< 1.21 \quad (+6.7\sigma)$
z_{re}	$< 8.52 \quad (-0.0\sigma)$	$H(0.15)$	$75.6^{+5.0}_{-4.7} \quad (+4.1\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 1.08 \quad (+6.6\sigma)$
10^9A_{s}	$2.110^{+0.089}_{-0.078} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$617^{+45}_{-42} \quad (-3.7\sigma)$	χ_{small}^2	$398.1 \quad (\nu: 1.9) \quad (+0.6\sigma)$
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.886^{+0.052}_{-0.052} \quad (+0.2\sigma)$	$H(0.38)$	$85.1^{+4.0}_{-3.7} \quad (+4.5\sigma)$	χ_{plikEE}^2	$742.4 \quad (\nu: 5.0)$
D_{40}	$1296^{+110}_{-100} \quad (+2.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1479^{+93}_{-90} \quad (-3.9\sigma)$	χ_{prior}^2	$0.99 \quad (\nu: 1.0) \quad (-1.7\sigma)$
D_{220}	$5872^{+380}_{-390} \quad (+3.9\sigma)$	$H(0.51)$	$91.5^{+3.5}_{-3.1} \quad (+4.8\sigma)$	χ_{CMB}^2	$1140.5 \quad (\nu: 6.3) \quad (-9.4\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1141.46; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.16; R - 1 = 0.01059$$

17.28 base_r_plikHM_EE_lowE_post_BAO_zre6p5

Parameter	95% limits		Parameter	95% limits		Parameter	95% limits	
$\Omega_{\mathrm{b}}h^2$	$0.0230^{+0.0014}_{-0.0014}$	$(+4.1\sigma)$	D_{2000}	238^{+11}_{-11}	$(+4.6\sigma)$	$D_{\mathrm{M}}(2.33)$	5742^{+60}_{-62}	(-2.1σ)
$\Omega_{\mathrm{c}}h^2$	$0.1174^{+0.0029}_{-0.0029}$	(-1.4σ)	$n_{\mathrm{s},0.002}$	$0.984^{+0.023}_{-0.021}$	$(+3.5\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.019}_{-0.019}$	(-1.2σ)
$100\theta_{\mathrm{MC}}$	$1.0399^{+0.0015}_{-0.0015}$	(-1.9σ)	Y_{P}	$0.24566^{+0.00052}_{-0.00059}$	$(+3.8\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.016}_{-0.016}$	(-0.5σ)
τ	$0.054^{+0.012}_{-0.010}$	$(+0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24698^{+0.00053}_{-0.00059}$	$(+3.8\sigma)$	$f\sigma_8(0.38)$	$0.467^{+0.015}_{-0.015}$	(-1.1σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.039}_{-0.037}$	$(+0.4\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.47^{+0.25}_{-0.23}$	(-3.8σ)	$\sigma_8(0.38)$	$0.661^{+0.014}_{-0.013}$	(-0.2σ)
n_{s}	$0.984^{+0.023}_{-0.021}$	$(+3.5\sigma)$	Age/Gyr	$13.75^{+0.14}_{-0.14}$	(-2.1σ)	$f\sigma_8(0.51)$	$0.467^{+0.013}_{-0.014}$	(-1.1σ)
r	< 0.547	$(+6.1\sigma)$	z_*	$1088.9^{+1.7}_{-1.7}$	(-3.3σ)	$\sigma_8(0.51)$	$0.619^{+0.013}_{-0.012}$	(-0.0σ)
y_{cal}	$1.0001^{+0.0049}_{-0.0047}$	(-0.2σ)	r_*	$144.6^{+1.1}_{-1.2}$	$(+0.2\sigma)$	$f\sigma_8(0.61)$	$0.463^{+0.012}_{-0.013}$	(-1.0σ)
H_0	$68.5^{+1.7}_{-1.6}$	$(+1.6\sigma)$	$100\theta_*$	$1.0400^{+0.0015}_{-0.0016}$	(-2.1σ)	$\sigma_8(0.61)$	$0.590^{+0.012}_{-0.011}$	$(+0.0\sigma)$
Ω_{Λ}	$0.699^{+0.017}_{-0.018}$	$(+1.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.90^{+0.11}_{-0.11}$	$(+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0059}_{-0.0055}$	$(+0.3\sigma)$
Ω_{m}	$0.301^{+0.018}_{-0.017}$	(-1.4σ)	z_{drag}	$1061.2^{+3.0}_{-3.0}$	$(+4.1\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0061}_{-0.0056}$	$(+0.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1410^{+0.0030}_{-0.0028}$	(-1.0σ)	r_{drag}	$147.1^{+1.5}_{-1.6}$	(-0.4σ)	$r_{0.002}$	< 0.674	$(+7.5\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0966^{+0.0025}_{-0.0024}$	$(+1.6\sigma)$	k_{D}	$0.1414^{+0.0025}_{-0.0025}$	$(+1.7\sigma)$	$r_{0.01}$	< 0.603	$(+6.7\sigma)$
σ_8	$0.805^{+0.018}_{-0.018}$	(-0.6σ)	$100\theta_{\mathrm{D}}$	$0.1599^{+0.0018}_{-0.0017}$	(-4.7σ)	$\ln(10^{10}A_{\mathrm{t}})$	$1.3^{+1.4}_{-2.0}$	$(+1.7\sigma)$
S_8	$0.806^{+0.036}_{-0.036}$	(-1.2σ)	z_{eq}	3355^{+72}_{-68}	(-1.0σ)	r_{10}	< 0.366	$(+7.7\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.441^{+0.020}_{-0.020}$	(-1.2σ)	k_{eq}	$0.01024^{+0.00022}_{-0.00021}$	(-1.0σ)	10^9A_{t}	< 1.14	$(+6.1\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.596^{+0.019}_{-0.019}$	(-1.1σ)	$100\theta_{\mathrm{eq}}$	$0.823^{+0.012}_{-0.012}$	$(+1.2\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	< 1.03	$(+6.1\sigma)$
$\sigma_8/h^{0.5}$	$0.972^{+0.027}_{-0.028}$	(-1.1σ)	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4539^{+0.0063}_{-0.0065}$	$(+1.1\sigma)$	χ_{small}^2	$398.0 (\nu: 1.9)$	$(+0.6\sigma)$
$r_{\mathrm{drag}}h$	$100.8^{+2.3}_{-2.2}$	$(+1.3\sigma)$	$H(0.15)$	$73.7^{+1.6}_{-1.5}$	$(+1.7\sigma)$	χ_{plikEE}^2	$741.9 (\nu: 3.9)$	
$\langle d^2 \rangle^{1/2}$	$2.382^{+0.074}_{-0.075}$	(-1.7σ)	$D_{\mathrm{M}}(0.15)$	634^{+14}_{-15}	(-1.6σ)	$\chi_{6\mathrm{DF}}^2$	$0.057 (\nu: 0.0)$	
z_{re}	< 8.63	$(+0.0\sigma)$	$H(0.38)$	$83.6^{+1.3}_{-1.3}$	$(+1.8\sigma)$	χ_{MGS}^2	$1.93 (\nu: 0.3)$	
10^9A_{s}	$2.103^{+0.082}_{-0.077}$	$(+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	1514^{+30}_{-31}	(-1.7σ)	$\chi_{\mathrm{DR12BAO}}^2$	$4.4 (\nu: 0.7)$	
$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.887^{+0.052}_{-0.051}$	$(+0.3\sigma)$	$H(0.51)$	$90.2^{+1.2}_{-1.2}$	$(+1.9\sigma)$	χ_{prior}^2	$0.95 (\nu: 0.9)$	(-1.7σ)
D_{40}	1295^{+110}_{-97}	$(+2.8\sigma)$	$D_{\mathrm{M}}(0.51)$	1963^{+36}_{-37}	(-1.7σ)	χ_{BAO}^2	$6.3 (\nu: 0.9)$	
D_{220}	5766^{+290}_{-300}	$(+1.3\sigma)$	$H(0.61)$	$95.8^{+1.1}_{-1.1}$	$(+2.0\sigma)$	χ_{CMB}^2	$1140.0 (\nu: 5.5)$	(-9.5σ)
D_{810}	2566^{+67}_{-64}	$(+2.2\sigma)$	$D_{\mathrm{M}}(0.61)$	2285^{+40}_{-41}	(-1.7σ)			
D_{1420}	835^{+29}_{-29}	$(+4.0\sigma)$	$H(2.33)$	$235.4^{+2.2}_{-2.1}$	(-0.9σ)			

$\bar{\chi}_{\mathrm{eff}}^2 = 1147.29$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.22$; $R - 1 = 0.01573$

17.29 base_r_plikHM_TT_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022177	$0.02214^{+0.00042}_{-0.00040}$ $(+0.1\sigma)$	$r_{\text{drag}} h$	98.82	$98.9^{+2.4}_{-2.3}$ $(+0.1\sigma)$	$D_{\text{M}}(0.51)$	1991.6	1992^{+27}_{-28} (-0.1σ)
$\Omega_c h^2$	0.12018	$0.1200^{+0.0030}_{-0.0030}$ (-0.1σ)	$\langle d^2 \rangle^{1/2}$	2.4451	$2.444^{+0.048}_{-0.049}$ (-0.1σ)	$H(0.61)$	95.10	$95.08^{+0.60}_{-0.55}$ $(+0.1\sigma)$
$100\theta_{\text{MC}}$	1.04085	$1.04082^{+0.00089}_{-0.00086}$ $(+0.0\sigma)$	z_{re}	7.55	$7.5^{+1.5}_{-1.6}$ $(+0.1\sigma)$	$D_{\text{M}}(0.61)$	2316.8	2317^{+29}_{-30} (-0.1σ)
τ	0.0526	$0.053^{+0.015}_{-0.015}$ $(+0.1\sigma)$	$10^9 A_{\text{s}}$	2.092	$2.091^{+0.060}_{-0.060}$ $(+0.1\sigma)$	$H(2.33)$	236.48	$236.4^{+1.8}_{-1.8}$ (-0.1σ)
$\ln(10^{10} A_{\text{s}})$	3.0408	$3.040^{+0.029}_{-0.029}$ $(+0.1\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8834	$1.882^{+0.022}_{-0.022}$ (-0.1σ)	$D_{\text{M}}(2.33)$	5773.2	5775^{+27}_{-29} (-0.1σ)
n_{s}	0.9647	$0.9643^{+0.0096}_{-0.0092}$ $(+0.1\sigma)$	D_{40}	1229.4	1244^{+32}_{-31} (-0.0σ)	$f\sigma_8(0.15)$	0.4611	$0.460^{+0.016}_{-0.016}$ (-0.1σ)
r	0.000	< 0.107 (-0.0σ)	D_{220}	5715	5714^{+83}_{-80} $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7488	$0.748^{+0.011}_{-0.011}$ (-0.0σ)
y_{cal}	1.00047	$1.0006^{+0.0049}_{-0.0048}$ $(+0.0\sigma)$	D_{810}	2538.4	2537^{+27}_{-26} $(+0.0\sigma)$	$f\sigma_8(0.38)$	0.4781	$0.477^{+0.012}_{-0.012}$ (-0.1σ)
A_{217}^{CIB}	48.7	48^{+10}_{-10} $(+0.0\sigma)$	D_{1420}	816.1	815^{+10}_{-10} $(+0.0\sigma)$	$\sigma_8(0.38)$	0.6631	$0.6625^{+0.0095}_{-0.0095}$ (-0.0σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.34	—	D_{2000}	230.18	$229.8^{+3.6}_{-3.6}$ $(+0.0\sigma)$	$f\sigma_8(0.51)$	0.4760	$0.475^{+0.010}_{-0.011}$ (-0.1σ)
A_{143}^{tSZ}	7.01	$5.1^{+3.8}_{-3.9}$ (-0.0σ)	$n_{\text{s},0.002}$	0.9647	$0.9643^{+0.0096}_{-0.0092}$ $(+0.1\sigma)$	$\sigma_8(0.51)$	0.6203	$0.6198^{+0.0090}_{-0.0089}$ $(+0.0\sigma)$
A_{100}^{PS}	254	263^{+50}_{-50} $(+0.0\sigma)$	Y_{P}	0.245316	$0.24530^{+0.00017}_{-0.00019}$ $(+0.1\sigma)$	$f\sigma_8(0.61)$	0.4705	$0.4699^{+0.0092}_{-0.0094}$ (-0.1σ)
A_{143}^{PS}	49.5	49^{+20}_{-20} (-0.0σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246643	$0.24662^{+0.00017}_{-0.00019}$ $(+0.1\sigma)$	$\sigma_8(0.61)$	0.5901	$0.5896^{+0.0086}_{-0.0086}$ $(+0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	47.3	44^{+20}_{-20} (-0.0σ)	10^5D/H	2.622	$2.629^{+0.078}_{-0.078}$ (-0.1σ)	$f\sigma_8(2.33)$	0.29729	$0.2970^{+0.0045}_{-0.0045}$ $(+0.0\sigma)$
A_{217}^{PS}	119.3	115^{+20}_{-20} (-0.0σ)	Age/Gyr	13.820	$13.824^{+0.062}_{-0.064}$ (-0.1σ)	$\sigma_8(2.33)$	0.3062	$0.3060^{+0.0050}_{-0.0050}$ $(+0.1\sigma)$
A^{kSZ}	0.02	< 8.45 $(+0.0\sigma)$	z_*	1090.18	$1090.22^{+0.67}_{-0.68}$ (-0.1σ)	$r_{0.002}$	0.000	< 0.100 (-0.0σ)
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	r_*	144.53	$144.60^{+0.72}_{-0.71}$ $(+0.1\sigma)$	$r_{0.01}$	0.000	< 0.104 (-0.0σ)
A_{143}^{dustTT}	10.79	$10.7^{+3.5}_{-3.4}$ (-0.0σ)	$100\theta_*$	1.04106	$1.04103^{+0.00088}_{-0.00085}$ $(+0.0\sigma)$	$\ln(10^{10} A_{\text{t}})$	-5.72	$-0.7^{+1.9}_{-2.5}$ $(+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$18.3^{+6.4}_{-6.5}$ $(+0.0\sigma)$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.883	$13.890^{+0.067}_{-0.068}$ $(+0.1\sigma)$	r_{10}	0.0001	< 0.0518 (-0.0σ)
A_{217}^{dustTT}	94.7	93^{+10}_{-10} (-0.0σ)	z_{drag}	1059.51	$1059.41^{+0.91}_{-0.89}$ $(+0.0\sigma)$	$10^9 A_{\text{t}}$	0.000	< 0.224 (-0.0σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	r_{drag}	147.26	$147.34^{+0.74}_{-0.74}$ $(+0.1\sigma)$	$10^9 A_{\text{t}} e^{-2\tau}$	0.000	< 0.202 (-0.0σ)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	k_{D}	0.14054	$0.14043^{+0.00091}_{-0.00089}$ (-0.1σ)	f_{2000}^{143}	30.2	31^{+6}_{-6} $(+0.0\sigma)$
H_0	67.11	$67.1^{+1.4}_{-1.3}$ $(+0.1\sigma)$	$100\theta_{\text{D}}$	0.16101	$0.16106^{+0.00052}_{-0.00053}$ (-0.1σ)	$f_{2000}^{143 \times 217}$	33.17	33^{+4}_{-4} (-0.0σ)
Ω_{Λ}	0.6825	$0.683^{+0.018}_{-0.019}$ $(+0.1\sigma)$	z_{eq}	3402	3398^{+69}_{-69} (-0.1σ)	f_{2000}^{217}	107.60	$108.1^{+3.7}_{-3.8}$ $(+0.0\sigma)$
Ω_{m}	0.3175	$0.317^{+0.019}_{-0.018}$ (-0.1σ)	k_{eq}	0.010383	$0.01037^{+0.00021}_{-0.00021}$ (-0.1σ)	χ_{lensing}^2	8.90	9.46 $(\nu: 0.4)$
$\Omega_{\text{m}} h^2$	0.14300	$0.1428^{+0.0029}_{-0.0029}$ (-0.1σ)	$100\theta_{\text{eq}}$	0.8128	$0.813^{+0.013}_{-0.013}$ $(+0.1\sigma)$	χ_{small}^2	395.87	397.1 $(\nu: 1.2)$ (-0.0σ)
$\Omega_{\text{m}} h^3$	0.09597	$0.09586^{+0.00090}_{-0.00087}$ (-0.0σ)	$100\theta_{\text{s,eq}}$	0.4492	$0.4496^{+0.0067}_{-0.0065}$ $(+0.1\sigma)$	χ_{lowl}^2	23.37	24.9 $(\nu: 1.3)$ (-0.1σ)
σ_8	0.8110	$0.810^{+0.012}_{-0.012}$ (-0.0σ)	$H(0.15)$	72.45	$72.5^{+1.2}_{-1.1}$ $(+0.1\sigma)$	χ_{plik}^2	759.0	771.2 $(\nu: 13.6)$ (-0.1σ)
S_8	0.8344	$0.833^{+0.031}_{-0.031}$ (-0.1σ)	$D_{\text{M}}(0.15)$	645.6	646^{+12}_{-12} (-0.1σ)	χ_{prior}^2	1.4	7.3 $(\nu: 6.7)$ (-0.0σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4570	$0.456^{+0.017}_{-0.017}$ (-0.1σ)	$H(0.38)$	82.66	$82.66^{+0.89}_{-0.84}$ $(+0.1\sigma)$	χ_{CMB}^2	1187.2	1202.6 $(\nu: 16.1)$ $(+1.6\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6088	$0.608^{+0.015}_{-0.015}$ (-0.1σ)	$D_{\text{M}}(0.38)$	1538.2	1538^{+23}_{-24} (-0.1σ)			
$\sigma_8/h^{0.5}$	0.9900	$0.989^{+0.020}_{-0.021}$ (-0.1σ)	$H(0.51)$	89.44	$89.43^{+0.72}_{-0.67}$ $(+0.1\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 1188.55$; $\Delta\chi_{\text{eff}}^2 = -0.02$; $\bar{\chi}_{\text{eff}}^2 = 1209.87$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.46$; $R - 1 = 0.00994$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.90 (Δ -0.00) small_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ 0.01) commander_dx12.v3.2.29: 23.37 (Δ 0.14) plik_rd12_HM.v22.TT: 759.04 (Δ -0.28)

17.30 base_r_plikHM_TT_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022253	$0.02221^{+0.00040}_{-0.00038}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4337	$2.433^{+0.042}_{-0.041}$ (−0.4 σ)	$D_M(0.61)$	2306.8	2307^{+21}_{-21} (−0.6 σ)
$\Omega_c h^2$	0.11914	$0.1190^{+0.0021}_{-0.0021}$ (−0.6 σ)	z_{re}	7.75	$7.8^{+1.4}_{-1.5}$ (+0.4 σ)	$H(2.33)$	235.88	$235.8^{+1.4}_{-1.4}$ (−0.6 σ)
$100\theta_{\text{MC}}$	1.04096	$1.04098^{+0.00083}_{-0.00084}$ (+0.3 σ)	$10^9 A_s$	2.099	$2.097^{+0.060}_{-0.058}$ (+0.3 σ)	$D_M(2.33)$	5766.1	5768^{+24}_{-23} (−0.5 σ)
τ	0.0549	$0.055^{+0.014}_{-0.014}$ (+0.4 σ)	$10^9 A_s e^{-2\tau}$	1.8808	$1.879^{+0.021}_{-0.021}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4560	$0.456^{+0.012}_{-0.012}$ (−0.5 σ)
$\ln(10^{10} A_s)$	3.0440	$3.043^{+0.028}_{-0.028}$ (+0.3 σ)	D_{40}	1226.7	1241^{+32}_{-30} (−0.2 σ)	$\sigma_8(0.15)$	0.7479	$0.747^{+0.011}_{-0.011}$ (−0.1 σ)
n_s	0.9669	$0.9666^{+0.0080}_{-0.0081}$ (+0.5 σ)	D_{220}	5728	5722^{+81}_{-80} (+0.3 σ)	$f\sigma_8(0.38)$	0.4744	$0.4740^{+0.0099}_{-0.0097}$ (−0.5 σ)
r	0.000	< 0.113 (+0.0 σ)	D_{810}	2540.0	2537^{+27}_{-26} (+0.1 σ)	$\sigma_8(0.38)$	0.6630	$0.6626^{+0.0097}_{-0.0095}$ (+0.0 σ)
y_{cal}	1.00090	$1.0008^{+0.0048}_{-0.0048}$ (+0.1 σ)	D_{1420}	817.3	$816^{+10}_{-9.7}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4731	$0.4726^{+0.0088}_{-0.0086}$ (−0.4 σ)
A_{217}^{CIB}	48.1	48^{+10}_{-10} (−0.0 σ)	D_{2000}	230.62	$230.2^{+3.6}_{-3.4}$ (+0.2 σ)	$\sigma_8(0.51)$	0.6205	$0.6201^{+0.0091}_{-0.0089}$ (+0.1 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.42	—	$n_{s,0.002}$	0.9669	$0.9666^{+0.0080}_{-0.0081}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4681	$0.4677^{+0.0082}_{-0.0079}$ (−0.4 σ)
A_{143}^{tSZ}	6.96	$5.2^{+3.7}_{-4.0}$ (+0.0 σ)	Y_P	0.245348	$0.24533^{+0.00016}_{-0.00018}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5904	$0.5901^{+0.0086}_{-0.0085}$ (+0.1 σ)
A_{100}^{PS}	254	262^{+60}_{-50} (−0.0 σ)	Y_P^{BBN}	0.246674	$0.24665^{+0.00016}_{-0.00018}$ (+0.4 σ)	$f\sigma_8(2.33)$	0.29770	$0.2976^{+0.0045}_{-0.0044}$ (+0.2 σ)
A_{143}^{PS}	50.6	48^{+20}_{-20} (−0.1 σ)	10^5D/H	2.608	$2.617^{+0.073}_{-0.073}$ (−0.4 σ)	$\sigma_8(2.33)$	0.30694	$0.3068^{+0.0047}_{-0.0047}$ (+0.4 σ)
$A_{143 \times 217}^{\text{PS}}$	49.2	43^{+20}_{-20} (−0.0 σ)	Age/Gyr	13.805	$13.808^{+0.054}_{-0.053}$ (−0.5 σ)	$r_{0.002}$	0.000	< 0.106 (+0.1 σ)
A_{217}^{PS}	120.3	115^{+20}_{-20} (+0.0 σ)	z_*	1089.99	$1090.04^{+0.56}_{-0.57}$ (−0.5 σ)	$r_{0.01}$	0.000	< 0.110 (+0.1 σ)
A^{kSZ}	0.01	< 8.26 (−0.0 σ)	r_*	144.74	$144.80^{+0.55}_{-0.56}$ (+0.6 σ)	$\ln(10^{10} A_t)$	−6.92	$−0.6^{+1.9}_{-2.4}$ (+0.1 σ)
A_{100}^{dustTT}	8.89	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$100\theta_*$	1.04116	$1.04118^{+0.00082}_{-0.00083}$ (+0.3 σ)	r_{10}	0.0000	< 0.0548 (+0.1 σ)
A_{143}^{dustTT}	10.83	$10.7^{+3.5}_{-3.4}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.902	$13.908^{+0.054}_{-0.055}$ (+0.5 σ)	$10^9 A_t$	0.000	< 0.237 (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.6	$18.3^{+6.4}_{-6.4}$ (+0.0 σ)	z_{drag}	1059.59	$1059.49^{+0.90}_{-0.85}$ (+0.2 σ)	$10^9 A_t e^{-2\tau}$	0.000	< 0.213 (+0.0 σ)
A_{217}^{dustTT}	94.9	94^{+10}_{-10} (+0.0 σ)	r_{drag}	147.45	$147.53^{+0.60}_{-0.62}$ (+0.5 σ)	f_{2000}^{143}	30.1	31^{+6}_{-6} (−0.1 σ)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	k_D	0.14040	$0.14028^{+0.00083}_{-0.00083}$ (−0.4 σ)	$f_{2000}^{143 \times 217}$	33.02	33^{+4}_{-4} (−0.1 σ)
c_{217}	0.99823	$0.9983^{+0.0013}_{-0.0012}$ (+0.0 σ)	$100\theta_D$	0.16095	$0.16103^{+0.00051}_{-0.00052}$ (−0.2 σ)	f_{2000}^{217}	107.50	$107.9^{+3.7}_{-3.7}$ (−0.1 σ)
H_0	67.57	$67.58^{+0.96}_{-0.96}$ (+0.6 σ)	z_{eq}	3379	3376^{+50}_{-50} (−0.6 σ)	χ_{lensing}^2	8.81	9.32 (ν : 0.3)
Ω_Λ	0.6889	$0.689^{+0.013}_{-0.013}$ (+0.6 σ)	k_{eq}	0.010312	$0.01030^{+0.00015}_{-0.00015}$ (−0.6 σ)	χ_{small}^2	396.18	397.3 (ν : 1.5) (+0.1 σ)
Ω_m	0.3111	$0.311^{+0.013}_{-0.013}$ (−0.6 σ)	$100\theta_{\text{eq}}$	0.8172	$0.8177^{+0.0092}_{-0.0091}$ (+0.6 σ)	χ_{lowl}^2	23.01	24.5 (ν : 1.1) (−0.3 σ)
$\Omega_m h^2$	0.14203	$0.1419^{+0.0021}_{-0.0021}$ (−0.6 σ)	$100\theta_{s,\text{eq}}$	0.45151	$0.4518^{+0.0047}_{-0.0047}$ (+0.6 σ)	χ_{plik}^2	759.7	771.5 (ν : 13.5) (−0.0 σ)
$\Omega_m h^3$	0.09598	$0.09589^{+0.00090}_{-0.00088}$ (+0.0 σ)	$H(0.15)$	72.85	$72.85^{+0.84}_{-0.83}$ (+0.6 σ)	$\chi_{6\text{DF}}^2$	0.030	0.055 (ν : 0.0)
σ_8	0.8093	$0.809^{+0.012}_{-0.012}$ (−0.2 σ)	$D_M(0.15)$	641.6	$641.6^{+8.3}_{-8.2}$ (−0.6 σ)	χ_{MGS}^2	1.22	1.30 (ν : 0.1)
S_8	0.8241	$0.823^{+0.023}_{-0.023}$ (−0.5 σ)	$H(0.38)$	82.95	$82.94^{+0.65}_{-0.63}$ (+0.6 σ)	χ_{DR12BAO}^2	4.40	4.8 (ν : 1.1)
$\sigma_8 \Omega_m^{0.5}$	0.4514	$0.451^{+0.013}_{-0.013}$ (−0.5 σ)	$D_M(0.38)$	1530.3	1530^{+17}_{-17} (−0.6 σ)	χ_{prior}^2	1.3	7.3 (ν : 6.6) (+0.0 σ)
$\sigma_8 \Omega_m^{0.25}$	0.6044	$0.604^{+0.012}_{-0.012}$ (−0.4 σ)	$H(0.51)$	89.65	$89.64^{+0.54}_{-0.53}$ (+0.6 σ)	χ_{CMB}^2	1187.7	1202.6 (ν : 15.7) (+1.6 σ)
$\sigma_8/h^{0.5}$	0.9845	$0.984^{+0.017}_{-0.017}$ (−0.4 σ)	$D_M(0.51)$	1982.4	1983^{+20}_{-20} (−0.6 σ)	χ_{BAO}^2	5.64	6.1 (ν : 0.7)
$r_{\text{drag}} h$	99.64	$99.7^{+1.6}_{-1.6}$ (+0.6 σ)	$H(0.61)$	95.267	$95.25^{+0.47}_{-0.46}$ (+0.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1194.73$; $\Delta\chi_{\text{eff}}^2 = 0.04$; $\bar{\chi}_{\text{eff}}^2 = 1215.99$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.26$; $R - 1 = 0.01776$
 χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.40 (Δ 0.02) CMB - smicadx12_Dec5_ft1_mv2_ndclpp_p_teb_consext8: 8.81 (Δ -0.07) small_100x143_offlike5_EE_Aplanck: 396.18 (Δ 0.08) commander_dx12_v3_2.29: 23.01 (Δ 0.05) plik_rd12_HM_v22_TT: 759.74 (Δ -0.06)

17.31 base_r_plikHM_TT_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02215^{+0.00042}_{-0.00040} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$99.0^{+2.3}_{-2.2} \quad (+0.2\sigma)$	$D_M(0.51)$	$1991^{+27}_{-28} \quad (-0.2\sigma)$
$\Omega_c h^2$	$0.1199^{+0.0029}_{-0.0029} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.445^{+0.048}_{-0.049} \quad (-0.0\sigma)$	$H(0.61)$	$95.10^{+0.60}_{-0.55} \quad (+0.1\sigma)$
$100\theta_{\text{MC}}$	$1.04083^{+0.00089}_{-0.00086} \quad (+0.0\sigma)$	z_{re}	$< 8.82 \quad (+0.3\sigma)$	$D_M(0.61)$	$2316^{+29}_{-30} \quad (-0.2\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$10^9 A_s$	$2.096^{+0.053}_{-0.049} \quad (+0.2\sigma)$	$H(2.33)$	$236.3^{+1.8}_{-1.8} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.025}_{-0.023} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$D_M(2.33)$	$5774^{+27}_{-28} \quad (-0.1\sigma)$
n_s	$0.9646^{+0.0094}_{-0.0090} \quad (+0.1\sigma)$	D_{40}	$1243^{+32}_{-31} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.016}_{-0.016} \quad (-0.1\sigma)$
r	$< 0.108 \quad (+0.0\sigma)$	D_{220}	$5714^{+83}_{-80} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0098} \quad (+0.1\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.012}_{-0.013} \quad (-0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.6632^{+0.0089}_{-0.0080} \quad (+0.1\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.8^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.9646^{+0.0094}_{-0.0090} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0080}_{-0.0077} \quad (+0.1\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	Y_{P}	$0.24530^{+0.00017}_{-0.00019} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4701^{+0.0091}_{-0.0094} \quad (-0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24663^{+0.00017}_{-0.00019} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5903^{+0.0077}_{-0.0073} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.628^{+0.077}_{-0.078} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0040}_{-0.0037} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Age/Gyr	$13.822^{+0.061}_{-0.064} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0044}_{-0.0041} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.42 \quad (-0.0\sigma)$	z_*	$1090.19^{+0.66}_{-0.67} \quad (-0.2\sigma)$	$r_{0.002}$	$< 0.101 \quad (+0.0\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_*	$144.62^{+0.71}_{-0.69} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.105 \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.4} \quad (-0.0\sigma)$	$100\theta_*$	$1.04104^{+0.00087}_{-0.00085} \quad (+0.0\sigma)$	$\ln(10^{10} A_t)$	$-0.7^{+1.9}_{-2.5} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.892^{+0.066}_{-0.065} \quad (+0.2\sigma)$	r_{10}	$< 0.0522 \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.42^{+0.93}_{-0.90} \quad (+0.1\sigma)$	$10^9 A_t$	$< 0.227 \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.36^{+0.73}_{-0.72} \quad (+0.2\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.203 \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14041^{+0.00089}_{-0.00088} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$67.2^{+1.4}_{-1.3} \quad (+0.2\sigma)$	$100\theta_{\text{D}}$	$0.16106^{+0.00052}_{-0.00053} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.0\sigma)$
Ω_{Λ}	$0.684^{+0.018}_{-0.018} \quad (+0.2\sigma)$	z_{eq}	$3395^{+65}_{-67} \quad (-0.2\sigma)$	f_{2000}^{217}	$108.0^{+3.7}_{-3.7} \quad (-0.0\sigma)$
Ω_{m}	$0.316^{+0.018}_{-0.018} \quad (-0.2\sigma)$	k_{eq}	$0.01036^{+0.00020}_{-0.00021} \quad (-0.2\sigma)$	χ_{lensing}^2	$9.43 \quad (\nu: 0.4)$
$\Omega_{\text{m}} h^2$	$0.1427^{+0.0027}_{-0.0028} \quad (-0.2\sigma)$	$100\theta_{\text{eq}}$	$0.814^{+0.013}_{-0.012} \quad (+0.2\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.2) \quad (-0.1\sigma)$
$\Omega_{\text{m}} h^3$	$0.09586^{+0.00090}_{-0.00087} \quad (-0.0\sigma)$	$100\theta_{\text{s,eq}}$	$0.4499^{+0.0065}_{-0.0062} \quad (+0.2\sigma)$	χ_{lowl}^2	$24.9 \quad (\nu: 1.3) \quad (-0.1\sigma)$
σ_8	$0.811^{+0.012}_{-0.011} \quad (+0.0\sigma)$	$H(0.15)$	$72.5^{+1.2}_{-1.1} \quad (+0.2\sigma)$	χ_{plik}^2	$771.1 \quad (\nu: 13.6) \quad (-0.1\sigma)$
S_8	$0.833^{+0.031}_{-0.032} \quad (-0.1\sigma)$	$D_M(0.15)$	$645^{+11}_{-12} \quad (-0.2\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.456^{+0.017}_{-0.017} \quad (-0.1\sigma)$	$H(0.38)$	$82.69^{+0.88}_{-0.82} \quad (+0.2\sigma)$	χ_{CMB}^2	$1202.4 \quad (\nu: 15.8) \quad (+1.5\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.608^{+0.015}_{-0.015} \quad (-0.1\sigma)$	$D_M(0.38)$	$1537^{+23}_{-23} \quad (-0.2\sigma)$		
$\sigma_8/h^{0.5}$	$0.989^{+0.020}_{-0.021} \quad (-0.1\sigma)$	$H(0.51)$	$89.45^{+0.71}_{-0.66} \quad (+0.2\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1209.64$; $\Delta \bar{\chi}_{\text{eff}}^2 = 1.48$; $R - 1 = 0.01135$

17.32 base_r_plikHM_TT_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02221^{+0.00040}_{-0.00038} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.042}_{-0.041} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+21}_{-21} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0021}_{-0.0021} \quad (-0.6\sigma)$	z_{re}	$7.8^{+1.1}_{-1.3} \quad (+0.4\sigma)$	$H(2.33)$	$235.8^{+1.4}_{-1.4} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04098^{+0.00083}_{-0.00084} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.054}_{-0.052} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+24}_{-23} \quad (-0.5\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.026}_{-0.025} \quad (+0.3\sigma)$	D_{40}	$1241^{+32}_{-30} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.0098} \quad (-0.1\sigma)$
n_{s}	$0.9667^{+0.0080}_{-0.0080} \quad (+0.5\sigma)$	D_{220}	$5722^{+81}_{-80} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4741^{+0.0099}_{-0.0097} \quad (-0.4\sigma)$
r	$< 0.114 \quad (+0.1\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.6630^{+0.0094}_{-0.0083} \quad (+0.1\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	D_{1420}	$816^{+10}_{-9.6} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4728^{+0.0087}_{-0.0085} \quad (-0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{2000}	$230.2^{+3.6}_{-3.4} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0084}_{-0.0080} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9667^{+0.0080}_{-0.0080} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4679^{+0.0080}_{-0.0078} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.2^{+3.7}_{-4.0} \quad (+0.0\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0080}_{-0.0076} \quad (+0.2\sigma)$
A_{100}^{PS}	$262^{+60}_{-50} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00017} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0041}_{-0.0039} \quad (+0.3\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.616^{+0.073}_{-0.073} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0043}_{-0.0041} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.807^{+0.054}_{-0.054} \quad (-0.5\sigma)$	$r_{0.002}$	$< 0.107 \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	z_*	$1090.04^{+0.56}_{-0.56} \quad (-0.6\sigma)$	$r_{0.01}$	$< 0.110 \quad (+0.1\sigma)$
A^{kSZ}	$< 8.24 \quad (-0.0\sigma)$	r_*	$144.81^{+0.55}_{-0.56} \quad (+0.6\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.6^{+1.9}_{-2.4} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$100\theta_*$	$1.04118^{+0.00081}_{-0.00083} \quad (+0.3\sigma)$	r_{10}	$< 0.0549 \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.4} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.908^{+0.054}_{-0.055} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.238 \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.0\sigma)$	z_{drag}	$1059.50^{+0.89}_{-0.86} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.213 \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	r_{drag}	$147.53^{+0.60}_{-0.62} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14028^{+0.00083}_{-0.00083} \quad (-0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00051}_{-0.00052} \quad (-0.2\sigma)$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7} \quad (-0.1\sigma)$
H_0	$67.59^{+0.95}_{-0.95} \quad (+0.6\sigma)$	z_{eq}	$3375^{+50}_{-49} \quad (-0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.28 \quad (\nu: 0.3)$
Ω_{Λ}	$0.689^{+0.012}_{-0.013} \quad (+0.6\sigma)$	k_{eq}	$0.01030^{+0.00015}_{-0.00015} \quad (-0.6\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.5) \quad (+0.1\sigma)$
Ω_{m}	$0.311^{+0.013}_{-0.012} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8179^{+0.0091}_{-0.0090} \quad (+0.6\sigma)$	χ_{lowl}^2	$24.5 \quad (\nu: 1.1) \quad (-0.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0021}_{-0.0021} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0047}_{-0.0047} \quad (+0.6\sigma)$	χ_{plik}^2	$771.4 \quad (\nu: 13.6) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09589^{+0.00090}_{-0.00088} \quad (+0.0\sigma)$	$H(0.15)$	$72.86^{+0.84}_{-0.82} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.5^{+8.2}_{-8.1} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.32 \quad (\nu: 0.1)$
S_8	$0.823^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$H(0.38)$	$82.95^{+0.64}_{-0.63} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.0)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+17}_{-17} \quad (-0.6\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$H(0.51)$	$89.65^{+0.54}_{-0.52} \quad (+0.6\sigma)$	χ_{CMB}^2	$1202.5 \quad (\nu: 15.6) \quad (+1.5\sigma)$
$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.017} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+20}_{-20} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$r_{\mathrm{drag}} h$	$99.7^{+1.6}_{-1.6} \quad (+0.6\sigma)$	$H(0.61)$	$95.25^{+0.47}_{-0.46} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1215.85; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.27; R - 1 = 0.01875$$

17.33 base_r_plikHM_TTTEEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022391	$0.02237^{+0.00028}_{-0.00028}$ (+1.1 σ)	S_8	0.8320	$0.830^{+0.025}_{-0.025}$ (−0.2 σ)	$D_M(0.38)$	1533.2	1533^{+18}_{-18} (−0.5 σ)
$\Omega_c h^2$	0.12002	$0.1199^{+0.0023}_{-0.0024}$ (−0.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4557	$0.455^{+0.014}_{-0.014}$ (−0.2 σ)	$H(0.51)$	89.64	$89.64^{+0.54}_{-0.52}$ (+0.6 σ)
$100\theta_{MC}$	1.04093	$1.04092^{+0.00060}_{-0.00059}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6082	$0.607^{+0.013}_{-0.013}$ (−0.2 σ)	$D_M(0.51)$	1985.6	1985^{+21}_{-22} (−0.5 σ)
τ	0.0543	$0.054^{+0.015}_{-0.014}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9889	$0.988^{+0.018}_{-0.018}$ (−0.2 σ)	$H(0.61)$	95.291	$95.29^{+0.44}_{-0.42}$ (+0.7 σ)
$\ln(10^{10} A_s)$	3.0445	$3.044^{+0.029}_{-0.028}$ (+0.3 σ)	$r_{drag} h$	99.08	$99.2^{+1.9}_{-1.8}$ (+0.3 σ)	$D_M(0.61)$	2310.0	2310^{+23}_{-23} (−0.5 σ)
n_s	0.9663	$0.9659^{+0.0081}_{-0.0081}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4430	$2.442^{+0.043}_{-0.043}$ (−0.1 σ)	$H(2.33)$	236.59	$236.5^{+1.4}_{-1.4}$ (−0.0 σ)
r	0.000	< 0.108 (+0.0 σ)	z_{re}	7.68	$7.7^{+1.5}_{-1.5}$ (+0.2 σ)	$D_M(2.33)$	5762.7	5763^{+20}_{-20} (−0.8 σ)
y_{cal}	1.00038	$1.0006^{+0.0049}_{-0.0047}$ (+0.0 σ)	$10^9 A_s$	2.100	$2.099^{+0.061}_{-0.058}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4600	$0.459^{+0.013}_{-0.013}$ (−0.2 σ)
A_{217}^{CIB}	45.8	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8836	$1.883^{+0.022}_{-0.021}$ (−0.0 σ)	$\sigma_8(0.15)$	0.7496	$0.749^{+0.011}_{-0.010}$ (+0.1 σ)
$\xi^{tSZ \times CIB}$	0.65	—	D_{40}	1228.3	1243^{+32}_{-29} (−0.1 σ)	$f\sigma_8(0.38)$	0.4775	$0.477^{+0.010}_{-0.010}$ (−0.2 σ)
A_{143}^{tSZ}	7.08	$5.5^{+3.8}_{-3.7}$ (+0.2 σ)	D_{220}	5729	5730^{+76}_{-75} (+0.5 σ)	$\sigma_8(0.38)$	0.6641	$0.6636^{+0.0094}_{-0.0092}$ (+0.2 σ)
A_{100}^{PS}	248	258^{+50}_{-50} (−0.2 σ)	D_{810}	2540.9	2539^{+27}_{-25} (+0.2 σ)	$f\sigma_8(0.51)$	0.4757	$0.4750^{+0.0090}_{-0.0091}$ (−0.1 σ)
A_{143}^{PS}	50.6	46^{+20}_{-20} (−0.4 σ)	D_{1420}	818.4	$817.6^{+9.3}_{-9.2}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6213	$0.6209^{+0.0088}_{-0.0086}$ (+0.2 σ)
$A_{143 \times 217}^{PS}$	53.1	43^{+20}_{-20} (−0.1 σ)	D_{2000}	231.35	$231.0^{+3.0}_{-3.1}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4704	$0.4698^{+0.0081}_{-0.0082}$ (−0.1 σ)
A_{217}^{PS}	122.1	115^{+20}_{-20} (+0.0 σ)	$n_{s,0.002}$	0.9663	$0.9659^{+0.0081}_{-0.0081}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5911	$0.5907^{+0.0084}_{-0.0082}$ (+0.2 σ)
A^{kSZ}	0.00	< 7.87 (−0.2 σ)	Y_P	0.245404	$0.24539^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.29789	$0.2977^{+0.0044}_{-0.0043}$ (+0.3 σ)
A_{100}^{dustTT}	8.81	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P^{BBN}	0.246730	$0.24672^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(2.33)$	0.30695	$0.3068^{+0.0047}_{-0.0046}$ (+0.4 σ)
A_{143}^{dustTT}	11.02	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	$10^5 D/H$	2.582	$2.586^{+0.053}_{-0.050}$ (−1.1 σ)	$r_{0.002}$	0.000	< 0.101 (+0.1 σ)
$A_{143 \times 217}^{dustTT}$	20.2	$18.6^{+6.4}_{-6.4}$ (+0.1 σ)	Age/Gyr	13.7951	$13.797^{+0.044}_{-0.045}$ (−0.8 σ)	$r_{0.01}$	0.000	< 0.104 (+0.0 σ)
A_{217}^{dustTT}	95.6	94^{+10}_{-10} (+0.0 σ)	z_*	1089.894	$1089.91^{+0.50}_{-0.49}$ (−0.9 σ)	$\ln(10^{10} A_t)$	−4.62	$-0.6^{+1.9}_{-2.5}$ (+0.1 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.075}_{-0.074}$	r_*	144.41	$144.46^{+0.53}_{-0.52}$ (−0.2 σ)	r_{10}	0.0002	< 0.0521 (+0.0 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	1.04111	$1.04110^{+0.00059}_{-0.00059}$ (+0.2 σ)	$10^9 A_t$	0.001	< 0.226 (+0.1 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	13.8709	$13.876^{+0.049}_{-0.049}$ (−0.2 σ)	$10^9 A_t e^{-2\tau}$	0.001	< 0.203 (+0.0 σ)
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	z_{drag}	1059.97	$1059.93^{+0.58}_{-0.57}$ (+1.2 σ)	f_{2000}^{143}	28.6	29^{+5}_{-5} (−0.6 σ)
$A_{143 \times 217}^{dustTE}$	0.667	$0.67^{+0.16}_{-0.16}$	r_{drag}	147.07	$147.12^{+0.53}_{-0.52}$ (−0.3 σ)	$f_{2000}^{143 \times 217}$	31.92	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dustTE}	2.09	$2.09^{+0.52}_{-0.53}$	k_D	0.14091	$0.14084^{+0.00058}_{-0.00059}$ (+0.7 σ)	f_{2000}^{217}	106.44	$106.9^{+3.5}_{-3.4}$ (−0.6 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_D$	0.160730	$0.16076^{+0.00034}_{-0.00033}$ (−1.2 σ)	$\chi^2_{lensing}$	8.84	9.25 (ν : 0.2)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3403	3400^{+53}_{-53} (−0.1 σ)	χ^2_{small}	396.05	397.2 (ν : 1.6) (+0.1 σ)
H_0	67.37	$67.4^{+1.1}_{-1.1}$ (+0.4 σ)	k_{eq}	0.010387	$0.01038^{+0.00016}_{-0.00016}$ (−0.1 σ)	χ^2_{lowl}	23.21	24.7 (ν : 1.2) (−0.1 σ)
Ω_Λ	0.6848	$0.685^{+0.015}_{-0.015}$ (+0.3 σ)	$100\theta_{eq}$	0.8132	$0.814^{+0.010}_{-0.0099}$ (+0.2 σ)	χ^2_{plik}	2345.0	2359.2 (ν : 16.0) (+294.1 σ)
Ω_m	0.3152	$0.315^{+0.015}_{-0.015}$ (−0.3 σ)	$100\theta_{s,eq}$	0.4493	$0.4496^{+0.0052}_{-0.0051}$ (+0.1 σ)	χ^2_{prior}	1.5	11.6 (ν : 10.3) (+1.1 σ)
$\Omega_m h^2$	0.14305	$0.1429^{+0.0022}_{-0.0022}$ (−0.1 σ)	$H(0.15)$	72.69	$72.71^{+0.93}_{-0.90}$ (+0.4 σ)	χ^2_{CMB}	2773.1	2790.4 (ν : 18.1) (+282.4 σ)
$\Omega_m h^3$	0.09637	$0.09631^{+0.00057}_{-0.00056}$ (+1.0 σ)	$D_M(0.15)$	643.3	$643.1^{+9.1}_{-9.2}$ (−0.4 σ)			
σ_8	0.8117	$0.811^{+0.012}_{-0.012}$ (+0.0 σ)	$H(0.38)$	82.88	$82.89^{+0.68}_{-0.66}$ (+0.5 σ)			

Best-fit $\chi^2_{eff} = 2774.63$; $\Delta\chi^2_{eff} = 0.00$; $\bar{\chi}^2_{eff} = 2801.95$; $\Delta\bar{\chi}^2_{eff} = 1.26$; $R - 1 = 0.00682$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.84 (Δ -0.03) small_100x143_offlike5_EE_Aplanck_B: 396.05 (Δ 0.00) commander_dx12_v3_2_29: 23.20 (Δ -0.05) plik_rd12_HM_v22b_TTTEEE: 2344.99 (Δ 0.06)

17.34 base_r_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022447	$0.02242^{+0.00026}_{-0.00027}$ (+1.3 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4521	$0.451^{+0.011}_{-0.011}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1979.0	1979^{+17}_{-17} (−0.8 σ)
$\Omega_{\mathrm{c}} h^2$	0.11929	$0.1192^{+0.0018}_{-0.0018}$ (−0.5 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6056	$0.605^{+0.011}_{-0.011}$ (−0.4 σ)	$H(0.61)$	95.413	$95.40^{+0.36}_{-0.36}$ (+1.0 σ)
$100\theta_{\mathrm{MC}}$	1.04101	$1.04101^{+0.00057}_{-0.00056}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9859	$0.985^{+0.016}_{-0.016}$ (−0.4 σ)	$D_{\mathrm{M}}(0.61)$	2303.0	2303^{+18}_{-18} (−0.8 σ)
τ	0.0566	$0.056^{+0.015}_{-0.014}$ (+0.5 σ)	$r_{\mathrm{drag}} h$	99.65	$99.7^{+1.4}_{-1.4}$ (+0.6 σ)	$H(2.33)$	236.18	$236.1^{+1.1}_{-1.1}$ (−0.3 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0484	$3.046^{+0.029}_{-0.027}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4367	$2.435^{+0.040}_{-0.040}$ (−0.3 σ)	$D_{\mathrm{M}}(2.33)$	5757.5	5759^{+17}_{-17} (−1.1 σ)
n_{s}	0.9680	$0.9675^{+0.0073}_{-0.0074}$ (+0.6 σ)	z_{re}	7.89	$7.8^{+1.5}_{-1.4}$ (+0.4 σ)	$f\sigma_8(0.15)$	0.4568	$0.456^{+0.011}_{-0.011}$ (−0.5 σ)
r	0.000	< 0.112 (+0.1 σ)	$10^9 A_{\mathrm{s}}$	2.108	$2.104^{+0.061}_{-0.056}$ (+0.4 σ)	$\sigma_8(0.15)$	0.7496	$0.749^{+0.011}_{-0.011}$ (+0.0 σ)
y_{cal}	1.00082	$1.0008^{+0.0048}_{-0.0048}$ (+0.1 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8825	$1.880^{+0.021}_{-0.020}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4753	$0.4746^{+0.0090}_{-0.0091}$ (−0.4 σ)
A_{217}^{CIB}	45.7	46^{+10}_{-10} (−0.2 σ)	D_{40}	1226.5	1241^{+32}_{-29} (−0.2 σ)	$\sigma_8(0.38)$	0.6646	$0.6637^{+0.0095}_{-0.0092}$ (+0.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.67	—	D_{220}	5739	5735^{+75}_{-75} (+0.6 σ)	$f\sigma_8(0.51)$	0.4740	$0.4733^{+0.0082}_{-0.0081}$ (−0.3 σ)
A_{143}^{tSZ}	7.06	$5.5^{+3.7}_{-3.8}$ (+0.2 σ)	D_{810}	2542.8	2540^{+26}_{-25} (+0.2 σ)	$\sigma_8(0.51)$	0.6220	$0.6212^{+0.0088}_{-0.0086}$ (+0.3 σ)
A_{100}^{PS}	248	258^{+60}_{-50} (−0.2 σ)	D_{1420}	819.6	$818.3^{+9.1}_{-9.3}$ (+0.7 σ)	$f\sigma_8(0.61)$	0.4691	$0.4684^{+0.0077}_{-0.0076}$ (−0.3 σ)
A_{143}^{PS}	50.2	45^{+20}_{-10} (−0.4 σ)	D_{2000}	231.78	$231.3^{+3.0}_{-3.0}$ (+0.9 σ)	$\sigma_8(0.61)$	0.5919	$0.5911^{+0.0085}_{-0.0081}$ (+0.3 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	52.9	42^{+20}_{-20} (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9680	$0.9675^{+0.0073}_{-0.0074}$ (+0.6 σ)	$f\sigma_8(2.33)$	0.29845	$0.2981^{+0.0044}_{-0.0041}$ (+0.4 σ)
A_{217}^{PS}	122.0	115^{+20}_{-20} (+0.0 σ)	Y_{P}	0.245425	$0.245412^{+0.000096}_{-0.00011}$ (+1.3 σ)	$\sigma_8(2.33)$	0.30773	$0.3073^{+0.0047}_{-0.0045}$ (+0.6 σ)
A^{kSZ}	0.01	< 7.70 (−0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246752	$0.246739^{+0.000097}_{-0.00011}$ (+1.3 σ)	$r_{0.002}$	0.000	< 0.106 (+0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.82	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.5713	$2.577^{+0.050}_{-0.047}$ (−1.3 σ)	$r_{0.01}$	0.000	< 0.109 (+0.1 σ)
$A_{143}^{\mathrm{dustTT}}$	11.04	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	Age/Gyr	13.7840	$13.787^{+0.039}_{-0.039}$ (−1.1 σ)	$\ln(10^{10} A_{\mathrm{t}})$	−7.83	$-0.6^{+1.9}_{-2.5}$ (+0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.2	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	z_{*}	1089.760	$1089.79^{+0.43}_{-0.42}$ (−1.1 σ)	r_{10}	0.0000	< 0.0544 (+0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	95.8	94^{+10}_{-10} (+0.1 σ)	r_{*}	144.557	$144.59^{+0.44}_{-0.43}$ (+0.1 σ)	$10^9 A_{\mathrm{t}}$	0.000	< 0.234 (+0.1 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.075}_{-0.075}$	$100\theta_{*}$	1.04119	$1.04119^{+0.00056}_{-0.00056}$ (+0.4 σ)	$10^9 A_{\mathrm{t}} e^{-2\tau}$	0.000	< 0.210 (+0.1 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.134	$0.135^{+0.056}_{-0.058}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.8838	$13.887^{+0.042}_{-0.041}$ (+0.1 σ)	f_{2000}^{143}	28.3	29^{+5}_{-5} (−0.6 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.478	$0.48^{+0.17}_{-0.16}$	z_{drag}	1060.05	$1059.99^{+0.55}_{-0.59}$ (+1.3 σ)	$f_{2000}^{143 \times 217}$	31.68	$31.9^{+3.5}_{-3.5}$ (−0.8 σ)
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.23^{+0.10}_{-0.11}$	r_{drag}	147.196	$147.24^{+0.45}_{-0.45}$ (−0.1 σ)	f_{2000}^{217}	106.33	$106.8^{+3.4}_{-3.4}$ (−0.7 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	k_{D}	0.14082	$0.14075^{+0.00054}_{-0.00056}$ (+0.5 σ)	$\chi_{\mathrm{lensing}}^2$	8.72	9.14 (ν : 0.2)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.53}_{-0.54}$	$100\theta_{\mathrm{D}}$	0.160689	$0.16073^{+0.00034}_{-0.00032}$ (−1.3 σ)	χ_{small}^2	396	1296 (ν : 477802.7) (+538.7 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{eq}	3387.0	3385^{+42}_{-42} (−0.4 σ)	χ_{lowl}^2	22.95	24.5 (ν : 1.1) (−0.3 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{eq}	0.010337	$0.01033^{+0.00013}_{-0.00013}$ (−0.4 σ)	χ_{plik}^2	2345	1461 (ν : 477551.6) (+127.8 σ)
H_0	67.70	$67.69^{+0.83}_{-0.82}$ (+0.7 σ)	$100\theta_{\mathrm{eq}}$	0.8163	$0.8166^{+0.0080}_{-0.0078}$ (+0.5 σ)	$\chi_{6\mathrm{DF}}^2$	0.029	0.050 (ν : 0.0)
Ω_{Λ}	0.6893	$0.689^{+0.011}_{-0.011}$ (+0.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.45090	$0.4511^{+0.0041}_{-0.0040}$ (+0.4 σ)	χ_{MGS}^2	1.22	1.28 (ν : 0.1)
Ω_{m}	0.3107	$0.311^{+0.011}_{-0.011}$ (−0.6 σ)	$H(0.15)$	72.97	$72.97^{+0.72}_{-0.71}$ (+0.8 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.43	4.8 (ν : 0.8)
$\Omega_{\mathrm{m}} h^2$	0.14238	$0.1423^{+0.0018}_{-0.0018}$ (−0.4 σ)	$D_{\mathrm{M}}(0.15)$	640.4	$640.5^{+7.1}_{-7.0}$ (−0.8 σ)	χ_{prior}^2	1.6	11.6 (ν : 10.6) (+1.2 σ)
$\Omega_{\mathrm{m}} h^3$	0.09639	$0.09632^{+0.00058}_{-0.00057}$ (+1.0 σ)	$H(0.38)$	83.08	$83.07^{+0.53}_{-0.53}$ (+0.8 σ)	χ_{CMB}^2	2773.4	2790.4 (ν : 17.4) (+282.4 σ)
σ_8	0.8112	$0.810^{+0.012}_{-0.012}$ (−0.1 σ)	$D_{\mathrm{M}}(0.38)$	1527.6	1528^{+14}_{-14} (−0.8 σ)	χ_{BAO}^2	5.68	6.1 (ν : 0.5)
S_8	0.8255	$0.824^{+0.021}_{-0.021}$ (−0.5 σ)	$H(0.51)$	89.795	$89.78^{+0.44}_{-0.43}$ (+0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2780.69$; $\Delta\chi_{\mathrm{eff}}^2 = -0.00$; $\bar{\chi}_{\mathrm{eff}}^2 = 2808.06$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.22$; $R - 1 = 0.01525$

χ_{eff}^2 : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.43 (Δ 0.01) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.72 (Δ -0.01) small_100x143_offlike5_EE_Aplanck: 396.49 (Δ -0.03) commander_dx12_v3.2_29: 22.95 (Δ 0.05) plik_rd12_HM_v22b_TTTEEE: 2345.28 (Δ -0.03)

17.35 base_r_plikHM_TTTEEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02238^{+0.00028}_{-0.00028} \quad (+1.1\sigma)$	S_8	$0.831^{+0.025}_{-0.025} \quad (-0.2\sigma)$	$D_M(0.38)$	$1532^{+18}_{-18} \quad (-0.5\sigma)$
$\Omega_c h^2$	$0.1198^{+0.0023}_{-0.0023} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$H(0.51)$	$89.65^{+0.54}_{-0.51} \quad (+0.6\sigma)$
$100\theta_{MC}$	$1.04093^{+0.00060}_{-0.00059} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.608^{+0.013}_{-0.012} \quad (-0.1\sigma)$	$D_M(0.51)$	$1985^{+21}_{-21} \quad (-0.5\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.018}_{-0.017} \quad (-0.1\sigma)$	$H(0.61)$	$95.30^{+0.44}_{-0.41} \quad (+0.7\sigma)$
$\ln(10^{10} A_s)$	$3.045^{+0.026}_{-0.024} \quad (+0.4\sigma)$	$r_{\text{drag}} h$	$99.2^{+1.8}_{-1.8} \quad (+0.3\sigma)$	$D_M(0.61)$	$2309^{+22}_{-23} \quad (-0.5\sigma)$
n_s	$0.9661^{+0.0081}_{-0.0079} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.042}_{-0.042} \quad (-0.1\sigma)$	$H(2.33)$	$236.5^{+1.4}_{-1.4} \quad (-0.1\sigma)$
r	$< 0.108 \quad (+0.0\sigma)$	z_{re}	$< 8.91 \quad (+0.4\sigma)$	$D_M(2.33)$	$5763^{+19}_{-20} \quad (-0.8\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0047} \quad (+0.0\sigma)$	$10^9 A_s$	$2.102^{+0.054}_{-0.050} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.882^{+0.021}_{-0.021} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0092} \quad (+0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	$1243^{+32}_{-29} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.7} \quad (+0.2\sigma)$	D_{220}	$5730^{+75}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.6641^{+0.0086}_{-0.0082} \quad (+0.3\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{810}	$2539^{+27}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4752^{+0.0089}_{-0.0089} \quad (-0.1\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{1420}	$817.6^{+9.3}_{-9.1} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6213^{+0.0080}_{-0.0076} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$231.0^{+3.0}_{-3.0} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4700^{+0.0080}_{-0.0080} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.9661^{+0.0081}_{-0.0079} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0076}_{-0.0072} \quad (+0.3\sigma)$
A^{kSZ}	$< 7.87 \quad (-0.2\sigma)$	Y_{P}	$0.24540^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0040}_{-0.0037} \quad (+0.4\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24672^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0043}_{-0.0040} \quad (+0.5\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	10^5D/H	$2.585^{+0.053}_{-0.050} \quad (-1.1\sigma)$	$r_{0.002}$	$< 0.101 \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.796^{+0.044}_{-0.045} \quad (-0.8\sigma)$	$r_{0.01}$	$< 0.104 \quad (+0.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.90^{+0.48}_{-0.49} \quad (-0.9\sigma)$	$\ln(10^{10} A_t)$	$-0.6^{+1.9}_{-2.5} \quad (+0.1\sigma)$
A_{100}^{dustTE}	$0.115^{+0.075}_{-0.074}$	r_*	$144.47^{+0.52}_{-0.51} \quad (-0.1\sigma)$	r_{10}	$< 0.0519 \quad (+0.0\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.04111^{+0.00059}_{-0.00058} \quad (+0.2\sigma)$	$10^9 A_t$	$< 0.225 \quad (+0.1\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.877^{+0.048}_{-0.048} \quad (-0.2\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.202 \quad (+0.0\sigma)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.11}$	z_{drag}	$1059.94^{+0.57}_{-0.57} \quad (+1.2\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.13^{+0.52}_{-0.51} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32.1^{+3.6}_{-3.6} \quad (-0.7\sigma)$
A_{217}^{dustTE}	$2.09^{+0.52}_{-0.53}$	k_{D}	$0.14083^{+0.00058}_{-0.00059} \quad (+0.7\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.4} \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\text{D}}$	$0.16076^{+0.00034}_{-0.00033} \quad (-1.2\sigma)$	χ_{lensing}^2	$9.22 \quad (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3398^{+52}_{-53} \quad (-0.1\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.6) \quad (+0.0\sigma)$
H_0	$67.4^{+1.1}_{-1.0} \quad (+0.4\sigma)$	k_{eq}	$0.01037^{+0.00016}_{-0.00016} \quad (-0.1\sigma)$	χ_{lowl}^2	$24.7 \quad (\nu: 1.2) \quad (-0.2\sigma)$
Ω_{Λ}	$0.686^{+0.014}_{-0.014} \quad (+0.4\sigma)$	$100\theta_{\text{eq}}$	$0.814^{+0.010}_{-0.0096} \quad (+0.2\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 15.8) \quad (+294.1\sigma)$
Ω_{m}	$0.314^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$100\theta_{\text{s,eq}}$	$0.4498^{+0.0051}_{-0.0049} \quad (+0.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
$\Omega_{\text{m}} h^2$	$0.1428^{+0.0022}_{-0.0022} \quad (-0.1\sigma)$	$H(0.15)$	$72.74^{+0.92}_{-0.88} \quad (+0.5\sigma)$	χ_{CMB}^2	$2790.2 \quad (\nu: 17.6) \quad (+282.4\sigma)$
$\Omega_{\text{m}} h^3$	$0.09631^{+0.00056}_{-0.00056} \quad (+1.0\sigma)$	$D_M(0.15)$	$642.8^{+8.9}_{-9.1} \quad (-0.5\sigma)$		
σ_8	$0.811^{+0.011}_{-0.011} \quad (+0.1\sigma)$	$H(0.38)$	$82.90^{+0.67}_{-0.64} \quad (+0.5\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2801.72; \Delta \bar{\chi}_{\text{eff}}^2 = 1.22; R - 1 = 0.00705$$

17.36 base_r_plikHM_TTTEEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02242^{+0.00026}_{-0.00026} \quad (+1.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+17}_{-17} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0018}_{-0.0018} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.4\sigma)$	$H(0.61)$	$95.40^{+0.36}_{-0.36} \quad (+1.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04101^{+0.00057}_{-0.00056} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+18}_{-18} \quad (-0.8\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.4}_{-1.4} \quad (+0.6\sigma)$	$H(2.33)$	$236.1^{+1.1}_{-1.1} \quad (-0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.047^{+0.027}_{-0.025} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.040}_{-0.038} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5759^{+17}_{-17} \quad (-1.1\sigma)$
n_{s}	$0.9676^{+0.0073}_{-0.0074} \quad (+0.6\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.4\sigma)$
r	$< 0.112 \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.056}_{-0.052} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0094} \quad (+0.1\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.021}_{-0.020} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4748^{+0.0089}_{-0.0089} \quad (-0.4\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	D_{40}	$1241^{+32}_{-29} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0092}_{-0.0082} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{220}	$5734^{+75}_{-74} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4735^{+0.0081}_{-0.0080} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.8} \quad (+0.2\sigma)$	D_{810}	$2540^{+26}_{-25} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0087}_{-0.0077} \quad (+0.3\sigma)$
A_{100}^{PS}	$258^{+60}_{-50} \quad (-0.2\sigma)$	D_{1420}	$818.2^{+9.1}_{-9.2} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.4686^{+0.0075}_{-0.0074} \quad (-0.3\sigma)$
A_{143}^{PS}	$45^{+20}_{-10} \quad (-0.4\sigma)$	D_{2000}	$231.3^{+3.0}_{-3.0} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.5914^{+0.0082}_{-0.0073} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9676^{+0.0073}_{-0.0074} \quad (+0.6\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0041}_{-0.0039} \quad (+0.5\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.245413^{+0.000096}_{-0.00011} \quad (+1.3\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0044}_{-0.0041} \quad (+0.6\sigma)$
A^{kSZ}	$< 7.70 \quad (-0.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246739^{+0.000096}_{-0.00011} \quad (+1.3\sigma)$	$r_{0.002}$	$< 0.106 \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.577^{+0.050}_{-0.047} \quad (-1.3\sigma)$	$r_{0.01}$	$< 0.109 \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.787^{+0.039}_{-0.039} \quad (-1.1\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.6^{+1.9}_{-2.5} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	z_*	$1089.79^{+0.43}_{-0.42} \quad (-1.2\sigma)$	r_{10}	$< 0.0543 \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	r_*	$144.60^{+0.43}_{-0.42} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.234 \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.075}$	$100\theta_*$	$1.04119^{+0.00056}_{-0.00056} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.209 \quad (+0.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.056}_{-0.058}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.041}_{-0.040} \quad (+0.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.7\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	z_{drag}	$1059.99^{+0.55}_{-0.56} \quad (+1.3\sigma)$	$f_{2000}^{143 \times 217}$	$31.9^{+3.5}_{-3.5} \quad (-0.8\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.10}_{-0.11}$	r_{drag}	$147.25^{+0.45}_{-0.44} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	k_{D}	$0.14074^{+0.00054}_{-0.00056} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.12 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.54}$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00034}_{-0.00032} \quad (-1.3\sigma)$	χ_{small}^2	$1291 \quad (\nu: 477329.0) \quad (+535.7\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{eq}	$3385^{+41}_{-41} \quad (-0.4\sigma)$	χ_{lowl}^2	$24.5 \quad (\nu: 1.1) \quad (-0.3\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{eq}	$0.01033^{+0.00013}_{-0.00013} \quad (-0.4\sigma)$	χ_{plik}^2	$1466 \quad (\nu: 477098.3) \quad (+128.7\sigma)$
H_0	$67.70^{+0.82}_{-0.82} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8167^{+0.0080}_{-0.0077} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.049 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4511^{+0.0041}_{-0.0040} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
Ω_{m}	$0.310^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.15)$	$72.97^{+0.71}_{-0.70} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0017}_{-0.0017} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.5^{+7.0}_{-7.0} \quad (-0.8\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.5) \quad (+1.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09632^{+0.00057}_{-0.00057} \quad (+1.0\sigma)$	$H(0.38)$	$83.07^{+0.53}_{-0.52} \quad (+0.8\sigma)$	χ_{CMB}^2	$2790.2 \quad (\nu: 17.2) \quad (+282.4\sigma)$
σ_8	$0.810^{+0.011}_{-0.011} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+14}_{-14} \quad (-0.8\sigma)$	χ_{BAO}^2	$6.05 \quad (\nu: 0.5)$
S_8	$0.824^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$H(0.51)$	$89.78^{+0.44}_{-0.42} \quad (+0.9\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.89; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.17; R - 1 = 0.01530$$

17.37 base_r_CamSpecHM_TTTEE_lowl_lowE_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022281	$0.02230^{+0.00031}_{-0.00030}$ (+0.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6059	$0.605^{+0.012}_{-0.013}$ (−0.3 σ)	$H(0.51)$	89.57	$89.62^{+0.54}_{-0.52}$ (+0.5 σ)
$\Omega_{\mathrm{c}}h^2$	0.11978	$0.1195^{+0.0023}_{-0.0024}$ (−0.4 σ)	$\sigma_8/h^{0.5}$	0.9858	$0.985^{+0.018}_{-0.018}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1986.9	1985^{+21}_{-21} (−0.5 σ)
$100\theta_{\mathrm{MC}}$	1.04085	$1.04088^{+0.00060}_{-0.00060}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	99.15	$99.4^{+1.9}_{-1.8}$ (+0.4 σ)	$H(0.61)$	95.210	$95.25^{+0.44}_{-0.42}$ (+0.6 σ)
τ	0.0528	$0.054^{+0.015}_{-0.014}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.4373	$2.433^{+0.043}_{-0.043}$ (−0.3 σ)	$D_{\mathrm{M}}(0.61)$	2311.6	2309^{+23}_{-23} (−0.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0394	$3.041^{+0.028}_{-0.028}$ (+0.1 σ)	z_{re}	7.54	$7.6^{+1.4}_{-1.5}$ (+0.2 σ)	$H(2.33)$	236.32	$236.2^{+1.4}_{-1.4}$ (−0.3 σ)
n_{s}	0.9654	$0.9669^{+0.0086}_{-0.0084}$ (+0.5 σ)	$10^9 A_{\mathrm{s}}$	2.089	$2.092^{+0.060}_{-0.059}$ (+0.1 σ)	$D_{\mathrm{M}}(2.33)$	5767.8	5766^{+20}_{-20} (−0.6 σ)
r	0.002	< 0.142 (+0.5 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8800	$1.878^{+0.021}_{-0.021}$ (−0.3 σ)	$f\sigma_8(0.15)$	0.4581	$0.457^{+0.013}_{-0.013}$ (−0.4 σ)
y_{cal}	1.00051	$1.0006^{+0.0049}_{-0.0049}$ (+0.0 σ)	D_{40}	1228.2	1244^{+36}_{-34} (+0.0 σ)	$\sigma_8(0.15)$	0.7472	$0.747^{+0.011}_{-0.011}$ (−0.1 σ)
A_{100}^{PS}	234.2	238^{+50}_{-50} (−0.9 σ)	D_{220}	5720	5715^{+75}_{-77} (+0.1 σ)	$f\sigma_8(0.38)$	0.4757	$0.475^{+0.010}_{-0.010}$ (−0.3 σ)
A_{143}^{PS}	39.8	39^{+20}_{-20} (−1.2 σ)	D_{810}	2535.9	2535^{+26}_{-25} (−0.1 σ)	$\sigma_8(0.38)$	0.6620	$0.6622^{+0.0092}_{-0.0092}$ (−0.0 σ)
A_{217}^{PS}	101.8	103^{+30}_{-30} (−1.2 σ)	D_{1420}	815.8	$816.3^{+9.5}_{-9.3}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4739	$0.4734^{+0.0089}_{-0.0092}$ (−0.3 σ)
A_{217}^{CIB}	44.7	39^{+10}_{-10} (−1.2 σ)	D_{2000}	230.25	$230.5^{+3.2}_{-3.2}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6193	$0.6197^{+0.0087}_{-0.0087}$ (−0.0 σ)
A_{143}^{tSZ}	6.62	< 7.50 (−0.6 σ)	$n_{\mathrm{s},0.002}$	0.9654	$0.9669^{+0.0086}_{-0.0084}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4687	$0.4683^{+0.0081}_{-0.0083}$ (−0.3 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.597	$0.66^{+0.25}_{-0.26}$	Y_{P}	0.245359	$0.24537^{+0.00012}_{-0.00013}$ (+0.8 σ)	$\sigma_8(0.61)$	0.5892	$0.5896^{+0.0083}_{-0.0083}$ (+0.0 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.78	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246686	$0.24669^{+0.00012}_{-0.00013}$ (+0.8 σ)	$f\sigma_8(2.33)$	0.29697	$0.2972^{+0.0043}_{-0.0043}$ (+0.1 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.09	—	$10^5\mathrm{D}/\mathrm{H}$	2.602	$2.599^{+0.057}_{-0.056}$ (−0.8 σ)	$\sigma_8(2.33)$	0.30602	$0.3063^{+0.0047}_{-0.0046}$ (+0.2 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.8075	$13.804^{+0.045}_{-0.046}$ (−0.6 σ)	$r_{0.002}$	0.002	< 0.136 (+0.6 σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	z_{\ast}	1090.02	$1089.97^{+0.51}_{-0.51}$ (−0.7 σ)	$r_{0.01}$	0.002	< 0.139 (+0.6 σ)
A_{143}^{dust}	0.973	$0.96^{+0.34}_{-0.35}$	r_{\ast}	144.56	$144.61^{+0.55}_{-0.53}$ (+0.2 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−3.19	$-0.2^{+1.7}_{-2.3}$ (+0.4 σ)
A_{217}^{dust}	0.969	$0.98^{+0.20}_{-0.20}$	$100\theta_{\ast}$	1.04105	$1.04107^{+0.00059}_{-0.00060}$ (+0.1 σ)	r_{10}	0.0009	< 0.0700 (+0.6 σ)
$A_{143\times 217}^{\mathrm{dust}}$	1.007	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_{\ast})/\mathrm{Gpc}$	13.886	$13.891^{+0.052}_{-0.050}$ (+0.2 σ)	$10^9 A_{\mathrm{t}}$	0.004	< 0.297 (+0.6 σ)
c_{100}	0.99766	$0.9975^{+0.0020}_{-0.0021}$ (−3.4 σ)	z_{drag}	1059.70	$1059.74^{+0.65}_{-0.64}$ (+0.8 σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.004	< 0.266 (+0.5 σ)
c_{217}	1.00131	$1.0011^{+0.0031}_{-0.0030}$ (+4.5 σ)	r_{drag}	147.25	$147.30^{+0.56}_{-0.54}$ (+0.0 σ)	f_{2000}^{143}	30.2	29^{+6}_{-5} (−0.6 σ)
c_{TE}	0.9965	$0.9965^{+0.0097}_{-0.0094}$	k_{D}	0.14063	$0.14059^{+0.00063}_{-0.00064}$ (+0.2 σ)	f_{2000}^{217}	106.93	$106.7^{+3.7}_{-3.8}$ (−0.7 σ)
c_{EE}	0.9923	$0.9921^{+0.0098}_{-0.0097}$	$100\theta_{\mathrm{D}}$	0.160879	$0.16087^{+0.00037}_{-0.00038}$ (−0.8 σ)	$f_{2000}^{143\times 217}$	32.28	32^{+4}_{-4} (−0.8 σ)
H_0	67.34	$67.5^{+1.1}_{-1.1}$ (+0.5 σ)	z_{eq}	3395	3389^{+52}_{-54} (−0.3 σ)	$\chi_{\mathrm{lensing}}^2$	8.86	9.38 (ν : 0.3)
Ω_{Λ}	0.6853	$0.687^{+0.014}_{-0.015}$ (+0.4 σ)	k_{eq}	0.010361	$0.01034^{+0.00016}_{-0.00017}$ (−0.3 σ)	χ_{small}^2	395.87	397.2 (ν : 1.3) (+0.1 σ)
Ω_{m}	0.3147	$0.313^{+0.015}_{-0.014}$ (−0.4 σ)	$100\theta_{\mathrm{eq}}$	0.8143	$0.815^{+0.010}_{-0.0098}$ (+0.4 σ)	χ_{lowl}^2	23.23	25.0 (ν : 1.7) (+0.0 σ)
$\Omega_{\mathrm{m}}h^2$	0.14271	$0.1425^{+0.0022}_{-0.0023}$ (−0.3 σ)	$100\theta_{\mathrm{s,eq}}$	0.4500	$0.4506^{+0.0053}_{-0.0050}$ (+0.3 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.4	11512.9 (ν : 15.1)
$\Omega_{\mathrm{m}}h^3$	0.09609	$0.09609^{+0.00061}_{-0.00061}$ (+0.5 σ)	$H(0.15)$	72.65	$72.75^{+0.92}_{-0.90}$ (+0.5 σ)	χ_{prior}^2	2.2	7.8 (ν : 5.8) (+0.1 σ)
σ_8	0.8089	$0.809^{+0.012}_{-0.012}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	643.6	$642.6^{+9.1}_{-9.1}$ (−0.5 σ)	χ_{CMB}^2	11927.4	11944.5 (ν : 17.2) (+1901.6 σ)
S_8	0.8286	$0.826^{+0.025}_{-0.025}$ (−0.4 σ)	$H(0.38)$	82.82	$82.89^{+0.67}_{-0.65}$ (+0.5 σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4538	$0.453^{+0.014}_{-0.014}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1534.2	1532^{+18}_{-18} (−0.5 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11929.59$; $\Delta\chi_{\mathrm{eff}}^2 = -0.06$; $\bar{\chi}_{\mathrm{eff}}^2 = 11952.27$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.82$; $R - 1 = 0.00977$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp.p_teb_consext8: 8.86 (Δ 0.03) small_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ 0.00) commander_dx12.v3.2_29: 23.23 (Δ 0.02) CamSpec like_10.7HM_1400_unified: 11499.43 (Δ -0.22)

17.38 base_r_CamSpecHM_TTTEE_lowl_lowE_lensing_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00029}_{-0.00028} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$95.34^{+0.36}_{-0.36} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0018}_{-0.0019} \quad (-0.6\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.4}_{-1.4} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+18}_{-18} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.040}_{-0.040} \quad (-0.5\sigma)$	$H(2.33)$	$235.9^{+1.1}_{-1.2} \quad (-0.5\sigma)$
τ	$0.055^{+0.014}_{-0.014} \quad (+0.4\sigma)$	z_{re}	$7.7^{+1.4}_{-1.4} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-18} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.029}_{-0.028} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.061}_{-0.059} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.6\sigma)$
n_{s}	$0.9682^{+0.0077}_{-0.0076} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.010}_{-0.011} \quad (-0.2\sigma)$
r	$< 0.146 \quad (+0.6\sigma)$	D_{40}	$1243^{+37}_{-34} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.4732^{+0.0090}_{-0.0091} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5719^{+74}_{-77} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6623^{+0.0094}_{-0.0093} \quad (-0.0\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{810}	$2536^{+26}_{-25} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.4720^{+0.0082}_{-0.0083} \quad (-0.5\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{1420}	$816.9^{+9.3}_{-9.2} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6199^{+0.0088}_{-0.0087} \quad (+0.0\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{2000}	$230.7^{+3.1}_{-3.1} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4672^{+0.0076}_{-0.0077} \quad (-0.4\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9682^{+0.0077}_{-0.0076} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5899^{+0.0084}_{-0.0083} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.6\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0043}_{-0.0043} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.26}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3068^{+0.0046}_{-0.0045} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.054}_{-0.052} \quad (-1.0\sigma)$	$r_{0.002}$	$< 0.141 \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.796^{+0.040}_{-0.040} \quad (-0.8\sigma)$	$r_{0.01}$	$< 0.144 \quad (+0.6\sigma)$
A^{kSZ}	—	z_*	$1089.88^{+0.44}_{-0.44} \quad (-0.9\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.2^{+1.7}_{-2.3} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.72^{+0.47}_{-0.45} \quad (+0.4\sigma)$	r_{10}	$< 0.0726 \quad (+0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	$100\theta_*$	$1.04113^{+0.00057}_{-0.00057} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.307 \quad (+0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.045}_{-0.043} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.274 \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{drag}	$1059.78^{+0.65}_{-0.61} \quad (+0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	r_{drag}	$147.40^{+0.49}_{-0.48} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.6^{+3.7}_{-3.8} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0030} \quad (+4.5\sigma)$	k_{D}	$0.14052^{+0.00061}_{-0.00060} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{TE}	$0.9966^{+0.0096}_{-0.0096}$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00037} \quad (-0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.40 \quad (\nu: 0.3)$
c_{EE}	$0.9923^{+0.0097}_{-0.0096}$	z_{eq}	$3377^{+42}_{-44} \quad (-0.6\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.5) \quad (+0.1\sigma)$
H_0	$67.69^{+0.83}_{-0.82} \quad (+0.7\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.6\sigma)$	χ_{lowl}^2	$24.8 \quad (\nu: 1.7) \quad (-0.1\sigma)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8178^{+0.0082}_{-0.0078} \quad (+0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11512.9 \quad (\nu: 15.0)$
Ω_{m}	$0.310^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0042}_{-0.0040} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.043 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0017}_{-0.0018} \quad (-0.6\sigma)$	$H(0.15)$	$72.95^{+0.71}_{-0.71} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09610^{+0.00062}_{-0.00060} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.6^{+7.0}_{-7.0} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.7)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$H(0.38)$	$83.04^{+0.53}_{-0.53} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.821^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+14}_{-14} \quad (-0.8\sigma)$	χ_{CMB}^2	$11944.4 \quad (\nu: 16.8) \quad (+1901.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$H(0.51)$	$89.74^{+0.43}_{-0.43} \quad (+0.8\sigma)$	χ_{BAO}^2	$5.95 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+17}_{-17} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.11; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.70; R - 1 = 0.01271$$

17.39 base_r_CamSpecHM_TTTEE_lowl_lowE_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00031}_{-0.00030}$ (+0.8 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.012}_{-0.013}$ (−0.3 σ)	$H(0.51)$	$89.64^{+0.53}_{-0.51}$ (+0.6 σ)
$\Omega_{\mathrm{c}} h^2$	$0.1195^{+0.0023}_{-0.0024}$ (−0.4 σ)	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.018}$ (−0.3 σ)	$D_{\mathrm{M}}(0.51)$	1984^{+21}_{-21} (−0.5 σ)
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00059}_{-0.00060}$ (+0.1 σ)	$r_{\mathrm{drag}} h$	$99.4^{+1.8}_{-1.8}$ (+0.4 σ)	$H(0.61)$	$95.26^{+0.44}_{-0.42}$ (+0.6 σ)
τ	$0.055^{+0.012}_{-0.011}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.042}_{-0.043}$ (−0.3 σ)	$D_{\mathrm{M}}(0.61)$	2309^{+22}_{-23} (−0.5 σ)
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.025}_{-0.024}$ (+0.2 σ)	z_{re}	< 8.83 (+0.3 σ)	$H(2.33)$	$236.1^{+1.4}_{-1.4}$ (−0.3 σ)
n_{s}	$0.9671^{+0.0085}_{-0.0083}$ (+0.6 σ)	$10^9 A_{\mathrm{s}}$	$2.096^{+0.053}_{-0.050}$ (+0.2 σ)	$D_{\mathrm{M}}(2.33)$	5766^{+20}_{-20} (−0.6 σ)
r	< 0.142 (+0.5 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021}$ (−0.4 σ)	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013}$ (−0.4 σ)
y_{cal}	$1.0006^{+0.0048}_{-0.0049}$ (+0.0 σ)	D_{40}	1244^{+36}_{-34} (−0.0 σ)	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.0092}$ (−0.1 σ)
A_{100}^{PS}	238^{+50}_{-50} (−0.9 σ)	D_{220}	5715^{+75}_{-77} (+0.1 σ)	$f\sigma_8(0.38)$	$0.475^{+0.010}_{-0.010}$ (−0.3 σ)
A_{143}^{PS}	39^{+20}_{-20} (−1.2 σ)	D_{810}	2535^{+26}_{-25} (−0.1 σ)	$\sigma_8(0.38)$	$0.6628^{+0.0088}_{-0.0078}$ (+0.0 σ)
A_{217}^{PS}	103^{+30}_{-30} (−1.2 σ)	D_{1420}	$816.3^{+9.4}_{-9.3}$ (+0.3 σ)	$f\sigma_8(0.51)$	$0.4737^{+0.0088}_{-0.0090}$ (−0.3 σ)
A_{217}^{CIB}	39^{+10}_{-10} (−1.3 σ)	D_{2000}	$230.5^{+3.2}_{-3.2}$ (+0.4 σ)	$\sigma_8(0.51)$	$0.6202^{+0.0080}_{-0.0075}$ (+0.1 σ)
A_{143}^{tSZ}	< 7.50 (−0.6 σ)	$n_{\mathrm{s},0.002}$	$0.9671^{+0.0085}_{-0.0083}$ (+0.6 σ)	$f\sigma_8(0.61)$	$0.4686^{+0.0080}_{-0.0081}$ (−0.3 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	Y_{P}	$0.24537^{+0.00012}_{-0.00013}$ (+0.8 σ)	$\sigma_8(0.61)$	$0.5901^{+0.0076}_{-0.0071}$ (+0.1 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013}$ (+0.8 σ)	$f\sigma_8(2.33)$	$0.2975^{+0.0039}_{-0.0037}$ (+0.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.599^{+0.057}_{-0.056}$ (−0.8 σ)	$\sigma_8(2.33)$	$0.3066^{+0.0042}_{-0.0039}$ (+0.3 σ)
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.803^{+0.045}_{-0.046}$ (−0.6 σ)	$r_{0.002}$	< 0.136 (+0.6 σ)
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.96^{+0.51}_{-0.51}$ (−0.7 σ)	$r_{0.01}$	< 0.139 (+0.6 σ)
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	r_*	$144.62^{+0.55}_{-0.52}$ (+0.2 σ)	$\ln(10^{10} A_{\mathrm{t}})$	$-0.2^{+1.7}_{-2.3}$ (+0.4 σ)
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04107^{+0.00058}_{-0.00059}$ (+0.1 σ)	r_{10}	< 0.0699 (+0.6 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.052}_{-0.050}$ (+0.2 σ)	$10^9 A_{\mathrm{t}}$	< 0.297 (+0.6 σ)
c_{100}	$0.9975^{+0.0020}_{-0.0021}$ (−3.4 σ)	z_{drag}	$1059.74^{+0.65}_{-0.65}$ (+0.8 σ)	$10^9 A_{\mathrm{t}} e^{-2\tau}$	< 0.266 (+0.5 σ)
c_{217}	$1.0011^{+0.0031}_{-0.0030}$ (+4.5 σ)	r_{drag}	$147.31^{+0.56}_{-0.53}$ (+0.1 σ)	f_{2000}^{143}	29^{+6}_{-5} (−0.6 σ)
c_{TE}	$0.9965^{+0.0097}_{-0.0094}$	k_{D}	$0.14058^{+0.00063}_{-0.00064}$ (+0.2 σ)	f_{2000}^{217}	$106.7^{+3.7}_{-3.8}$ (−0.7 σ)
c_{EE}	$0.9921^{+0.0098}_{-0.0098}$	$100\theta_{\mathrm{D}}$	$0.16086^{+0.00038}_{-0.00037}$ (−0.8 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.8 σ)
H_0	$67.5^{+1.1}_{-1.0}$ (+0.5 σ)	z_{eq}	3388^{+52}_{-54} (−0.3 σ)	$\chi_{\mathrm{lensing}}^2$	9.32 (ν : 0.3)
Ω_{Λ}	$0.687^{+0.014}_{-0.014}$ (+0.5 σ)	k_{eq}	$0.01034^{+0.00016}_{-0.00016}$ (−0.3 σ)	χ_{simall}^2	397.1 (ν : 1.3) (+0.0 σ)
Ω_{m}	$0.313^{+0.014}_{-0.014}$ (−0.5 σ)	$100\theta_{\mathrm{eq}}$	$0.816^{+0.010}_{-0.0097}$ (+0.4 σ)	χ_{lowl}^2	25.0 (ν : 1.7) (+0.0 σ)
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0022}_{-0.0022}$ (−0.3 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0052}_{-0.0050}$ (+0.4 σ)	$\chi_{\mathrm{CamSpec}}^2$	11512.8 (ν : 15.0)
$\Omega_{\mathrm{m}} h^3$	$0.09609^{+0.00062}_{-0.00062}$ (+0.5 σ)	$H(0.15)$	$72.77^{+0.91}_{-0.88}$ (+0.5 σ)	χ_{prior}^2	7.7 (ν : 5.7) (+0.1 σ)
σ_8	$0.809^{+0.011}_{-0.011}$ (−0.1 σ)	$D_{\mathrm{M}}(0.15)$	$642.4^{+8.9}_{-9.0}$ (−0.5 σ)	χ_{CMB}^2	11944.3 (ν : 16.8) (+1901.6 σ)
S_8	$0.827^{+0.025}_{-0.025}$ (−0.4 σ)	$H(0.38)$	$82.91^{+0.67}_{-0.64}$ (+0.5 σ)		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014}$ (−0.4 σ)	$D_{\mathrm{M}}(0.38)$	1532^{+18}_{-18} (−0.5 σ)		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11952.03; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.78; R - 1 = 0.00998$$

17.40 base_r_CamSpecHM_TTTEE_lowl_lowE_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00029}_{-0.00028} \quad (+1.0\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$95.34^{+0.36}_{-0.36} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0018}_{-0.0019} \quad (-0.7\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.4}_{-1.4} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+18}_{-18} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.428^{+0.039}_{-0.038} \quad (-0.5\sigma)$	$H(2.33)$	$235.8^{+1.1}_{-1.2} \quad (-0.5\sigma)$
τ	$0.056^{+0.012}_{-0.012} \quad (+0.5\sigma)$	z_{re}	$7.8^{+1.1}_{-1.3} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-18} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.026}_{-0.025} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.054}_{-0.051} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.6\sigma)$
n_{s}	$0.9683^{+0.0077}_{-0.0076} \quad (+0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.020}_{-0.020} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.010}_{-0.0092} \quad (-0.1\sigma)$
r	$< 0.146 \quad (+0.6\sigma)$	D_{40}	$1243^{+37}_{-34} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.4734^{+0.0089}_{-0.0089} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5719^{+74}_{-77} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6627^{+0.0087}_{-0.0083} \quad (+0.0\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	D_{810}	$2536^{+26}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.4722^{+0.0081}_{-0.0079} \quad (-0.5\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{1420}	$816.8^{+9.3}_{-9.2} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6203^{+0.0082}_{-0.0078} \quad (+0.1\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{2000}	$230.7^{+3.1}_{-3.1} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4674^{+0.0075}_{-0.0073} \quad (-0.4\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9683^{+0.0077}_{-0.0076} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.5903^{+0.0078}_{-0.0074} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.6\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0040}_{-0.0038} \quad (+0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.67^{+0.25}_{-0.26}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0042}_{-0.0040} \quad (+0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.054}_{-0.052} \quad (-1.0\sigma)$	$r_{0.002}$	$< 0.141 \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.795^{+0.040}_{-0.040} \quad (-0.8\sigma)$	$r_{0.01}$	$< 0.143 \quad (+0.6\sigma)$
A^{kSZ}	—	z_*	$1089.87^{+0.44}_{-0.43} \quad (-1.0\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.2^{+1.7}_{-2.3} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.73^{+0.47}_{-0.45} \quad (+0.4\sigma)$	r_{10}	$< 0.0725 \quad (+0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	$100\theta_*$	$1.04114^{+0.00056}_{-0.00058} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.307 \quad (+0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.045}_{-0.043} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.274 \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{drag}	$1059.79^{+0.64}_{-0.62} \quad (+0.9\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	r_{drag}	$147.40^{+0.49}_{-0.48} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.5^{+3.7}_{-3.8} \quad (-0.8\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.5\sigma)$	k_{D}	$0.14051^{+0.00061}_{-0.00060} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.9\sigma)$
c_{TE}	$0.9966^{+0.0096}_{-0.0095}$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00037} \quad (-0.9\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.34 \quad (\nu: 0.3)$
c_{EE}	$0.9923^{+0.0097}_{-0.0096}$	z_{eq}	$3377^{+42}_{-44} \quad (-0.6\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.5) \quad (+0.1\sigma)$
H_0	$67.70^{+0.83}_{-0.82} \quad (+0.8\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.6\sigma)$	χ_{lowl}^2	$24.8 \quad (\nu: 1.7) \quad (-0.1\sigma)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8179^{+0.0081}_{-0.0077} \quad (+0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11512.8 \quad (\nu: 14.9)$
Ω_{m}	$0.310^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4518^{+0.0042}_{-0.0040} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.042 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0017}_{-0.0018} \quad (-0.6\sigma)$	$H(0.15)$	$72.97^{+0.71}_{-0.71} \quad (+0.8\sigma)$	χ_{MGS}^2	$1.35 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^3$	$0.09610^{+0.00062}_{-0.00061} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.5^{+7.0}_{-6.9} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.7)$
σ_8	$0.809^{+0.011}_{-0.010} \quad (-0.2\sigma)$	$H(0.38)$	$83.04^{+0.53}_{-0.53} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.9) \quad (+0.1\sigma)$
S_8	$0.822^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+14}_{-14} \quad (-0.8\sigma)$	χ_{CMB}^2	$11944.3 \quad (\nu: 16.5) \quad (+1901.6\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$H(0.51)$	$89.74^{+0.43}_{-0.43} \quad (+0.8\sigma)$	χ_{BAO}^2	$5.92 \quad (\nu: 0.4)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+17}_{-16} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.91; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.65; R - 1 = 0.01331$$

17.41 base_r_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022086	$0.02212^{+0.00043}_{-0.00043} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.447	$2.441^{+0.075}_{-0.077} \quad (-0.1\sigma)$	$D_M(0.51)$	1994.3	$1992^{+37}_{-37} \quad (-0.1\sigma)$
$\Omega_c h^2$	0.12026	$0.1201^{+0.0042}_{-0.0042} \quad (-0.1\sigma)$	z_{re}	7.55	$7.5^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$H(0.61)$	95.02	$95.07^{+0.72}_{-0.68} \quad (+0.0\sigma)$
$100\theta_{\text{MC}}$	1.04082	$1.04082^{+0.00094}_{-0.00094} \quad (+0.0\sigma)$	$10^9 A_s$	2.087	$2.083^{+0.068}_{-0.066} \quad (-0.2\sigma)$	$D_M(0.61)$	2319.7	$2317^{+39}_{-39} \quad (-0.1\sigma)$
τ	0.0524	$0.052^{+0.016}_{-0.015} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8796	$1.878^{+0.027}_{-0.027} \quad (-0.3\sigma)$	$H(2.33)$	236.44	$236.3^{+2.5}_{-2.5} \quad (-0.2\sigma)$
$\ln(10^{10} A_s)$	3.0384	$3.036^{+0.032}_{-0.032} \quad (-0.2\sigma)$	D_{40}	1230.7	$1243^{+38}_{-34} \quad (-0.1\sigma)$	$D_M(2.33)$	5777.7	$5776^{+32}_{-32} \quad (-0.0\sigma)$
n_s	0.9629	$0.964^{+0.012}_{-0.011} \quad (-0.0\sigma)$	D_{220}	5704	$5704^{+83}_{-82} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4612	$0.460^{+0.024}_{-0.024} \quad (-0.2\sigma)$
r	0.000	$< 0.112 \quad (+0.1\sigma)$	D_{810}	2531.5	$2531^{+28}_{-28} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	0.7479	$0.747^{+0.015}_{-0.015} \quad (-0.2\sigma)$
y_{cal}	1.0003	$1.0004^{+0.0050}_{-0.0050} \quad (-0.0\sigma)$	D_{1420}	812.7	$813^{+10}_{-10} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	0.4780	$0.477^{+0.019}_{-0.019} \quad (-0.2\sigma)$
A_{100}^{PS}	254	$255^{+50}_{-50} \quad (-0.3\sigma)$	D_{2000}	228.92	$229.0^{+3.7}_{-3.7} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	0.6622	$0.661^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{143}^{tSZ}	5.77	$< 7.53 \quad (-0.7\sigma)$	$n_{s,0.002}$	0.9629	$0.964^{+0.012}_{-0.011} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	0.4757	$0.474^{+0.016}_{-0.017} \quad (-0.2\sigma)$
A^{kSZ}	1.0	—	Y_P	0.245278	$0.24529^{+0.00018}_{-0.00021} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	0.6194	$0.619^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{100}^{dust}	1.002	$1.00^{+0.38}_{-0.38}$	Y_P^{BBN}	0.246604	$0.24661^{+0.00018}_{-0.00021} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	0.4702	$0.469^{+0.014}_{-0.015} \quad (-0.2\sigma)$
A_{143}^{power}	12.17	$10.3^{+4.9}_{-4.4}$	10^5D/H	2.640	$2.634^{+0.084}_{-0.081} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	0.5891	$0.588^{+0.010}_{-0.010} \quad (-0.2\sigma)$
A_{217}^{power}	11.26	$8.1^{+5.0}_{-4.2}$	Age/Gyr	13.830	$13.826^{+0.072}_{-0.071} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	0.29677	$0.2964^{+0.0051}_{-0.0049} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\text{power}}$	7.53	< 8.53	z_*	1090.31	$1090.25^{+0.81}_{-0.80} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	0.3057	$0.3054^{+0.0054}_{-0.0051} \quad (-0.2\sigma)$
$\gamma_{143}^{\text{power}}$	1.31	$1.34^{+0.97}_{-0.84}$	r_*	144.58	$144.61^{+0.95}_{-0.95} \quad (+0.2\sigma)$	$r_{0.002}$	0.000	$< 0.105 \quad (+0.1\sigma)$
$\gamma_{217}^{\text{power}}$	1.26	—	$100\theta_*$	1.04103	$1.04103^{+0.00093}_{-0.00092} \quad (+0.0\sigma)$	$r_{0.01}$	0.000	$< 0.109 \quad (+0.1\sigma)$
$\gamma_{143 \times 217}^{\text{power}}$	1.20	> 0.373	$D_M(z_*)/\text{Gpc}$	13.888	$13.891^{+0.087}_{-0.087} \quad (+0.2\sigma)$	$\ln(10^{10} A_t)$	-7.95	$-0.7^{+1.9}_{-2.5} \quad (+0.1\sigma)$
c_{100}	0.99802	$0.9978^{+0.0020}_{-0.0021} \quad (-2.9\sigma)$	z_{drag}	1059.28	$1059.35^{+0.89}_{-0.86} \quad (-0.1\sigma)$	r_{10}	0.0000	$< 0.0542 \quad (+0.1\sigma)$
c_{217}	0.99913	$0.9994^{+0.0031}_{-0.0028} \quad (+1.8\sigma)$	r_{drag}	147.34	$147.36^{+0.95}_{-0.94} \quad (+0.2\sigma)$	$10^9 A_t$	0.000	$< 0.234 \quad (+0.1\sigma)$
H_0	66.99	$67.1^{+1.8}_{-1.8} \quad (+0.1\sigma)$	k_D	0.14039	$0.1404^{+0.0010}_{-0.0010} \quad (-0.2\sigma)$	$10^9 A_t e^{-2\tau}$	0.000	$< 0.210 \quad (+0.1\sigma)$
Ω_Λ	0.6814	$0.683^{+0.025}_{-0.026} \quad (+0.1\sigma)$	$100\theta_D$	0.16113	$0.16110^{+0.00051}_{-0.00051} \quad (+0.1\sigma)$	f_{2000}^{143}	23.7	$23^{+6}_{-6} \quad (-2.6\sigma)$
Ω_m	0.3186	$0.317^{+0.026}_{-0.025} \quad (-0.1\sigma)$	z_{eq}	3402	$3397^{+95}_{-95} \quad (-0.1\sigma)$	f_{2000}^{217}	17.09	$16.8^{+3.9}_{-3.9} \quad (-47.9\sigma)$
$\Omega_m h^2$	0.14299	$0.1428^{+0.0040}_{-0.0040} \quad (-0.1\sigma)$	k_{eq}	0.010382	$0.01037^{+0.00029}_{-0.00029} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	11.56	$11.0^{+4.3}_{-4.1} \quad (-11.2\sigma)$
$\Omega_m h^3$	0.09579	$0.09581^{+0.00088}_{-0.00087} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	0.8125	$0.813^{+0.018}_{-0.017} \quad (+0.1\sigma)$	χ_{small}^2	395.87	$397.0 \quad (\nu: 1.3) \quad (-0.0\sigma)$
σ_8	0.8101	$0.809^{+0.018}_{-0.018} \quad (-0.2\sigma)$	$100\theta_{s,\text{eq}}$	0.4492	$0.4497^{+0.0093}_{-0.0090} \quad (+0.1\sigma)$	χ_{lowl}^2	23.60	$25.0 \quad (\nu: 1.7) \quad (-0.0\sigma)$
S_8	0.8348	$0.832^{+0.048}_{-0.048} \quad (-0.2\sigma)$	$H(0.15)$	72.34	$72.4^{+1.6}_{-1.5} \quad (+0.1\sigma)$	χ_{CamSpec}^2	6704.4	$6716.7 \quad (\nu: 13.8)$
$\sigma_8 \Omega_m^{0.5}$	0.4572	$0.456^{+0.026}_{-0.026} \quad (-0.2\sigma)$	$D_M(0.15)$	646.6	$646^{+16}_{-16} \quad (-0.1\sigma)$	χ_{prior}^2	1.2	$5.3 \quad (\nu: 4.4) \quad (-0.5\sigma)$
$\sigma_8 \Omega_m^{0.25}$	0.6086	$0.607^{+0.023}_{-0.024} \quad (-0.2\sigma)$	$H(0.38)$	82.57	$82.6^{+1.1}_{-1.1} \quad (+0.1\sigma)$	χ_{CMB}^2	7123.9	$7138.7 \quad (\nu: 14.9) \quad (+1051.6\sigma)$
$\sigma_8/h^{0.5}$	0.9897	$0.987^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$D_M(0.38)$	1540.4	$1539^{+32}_{-31} \quad (-0.1\sigma)$			
$r_{\text{drag}} h$	98.71	$98.9^{+3.3}_{-3.2} \quad (+0.1\sigma)$	$H(0.51)$	89.35	$89.41^{+0.90}_{-0.86} \quad (+0.1\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 7125.09$; $\Delta\chi_{\text{eff}}^2 = -0.02$; $\bar{\chi}_{\text{eff}}^2 = 7144.04$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.83$; $R - 1 = 0.00760$

χ_{eff}^2 : CMB - small_100x143_offlike5_EE_Aplanck_B: 395.87 (Δ 0.09) commander_dx12_v3.2.29: 23.60 (Δ -0.10) CamSpec like_10.7cleaned: 6704.38 (Δ -0.06)

17.42 base_r_plikHM_TT_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022093	$0.02208^{+0.00043}_{-0.00041} \quad (-0.2\sigma)$	σ_8	0.8156	$0.814^{+0.017}_{-0.017} \quad (+0.4\sigma)$	$H(0.38)$	82.34	$82.4^{+1.1}_{-1.0} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12135	$0.1212^{+0.0041}_{-0.0040} \quad (+0.4\sigma)$	S_8	0.8490	$0.846^{+0.047}_{-0.046} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	1547.3	$1546^{+30}_{-30} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	1.04069	$1.04072^{+0.00092}_{-0.00092} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4650	$0.463^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$H(0.51)$	89.19	$89.22^{+0.86}_{-0.81} \quad (-0.4\sigma)$
τ	0.0527	$0.052^{+0.016}_{-0.015} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6158	$0.614^{+0.022}_{-0.022} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	2002.3	$2001^{+35}_{-35} \quad (+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0439	$3.042^{+0.031}_{-0.031} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9996	$0.997^{+0.030}_{-0.030} \quad (+0.4\sigma)$	$H(0.61)$	94.91	$94.93^{+0.69}_{-0.64} \quad (-0.4\sigma)$
n_{s}	0.9624	$0.962^{+0.011}_{-0.011} \quad (-0.4\sigma)$	$r_{\mathrm{drag}}h$	97.90	$98.1^{+3.1}_{-3.0} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	2328.2	$2327^{+38}_{-38} \quad (+0.4\sigma)$
r	0.0117	$< 0.0579 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.466	$2.463^{+0.073}_{-0.072} \quad (+0.4\sigma)$	$H(2.33)$	237.15	$237.0^{+2.5}_{-2.4} \quad (+0.4\sigma)$
y_{cal}	1.00061	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	7.60	$7.5^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5781.5	$5781^{+31}_{-32} \quad (+0.3\sigma)$
$A_{B,\mathrm{dust}}$	4.63	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	2.099	$2.096^{+0.067}_{-0.065} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	0.4685	$0.467^{+0.023}_{-0.023} \quad (+0.4\sigma)$
$A_{B,\mathrm{sync}}$	1.48	< 3.66	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8887	$1.887^{+0.026}_{-0.026} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	0.7523	$0.751^{+0.014}_{-0.014} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.54	—	D_{40}	1238.6	$1245^{+31}_{-30} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.4838	$0.483^{+0.018}_{-0.018} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{dust}}$	1.574	$1.60^{+0.19}_{-0.19}$	D_{220}	5708	$5711^{+80}_{-79} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	0.6654	$0.664^{+0.011}_{-0.012} \quad (+0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.33	—	D_{810}	2539.7	$2538^{+27}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	0.4808	$0.480^{+0.015}_{-0.016} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.03	$-3.10^{+0.52}_{-0.55}$	D_{1420}	815.7	$815^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6221	$0.621^{+0.010}_{-0.010} \quad (+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.33	$-0.35^{+0.53}_{-0.58}$	D_{2000}	230.03	$229.6^{+3.6}_{-3.5} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	0.4748	$0.474^{+0.014}_{-0.014} \quad (+0.4\sigma)$
A_{217}^{CIB}	48.7	$48^{+10}_{-10} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9624	$0.962^{+0.011}_{-0.011} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	0.5916	$0.5908^{+0.0098}_{-0.0098} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.31	—	Y_{P}	0.245281	$0.24527^{+0.00018}_{-0.00020} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	0.29776	$0.2974^{+0.0049}_{-0.0048} \quad (+0.2\sigma)$
A_{143}^{tSZ}	7.01	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246607	$0.24659^{+0.00018}_{-0.00020} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	0.3064	$0.3061^{+0.0052}_{-0.0051} \quad (+0.1\sigma)$
A_{100}^{PS}	255	$264^{+60}_{-60} \quad (+0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.638	$2.642^{+0.081}_{-0.081} \quad (+0.2\sigma)$	$r_{0.002}$	0.0104	$< 0.0527 \quad (-0.4\sigma)$
A_{143}^{PS}	49.4	$49^{+20}_{-20} \quad (+0.1\sigma)$	Age/Gyr	13.838	$13.838^{+0.069}_{-0.070} \quad (+0.3\sigma)$	$r_{0.01}$	0.0110	$< 0.0553 \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	46.8	$44^{+20}_{-20} \quad (+0.0\sigma)$	z_*	1090.39	$1090.40^{+0.79}_{-0.78} \quad (+0.3\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	-1.40	$-1.0^{+1.5}_{-2.1} \quad (-0.2\sigma)$
A_{217}^{PS}	119.5	$116^{+20}_{-20} \quad (+0.0\sigma)$	r_*	144.30	$144.36^{+0.93}_{-0.92} \quad (-0.4\sigma)$	r_{10}	0.0053	$< 0.0271 \quad (-0.4\sigma)$
A^{kSZ}	0.00	$< 8.41 \quad (+0.0\sigma)$	$100\theta_*$	1.04090	$1.04093^{+0.00091}_{-0.00090} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{t}}$	0.025	$< 0.121 \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.79	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.863	$13.869^{+0.086}_{-0.086} \quad (-0.4\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.022	$< 0.109 \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.79	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	z_{drag}	1059.40	$1059.33^{+0.91}_{-0.89} \quad (-0.1\sigma)$	f_{2000}^{143}	30.4	$31^{+6}_{-6} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.3	$18.2^{+6.5}_{-6.5} \quad (-0.0\sigma)$	r_{drag}	147.04	$147.12^{+0.93}_{-0.93} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	33.27	$34^{+4}_{-4} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	94.6	$93^{+10}_{-10} \quad (-0.0\sigma)$	k_{D}	0.14070	$0.1406^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	f_{2000}^{217}	107.76	$108.2^{+3.7}_{-3.7} \quad (+0.1\sigma)$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	0.16107	$0.16111^{+0.00052}_{-0.00051} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	734.86	$739.1 \quad (\nu: 3.7)$
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{eq}	3428	$3423^{+92}_{-91} \quad (+0.4\sigma)$	χ_{small}^2	396.01	$397.1 \quad (\nu: 1.4) \quad (-0.0\sigma)$
H_0	66.58	$66.7^{+1.8}_{-1.7} \quad (-0.4\sigma)$	k_{eq}	0.010462	$0.01045^{+0.00028}_{-0.00028} \quad (+0.4\sigma)$	χ_{lowl}^2	24.26	$25.0 \quad (\nu: 1.1) \quad (-0.0\sigma)$
Ω_{Λ}	0.6750	$0.676^{+0.025}_{-0.026} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	0.8078	$0.809^{+0.017}_{-0.017} \quad (-0.4\sigma)$	χ_{plik}^2	758.5	$771.1 \quad (\nu: 14.1) \quad (-0.1\sigma)$
Ω_{m}	0.3250	$0.324^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4467	$0.4472^{+0.0088}_{-0.0086} \quad (-0.4\sigma)$	χ_{prior}^2	1.5	$8.9 \quad (\nu: 8.1) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14409	$0.1439^{+0.0039}_{-0.0038} \quad (+0.4\sigma)$	$H(0.15)$	72.00	$72.1^{+1.5}_{-1.5} \quad (-0.4\sigma)$	χ_{CMB}^2	1913.6	$1932.3 \quad (\nu: 19.0) \quad (+130.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09593	$0.09588^{+0.00090}_{-0.00088} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	650.2	$650^{+15}_{-15} \quad (+0.4\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 1915.08$; $\bar{\chi}_{\mathrm{eff}}^2 = 1941.21$; $R - 1 = 0.00244$

χ_{eff}^2 : CMB - BK15_dust: 734.86 small_100x143_offlike5_EE_Aplanck_B: 396.01 commander_dx12_v3_2_29: 24.26 plik_rd12_HM_v22_TT: 758.48

17.43 base_r_plikHM_TT_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022219	$0.02219^{+0.00039}_{-0.00037} \quad (+0.3\sigma)$	S_8	0.8252	$0.824^{+0.029}_{-0.029} \quad (-0.5\sigma)$	$H(0.51)$	89.61	$89.61^{+0.58}_{-0.55} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11926	$0.1191^{+0.0024}_{-0.0024} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4520	$0.451^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	1983.9	$1984^{+21}_{-21} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	1.04096	$1.04097^{+0.00082}_{-0.00082} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6048	$0.604^{+0.015}_{-0.016} \quad (-0.4\sigma)$	$H(0.61)$	95.232	$95.23^{+0.49}_{-0.47} \quad (+0.5\sigma)$
τ	0.0547	$0.055^{+0.016}_{-0.015} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	0.9850	$0.984^{+0.022}_{-0.022} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	2308.5	$2308^{+23}_{-23} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0426	$3.043^{+0.033}_{-0.032} \quad (+0.2\sigma)$	$r_{\mathrm{drag}}h$	99.54	$99.6^{+1.8}_{-1.8} \quad (+0.6\sigma)$	$H(2.33)$	235.93	$235.8^{+1.5}_{-1.5} \quad (-0.6\sigma)$
n_{s}	0.9669	$0.9665^{+0.0083}_{-0.0082} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.433	$2.433^{+0.054}_{-0.053} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	5767.9	$5769^{+24}_{-24} \quad (-0.4\sigma)$
r	0.0175	$< 0.0608 \quad (-0.4\sigma)$	z_{re}	7.74	$7.7^{+1.6}_{-1.6} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	0.4565	$0.456^{+0.015}_{-0.015} \quad (-0.5\sigma)$
y_{cal}	1.00036	$1.0009^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	2.096	$2.096^{+0.069}_{-0.065} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	0.7478	$0.747^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$A_{B,\mathrm{dust}}$	4.59	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8787	$1.879^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	0.4748	$0.474^{+0.012}_{-0.013} \quad (-0.4\sigma)$
$A_{B,\mathrm{sync}}$	1.43	< 3.66	D_{40}	1230.7	$1236^{+27}_{-26} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	0.6628	$0.663^{+0.011}_{-0.011} \quad (+0.0\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.50	—	D_{220}	5715	$5720^{+78}_{-78} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	0.4733	$0.473^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$\beta_{B,\mathrm{dust}}$	1.575	$1.60^{+0.18}_{-0.18}$	D_{810}	2536.8	$2537^{+27}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	0.6203	$0.620^{+0.011}_{-0.010} \quad (+0.1\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.32	—	D_{1420}	816.2	$816.0^{+9.9}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	0.4683	$0.468^{+0.010}_{-0.010} \quad (-0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.53}_{-0.55}$	D_{2000}	230.26	$230.1^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	0.5902	$0.590^{+0.010}_{-0.0098} \quad (+0.1\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.34	$-0.34^{+0.54}_{-0.57}$	$n_{\mathrm{s},0.002}$	0.9669	$0.9665^{+0.0083}_{-0.0082} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	0.2976	$0.2975^{+0.0051}_{-0.0049} \quad (+0.2\sigma)$
A_{217}^{CIB}	48.7	$48^{+10}_{-10} \quad (+0.0\sigma)$	Y_{P}	0.245334	$0.24532^{+0.00015}_{-0.00017} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	0.3068	$0.3067^{+0.0054}_{-0.0050} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.32	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246660	$0.24664^{+0.00015}_{-0.00017} \quad (+0.3\sigma)$	$r_{0.002}$	0.0159	$< 0.0562 \quad (-0.3\sigma)$
A_{143}^{tSZ}	7.04	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	2.614	$2.620^{+0.072}_{-0.072} \quad (-0.3\sigma)$	$r_{0.01}$	0.0167	$< 0.0584 \quad (-0.4\sigma)$
A_{100}^{PS}	253	$263^{+60}_{-50} \quad (+0.0\sigma)$	Age/Gyr	13.808	$13.810^{+0.055}_{-0.056} \quad (-0.4\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	-1.00	$-0.9^{+1.5}_{-2.1} \quad (-0.2\sigma)$
A_{143}^{PS}	49.0	$49^{+20}_{-20} \quad (-0.1\sigma)$	z_*	1090.05	$1090.08^{+0.57}_{-0.57} \quad (-0.5\sigma)$	r_{10}	0.0081	$< 0.0288 \quad (-0.4\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	46.5	$43^{+20}_{-20} \quad (-0.0\sigma)$	r_*	144.74	$144.79^{+0.63}_{-0.62} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}}$	0.037	$< 0.127 \quad (-0.4\sigma)$
A_{217}^{PS}	119.0	$115^{+20}_{-20} \quad (-0.0\sigma)$	$100\theta_*$	1.04116	$1.04118^{+0.00082}_{-0.00081} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.033	$< 0.114 \quad (-0.4\sigma)$
A^{kSZ}	0.00	$< 8.34 \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.902	$13.907^{+0.062}_{-0.060} \quad (+0.5\sigma)$	f_{2000}^{143}	30.1	$31^{+6}_{-6} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	8.86	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_{drag}	1059.51	$1059.45^{+0.86}_{-0.85} \quad (+0.1\sigma)$	$f_{2000}^{143\times 217}$	33.01	$33^{+4}_{-4} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	10.76	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	r_{drag}	147.46	$147.52^{+0.68}_{-0.67} \quad (+0.5\sigma)$	f_{2000}^{217}	107.48	$107.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$
$A_{143\times 217}^{\mathrm{dustTT}}$	19.4	$18.2^{+6.4}_{-6.5} \quad (-0.0\sigma)$	k_{D}	0.14037	$0.14027^{+0.00087}_{-0.00087} \quad (-0.4\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	735.55	$739.9 \quad (\nu: 3.6)$
$A_{217}^{\mathrm{dustTT}}$	94.7	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	0.16100	$0.16105^{+0.00051}_{-0.00050} \quad (-0.1\sigma)$	χ_{small}^2	396.19	$397.2 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{eq}	3381	$3377^{+56}_{-55} \quad (-0.6\sigma)$	χ_{lowl}^2	23.52	$24.0 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{eq}	0.010319	$0.01031^{+0.00017}_{-0.00017} \quad (-0.6\sigma)$	χ_{plik}^2	759.5	$771.7 \quad (\nu: 14.7) \quad (+0.0\sigma)$
H_0	67.50	$67.5^{+1.1}_{-1.0} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	0.8167	$0.817^{+0.010}_{-0.010} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.037	$0.067 \quad (\nu: 0.0)$
Ω_{Λ}	0.6881	$0.689^{+0.014}_{-0.015} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4513	$0.4516^{+0.0053}_{-0.0053} \quad (+0.6\sigma)$	χ_{MGS}^2	1.16	$1.27 \quad (\nu: 0.1)$
Ω_{m}	0.3119	$0.311^{+0.015}_{-0.014} \quad (-0.6\sigma)$	$H(0.15)$	72.78	$72.80^{+0.92}_{-0.90} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.56	$5.0 \quad (\nu: 1.6)$
$\Omega_{\mathrm{m}}h^2$	0.14213	$0.1420^{+0.0023}_{-0.0023} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	642.2	$642.0^{+9.1}_{-9.0} \quad (-0.6\sigma)$	χ_{prior}^2	1.4	$9.0 \quad (\nu: 8.2) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09594	$0.09587^{+0.00089}_{-0.00090} \quad (-0.0\sigma)$	$H(0.38)$	82.90	$82.90^{+0.69}_{-0.67} \quad (+0.5\sigma)$	χ_{BAO}^2	5.75	$6.3 \quad (\nu: 1.1)$
σ_8	0.8093	$0.809^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	1531.5	$1531^{+18}_{-18} \quad (-0.6\sigma)$	χ_{CMB}^2	1914.8	$1932.8 \quad (\nu: 18.8) \quad (+130.7\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 1921.94$; $\bar{\chi}_{\mathrm{eff}}^2 = 1948.08$; $R - 1 = 0.00580$

χ_{eff}^2 : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.56 CMB - BK15_dust: 735.55 small_100x143.offlike5_EE_Aplanck_B: 396.19 commander_dx12.v3.2.29: 23.52 plik_rd12_HM.v22_TT: 759.51

17.44 base_r_plikHM_TT_lowl_lowE_BK15_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022122	$0.02211^{+0.00041}_{-0.00040}$ (-0.1σ)	σ_8	0.8122	$0.812^{+0.012}_{-0.012}$ $(+0.1\sigma)$	$H(0.38)$	82.54	$82.55^{+0.87}_{-0.84}$ (-0.1σ)
$\Omega_c h^2$	0.12047	$0.1204^{+0.0031}_{-0.0030}$ $(+0.1\sigma)$	S_8	0.8385	$0.838^{+0.031}_{-0.031}$ $(+0.1\sigma)$	$D_M(0.38)$	1541.3	1541^{+24}_{-24} $(+0.1\sigma)$
$100\theta_{MC}$	1.04076	$1.04078^{+0.00089}_{-0.00087}$ (-0.1σ)	$\sigma_8 \Omega_m^{0.5}$	0.4593	$0.459^{+0.017}_{-0.017}$ $(+0.1\sigma)$	$H(0.51)$	89.34	$89.34^{+0.71}_{-0.68}$ (-0.1σ)
τ	0.0529	$0.052^{+0.015}_{-0.015}$ $(+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6107	$0.610^{+0.015}_{-0.015}$ $(+0.1\sigma)$	$D_M(0.51)$	1995.4	1995^{+27}_{-28} $(+0.1\sigma)$
$\ln(10^{10} A_s)$	3.0420	$3.041^{+0.029}_{-0.029}$ $(+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9928	$0.992^{+0.020}_{-0.020}$ $(+0.1\sigma)$	$H(0.61)$	95.01	$95.02^{+0.59}_{-0.56}$ (-0.1σ)
n_s	0.9633	$0.9632^{+0.0095}_{-0.0095}$ (-0.1σ)	$r_{drag} h$	98.55	$98.6^{+2.4}_{-2.3}$ (-0.1σ)	$D_M(0.61)$	2320.8	2321^{+30}_{-30} $(+0.1\sigma)$
r	0.0128	< 0.0586 (-0.4σ)	$\langle d^2 \rangle^{1/2}$	2.4528	$2.451^{+0.048}_{-0.048}$ $(+0.1\sigma)$	$H(2.33)$	236.61	$236.6^{+1.9}_{-1.9}$ $(+0.1\sigma)$
y_{cal}	1.00057	$1.0007^{+0.0049}_{-0.0048}$ $(+0.1\sigma)$	z_{re}	7.60	$7.5^{+1.5}_{-1.6}$ $(+0.1\sigma)$	$D_M(2.33)$	5777.3	5777^{+27}_{-28} $(+0.1\sigma)$
$A_{B,dust}$	4.63	$4.9^{+2.1}_{-1.9}$	$10^9 A_s$	2.095	$2.092^{+0.062}_{-0.060}$ $(+0.1\sigma)$	$f\sigma_8(0.15)$	0.4632	$0.463^{+0.016}_{-0.016}$ $(+0.1\sigma)$
$A_{B,sync}$	1.42	< 3.66	$10^9 A_s e^{-2\tau}$	1.8843	$1.884^{+0.022}_{-0.022}$ $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7497	$0.749^{+0.011}_{-0.011}$ $(+0.1\sigma)$
$\alpha_{B,dust}$	-0.52	—	D_{40}	1236.8	1242^{+27}_{-26} (-0.1σ)	$f\sigma_8(0.38)$	0.4797	$0.479^{+0.012}_{-0.012}$ $(+0.1\sigma)$
$\beta_{B,dust}$	1.573	$1.60^{+0.19}_{-0.19}$	D_{220}	5714	5714^{+79}_{-78} $(+0.1\sigma)$	$\sigma_8(0.38)$	0.6637	$0.6632^{+0.0094}_{-0.0094}$ $(+0.1\sigma)$
$\alpha_{B,sync}$	-0.54	—	D_{810}	2537.5	2537^{+26}_{-26} $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4773	$0.477^{+0.010}_{-0.011}$ $(+0.1\sigma)$
$\beta_{B,sync}$	-3.04	$-3.10^{+0.53}_{-0.55}$	D_{1420}	815.0	815^{+10}_{-10} (-0.0σ)	$\sigma_8(0.51)$	0.6207	$0.6202^{+0.0089}_{-0.0088}$ $(+0.1\sigma)$
$\epsilon_{dust,sync}$	-0.34	$-0.34^{+0.54}_{-0.58}$	D_{2000}	229.76	$229.7^{+3.5}_{-3.5}$ (-0.0σ)	$f\sigma_8(0.61)$	0.4717	$0.4712^{+0.0090}_{-0.0093}$ $(+0.1\sigma)$
A_{217}^{CIB}	50.8	48^{+10}_{-10} $(+0.0\sigma)$	$n_{s,0.002}$	0.9633	$0.9632^{+0.0095}_{-0.0095}$ (-0.1σ)	$\sigma_8(0.61)$	0.5904	$0.5900^{+0.0087}_{-0.0085}$ $(+0.1\sigma)$
$\xi^{tSZ \times CIB}$	0.05	—	Y_P	0.245294	$0.24528^{+0.00017}_{-0.00019}$ (-0.1σ)	$f\sigma_8(2.33)$	0.29737	$0.2971^{+0.0046}_{-0.0045}$ $(+0.1\sigma)$
A_{143}^{tSZ}	7.20	$5.1^{+3.8}_{-3.9}$ (-0.0σ)	Y_P^{BBN}	0.246620	$0.24661^{+0.00017}_{-0.00019}$ (-0.1σ)	$\sigma_8(2.33)$	0.3062	$0.3060^{+0.0051}_{-0.0050}$ $(+0.1\sigma)$
A_{100}^{PS}	257	264^{+60}_{-60} $(+0.0\sigma)$	$10^5 D/H$	2.633	$2.635^{+0.077}_{-0.077}$ $(+0.1\sigma)$	$r_{0.002}$	0.0114	< 0.0535 (-0.4σ)
A_{143}^{PS}	45.8	49^{+20}_{-20} $(+0.0\sigma)$	Age/Gyr	13.829	$13.829^{+0.062}_{-0.063}$ $(+0.1\sigma)$	$r_{0.01}$	0.0121	< 0.0561 (-0.4σ)
$A_{143 \times 217}^{PS}$	39.8	44^{+20}_{-20} (-0.0σ)	z_*	1090.28	$1090.29^{+0.67}_{-0.67}$ $(+0.1\sigma)$	$\ln(10^{10} A_t)$	-1.32	$-0.97^{+1.5}_{-2.1}$ (-0.2σ)
A_{217}^{PS}	116.0	115^{+20}_{-20} (-0.0σ)	r_*	144.50	$144.51^{+0.72}_{-0.72}$ (-0.0σ)	r_{10}	0.0059	< 0.0275 (-0.4σ)
A^{kSZ}	0.00	< 8.45 $(+0.0\sigma)$	$100\theta_*$	1.04097	$1.04099^{+0.00087}_{-0.00086}$ (-0.1σ)	$10^9 A_t$	0.027	< 0.123 (-0.4σ)
A_{100}^{dustTT}	8.89	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	$D_M(z_*)/\text{Gpc}$	13.881	$13.882^{+0.068}_{-0.068}$ (-0.0σ)	$10^9 A_t e^{-2\tau}$	0.024	< 0.110 (-0.4σ)
A_{143}^{dustTT}	10.76	$10.7^{+3.6}_{-3.5}$ (-0.0σ)	z_{drag}	1059.40	$1059.37^{+0.87}_{-0.89}$ (-0.0σ)	f_{2000}^{143}	30.8	31^{+6}_{-6} $(+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	19.0	$18.3^{+6.5}_{-6.5}$ (-0.0σ)	r_{drag}	147.24	$147.26^{+0.75}_{-0.75}$ (-0.0σ)	$f_{2000}^{143 \times 217}$	33.47	34^{+4}_{-4} $(+0.1\sigma)$
A_{217}^{dustTT}	94.0	93^{+10}_{-10} (-0.0σ)	k_D	0.14052	$0.14049^{+0.00090}_{-0.00089}$ $(+0.0\sigma)$	f_{2000}^{217}	108.00	$108.2^{+3.7}_{-3.7}$ $(+0.1\sigma)$
c_{100}	0.99961	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$100\theta_D$	0.16106	$0.16109^{+0.00051}_{-0.00051}$ $(+0.0\sigma)$	$\chi^2_{lensing}$	8.98	$9.53 (\nu: 0.5)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (-0.0σ)	z_{eq}	3408	3407^{+70}_{-69} $(+0.1\sigma)$	$\chi^2_{BKPLANCK}$	735.21	$739.4 (\nu: 3.4)$
H_0	66.93	$66.9^{+1.4}_{-1.3}$ (-0.1σ)	k_{eq}	0.010400	$0.01040^{+0.00021}_{-0.00021}$ $(+0.1\sigma)$	χ^2_{small}	396.00	$397.0 (\nu: 1.3)$ (-0.1σ)
Ω_Λ	0.6803	$0.680^{+0.019}_{-0.019}$ (-0.1σ)	$100\theta_{eq}$	0.8115	$0.812^{+0.013}_{-0.013}$ (-0.1σ)	χ^2_{lowl}	24.07	$24.6 (\nu: 0.8)$ (-0.2σ)
Ω_m	0.3197	$0.320^{+0.019}_{-0.019}$ $(+0.1\sigma)$	$100\theta_{s,eq}$	0.4486	$0.4487^{+0.0067}_{-0.0066}$ (-0.1σ)	χ^2_{plik}	758.4	$770.9 (\nu: 13.7)$ (-0.1σ)
$\Omega_m h^2$	0.14324	$0.1432^{+0.0029}_{-0.0029}$ $(+0.1\sigma)$	$H(0.15)$	72.30	$72.3^{+1.2}_{-1.2}$ (-0.1σ)	χ^2_{prior}	1.7	$8.9 (\nu: 8.2)$ $(+0.4\sigma)$
$\Omega_m h^3$	0.09587	$0.09586^{+0.00088}_{-0.00088}$ (-0.0σ)	$D_M(0.15)$	647.1	647^{+12}_{-12} $(+0.1\sigma)$	χ^2_{CMB}	1922.6	$1941.5 (\nu: 18.9)$ $(+132.3\sigma)$

Best-fit $\chi^2_{eff} = 1924.32$; $\bar{\chi}^2_{eff} = 1950.36$; $R - 1 = 0.00332$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.98 BK15_dust: 735.21 small_100x143_offlike5_EE_Aplanck_B: 396.00 commander_dx12_v3_2_29: 24.07
plik_rd12_HM_v22_TT: 758.35

17.45 base_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022208	$0.02219^{+0.00038}_{-0.00037}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4531	$0.452^{+0.013}_{-0.013}$ (−0.4 σ)	$H(0.61)$	95.210	$95.22^{+0.47}_{-0.45}$ (+0.5 σ)
$\Omega_{\mathrm{c}}h^2$	0.11941	$0.1192^{+0.0021}_{-0.0021}$ (−0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6059	$0.605^{+0.012}_{-0.012}$ (−0.3 σ)	$D_{\mathrm{M}}(0.61)$	2309.8	2309^{+21}_{-22} (−0.5 σ)
$100\theta_{\mathrm{MC}}$	1.04096	$1.04096^{+0.00083}_{-0.00081}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9866	$0.986^{+0.017}_{-0.017}$ (−0.3 σ)	$H(2.33)$	236.02	$235.9^{+1.4}_{-1.4}$ (−0.5 σ)
τ	0.0546	$0.055^{+0.015}_{-0.014}$ (+0.5 σ)	$r_{\mathrm{drag}}h$	99.42	$99.6^{+1.6}_{-1.6}$ (+0.5 σ)	$D_{\mathrm{M}}(2.33)$	5768.7	5769^{+23}_{-24} (−0.4 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0439	$3.045^{+0.029}_{-0.028}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4379	$2.438^{+0.041}_{-0.042}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4576	$0.457^{+0.012}_{-0.012}$ (−0.4 σ)
n_{s}	0.9662	$0.9661^{+0.0080}_{-0.0079}$ (+0.4 σ)	z_{re}	7.74	$7.8^{+1.4}_{-1.5}$ (+0.4 σ)	$\sigma_8(0.15)$	0.7485	$0.748^{+0.011}_{-0.011}$ (+0.0 σ)
r	0.0155	< 0.0597 (−0.4 σ)	10^9A_{s}	2.099	$2.101^{+0.062}_{-0.057}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.4757	$0.4751^{+0.0097}_{-0.0099}$ (−0.3 σ)
y_{cal}	1.00089	$1.0010^{+0.0048}_{-0.0048}$ (+0.2 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8815	$1.880^{+0.021}_{-0.021}$ (−0.2 σ)	$\sigma_8(0.38)$	0.6634	$0.6634^{+0.0098}_{-0.0094}$ (+0.1 σ)
$A_{B,\mathrm{dust}}$	4.60	$4.9^{+2.1}_{-1.9}$	D_{40}	1232.9	1237^{+26}_{-25} (−0.4 σ)	$f\sigma_8(0.51)$	0.4741	$0.4737^{+0.0087}_{-0.0088}$ (−0.3 σ)
$A_{B,\mathrm{sync}}$	1.43	< 3.67	D_{220}	5723	5723^{+77}_{-77} (+0.3 σ)	$\sigma_8(0.51)$	0.6207	$0.6208^{+0.0092}_{-0.0088}$ (+0.2 σ)
$\alpha_{B,\mathrm{dust}}$	−0.50	—	D_{810}	2539.5	2538^{+26}_{-26} (+0.1 σ)	$f\sigma_8(0.61)$	0.4690	$0.4687^{+0.0080}_{-0.0081}$ (−0.2 σ)
$\beta_{B,\mathrm{dust}}$	1.574	$1.60^{+0.18}_{-0.18}$	D_{1420}	816.8	$816.1^{+9.9}_{-9.8}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5906	$0.5907^{+0.0089}_{-0.0084}$ (+0.2 σ)
$\alpha_{B,\mathrm{sync}}$	−0.35	—	D_{2000}	230.41	$230.2^{+3.4}_{-3.4}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.29774	$0.2978^{+0.0046}_{-0.0043}$ (+0.4 σ)
$\beta_{B,\mathrm{sync}}$	−3.04	$-3.10^{+0.53}_{-0.55}$	$n_{\mathrm{s},0.002}$	0.9662	$0.9661^{+0.0080}_{-0.0079}$ (+0.4 σ)	$\sigma_8(2.33)$	0.30690	$0.3070^{+0.0049}_{-0.0046}$ (+0.5 σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	−0.35	$-0.34^{+0.54}_{-0.57}$	Y_{P}	0.245329	$0.24532^{+0.00015}_{-0.00017}$ (+0.3 σ)	$r_{0.002}$	0.0140	< 0.0549 (−0.4 σ)
A_{217}^{CIB}	48.9	48^{+10}_{-10} (+0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246656	$0.24665^{+0.00015}_{-0.00017}$ (+0.3 σ)	$r_{0.01}$	0.0147	< 0.0573 (−0.4 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.28	—	$10^5\mathrm{D}/\mathrm{H}$	2.616	$2.619^{+0.072}_{-0.071}$ (−0.3 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−1.12	$-0.9^{+1.5}_{-2.1}$ (−0.2 σ)
A_{143}^{tSZ}	7.07	$5.1^{+3.8}_{-3.9}$ (−0.0 σ)	Age/Gyr	13.810	$13.811^{+0.054}_{-0.055}$ (−0.4 σ)	r_{10}	0.0071	< 0.0281 (−0.4 σ)
A_{100}^{PS}	255	263^{+60}_{-60} (+0.0 σ)	z_*	1090.07	$1090.08^{+0.56}_{-0.55}$ (−0.5 σ)	10^9A_{t}	0.033	< 0.125 (−0.4 σ)
A_{143}^{PS}	48.6	49^{+20}_{-20} (−0.1 σ)	r_*	144.71	$144.77^{+0.56}_{-0.56}$ (+0.5 σ)	$10^9A_{\mathrm{t}}e^{-2\tau}$	0.029	< 0.112 (−0.4 σ)
$A_{143\times 217}^{\mathrm{PS}}$	45.8	43^{+20}_{-20} (−0.0 σ)	$100\theta_*$	1.04116	$1.04116^{+0.00081}_{-0.00081}$ (+0.3 σ)	f_{2000}^{143}	30.3	31^{+6}_{-6} (−0.1 σ)
A_{217}^{PS}	119.0	115^{+20}_{-20} (−0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.899	$13.905^{+0.056}_{-0.055}$ (+0.5 σ)	$f_{2000}^{143\times 217}$	33.18	33^{+4}_{-4} (−0.1 σ)
A^{kSZ}	0.02	< 8.30 (−0.0 σ)	z_{drag}	1059.51	$1059.47^{+0.85}_{-0.87}$ (+0.2 σ)	f_{2000}^{217}	107.72	$107.9^{+3.6}_{-3.6}$ (−0.0 σ)
$A_{100}^{\mathrm{dustTT}}$	8.87	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	r_{drag}	147.43	$147.50^{+0.62}_{-0.62}$ (+0.5 σ)	$\chi^2_{\mathrm{lensing}}$	8.81	9.23 (ν : 0.2)
$A_{143}^{\mathrm{dustTT}}$	10.78	$10.7^{+3.6}_{-3.5}$ (−0.0 σ)	k_{D}	0.14039	$0.14030^{+0.00083}_{-0.00083}$ (−0.3 σ)	$\chi^2_{\mathrm{BKPLANCK}}$	735.47	739.8 (ν : 3.5)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.3	$18.2^{+6.4}_{-6.5}$ (−0.0 σ)	$100\theta_{\mathrm{D}}$	0.16101	$0.16104^{+0.00050}_{-0.00050}$ (−0.2 σ)	χ^2_{simall}	396.21	397.3 (ν : 1.7) (+0.1 σ)
$A_{217}^{\mathrm{dustTT}}$	94.6	93^{+10}_{-10} (−0.0 σ)	z_{eq}	3384.3	3379^{+50}_{-49} (−0.5 σ)	χ^2_{lowl}	23.60	24.1 (ν : 0.6) (−0.5 σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	k_{eq}	0.010329	$0.01031^{+0.00015}_{-0.00015}$ (−0.5 σ)	χ^2_{plik}	759.2	771.3 (ν : 14.1) (−0.1 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (−0.0 σ)	$100\theta_{\mathrm{eq}}$	0.8161	$0.8170^{+0.0090}_{-0.0091}$ (+0.5 σ)	$\chi^2_{6\mathrm{DF}}$	0.047	0.065 (ν : 0.0)
H_0	67.44	$67.50^{+0.96}_{-0.95}$ (+0.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.45096	$0.4514^{+0.0046}_{-0.0047}$ (+0.5 σ)	χ^2_{MGS}	1.10	1.23 (ν : 0.1)
Ω_{Λ}	0.6872	$0.688^{+0.012}_{-0.013}$ (+0.5 σ)	$H(0.15)$	72.73	$72.78^{+0.84}_{-0.83}$ (+0.5 σ)	$\chi^2_{\mathrm{DR12BAO}}$	4.77	5.0 (ν : 1.3)
Ω_{m}	0.3128	$0.312^{+0.013}_{-0.012}$ (−0.5 σ)	$D_{\mathrm{M}}(0.15)$	642.8	$642.3^{+8.3}_{-8.2}$ (−0.5 σ)	χ^2_{prior}	1.5	8.9 (ν : 8.2) (+0.4 σ)
$\Omega_{\mathrm{m}}h^2$	0.14227	$0.1421^{+0.0021}_{-0.0020}$ (−0.5 σ)	$H(0.38)$	82.86	$82.89^{+0.65}_{-0.63}$ (+0.5 σ)	χ^2_{CMB}	1923.3	1941.7 (ν : 18.9) (+132.3 σ)
$\Omega_{\mathrm{m}}h^3$	0.09594	$0.09588^{+0.00088}_{-0.00090}$ (+0.0 σ)	$D_{\mathrm{M}}(0.38)$	1532.6	1532^{+17}_{-17} (−0.5 σ)	χ^2_{BAO}	5.92	6.3 (ν : 0.9)
σ_8	0.8102	$0.810^{+0.012}_{-0.012}$ (−0.1 σ)	$H(0.51)$	89.58	$89.60^{+0.55}_{-0.52}$ (+0.5 σ)			
S_8	0.8273	$0.826^{+0.023}_{-0.023}$ (−0.4 σ)	$D_{\mathrm{M}}(0.51)$	1985.2	1984^{+20}_{-20} (−0.5 σ)			

Best-fit $\chi^2_{\mathrm{eff}} = 1930.77$; $\bar{\chi}^2_{\mathrm{eff}} = 1956.87$; $R - 1 = 0.00562$
 χ^2_{eff} : BAO - 6DF: 0.05 MGS: 1.10 DR12BAO: 4.78 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.81 BK15_dust: 735.47 simall_100x143_offlike5_EE_Aplanck_B: 396.21 commander_dx12_v3.2.29: 23.60 plik_rd12_HM_v22.TT: 759.22

17.46 base_r_plikHM_TT_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02208^{+0.00043}_{-0.00042} \quad (-0.2\sigma)$	σ_8	$0.815^{+0.016}_{-0.016} \quad (+0.5\sigma)$	$H(0.38)$	$82.4^{+1.1}_{-1.0} \quad (-0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1211^{+0.0040}_{-0.0040} \quad (+0.4\sigma)$	S_8	$0.847^{+0.047}_{-0.046} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1546^{+30}_{-30} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04073^{+0.00092}_{-0.00092} \quad (-0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.464^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$H(0.51)$	$89.23^{+0.86}_{-0.81} \quad (-0.3\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.615^{+0.022}_{-0.022} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$2000^{+35}_{-35} \quad (+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.027}_{-0.026} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.998^{+0.030}_{-0.030} \quad (+0.5\sigma)$	$H(0.61)$	$94.94^{+0.69}_{-0.64} \quad (-0.3\sigma)$
n_{s}	$0.962^{+0.011}_{-0.011} \quad (-0.3\sigma)$	$r_{\mathrm{drag}}h$	$98.1^{+3.1}_{-3.0} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2326^{+38}_{-38} \quad (+0.3\sigma)$
r	$< 0.0578 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.466^{+0.072}_{-0.071} \quad (+0.5\sigma)$	$H(2.33)$	$237.0^{+2.5}_{-2.4} \quad (+0.3\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 8.86 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5781^{+30}_{-31} \quad (+0.3\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}$	$2.102^{+0.058}_{-0.054} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.467^{+0.023}_{-0.023} \quad (+0.5\sigma)$
$A_{B,\mathrm{sync}}$	< 3.66	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.887^{+0.026}_{-0.026} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.014}_{-0.013} \quad (+0.5\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1244^{+31}_{-30} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.483^{+0.018}_{-0.018} \quad (+0.5\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5711^{+81}_{-79} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.011}_{-0.0099} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2538^{+27}_{-27} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.480^{+0.015}_{-0.016} \quad (+0.5\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.56}$	D_{1420}	$815^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.6220^{+0.0099}_{-0.0087} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.58}$	D_{2000}	$229.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.013}_{-0.014} \quad (+0.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.962^{+0.011}_{-0.011} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5916^{+0.0088}_{-0.0084} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24527^{+0.00018}_{-0.00020} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0043}_{-0.0040} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24660^{+0.00018}_{-0.00020} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0045}_{-0.0042} \quad (+0.3\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (+0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.641^{+0.081}_{-0.080} \quad (+0.2\sigma)$	$r_{0.002}$	$< 0.0526 \quad (-0.4\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.836^{+0.069}_{-0.070} \quad (+0.3\sigma)$	$r_{0.01}$	$< 0.0552 \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	z_*	$1090.38^{+0.78}_{-0.77} \quad (+0.3\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-1.0^{+1.5}_{-2.1} \quad (-0.2\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	r_*	$144.38^{+0.92}_{-0.92} \quad (-0.3\sigma)$	r_{10}	$< 0.0270 \quad (-0.4\sigma)$
A^{kSZ}	$< 8.39 \quad (+0.0\sigma)$	$100\theta_*$	$1.04094^{+0.00091}_{-0.00090} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.121 \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.870^{+0.086}_{-0.086} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.109 \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	z_{drag}	$1059.34^{+0.90}_{-0.86} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.2^{+6.5}_{-6.5} \quad (-0.0\sigma)$	r_{drag}	$147.13^{+0.93}_{-0.93} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	k_{D}	$0.1406^{+0.0010}_{-0.0010} \quad (+0.2\sigma)$	f_{2000}^{217}	$108.2^{+3.7}_{-3.7} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16110^{+0.00052}_{-0.00051} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.1 \quad (\nu: 3.6)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{eq}	$3421^{+92}_{-91} \quad (+0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (-0.1\sigma)$
H_0	$66.7^{+1.8}_{-1.7} \quad (-0.4\sigma)$	k_{eq}	$0.01044^{+0.00028}_{-0.00028} \quad (+0.4\sigma)$	χ_{lowl}^2	$25.0 \quad (\nu: 1.1) \quad (-0.0\sigma)$
Ω_{Λ}	$0.676^{+0.024}_{-0.026} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.809^{+0.017}_{-0.017} \quad (-0.4\sigma)$	χ_{plik}^2	$771.0 \quad (\nu: 14.0) \quad (-0.1\sigma)$
Ω_{m}	$0.324^{+0.026}_{-0.024} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4474^{+0.0088}_{-0.0086} \quad (-0.4\sigma)$	χ_{prior}^2	$8.9 \quad (\nu: 8.1) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1438^{+0.0039}_{-0.0038} \quad (+0.4\sigma)$	$H(0.15)$	$72.1^{+1.5}_{-1.5} \quad (-0.4\sigma)$	χ_{CMB}^2	$1932.0 \quad (\nu: 18.6) \quad (+130.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09588^{+0.00090}_{-0.00089} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$649^{+15}_{-15} \quad (+0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1940.93$; $R - 1 = 0.00225$

17.47 base_r_plikHM_TT_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02219^{+0.00039}_{-0.00037} \quad (+0.3\sigma)$	S_8	$0.825^{+0.029}_{-0.028} \quad (-0.5\sigma)$	$H(0.51)$	$89.62^{+0.57}_{-0.55} \quad (+0.5\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0024}_{-0.0024} \quad (-0.6\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$D_M(0.51)$	$1983^{+21}_{-21} \quad (-0.6\sigma)$
$100\theta_{MC}$	$1.04097^{+0.00083}_{-0.00082} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$H(0.61)$	$95.23^{+0.48}_{-0.47} \quad (+0.5\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$D_M(0.61)$	$2308^{+23}_{-23} \quad (-0.6\sigma)$
$\ln(10^{10} A_s)$	$3.044^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$r_{\text{drag}} h$	$99.6^{+1.8}_{-1.8} \quad (+0.6\sigma)$	$H(2.33)$	$235.8^{+1.5}_{-1.5} \quad (-0.6\sigma)$
n_s	$0.9665^{+0.0083}_{-0.0082} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.052}_{-0.051} \quad (-0.3\sigma)$	$D_M(2.33)$	$5768^{+24}_{-24} \quad (-0.5\sigma)$
r	$< 0.0605 \quad (-0.4\sigma)$	z_{re}	$< 9.00 \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.015}_{-0.015} \quad (-0.4\sigma)$
y_{cal}	$1.0009^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_s$	$2.100^{+0.061}_{-0.057} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.012} \quad (-0.0\sigma)$
$A_{B,\text{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_s e^{-2\tau}$	$1.879^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$A_{B,\text{sync}}$	< 3.66	D_{40}	$1236^{+27}_{-26} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.010} \quad (+0.1\sigma)$
$\alpha_{B,\text{dust}}$	—	D_{220}	$5720^{+78}_{-78} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.011} \quad (-0.3\sigma)$
$\beta_{B,\text{dust}}$	$1.60^{+0.18}_{-0.19}$	D_{810}	$2537^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0097}_{-0.0092} \quad (+0.2\sigma)$
$\alpha_{B,\text{sync}}$	—	D_{1420}	$815.9^{+9.9}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.010}_{-0.0098} \quad (-0.3\sigma)$
$\beta_{B,\text{sync}}$	$-3.10^{+0.53}_{-0.55}$	D_{2000}	$230.1^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.5906^{+0.0091}_{-0.0086} \quad (+0.2\sigma)$
$\epsilon_{\text{dust,sync}}$	$-0.34^{+0.54}_{-0.57}$	$n_{s,0.002}$	$0.9665^{+0.0083}_{-0.0082} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0045}_{-0.0043} \quad (+0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	Y_P	$0.24532^{+0.00015}_{-0.00017} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0047}_{-0.0044} \quad (+0.4\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.24665^{+0.00015}_{-0.00017} \quad (+0.3\sigma)$	$r_{0.002}$	$< 0.0558 \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.620^{+0.072}_{-0.072} \quad (-0.3\sigma)$	$r_{0.01}$	$< 0.0581 \quad (-0.4\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (+0.0\sigma)$	Age/Gyr	$13.810^{+0.055}_{-0.056} \quad (-0.4\sigma)$	$\ln(10^{10} A_t)$	$-0.9^{+1.5}_{-2.1} \quad (-0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	z_*	$1090.07^{+0.57}_{-0.57} \quad (-0.5\sigma)$	r_{10}	$< 0.0286 \quad (-0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	r_*	$144.80^{+0.63}_{-0.62} \quad (+0.5\sigma)$	$10^9 A_t$	$< 0.127 \quad (-0.4\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$100\theta_*$	$1.04118^{+0.00082}_{-0.00081} \quad (+0.3\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.114 \quad (-0.4\sigma)$
A^{kSZ}	$< 8.32 \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.907^{+0.062}_{-0.060} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_{drag}	$1059.46^{+0.86}_{-0.86} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	r_{drag}	$147.52^{+0.68}_{-0.67} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.2^{+6.4}_{-6.5} \quad (-0.0\sigma)$	k_D	$0.14027^{+0.00087}_{-0.00087} \quad (-0.4\sigma)$	χ_{BKPLANCK}^2	$739.8 \quad (\nu: 3.6)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_D$	$0.16105^{+0.00051}_{-0.00050} \quad (-0.1\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{eq}	$3377^{+56}_{-55} \quad (-0.6\sigma)$	χ_{lowl}^2	$24.0 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	k_{eq}	$0.01031^{+0.00017}_{-0.00017} \quad (-0.6\sigma)$	χ_{plik}^2	$771.6 \quad (\nu: 14.6) \quad (-0.0\sigma)$
H_0	$67.5^{+1.0}_{-1.0} \quad (+0.6\sigma)$	$100\theta_{\text{eq}}$	$0.817^{+0.010}_{-0.010} \quad (+0.6\sigma)$	$\chi_{6\text{DF}}^2$	$0.066 \quad (\nu: 0.0)$
Ω_Λ	$0.689^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$100\theta_{s,\text{eq}}$	$0.4517^{+0.0053}_{-0.0053} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.28 \quad (\nu: 0.1)$
Ω_m	$0.311^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$H(0.15)$	$72.81^{+0.91}_{-0.90} \quad (+0.6\sigma)$	χ_{DR12BAO}^2	$5.0 \quad (\nu: 1.5)$
$\Omega_m h^2$	$0.1420^{+0.0023}_{-0.0023} \quad (-0.6\sigma)$	$D_M(0.15)$	$642.0^{+9.0}_{-8.9} \quad (-0.6\sigma)$	χ_{prior}^2	$8.9 \quad (\nu: 8.2) \quad (+0.4\sigma)$
$\Omega_m h^3$	$0.09587^{+0.00089}_{-0.00090} \quad (-0.0\sigma)$	$H(0.38)$	$82.91^{+0.68}_{-0.67} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 1.1)$
σ_8	$0.810^{+0.014}_{-0.013} \quad (-0.1\sigma)$	$D_M(0.38)$	$1531^{+18}_{-18} \quad (-0.6\sigma)$	χ_{CMB}^2	$1932.6 \quad (\nu: 18.6) \quad (+130.7\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 1947.86; R - 1 = 0.00560$$

17.48 base_r_plikHM_TT_lowl_lowE_BK15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02212^{+0.00040}_{-0.00040} \quad (-0.0\sigma)$	σ_8	$0.812^{+0.012}_{-0.011} \quad (+0.2\sigma)$	$H(0.38)$	$82.59^{+0.86}_{-0.83} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1203^{+0.0030}_{-0.0029} \quad (-0.0\sigma)$	S_8	$0.837^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1540^{+23}_{-23} \quad (+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04079^{+0.00088}_{-0.00087} \quad (-0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.459^{+0.017}_{-0.017} \quad (+0.1\sigma)$	$H(0.51)$	$89.37^{+0.69}_{-0.66} \quad (-0.0\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1994^{+27}_{-27} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.025}_{-0.023} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.020}_{-0.020} \quad (+0.1\sigma)$	$H(0.61)$	$95.04^{+0.58}_{-0.55} \quad (-0.0\sigma)$
n_{s}	$0.9636^{+0.0093}_{-0.0093} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.7^{+2.3}_{-2.3} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2319^{+29}_{-30} \quad (+0.0\sigma)$
r	$< 0.0587 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.452^{+0.048}_{-0.048} \quad (+0.2\sigma)$	$H(2.33)$	$236.5^{+1.8}_{-1.8} \quad (-0.0\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 8.80 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5776^{+27}_{-28} \quad (+0.0\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	10^9A_{s}	$2.098^{+0.053}_{-0.049} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.016}_{-0.016} \quad (+0.1\sigma)$
$A_{B,\mathrm{sync}}$	< 3.66	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.884^{+0.022}_{-0.022} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.010}_{-0.0096} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1241^{+27}_{-26} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5714^{+79}_{-78} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6639^{+0.0089}_{-0.0079} \quad (+0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.010}_{-0.011} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.53}_{-0.55}$	D_{1420}	$815^{+10}_{-9.9} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0080}_{-0.0077} \quad (+0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.34^{+0.54}_{-0.58}$	D_{2000}	$229.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.4715^{+0.0090}_{-0.0092} \quad (+0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9636^{+0.0093}_{-0.0093} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0076}_{-0.0073} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24529^{+0.00016}_{-0.00019} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0040}_{-0.0038} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24661^{+0.00017}_{-0.00019} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0043}_{-0.0041} \quad (+0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (+0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.633^{+0.077}_{-0.076} \quad (+0.0\sigma)$	$r_{0.002}$	$< 0.0537 \quad (-0.4\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.827^{+0.061}_{-0.062} \quad (+0.0\sigma)$	$r_{0.01}$	$< 0.0561 \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (-0.0\sigma)$	z_*	$1090.26^{+0.66}_{-0.66} \quad (+0.0\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.96^{+1.5}_{-2.1} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	r_*	$144.54^{+0.70}_{-0.71} \quad (+0.0\sigma)$	r_{10}	$< 0.0276 \quad (-0.4\sigma)$
A^{kSZ}	$< 8.43 \quad (+0.0\sigma)$	$100\theta_*$	$1.04100^{+0.00087}_{-0.00085} \quad (-0.0\sigma)$	10^9A_{t}	$< 0.123 \quad (-0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.885^{+0.067}_{-0.067} \quad (+0.0\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.110 \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_{drag}	$1059.38^{+0.86}_{-0.86} \quad (-0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (-0.0\sigma)$	r_{drag}	$147.29^{+0.74}_{-0.74} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+4}_{-4} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	k_{D}	$0.14047^{+0.00089}_{-0.00089} \quad (-0.0\sigma)$	f_{2000}^{217}	$108.1^{+3.7}_{-3.6} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16108^{+0.00051}_{-0.00050} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.52 \quad (\nu: 0.5)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{eq}	$3404^{+68}_{-67} \quad (-0.0\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.4 \quad (\nu: 3.5)$
H_0	$67.0^{+1.4}_{-1.3} \quad (-0.0\sigma)$	k_{eq}	$0.01039^{+0.00021}_{-0.00020} \quad (-0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{Λ}	$0.681^{+0.018}_{-0.019} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.013}_{-0.012} \quad (-0.0\sigma)$	χ_{lowl}^2	$24.6 \quad (\nu: 0.8) \quad (-0.2\sigma)$
Ω_{m}	$0.319^{+0.019}_{-0.018} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0065}_{-0.0064} \quad (+0.0\sigma)$	χ_{plik}^2	$770.8 \quad (\nu: 13.7) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1431^{+0.0028}_{-0.0028} \quad (-0.0\sigma)$	$H(0.15)$	$72.4^{+1.2}_{-1.1} \quad (-0.0\sigma)$	χ_{prior}^2	$8.9 \quad (\nu: 8.1) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09586^{+0.00088}_{-0.00088} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$647^{+12}_{-12} \quad (+0.0\sigma)$	χ_{CMB}^2	$1941.2 \quad (\nu: 18.6) \quad (+132.2\sigma)$

 $\bar{\chi}_{\mathrm{eff}}^2 = 1950.10; R - 1 = 0.00351$

17.49 base_r_plikHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00038}_{-0.00038} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.61)$	$95.22^{+0.47}_{-0.45} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1192^{+0.0021}_{-0.0021} \quad (-0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2308^{+21}_{-22} \quad (-0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00083}_{-0.00082} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-0.5\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.6}_{-1.6} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5769^{+23}_{-24} \quad (-0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.041}_{-0.041} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.012}_{-0.012} \quad (-0.4\sigma)$
n_{s}	$0.9662^{+0.0080}_{-0.0078} \quad (+0.4\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0098} \quad (+0.1\sigma)$
r	$< 0.0597 \quad (-0.4\sigma)$	10^9A_{s}	$2.103^{+0.055}_{-0.053} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.4752^{+0.0097}_{-0.0098} \quad (-0.3\sigma)$
y_{cal}	$1.0010^{+0.0048}_{-0.0047} \quad (+0.2\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.6637^{+0.0091}_{-0.0088} \quad (+0.2\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	D_{40}	$1237^{+26}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.4738^{+0.0086}_{-0.0087} \quad (-0.3\sigma)$
$A_{B,\mathrm{sync}}$	< 3.67	D_{220}	$5723^{+77}_{-77} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0085}_{-0.0082} \quad (+0.3\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{810}	$2538^{+26}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4688^{+0.0079}_{-0.0079} \quad (-0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.18}_{-0.18}$	D_{1420}	$816.1^{+9.8}_{-9.8} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.5910^{+0.0081}_{-0.0078} \quad (+0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{2000}	$230.2^{+3.5}_{-3.4} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0041}_{-0.0040} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.53}_{-0.55}$	$n_{\mathrm{s},0.002}$	$0.9662^{+0.0080}_{-0.0078} \quad (+0.4\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0044}_{-0.0043} \quad (+0.5\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.34^{+0.54}_{-0.57}$	Y_{P}	$0.24532^{+0.00015}_{-0.00017} \quad (+0.3\sigma)$	$r_{0.002}$	$< 0.0549 \quad (-0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00015}_{-0.00017} \quad (+0.3\sigma)$	$r_{0.01}$	$< 0.0573 \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.619^{+0.072}_{-0.071} \quad (-0.3\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.1} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.810^{+0.054}_{-0.055} \quad (-0.4\sigma)$	r_{10}	$< 0.0281 \quad (-0.4\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (+0.0\sigma)$	z_*	$1090.07^{+0.56}_{-0.55} \quad (-0.5\sigma)$	10^9A_{t}	$< 0.125 \quad (-0.4\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	r_*	$144.78^{+0.56}_{-0.56} \quad (+0.5\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.112 \quad (-0.4\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$100\theta_*$	$1.04117^{+0.00081}_{-0.00081} \quad (+0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.056}_{-0.055} \quad (+0.5\sigma)$	$f_{2000}^{143\times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
A^{kSZ}	$< 8.29 \quad (-0.0\sigma)$	z_{drag}	$1059.47^{+0.84}_{-0.87} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.9^{+3.6}_{-3.7} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_{drag}	$147.50^{+0.62}_{-0.62} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.20 \quad (\nu: 0.2)$
$A_{143}^{\mathrm{dust}TT}$	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	k_{D}	$0.14030^{+0.00082}_{-0.00083} \quad (-0.3\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.8 \quad (\nu: 3.5)$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.2^{+6.4}_{-6.5} \quad (-0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16104^{+0.00050}_{-0.00050} \quad (-0.2\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 1.8) \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{eq}	$3379^{+49}_{-48} \quad (-0.5\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 0.6) \quad (-0.5\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.5\sigma)$	χ_{plik}^2	$771.2 \quad (\nu: 14.1) \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8171^{+0.0089}_{-0.0090} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
H_0	$67.51^{+0.95}_{-0.95} \quad (+0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0046}_{-0.0047} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
Ω_{Λ}	$0.688^{+0.012}_{-0.013} \quad (+0.6\sigma)$	$H(0.15)$	$72.79^{+0.84}_{-0.82} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.2)$
Ω_{m}	$0.312^{+0.013}_{-0.012} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$642.2^{+8.2}_{-8.2} \quad (-0.5\sigma)$	χ_{prior}^2	$8.9 \quad (\nu: 8.2) \quad (+0.4\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$H(0.38)$	$82.90^{+0.65}_{-0.62} \quad (+0.5\sigma)$	χ_{CMB}^2	$1941.6 \quad (\nu: 18.7) \quad (+132.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09588^{+0.00088}_{-0.00090} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+17}_{-17} \quad (-0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.0\sigma)$	$H(0.51)$	$89.61^{+0.54}_{-0.52} \quad (+0.5\sigma)$		
S_8	$0.826^{+0.023}_{-0.023} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1984^{+20}_{-20} \quad (-0.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1956.72; R - 1 = 0.00561$$

17.50 base_r_plikHM_TTTEEE_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022344	$0.02234^{+0.00030}_{-0.00028}$ (+1.0 σ)	Ω_Λ	0.6818	$0.682^{+0.016}_{-0.017}$ (+0.1 σ)	$H(0.15)$	72.51	$72.5^{+1.0}_{-1.0}$ (+0.2 σ)
$\Omega_c h^2$	0.12048	$0.1204^{+0.0027}_{-0.0026}$ (+0.0 σ)	Ω_m	0.3182	$0.318^{+0.017}_{-0.016}$ (−0.1 σ)	$D_M(0.15)$	645.1	645^{+10}_{-10} (−0.2 σ)
$100\theta_{MC}$	1.04088	$1.04088^{+0.00062}_{-0.00061}$ (+0.1 σ)	$\Omega_m h^2$	0.14347	$0.1434^{+0.0025}_{-0.0025}$ (+0.1 σ)	$H(0.38)$	82.74	$82.76^{+0.75}_{-0.72}$ (+0.3 σ)
τ	0.0545	$0.055^{+0.016}_{-0.015}$ (+0.4 σ)	$\Omega_m h^3$	0.09634	$0.09632^{+0.00058}_{-0.00056}$ (+1.0 σ)	$D_M(0.38)$	1537.0	1537^{+20}_{-20} (−0.2 σ)
$\ln(10^{10} A_s)$	3.0467	$3.047^{+0.032}_{-0.031}$ (+0.5 σ)	σ_8	0.8138	$0.814^{+0.015}_{-0.014}$ (+0.3 σ)	$H(0.51)$	89.53	$89.55^{+0.59}_{-0.56}$ (+0.4 σ)
n_s	0.9648	$0.9647^{+0.0084}_{-0.0085}$ (+0.1 σ)	S_8	0.8381	$0.837^{+0.031}_{-0.031}$ (+0.1 σ)	$D_M(0.51)$	1990.0	1989^{+24}_{-24} (−0.2 σ)
r	0.0147	< 0.0605 (−0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4590	$0.459^{+0.017}_{-0.017}$ (+0.1 σ)	$H(0.61)$	95.207	$95.22^{+0.48}_{-0.45}$ (+0.5 σ)
y_{cal}	1.00104	$1.0009^{+0.0049}_{-0.0048}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6112	$0.611^{+0.016}_{-0.016}$ (+0.2 σ)	$D_M(0.61)$	2314.7	2314^{+25}_{-26} (−0.3 σ)
$A_{B,dust}$	4.62	$4.9^{+2.1}_{-1.9}$	$\sigma_8/h^{0.5}$	0.9931	$0.993^{+0.023}_{-0.023}$ (+0.1 σ)	$H(2.33)$	236.85	$236.8^{+1.6}_{-1.6}$ (+0.2 σ)
$A_{B,sync}$	1.44	< 3.63	$r_{drag} h$	98.71	$98.8^{+2.1}_{-2.0}$ (+0.0 σ)	$D_M(2.33)$	5766.4	5766^{+21}_{-22} (−0.6 σ)
$\alpha_{B,dust}$	−0.51	—	$\langle d^2 \rangle^{1/2}$	2.454	$2.454^{+0.054}_{-0.055}$ (+0.2 σ)	$f\sigma_8(0.15)$	0.4631	$0.463^{+0.016}_{-0.016}$ (+0.1 σ)
$\beta_{B,dust}$	1.575	$1.60^{+0.19}_{-0.19}$	z_{re}	7.71	$7.8^{+1.5}_{-1.5}$ (+0.4 σ)	$\sigma_8(0.15)$	0.7513	$0.751^{+0.013}_{-0.013}$ (+0.4 σ)
$\alpha_{B,sync}$	−0.44	—	$10^9 A_s$	2.105	$2.106^{+0.068}_{-0.064}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4800	$0.480^{+0.013}_{-0.013}$ (+0.1 σ)
$\beta_{B,sync}$	−3.05	$−3.10^{+0.52}_{-0.56}$	$10^9 A_s e^{-2\tau}$	1.8874	$1.886^{+0.023}_{-0.023}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6653	$0.665^{+0.011}_{-0.011}$ (+0.4 σ)
$\epsilon_{dust,sync}$	−0.34	$−0.35^{+0.53}_{-0.57}$	D_{40}	1237.9	1242^{+26}_{-26} (−0.1 σ)	$f\sigma_8(0.51)$	0.4778	$0.478^{+0.011}_{-0.012}$ (+0.2 σ)
A_{217}^{CIB}	48.3	47^{+10}_{-10} (−0.2 σ)	D_{220}	5734	5733^{+76}_{-76} (+0.5 σ)	$\sigma_8(0.51)$	0.6223	$0.622^{+0.010}_{-0.0098}$ (+0.5 σ)
$\xi^{tSZ \times CIB}$	0.28	—	D_{810}	2543.1	2541^{+26}_{-26} (+0.4 σ)	$f\sigma_8(0.61)$	0.4723	$0.472^{+0.010}_{-0.011}$ (+0.2 σ)
A_{143}^{tSZ}	7.28	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	D_{1420}	818.5	$817.8^{+9.4}_{-9.3}$ (+0.6 σ)	$\sigma_8(0.61)$	0.5919	$0.5919^{+0.0097}_{-0.0092}$ (+0.5 σ)
A_{100}^{PS}	251	258^{+50}_{-50} (−0.2 σ)	D_{2000}	231.30	$231.1^{+3.1}_{-3.1}$ (+0.8 σ)	$f\sigma_8(2.33)$	0.29820	$0.2982^{+0.0049}_{-0.0046}$ (+0.5 σ)
A_{143}^{PS}	45.8	46^{+20}_{-20} (−0.4 σ)	$n_{s,0.002}$	0.9648	$0.9647^{+0.0084}_{-0.0085}$ (+0.1 σ)	$\sigma_8(2.33)$	0.3071	$0.3072^{+0.0052}_{-0.0048}$ (+0.5 σ)
$A_{143 \times 217}^{PS}$	43.9	43^{+20}_{-20} (−0.1 σ)	Y_P	0.245385	$0.24538^{+0.00011}_{-0.00012}$ (+1.0 σ)	$r_{0.002}$	0.0132	< 0.0555 (−0.4 σ)
A_{217}^{PS}	118.3	116^{+20}_{-20} (+0.0 σ)	Y_P^{BBN}	0.246712	$0.24671^{+0.00011}_{-0.00012}$ (+1.0 σ)	$r_{0.01}$	0.0139	< 0.0579 (−0.4 σ)
A^{kSZ}	0.00	< 7.91 (−0.2 σ)	$10^5 D/H$	2.590	$2.591^{+0.054}_{-0.054}$ (−1.0 σ)	$\ln(10^{10} A_t)$	−1.17	$−0.9^{+1.5}_{-2.0}$ (−0.1 σ)
A_{100}^{dustTT}	8.79	$8.8^{+3.6}_{-3.6}$ (−0.0 σ)	Age/Gyr	13.8032	$13.803^{+0.046}_{-0.048}$ (−0.6 σ)	r_{10}	0.0067	< 0.0285 (−0.4 σ)
A_{143}^{dustTT}	10.90	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	z_*	1089.99	$1089.99^{+0.54}_{-0.54}$ (−0.7 σ)	$10^9 A_t$	0.031	< 0.127 (−0.4 σ)
$A_{143 \times 217}^{dustTT}$	19.5	$18.6^{+6.3}_{-6.4}$ (+0.1 σ)	r_*	144.33	$144.35^{+0.59}_{-0.59}$ (−0.4 σ)	$10^9 A_t e^{-2\tau}$	0.028	< 0.114 (−0.4 σ)
A_{217}^{dustTT}	94.7	94^{+10}_{-10} (+0.0 σ)	$100\theta_*$	1.04106	$1.04107^{+0.00061}_{-0.00060}$ (+0.1 σ)	f_{2000}^{143}	29.2	29^{+5}_{-5} (−0.6 σ)
A_{100}^{dustTE}	0.113	$0.115^{+0.076}_{-0.075}$	$D_M(z_*)/\text{Gpc}$	13.863	$13.866^{+0.055}_{-0.055}$ (−0.4 σ)	$f_{2000}^{143 \times 217}$	32.18	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	z_{drag}	1059.89	$1059.90^{+0.61}_{-0.58}$ (+1.1 σ)	f_{2000}^{217}	106.95	$107.1^{+3.5}_{-3.4}$ (−0.5 σ)
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.17}_{-0.17}$	r_{drag}	146.99	$147.02^{+0.58}_{-0.58}$ (−0.6 σ)	$\chi_{BKPLANCK}^2$	735.20	739.4 (ν : 3.5)
A_{143}^{dustTE}	0.227	$0.23^{+0.11}_{-0.11}$	k_D	0.14095	$0.14092^{+0.00062}_{-0.00063}$ (+0.9 σ)	χ_{small}^2	396.18	397.4 (ν : 2.0) (+0.2 σ)
$A_{143 \times 217}^{dustTE}$	0.667	$0.67^{+0.16}_{-0.16}$	$100\theta_D$	0.160772	$0.16078^{+0.00035}_{-0.00035}$ (−1.1 σ)	χ_{lowl}^2	23.97	24.5 (ν : 0.7) (−0.3 σ)
A_{217}^{dustTE}	2.10	$2.09^{+0.53}_{-0.53}$	z_{eq}	3413	3411^{+61}_{-59} (+0.1 σ)	χ_{plik}^2	2344.1	2359.2 (ν : 16.8) (+294.1 σ)
c_{100}	0.99968	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{eq}	0.010417	$0.01041^{+0.00018}_{-0.00018}$ (+0.1 σ)	χ_{prior}^2	2.1	13.2 (ν : 11.8) (+1.6 σ)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{eq}$	0.8113	$0.812^{+0.011}_{-0.011}$ (−0.1 σ)	χ_{CMB}^2	3499.4	3520.5 (ν : 20.7) (+411.6 σ)
H_0	67.15	$67.2^{+1.2}_{-1.2}$ (+0.2 σ)	$100\theta_{s,eq}$	0.4483	$0.4485^{+0.0058}_{-0.0058}$ (−0.1 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3501.51$; $\bar{\chi}_{\text{eff}}^2 = 3533.72$; $R - 1 = 0.00500$

χ_{eff}^2 : CMB - BK15_dust: 735.20 small.100x143_offlike5_EE_Aplanck_B: 396.18 commander_dx12.v3.2.29: 23.97 plik_rd12_HM.v22b_TTTEEE: 2344.08

17.51 base_r_plikHM_TTTEEE_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022418	$0.02241^{+0.00028}_{-0.00027}$ (+1.3 σ)	Ω_{m}	0.3117	$0.312^{+0.012}_{-0.012}$ (−0.6 σ)	$H(0.38)$	83.02	$83.02^{+0.57}_{-0.55}$ (+0.8 σ)
$\Omega_{\mathrm{c}}h^2$	0.11944	$0.1194^{+0.0020}_{-0.0020}$ (−0.4 σ)	$\Omega_{\mathrm{m}}h^2$	0.14250	$0.1425^{+0.0019}_{-0.0019}$ (−0.3 σ)	$D_{\mathrm{M}}(0.38)$	1529.1	1529^{+15}_{-15} (−0.7 σ)
$100\theta_{\mathrm{MC}}$	1.04099	$1.04100^{+0.00059}_{-0.00058}$ (+0.4 σ)	$\Omega_{\mathrm{m}}h^3$	0.09635	$0.09634^{+0.00058}_{-0.00058}$ (+1.0 σ)	$H(0.51)$	89.749	$89.75^{+0.46}_{-0.45}$ (+0.8 σ)
τ	0.0562	$0.056^{+0.016}_{-0.015}$ (+0.6 σ)	σ_8	0.8113	$0.811^{+0.014}_{-0.014}$ (+0.1 σ)	$D_{\mathrm{M}}(0.51)$	1980.7	1981^{+18}_{-18} (−0.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0476	$3.048^{+0.032}_{-0.031}$ (+0.5 σ)	S_8	0.8269	$0.827^{+0.025}_{-0.024}$ (−0.4 σ)	$H(0.61)$	95.374	$95.37^{+0.38}_{-0.37}$ (+0.9 σ)
n_{s}	0.9674	$0.9670^{+0.0071}_{-0.0073}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4529	$0.453^{+0.014}_{-0.013}$ (−0.4 σ)	$D_{\mathrm{M}}(0.61)$	2304.8	2305^{+19}_{-20} (−0.7 σ)
r	0.0175	< 0.0628 (−0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6062	$0.606^{+0.014}_{-0.013}$ (−0.2 σ)	$H(2.33)$	236.24	$236.2^{+1.2}_{-1.2}$ (−0.2 σ)
y_{cal}	1.00086	$1.0010^{+0.0049}_{-0.0049}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9866	$0.987^{+0.020}_{-0.020}$ (−0.2 σ)	$D_{\mathrm{M}}(2.33)$	5759.4	5760^{+18}_{-18} (−1.0 σ)
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	$r_{\mathrm{drag}}h$	99.52	$99.5^{+1.5}_{-1.5}$ (+0.5 σ)	$f\sigma_8(0.15)$	0.4575	$0.458^{+0.013}_{-0.013}$ (−0.3 σ)
$A_{B,\mathrm{sync}}$	1.44	< 3.59	$\langle d^2 \rangle^{1/2}$	2.4386	$2.440^{+0.049}_{-0.048}$ (−0.2 σ)	$\sigma_8(0.15)$	0.7496	$0.750^{+0.013}_{-0.012}$ (+0.2 σ)
$\alpha_{B,\mathrm{dust}}$	−0.51	—	z_{re}	7.85	$7.9^{+1.5}_{-1.5}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4758	$0.476^{+0.011}_{-0.011}$ (−0.3 σ)
$\beta_{B,\mathrm{dust}}$	1.577	$1.60^{+0.19}_{-0.19}$	10^9A_{s}	2.106	$2.107^{+0.068}_{-0.065}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6645	$0.664^{+0.011}_{-0.011}$ (+0.3 σ)
$\alpha_{B,\mathrm{sync}}$	−0.33	—	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8825	$1.882^{+0.022}_{-0.022}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4744	$0.474^{+0.010}_{-0.010}$ (−0.2 σ)
$\beta_{B,\mathrm{sync}}$	−3.03	$−3.10^{+0.52}_{-0.56}$	D_{40}	1233.2	1238^{+26}_{-25} (−0.3 σ)	$\sigma_8(0.51)$	0.6218	$0.622^{+0.010}_{-0.0099}$ (+0.4 σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	−0.35	$−0.35^{+0.53}_{-0.58}$	D_{220}	5737	5738^{+75}_{-76} (+0.7 σ)	$f\sigma_8(0.61)$	0.4694	$0.4694^{+0.0094}_{-0.0092}$ (−0.1 σ)
A_{217}^{CIB}	47.1	46^{+10}_{-10} (−0.2 σ)	D_{810}	2541.9	2541^{+27}_{-27} (+0.3 σ)	$\sigma_8(0.61)$	0.5917	$0.5917^{+0.0097}_{-0.0094}$ (+0.4 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.43	—	D_{1420}	819.0	$818.5^{+9.3}_{-9.1}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.29831	$0.2983^{+0.0049}_{-0.0047}$ (+0.5 σ)
A_{143}^{tSZ}	7.25	$5.5^{+3.7}_{-3.8}$ (+0.2 σ)	D_{2000}	231.54	$231.4^{+3.1}_{-3.0}$ (+0.9 σ)	$\sigma_8(2.33)$	0.30754	$0.3076^{+0.0051}_{-0.0049}$ (+0.6 σ)
A_{100}^{PS}	249	258^{+50}_{-50} (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9674	$0.9670^{+0.0071}_{-0.0073}$ (+0.5 σ)	$r_{0.002}$	0.0159	< 0.0579 (−0.3 σ)
A_{143}^{PS}	47.0	45^{+10}_{-20} (−0.4 σ)	Y_{P}	0.245414	$0.24541^{+0.00010}_{-0.00011}$ (+1.2 σ)	$r_{0.01}$	0.0167	< 0.0603 (−0.3 σ)
$A_{143\times 217}^{\mathrm{PS}}$	47.3	42^{+20}_{-20} (−0.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246741	$0.24673^{+0.00010}_{-0.00011}$ (+1.2 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−0.999	$−0.8^{+1.4}_{-2.0}$ (−0.1 σ)
A_{217}^{PS}	119.8	115^{+20}_{-20} (+0.0 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.5766	$2.579^{+0.050}_{-0.050}$ (−1.3 σ)	r_{10}	0.0081	< 0.0296 (−0.3 σ)
A^{kSZ}	0.00	< 7.83 (−0.2 σ)	Age/Gyr	13.7881	$13.789^{+0.040}_{-0.040}$ (−1.0 σ)	10^9A_{t}	0.037	< 0.132 (−0.3 σ)
$A_{100}^{\mathrm{dustTT}}$	8.83	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	z_{\ast}	1089.810	$1089.82^{+0.44}_{-0.44}$ (−1.1 σ)	$10^9A_{\mathrm{t}}e^{-2\tau}$	0.033	< 0.118 (−0.3 σ)
$A_{143}^{\mathrm{dustTT}}$	10.97	$10.8^{+3.5}_{-3.5}$ (+0.1 σ)	r_{\ast}	144.540	$144.55^{+0.47}_{-0.46}$ (+0.0 σ)	f_{2000}^{143}	28.7	29^{+5}_{-5} (−0.6 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.8	$18.5^{+6.3}_{-6.4}$ (+0.1 σ)	$100\theta_{\ast}$	1.04117	$1.04119^{+0.00059}_{-0.00058}$ (+0.4 σ)	$f_{2000}^{143\times 217}$	31.88	32^{+4}_{-4} (−0.8 σ)
$A_{217}^{\mathrm{dustTT}}$	95.1	94^{+10}_{-10} (+0.0 σ)	$D_{\mathrm{M}}(z_{\ast})/\mathrm{Gpc}$	13.8824	$13.883^{+0.045}_{-0.044}$ (−0.0 σ)	f_{2000}^{217}	106.62	$106.9^{+3.4}_{-3.3}$ (−0.6 σ)
$A_{100}^{\mathrm{dustTE}}$	0.116	$0.115^{+0.076}_{-0.075}$	z_{drag}	1060.01	$1059.98^{+0.60}_{-0.58}$ (+1.3 σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.50	739.8 (ν : 3.4)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	r_{drag}	147.187	$147.20^{+0.48}_{-0.48}$ (−0.2 σ)	χ_{simall}^2	396.48	397.6 (ν : 2.4) (+0.3 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.481	$0.48^{+0.17}_{-0.16}$	k_{D}	0.14080	$0.14078^{+0.00058}_{-0.00057}$ (+0.6 σ)	χ_{lowl}^2	23.56	24.1 (ν : 0.6) (−0.5 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.23^{+0.11}_{-0.10}$	$100\theta_{\mathrm{D}}$	0.160722	$0.16074^{+0.00034}_{-0.00034}$ (−1.3 σ)	χ_{plik}^2	2344.7	2359.2 (ν : 17.0) (+294.1 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.666	$0.67^{+0.16}_{-0.16}$	z_{eq}	3389.9	3390^{+45}_{-45} (−0.3 σ)	$\chi_{6\mathrm{DF}}^2$	0.039	0.064 (ν : 0.0)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.53}_{-0.52}$	k_{eq}	0.010346	$0.01035^{+0.00014}_{-0.00014}$ (−0.3 σ)	χ_{MGS}^2	1.16	1.21 (ν : 0.1)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{\mathrm{eq}}$	0.8157	$0.8158^{+0.0085}_{-0.0084}$ (+0.4 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.66	5.0 (ν : 1.2)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.45060	$0.4506^{+0.0044}_{-0.0043}$ (+0.4 σ)	χ_{prior}^2	1.9	13.3 (ν : 12.1) (+1.6 σ)
H_0	67.61	$67.61^{+0.91}_{-0.88}$ (+0.7 σ)	$H(0.15)$	72.90	$72.90^{+0.78}_{-0.75}$ (+0.7 σ)	χ_{BAO}^2	5.85	6.3 (ν : 0.8)
Ω_{Λ}	0.6883	$0.688^{+0.012}_{-0.012}$ (+0.6 σ)	$D_{\mathrm{M}}(0.15)$	641.2	$641.2^{+7.5}_{-7.7}$ (−0.7 σ)	χ_{CMB}^2	3500.2	3520.7 (ν : 20.8) (+411.6 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 3507.90$; $\bar{\chi}_{\mathrm{eff}}^2 = 3540.30$; $R - 1 = 0.00604$
 χ_{eff}^2 : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.66 CMB - BK15_dust: 735.50 simall_100x143.offlike5_EE_Aplanck_B: 396.48 commander_dx12.v3.2.29: 23.56 plik_rd12_HM.v22b_TTEEE 2344.65

17.52 base_r_plikHM_TTTEEE_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02234^{+0.00030}_{-0.00028} \quad (+1.0\sigma)$	Ω_{Λ}	$0.682^{+0.016}_{-0.017} \quad (+0.1\sigma)$	$H(0.15)$	$72.5^{+1.0}_{-1.0} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1204^{+0.0027}_{-0.0026} \quad (+0.0\sigma)$	Ω_{m}	$0.318^{+0.017}_{-0.016} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+10}_{-10} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00062}_{-0.00061} \quad (+0.2\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1434^{+0.0025}_{-0.0025} \quad (+0.1\sigma)$	$H(0.38)$	$82.77^{+0.75}_{-0.72} \quad (+0.3\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09633^{+0.00058}_{-0.00056} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+20}_{-20} \quad (-0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.049^{+0.028}_{-0.027} \quad (+0.6\sigma)$	σ_8	$0.814^{+0.014}_{-0.013} \quad (+0.4\sigma)$	$H(0.51)$	$89.55^{+0.59}_{-0.56} \quad (+0.4\sigma)$
n_{s}	$0.9648^{+0.0083}_{-0.0084} \quad (+0.1\sigma)$	S_8	$0.838^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1989^{+24}_{-24} \quad (-0.3\sigma)$
r	$< 0.0604 \quad (-0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.459^{+0.017}_{-0.017} \quad (+0.1\sigma)$	$H(0.61)$	$95.22^{+0.47}_{-0.44} \quad (+0.5\sigma)$
y_{cal}	$1.0009^{+0.0049}_{-0.0048} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.016}_{-0.016} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2314^{+25}_{-26} \quad (-0.3\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$\sigma_8/h^{0.5}$	$0.993^{+0.022}_{-0.022} \quad (+0.2\sigma)$	$H(2.33)$	$236.8^{+1.6}_{-1.6} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	< 3.63	$r_{\mathrm{drag}}h$	$98.8^{+2.1}_{-2.0} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+21}_{-22} \quad (-0.6\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	$\langle d^2 \rangle^{1/2}$	$2.456^{+0.053}_{-0.053} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.016}_{-0.016} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	z_{re}	$< 9.04 \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.012}_{-0.011} \quad (+0.5\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	10^9A_{s}	$2.109^{+0.060}_{-0.056} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.013}_{-0.013} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.56}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.886^{+0.023}_{-0.023} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.666^{+0.010}_{-0.0097} \quad (+0.5\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.53}_{-0.57}$	D_{40}	$1242^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.011}_{-0.011} \quad (+0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	D_{220}	$5733^{+76}_{-76} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6228^{+0.0093}_{-0.0089} \quad (+0.6\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	D_{810}	$2541^{+26}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.010}_{-0.010} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{1420}	$817.8^{+9.4}_{-9.3} \quad (+0.6\sigma)$	$\sigma_8(0.61)$	$0.5924^{+0.0088}_{-0.0083} \quad (+0.6\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0044}_{-0.0041} \quad (+0.6\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	$n_{\mathrm{s},0.002}$	$0.9648^{+0.0083}_{-0.0084} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3074^{+0.0046}_{-0.0043} \quad (+0.6\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$r_{0.002}$	$< 0.0554 \quad (-0.4\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+1.0\sigma)$	$r_{0.01}$	$< 0.0578 \quad (-0.4\sigma)$
A^{kSZ}	$< 7.90 \quad (-0.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.591^{+0.054}_{-0.054} \quad (-1.0\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.0} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.8^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.802^{+0.046}_{-0.048} \quad (-0.7\sigma)$	r_{10}	$< 0.0284 \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	z_*	$1089.99^{+0.54}_{-0.54} \quad (-0.7\sigma)$	10^9A_{t}	$< 0.127 \quad (-0.4\sigma)$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.5^{+6.3}_{-6.4} \quad (+0.1\sigma)$	r_*	$144.36^{+0.58}_{-0.58} \quad (-0.4\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.114 \quad (-0.4\sigma)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04107^{+0.00061}_{-0.00060} \quad (+0.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.076}_{-0.075}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.866^{+0.054}_{-0.055} \quad (-0.4\sigma)$	$f_{2000}^{143\times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.135^{+0.058}_{-0.058}$	z_{drag}	$1059.90^{+0.60}_{-0.58} \quad (+1.1\sigma)$	f_{2000}^{217}	$107.0^{+3.5}_{-3.4} \quad (-0.5\sigma)$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	r_{drag}	$147.02^{+0.58}_{-0.58} \quad (-0.5\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.4 \quad (\nu: 3.5)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.11}_{-0.11}$	k_{D}	$0.14092^{+0.00062}_{-0.00062} \quad (+0.9\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.1) \quad (+0.2\sigma)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	$100\theta_{\mathrm{D}}$	$0.16078^{+0.00034}_{-0.00035} \quad (-1.1\sigma)$	χ_{lowl}^2	$24.5 \quad (\nu: 0.7) \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dust}TE}$	$2.09^{+0.53}_{-0.53}$	z_{eq}	$3410^{+60}_{-59} \quad (+0.1\sigma)$	χ_{plik}^2	$2359.0 \quad (\nu: 16.6) \quad (+294.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{eq}	$0.01041^{+0.00018}_{-0.00018} \quad (+0.1\sigma)$	χ_{prior}^2	$13.2 \quad (\nu: 11.8) \quad (+1.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.011}_{-0.011} \quad (-0.1\sigma)$	χ_{CMB}^2	$3520.3 \quad (\nu: 20.4) \quad (+411.5\sigma)$
H_0	$67.2^{+1.2}_{-1.2} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4486^{+0.0057}_{-0.0057} \quad (-0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3533.51; R - 1 = 0.00462$$

17.53 base_r_plikHM_TTTEEE_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00028}_{-0.00026} \quad (+1.3\sigma)$	Ω_m	$0.312^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.38)$	$83.03^{+0.57}_{-0.55} \quad (+0.8\sigma)$
$\Omega_c h^2$	$0.1194^{+0.0020}_{-0.0020} \quad (-0.4\sigma)$	$\Omega_m h^2$	$0.1425^{+0.0019}_{-0.0019} \quad (-0.3\sigma)$	$D_M(0.38)$	$1529^{+15}_{-15} \quad (-0.7\sigma)$
$100\theta_{MC}$	$1.04101^{+0.00060}_{-0.00058} \quad (+0.4\sigma)$	$\Omega_m h^3$	$0.09634^{+0.00058}_{-0.00058} \quad (+1.0\sigma)$	$H(0.51)$	$89.75^{+0.46}_{-0.45} \quad (+0.8\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.7\sigma)$	σ_8	$0.812^{+0.014}_{-0.013} \quad (+0.1\sigma)$	$D_M(0.51)$	$1981^{+18}_{-18} \quad (-0.7\sigma)$
$\ln(10^{10} A_s)$	$3.049^{+0.029}_{-0.028} \quad (+0.6\sigma)$	S_8	$0.827^{+0.025}_{-0.024} \quad (-0.3\sigma)$	$H(0.61)$	$95.37^{+0.38}_{-0.37} \quad (+0.9\sigma)$
n_s	$0.9670^{+0.0071}_{-0.0073} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.014}_{-0.013} \quad (-0.3\sigma)$	$D_M(0.61)$	$2305^{+19}_{-20} \quad (-0.7\sigma)$
r	$< 0.0627 \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.607^{+0.014}_{-0.013} \quad (-0.2\sigma)$	$H(2.33)$	$236.2^{+1.2}_{-1.2} \quad (-0.2\sigma)$
y_{cal}	$1.0010^{+0.0049}_{-0.0049} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.020}_{-0.019} \quad (-0.2\sigma)$	$D_M(2.33)$	$5759^{+18}_{-18} \quad (-1.0\sigma)$
$A_{B,dust}$	$4.9^{+2.1}_{-1.9}$	$r_{drag} h$	$99.5^{+1.5}_{-1.5} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.012} \quad (-0.3\sigma)$
$A_{B,sync}$	< 3.59	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.048}_{-0.046} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$\alpha_{B,dust}$	—	z_{re}	$7.9^{+1.3}_{-1.4} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$\beta_{B,dust}$	$1.60^{+0.19}_{-0.18}$	$10^9 A_s$	$2.110^{+0.062}_{-0.059} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.010}_{-0.0098} \quad (+0.4\sigma)$
$\alpha_{B,sync}$	—	$10^9 A_s e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.4747^{+0.0099}_{-0.0096} \quad (-0.2\sigma)$
$\beta_{B,sync}$	$-3.10^{+0.53}_{-0.56}$	D_{40}	$1238^{+26}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.6222^{+0.0094}_{-0.0091} \quad (+0.5\sigma)$
$\epsilon_{dust,sync}$	$-0.34^{+0.53}_{-0.57}$	D_{220}	$5738^{+75}_{-76} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.4697^{+0.0093}_{-0.0088} \quad (-0.1\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	D_{810}	$2541^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5921^{+0.0089}_{-0.0086} \quad (+0.5\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{1420}	$818.5^{+9.3}_{-9.1} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0045}_{-0.0043} \quad (+0.6\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.8} \quad (+0.2\sigma)$	D_{2000}	$231.4^{+3.1}_{-3.0} \quad (+0.9\sigma)$	$\sigma_8(2.33)$	$0.3078^{+0.0046}_{-0.0044} \quad (+0.7\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.9670^{+0.0071}_{-0.0073} \quad (+0.5\sigma)$	$r_{0.002}$	$< 0.0578 \quad (-0.3\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.4\sigma)$	Y_P	$0.24541^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$r_{0.01}$	$< 0.0602 \quad (-0.3\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	Y_P^{BBN}	$0.24674^{+0.00010}_{-0.00011} \quad (+1.2\sigma)$	$\ln(10^{10} A_t)$	$-0.8^{+1.4}_{-2.0} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$10^5 D/H$	$2.579^{+0.050}_{-0.049} \quad (-1.3\sigma)$	r_{10}	$< 0.0296 \quad (-0.3\sigma)$
A^{kSZ}	$< 7.82 \quad (-0.2\sigma)$	Age/Gyr	$13.788^{+0.040}_{-0.040} \quad (-1.0\sigma)$	$10^9 A_t$	$< 0.132 \quad (-0.3\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1089.82^{+0.44}_{-0.44} \quad (-1.1\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.118 \quad (-0.3\sigma)$
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	r_*	$144.55^{+0.47}_{-0.46} \quad (+0.0\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.7\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.3}_{-6.4} \quad (+0.1\sigma)$	$100\theta_*$	$1.04119^{+0.00059}_{-0.00058} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.883^{+0.045}_{-0.044} \quad (-0.0\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.3} \quad (-0.6\sigma)$
A_{100}^{dustTE}	$0.115^{+0.076}_{-0.075}$	z_{drag}	$1059.98^{+0.60}_{-0.58} \quad (+1.3\sigma)$	$\chi_{BKPLANCK}^2$	$739.8 \quad (\nu: 3.4)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.058}$	r_{drag}	$147.20^{+0.48}_{-0.48} \quad (-0.2\sigma)$	χ_{small}^2	$397.6 \quad (\nu: 2.5) \quad (+0.3\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.16}$	k_D	$0.14078^{+0.00058}_{-0.00057} \quad (+0.6\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 0.6) \quad (-0.5\sigma)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.10}$	$100\theta_D$	$0.16074^{+0.00034}_{-0.00034} \quad (-1.3\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 16.8) \quad (+294.1\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	z_{eq}	$3389^{+45}_{-45} \quad (-0.3\sigma)$	χ_{6DF}^2	$0.063 \quad (\nu: 0.0)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	k_{eq}	$0.01034^{+0.00014}_{-0.00014} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.21 \quad (\nu: 0.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.8158^{+0.0085}_{-0.0084} \quad (+0.4\sigma)$	$\chi_{DR12BAO}^2$	$5.0 \quad (\nu: 1.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	$0.4507^{+0.0044}_{-0.0043} \quad (+0.4\sigma)$	χ_{prior}^2	$13.3 \quad (\nu: 12.1) \quad (+1.6\sigma)$
H_0	$67.62^{+0.91}_{-0.88} \quad (+0.7\sigma)$	$H(0.15)$	$72.91^{+0.78}_{-0.75} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.3 \quad (\nu: 0.8)$
Ω_Λ	$0.688^{+0.012}_{-0.012} \quad (+0.6\sigma)$	$D_M(0.15)$	$641.1^{+7.5}_{-7.7} \quad (-0.7\sigma)$	χ_{CMB}^2	$3520.5 \quad (\nu: 20.5) \quad (+411.6\sigma)$

$\bar{\chi}_{eff}^2 = 3540.14$; $R - 1 = 0.00660$

17.54 base_r_CamSpecHM_TT_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022078	$0.02209^{+0.00043}_{-0.00043} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.09590	$0.09591^{+0.00090}_{-0.00088} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	649.4	$649^{+16}_{-16} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12113	$0.1210^{+0.0041}_{-0.0041} \quad (+0.3\sigma)$	σ_8	0.8143	$0.814^{+0.017}_{-0.017} \quad (+0.3\sigma)$	$H(0.38)$	82.39	$82.4^{+1.1}_{-1.1} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.04075	$1.04078^{+0.00092}_{-0.00095} \quad (-0.1\sigma)$	S_8	0.8458	$0.844^{+0.048}_{-0.046} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	1545.8	$1545^{+31}_{-31} \quad (+0.3\sigma)$
τ	0.0528	$0.053^{+0.016}_{-0.016} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4632	$0.463^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$H(0.51)$	89.22	$89.26^{+0.89}_{-0.84} \quad (-0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0420	$3.042^{+0.032}_{-0.032} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6142	$0.613^{+0.023}_{-0.023} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	2000.6	$1999^{+36}_{-36} \quad (+0.3\sigma)$
n_{s}	0.9626	$0.963^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9973	$0.996^{+0.031}_{-0.031} \quad (+0.4\sigma)$	$H(0.61)$	94.93	$94.96^{+0.71}_{-0.66} \quad (-0.3\sigma)$
r	0.0132	$< 0.0591 \quad (-0.4\sigma)$	$r_{\mathrm{drag}}h$	98.08	$98.2^{+3.2}_{-3.1} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	2326.4	$2325^{+39}_{-39} \quad (+0.3\sigma)$
y_{cal}	1.00060	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.461	$2.459^{+0.074}_{-0.073} \quad (+0.3\sigma)$	$H(2.33)$	237.00	$236.9^{+2.5}_{-2.5} \quad (+0.3\sigma)$
$A_{B,\mathrm{dust}}$	4.60	$4.9^{+2.1}_{-1.9}$	z_{re}	7.60	$7.6^{+1.6}_{-1.7} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5780.7	$5779^{+31}_{-32} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	1.48	< 3.68	$10^9 A_{\mathrm{s}}$	2.095	$2.094^{+0.068}_{-0.066} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	0.4668	$0.466^{+0.024}_{-0.023} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	-0.52	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8849	$1.885^{+0.027}_{-0.026} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7512	$0.751^{+0.015}_{-0.015} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{dust}}$	1.573	$1.60^{+0.19}_{-0.19}$	D_{40}	1237.0	$1241^{+31}_{-30} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	0.4825	$0.482^{+0.019}_{-0.019} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.31	—	D_{220}	5700	$5702^{+81}_{-80} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	0.6646	$0.664^{+0.012}_{-0.012} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.03	$-3.10^{+0.52}_{-0.55}$	D_{810}	2535.5	$2536^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4797	$0.479^{+0.016}_{-0.016} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.34	$-0.35^{+0.53}_{-0.57}$	D_{1420}	814.2	$814^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6214	$0.621^{+0.011}_{-0.011} \quad (+0.3\sigma)$
A_{100}^{PS}	237.4	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{2000}	229.52	$229.6^{+3.6}_{-3.6} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	0.4737	$0.473^{+0.014}_{-0.014} \quad (+0.4\sigma)$
A_{143}^{PS}	40.8	$41^{+20}_{-20} \quad (-0.9\sigma)$	$n_{\mathrm{s},0.002}$	0.9626	$0.963^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	0.5910	$0.591^{+0.010}_{-0.010} \quad (+0.2\sigma)$
A_{217}^{PS}	100.4	$102^{+30}_{-30} \quad (-1.3\sigma)$	Y_{P}	0.245274	$0.24527^{+0.00018}_{-0.00021} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	0.2975	$0.2974^{+0.0050}_{-0.0049} \quad (+0.2\sigma)$
A_{217}^{CIB}	46.1	$41^{+10}_{-10} \quad (-1.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246601	$0.24660^{+0.00018}_{-0.00021} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	0.3062	$0.3061^{+0.0053}_{-0.0052} \quad (+0.1\sigma)$
A_{143}^{tSZ}	6.47	$< 7.37 \quad (-0.7\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	2.641	$2.639^{+0.083}_{-0.082} \quad (+0.2\sigma)$	$r_{0.002}$	0.0117	$< 0.0539 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	0.565	$0.65^{+0.25}_{-0.25}$	Age/Gyr	13.836	$13.834^{+0.071}_{-0.072} \quad (+0.2\sigma)$	$r_{0.01}$	0.0124	$< 0.0565 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	0.81	—	z_*	1090.39	$1090.37^{+0.81}_{-0.79} \quad (+0.3\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	-1.29	$-0.97^{+1.5}_{-2.1} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.02	—	r_*	144.36	$144.38^{+0.93}_{-0.94} \quad (-0.3\sigma)$	r_{10}	0.0060	$< 0.0277 \quad (-0.4\sigma)$
A^{kSZ}	0.2	—	$100\theta_*$	1.04097	$1.04099^{+0.00090}_{-0.00093} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{t}}$	0.028	$< 0.124 \quad (-0.4\sigma)$
A_{100}^{dust}	1.011	$1.01^{+0.38}_{-0.38}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.868	$13.870^{+0.086}_{-0.087} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.025	$< 0.111 \quad (-0.4\sigma)$
A_{143}^{dust}	0.985	$0.97^{+0.35}_{-0.34}$	z_{drag}	1059.32	$1059.36^{+0.92}_{-0.87} \quad (-0.1\sigma)$	f_{2000}^{143}	31.3	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{217}^{dust}	0.963	$0.97^{+0.20}_{-0.20}$	r_{drag}	147.12	$147.14^{+0.93}_{-0.94} \quad (-0.3\sigma)$	f_{2000}^{217}	107.68	$107.7^{+4.0}_{-4.0} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	0.996	$1.03^{+0.32}_{-0.32}$	k_{D}	0.14061	$0.1406^{+0.0010}_{-0.0010} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	33.07	$33^{+4}_{-4} \quad (-0.2\sigma)$
c_{100}	0.99756	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$100\theta_{\mathrm{D}}$	0.16111	$0.16110^{+0.00052}_{-0.00052} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	734.95	$739.3 \quad (\nu: 3.7)$
c_{217}	1.00141	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{eq}	3422	$3420^{+94}_{-92} \quad (+0.3\sigma)$	χ_{small}^2	396.01	$397.1 \quad (\nu: 1.5) \quad (+0.0\sigma)$
H_0	66.67	$66.7^{+1.8}_{-1.8} \quad (-0.3\sigma)$	k_{eq}	0.010445	$0.01044^{+0.00029}_{-0.00028} \quad (+0.3\sigma)$	χ_{lowl}^2	24.16	$24.7 \quad (\nu: 1.1) \quad (-0.2\sigma)$
Ω_{Λ}	0.6763	$0.677^{+0.025}_{-0.026} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	0.8088	$0.809^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	7049.9	$7063.0 \quad (\nu: 14.1)$
Ω_{m}	0.3237	$0.323^{+0.026}_{-0.025} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4473	$0.4475^{+0.0090}_{-0.0088} \quad (-0.3\sigma)$	χ_{prior}^2	2.3	$9.2 \quad (\nu: 7.3) \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14385	$0.1438^{+0.0039}_{-0.0039} \quad (+0.3\sigma)$	$H(0.15)$	72.07	$72.1^{+1.5}_{-1.5} \quad (-0.3\sigma)$	χ_{CMB}^2	8205.0	$8224.0 \quad (\nu: 18.8) \quad (+1243.6\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 8207.30$; $\bar{\chi}_{\mathrm{eff}}^2 = 8233.28$; $R - 1 = 0.00244$

χ_{eff}^2 : CMB - BK15_dust: 734.95 small_100x143_offlike5_EE_Aplanck_B: 396.00 commander_dx12_v3_2_29: 24.16 CamSpec like_10.7HM: 7049.91

17.55 base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022205	$0.02220^{+0.00039}_{-0.00038}$ $(+0.4\sigma)$	S_8	0.8233	$0.823^{+0.029}_{-0.029}$ (-0.5σ)	$D_M(0.51)$	1983.0	1983^{+22}_{-22} (-0.6σ)
$\Omega_c h^2$	0.11915	$0.1191^{+0.0024}_{-0.0024}$ (-0.6σ)	$\sigma_8 \Omega_m^{0.5}$	0.4510	$0.451^{+0.016}_{-0.016}$ (-0.5σ)	$H(0.61)$	95.246	$95.25^{+0.48}_{-0.47}$ $(+0.6\sigma)$
$100\theta_{MC}$	1.04103	$1.04104^{+0.00081}_{-0.00083}$ $(+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6038	$0.604^{+0.016}_{-0.015}$ (-0.5σ)	$D_M(0.61)$	2307.5	2307^{+23}_{-23} (-0.6σ)
τ	0.0547	$0.055^{+0.016}_{-0.015}$ $(+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9836	$0.984^{+0.023}_{-0.022}$ (-0.4σ)	$H(2.33)$	235.85	$235.8^{+1.5}_{-1.5}$ (-0.6σ)
$\ln(10^{10} A_s)$	3.0410	$3.041^{+0.032}_{-0.032}$ $(+0.1\sigma)$	$r_{drag} h$	99.64	$99.7^{+1.8}_{-1.8}$ $(+0.6\sigma)$	$D_M(2.33)$	5767.4	5767^{+24}_{-24} (-0.5σ)
n_s	0.9668	$0.9672^{+0.0085}_{-0.0084}$ $(+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	2.431	$2.430^{+0.054}_{-0.052}$ (-0.4σ)	$f\sigma_8(0.15)$	0.4556	$0.455^{+0.015}_{-0.015}$ (-0.5σ)
r	0.0188	< 0.0625 (-0.3σ)	z_{re}	7.74	$7.7^{+1.5}_{-1.6}$ $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7470	$0.747^{+0.013}_{-0.013}$ (-0.1σ)
y_{cal}	1.00052	$1.0008^{+0.0049}_{-0.0049}$ $(+0.1\sigma)$	$10^9 A_s$	2.093	$2.094^{+0.068}_{-0.066}$ $(+0.1\sigma)$	$f\sigma_8(0.38)$	0.4739	$0.474^{+0.013}_{-0.012}$ (-0.5σ)
$A_{B,dust}$	4.62	$4.9^{+2.1}_{-1.9}$	$10^9 A_s e^{-2\tau}$	1.8758	$1.877^{+0.023}_{-0.023}$ (-0.5σ)	$\sigma_8(0.38)$	0.6622	$0.662^{+0.011}_{-0.011}$ (-0.0σ)
$A_{B,sync}$	1.44	< 3.69	D_{40}	1229.8	1233^{+28}_{-27} (-0.6σ)	$f\sigma_8(0.51)$	0.4726	$0.473^{+0.011}_{-0.011}$ (-0.4σ)
$\alpha_{B,dust}$	-0.50	—	D_{220}	5709	5710^{+80}_{-79} (-0.0σ)	$\sigma_8(0.51)$	0.6197	$0.620^{+0.010}_{-0.010}$ $(+0.0\sigma)$
$\beta_{B,dust}$	1.578	$1.59^{+0.19}_{-0.19}$	D_{810}	2533.2	2535^{+27}_{-27} (-0.1σ)	$f\sigma_8(0.61)$	0.4676	$0.468^{+0.011}_{-0.010}$ (-0.4σ)
$\alpha_{B,sync}$	-0.29	—	D_{1420}	814.9	$816^{+10}_{-9.9}$ $(+0.1\sigma)$	$\sigma_8(0.61)$	0.5897	$0.5899^{+0.0099}_{-0.0098}$ $(+0.1\sigma)$
$\beta_{B,sync}$	-3.04	$-3.10^{+0.52}_{-0.54}$	D_{2000}	229.82	$230.0^{+3.5}_{-3.5}$ $(+0.2\sigma)$	$f\sigma_8(2.33)$	0.29734	$0.2974^{+0.0050}_{-0.0049}$ $(+0.2\sigma)$
$\epsilon_{dust,sync}$	-0.34	$-0.35^{+0.53}_{-0.57}$	$n_{s,0.002}$	0.9668	$0.9672^{+0.0085}_{-0.0084}$ $(+0.6\sigma)$	$\sigma_8(2.33)$	0.3066	$0.3067^{+0.0051}_{-0.0051}$ $(+0.3\sigma)$
A_{100}^{PS}	240.3	242^{+50}_{-50} (-0.7σ)	Y_P	0.245328	$0.24532^{+0.00015}_{-0.00017}$ $(+0.4\sigma)$	$r_{0.002}$	0.0171	< 0.0577 (-0.3σ)
A_{143}^{PS}	39.2	40^{+20}_{-20} (-1.0σ)	Y_P^{BBN}	0.246654	$0.24665^{+0.00015}_{-0.00017}$ $(+0.4\sigma)$	$r_{0.01}$	0.0179	< 0.0601 (-0.3σ)
A_{217}^{PS}	99.8	102^{+30}_{-30} (-1.3σ)	$10^5 D/H$	2.617	$2.618^{+0.073}_{-0.072}$ (-0.4σ)	$\ln(10^{10} A_t)$	-0.93	$-0.9^{+1.5}_{-2.0}$ (-0.1σ)
A_{217}^{CIB}	44.8	40^{+10}_{-10} (-1.1σ)	Age/Gyr	13.807	$13.807^{+0.054}_{-0.054}$ (-0.5σ)	r_{10}	0.0087	< 0.0296 (-0.3σ)
A_{143}^{tSZ}	5.62	< 7.40 (-0.7σ)	z_*	1090.06	$1090.05^{+0.57}_{-0.57}$ (-0.5σ)	$10^9 A_t$	0.039	< 0.131 (-0.3σ)
$r_{143 \times 217}^{PS}$	0.569	$0.65^{+0.25}_{-0.25}$	r_*	144.78	$144.79^{+0.61}_{-0.62}$ $(+0.5\sigma)$	$10^9 A_t e^{-2\tau}$	0.035	< 0.117 (-0.3σ)
$r_{143 \times 217}^{CIB}$	0.74	—	$100\theta_*$	1.04123	$1.04124^{+0.00080}_{-0.00082}$ $(+0.5\sigma)$	f_{2000}^{143}	31.0	30^{+6}_{-6} (-0.2σ)
$\xi^{tSZ \times CIB}$	0.04	—	$D_M(z_*)/\text{Gpc}$	13.904	$13.906^{+0.060}_{-0.060}$ $(+0.5\sigma)$	f_{2000}^{217}	107.48	$107.4^{+4.0}_{-4.0}$ (-0.3σ)
A^{kSZ}	1.6	—	z_{drag}	1059.47	$1059.48^{+0.87}_{-0.85}$ $(+0.2\sigma)$	$f_{2000}^{143 \times 217}$	32.87	33^{+4}_{-4} (-0.4σ)
A_{100}^{dust}	1.005	$1.01^{+0.38}_{-0.38}$	r_{drag}	147.50	$147.52^{+0.66}_{-0.67}$ $(+0.5\sigma)$	$\chi_{BKPLANCK}^2$	735.63	740.0 $(\nu: 3.6)$
A_{143}^{dust}	0.992	$0.97^{+0.35}_{-0.35}$	k_D	0.14031	$0.14029^{+0.00087}_{-0.00085}$ (-0.4σ)	χ_{small}^2	396.19	397.3 $(\nu: 1.8)$ $(+0.1\sigma)$
A_{217}^{dust}	0.966	$0.97^{+0.20}_{-0.20}$	$100\theta_D$	0.16103	$0.16104^{+0.00050}_{-0.00050}$ (-0.1σ)	χ_{lowl}^2	23.47	23.7 $(\nu: 0.6)$ (-0.7σ)
$A_{143 \times 217}^{dust}$	1.011	$1.03^{+0.32}_{-0.32}$	z_{eq}	3378	3377^{+56}_{-55} (-0.6σ)	$\chi_{CamSpec}^2$	7050.8	7063.3 $(\nu: 13.8)$
c_{100}	0.99750	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	k_{eq}	0.010310	$0.01031^{+0.00017}_{-0.00017}$ (-0.6σ)	χ_{6DF}^2	0.030	0.064 $(\nu: 0.0)$
c_{217}	1.00140	$1.0012^{+0.0031}_{-0.0031}$ $(+4.6\sigma)$	$100\theta_{eq}$	0.8173	$0.818^{+0.010}_{-0.010}$ $(+0.6\sigma)$	χ_{MGS}^2	1.22	1.30 $(\nu: 0.1)$
H_0	67.55	$67.6^{+1.1}_{-1.1}$ $(+0.6\sigma)$	$100\theta_{s,eq}$	0.4516	$0.4517^{+0.0053}_{-0.0053}$ $(+0.6\sigma)$	$\chi_{DR12BAO}^2$	4.37	4.9 $(\nu: 1.5)$
Ω_Λ	0.6888	$0.689^{+0.014}_{-0.014}$ $(+0.6\sigma)$	$H(0.15)$	72.82	$72.84^{+0.92}_{-0.91}$ $(+0.6\sigma)$	χ_{prior}^2	2.3	9.2 $(\nu: 7.3)$ $(+0.5\sigma)$
Ω_m	0.3112	$0.311^{+0.014}_{-0.014}$ (-0.6σ)	$D_M(0.15)$	641.8	$641.7^{+9.1}_{-9.1}$ (-0.6σ)	χ_{BAO}^2	5.62	6.3 $(\nu: 1.0)$
$\Omega_m h^2$	0.14200	$0.1420^{+0.0023}_{-0.0023}$ (-0.6σ)	$H(0.38)$	82.92	$82.94^{+0.69}_{-0.68}$ $(+0.6\sigma)$	χ_{CMB}^2	8206.1	8224.3 $(\nu: 18.1)$ $(+1243.6\sigma)$
$\Omega_m h^3$	0.09592	$0.09592^{+0.00089}_{-0.00088}$ $(+0.1\sigma)$	$D_M(0.38)$	1530.7	1530^{+18}_{-18} (-0.6σ)			
σ_8	0.8084	$0.809^{+0.015}_{-0.015}$ (-0.2σ)	$H(0.51)$	89.63	$89.64^{+0.57}_{-0.56}$ $(+0.6\sigma)$			

Best-fit $\chi_{\text{eff}}^2 = 8214.03$; $\bar{\chi}_{\text{eff}}^2 = 8239.80$; $R - 1 = 0.00717$
 χ_{eff}^2 : BAO - 6DF: 0.03 MGS: 1.22 DR12BAO: 4.37 CMB - BK15_dust: 735.63 small_100x143_offlike5_EE_Aplanck_B: 396.19 commander_dx12_v3_2_29: 23.46 CamSpec like_10.7HM: 7050.82

17.56 base_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022111	$0.02212^{+0.00041}_{-0.00041} \quad (-0.0\sigma)$	σ_8	0.8124	$0.812^{+0.012}_{-0.012} \quad (+0.1\sigma)$	$D_M(0.38)$	1542.3	$1541^{+25}_{-24} \quad (+0.1\sigma)$
$\Omega_c h^2$	0.12065	$0.1205^{+0.0031}_{-0.0030} \quad (+0.1\sigma)$	S_8	0.8399	$0.838^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$H(0.51)$	89.32	$89.36^{+0.72}_{-0.70} \quad (-0.0\sigma)$
$100\theta_{MC}$	1.04081	$1.04083^{+0.00088}_{-0.00090} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4601	$0.459^{+0.018}_{-0.017} \quad (+0.1\sigma)$	$D_M(0.51)$	1996.5	$1995^{+29}_{-28} \quad (+0.1\sigma)$
τ	0.0529	$0.053^{+0.016}_{-0.015} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6114	$0.610^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$H(0.61)$	95.00	$95.04^{+0.60}_{-0.58} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	3.0410	$3.041^{+0.029}_{-0.029} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	0.9935	$0.992^{+0.021}_{-0.021} \quad (+0.1\sigma)$	$D_M(0.61)$	2322.0	$2320^{+31}_{-31} \quad (+0.1\sigma)$
n_s	0.9632	$0.9638^{+0.0099}_{-0.0097} \quad (-0.0\sigma)$	$r_{drag} h$	98.44	$98.6^{+2.4}_{-2.4} \quad (-0.1\sigma)$	$H(2.33)$	236.72	$236.6^{+1.9}_{-1.8} \quad (+0.1\sigma)$
r	0.0132	$< 0.0597 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4535	$2.450^{+0.049}_{-0.049} \quad (+0.1\sigma)$	$D_M(2.33)$	5777.7	$5776^{+28}_{-28} \quad (+0.0\sigma)$
y_{cal}	1.00056	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	7.61	$7.6^{+1.5}_{-1.6} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	0.4639	$0.463^{+0.016}_{-0.016} \quad (+0.1\sigma)$
$A_{B,dust}$	4.61	$4.9^{+2.1}_{-1.9}$	$10^9 A_s$	2.093	$2.092^{+0.061}_{-0.060} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	0.7498	$0.749^{+0.011}_{-0.011} \quad (+0.1\sigma)$
$A_{B,sync}$	1.47	< 3.65	$10^9 A_s e^{-2\tau}$	1.8824	$1.882^{+0.022}_{-0.022} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	0.4802	$0.479^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\alpha_{B,dust}$	-0.52	—	D_{40}	1235.3	$1239^{+27}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	0.6637	$0.6633^{+0.0094}_{-0.0094} \quad (+0.1\sigma)$
$\beta_{B,dust}$	1.576	$1.60^{+0.19}_{-0.19}$	D_{220}	5703	$5705^{+81}_{-79} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	0.4777	$0.477^{+0.010}_{-0.011} \quad (+0.1\sigma)$
$\alpha_{B,sync}$	-0.27	—	D_{810}	2534.3	$2535^{+27}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	0.6207	$0.6204^{+0.0090}_{-0.0089} \quad (+0.1\sigma)$
$\beta_{B,sync}$	-3.04	$-3.10^{+0.52}_{-0.55}$	D_{1420}	814.0	$815^{+10}_{-10} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	0.4720	$0.4713^{+0.0092}_{-0.0094} \quad (+0.1\sigma)$
$\epsilon_{dust,sync}$	-0.34	$-0.35^{+0.52}_{-0.57}$	D_{2000}	229.47	$229.6^{+3.6}_{-3.6} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	0.5903	$0.5901^{+0.0087}_{-0.0085} \quad (+0.1\sigma)$
A_{100}^{PS}	240.5	$242^{+50}_{-50} \quad (-0.7\sigma)$	$n_{s,0.002}$	0.9632	$0.9638^{+0.0099}_{-0.0097} \quad (-0.0\sigma)$	$f\sigma_8(2.33)$	0.29730	$0.2972^{+0.0046}_{-0.0045} \quad (+0.1\sigma)$
A_{143}^{PS}	39.3	$41^{+20}_{-20} \quad (-1.0\sigma)$	Y_P	0.245289	$0.24529^{+0.00017}_{-0.00020} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	0.3061	$0.3061^{+0.0051}_{-0.0050} \quad (+0.1\sigma)$
A_{217}^{PS}	99.6	$102^{+30}_{-30} \quad (-1.3\sigma)$	Y_P^{BBN}	0.246615	$0.24661^{+0.00017}_{-0.00020} \quad (-0.0\sigma)$	$r_{0.002}$	0.0118	$< 0.0546 \quad (-0.4\sigma)$
A_{217}^{CIB}	45.3	$41^{+10}_{-10} \quad (-1.0\sigma)$	$10^5 D/H$	2.635	$2.633^{+0.079}_{-0.078} \quad (+0.0\sigma)$	$r_{0.01}$	0.0125	$< 0.0571 \quad (-0.4\sigma)$
A_{143}^{tSZ}	5.64	$< 7.39 \quad (-0.7\sigma)$	Age/Gyr	13.830	$13.827^{+0.064}_{-0.064} \quad (+0.0\sigma)$	$\ln(10^{10} A_t)$	-1.29	$-0.9^{+1.5}_{-2.1} \quad (-0.2\sigma)$
$r_{143 \times 217}^{PS}$	0.562	$0.65^{+0.25}_{-0.25}$	z_*	1090.31	$1090.28^{+0.70}_{-0.69} \quad (+0.0\sigma)$	r_{10}	0.0060	$< 0.0281 \quad (-0.4\sigma)$
$r_{143 \times 217}^{CIB}$	0.75	—	r_*	144.46	$144.50^{+0.71}_{-0.72} \quad (-0.1\sigma)$	$10^9 A_t$	0.028	$< 0.125 \quad (-0.4\sigma)$
$\xi^{tSZ \times CIB}$	0.01	—	$100\theta_*$	1.04101	$1.04104^{+0.00086}_{-0.00089} \quad (+0.0\sigma)$	$10^9 A_t e^{-2\tau}$	0.025	$< 0.112 \quad (-0.4\sigma)$
A^{kSZ}	1.6	—	$D_M(z_*)/\text{Gpc}$	13.877	$13.880^{+0.067}_{-0.068} \quad (-0.1\sigma)$	f_{2000}^{143}	31.3	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{100}^{dust}	1.003	$1.01^{+0.38}_{-0.38}$	z_{drag}	1059.40	$1059.39^{+0.88}_{-0.87} \quad (+0.0\sigma)$	f_{2000}^{217}	107.83	$107.7^{+3.9}_{-4.0} \quad (-0.2\sigma)$
A_{143}^{dust}	0.986	$0.97^{+0.35}_{-0.35}$	r_{drag}	147.21	$147.25^{+0.73}_{-0.74} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	33.19	$33^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dust}	0.961	$0.97^{+0.20}_{-0.20}$	k_D	0.14054	$0.14051^{+0.00088}_{-0.00087} \quad (+0.1\sigma)$	$\chi_{lensing}^2$	9.00	$9.56 \quad (\nu: 0.4)$
$A_{143 \times 217}^{dust}$	0.999	$1.03^{+0.32}_{-0.32}$	$100\theta_D$	0.16108	$0.16108^{+0.00052}_{-0.00051} \quad (+0.0\sigma)$	$\chi_{BKPLANCK}^2$	735.17	$739.4 \quad (\nu: 3.5)$
c_{100}	0.99746	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	z_{eq}	3412	$3408^{+71}_{-69} \quad (+0.1\sigma)$	χ_{small}^2	396.01	$397.0 \quad (\nu: 1.3) \quad (-0.0\sigma)$
c_{217}	1.00143	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	k_{eq}	0.010412	$0.01040^{+0.00022}_{-0.00021} \quad (+0.1\sigma)$	χ_{lowl}^2	23.99	$24.4 \quad (\nu: 0.8) \quad (-0.3\sigma)$
H_0	66.87	$67.0^{+1.4}_{-1.4} \quad (-0.1\sigma)$	$100\theta_{eq}$	0.8108	$0.812^{+0.013}_{-0.013} \quad (-0.1\sigma)$	$\chi_{CamSpec}^2$	7049.8	$7062.6 \quad (\nu: 13.2)$
Ω_Λ	0.6793	$0.680^{+0.019}_{-0.020} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	0.4483	$0.4487^{+0.0067}_{-0.0067} \quad (-0.1\sigma)$	χ_{prior}^2	2.4	$9.2 \quad (\nu: 7.3) \quad (+0.5\sigma)$
Ω_m	0.3207	$0.320^{+0.020}_{-0.019} \quad (+0.1\sigma)$	$H(0.15)$	72.25	$72.3^{+1.2}_{-1.2} \quad (-0.1\sigma)$	χ_{CMB}^2	8214.0	$8233.0 \quad (\nu: 18.7) \quad (+1245.1\sigma)$
$\Omega_m h^2$	0.14341	$0.1432^{+0.0030}_{-0.0029} \quad (+0.1\sigma)$	$D_M(0.15)$	647.6	$647^{+12}_{-12} \quad (+0.1\sigma)$			
$\Omega_m h^3$	0.09590	$0.09590^{+0.00089}_{-0.00088} \quad (+0.1\sigma)$	$H(0.38)$	82.51	$82.57^{+0.89}_{-0.87} \quad (-0.1\sigma)$			

Best-fit $\chi_{eff}^2 = 8216.43$; $\bar{\chi}_{eff}^2 = 8242.24$; $R - 1 = 0.00337$

χ_{eff}^2 : CMB - smicadx12.Dec5.ftl_mv2.ndclpp_p.teb_consext8: 9.00 BK15_dust: 735.17 small.100x143_offlike5.EE_Aplanck_B: 396.01 commander_dx12_v3.2.29: 23.99 CamSpec like_10.7HM: 7049.83

17.57 base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022189	$0.02221^{+0.00038}_{-0.00038}$ $(+0.4\sigma)$	S_8	0.8268	$0.826^{+0.023}_{-0.023}$ (-0.4σ)	$D_{\mathrm{M}}(0.51)$	1985.4	1984^{+20}_{-20} (-0.6σ)
$\Omega_{\mathrm{c}}h^2$	0.11942	$0.1193^{+0.0021}_{-0.0021}$ (-0.5σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4529	$0.452^{+0.013}_{-0.013}$ (-0.4σ)	$H(0.61)$	95.200	$95.24^{+0.46}_{-0.46}$ $(+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	1.04098	$1.04102^{+0.00081}_{-0.00083}$ $(+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6055	$0.605^{+0.012}_{-0.012}$ (-0.3σ)	$D_{\mathrm{M}}(0.61)$	2310.1	2308^{+22}_{-22} (-0.6σ)
τ	0.0546	$0.056^{+0.015}_{-0.014}$ $(+0.5\sigma)$	$\sigma_8/h^{0.5}$	0.9860	$0.986^{+0.018}_{-0.018}$ (-0.3σ)	$H(2.33)$	236.00	$235.9^{+1.4}_{-1.3}$ (-0.5σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0425	$3.045^{+0.028}_{-0.028}$ $(+0.3\sigma)$	$r_{\mathrm{drag}}h$	99.42	$99.6^{+1.6}_{-1.6}$ $(+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	5769.3	5768^{+23}_{-23} (-0.5σ)
n_{s}	0.9658	$0.9667^{+0.0083}_{-0.0081}$ $(+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4370	$2.436^{+0.041}_{-0.042}$ (-0.3σ)	$f\sigma_8(0.15)$	0.4573	$0.457^{+0.012}_{-0.012}$ (-0.4σ)
r	0.0130	< 0.0613 (-0.3σ)	z_{re}	7.74	$7.9^{+1.4}_{-1.4}$ $(+0.5\sigma)$	$\sigma_8(0.15)$	0.7480	$0.749^{+0.011}_{-0.011}$ $(+0.0\sigma)$
y_{cal}	1.00083	$1.0009^{+0.0048}_{-0.0049}$ $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.096	$2.101^{+0.060}_{-0.058}$ $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4754	$0.4752^{+0.0099}_{-0.0098}$ (-0.3σ)
$A_{B,\mathrm{dust}}$	4.59	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8789	$1.878^{+0.021}_{-0.021}$ (-0.3σ)	$\sigma_8(0.38)$	0.6629	$0.6636^{+0.0095}_{-0.0093}$ $(+0.2\sigma)$
$A_{B,\mathrm{sync}}$	1.46	< 3.68	D_{40}	1231.2	1235^{+26}_{-25} (-0.5σ)	$f\sigma_8(0.51)$	0.4738	$0.4738^{+0.0087}_{-0.0088}$ (-0.3σ)
$\alpha_{B,\mathrm{dust}}$	-0.50	—	D_{220}	5715	5714^{+79}_{-79} $(+0.1\sigma)$	$\sigma_8(0.51)$	0.6203	$0.6210^{+0.0089}_{-0.0087}$ $(+0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	1.573	$1.59^{+0.19}_{-0.19}$	D_{810}	2535.6	2536^{+27}_{-26} (-0.0σ)	$f\sigma_8(0.61)$	0.4687	$0.4688^{+0.0081}_{-0.0081}$ (-0.2σ)
$\alpha_{B,\mathrm{sync}}$	-0.41	—	D_{1420}	815.3	$815.8^{+9.8}_{-9.8}$ $(+0.2\sigma)$	$\sigma_8(0.61)$	0.5902	$0.5909^{+0.0086}_{-0.0083}$ $(+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.03	$-3.10^{+0.52}_{-0.54}$	D_{2000}	229.91	$230.1^{+3.5}_{-3.5}$ $(+0.2\sigma)$	$f\sigma_8(2.33)$	0.29752	$0.2979^{+0.0044}_{-0.0043}$ $(+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.32	$-0.35^{+0.52}_{-0.57}$	$n_{\mathrm{s},0.002}$	0.9658	$0.9667^{+0.0083}_{-0.0081}$ $(+0.5\sigma)$	$\sigma_8(2.33)$	0.30666	$0.3071^{+0.0047}_{-0.0046}$ $(+0.5\sigma)$
A_{100}^{PS}	239.7	242^{+50}_{-50} (-0.7σ)	Y_{P}	0.245321	$0.24533^{+0.00016}_{-0.00016}$ $(+0.4\sigma)$	$r_{0.002}$	0.0117	< 0.0566 (-0.3σ)
A_{143}^{PS}	40.7	41^{+20}_{-20} (-1.0σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246648	$0.24665^{+0.00016}_{-0.00016}$ $(+0.4\sigma)$	$r_{0.01}$	0.0123	< 0.0589 (-0.3σ)
A_{217}^{PS}	100.5	102^{+30}_{-30} (-1.3σ)	$10^5\mathrm{D}/\mathrm{H}$	2.620	$2.617^{+0.072}_{-0.071}$ (-0.4σ)	$\ln(10^{10}A_{\mathrm{t}})$	-1.30	$-0.9^{+1.5}_{-2.0}$ (-0.1σ)
A_{217}^{CIB}	44.9	40^{+10}_{-10} (-1.1σ)	Age/Gyr	13.812	$13.808^{+0.053}_{-0.054}$ (-0.5σ)	r_{10}	0.0060	< 0.0289 (-0.3σ)
A_{143}^{tSZ}	5.78	< 7.40 (-0.7σ)	z_*	1090.10	$1090.06^{+0.56}_{-0.56}$ (-0.5σ)	$10^9 A_{\mathrm{t}}$	0.027	< 0.129 (-0.3σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.583	$0.65^{+0.25}_{-0.25}$	r_*	144.72	$144.75^{+0.55}_{-0.56}$ $(+0.5\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.024	< 0.115 (-0.3σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.76	—	$100\theta_*$	1.04118	$1.04122^{+0.00080}_{-0.00082}$ $(+0.4\sigma)$	f_{2000}^{143}	31.0	30^{+6}_{-6} (-0.2σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.10	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.899	$13.902^{+0.054}_{-0.055}$ $(+0.4\sigma)$	f_{2000}^{217}	107.56	$107.4^{+3.9}_{-4.0}$ (-0.3σ)
A^{kSZ}	1.3	—	z_{drag}	1059.47	$1059.50^{+0.85}_{-0.87}$ $(+0.2\sigma)$	$f_{2000}^{143\times 217}$	32.87	33^{+4}_{-4} (-0.4σ)
A_{100}^{dust}	1.011	$1.01^{+0.38}_{-0.38}$	r_{drag}	147.45	$147.47^{+0.62}_{-0.62}$ $(+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.90	9.33 $(\nu: 0.3)$
A_{143}^{dust}	0.977	$0.97^{+0.35}_{-0.34}$	k_{D}	0.14035	$0.14034^{+0.00083}_{-0.00081}$ (-0.3σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.61	739.8 $(\nu: 3.4)$
A_{217}^{dust}	0.966	$0.97^{+0.20}_{-0.20}$	$100\theta_{\mathrm{D}}$	0.16104	$0.16103^{+0.00050}_{-0.00050}$ (-0.2σ)	χ_{simall}^2	396.19	397.4 $(\nu: 1.8)$ $(+0.2\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	1.002	$1.03^{+0.32}_{-0.31}$	z_{eq}	3384.1	3380^{+50}_{-49} (-0.5σ)	χ_{lowl}^2	23.50	23.9 $(\nu: 0.6)$ (-0.6σ)
c_{100}	0.99759	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	k_{eq}	0.010329	$0.01032^{+0.00015}_{-0.00015}$ (-0.5σ)	$\chi_{\mathrm{CamSpec}}^2$	7050.6	7062.9 $(\nu: 13.1)$
c_{217}	1.00142	$1.0012^{+0.0031}_{-0.0031}$ $(+4.6\sigma)$	$100\theta_{\mathrm{eq}}$	0.8161	$0.8169^{+0.0092}_{-0.0091}$ $(+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.047	0.064 $(\nu: 0.0)$
H_0	67.43	$67.52^{+0.98}_{-0.96}$ $(+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.45098	$0.4514^{+0.0047}_{-0.0047}$ $(+0.5\sigma)$	χ_{MGS}^2	1.10	1.24 $(\nu: 0.1)$
Ω_{Λ}	0.6871	$0.688^{+0.013}_{-0.013}$ $(+0.6\sigma)$	$H(0.15)$	72.72	$72.80^{+0.85}_{-0.84}$ $(+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.77	5.0 $(\nu: 1.3)$
Ω_{m}	0.3129	$0.312^{+0.013}_{-0.013}$ (-0.6σ)	$D_{\mathrm{M}}(0.15)$	642.9	$642.1^{+8.4}_{-8.3}$ (-0.6σ)	χ_{prior}^2	2.3	9.2 $(\nu: 7.3)$ $(+0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	0.14226	$0.1421^{+0.0021}_{-0.0020}$ (-0.5σ)	$H(0.38)$	82.85	$82.91^{+0.65}_{-0.63}$ $(+0.6\sigma)$	χ_{CMB}^2	8214.8	8233.2 $(\nu: 18.3)$ $(+1245.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	0.09592	$0.09594^{+0.00088}_{-0.00087}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1532.8	1531^{+17}_{-17} (-0.6σ)	χ_{BAO}^2	5.92	6.3 $(\nu: 0.9)$
σ_8	0.8096	$0.810^{+0.012}_{-0.012}$ (-0.0σ)	$H(0.51)$	89.57	$89.62^{+0.54}_{-0.53}$ $(+0.5\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 8223.00$; $\bar{\chi}_{\mathrm{eff}}^2 = 8248.72$; $R - 1 = 0.00847$
 χ_{eff}^2 : BAO - 6DF: 0.05 MGS: 1.10 DR12BAO: 4.77 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.90 BK15_dust: 735.61 simall_100x143_offlike5_EE_Aplanck_B: 396.19 commander_dx12_v3.2.29: 23.50 CamSpec like_10.7HM: 7050.59

17.58 base_r_CamSpecHM_TT_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02210^{+0.00044}_{-0.00042} \quad (-0.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09592^{+0.00090}_{-0.00088} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$649^{+16}_{-15} \quad (+0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1209^{+0.0041}_{-0.0040} \quad (+0.3\sigma)$	σ_8	$0.815^{+0.017}_{-0.016} \quad (+0.4\sigma)$	$H(0.38)$	$82.5^{+1.1}_{-1.1} \quad (-0.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04079^{+0.00092}_{-0.00094} \quad (-0.0\sigma)$	S_8	$0.845^{+0.048}_{-0.046} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1544^{+31}_{-31} \quad (+0.3\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.463^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$H(0.51)$	$89.28^{+0.88}_{-0.84} \quad (-0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.028}_{-0.026} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.023}_{-0.022} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1999^{+36}_{-36} \quad (+0.3\sigma)$
n_{s}	$0.963^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.997^{+0.031}_{-0.030} \quad (+0.4\sigma)$	$H(0.61)$	$94.98^{+0.70}_{-0.67} \quad (-0.2\sigma)$
r	$< 0.0591 \quad (-0.4\sigma)$	$r_{\mathrm{drag}}h$	$98.2^{+3.2}_{-3.1} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2324^{+39}_{-39} \quad (+0.3\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.461^{+0.074}_{-0.072} \quad (+0.4\sigma)$	$H(2.33)$	$236.9^{+2.5}_{-2.4} \quad (+0.3\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	z_{re}	$< 8.91 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5779^{+32}_{-32} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	< 3.68	$10^9 A_{\mathrm{s}}$	$2.100^{+0.059}_{-0.055} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.466^{+0.024}_{-0.023} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.884^{+0.027}_{-0.026} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.014}_{-0.013} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{40}	$1241^{+31}_{-30} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.482^{+0.019}_{-0.018} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{220}	$5702^{+81}_{-80} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.665^{+0.011}_{-0.010} \quad (+0.4\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{810}	$2536^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.016}_{-0.016} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.52}_{-0.57}$	D_{1420}	$814^{+10}_{-10} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6219^{+0.0097}_{-0.0094} \quad (+0.4\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{2000}	$229.6^{+3.6}_{-3.6} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.014}_{-0.014} \quad (+0.4\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.963^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.5915^{+0.0090}_{-0.0086} \quad (+0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	Y_{P}	$0.24528^{+0.00018}_{-0.00021} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0044}_{-0.0041} \quad (+0.3\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24660^{+0.00018}_{-0.00021} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0046}_{-0.0043} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$< 7.38 \quad (-0.7\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.638^{+0.083}_{-0.082} \quad (+0.1\sigma)$	$r_{0.002}$	$< 0.0540 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.832^{+0.071}_{-0.071} \quad (+0.2\sigma)$	$r_{0.01}$	$< 0.0565 \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	z_*	$1090.35^{+0.80}_{-0.79} \quad (+0.2\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.97^{+1.5}_{-2.1} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	r_*	$144.40^{+0.93}_{-0.94} \quad (-0.3\sigma)$	r_{10}	$< 0.0277 \quad (-0.4\sigma)$
A^{kSZ}	—	$100\theta_*$	$1.04100^{+0.00090}_{-0.00092} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.124 \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.871^{+0.086}_{-0.087} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.111 \quad (-0.4\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	z_{drag}	$1059.37^{+0.91}_{-0.89} \quad (-0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_{drag}	$147.15^{+0.93}_{-0.95} \quad (-0.3\sigma)$	f_{2000}^{217}	$107.6^{+4.0}_{-4.0} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	k_{D}	$0.1406^{+0.0010}_{-0.0010} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16110^{+0.00052}_{-0.00052} \quad (+0.1\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.2 \quad (\nu: 3.6)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{eq}	$3418^{+95}_{-92} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (-0.0\sigma)$
H_0	$66.8^{+1.8}_{-1.8} \quad (-0.3\sigma)$	k_{eq}	$0.01043^{+0.00029}_{-0.00028} \quad (+0.3\sigma)$	χ_{lowl}^2	$24.7 \quad (\nu: 1.1) \quad (-0.2\sigma)$
Ω_{Λ}	$0.677^{+0.025}_{-0.026} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.810^{+0.017}_{-0.017} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.9 \quad (\nu: 13.9)$
Ω_{m}	$0.323^{+0.026}_{-0.025} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4477^{+0.0089}_{-0.0089} \quad (-0.3\sigma)$	χ_{prior}^2	$9.2 \quad (\nu: 7.2) \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1437^{+0.0040}_{-0.0038} \quad (+0.3\sigma)$	$H(0.15)$	$72.2^{+1.5}_{-1.5} \quad (-0.3\sigma)$	χ_{CMB}^2	$8223.8 \quad (\nu: 18.4) \quad (+1243.5\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 8233.01; R - 1 = 0.00318$$

17.59 base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02221^{+0.00039}_{-0.00038} \quad (+0.4\sigma)$	S_8	$0.824^{+0.029}_{-0.028} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+21}_{-22} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0024}_{-0.0024} \quad (-0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.016}_{-0.015} \quad (-0.5\sigma)$	$H(0.61)$	$95.26^{+0.48}_{-0.47} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04104^{+0.00081}_{-0.00083} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.015}_{-0.015} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+23}_{-23} \quad (-0.6\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$H(2.33)$	$235.8^{+1.5}_{-1.5} \quad (-0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.8}_{-1.8} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+24}_{-24} \quad (-0.6\sigma)$
n_{s}	$0.9673^{+0.0084}_{-0.0084} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.052}_{-0.050} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.015}_{-0.014} \quad (-0.5\sigma)$
r	$< 0.0624 \quad (-0.3\sigma)$	z_{re}	$< 9.02 \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.012} \quad (-0.1\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.060}_{-0.057} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.012}_{-0.012} \quad (-0.4\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.010} \quad (+0.1\sigma)$
$A_{B,\mathrm{sync}}$	< 3.68	D_{40}	$1233^{+28}_{-27} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.011} \quad (-0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{220}	$5710^{+80}_{-79} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.6205^{+0.0096}_{-0.0092} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.59^{+0.19}_{-0.19}$	D_{810}	$2535^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.010}_{-0.0098} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{1420}	$815.5^{+9.9}_{-9.9} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.5904^{+0.0091}_{-0.0087} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.54}$	D_{2000}	$230.1^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0045}_{-0.0043} \quad (+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.52}_{-0.57}$	$n_{\mathrm{s},0.002}$	$0.9673^{+0.0084}_{-0.0084} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3070^{+0.0047}_{-0.0044} \quad (+0.4\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	Y_{P}	$0.24533^{+0.00015}_{-0.00017} \quad (+0.4\sigma)$	$r_{0.002}$	$< 0.0577 \quad (-0.3\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00015}_{-0.00017} \quad (+0.4\sigma)$	$r_{0.01}$	$< 0.0601 \quad (-0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.617^{+0.072}_{-0.072} \quad (-0.4\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.0} \quad (-0.1\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.807^{+0.054}_{-0.054} \quad (-0.5\sigma)$	r_{10}	$< 0.0295 \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.7\sigma)$	z_*	$1090.05^{+0.57}_{-0.57} \quad (-0.5\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.131 \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	r_*	$144.79^{+0.61}_{-0.62} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.117 \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$100\theta_*$	$1.04124^{+0.00080}_{-0.00082} \quad (+0.5\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.906^{+0.060}_{-0.060} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.4^{+4.0}_{-4.0} \quad (-0.3\sigma)$
A^{kSZ}	—	z_{drag}	$1059.49^{+0.86}_{-0.85} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_{drag}	$147.52^{+0.66}_{-0.67} \quad (+0.5\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.9 \quad (\nu: 3.5)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	k_{D}	$0.14029^{+0.00087}_{-0.00085} \quad (-0.4\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_{\mathrm{D}}$	$0.16104^{+0.00049}_{-0.00050} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 0.6) \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{eq}	$3376^{+56}_{-55} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.2 \quad (\nu: 13.5)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{eq}	$0.01031^{+0.00017}_{-0.00017} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.31 \quad (\nu: 0.1)$
H_0	$67.6^{+1.1}_{-1.1} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0054}_{-0.0053} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.4)$
Ω_{Λ}	$0.689^{+0.014}_{-0.014} \quad (+0.6\sigma)$	$H(0.15)$	$72.85^{+0.92}_{-0.90} \quad (+0.6\sigma)$	χ_{prior}^2	$9.2 \quad (\nu: 7.3) \quad (+0.5\sigma)$
Ω_{m}	$0.311^{+0.014}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.6^{+9.1}_{-9.1} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 1.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1419^{+0.0023}_{-0.0023} \quad (-0.6\sigma)$	$H(0.38)$	$82.94^{+0.69}_{-0.68} \quad (+0.6\sigma)$	χ_{CMB}^2	$8224.1 \quad (\nu: 17.7) \quad (+1243.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09592^{+0.00089}_{-0.00088} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+18}_{-18} \quad (-0.6\sigma)$		
σ_8	$0.809^{+0.015}_{-0.013} \quad (-0.1\sigma)$	$H(0.51)$	$89.65^{+0.57}_{-0.55} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8239.57; R - 1 = 0.00860$$

17.60 base_r_CamSpecHM_TT_lowl_lowE_BK15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02213^{+0.00041}_{-0.00040} \quad (+0.0\sigma)$	σ_8	$0.812^{+0.012}_{-0.011} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1540^{+23}_{-24} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1203^{+0.0030}_{-0.0030} \quad (+0.0\sigma)$	S_8	$0.837^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$H(0.51)$	$89.39^{+0.71}_{-0.68} \quad (+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04085^{+0.00087}_{-0.00089} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.459^{+0.018}_{-0.017} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1994^{+27}_{-28} \quad (-0.0\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.015}_{-0.015} \quad (+0.1\sigma)$	$H(0.61)$	$95.06^{+0.59}_{-0.56} \quad (+0.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.025}_{-0.024} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.020}_{-0.021} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2319^{+30}_{-30} \quad (-0.0\sigma)$
n_{s}	$0.9642^{+0.0097}_{-0.0094} \quad (+0.0\sigma)$	$r_{\mathrm{drag}}h$	$98.7^{+2.4}_{-2.3} \quad (-0.0\sigma)$	$H(2.33)$	$236.5^{+1.8}_{-1.8} \quad (+0.0\sigma)$
r	$< 0.0598 \quad (-0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.049}_{-0.049} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5775^{+28}_{-28} \quad (-0.0\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 8.87 \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.016}_{-0.016} \quad (+0.1\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	10^9A_{s}	$2.097^{+0.053}_{-0.050} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.010}_{-0.0097} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1239^{+27}_{-26} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.6640^{+0.0090}_{-0.0080} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5705^{+81}_{-79} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.010}_{-0.011} \quad (+0.1\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2535^{+27}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0081}_{-0.0077} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{1420}	$815^{+10}_{-10} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4715^{+0.0092}_{-0.0093} \quad (+0.1\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.52}_{-0.57}$	D_{2000}	$229.7^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5908^{+0.0077}_{-0.0073} \quad (+0.3\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.9642^{+0.0097}_{-0.0094} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0040}_{-0.0038} \quad (+0.3\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	Y_{P}	$0.24529^{+0.00017}_{-0.00019} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0044}_{-0.0042} \quad (+0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24662^{+0.00017}_{-0.00019} \quad (+0.0\sigma)$	$r_{0.002}$	$< 0.0549 \quad (-0.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.631^{+0.078}_{-0.077} \quad (-0.0\sigma)$	$r_{0.01}$	$< 0.0572 \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.40 \quad (-0.7\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.825^{+0.063}_{-0.063} \quad (-0.0\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.1} \quad (-0.2\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	z_*	$1090.25^{+0.68}_{-0.67} \quad (-0.0\sigma)$	r_{10}	$< 0.0282 \quad (-0.4\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	r_*	$144.53^{+0.70}_{-0.70} \quad (-0.0\sigma)$	10^9A_{t}	$< 0.126 \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$100\theta_*$	$1.04105^{+0.00086}_{-0.00088} \quad (+0.1\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.113 \quad (-0.4\sigma)$
A^{kSZ}	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.883^{+0.066}_{-0.066} \quad (-0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_{drag}	$1059.41^{+0.87}_{-0.89} \quad (+0.0\sigma)$	f_{2000}^{217}	$107.6^{+3.9}_{-4.0} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	r_{drag}	$147.27^{+0.72}_{-0.73} \quad (-0.0\sigma)$	$f_{2000}^{143\times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	k_{D}	$0.14050^{+0.00088}_{-0.00087} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.54 \quad (\nu: 0.4)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_{\mathrm{D}}$	$0.16107^{+0.00051}_{-0.00051} \quad (-0.0\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.4 \quad (\nu: 3.5)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.5\sigma)$	z_{eq}	$3405^{+68}_{-67} \quad (+0.0\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.3) \quad (-0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	k_{eq}	$0.01039^{+0.00021}_{-0.00021} \quad (+0.0\sigma)$	χ_{lowl}^2	$24.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
H_0	$67.0^{+1.4}_{-1.3} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.013}_{-0.013} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.5 \quad (\nu: 13.0)$
Ω_{Λ}	$0.681^{+0.018}_{-0.019} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0065}_{-0.0065} \quad (-0.0\sigma)$	χ_{prior}^2	$9.2 \quad (\nu: 7.3) \quad (+0.5\sigma)$
Ω_{m}	$0.319^{+0.019}_{-0.018} \quad (-0.0\sigma)$	$H(0.15)$	$72.4^{+1.2}_{-1.1} \quad (+0.0\sigma)$	χ_{CMB}^2	$8232.8 \quad (\nu: 18.2) \quad (+1245.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1431^{+0.0029}_{-0.0028} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+12}_{-12} \quad (-0.0\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.09591^{+0.00089}_{-0.00088} \quad (+0.1\sigma)$	$H(0.38)$	$82.60^{+0.88}_{-0.84} \quad (+0.0\sigma)$		

$$\chi_{\mathrm{eff}}^2 = 8241.99; R - 1 = 0.00437$$

17.61 base_r_CamSpecHM_TT_lowl_lowE_BK15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02221^{+0.00038}_{-0.00037} \quad (+0.4\sigma)$	S_8	$0.826^{+0.023}_{-0.023} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1983^{+20}_{-20} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0021}_{-0.0021} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.61)$	$95.25^{+0.46}_{-0.46} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04102^{+0.00081}_{-0.00083} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2308^{+21}_{-22} \quad (-0.6\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.3} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.6^{+1.6}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+23}_{-23} \quad (-0.5\sigma)$
n_{s}	$0.9668^{+0.0083}_{-0.0080} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.041}_{-0.042} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.012}_{-0.012} \quad (-0.4\sigma)$
r	$< 0.0613 \quad (-0.3\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.0099} \quad (+0.1\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.055}_{-0.053} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.4753^{+0.0098}_{-0.0098} \quad (-0.3\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.6639^{+0.0092}_{-0.0085} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	< 3.67	D_{40}	$1235^{+26}_{-25} \quad (-0.5\sigma)$	$f\sigma_8(0.51)$	$0.4739^{+0.0087}_{-0.0087} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{220}	$5714^{+79}_{-79} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6213^{+0.0087}_{-0.0079} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{810}	$2536^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0080}_{-0.0080} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{1420}	$815.7^{+9.8}_{-9.8} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.5911^{+0.0083}_{-0.0075} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.54}$	D_{2000}	$230.1^{+3.4}_{-3.5} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2981^{+0.0043}_{-0.0038} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.35^{+0.52}_{-0.57}$	$n_{\mathrm{s},0.002}$	$0.9668^{+0.0083}_{-0.0080} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0044}_{-0.0042} \quad (+0.5\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00016} \quad (+0.4\sigma)$	$r_{0.002}$	$< 0.0566 \quad (-0.3\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00016} \quad (+0.4\sigma)$	$r_{0.01}$	$< 0.0589 \quad (-0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.616^{+0.072}_{-0.071} \quad (-0.4\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.0} \quad (-0.1\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.807^{+0.053}_{-0.053} \quad (-0.5\sigma)$	r_{10}	$< 0.0289 \quad (-0.3\sigma)$
A_{143}^{tSZ}	$< 7.40 \quad (-0.7\sigma)$	z_*	$1090.06^{+0.56}_{-0.56} \quad (-0.5\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.129 \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	r_*	$144.76^{+0.55}_{-0.56} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.115 \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$100\theta_*$	$1.04123^{+0.00080}_{-0.00082} \quad (+0.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.902^{+0.054}_{-0.055} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.4^{+3.9}_{-4.0} \quad (-0.3\sigma)$
A^{kSZ}	—	z_{drag}	$1059.51^{+0.85}_{-0.87} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_{drag}	$147.48^{+0.62}_{-0.62} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.30 \quad (\nu: 0.2)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	k_{D}	$0.14034^{+0.00083}_{-0.00081} \quad (-0.3\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.8 \quad (\nu: 3.4)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00049}_{-0.00050} \quad (-0.2\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 1.9) \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{eq}	$3380^{+49}_{-49} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{eq}	$0.01032^{+0.00015}_{-0.00015} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.8 \quad (\nu: 13.0)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8170^{+0.0092}_{-0.0090} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.062 \quad (\nu: 0.0)$
H_0	$67.53^{+0.97}_{-0.96} \quad (+0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4514^{+0.0047}_{-0.0047} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.25 \quad (\nu: 0.1)$
Ω_{Λ}	$0.688^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$H(0.15)$	$72.81^{+0.84}_{-0.83} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.2)$
Ω_{m}	$0.312^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$642.0^{+8.3}_{-8.2} \quad (-0.6\sigma)$	χ_{prior}^2	$9.2 \quad (\nu: 7.3) \quad (+0.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$H(0.38)$	$82.92^{+0.64}_{-0.63} \quad (+0.6\sigma)$	χ_{CMB}^2	$8233.1 \quad (\nu: 18.1) \quad (+1245.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09594^{+0.00088}_{-0.00087} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+17}_{-17} \quad (-0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.0\sigma)$	$H(0.51)$	$89.63^{+0.54}_{-0.52} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8248.57; \quad R - 1 = 0.00954$$

17.62 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022276	$0.02228^{+0.00031}_{-0.00031}$ $(+0.7\sigma)$	$\Omega_{\mathrm{m}}h^2$	0.14281	$0.1427^{+0.0026}_{-0.0026}$ (-0.2σ)	$D_{\mathrm{M}}(0.15)$	644.0	644^{+10}_{-10} (-0.4σ)
$\Omega_{\mathrm{c}}h^2$	0.11989	$0.1198^{+0.0027}_{-0.0027}$ (-0.3σ)	$\Omega_{\mathrm{m}}h^3$	0.09610	$0.09608^{+0.00063}_{-0.00062}$ $(+0.5\sigma)$	$H(0.38)$	82.79	$82.82^{+0.75}_{-0.74}$ $(+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	1.04085	$1.04086^{+0.00063}_{-0.00062}$ $(+0.1\sigma)$	σ_8	0.8095	$0.810^{+0.015}_{-0.015}$ (-0.1σ)	$D_{\mathrm{M}}(0.38)$	1534.9	1534^{+21}_{-20} (-0.4σ)
τ	0.0530	$0.054^{+0.016}_{-0.015}$ $(+0.2\sigma)$	S_8	0.8300	$0.829^{+0.032}_{-0.032}$ (-0.3σ)	$H(0.51)$	89.55	$89.57^{+0.60}_{-0.59}$ $(+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0398	$3.041^{+0.032}_{-0.032}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4546	$0.454^{+0.018}_{-0.017}$ (-0.3σ)	$D_{\mathrm{M}}(0.51)$	1987.7	1987^{+24}_{-24} (-0.4σ)
n_{s}	0.9656	$0.9660^{+0.0090}_{-0.0088}$ $(+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6066	$0.606^{+0.017}_{-0.016}$ (-0.2σ)	$H(0.61)$	95.196	$95.21^{+0.48}_{-0.47}$ $(+0.5\sigma)$
r	0.0194	< 0.0694 (-0.2σ)	$\sigma_8/h^{0.5}$	0.9868	$0.987^{+0.023}_{-0.023}$ (-0.2σ)	$D_{\mathrm{M}}(0.61)$	2312.5	2311^{+26}_{-26} (-0.4σ)
y_{cal}	1.00054	$1.0007^{+0.0049}_{-0.0049}$ $(+0.1\sigma)$	$r_{\mathrm{drag}}h$	99.07	$99.2^{+2.1}_{-2.1}$ $(+0.3\sigma)$	$H(2.33)$	236.38	$236.3^{+1.6}_{-1.6}$ (-0.2σ)
$A_{B,\mathrm{dust}}$	4.60	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	2.439	$2.438^{+0.056}_{-0.056}$ (-0.2σ)	$D_{\mathrm{M}}(2.33)$	5768.3	5768^{+22}_{-22} (-0.5σ)
$A_{B,\mathrm{sync}}$	1.49	< 3.64	z_{re}	7.56	$7.6^{+1.6}_{-1.6}$ $(+0.2\sigma)$	$f\sigma_8(0.15)$	0.4589	$0.458^{+0.016}_{-0.016}$ (-0.3σ)
$\alpha_{B,\mathrm{dust}}$	-0.50	—	10^9A_{s}	2.090	$2.092^{+0.069}_{-0.065}$ $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7477	$0.748^{+0.013}_{-0.013}$ (-0.1σ)
$\beta_{B,\mathrm{dust}}$	1.580	$1.60^{+0.19}_{-0.19}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8801	$1.880^{+0.023}_{-0.023}$ (-0.2σ)	$f\sigma_8(0.38)$	0.4763	$0.476^{+0.013}_{-0.013}$ (-0.2σ)
$\alpha_{B,\mathrm{sync}}$	-0.23	—	D_{40}	1233.5	1237^{+28}_{-27} (-0.4σ)	$\sigma_8(0.38)$	0.6623	$0.663^{+0.011}_{-0.011}$ (-0.0σ)
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.52}_{-0.55}$	D_{220}	5716	5716^{+77}_{-77} $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4745	$0.474^{+0.012}_{-0.012}$ (-0.2σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.35	$-0.36^{+0.52}_{-0.57}$	D_{810}	2535.9	2536^{+27}_{-27} (-0.0σ)	$\sigma_8(0.51)$	0.6196	$0.620^{+0.010}_{-0.010}$ $(+0.0\sigma)$
A_{100}^{PS}	235.0	239^{+50}_{-50} (-0.8σ)	D_{1420}	815.9	$816.1^{+9.7}_{-9.7}$ $(+0.2\sigma)$	$f\sigma_8(0.61)$	0.4692	$0.469^{+0.011}_{-0.011}$ (-0.2σ)
A_{143}^{PS}	39.6	39^{+20}_{-20} (-1.2σ)	D_{2000}	230.31	$230.4^{+3.3}_{-3.3}$ $(+0.4\sigma)$	$\sigma_8(0.61)$	0.5895	$0.5897^{+0.0099}_{-0.0096}$ $(+0.1\sigma)$
A_{217}^{PS}	102.6	103^{+30}_{-30} (-1.2σ)	$n_{\mathrm{s},0.002}$	0.9656	$0.9660^{+0.0090}_{-0.0088}$ $(+0.4\sigma)$	$f\sigma_8(2.33)$	0.29708	$0.2972^{+0.0050}_{-0.0048}$ $(+0.1\sigma)$
A_{217}^{CIB}	44.2	40^{+10}_{-10} (-1.2σ)	Y_{P}	0.245357	$0.24536^{+0.00012}_{-0.00013}$ $(+0.7\sigma)$	$\sigma_8(2.33)$	0.3061	$0.3063^{+0.0053}_{-0.0050}$ $(+0.2\sigma)$
A_{143}^{tSZ}	6.51	< 7.47 (-0.6σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246684	$0.24668^{+0.00012}_{-0.00014}$ $(+0.7\sigma)$	$r_{0.002}$	0.0175	< 0.0643 (-0.2σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.601	$0.66^{+0.25}_{-0.25}$	$10^5\mathrm{D}/\mathrm{H}$	2.603	$2.604^{+0.060}_{-0.057}$ (-0.7σ)	$r_{0.01}$	0.0184	< 0.0668 (-0.2σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.76	—	Age/Gyr	13.8086	$13.808^{+0.049}_{-0.049}$ (-0.5σ)	$\ln(10^{10}A_{\mathrm{t}})$	-0.90	$-0.7^{+1.4}_{-1.9}$ $(+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.09	—	z_*	1090.03	$1090.02^{+0.57}_{-0.54}$ (-0.6σ)	r_{10}	0.0089	< 0.0330 (-0.2σ)
A^{kSZ}	0.1	—	r_*	144.53	$144.57^{+0.62}_{-0.61}$ $(+0.1\sigma)$	10^9A_{t}	0.040	< 0.145 (-0.2σ)
A_{100}^{dust}	1.004	$1.00^{+0.38}_{-0.38}$	$100\theta_*$	1.04104	$1.04105^{+0.00062}_{-0.00061}$ $(+0.1\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	0.036	< 0.131 (-0.2σ)
A_{143}^{dust}	0.972	$0.96^{+0.35}_{-0.34}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.883	$13.887^{+0.058}_{-0.057}$ $(+0.1\sigma)$	f_{2000}^{143}	30.1	30^{+6}_{-6} (-0.5σ)
A_{217}^{dust}	0.971	$0.98^{+0.20}_{-0.20}$	z_{drag}	1059.70	$1059.70^{+0.65}_{-0.65}$ $(+0.7\sigma)$	f_{2000}^{217}	106.92	$106.9^{+3.8}_{-3.8}$ (-0.6σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.009	$1.03^{+0.32}_{-0.31}$	r_{drag}	147.23	$147.26^{+0.62}_{-0.62}$ (-0.0σ)	$f_{2000}^{143 \times 217}$	32.25	32^{+4}_{-4} (-0.7σ)
c_{100}	0.99764	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	k_{D}	0.14065	$0.14062^{+0.00070}_{-0.00070}$ $(+0.3\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	735.45	739.9 $(\nu: 3.7)$
c_{217}	1.00126	$1.0011^{+0.0030}_{-0.0031}$ $(+4.6\sigma)$	$100\theta_{\mathrm{D}}$	0.160882	$0.16089^{+0.00039}_{-0.00038}$ (-0.7σ)	χ_{small}^2	395.96	397.2 $(\nu: 1.7)$ $(+0.0\sigma)$
c_{TE}	0.9966	$0.9967^{+0.0097}_{-0.0095}$	z_{eq}	3397	3394^{+62}_{-61} (-0.2σ)	χ_{lowl}^2	23.74	24.2 $(\nu: 0.7)$ (-0.4σ)
c_{EE}	0.9921	$0.9921^{+0.0097}_{-0.0097}$	k_{eq}	0.010369	$0.01036^{+0.00019}_{-0.00019}$ (-0.2σ)	$\chi_{\mathrm{CamSpec}}^2$	11498.9	11513.5 $(\nu: 15.6)$
H_0	67.29	$67.3^{+1.2}_{-1.2}$ $(+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	0.8139	$0.814^{+0.012}_{-0.011}$ $(+0.2\sigma)$	χ_{prior}^2	2.2	9.5 $(\nu: 7.1)$ $(+0.6\sigma)$
Ω_{Λ}	0.6846	$0.685^{+0.016}_{-0.017}$ $(+0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4498	$0.4501^{+0.0060}_{-0.0059}$ $(+0.2\sigma)$	χ_{CMB}^2	12654.1	12674.8 $(\nu: 20.2)$ $(+2030.8\sigma)$
Ω_{m}	0.3154	$0.315^{+0.017}_{-0.016}$ (-0.3σ)	$H(0.15)$	72.61	$72.7^{+1.0}_{-1.0}$ $(+0.4\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 12656.30$; $\bar{\chi}_{\mathrm{eff}}^2 = 12684.27$; $R - 1 = 0.00430$

χ_{eff}^2 : CMB - BK15_dust: 735.45 small_100x143_offlike5_EE_Aplanck_B: 395.96 commander_dx12_v3_2_29: 23.74 CamSpec like_10.7HM_1400_unified: 11498.91

17.63 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022330	$0.02233^{+0.00029}_{-0.00029}$ (+0.9 σ)	$\Omega_{\mathrm{m}}h^3$	0.09609	$0.09608^{+0.00062}_{-0.00062}$ (+0.5 σ)	$D_{\mathrm{M}}(0.38)$	1528.3	1528^{+15}_{-15} (−0.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.11901	$0.1190^{+0.0020}_{-0.0020}$ (−0.6 σ)	σ_8	0.8079	$0.808^{+0.015}_{-0.014}$ (−0.3 σ)	$H(0.51)$	89.727	$89.73^{+0.46}_{-0.46}$ (+0.8 σ)
$100\theta_{\mathrm{MC}}$	1.04095	$1.04095^{+0.00058}_{-0.00058}$ (+0.3 σ)	S_8	0.8213	$0.821^{+0.025}_{-0.025}$ (−0.6 σ)	$D_{\mathrm{M}}(0.51)$	1980.1	1980^{+18}_{-18} (−0.7 σ)
τ	0.0548	$0.055^{+0.016}_{-0.016}$ (+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4498	$0.450^{+0.014}_{-0.014}$ (−0.6 σ)	$H(0.61)$	95.333	$95.33^{+0.38}_{-0.38}$ (+0.8 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0415	$3.041^{+0.033}_{-0.032}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6028	$0.603^{+0.014}_{-0.014}$ (−0.5 σ)	$D_{\mathrm{M}}(0.61)$	2304.3	2304^{+19}_{-19} (−0.7 σ)
n_{s}	0.9681	$0.9678^{+0.0078}_{-0.0079}$ (+0.7 σ)	$\sigma_8/h^{0.5}$	0.9821	$0.982^{+0.020}_{-0.020}$ (−0.5 σ)	$H(2.33)$	235.87	$235.9^{+1.2}_{-1.2}$ (−0.5 σ)
r	0.0213	< 0.0713 (−0.2 σ)	$r_{\mathrm{drag}}h$	99.76	$99.8^{+1.6}_{-1.5}$ (+0.7 σ)	$D_{\mathrm{M}}(2.33)$	5762.7	5763^{+18}_{-18} (−0.8 σ)
y_{cal}	1.00068	$1.0008^{+0.0049}_{-0.0048}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4264	$2.427^{+0.050}_{-0.050}$ (−0.5 σ)	$f\sigma_8(0.15)$	0.4545	$0.454^{+0.013}_{-0.013}$ (−0.6 σ)
$A_{B,\mathrm{dust}}$	4.57	$4.9^{+2.1}_{-1.9}$	z_{re}	7.72	$7.7^{+1.6}_{-1.6}$ (+0.3 σ)	$\sigma_8(0.15)$	0.7467	$0.747^{+0.013}_{-0.013}$ (−0.2 σ)
$A_{B,\mathrm{sync}}$	1.40	< 3.66	$10^9 A_{\mathrm{s}}$	2.094	$2.094^{+0.071}_{-0.066}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4731	$0.473^{+0.011}_{-0.011}$ (−0.5 σ)
$\alpha_{B,\mathrm{dust}}$	−0.49	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8765	$1.877^{+0.022}_{-0.022}$ (−0.5 σ)	$\sigma_8(0.38)$	0.6621	$0.662^{+0.012}_{-0.011}$ (−0.1 σ)
$\beta_{B,\mathrm{dust}}$	1.580	$1.60^{+0.19}_{-0.19}$	D_{40}	1229.1	1234^{+27}_{-26} (−0.6 σ)	$f\sigma_8(0.51)$	0.4719	$0.472^{+0.010}_{-0.010}$ (−0.5 σ)
$\alpha_{B,\mathrm{sync}}$	−0.35	—	D_{220}	5718	5720^{+77}_{-75} (+0.2 σ)	$\sigma_8(0.51)$	0.6197	$0.620^{+0.011}_{-0.010}$ (−0.0 σ)
$\beta_{B,\mathrm{sync}}$	−3.04	$−3.10^{+0.52}_{-0.56}$	D_{810}	2535.9	2536^{+27}_{-26} (−0.1 σ)	$f\sigma_8(0.61)$	0.4671	$0.4670^{+0.0096}_{-0.0095}$ (−0.5 σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	−0.35	$−0.36^{+0.53}_{-0.57}$	D_{1420}	816.8	$816.6^{+9.6}_{-9.5}$ (+0.3 σ)	$\sigma_8(0.61)$	0.5897	$0.590^{+0.010}_{-0.0097}$ (+0.0 σ)
A_{100}^{PS}	232.9	239^{+50}_{-50} (−0.8 σ)	D_{2000}	230.66	$230.6^{+3.2}_{-3.2}$ (+0.5 σ)	$f\sigma_8(2.33)$	0.2974	$0.2973^{+0.0052}_{-0.0049}$ (+0.1 σ)
A_{143}^{PS}	38.7	39^{+20}_{-20} (−1.2 σ)	$n_{\mathrm{s},0.002}$	0.9681	$0.9678^{+0.0078}_{-0.0079}$ (+0.7 σ)	$\sigma_8(2.33)$	0.3066	$0.3066^{+0.0054}_{-0.0051}$ (+0.3 σ)
A_{217}^{PS}	102.6	103^{+30}_{-30} (−1.2 σ)	Y_{P}	0.245379	$0.24538^{+0.00011}_{-0.00012}$ (+0.9 σ)	$r_{0.002}$	0.0194	< 0.0663 (−0.2 σ)
A_{217}^{CIB}	44.1	39^{+10}_{-10} (−1.2 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246706	$0.24670^{+0.00011}_{-0.00012}$ (+0.9 σ)	$r_{0.01}$	0.0204	< 0.0688 (−0.2 σ)
A_{143}^{tSZ}	6.61	< 7.52 (−0.6 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.593	$2.594^{+0.055}_{-0.052}$ (−0.9 σ)	$\ln(10^{10}A_{\mathrm{t}})$	−0.81	$−0.6^{+1.4}_{-1.8}$ (+0.1 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.594	$0.66^{+0.26}_{-0.25}$	Age/Gyr	13.7965	$13.797^{+0.042}_{-0.042}$ (−0.8 σ)	r_{10}	0.0099	< 0.0340 (−0.2 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.77	—	z_*	1089.883	$1089.89^{+0.46}_{-0.45}$ (−0.9 σ)	$10^9 A_{\mathrm{t}}$	0.045	< 0.149 (−0.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.08	—	r_*	144.718	$144.72^{+0.50}_{-0.48}$ (+0.4 σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.040	< 0.134 (−0.2 σ)
A^{kSZ}	0.0	—	$100\theta_*$	1.04114	$1.04114^{+0.00057}_{-0.00058}$ (+0.2 σ)	f_{2000}^{143}	29.7	29^{+6}_{-5} (−0.5 σ)
A_{100}^{dust}	1.009	$1.00^{+0.38}_{-0.39}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.9000	$13.900^{+0.047}_{-0.046}$ (+0.4 σ)	f_{2000}^{217}	106.70	$106.8^{+3.8}_{-3.8}$ (−0.7 σ)
A_{143}^{dust}	0.968	$0.96^{+0.34}_{-0.34}$	z_{drag}	1059.78	$1059.76^{+0.63}_{-0.63}$ (+0.8 σ)	$f_{2000}^{143 \times 217}$	31.86	32^{+4}_{-4} (−0.8 σ)
A_{217}^{dust}	0.972	$0.98^{+0.20}_{-0.20}$	r_{drag}	147.40	$147.40^{+0.53}_{-0.51}$ (+0.3 σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.72	740.2 (ν : 3.6)
$A_{143 \times 217}^{\mathrm{dust}}$	1.004	$1.03^{+0.32}_{-0.32}$	k_{D}	0.14051	$0.14050^{+0.00064}_{-0.00064}$ (+0.0 σ)	χ_{simall}^2	396.16	397.3 (ν : 1.9) (+0.1 σ)
c_{100}	0.99763	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_{\mathrm{D}}$	0.160851	$0.16086^{+0.00038}_{-0.00037}$ (−0.8 σ)	χ_{lowl}^2	23.32	23.8 (ν : 0.6) (−0.6 σ)
c_{217}	1.00128	$1.0011^{+0.0030}_{-0.0031}$ (+4.6 σ)	z_{eq}	3377.6	3378^{+46}_{-46} (−0.6 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.2	11513.4 (ν : 15.5)
c_{TE}	0.9966	$0.9968^{+0.0098}_{-0.0096}$	k_{eq}	0.010309	$0.01031^{+0.00014}_{-0.00014}$ (−0.6 σ)	$\chi_{6\mathrm{DF}}^2$	0.022	0.048 (ν : 0.0)
c_{EE}	0.9923	$0.9924^{+0.0095}_{-0.0096}$	$100\theta_{\mathrm{eq}}$	0.8176	$0.8177^{+0.0087}_{-0.0085}$ (+0.6 σ)	χ_{MGS}^2	1.28	1.33 (ν : 0.1)
H_0	67.68	$67.68^{+0.90}_{-0.89}$ (+0.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.45167	$0.4517^{+0.0045}_{-0.0044}$ (+0.6 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.23	4.6 (ν : 0.9)
Ω_{Λ}	0.6900	$0.690^{+0.012}_{-0.012}$ (+0.7 σ)	$H(0.15)$	72.94	$72.94^{+0.77}_{-0.76}$ (+0.7 σ)	χ_{prior}^2	2.3	9.5 (ν : 7.2) (+0.6 σ)
Ω_{m}	0.3100	$0.310^{+0.012}_{-0.012}$ (−0.7 σ)	$D_{\mathrm{M}}(0.15)$	640.7	$640.7^{+7.6}_{-7.6}$ (−0.7 σ)	χ_{BAO}^2	5.54	6.0 (ν : 0.5)
$\Omega_{\mathrm{m}}h^2$	0.14199	$0.1420^{+0.0019}_{-0.0019}$ (−0.6 σ)	$H(0.38)$	83.03	$83.02^{+0.57}_{-0.56}$ (+0.8 σ)	χ_{CMB}^2	12654.4	12674.7 (ν : 19.9) (+2030.8 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 12662.21$; $\bar{\chi}_{\mathrm{eff}}^2 = 12690.24$; $R - 1 = 0.00669$
 χ_{eff}^2 : BAO - 6DF: 0.02 MGS: 1.28 DR12BAO: 4.24 CMB - BK15_dust: 735.72 simall_100x143_offlike5_EE_Aplanck_B: 396.17 commander_dx12_v3_2_29: 23.32 CamSpec like_10.7HM_1400_unified: 11499.19

17.64 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022288	$0.02228^{+0.00031}_{-0.00030}$ $(+0.7\sigma)$	$\Omega_{\mathrm{m}}h^2$	0.14281	$0.1427^{+0.0023}_{-0.0022}$ (-0.2σ)	$D_{\mathrm{M}}(0.15)$	643.8	$643.6^{+9.2}_{-9.2}$ (-0.4σ)
$\Omega_{\mathrm{c}}h^2$	0.11988	$0.1198^{+0.0024}_{-0.0024}$ (-0.3σ)	$\Omega_{\mathrm{m}}h^3$	0.09613	$0.09608^{+0.00062}_{-0.00061}$ $(+0.5\sigma)$	$H(0.38)$	82.81	$82.82^{+0.68}_{-0.66}$ $(+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	1.04086	$1.04085^{+0.00061}_{-0.00061}$ $(+0.1\sigma)$	σ_8	0.8100	$0.810^{+0.012}_{-0.012}$ (-0.0σ)	$D_{\mathrm{M}}(0.38)$	1534.5	1534^{+18}_{-18} (-0.4σ)
τ	0.0534	$0.054^{+0.015}_{-0.015}$ $(+0.3\sigma)$	S_8	0.8303	$0.830^{+0.025}_{-0.025}$ (-0.2σ)	$H(0.51)$	89.56	$89.57^{+0.55}_{-0.53}$ $(+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0412	$3.042^{+0.030}_{-0.028}$ $(+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4548	$0.455^{+0.014}_{-0.014}$ (-0.2σ)	$D_{\mathrm{M}}(0.51)$	1987.3	1987^{+21}_{-22} (-0.4σ)
n_{s}	0.9657	$0.9658^{+0.0084}_{-0.0083}$ $(+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6070	$0.607^{+0.013}_{-0.013}$ (-0.2σ)	$H(0.61)$	95.210	$95.21^{+0.45}_{-0.43}$ $(+0.5\sigma)$
r	0.0192	< 0.0687 (-0.2σ)	$\sigma_8/h^{0.5}$	0.9873	$0.987^{+0.018}_{-0.018}$ (-0.2σ)	$D_{\mathrm{M}}(0.61)$	2312.0	2312^{+23}_{-23} (-0.4σ)
y_{cal}	1.00074	$1.0008^{+0.0049}_{-0.0049}$ $(+0.1\sigma)$	$r_{\mathrm{drag}}h$	99.09	$99.2^{+1.9}_{-1.8}$ $(+0.3\sigma)$	$H(2.33)$	236.39	$236.3^{+1.4}_{-1.4}$ (-0.2σ)
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	2.4397	$2.440^{+0.043}_{-0.043}$ (-0.2σ)	$D_{\mathrm{M}}(2.33)$	5767.6	5768^{+20}_{-21} (-0.5σ)
$A_{B,\mathrm{sync}}$	1.43	< 3.69	z_{re}	7.60	$7.7^{+1.5}_{-1.5}$ $(+0.3\sigma)$	$f\sigma_8(0.15)$	0.4591	$0.459^{+0.013}_{-0.013}$ (-0.2σ)
$\alpha_{B,\mathrm{dust}}$	-0.51	—	10^9A_{s}	2.093	$2.096^{+0.063}_{-0.058}$ $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7482	$0.748^{+0.011}_{-0.010}$ $(+0.0\sigma)$
$\beta_{B,\mathrm{dust}}$	1.580	$1.60^{+0.19}_{-0.19}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8811	$1.880^{+0.021}_{-0.021}$ (-0.2σ)	$f\sigma_8(0.38)$	0.4766	$0.476^{+0.010}_{-0.010}$ (-0.2σ)
$\alpha_{B,\mathrm{sync}}$	-0.35	—	D_{40}	1234.0	1238^{+27}_{-25} (-0.3σ)	$\sigma_8(0.38)$	0.6628	$0.6630^{+0.0097}_{-0.0093}$ $(+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	-3.04	$-3.10^{+0.52}_{-0.55}$	D_{220}	5720	5719^{+77}_{-77} $(+0.2\sigma)$	$f\sigma_8(0.51)$	0.4747	$0.4747^{+0.0090}_{-0.0090}$ (-0.2σ)
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.36	$-0.36^{+0.52}_{-0.57}$	D_{810}	2537.4	2537^{+26}_{-26} $(+0.0\sigma)$	$\sigma_8(0.51)$	0.6201	$0.6203^{+0.0091}_{-0.0087}$ $(+0.1\sigma)$
A_{100}^{PS}	233.7	240^{+50}_{-50} (-0.8σ)	D_{1420}	816.5	$816.2^{+9.7}_{-9.7}$ $(+0.2\sigma)$	$f\sigma_8(0.61)$	0.4695	$0.4694^{+0.0082}_{-0.0081}$ (-0.1σ)
A_{143}^{PS}	42.9	40^{+20}_{-20} (-1.2σ)	D_{2000}	230.52	$230.4^{+3.3}_{-3.3}$ $(+0.4\sigma)$	$\sigma_8(0.61)$	0.5899	$0.5902^{+0.0088}_{-0.0083}$ $(+0.1\sigma)$
A_{217}^{PS}	102.9	103^{+30}_{-30} (-1.2σ)	$n_{\mathrm{s},0.002}$	0.9657	$0.9658^{+0.0084}_{-0.0083}$ $(+0.3\sigma)$	$f\sigma_8(2.33)$	0.29730	$0.2974^{+0.0046}_{-0.0043}$ $(+0.2\sigma)$
A_{217}^{CIB}	44.0	40^{+10}_{-10} (-1.2σ)	Y_{P}	0.245362	$0.24536^{+0.00012}_{-0.00013}$ $(+0.7\sigma)$	$\sigma_8(2.33)$	0.30634	$0.3065^{+0.0050}_{-0.0046}$ $(+0.3\sigma)$
A_{143}^{tSZ}	6.56	< 7.48 (-0.6σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246689	$0.24668^{+0.00012}_{-0.00013}$ $(+0.7\sigma)$	$r_{0.002}$	0.0173	< 0.0634 (-0.2σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.632	$0.66^{+0.25}_{-0.25}$	$10^5\mathrm{D}/\mathrm{H}$	2.601	$2.603^{+0.058}_{-0.057}$ (-0.7σ)	$r_{0.01}$	0.0182	< 0.0661 (-0.2σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.82	—	Age/Gyr	13.8069	$13.808^{+0.046}_{-0.047}$ (-0.5σ)	$\ln(10^{10}A_{\mathrm{t}})$	-0.91	$-0.7^{+1.4}_{-1.9}$ $(+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.29	—	z_*	1090.01	$1090.02^{+0.52}_{-0.52}$ (-0.6σ)	r_{10}	0.0088	< 0.0326 (-0.2σ)
A^{kSZ}	0.0	—	r_*	144.53	$144.56^{+0.55}_{-0.54}$ $(+0.1\sigma)$	10^9A_{t}	0.040	< 0.144 (-0.2σ)
A_{100}^{dust}	1.003	$1.00^{+0.38}_{-0.38}$	$100\theta_*$	1.04105	$1.04104^{+0.00060}_{-0.00060}$ $(+0.0\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	0.036	< 0.129 (-0.2σ)
A_{143}^{dust}	0.981	$0.96^{+0.35}_{-0.34}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.883	$13.886^{+0.052}_{-0.051}$ $(+0.0\sigma)$	f_{2000}^{143}	30.0	30^{+6}_{-5} (-0.5σ)
A_{217}^{dust}	0.973	$0.98^{+0.20}_{-0.20}$	z_{drag}	1059.74	$1059.71^{+0.64}_{-0.65}$ $(+0.7\sigma)$	f_{2000}^{217}	106.80	$106.9^{+3.8}_{-3.8}$ (-0.6σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.001	$1.03^{+0.32}_{-0.31}$	r_{drag}	147.21	$147.25^{+0.56}_{-0.56}$ (-0.1σ)	$f_{2000}^{143 \times 217}$	32.13	32^{+4}_{-4} (-0.7σ)
c_{100}	0.99768	$0.9975^{+0.0021}_{-0.0020}$ (-3.4σ)	k_{D}	0.14067	$0.14062^{+0.00066}_{-0.00066}$ $(+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.85	9.29 $(\nu: 0.2)$
c_{217}	1.00130	$1.0011^{+0.0030}_{-0.0030}$ $(+4.6\sigma)$	$100\theta_{\mathrm{D}}$	0.160866	$0.16088^{+0.00038}_{-0.00038}$ (-0.7σ)	$\chi_{\mathrm{BKPLANCK}}^2$	735.41	739.9 $(\nu: 3.5)$
c_{TE}	0.9964	$0.9966^{+0.0097}_{-0.0095}$	z_{eq}	3397	3394^{+54}_{-53} (-0.2σ)	χ_{small}^2	396.01	397.2 $(\nu: 1.5)$ $(+0.0\sigma)$
c_{EE}	0.9919	$0.9922^{+0.0096}_{-0.0097}$	k_{eq}	0.010369	$0.01036^{+0.00017}_{-0.00016}$ (-0.2σ)	χ_{lowl}^2	23.74	24.2 $(\nu: 0.7)$ (-0.4σ)
H_0	67.31	$67.3^{+1.1}_{-1.1}$ $(+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	0.8139	$0.814^{+0.010}_{-0.010}$ $(+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	11498.9	11513.1 $(\nu: 15.1)$
Ω_{Λ}	0.6848	$0.685^{+0.015}_{-0.015}$ $(+0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	0.4498	$0.4500^{+0.0052}_{-0.0052}$ $(+0.2\sigma)$	χ_{prior}^2	2.3	9.4 $(\nu: 7.1)$ $(+0.6\sigma)$
Ω_{m}	0.3152	$0.315^{+0.015}_{-0.015}$ (-0.3σ)	$H(0.15)$	72.63	$72.65^{+0.93}_{-0.91}$ $(+0.4\sigma)$	χ_{CMB}^2	12662.9	12683.6 $(\nu: 20.2)$ $(+2032.4\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 12665.14$; $\bar{\chi}_{\mathrm{eff}}^2 = 12693.08$; $R - 1 = 0.00549$

χ_{eff}^2 : CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 8.85 BK15.dust: 735.41 small.100x143_offlike5.EE.Aplanck_B: 396.01 commander_dx12.v3.2.29: 23.74 CamSpec like_10.7HM.1400.unified: 11498.88

17.65 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022314	$0.02233^{+0.00029}_{-0.00029}$ $(+0.9\sigma)$	σ_8	0.8091	$0.809^{+0.012}_{-0.011}$ (-0.1σ)	$D_M(0.51)$	1982.5	1981^{+17}_{-17} (-0.7σ)
$\Omega_c h^2$	0.11928	$0.1191^{+0.0019}_{-0.0019}$ (-0.6σ)	S_8	0.8247	$0.824^{+0.021}_{-0.020}$ (-0.5σ)	$H(0.61)$	95.288	$95.32^{+0.37}_{-0.37}$ $(+0.8\sigma)$
$100\theta_{MC}$	1.04091	$1.04094^{+0.00058}_{-0.00058}$ $(+0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4517	$0.451^{+0.011}_{-0.011}$ (-0.5σ)	$D_M(0.61)$	2306.9	2305^{+18}_{-18} (-0.7σ)
τ	0.0547	$0.056^{+0.015}_{-0.014}$ $(+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6046	$0.604^{+0.011}_{-0.011}$ (-0.4σ)	$H(2.33)$	236.03	$235.9^{+1.1}_{-1.2}$ (-0.5σ)
$\ln(10^{10} A_s)$	3.0431	$3.045^{+0.030}_{-0.028}$ $(+0.4\sigma)$	$\sigma_8/h^{0.5}$	0.9845	$0.984^{+0.016}_{-0.016}$ (-0.4σ)	$D_M(2.33)$	5764.5	5763^{+18}_{-18} (-0.8σ)
n_s	0.9670	$0.9674^{+0.0077}_{-0.0077}$ $(+0.6\sigma)$	$r_{drag} h$	99.54	$99.7^{+1.4}_{-1.4}$ $(+0.6\sigma)$	$f\sigma_8(0.15)$	0.4563	$0.456^{+0.011}_{-0.011}$ (-0.5σ)
r	0.0197	< 0.0701 (-0.2σ)	$\langle d^2 \rangle^{1/2}$	2.4334	$2.433^{+0.040}_{-0.040}$ (-0.3σ)	$\sigma_8(0.15)$	0.7477	$0.748^{+0.011}_{-0.010}$ (-0.0σ)
y_{cal}	1.00104	$1.0009^{+0.0048}_{-0.0049}$ $(+0.2\sigma)$	z_{re}	7.72	$7.8^{+1.4}_{-1.4}$ $(+0.5\sigma)$	$f\sigma_8(0.38)$	0.4746	$0.4743^{+0.0090}_{-0.0089}$ (-0.4σ)
$A_{B,dust}$	4.62	$4.9^{+2.1}_{-1.9}$	$10^9 A_s$	2.097	$2.101^{+0.063}_{-0.058}$ $(+0.4\sigma)$	$\sigma_8(0.38)$	0.6627	$0.6632^{+0.0099}_{-0.0093}$ $(+0.1\sigma)$
$A_{B,sync}$	1.48	< 3.68	$10^9 A_s e^{-2\tau}$	1.8796	$1.878^{+0.020}_{-0.021}$ (-0.3σ)	$f\sigma_8(0.51)$	0.4731	$0.4730^{+0.0082}_{-0.0081}$ (-0.4σ)
$\alpha_{B,dust}$	-0.50	—	D_{40}	1232.4	1236^{+26}_{-25} (-0.4σ)	$\sigma_8(0.51)$	0.6202	$0.6207^{+0.0093}_{-0.0087}$ $(+0.2\sigma)$
$\beta_{B,dust}$	1.579	$1.60^{+0.19}_{-0.19}$	D_{220}	5725	5724^{+75}_{-75} $(+0.3\sigma)$	$f\sigma_8(0.61)$	0.4682	$0.4681^{+0.0077}_{-0.0076}$ (-0.3σ)
$\alpha_{B,sync}$	-0.22	—	D_{810}	2538.2	2537^{+26}_{-26} $(+0.0\sigma)$	$\sigma_8(0.61)$	0.5901	$0.5906^{+0.0089}_{-0.0083}$ $(+0.2\sigma)$
$\beta_{B,sync}$	-3.04	$-3.10^{+0.52}_{-0.56}$	D_{1420}	817.1	$816.9^{+9.6}_{-9.5}$ $(+0.4\sigma)$	$f\sigma_8(2.33)$	0.29754	$0.2978^{+0.0046}_{-0.0043}$ $(+0.4\sigma)$
$\epsilon_{dust,sync}$	-0.34	$-0.36^{+0.52}_{-0.57}$	D_{2000}	230.72	$230.7^{+3.2}_{-3.2}$ $(+0.5\sigma)$	$\sigma_8(2.33)$	0.30674	$0.3071^{+0.0049}_{-0.0045}$ $(+0.5\sigma)$
A_{100}^{PS}	233.6	239^{+50}_{-50} (-0.8σ)	$n_{s,0.002}$	0.9670	$0.9674^{+0.0077}_{-0.0077}$ $(+0.6\sigma)$	$r_{0.002}$	0.0179	< 0.0651 (-0.2σ)
A_{143}^{PS}	40.5	39^{+20}_{-20} (-1.2σ)	Y_P	0.245373	$0.24538^{+0.00011}_{-0.00012}$ $(+0.9\sigma)$	$r_{0.01}$	0.0188	< 0.0676 (-0.2σ)
A_{217}^{PS}	103.0	103^{+30}_{-30} (-1.2σ)	Y_P^{BBN}	0.246699	$0.24670^{+0.00011}_{-0.00012}$ $(+0.9\sigma)$	$\ln(10^{10} A_t)$	-0.88	$-0.7^{+1.4}_{-1.9}$ $(+0.0\sigma)$
A_{217}^{CIB}	44.1	39^{+10}_{-10} (-1.3σ)	$10^5 D/H$	2.596	$2.594^{+0.055}_{-0.052}$ (-0.9σ)	r_{10}	0.0091	< 0.0334 (-0.2σ)
A_{143}^{tSZ}	6.54	< 7.53 (-0.6σ)	Age/Gyr	13.8005	$13.798^{+0.041}_{-0.041}$ (-0.8σ)	$10^9 A_t$	0.041	< 0.147 (-0.2σ)
$r_{143 \times 217}^{PS}$	0.609	$0.66^{+0.26}_{-0.25}$	z_*	1089.927	$1089.90^{+0.45}_{-0.44}$ (-0.9σ)	$10^9 A_t e^{-2\tau}$	0.037	< 0.132 (-0.2σ)
$r_{143 \times 217}^{CIB}$	0.79	—	r_*	144.660	$144.69^{+0.46}_{-0.45}$ $(+0.3\sigma)$	f_{2000}^{143}	29.9	29^{+6}_{-5} (-0.6σ)
$\xi^{tSZ \times CIB}$	0.16	—	$100\theta_*$	1.04110	$1.04113^{+0.00058}_{-0.00058}$ $(+0.2\sigma)$	f_{2000}^{217}	106.89	$106.8^{+3.8}_{-3.8}$ (-0.7σ)
A^{kSZ}	0.0	—	$D_M(z_*)/\text{Gpc}$	13.8949	$13.898^{+0.045}_{-0.043}$ $(+0.3\sigma)$	$f_{2000}^{143 \times 217}$	32.05	32^{+4}_{-4} (-0.8σ)
A_{100}^{dust}	1.007	$1.00^{+0.39}_{-0.39}$	z_{drag}	1059.74	$1059.77^{+0.62}_{-0.64}$ $(+0.8\sigma)$	$\chi^2_{lensing}$	8.87	9.25 $(\nu: 0.2)$
A_{143}^{dust}	0.972	$0.96^{+0.35}_{-0.34}$	r_{drag}	147.345	$147.37^{+0.50}_{-0.48}$ $(+0.2\sigma)$	$\chi^2_{BKPLANCK}$	735.58	740.0 $(\nu: 3.5)$
A_{217}^{dust}	0.973	$0.98^{+0.20}_{-0.20}$	k_D	0.14056	$0.14053^{+0.00062}_{-0.00063}$ $(+0.1\sigma)$	χ^2_{small}	396.18	397.4 $(\nu: 1.9)$ $(+0.2\sigma)$
$A_{143 \times 217}^{dust}$	1.003	$1.03^{+0.32}_{-0.32}$	$100\theta_D$	0.160857	$0.16085^{+0.00038}_{-0.00037}$ (-0.9σ)	χ^2_{lowl}	23.52	24.0 $(\nu: 0.6)$ (-0.6σ)
c_{100}	0.99766	$0.9975^{+0.0021}_{-0.0020}$ (-3.4σ)	z_{eq}	3383.7	3380^{+42}_{-43} (-0.5σ)	$\chi^2_{CamSpec}$	11498.9	11512.9 $(\nu: 15.0)$
c_{217}	1.00128	$1.0011^{+0.0030}_{-0.0030}$ $(+4.6\sigma)$	k_{eq}	0.010327	$0.01032^{+0.00013}_{-0.00013}$ (-0.5σ)	χ^2_{6DF}	0.037	0.050 $(\nu: 0.0)$
c_{TE}	0.9966	$0.9966^{+0.0098}_{-0.0095}$	$100\theta_{eq}$	0.8165	$0.8172^{+0.0081}_{-0.0079}$ $(+0.5\sigma)$	χ^2_{MGS}	1.16	1.28 $(\nu: 0.1)$
c_{EE}	0.9925	$0.9924^{+0.0095}_{-0.0096}$	$100\theta_{s,eq}$	0.45107	$0.4514^{+0.0041}_{-0.0040}$ $(+0.5\sigma)$	$\chi^2_{DR12BAO}$	4.60	4.7 $(\nu: 0.8)$
H_0	67.56	$67.63^{+0.85}_{-0.84}$ $(+0.7\sigma)$	$H(0.15)$	72.84	$72.90^{+0.73}_{-0.72}$ $(+0.7\sigma)$	χ^2_{prior}	2.3	9.4 $(\nu: 7.2)$ $(+0.6\sigma)$
Ω_Λ	0.6883	$0.689^{+0.011}_{-0.011}$ $(+0.6\sigma)$	$D_M(0.15)$	641.7	$641.1^{+7.2}_{-7.2}$ (-0.7σ)	χ^2_{CMB}	12663.0	12683.6 $(\nu: 20.2)$ $(+2032.4\sigma)$
Ω_m	0.3117	$0.311^{+0.011}_{-0.011}$ (-0.6σ)	$H(0.38)$	82.95	$83.00^{+0.54}_{-0.54}$ $(+0.7\sigma)$	χ^2_{BAO}	5.79	6.1 $(\nu: 0.5)$
$\Omega_m h^2$	0.14224	$0.1421^{+0.0018}_{-0.0018}$ (-0.5σ)	$D_M(0.38)$	1530.4	1529^{+14}_{-14} (-0.7σ)			
$\Omega_m h^3$	0.09609	$0.09610^{+0.00062}_{-0.00062}$ $(+0.5\sigma)$	$H(0.51)$	89.669	$89.71^{+0.44}_{-0.44}$ $(+0.7\sigma)$			

Best-fit $\chi^2_{eff} = 12671.15$; $\bar{\chi}^2_{eff} = 12699.13$; $R - 1 = 0.00878$

χ^2_{eff} : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.59 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.87 BK15_dust: 735.58 small_100x143_offlike5_EE_Aplanck_B: 396.18 commander_dx12_v3.2.29: 23.52 CamSpec like_10.7HM_1400_unified: 11498.90

17.66 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02228^{+0.00031}_{-0.00031} \quad (+0.7\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0026}_{-0.0026} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+10}_{-10} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0027}_{-0.0027} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09608^{+0.00063}_{-0.00062} \quad (+0.5\sigma)$	$H(0.38)$	$82.84^{+0.75}_{-0.74} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04086^{+0.00063}_{-0.00062} \quad (+0.1\sigma)$	σ_8	$0.811^{+0.014}_{-0.013} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+21}_{-20} \quad (-0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	S_8	$0.830^{+0.032}_{-0.031} \quad (-0.2\sigma)$	$H(0.51)$	$89.58^{+0.60}_{-0.58} \quad (+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.028}_{-0.026} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+24}_{-24} \quad (-0.4\sigma)$
n_{s}	$0.9662^{+0.0090}_{-0.0088} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$H(0.61)$	$95.22^{+0.48}_{-0.47} \quad (+0.5\sigma)$
r	$< 0.0693 \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.023}_{-0.022} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+26}_{-26} \quad (-0.4\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$99.2^{+2.1}_{-2.1} \quad (+0.3\sigma)$	$H(2.33)$	$236.3^{+1.6}_{-1.6} \quad (-0.2\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.055}_{-0.053} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+22}_{-22} \quad (-0.5\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	z_{re}	$< 8.94 \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	10^9A_{s}	$2.098^{+0.060}_{-0.055} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.012}_{-0.011} \quad (+0.0\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.023}_{-0.023} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{40}	$1237^{+28}_{-27} \quad (-0.4\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0095} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{220}	$5716^{+77}_{-77} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.475^{+0.012}_{-0.011} \quad (-0.2\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.52}_{-0.57}$	D_{810}	$2536^{+27}_{-27} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.6206^{+0.0094}_{-0.0087} \quad (+0.2\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{1420}	$816.1^{+9.7}_{-9.7} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.470^{+0.010}_{-0.010} \quad (-0.1\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{2000}	$230.4^{+3.3}_{-3.3} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0088}_{-0.0081} \quad (+0.2\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9662^{+0.0090}_{-0.0088} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0044}_{-0.0040} \quad (+0.3\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	Y_{P}	$0.24536^{+0.00012}_{-0.00013} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0046}_{-0.0042} \quad (+0.3\sigma)$
A_{143}^{tSZ}	$< 7.49 \quad (-0.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24668^{+0.00012}_{-0.00013} \quad (+0.7\sigma)$	$r_{0.002}$	$< 0.0642 \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$10^5\mathrm{D}/\mathrm{H}$	$2.603^{+0.059}_{-0.057} \quad (-0.7\sigma)$	$r_{0.01}$	$< 0.0667 \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.807^{+0.049}_{-0.049} \quad (-0.5\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.7^{+1.4}_{-1.9} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_*	$1090.01^{+0.56}_{-0.54} \quad (-0.6\sigma)$	r_{10}	$< 0.0329 \quad (-0.2\sigma)$
A^{kSZ}	—	r_*	$144.57^{+0.62}_{-0.61} \quad (+0.1\sigma)$	10^9A_{t}	$< 0.145 \quad (-0.2\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	$100\theta_*$	$1.04105^{+0.00062}_{-0.00061} \quad (+0.1\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.130 \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.058}_{-0.057} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_{drag}	$1059.71^{+0.64}_{-0.65} \quad (+0.7\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.8} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_{drag}	$147.27^{+0.62}_{-0.62} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	k_{D}	$0.14061^{+0.00070}_{-0.00070} \quad (+0.3\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.9 \quad (\nu: 3.7)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16088^{+0.00038}_{-0.00038} \quad (-0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.0\sigma)$
c_{TE}	$0.9966^{+0.0097}_{-0.0096}$	z_{eq}	$3393^{+61}_{-61} \quad (-0.2\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 0.7) \quad (-0.4\sigma)$
c_{EE}	$0.9921^{+0.0097}_{-0.0097}$	k_{eq}	$0.01036^{+0.00019}_{-0.00019} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.4 \quad (\nu: 15.5)$
H_0	$67.4^{+1.2}_{-1.2} \quad (+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.011} \quad (+0.3\sigma)$	χ_{prior}^2	$9.5 \quad (\nu: 7.1) \quad (+0.6\sigma)$
Ω_{Λ}	$0.686^{+0.016}_{-0.017} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4501^{+0.0060}_{-0.0059} \quad (+0.2\sigma)$	χ_{CMB}^2	$12674.6 \quad (\nu: 19.8) \quad (+2030.8\sigma)$
Ω_{m}	$0.314^{+0.017}_{-0.016} \quad (-0.3\sigma)$	$H(0.15)$	$72.7^{+1.0}_{-1.0} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12684.04; R - 1 = 0.00482$$

17.67 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02233^{+0.00028}_{-0.00029} \quad (+0.9\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09609^{+0.00063}_{-0.00063} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+15}_{-15} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1190^{+0.0020}_{-0.0020} \quad (-0.6\sigma)$	σ_8	$0.809^{+0.013}_{-0.013} \quad (-0.2\sigma)$	$H(0.51)$	$89.73^{+0.46}_{-0.46} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00058}_{-0.00059} \quad (+0.3\sigma)$	S_8	$0.822^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+18}_{-18} \quad (-0.8\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$H(0.61)$	$95.34^{+0.38}_{-0.38} \quad (+0.8\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+19}_{-20} \quad (-0.8\sigma)$
n_{s}	$0.9679^{+0.0078}_{-0.0079} \quad (+0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.020}_{-0.019} \quad (-0.5\sigma)$	$H(2.33)$	$235.9^{+1.2}_{-1.3} \quad (-0.5\sigma)$
r	$< 0.0713 \quad (-0.2\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.6}_{-1.5} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+19}_{-18} \quad (-0.8\sigma)$
y_{cal}	$1.0008^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.048}_{-0.046} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.013}_{-0.012} \quad (-0.6\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	z_{re}	$< 9.01 \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.011} \quad (-0.1\sigma)$
$A_{B,\mathrm{sync}}$	< 3.66	$10^9 A_{\mathrm{s}}$	$2.098^{+0.062}_{-0.056} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.5\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0095} \quad (+0.0\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{40}	$1234^{+27}_{-26} \quad (-0.6\sigma)$	$f\sigma_8(0.51)$	$0.4723^{+0.0099}_{-0.0094} \quad (-0.5\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{220}	$5720^{+77}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6202^{+0.0095}_{-0.0088} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.56}$	D_{810}	$2536^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4675^{+0.0093}_{-0.0087} \quad (-0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.53}_{-0.57}$	D_{1420}	$816.6^{+9.6}_{-9.5} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0090}_{-0.0083} \quad (+0.1\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{2000}	$230.6^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0045}_{-0.0042} \quad (+0.3\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	$n_{\mathrm{s},0.002}$	$0.9679^{+0.0078}_{-0.0079} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0047}_{-0.0043} \quad (+0.4\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$r_{0.002}$	$< 0.0663 \quad (-0.2\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$r_{0.01}$	$< 0.0688 \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.6\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.594^{+0.055}_{-0.052} \quad (-0.9\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.6^{+1.4}_{-1.8} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.797^{+0.042}_{-0.042} \quad (-0.8\sigma)$	r_{10}	$< 0.0340 \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	z_*	$1089.89^{+0.46}_{-0.45} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.150 \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	r_*	$144.72^{+0.50}_{-0.48} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{t}}e^{-2\tau}$	$< 0.134 \quad (-0.2\sigma)$
A^{kSZ}	—	$100\theta_*$	$1.04114^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.048}_{-0.046} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8} \quad (-0.7\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	z_{drag}	$1059.76^{+0.63}_{-0.63} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_{drag}	$147.41^{+0.53}_{-0.51} \quad (+0.3\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$740.1 \quad (\nu: 3.5)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	k_{D}	$0.14050^{+0.00065}_{-0.00064} \quad (+0.0\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.0) \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16086^{+0.00038}_{-0.00037} \quad (-0.8\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.6\sigma)$	z_{eq}	$3377^{+45}_{-46} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.3 \quad (\nu: 15.4)$
c_{TE}	$0.9967^{+0.0098}_{-0.0095}$	k_{eq}	$0.01031^{+0.00014}_{-0.00014} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
c_{EE}	$0.9923^{+0.0095}_{-0.0096}$	$100\theta_{\mathrm{eq}}$	$0.8177^{+0.0087}_{-0.0085} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
H_0	$67.68^{+0.90}_{-0.89} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0045}_{-0.0044} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.9)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.7\sigma)$	$H(0.15)$	$72.95^{+0.77}_{-0.76} \quad (+0.7\sigma)$	χ_{prior}^2	$9.5 \quad (\nu: 7.2) \quad (+0.6\sigma)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.6^{+7.6}_{-7.6} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0019}_{-0.0019} \quad (-0.6\sigma)$	$H(0.38)$	$83.03^{+0.57}_{-0.56} \quad (+0.8\sigma)$	χ_{CMB}^2	$12674.5 \quad (\nu: 19.6) \quad (+2030.8\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12690.02; R - 1 = 0.00713$$

17.68 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00031}_{-0.00030} \quad (+0.7\sigma)$	$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0022}_{-0.0022} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.4^{+9.0}_{-9.1} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1197^{+0.0023}_{-0.0023} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}} h^3$	$0.09608^{+0.00063}_{-0.00062} \quad (+0.5\sigma)$	$H(0.38)$	$82.84^{+0.67}_{-0.65} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04086^{+0.00061}_{-0.00061} \quad (+0.1\sigma)$	σ_8	$0.811^{+0.012}_{-0.011} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+18}_{-18} \quad (-0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	S_8	$0.830^{+0.025}_{-0.025} \quad (-0.2\sigma)$	$H(0.51)$	$89.58^{+0.54}_{-0.52} \quad (+0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.026}_{-0.025} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+21}_{-21} \quad (-0.4\sigma)$
n_{s}	$0.9660^{+0.0084}_{-0.0082} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.013}_{-0.012} \quad (-0.2\sigma)$	$H(0.61)$	$95.22^{+0.44}_{-0.42} \quad (+0.5\sigma)$
r	$< 0.0688 \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+23}_{-23} \quad (-0.4\sigma)$
y_{cal}	$1.0008^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.2^{+1.9}_{-1.8} \quad (+0.3\sigma)$	$H(2.33)$	$236.3^{+1.4}_{-1.4} \quad (-0.2\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.043}_{-0.042} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+20}_{-21} \quad (-0.5\sigma)$
$A_{B,\mathrm{sync}}$	< 3.69	z_{re}	$< 8.93 \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	$10^9 A_{\mathrm{s}}$	$2.100^{+0.056}_{-0.052} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0093} \quad (+0.1\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{40}	$1238^{+26}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.38)$	$0.6635^{+0.0088}_{-0.0083} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{220}	$5719^{+76}_{-77} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4749^{+0.0089}_{-0.0089} \quad (-0.1\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.52}_{-0.57}$	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.6208^{+0.0083}_{-0.0078} \quad (+0.2\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{1420}	$816.2^{+9.7}_{-9.7} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.4697^{+0.0081}_{-0.0080} \quad (-0.1\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{2000}	$230.4^{+3.3}_{-3.3} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0079}_{-0.0074} \quad (+0.2\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0084}_{-0.0082} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0041}_{-0.0038} \quad (+0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	Y_{P}	$0.24536^{+0.00012}_{-0.00013} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3068^{+0.0044}_{-0.0041} \quad (+0.4\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.6\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00013} \quad (+0.7\sigma)$	$r_{0.002}$	$< 0.0635 \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.602^{+0.057}_{-0.056} \quad (-0.7\sigma)$	$r_{0.01}$	$< 0.0661 \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.807^{+0.045}_{-0.046} \quad (-0.5\sigma)$	$\ln(10^{10} A_{\mathrm{t}})$	$-0.7^{+1.4}_{-1.9} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_*	$1090.00^{+0.52}_{-0.51} \quad (-0.6\sigma)$	r_{10}	$< 0.0326 \quad (-0.2\sigma)$
A^{kSZ}	—	r_*	$144.57^{+0.54}_{-0.54} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}}$	$< 0.144 \quad (-0.2\sigma)$
A_{100}^{dust}	$1.00^{+0.39}_{-0.38}$	$100\theta_*$	$1.04105^{+0.00060}_{-0.00060} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{t}} e^{-2\tau}$	$< 0.129 \quad (-0.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.051}_{-0.050} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_{drag}	$1059.71^{+0.64}_{-0.66} \quad (+0.7\sigma)$	f_{2000}^{217}	$106.9^{+3.8}_{-3.8} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_{drag}	$147.27^{+0.56}_{-0.55} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	k_{D}	$0.14062^{+0.00066}_{-0.00066} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.25 \quad (\nu: 0.2)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16088^{+0.00038}_{-0.00038} \quad (-0.8\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.8 \quad (\nu: 3.5)$
c_{TE}	$0.9966^{+0.0097}_{-0.0095}$	z_{eq}	$3393^{+53}_{-53} \quad (-0.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{EE}	$0.9921^{+0.0095}_{-0.0097}$	k_{eq}	$0.01036^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	χ_{lowl}^2	$24.2 \quad (\nu: 0.7) \quad (-0.4\sigma)$
H_0	$67.4^{+1.1}_{-1.0} \quad (+0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.010}_{-0.0099} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.0 \quad (\nu: 15.0)$
Ω_{Λ}	$0.686^{+0.014}_{-0.015} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4502^{+0.0052}_{-0.0051} \quad (+0.2\sigma)$	χ_{prior}^2	$9.4 \quad (\nu: 7.1) \quad (+0.6\sigma)$
Ω_{m}	$0.314^{+0.015}_{-0.014} \quad (-0.4\sigma)$	$H(0.15)$	$72.68^{+0.92}_{-0.88} \quad (+0.4\sigma)$	χ_{CMB}^2	$12683.5 \quad (\nu: 20.0) \quad (+2032.4\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12692.90; R - 1 = 0.00651$$

17.69 base_r_CamSpecHM_TTTEE_lowl_lowE_BK15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02233^{+0.00028}_{-0.00029} \quad (+0.9\sigma)$	σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+17}_{-17} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0018}_{-0.0019} \quad (-0.6\sigma)$	S_8	$0.824^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$H(0.61)$	$95.32^{+0.37}_{-0.37} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00058}_{-0.00059} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+18}_{-18} \quad (-0.7\sigma)$
τ	$0.057^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.4\sigma)$	$H(2.33)$	$235.9^{+1.1}_{-1.2} \quad (-0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.027}_{-0.026} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.015} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+18}_{-18} \quad (-0.8\sigma)$
n_{s}	$0.9674^{+0.0077}_{-0.0076} \quad (+0.6\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.4}_{-1.4} \quad (+0.6\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.011} \quad (-0.5\sigma)$
r	$< 0.0702 \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.434^{+0.040}_{-0.038} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.0099} \quad (+0.0\sigma)$
y_{cal}	$1.0009^{+0.0048}_{-0.0049} \quad (+0.2\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.4745^{+0.0089}_{-0.0088} \quad (-0.4\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	10^9A_{s}	$2.103^{+0.057}_{-0.054} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.6635^{+0.0091}_{-0.0087} \quad (+0.2\sigma)$
$A_{B,\mathrm{sync}}$	< 3.68	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.020}_{-0.021} \quad (-0.4\sigma)$	$f\sigma_8(0.51)$	$0.4732^{+0.0081}_{-0.0079} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	D_{40}	$1236^{+26}_{-25} \quad (-0.4\sigma)$	$\sigma_8(0.51)$	$0.6210^{+0.0086}_{-0.0081} \quad (+0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	D_{220}	$5724^{+75}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4683^{+0.0076}_{-0.0073} \quad (-0.3\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.5909^{+0.0082}_{-0.0077} \quad (+0.3\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.52}_{-0.55}$	D_{1420}	$816.8^{+9.6}_{-9.5} \quad (+0.4\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0042}_{-0.0040} \quad (+0.4\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.36^{+0.52}_{-0.57}$	D_{2000}	$230.7^{+3.2}_{-3.2} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0045}_{-0.0042} \quad (+0.5\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	$n_{\mathrm{s},0.002}$	$0.9674^{+0.0077}_{-0.0076} \quad (+0.6\sigma)$	$r_{0.002}$	$< 0.0652 \quad (-0.2\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$r_{0.01}$	$< 0.0677 \quad (-0.2\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.7^{+1.4}_{-1.9} \quad (+0.0\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.594^{+0.055}_{-0.052} \quad (-0.9\sigma)$	r_{10}	$< 0.0335 \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.6\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.797^{+0.041}_{-0.041} \quad (-0.8\sigma)$	10^9A_{t}	$< 0.148 \quad (-0.2\sigma)$
$r_{143\times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	z_*	$1089.90^{+0.45}_{-0.44} \quad (-0.9\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.132 \quad (-0.2\sigma)$
$r_{143\times 217}^{\mathrm{CIB}}$	—	r_*	$144.70^{+0.46}_{-0.45} \quad (+0.3\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$100\theta_*$	$1.04113^{+0.00058}_{-0.00058} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.8} \quad (-0.7\sigma)$
A^{kSZ}	—	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.898^{+0.045}_{-0.043} \quad (+0.3\sigma)$	$f_{2000}^{143\times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
A_{100}^{dust}	$1.00^{+0.39}_{-0.39}$	z_{drag}	$1059.77^{+0.62}_{-0.64} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.21 \quad (\nu: 0.2)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	r_{drag}	$147.38^{+0.49}_{-0.48} \quad (+0.2\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$740.0 \quad (\nu: 3.5)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	k_{D}	$0.14053^{+0.00063}_{-0.00063} \quad (+0.1\sigma)$	χ_{small}^2	$397.4 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00038}_{-0.00037} \quad (-0.9\sigma)$	χ_{lowl}^2	$24.0 \quad (\nu: 0.6) \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	z_{eq}	$3380^{+42}_{-43} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11512.9 \quad (\nu: 15.0)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.6\sigma)$	k_{eq}	$0.01032^{+0.00013}_{-0.00013} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.049 \quad (\nu: 0.0)$
c_{TE}	$0.9966^{+0.0098}_{-0.0095}$	$100\theta_{\mathrm{eq}}$	$0.8173^{+0.0080}_{-0.0078} \quad (+0.6\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
c_{EE}	$0.9924^{+0.0095}_{-0.0096}$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0041}_{-0.0040} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.8)$
H_0	$67.64^{+0.84}_{-0.83} \quad (+0.7\sigma)$	$H(0.15)$	$72.91^{+0.73}_{-0.72} \quad (+0.7\sigma)$	χ_{prior}^2	$9.4 \quad (\nu: 7.2) \quad (+0.6\sigma)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.0^{+7.2}_{-7.1} \quad (-0.7\sigma)$	χ_{CMB}^2	$12683.5 \quad (\nu: 20.0) \quad (+2032.4\sigma)$
Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$H(0.38)$	$83.01^{+0.54}_{-0.54} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.03 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}}h^2$	$0.1421^{+0.0017}_{-0.0018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+14}_{-14} \quad (-0.7\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.09610^{+0.00063}_{-0.00062} \quad (+0.5\sigma)$	$H(0.51)$	$89.71^{+0.44}_{-0.44} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12699.00; R - 1 = 0.00924$$

17.70 base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022382	$0.02236^{+0.00028}_{-0.00028}$ $(+1.1\sigma)$	Ω_{Λ}	0.6841	$0.684^{+0.014}_{-0.015}$ $(+0.2\sigma)$	$H(0.15)$	72.65	$72.63^{+0.91}_{-0.90}$ $(+0.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.12011	$0.1201^{+0.0023}_{-0.0023}$ (-0.1σ)	Ω_{m}	0.3159	$0.316^{+0.015}_{-0.014}$ (-0.2σ)	$D_{\mathrm{M}}(0.15)$	643.7	$643.9^{+9.1}_{-9.0}$ (-0.3σ)
$100\theta_{\mathrm{MC}}$	1.04089	$1.04091^{+0.00061}_{-0.00061}$ $(+0.2\sigma)$	$\Omega_{\mathrm{m}}h^2$	0.14313	$0.1431^{+0.0022}_{-0.0022}$ $(+0.0\sigma)$	$H(0.38)$	82.84	$82.83^{+0.66}_{-0.65}$ $(+0.4\sigma)$
τ	0.0546	$0.055^{+0.015}_{-0.014}$ $(+0.4\sigma)$	$\Omega_{\mathrm{m}}h^3$	0.09635	$0.09632^{+0.00057}_{-0.00057}$ $(+1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	1534.1	1535^{+18}_{-18} (-0.4σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0456	$3.046^{+0.029}_{-0.028}$ $(+0.4\sigma)$	σ_8	0.8123	$0.812^{+0.012}_{-0.012}$ $(+0.2\sigma)$	$H(0.51)$	89.61	$89.60^{+0.53}_{-0.52}$ $(+0.5\sigma)$
n_{s}	0.9659	$0.9651^{+0.0079}_{-0.0080}$ $(+0.2\sigma)$	S_8	0.8334	$0.834^{+0.025}_{-0.025}$ (-0.1σ)	$D_{\mathrm{M}}(0.51)$	1986.6	1987^{+21}_{-21} (-0.4σ)
r	0.0153	< 0.0614 (-0.3σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4565	$0.457^{+0.014}_{-0.014}$ (-0.1σ)	$H(0.61)$	95.269	$95.26^{+0.43}_{-0.42}$ $(+0.6\sigma)$
y_{cal}	1.00057	$1.0009^{+0.0049}_{-0.0048}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6089	$0.609^{+0.012}_{-0.013}$ (-0.0σ)	$D_{\mathrm{M}}(0.61)$	2311.1	2312^{+23}_{-23} (-0.4σ)
$A_{B,\mathrm{dust}}$	4.62	$4.9^{+2.1}_{-1.9}$	$\sigma_8/h^{0.5}$	0.9900	$0.990^{+0.018}_{-0.018}$ (-0.0σ)	$H(2.33)$	236.64	$236.6^{+1.4}_{-1.4}$ $(+0.1\sigma)$
$A_{B,\mathrm{sync}}$	1.44	< 3.67	$r_{\mathrm{drag}}h$	98.99	$99.0^{+1.8}_{-1.8}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	5763.7	5765^{+20}_{-20} (-0.7σ)
$\alpha_{B,\mathrm{dust}}$	-0.51	—	$\langle d^2 \rangle^{1/2}$	2.4463	$2.448^{+0.042}_{-0.042}$ $(+0.0\sigma)$	$f\sigma_8(0.15)$	0.4607	$0.461^{+0.013}_{-0.013}$ (-0.1σ)
$\beta_{B,\mathrm{dust}}$	1.576	$1.60^{+0.19}_{-0.19}$	z_{re}	7.71	$7.7^{+1.4}_{-1.5}$ $(+0.3\sigma)$	$\sigma_8(0.15)$	0.7501	$0.750^{+0.011}_{-0.010}$ $(+0.2\sigma)$
$\alpha_{B,\mathrm{sync}}$	-0.39	—	$10^9 A_{\mathrm{s}}$	2.102	$2.103^{+0.061}_{-0.057}$ $(+0.4\sigma)$	$f\sigma_8(0.38)$	0.4781	$0.478^{+0.010}_{-0.010}$ (-0.0σ)
$\beta_{B,\mathrm{sync}}$	-3.03	$-3.10^{+0.52}_{-0.55}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8846	$1.885^{+0.021}_{-0.021}$ $(+0.1\sigma)$	$\sigma_8(0.38)$	0.6645	$0.6644^{+0.0094}_{-0.0091}$ $(+0.3\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	-0.34	$-0.34^{+0.53}_{-0.58}$	D_{40}	1235.1	1241^{+25}_{-24} (-0.2σ)	$f\sigma_8(0.51)$	0.4762	$0.4762^{+0.0089}_{-0.0090}$ $(+0.0\sigma)$
A_{217}^{CIB}	46.8	47^{+10}_{-10} (-0.1σ)	D_{220}	5732	5735^{+75}_{-75} $(+0.6\sigma)$	$\sigma_8(0.51)$	0.6216	$0.6215^{+0.0089}_{-0.0086}$ $(+0.3\sigma)$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.48	—	D_{810}	2541.4	2541^{+26}_{-26} $(+0.3\sigma)$	$f\sigma_8(0.61)$	0.4709	$0.4709^{+0.0081}_{-0.0082}$ $(+0.1\sigma)$
A_{143}^{tSZ}	7.15	$5.5^{+3.6}_{-4.0}$ $(+0.2\sigma)$	D_{1420}	818.4	$817.7^{+9.4}_{-9.3}$ $(+0.5\sigma)$	$\sigma_8(0.61)$	0.5914	$0.5913^{+0.0085}_{-0.0082}$ $(+0.4\sigma)$
A_{100}^{PS}	250	259^{+50}_{-50} (-0.1σ)	D_{2000}	231.31	$231.0^{+3.1}_{-3.1}$ $(+0.7\sigma)$	$f\sigma_8(2.33)$	0.29800	$0.2980^{+0.0044}_{-0.0042}$ $(+0.4\sigma)$
A_{143}^{PS}	48.2	46^{+20}_{-20} (-0.4σ)	$n_{\mathrm{s},0.002}$	0.9659	$0.9651^{+0.0079}_{-0.0080}$ $(+0.2\sigma)$	$\sigma_8(2.33)$	0.30704	$0.3070^{+0.0048}_{-0.0045}$ $(+0.4\sigma)$
$A_{143\times 217}^{\mathrm{PS}}$	48.7	42^{+20}_{-20} (-0.1σ)	Y_{P}	0.245400	$0.24539^{+0.00010}_{-0.00012}$ $(+1.0\sigma)$	$r_{0.002}$	0.0138	< 0.0563 (-0.3σ)
A_{217}^{PS}	120.4	115^{+20}_{-20} (-0.0σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246727	$0.24671^{+0.00011}_{-0.00012}$ $(+1.0\sigma)$	$r_{0.01}$	0.0145	< 0.0588 (-0.3σ)
A^{kSZ}	0.00	< 7.99 (-0.1σ)	$10^5\mathrm{D}/\mathrm{H}$	2.583	$2.588^{+0.054}_{-0.051}$ (-1.1σ)	$\ln(10^{10}A_{\mathrm{t}})$	-1.14	$-0.9^{+1.5}_{-2.0}$ (-0.1σ)
$A_{100}^{\mathrm{dustTT}}$	8.76	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	Age/Gyr	13.7975	$13.799^{+0.045}_{-0.045}$ (-0.7σ)	r_{10}	0.0070	< 0.0289 (-0.3σ)
$A_{143}^{\mathrm{dustTT}}$	10.97	$10.9^{+3.5}_{-3.5}$ $(+0.1\sigma)$	z_{*}	1089.91	$1089.95^{+0.50}_{-0.49}$ (-0.8σ)	$10^9 A_{\mathrm{t}}$	0.032	< 0.129 (-0.3σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.8	$18.5^{+6.4}_{-6.4}$ $(+0.1\sigma)$	r_{*}	144.39	$144.41^{+0.52}_{-0.52}$ (-0.3σ)	$10^9 A_{\mathrm{t}}e^{-2\tau}$	0.029	< 0.116 (-0.3σ)
$A_{217}^{\mathrm{dustTT}}$	95.2	94^{+10}_{-10} $(+0.0\sigma)$	$100\theta_{*}$	1.04107	$1.04110^{+0.00060}_{-0.00060}$ $(+0.2\sigma)$	f_{2000}^{143}	28.8	30^{+5}_{-5} (-0.5σ)
$A_{100}^{\mathrm{dustTE}}$	0.116	$0.115^{+0.075}_{-0.075}$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	13.8698	$13.871^{+0.049}_{-0.049}$ (-0.3σ)	$f_{2000}^{143\times 217}$	31.95	32^{+4}_{-4} (-0.6σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	z_{drag}	1059.97	$1059.91^{+0.55}_{-0.59}$ $(+1.2\sigma)$	f_{2000}^{217}	106.59	$107.1^{+3.4}_{-3.5}$ (-0.5σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	r_{drag}	147.05	$147.08^{+0.52}_{-0.51}$ (-0.4σ)	$\chi_{\mathrm{lensing}}^2$	8.86	9.28 $(\nu: 0.3)$
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.23^{+0.11}_{-0.11}$	k_{D}	0.14092	$0.14087^{+0.00058}_{-0.00058}$ $(+0.8\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	735.35	739.6 $(\nu: 3.4)$
$A_{143\times 217}^{\mathrm{dustTE}}$	0.664	$0.67^{+0.16}_{-0.16}$	$100\theta_{\mathrm{D}}$	0.160733	$0.16077^{+0.00034}_{-0.00033}$ (-1.2σ)	χ_{small}^2	396.18	397.2 $(\nu: 1.6)$ $(+0.1\sigma)$
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.09^{+0.53}_{-0.53}$	z_{eq}	3405	3405^{+53}_{-53} $(+0.0\sigma)$	χ_{lowl}^2	23.79	24.4 $(\nu: 0.6)$ (-0.3σ)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	k_{eq}	0.010392	$0.01039^{+0.00016}_{-0.00016}$ $(+0.0\sigma)$	χ_{plik}^2	2344.5	2359.0 $(\nu: 15.8)$ $(+294.1\sigma)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	$100\theta_{\mathrm{eq}}$	0.8128	$0.813^{+0.010}_{-0.0098}$ $(+0.1\sigma)$	χ_{prior}^2	1.7	13.2 $(\nu: 11.7)$ $(+1.6\sigma)$
H_0	67.32	$67.3^{+1.1}_{-1.0}$ $(+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4491	$0.4491^{+0.0051}_{-0.0050}$ $(+0.0\sigma)$	χ_{CMB}^2	3508.7	3529.5 $(\nu: 20.8)$ $(+413.2\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 3510.40$; $\bar{\chi}_{\mathrm{eff}}^2 = 3542.67$; $R - 1 = 0.00459$
 χ_{eff}^2 : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.86 BK15_dust: 735.35 small_100x143_offlike5_EE_Aplanck_B: 396.18 commander_dx12_v3.2.29: 23.79
plik_rd12_HM_v22b_TTTEEE: 2344.50

17.71 base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022426	$0.02241^{+0.00026}_{-0.00026}$ (+1.3 σ)	$\Omega_{\text{m}}h^2$	0.14249	$0.1425^{+0.0017}_{-0.0018}$ (−0.3 σ)	$H(0.51)$	89.760	$89.75^{+0.44}_{-0.43}$ (+0.8 σ)
$\Omega_{\text{c}}h^2$	0.11941	$0.1194^{+0.0018}_{-0.0019}$ (−0.4 σ)	$\Omega_{\text{m}}h^3$	0.09637	$0.09633^{+0.00057}_{-0.00058}$ (+1.0 σ)	$D_{\text{M}}(0.51)$	1980.4	1981^{+17}_{-17} (−0.7 σ)
$100\theta_{\text{MC}}$	1.04100	$1.04100^{+0.00058}_{-0.00058}$ (+0.4 σ)	σ_8	0.8111	$0.811^{+0.012}_{-0.011}$ (+0.1 σ)	$H(0.61)$	95.384	$95.38^{+0.37}_{-0.35}$ (+0.9 σ)
τ	0.0560	$0.057^{+0.015}_{-0.014}$ (+0.6 σ)	S_8	0.8265	$0.827^{+0.021}_{-0.021}$ (−0.4 σ)	$D_{\text{M}}(0.61)$	2304.4	2305^{+18}_{-18} (−0.7 σ)
$\ln(10^{10}A_{\text{s}})$	3.0474	$3.048^{+0.028}_{-0.028}$ (+0.6 σ)	$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4527	$0.453^{+0.011}_{-0.011}$ (−0.4 σ)	$H(2.33)$	236.24	$236.2^{+1.1}_{-1.1}$ (−0.2 σ)
n_{s}	0.9675	$0.9668^{+0.0073}_{-0.0072}$ (+0.5 σ)	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6060	$0.606^{+0.011}_{-0.011}$ (−0.3 σ)	$D_{\text{M}}(2.33)$	5758.9	5759^{+17}_{-18} (−1.0 σ)
r	0.0181	< 0.0629 (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9863	$0.987^{+0.016}_{-0.016}$ (−0.2 σ)	$f\sigma_8(0.15)$	0.4573	$0.457^{+0.011}_{-0.011}$ (−0.4 σ)
y_{cal}	1.00105	$1.0010^{+0.0049}_{-0.0049}$ (+0.2 σ)	$r_{\text{drag}}h$	99.54	$99.6^{+1.4}_{-1.4}$ (+0.5 σ)	$\sigma_8(0.15)$	0.7495	$0.750^{+0.011}_{-0.010}$ (+0.2 σ)
$A_{B,\text{dust}}$	4.61	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	2.4378	$2.440^{+0.040}_{-0.040}$ (−0.2 σ)	$f\sigma_8(0.38)$	0.4756	$0.4757^{+0.0090}_{-0.0091}$ (−0.3 σ)
$A_{B,\text{sync}}$	1.44	< 3.65	z_{re}	7.83	$7.9^{+1.4}_{-1.4}$ (+0.5 σ)	$\sigma_8(0.38)$	0.6644	$0.6645^{+0.0095}_{-0.0092}$ (+0.3 σ)
$\alpha_{B,\text{dust}}$	−0.50	—	10^9A_{s}	2.106	$2.108^{+0.060}_{-0.057}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4742	$0.4743^{+0.0082}_{-0.0082}$ (−0.2 σ)
$\beta_{B,\text{dust}}$	1.578	$1.60^{+0.19}_{-0.19}$	$10^9A_{\text{s}}e^{-2\tau}$	1.8829	$1.882^{+0.021}_{-0.021}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6217	$0.6219^{+0.0089}_{-0.0086}$ (+0.4 σ)
$\alpha_{B,\text{sync}}$	−0.34	—	D_{40}	1233.5	1239^{+25}_{-24} (−0.3 σ)	$f\sigma_8(0.61)$	0.4693	$0.4693^{+0.0076}_{-0.0076}$ (−0.2 σ)
$\beta_{B,\text{sync}}$	−3.04	$−3.10^{+0.53}_{-0.56}$	D_{220}	5739	5740^{+75}_{-75} (+0.7 σ)	$\sigma_8(0.61)$	0.5916	$0.5917^{+0.0085}_{-0.0082}$ (+0.4 σ)
$\epsilon_{\text{dust,sync}}$	−0.34	$−0.34^{+0.53}_{-0.58}$	D_{810}	2542.6	2541^{+26}_{-26} (+0.3 σ)	$f\sigma_8(2.33)$	0.29829	$0.2983^{+0.0044}_{-0.0042}$ (+0.6 σ)
A_{217}^{CIB}	47.4	47^{+10}_{-10} (−0.1 σ)	D_{1420}	819.3	$818.4^{+9.3}_{-9.2}$ (+0.7 σ)	$\sigma_8(2.33)$	0.30752	$0.3076^{+0.0047}_{-0.0045}$ (+0.7 σ)
$\xi^{\text{tSZ}} \times \text{CIB}$	0.40	—	D_{2000}	231.65	$231.3^{+3.1}_{-3.0}$ (+0.9 σ)	$r_{0.002}$	0.0164	< 0.0577 (−0.3 σ)
A_{143}^{tSZ}	7.24	$5.5^{+3.7}_{-3.7}$ (+0.2 σ)	$n_{\text{s},0.002}$	0.9675	$0.9668^{+0.0073}_{-0.0072}$ (+0.5 σ)	$r_{0.01}$	0.0173	< 0.0603 (−0.3 σ)
A_{100}^{PS}	251	258^{+50}_{-50} (−0.2 σ)	Y_{P}	0.245417	$0.245409^{+0.000096}_{-0.00010}$ (+1.2 σ)	$\ln(10^{10}A_{\text{t}})$	−0.96	$−0.9^{+1.5}_{-2.0}$ (−0.1 σ)
A_{143}^{PS}	46.7	45^{+20}_{-20} (−0.4 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246744	$0.246736^{+0.000097}_{-0.00010}$ (+1.2 σ)	r_{10}	0.0084	< 0.0296 (−0.3 σ)
$A_{143 \times 217}^{\text{PS}}$	46.4	42^{+20}_{-20} (−0.2 σ)	$10^5\text{D}/\text{H}$	2.5751	$2.579^{+0.049}_{-0.047}$ (−1.3 σ)	10^9A_{t}	0.038	< 0.132 (−0.3 σ)
A_{217}^{PS}	119.4	115^{+20}_{-20} (−0.0 σ)	Age/Gyr	13.7870	$13.788^{+0.039}_{-0.040}$ (−1.0 σ)	$10^9A_{\text{t}}e^{-2\tau}$	0.034	< 0.118 (−0.3 σ)
A^{kSZ}	0.00	< 7.96 (−0.2 σ)	z_*	1089.797	$1089.82^{+0.42}_{-0.42}$ (−1.1 σ)	f_{2000}^{143}	28.7	29^{+5}_{-5} (−0.6 σ)
A_{100}^{dustTT}	8.84	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	r_*	144.540	$144.56^{+0.43}_{-0.43}$ (+0.0 σ)	$f_{2000}^{143 \times 217}$	31.89	$32.0^{+3.5}_{-3.6}$ (−0.7 σ)
A_{143}^{dustTT}	11.04	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$100\theta_*$	1.04118	$1.04118^{+0.00057}_{-0.00058}$ (+0.3 σ)	f_{2000}^{217}	106.69	$106.9^{+3.4}_{-3.4}$ (−0.6 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.8	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.8823	$13.884^{+0.042}_{-0.041}$ (−0.0 σ)	χ_{lensing}^2	8.74	9.10 (ν : 0.2)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.0 σ)	z_{drag}	1060.01	$1059.98^{+0.56}_{-0.55}$ (+1.3 σ)	χ_{BKPLANCK}^2	735.50	739.8 (ν : 3.4)
A_{100}^{dustTE}	0.115	$0.115^{+0.076}_{-0.075}$	r_{drag}	147.185	$147.21^{+0.45}_{-0.45}$ (−0.2 σ)	χ_{simall}^2	396.42	397.5 (ν : 2.0) (+0.2 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.057}_{-0.058}$	k_{D}	0.14081	$0.14077^{+0.00055}_{-0.00055}$ (+0.6 σ)	χ_{lowl}^2	23.54	24.1 (ν : 0.5) (−0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.479	$0.48^{+0.17}_{-0.17}$	$100\theta_{\text{D}}$	0.160713	$0.16074^{+0.00033}_{-0.00032}$ (−1.3 σ)	χ_{plik}^2	2344.7	2359.0 (ν : 15.7) (+294.1 σ)
A_{143}^{dustTE}	0.226	$0.23^{+0.10}_{-0.11}$	z_{eq}	3389.6	3389^{+41}_{-42} (−0.3 σ)	$\chi_{6\text{DF}}^2$	0.037	0.058 (ν : 0.0)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.67^{+0.16}_{-0.16}$	k_{eq}	0.010345	$0.01034^{+0.00013}_{-0.00013}$ (−0.3 σ)	χ_{MGS}^2	1.16	1.22 (ν : 0.1)
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.53}$	$100\theta_{\text{eq}}$	0.8158	$0.8159^{+0.0079}_{-0.0077}$ (+0.4 σ)	χ_{DR12BAO}^2	4.61	4.9 (ν : 1.0)
c_{100}	0.99969	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{\text{s,eq}}$	0.45064	$0.4507^{+0.0041}_{-0.0040}$ (+0.4 σ)	χ_{prior}^2	2.0	13.3 (ν : 11.5) (+1.6 σ)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$H(0.15)$	72.92	$72.91^{+0.73}_{-0.71}$ (+0.7 σ)	χ_{CMB}^2	3508.9	3529.5 (ν : 20.6) (+413.2 σ)
H_0	67.63	$67.63^{+0.84}_{-0.82}$ (+0.7 σ)	$D_{\text{M}}(0.15)$	641.0	$641.1^{+7.1}_{-7.1}$ (−0.7 σ)	χ_{BAO}^2	5.80	6.2 (ν : 0.6)
Ω_{Λ}	0.6885	$0.688^{+0.011}_{-0.011}$ (+0.6 σ)	$H(0.38)$	83.04	$83.03^{+0.54}_{-0.53}$ (+0.8 σ)			
Ω_{m}	0.3115	$0.312^{+0.011}_{-0.011}$ (−0.6 σ)	$D_{\text{M}}(0.38)$	1528.8	1529^{+14}_{-14} (−0.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3516.64$; $\bar{\chi}_{\text{eff}}^2 = 3549.03$; $R - 1 = 0.00581$
 χ_{eff}^2 : BAO - 6DF: 0.04 MGS: 1.16 DR12BAO: 4.61 CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.74 BK15_dust: 735.50 simall_100x143_offlike5_EE_Aplanck_B: 396.42 commander_dx12_v3.2.29: 23.54 plik_rd12_HM_v22b_TTTEEE: 2344.67

17.72 base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02236^{+0.00028}_{-0.00028} \quad (+1.1\sigma)$	Ω_Λ	$0.684^{+0.014}_{-0.014} \quad (+0.2\sigma)$	$H(0.15)$	$72.65^{+0.90}_{-0.88} \quad (+0.4\sigma)$
$\Omega_c h^2$	$0.1201^{+0.0023}_{-0.0023} \quad (-0.1\sigma)$	Ω_m	$0.316^{+0.014}_{-0.014} \quad (-0.2\sigma)$	$D_M(0.15)$	$643.7^{+8.9}_{-8.9} \quad (-0.4\sigma)$
$100\theta_{MC}$	$1.04092^{+0.00061}_{-0.00061} \quad (+0.2\sigma)$	$\Omega_m h^2$	$0.1431^{+0.0021}_{-0.0022} \quad (-0.0\sigma)$	$H(0.38)$	$82.84^{+0.66}_{-0.64} \quad (+0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\Omega_m h^3$	$0.09632^{+0.00057}_{-0.00057} \quad (+1.0\sigma)$	$D_M(0.38)$	$1534^{+18}_{-18} \quad (-0.4\sigma)$
$\ln(10^{10} A_s)$	$3.047^{+0.026}_{-0.024} \quad (+0.5\sigma)$	σ_8	$0.813^{+0.011}_{-0.011} \quad (+0.2\sigma)$	$H(0.51)$	$89.61^{+0.53}_{-0.51} \quad (+0.5\sigma)$
n_s	$0.9652^{+0.0079}_{-0.0079} \quad (+0.2\sigma)$	S_8	$0.834^{+0.025}_{-0.025} \quad (-0.1\sigma)$	$D_M(0.51)$	$1987^{+21}_{-21} \quad (-0.4\sigma)$
r	$< 0.0615 \quad (-0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.457^{+0.014}_{-0.014} \quad (-0.1\sigma)$	$H(0.61)$	$95.26^{+0.43}_{-0.41} \quad (+0.6\sigma)$
y_{cal}	$1.0009^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.012}_{-0.012} \quad (+0.0\sigma)$	$D_M(0.61)$	$2311^{+22}_{-23} \quad (-0.4\sigma)$
$A_{B,dust}$	$4.9^{+2.1}_{-1.9}$	$\sigma_8/h^{0.5}$	$0.990^{+0.018}_{-0.017} \quad (+0.0\sigma)$	$H(2.33)$	$236.6^{+1.4}_{-1.4} \quad (+0.1\sigma)$
$A_{B,sync}$	< 3.67	$r_{drag} h$	$99.0^{+1.8}_{-1.8} \quad (+0.2\sigma)$	$D_M(2.33)$	$5764^{+20}_{-20} \quad (-0.7\sigma)$
$\alpha_{B,dust}$	—	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.042}_{-0.041} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$\beta_{B,dust}$	$1.60^{+0.19}_{-0.19}$	z_{re}	$< 8.92 \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.751^{+0.010}_{-0.0094} \quad (+0.3\sigma)$
$\alpha_{B,sync}$	—	$10^9 A_s$	$2.106^{+0.054}_{-0.051} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.010}_{-0.010} \quad (-0.0\sigma)$
$\beta_{B,sync}$	$-3.10^{+0.52}_{-0.55}$	$10^9 A_s e^{-2\tau}$	$1.884^{+0.021}_{-0.021} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6648^{+0.0087}_{-0.0083} \quad (+0.4\sigma)$
$\epsilon_{dust,sync}$	$-0.34^{+0.53}_{-0.58}$	D_{40}	$1241^{+25}_{-24} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	$0.4764^{+0.0088}_{-0.0089} \quad (+0.0\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5734^{+75}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.6220^{+0.0081}_{-0.0077} \quad (+0.4\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{810}	$2541^{+26}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4711^{+0.0080}_{-0.0079} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{1420}	$817.7^{+9.4}_{-9.2} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.5917^{+0.0078}_{-0.0073} \quad (+0.4\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.1\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.1} \quad (+0.7\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0040}_{-0.0038} \quad (+0.5\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	$n_{s,0.002}$	$0.9652^{+0.0079}_{-0.0079} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0043}_{-0.0041} \quad (+0.5\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	Y_P	$0.24539^{+0.00010}_{-0.00011} \quad (+1.0\sigma)$	$r_{0.002}$	$< 0.0564 \quad (-0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24672^{+0.00010}_{-0.00012} \quad (+1.0\sigma)$	$r_{0.01}$	$< 0.0588 \quad (-0.3\sigma)$
A^{kSZ}	$< 7.96 \quad (-0.1\sigma)$	$10^5 D/H$	$2.588^{+0.053}_{-0.050} \quad (-1.1\sigma)$	$\ln(10^{10} A_t)$	$-0.9^{+1.5}_{-2.0} \quad (-0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Age/Gyr	$13.799^{+0.044}_{-0.045} \quad (-0.8\sigma)$	r_{10}	$< 0.0289 \quad (-0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	z_*	$1089.94^{+0.50}_{-0.49} \quad (-0.8\sigma)$	$10^9 A_t$	$< 0.129 \quad (-0.3\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.5^{+6.4}_{-6.4} \quad (+0.1\sigma)$	r_*	$144.42^{+0.52}_{-0.51} \quad (-0.2\sigma)$	$10^9 A_t e^{-2\tau}$	$< 0.116 \quad (-0.3\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04110^{+0.00060}_{-0.00060} \quad (+0.2\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.5\sigma)$
A_{100}^{dustTE}	$0.115^{+0.075}_{-0.075}$	$D_M(z_*)/\text{Gpc}$	$13.872^{+0.048}_{-0.048} \quad (-0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.058}$	z_{drag}	$1059.92^{+0.59}_{-0.60} \quad (+1.2\sigma)$	f_{2000}^{217}	$107.0^{+3.4}_{-3.5} \quad (-0.5\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	r_{drag}	$147.08^{+0.52}_{-0.51} \quad (-0.4\sigma)$	$\chi^2_{lensing}$	$9.27 \quad (\nu: 0.3)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.11}$	k_D	$0.14087^{+0.00058}_{-0.00057} \quad (+0.8\sigma)$	$\chi^2_{BKPLANK}$	$739.6 \quad (\nu: 3.4)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	$100\theta_D$	$0.16077^{+0.00034}_{-0.00033} \quad (-1.2\sigma)$	χ^2_{small}	$397.2 \quad (\nu: 1.6) \quad (+0.0\sigma)$
A_{217}^{dustTE}	$2.09^{+0.53}_{-0.53}$	z_{eq}	$3404^{+51}_{-52} \quad (-0.0\sigma)$	χ^2_{lowl}	$24.4 \quad (\nu: 0.6) \quad (-0.3\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{eq}	$0.01039^{+0.00016}_{-0.00016} \quad (-0.0\sigma)$	χ^2_{plik}	$2358.9 \quad (\nu: 15.7) \quad (+294.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{eq}$	$0.8130^{+0.0099}_{-0.0096} \quad (+0.1\sigma)$	χ^2_{prior}	$13.2 \quad (\nu: 11.6) \quad (+1.6\sigma)$
H_0	$67.3^{+1.0}_{-1.0} \quad (+0.3\sigma)$	$100\theta_{s,eq}$	$0.4493^{+0.0051}_{-0.0049} \quad (+0.0\sigma)$	χ^2_{CMB}	$3529.3 \quad (\nu: 20.5) \quad (+413.1\sigma)$

$$\bar{\chi}^2_{eff} = 3542.49; R - 1 = 0.00477$$

17.73 base_r_plikHM_TTTEEE_lowl_lowE_BK15_lensing_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02241^{+0.00026}_{-0.00026} \quad (+1.3\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1424^{+0.0017}_{-0.0018} \quad (-0.3\sigma)$	$H(0.51)$	$89.76^{+0.44}_{-0.42} \quad (+0.8\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1194^{+0.0018}_{-0.0018} \quad (-0.5\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09633^{+0.00057}_{-0.00058} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+17}_{-17} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04101^{+0.00058}_{-0.00058} \quad (+0.4\sigma)$	σ_8	$0.812^{+0.012}_{-0.011} \quad (+0.1\sigma)$	$H(0.61)$	$95.38^{+0.37}_{-0.35} \quad (+0.9\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.7\sigma)$	S_8	$0.827^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+18}_{-18} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.049^{+0.026}_{-0.025} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.011}_{-0.011} \quad (-0.4\sigma)$	$H(2.33)$	$236.2^{+1.1}_{-1.1} \quad (-0.3\sigma)$
n_{s}	$0.9668^{+0.0073}_{-0.0071} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5759^{+17}_{-17} \quad (-1.0\sigma)$
r	$< 0.0629 \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.016}_{-0.016} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.011} \quad (-0.3\sigma)$
y_{cal}	$1.0010^{+0.0049}_{-0.0049} \quad (+0.2\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.4}_{-1.4} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.010}_{-0.0096} \quad (+0.2\sigma)$
$A_{B,\mathrm{dust}}$	$4.9^{+2.1}_{-1.9}$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.039}_{-0.038} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.4758^{+0.0089}_{-0.0089} \quad (-0.3\sigma)$
$A_{B,\mathrm{sync}}$	< 3.65	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6648^{+0.0093}_{-0.0083} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{dust}}$	—	10^9A_{s}	$2.110^{+0.056}_{-0.054} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4745^{+0.0081}_{-0.0080} \quad (-0.2\sigma)$
$\beta_{B,\mathrm{dust}}$	$1.60^{+0.19}_{-0.19}$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.020}_{-0.021} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6221^{+0.0087}_{-0.0077} \quad (+0.4\sigma)$
$\alpha_{B,\mathrm{sync}}$	—	D_{40}	$1239^{+25}_{-24} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.4695^{+0.0075}_{-0.0073} \quad (-0.1\sigma)$
$\beta_{B,\mathrm{sync}}$	$-3.10^{+0.53}_{-0.56}$	D_{220}	$5740^{+75}_{-75} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.5920^{+0.0080}_{-0.0076} \quad (+0.5\sigma)$
$\epsilon_{\mathrm{dust},\mathrm{sync}}$	$-0.34^{+0.53}_{-0.58}$	D_{810}	$2541^{+26}_{-26} \quad (+0.3\sigma)$	$f\sigma_8(2.33)$	$0.2985^{+0.0041}_{-0.0039} \quad (+0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	D_{1420}	$818.4^{+9.3}_{-9.2} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.3077^{+0.0043}_{-0.0041} \quad (+0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$231.3^{+3.1}_{-3.0} \quad (+0.9\sigma)$	$r_{0.002}$	$< 0.0578 \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.7} \quad (+0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9668^{+0.0073}_{-0.0071} \quad (+0.5\sigma)$	$r_{0.01}$	$< 0.0603 \quad (-0.3\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	Y_{P}	$0.245410^{+0.000096}_{-0.00010} \quad (+1.3\sigma)$	$\ln(10^{10}A_{\mathrm{t}})$	$-0.9^{+1.5}_{-2.0} \quad (-0.1\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246736^{+0.000096}_{-0.00010} \quad (+1.3\sigma)$	r_{10}	$< 0.0296 \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.578^{+0.049}_{-0.046} \quad (-1.3\sigma)$	10^9A_{t}	$< 0.132 \quad (-0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.788^{+0.039}_{-0.039} \quad (-1.0\sigma)$	$10^9A_{\mathrm{t}}e^{-2\tau}$	$< 0.118 \quad (-0.3\sigma)$
A^{kSZ}	$< 7.96 \quad (-0.2\sigma)$	z_*	$1089.81^{+0.42}_{-0.41} \quad (-1.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_*	$144.56^{+0.43}_{-0.42} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32.0^{+3.5}_{-3.6} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$100\theta_*$	$1.04119^{+0.00058}_{-0.00058} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.9^{+3.4}_{-3.4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.884^{+0.042}_{-0.041} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.08 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dust}TT}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.99^{+0.56}_{-0.55} \quad (+1.3\sigma)$	$\chi_{\mathrm{BKPLANCK}}^2$	$739.8 \quad (\nu: 3.4)$
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.076}_{-0.075}$	r_{drag}	$147.21^{+0.45}_{-0.45} \quad (-0.1\sigma)$	χ_{small}^2	$397.5 \quad (\nu: 2.1) \quad (+0.2\sigma)$
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.135^{+0.057}_{-0.058}$	k_{D}	$0.14077^{+0.00055}_{-0.00055} \quad (+0.6\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 0.5) \quad (-0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00033}_{-0.00032} \quad (-1.3\sigma)$	χ_{plik}^2	$2358.9 \quad (\nu: 15.6) \quad (+294.1\sigma)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.10}_{-0.11}$	z_{eq}	$3388^{+41}_{-42} \quad (-0.3\sigma)$	χ_{6DF}^2	$0.057 \quad (\nu: 0.0)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	k_{eq}	$0.01034^{+0.00013}_{-0.00013} \quad (-0.3\sigma)$	χ_{MGS}^2	$1.22 \quad (\nu: 0.1)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.53}_{-0.53}$	$100\theta_{\mathrm{eq}}$	$0.8160^{+0.0079}_{-0.0077} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 0.9)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s},\mathrm{eq}}$	$0.4508^{+0.0041}_{-0.0039} \quad (+0.4\sigma)$	χ_{prior}^2	$13.3 \quad (\nu: 11.5) \quad (+1.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$H(0.15)$	$72.92^{+0.73}_{-0.70} \quad (+0.7\sigma)$	χ_{CMB}^2	$3529.4 \quad (\nu: 20.3) \quad (+413.2\sigma)$
H_0	$67.64^{+0.84}_{-0.82} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.0^{+7.0}_{-7.1} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.6)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.6\sigma)$	$H(0.38)$	$83.04^{+0.54}_{-0.52} \quad (+0.8\sigma)$		
Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+14}_{-14} \quad (-0.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 3548.89$; $R - 1 = 0.00600$

18 w

18.1 base_w_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022222	$0.02215^{+0.00043}_{-0.00043}$	$\sigma_8 \Omega_m^{0.5}$	0.4077	$0.431^{+0.040}_{-0.036}$	$100\theta_{s,eq}$	0.4490	$0.4487^{+0.0089}_{-0.0089}$
$\Omega_c h^2$	0.12025	$0.1205^{+0.0041}_{-0.0040}$	$\sigma_8 \Omega_m^{0.25}$	0.6626	$0.643^{+0.038}_{-0.045}$	$H(0.15)$	88.7	$81.8^{+7.7}_{-10}$
$100\theta_{MC}$	1.04088	$1.04080^{+0.00092}_{-0.00093}$	$\sigma_8/h^{0.5}$	1.077	$1.045^{+0.060}_{-0.067}$	$D_M(0.15)$	481	547^{+100}_{-70}
τ	0.0523	$0.052^{+0.015}_{-0.016}$	$r_{drag}h$	147.1	125^{+20}_{-30}	$H(0.38)$	84.31	$84.0^{+2.1}_{-2.1}$
w_0	-1.97	$-1.56^{+0.60}_{-0.48}$	$\langle d^2 \rangle^{1/2}$	2.528	$2.504^{+0.086}_{-0.096}$	$D_M(0.38)$	1288	1386^{+200}_{-100}
$\ln(10^{10} A_s)$	3.0403	$3.039^{+0.032}_{-0.033}$	z_{re}	7.44	$7.4^{+1.5}_{-1.7}$	$H(0.51)$	86.62	$88.1^{+1.9}_{-2.2}$
n_s	0.9647	$0.963^{+0.011}_{-0.011}$	$10^9 A_s$	2.091	$2.088^{+0.067}_{-0.067}$	$D_M(0.51)$	1745	1840^{+170}_{-120}
y_{cal}	1.00031	$1.0004^{+0.0048}_{-0.0048}$	$10^9 A_s e^{-2\tau}$	1.8835	$1.884^{+0.026}_{-0.026}$	$H(0.61)$	90.06	$92.4^{+2.9}_{-2.8}$
A_{217}^{CIB}	48.3	48^{+10}_{-10}	D_{40}	1225.0	1230^{+31}_{-29}	$D_M(0.61)$	2085	2172^{+160}_{-110}
$\xi^{tSZ \times CIB}$	0.38	—	D_{220}	5717	5716^{+81}_{-80}	$H(2.33)$	230.54	$232.3^{+5.3}_{-4.4}$
A_{143}^{tSZ}	6.98	$5.1^{+3.8}_{-3.9}$	D_{810}	2537.0	2535^{+27}_{-26}	$D_M(2.33)$	5737.5	5750^{+44}_{-42}
A_{100}^{PS}	253	263^{+60}_{-60}	D_{1420}	815.4	$814.0^{+9.9}_{-9.6}$	$f\sigma_8(0.15)$	0.5108	$0.491^{+0.043}_{-0.041}$
A_{143}^{PS}	49.1	49^{+20}_{-20}	D_{2000}	230.40	$229.7^{+3.6}_{-3.4}$	$\sigma_8(0.15)$	1.015	$0.90^{+0.13}_{-0.16}$
$A_{143 \times 217}^{PS}$	47.5	43^{+20}_{-20}	$n_{s,0.002}$	0.9647	$0.963^{+0.011}_{-0.011}$	$f\sigma_8(0.38)$	0.648	$0.574^{+0.094}_{-0.11}$
A_{217}^{PS}	119.3	115^{+20}_{-20}	Y_P	0.245335	$0.24530^{+0.00018}_{-0.00020}$	$\sigma_8(0.38)$	0.908	$0.80^{+0.12}_{-0.15}$
A^{kSZ}	0.00	< 8.41	Y_P^{BBN}	0.246661	$0.24663^{+0.00018}_{-0.00020}$	$f\sigma_8(0.51)$	0.680	$0.59^{+0.11}_{-0.13}$
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.5}$	$10^5 D/H$	2.614	$2.627^{+0.084}_{-0.079}$	$\sigma_8(0.51)$	0.849	$0.75^{+0.11}_{-0.14}$
A_{143}^{dustTT}	10.76	$10.7^{+3.5}_{-3.5}$	Age/Gyr	13.451	$13.59^{+0.26}_{-0.19}$	$f\sigma_8(0.61)$	0.685	$0.59^{+0.11}_{-0.13}$
$A_{143 \times 217}^{dustTT}$	19.3	$18.2^{+6.4}_{-6.4}$	z_*	1090.13	$1090.24^{+0.81}_{-0.77}$	$\sigma_8(0.61)$	0.805	$0.71^{+0.10}_{-0.13}$
A_{217}^{dustTT}	94.5	93^{+10}_{-10}	r_*	144.48	$144.48^{+0.93}_{-0.93}$	$f\sigma_8(2.33)$	0.401	$0.357^{+0.048}_{-0.064}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	$100\theta_*$	1.04108	$1.04101^{+0.00091}_{-0.00092}$	$\sigma_8(2.33)$	0.401	$0.360^{+0.045}_{-0.058}$
c_{217}	0.99823	$0.9982^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.878	$13.879^{+0.087}_{-0.086}$	f_{2000}^{143}	29.7	31^{+6}_{-6}
H_0	99.9	> 66.7	z_{drag}	1059.63	$1059.46^{+0.89}_{-0.90}$	$f_{2000}^{143 \times 217}$	32.74	33^{+4}_{-4}
Ω_Λ	0.857	$0.792^{+0.069}_{-0.12}$	r_{drag}	147.19	$147.22^{+0.95}_{-0.93}$	f_{2000}^{217}	107.21	$107.9^{+3.8}_{-3.7}$
Ω_m	0.143	$0.208^{+0.12}_{-0.069}$	k_D	0.14065	$0.1406^{+0.0010}_{-0.0010}$	χ_{small}^2	395.73	396.8 (ν : 1.2)
$\Omega_m h^2$	0.14312	$0.1433^{+0.0040}_{-0.0038}$	$100\theta_D$	0.16095	$0.16104^{+0.00053}_{-0.00052}$	χ_{lowl}^2	22.64	23.2 (ν : 0.7)
$\Omega_m h^3$	0.1430	$0.122^{+0.023}_{-0.028}$	z_{eq}	3405	3408^{+95}_{-91}	χ_{plik}^2	756.6	770.0 (ν : 14.7)
σ_8	1.077	$0.96^{+0.13}_{-0.17}$	k_{eq}	0.010392	$0.01040^{+0.00029}_{-0.00028}$	χ_{prior}^2	1.3	7.2 (ν : 6.6)
S_8	0.744	$0.787^{+0.073}_{-0.065}$	$100\theta_{eq}$	0.8124	$0.812^{+0.017}_{-0.017}$	χ_{CMB}^2	1175.0	1190.0 (ν : 16.0)

Best-fit $\chi_{eff}^2 = 1176.30$; $\Delta\chi_{eff}^2 = -3.28$; $\bar{\chi}_{eff}^2 = 1197.21$; $\Delta\bar{\chi}_{eff}^2 = -2.37$; $R - 1 = 0.00888$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.73 (Δ -0.14) commander_dx12_v3_2_29: 22.64 (Δ -0.96) plik_rd12_HM_v22_TT: 756.63 (Δ -2.12)

18.2 base_w_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022274	$0.02221^{+0.00041}_{-0.00040}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6517	$0.635^{+0.028}_{-0.032}$ (−0.4 σ)	$D_M(0.15)$	479	543^{+100}_{-70} (−0.1 σ)
$\Omega_c h^2$	0.11880	$0.1193^{+0.0032}_{-0.0030}$ (−0.5 σ)	$\sigma_8/h^{0.5}$	1.0622	$1.034^{+0.043}_{-0.051}$ (−0.3 σ)	$H(0.38)$	84.97	$84.4^{+1.9}_{-2.1}$ (+0.4 σ)
$100\theta_{MC}$	1.04098	$1.04092^{+0.00086}_{-0.00091}$ (+0.2 σ)	$r_{drag}h$	147.4	126^{+20}_{-30} (+0.0 σ)	$D_M(0.38)$	1280	1378^{+200}_{-100} (−0.1 σ)
τ	0.0519	$0.051^{+0.015}_{-0.016}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.500	$2.482^{+0.055}_{-0.062}$ (−0.5 σ)	$H(0.51)$	87.18	$88.5^{+1.5}_{-1.8}$ (+0.3 σ)
w_0	−1.928	$−1.54^{+0.55}_{-0.43}$ (+0.1 σ)	z_{re}	7.37	$7.3^{+1.5}_{-1.6}$ (−0.1 σ)	$D_M(0.51)$	1734	1829^{+160}_{-110} (−0.1 σ)
$\ln(10^{10} A_s)$	3.0353	$3.034^{+0.029}_{-0.030}$ (−0.3 σ)	$10^9 A_s$	2.081	$2.079^{+0.061}_{-0.062}$ (−0.3 σ)	$H(0.61)$	90.51	$92.7^{+2.6}_{-2.5}$ (+0.2 σ)
n_s	0.9676	$0.9654^{+0.0095}_{-0.0098}$ (+0.4 σ)	$10^9 A_s e^{-2\tau}$	1.8757	$1.878^{+0.022}_{-0.022}$ (−0.4 σ)	$D_M(0.61)$	2072	2161^{+160}_{-110} (−0.2 σ)
y_{cal}	1.00002	$1.0002^{+0.0048}_{-0.0047}$ (−0.1 σ)	D_{40}	1217.1	1223^{+27}_{-25} (−0.4 σ)	$H(2.33)$	229.51	$231.5^{+5.2}_{-3.8}$ (−0.3 σ)
A_{217}^{CIB}	48.5	48^{+10}_{-10} (+0.0 σ)	D_{220}	5718	5718^{+81}_{-78} (+0.0 σ)	$D_M(2.33)$	5729.4	5743^{+43}_{-39} (−0.3 σ)
$\xi^{tSZ \times CIB}$	0.32	—	D_{810}	2533.5	2533^{+25}_{-25} (−0.2 σ)	$f\sigma_8(0.15)$	0.4978	$0.482^{+0.029}_{-0.029}$ (−0.4 σ)
A_{143}^{tSZ}	7.03	$5.1^{+3.8}_{-3.9}$ (+0.0 σ)	D_{1420}	815.1	$814.1^{+9.9}_{-9.5}$ (+0.0 σ)	$\sigma_8(0.15)$	1.001	$0.89^{+0.12}_{-0.15}$ (−0.1 σ)
A_{100}^{PS}	253	263^{+60}_{-60} (−0.0 σ)	D_{2000}	230.24	$229.7^{+3.6}_{-3.3}$ (+0.0 σ)	$f\sigma_8(0.38)$	0.632	$0.564^{+0.078}_{-0.091}$ (−0.2 σ)
A_{143}^{PS}	48.2	48^{+20}_{-20} (−0.0 σ)	$n_{s,0.002}$	0.9676	$0.9654^{+0.0095}_{-0.0098}$ (+0.4 σ)	$\sigma_8(0.38)$	0.898	$0.80^{+0.11}_{-0.14}$ (−0.1 σ)
$A_{143 \times 217}^{PS}$	46.0	43^{+20}_{-20} (−0.1 σ)	Y_P	0.245357	$0.24533^{+0.00016}_{-0.00019}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.664	$0.581^{+0.092}_{-0.11}$ (−0.1 σ)
A_{217}^{PS}	118.6	115^{+20}_{-20} (−0.1 σ)	Y_P^{BBN}	0.246683	$0.24665^{+0.00016}_{-0.00019}$ (+0.3 σ)	$\sigma_8(0.51)$	0.839	$0.75^{+0.10}_{-0.13}$ (−0.1 σ)
A^{kSZ}	0.01	< 8.34 (+0.0 σ)	$10^5 D/H$	2.604	$2.617^{+0.077}_{-0.076}$ (−0.3 σ)	$f\sigma_8(0.61)$	0.671	$0.583^{+0.097}_{-0.12}$ (−0.1 σ)
A_{100}^{dustTT}	8.97	$9.0^{+3.6}_{-3.7}$ (+0.0 σ)	Age/Gyr	13.437	$13.58^{+0.26}_{-0.18}$ (−0.1 σ)	$\sigma_8(0.61)$	0.797	$0.709^{+0.094}_{-0.12}$ (−0.1 σ)
A_{143}^{dustTT}	10.84	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	z_*	1089.93	$1090.07^{+0.70}_{-0.69}$ (−0.4 σ)	$f\sigma_8(2.33)$	0.397	$0.356^{+0.045}_{-0.059}$ (−0.0 σ)
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.3}_{-6.4}$ (+0.0 σ)	r_*	144.82	$144.73^{+0.71}_{-0.76}$ (+0.5 σ)	$\sigma_8(2.33)$	0.3980	$0.359^{+0.042}_{-0.054}$ (−0.0 σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (−0.0 σ)	$100\theta_*$	1.04117	$1.04112^{+0.00085}_{-0.00088}$ (+0.2 σ)	f_{2000}^{143}	29.8	31^{+6}_{-6} (−0.0 σ)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.909	$13.901^{+0.067}_{-0.070}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	32.73	33^{+4}_{-4} (−0.0 σ)
c_{217}	0.99825	$0.9983^{+0.0013}_{-0.0013}$ (+0.0 σ)	z_{drag}	1059.63	$1059.51^{+0.88}_{-0.87}$ (+0.1 σ)	f_{2000}^{217}	107.17	$107.8^{+3.8}_{-3.6}$ (−0.1 σ)
H_0	99.9	> 67.7 (+0.0 σ)	r_{drag}	147.52	$147.45^{+0.74}_{-0.78}$ (+0.5 σ)	$\chi^2_{lensing}$	8.41	9.0 (ν : 0.7)
Ω_Λ	0.858	$0.796^{+0.067}_{-0.11}$ (+0.1 σ)	k_D	0.14034	$0.14036^{+0.00090}_{-0.00090}$ (−0.4 σ)	χ^2_{small}	395.65	396.6 (ν : 0.9) (−0.1 σ)
Ω_m	0.142	$0.204^{+0.11}_{-0.067}$ (−0.1 σ)	$100\theta_D$	0.16094	$0.16101^{+0.00051}_{-0.00051}$ (−0.1 σ)	χ^2_{lowl}	22.16	22.74 (ν : 0.4) (−0.4 σ)
$\Omega_m h^2$	0.14172	$0.1422^{+0.0031}_{-0.0029}$ (−0.5 σ)	z_{eq}	3371	3382^{+73}_{-68} (−0.5 σ)	χ^2_{plik}	757.7	770.3 (ν : 13.9) (+0.1 σ)
$\Omega_m h^3$	0.1416	$0.121^{+0.021}_{-0.026}$ (−0.0 σ)	k_{eq}	0.010289	$0.01032^{+0.00022}_{-0.00021}$ (−0.5 σ)	χ^2_{prior}	1.3	7.3 (ν : 6.8) (+0.0 σ)
σ_8	1.062	$0.95^{+0.12}_{-0.15}$ (−0.1 σ)	$100\theta_{eq}$	0.8187	$0.816^{+0.013}_{-0.014}$ (+0.5 σ)	χ^2_{CMB}	1183.9	1198.7 (ν : 15.7) (+1.5 σ)
S_8	0.730	$0.774^{+0.069}_{-0.058}$ (−0.4 σ)	$100\theta_{s,eq}$	0.4523	$0.4512^{+0.0068}_{-0.0070}$ (+0.5 σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4000	$0.424^{+0.038}_{-0.032}$ (−0.4 σ)	$H(0.15)$	89.2	$82.3^{+7.6}_{-10}$ (+0.1 σ)			

Best-fit $\chi^2_{eff} = 1185.20$; $\Delta\chi^2_{eff} = -3.37$; $\bar{\chi}^2_{eff} = 1205.98$; $\Delta\bar{\chi}^2_{eff} = -2.44$; $R - 1 = 0.01136$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.41 (Δ -0.49) small.100x143_offlike5_EE_Aplanck_B: 395.65 (Δ -0.21) commander_dx12_v3.2.29: 22.16 (Δ -1.07) plik_rd12_HM_v22_TT: 757.66 (Δ -1.66)

18.3 base_w_plikHM_TT_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022155	$0.02212^{+0.00041}_{-0.00041}$ (-0.2σ)	$\sigma_8 \Omega_m^{0.25}$	0.6270	$0.626^{+0.028}_{-0.028}$ (-0.8σ)	$D_M(0.15)$	601.1	602^{+21}_{-19} $(+1.1\sigma)$
$\Omega_c h^2$	0.12060	$0.1206^{+0.0039}_{-0.0038}$ $(+0.1\sigma)$	$\sigma_8/h^{0.5}$	1.0189	$1.017^{+0.040}_{-0.039}$ (-0.8σ)	$H(0.38)$	83.57	$83.5^{+1.1}_{-1.1}$ (-0.4σ)
$100\theta_{MC}$	1.04079	$1.04076^{+0.00093}_{-0.00088}$ (-0.1σ)	$r_{drag}h$	108.44	$108.4^{+4.8}_{-4.9}$ (-1.1σ)	$D_M(0.38)$	1467.9	1469^{+34}_{-33} $(+1.0\sigma)$
τ	0.0524	$0.051^{+0.016}_{-0.016}$ (-0.0σ)	$\langle d^2 \rangle^{1/2}$	2.482	$2.481^{+0.082}_{-0.080}$ (-0.5σ)	$H(0.51)$	89.24	$89.2^{+1.0}_{-1.1}$ $(+1.0\sigma)$
w_0	-1.225	$-1.23^{+0.13}_{-0.13}$ $(+1.1\sigma)$	z_{re}	7.51	$7.4^{+1.6}_{-1.8}$ (-0.0σ)	$D_M(0.51)$	1919.5	1921^{+37}_{-36} $(+1.0\sigma)$
$\ln(10^{10} A_s)$	3.0411	$3.038^{+0.031}_{-0.033}$ (-0.0σ)	$10^9 A_s$	2.093	$2.087^{+0.065}_{-0.067}$ (-0.0σ)	$H(0.61)$	94.25	$94.2^{+1.1}_{-1.2}$ $(+1.1\sigma)$
n_s	0.9638	$0.963^{+0.011}_{-0.011}$ (-0.1σ)	$10^9 A_s e^{-2\tau}$	1.8846	$1.884^{+0.026}_{-0.024}$ $(+0.0\sigma)$	$D_M(0.61)$	2246.5	2248^{+38}_{-37} $(+1.0\sigma)$
y_{cal}	1.00029	$1.0003^{+0.0046}_{-0.0046}$ (-0.0σ)	D_{40}	1229.2	1231^{+30}_{-29} $(+0.1\sigma)$	$H(2.33)$	234.03	$234.0^{+2.2}_{-2.1}$ $(+0.7\sigma)$
A_{217}^{CIB}	48.5	48^{+10}_{-10} $(+0.0\sigma)$	D_{220}	5711	5712^{+76}_{-73} (-0.1σ)	$D_M(2.33)$	5758.2	5760^{+29}_{-29} $(+0.4\sigma)$
$\xi^{tSZ \times CIB}$	0.35	—	D_{810}	2537.2	2535^{+25}_{-24} (-0.0σ)	$f\sigma_8(0.15)$	0.4756	$0.475^{+0.029}_{-0.028}$ (-0.8σ)
A_{143}^{tSZ}	6.98	$5.1^{+3.7}_{-4.0}$ (-0.0σ)	D_{1420}	815.2	$813.9^{+9.9}_{-9.3}$ (-0.0σ)	$\sigma_8(0.15)$	0.8120	$0.811^{+0.042}_{-0.040}$ (-1.1σ)
A_{100}^{PS}	254	262^{+60}_{-60} (-0.0σ)	D_{2000}	230.06	$229.5^{+3.7}_{-3.3}$ (-0.1σ)	$f\sigma_8(0.38)$	0.5164	$0.516^{+0.037}_{-0.035}$ (-1.1σ)
A_{143}^{PS}	49.6	49^{+20}_{-20} $(+0.1\sigma)$	$n_{s,0.002}$	0.9638	$0.963^{+0.011}_{-0.011}$ (-0.1σ)	$\sigma_8(0.38)$	0.7213	$0.720^{+0.036}_{-0.035}$ (-1.1σ)
$A_{143 \times 217}^{PS}$	47.6	44^{+20}_{-20} $(+0.0\sigma)$	Y_P	0.245307	$0.24529^{+0.00018}_{-0.00019}$ (-0.2σ)	$f\sigma_8(0.51)$	0.5212	$0.521^{+0.038}_{-0.036}$ (-1.1σ)
A_{217}^{PS}	119.6	115^{+20}_{-20} (-0.0σ)	Y_P^{BBN}	0.246633	$0.24661^{+0.00018}_{-0.00019}$ (-0.2σ)	$\sigma_8(0.51)$	0.6747	$0.673^{+0.033}_{-0.033}$ (-1.1σ)
A^{kSZ}	0.02	< 8.25 $(+0.0\sigma)$	$10^5 D/H$	2.627	$2.634^{+0.080}_{-0.077}$ $(+0.2\sigma)$	$f\sigma_8(0.61)$	0.5185	$0.518^{+0.037}_{-0.036}$ (-1.1σ)
A_{100}^{dustTT}	8.90	$8.9^{+3.4}_{-3.5}$ $(+0.0\sigma)$	Age/Gyr	13.705	$13.711^{+0.067}_{-0.069}$ $(+1.0\sigma)$	$\sigma_8(0.61)$	0.6415	$0.640^{+0.030}_{-0.031}$ (-1.1σ)
A_{143}^{dustTT}	10.82	$10.8^{+3.5}_{-3.6}$ $(+0.0\sigma)$	z_*	1090.25	$1090.30^{+0.75}_{-0.77}$ $(+0.1\sigma)$	$f\sigma_8(2.33)$	0.3232	$0.323^{+0.014}_{-0.015}$ (-1.1σ)
$A_{143 \times 217}^{dustTT}$	19.3	$18.3^{+6.0}_{-6.5}$ $(+0.0\sigma)$	r_*	144.44	$144.47^{+0.91}_{-0.90}$ (-0.0σ)	$\sigma_8(2.33)$	0.3286	$0.328^{+0.013}_{-0.013}$ (-1.1σ)
A_{217}^{dustTT}	94.4	93^{+10}_{-10} $(+0.0\sigma)$	$100\theta_*$	1.04100	$1.04097^{+0.00094}_{-0.00087}$ (-0.1σ)	f_{2000}^{143}	30.2	31^{+6}_{-6} $(+0.1\sigma)$
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	13.875	$13.878^{+0.084}_{-0.085}$ (-0.0σ)	$f_{2000}^{143 \times 217}$	33.14	34^{+4}_{-4} $(+0.1\sigma)$
c_{217}	0.99824	$0.9983^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	z_{drag}	1059.47	$1059.39^{+0.85}_{-0.83}$ (-0.1σ)	f_{2000}^{217}	107.55	$108.1^{+3.8}_{-3.8}$ $(+0.1\sigma)$
H_0	73.68	$73.7^{+3.2}_{-3.3}$ (-1.1σ)	r_{drag}	147.17	$147.21^{+0.92}_{-0.93}$ (-0.0σ)	χ_{small}^2	395.82	$396.8 (\nu: 1.4)$ (-0.0σ)
Ω_Λ	0.7358	$0.735^{+0.023}_{-0.026}$ (-1.0σ)	k_D	0.14062	$0.1405^{+0.0010}_{-0.0010}$ (-0.0σ)	χ_{lowl}^2	23.23	$23.5 (\nu: 0.7)$ $(+0.2\sigma)$
Ω_m	0.2642	$0.265^{+0.026}_{-0.023}$ $(+1.0\sigma)$	$100\theta_D$	0.16102	$0.16107^{+0.00050}_{-0.00051}$ $(+0.1\sigma)$	χ_{plik}^2	757.8	$770.5 (\nu: 14.3)$ $(+0.1\sigma)$
$\Omega_m h^2$	0.14340	$0.1434^{+0.0037}_{-0.0037}$ $(+0.1\sigma)$	z_{eq}	3412	3411^{+88}_{-88} $(+0.1\sigma)$	$\chi_{H073p45}^2$	0.02	$1.0 (\nu: 1.0)$
$\Omega_m h^3$	0.1057	$0.1056^{+0.0054}_{-0.0053}$ (-1.1σ)	k_{eq}	0.010412	$0.01041^{+0.00027}_{-0.00027}$ $(+0.1\sigma)$	χ_{prior}^2	1.3	$7.2 (\nu: 6.5)$ (-0.0σ)
σ_8	0.8746	$0.873^{+0.045}_{-0.043}$ (-1.1σ)	$100\theta_{eq}$	0.8110	$0.811^{+0.017}_{-0.017}$ (-0.1σ)	χ_{CMB}^2	1176.8	$1190.8 (\nu: 15.4)$ $(+0.1\sigma)$
S_8	0.8207	$0.820^{+0.040}_{-0.040}$ $(+0.9\sigma)$	$100\theta_{s,eq}$	0.4483	$0.4484^{+0.0086}_{-0.0085}$ (-0.1σ)			
$\sigma_8 \Omega_m^{0.5}$	0.4495	$0.449^{+0.022}_{-0.022}$ $(+0.9\sigma)$	$H(0.15)$	76.27	$76.2^{+1.9}_{-1.9}$ (-1.1σ)			

Best-fit $\chi_{eff}^2 = 1178.12$; $\Delta\chi_{eff}^2 = -13.46$; $\bar{\chi}_{eff}^2 = 1198.92$; $\Delta\bar{\chi}_{eff}^2 = -13.16$; $R - 1 = 0.05017$
 χ_{eff}^2 : CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.82 (Δ -0.25) commander_dx12_v3_2_29: 23.23 (Δ 1.14) plik_rd12_HM_v22_TT: 757.77 (Δ -5.25) Hubble - H073p45: 0.02 (Δ -8.97)

18.4 base_w_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02216^{+0.00043}_{-0.00043} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.431^{+0.040}_{-0.035} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4489^{+0.0088}_{-0.0089} \quad (+0.0\sigma)$
$\Omega_c h^2$	$0.1204^{+0.0041}_{-0.0040} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.644^{+0.038}_{-0.045} \quad (+0.0\sigma)$	$H(0.15)$	$81.8^{+7.7}_{-10} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.04082^{+0.00091}_{-0.00093} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$1.046^{+0.059}_{-0.067} \quad (+0.0\sigma)$	$D_M(0.15)$	$546^{+100}_{-70} \quad (-0.0\sigma)$
τ	$0.053^{+0.012}_{-0.011} \quad (+0.2\sigma)$	$r_{drag} h$	$125^{+20}_{-30} \quad (+0.0\sigma)$	$H(0.38)$	$84.0^{+2.1}_{-2.1} \quad (+0.0\sigma)$
w_0	$-1.56^{+0.60}_{-0.48} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.507^{+0.085}_{-0.094} \quad (+0.1\sigma)$	$D_M(0.38)$	$1385^{+200}_{-100} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.027}_{-0.025} \quad (+0.2\sigma)$	z_{re}	$< 8.71 \quad (+0.3\sigma)$	$H(0.51)$	$88.1^{+1.9}_{-2.2} \quad (+0.0\sigma)$
n_s	$0.963^{+0.011}_{-0.011} \quad (+0.0\sigma)$	$10^9 A_s$	$2.096^{+0.057}_{-0.052} \quad (+0.2\sigma)$	$D_M(0.51)$	$1839^{+170}_{-120} \quad (-0.0\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.026}_{-0.026} \quad (-0.0\sigma)$	$H(0.61)$	$92.4^{+2.9}_{-2.8} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{40}	$1230^{+31}_{-29} \quad (-0.0\sigma)$	$D_M(0.61)$	$2171^{+160}_{-110} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5716^{+82}_{-80} \quad (+0.0\sigma)$	$H(2.33)$	$232.3^{+5.2}_{-4.3} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.0\sigma)$	$D_M(2.33)$	$5750^{+44}_{-42} \quad (-0.0\sigma)$
A_{100}^{PS}	$262^{+60}_{-50} \quad (-0.0\sigma)$	D_{1420}	$814^{+10}_{-9.5} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.492^{+0.043}_{-0.041} \quad (+0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.3} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.90^{+0.13}_{-0.16} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.963^{+0.011}_{-0.011} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.574^{+0.094}_{-0.11} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.24530^{+0.00018}_{-0.00019} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.12}_{-0.15} \quad (+0.0\sigma)$
A^{kSZ}	$< 8.39 \quad (-0.0\sigma)$	Y_P^{BBN}	$0.24663^{+0.00018}_{-0.00020} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.59^{+0.11}_{-0.13} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	$10^5 D/H$	$2.626^{+0.083}_{-0.079} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.75^{+0.11}_{-0.14} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.59^{+0.26}_{-0.19} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.59^{+0.11}_{-0.13} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.2^{+6.4}_{-6.4} \quad (+0.0\sigma)$	z_*	$1090.22^{+0.81}_{-0.77} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.71^{+0.10}_{-0.13} \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	r_*	$144.50^{+0.92}_{-0.93} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.358^{+0.048}_{-0.064} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$100\theta_*$	$1.04102^{+0.00090}_{-0.00092} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.361^{+0.045}_{-0.058} \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/Gpc$	$13.880^{+0.086}_{-0.086} \quad (+0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
H_0	$> 66.8 \quad (+0.0\sigma)$	z_{drag}	$1059.47^{+0.88}_{-0.91} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.0\sigma)$
Ω_Λ	$0.792^{+0.069}_{-0.12} \quad (+0.0\sigma)$	r_{drag}	$147.23^{+0.93}_{-0.93} \quad (+0.0\sigma)$	f_{2000}^{217}	$107.9^{+3.8}_{-3.7} \quad (-0.0\sigma)$
Ω_m	$0.208^{+0.12}_{-0.069} \quad (-0.0\sigma)$	k_D	$0.1406^{+0.0010}_{-0.0010} \quad (-0.0\sigma)$	χ_{small}^2	$396.6 \quad (\nu: 1.1) \quad (-0.1\sigma)$
$\Omega_m h^2$	$0.1432^{+0.0039}_{-0.0038} \quad (-0.0\sigma)$	$100\theta_D$	$0.16103^{+0.00052}_{-0.00051} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 0.7) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.122^{+0.022}_{-0.027} \quad (+0.0\sigma)$	z_{eq}	$3406^{+94}_{-90} \quad (-0.0\sigma)$	χ_{plik}^2	$769.8 \quad (\nu: 14.6) \quad (-0.0\sigma)$
σ_8	$0.96^{+0.13}_{-0.17} \quad (+0.0\sigma)$	k_{eq}	$0.01040^{+0.00029}_{-0.00027} \quad (-0.0\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.6) \quad (+0.0\sigma)$
S_8	$0.787^{+0.072}_{-0.064} \quad (+0.0\sigma)$	$100\theta_{eq}$	$0.812^{+0.017}_{-0.017} \quad (+0.0\sigma)$	χ_{CMB}^2	$1189.7 \quad (\nu: 15.5) \quad (-0.1\sigma)$

$\bar{\chi}_{eff}^2 = 1196.88$; $\Delta \bar{\chi}_{eff}^2 = -2.44$; $R - 1 = 0.00979$

18.5 base_w_plikHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00041}_{-0.00040} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.635^{+0.028}_{-0.032} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$544^{+100}_{-70} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0031}_{-0.0029} \quad (-0.6\sigma)$	$\sigma_8/h^{0.5}$	$1.034^{+0.043}_{-0.052} \quad (-0.3\sigma)$	$H(0.38)$	$84.5^{+1.9}_{-2.1} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00086}_{-0.00090} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$126^{+20}_{-30} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1378^{+200}_{-100} \quad (-0.1\sigma)$
τ	$0.053^{+0.012}_{-0.010} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.483^{+0.055}_{-0.061} \quad (-0.4\sigma)$	$H(0.51)$	$88.6^{+1.5}_{-1.8} \quad (+0.4\sigma)$
w_0	$-1.53^{+0.55}_{-0.43} \quad (+0.1\sigma)$	z_{re}	$< 8.57 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1830^{+170}_{-110} \quad (-0.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.038^{+0.024}_{-0.022} \quad (-0.0\sigma)$	10^9A_{s}	$2.087^{+0.050}_{-0.046} \quad (-0.0\sigma)$	$H(0.61)$	$92.8^{+2.5}_{-2.5} \quad (+0.2\sigma)$
n_{s}	$0.9659^{+0.0093}_{-0.0097} \quad (+0.5\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.877^{+0.022}_{-0.021} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2161^{+160}_{-110} \quad (-0.2\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0047} \quad (-0.1\sigma)$	D_{40}	$1223^{+27}_{-25} \quad (-0.5\sigma)$	$H(2.33)$	$231.4^{+5.3}_{-3.8} \quad (-0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{220}	$5718^{+82}_{-79} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5742^{+43}_{-40} \quad (-0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2533^{+26}_{-25} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.481^{+0.029}_{-0.028} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{1420}	$814^{+10}_{-9.4} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.89^{+0.12}_{-0.15} \quad (-0.1\sigma)$
A_{100}^{PS}	$262^{+50}_{-60} \quad (-0.0\sigma)$	D_{2000}	$229.8^{+3.6}_{-3.3} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.563^{+0.079}_{-0.091} \quad (-0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9659^{+0.0093}_{-0.0097} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.11}_{-0.14} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00018} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.580^{+0.093}_{-0.11} \quad (-0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00018} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.75^{+0.10}_{-0.13} \quad (-0.1\sigma)$
A^{kSZ}	$< 8.29 \quad (+0.0\sigma)$	$10^5\mathrm{D}/\mathrm{H}$	$2.615^{+0.077}_{-0.076} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.582^{+0.097}_{-0.12} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.7} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.58^{+0.26}_{-0.18} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.709^{+0.095}_{-0.12} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	z_*	$1090.04^{+0.68}_{-0.67} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.356^{+0.045}_{-0.059} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.3}_{-6.4} \quad (+0.0\sigma)$	r_*	$144.77^{+0.70}_{-0.73} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.359^{+0.042}_{-0.054} \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04114^{+0.00084}_{-0.00088} \quad (+0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.905^{+0.065}_{-0.068} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0013}_{-0.0013} \quad (+0.0\sigma)$	z_{drag}	$1059.52^{+0.91}_{-0.89} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.8^{+3.8}_{-3.7} \quad (-0.1\sigma)$
H_0	$> 67.4 \quad (+0.0\sigma)$	r_{drag}	$147.49^{+0.72}_{-0.76} \quad (+0.6\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.1 \quad (\nu: 0.7)$
Ω_{Λ}	$0.795^{+0.068}_{-0.11} \quad (+0.1\sigma)$	k_{D}	$0.14033^{+0.00090}_{-0.00088} \quad (-0.4\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.2\sigma)$
Ω_{m}	$0.205^{+0.11}_{-0.068} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16100^{+0.00051}_{-0.00051} \quad (-0.1\sigma)$	χ_{lowl}^2	$22.70 \quad (\nu: 0.4) \quad (-0.5\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0029}_{-0.0028} \quad (-0.6\sigma)$	z_{eq}	$3378^{+70}_{-67} \quad (-0.6\sigma)$	χ_{plik}^2	$770.2 \quad (\nu: 14.2) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.121^{+0.021}_{-0.026} \quad (-0.1\sigma)$	k_{eq}	$0.01031^{+0.00021}_{-0.00020} \quad (-0.6\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
σ_8	$0.95^{+0.12}_{-0.15} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.013}_{-0.013} \quad (+0.6\sigma)$	χ_{CMB}^2	$1198.3 \quad (\nu: 15.3) \quad (+1.5\sigma)$
S_8	$0.774^{+0.070}_{-0.059} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0066}_{-0.0068} \quad (+0.6\sigma)$		
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.424^{+0.038}_{-0.032} \quad (-0.3\sigma)$	$H(0.15)$	$82.2^{+7.7}_{-10} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1205.67; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.49; R - 1 = 0.01511$$

18.6 base_w_plikHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02212^{+0.00042}_{-0.00039} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.627^{+0.028}_{-0.027} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$602^{+21}_{-20} \quad (+1.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1205^{+0.0038}_{-0.0038} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$1.019^{+0.040}_{-0.038} \quad (-0.8\sigma)$	$H(0.38)$	$83.5^{+1.0}_{-1.0} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04076^{+0.00093}_{-0.00091} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$108.4^{+4.8}_{-4.9} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1469^{+34}_{-33} \quad (+1.0\sigma)$
τ	$0.053^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.484^{+0.080}_{-0.079} \quad (-0.4\sigma)$	$H(0.51)$	$89.2^{+1.0}_{-1.1} \quad (+1.0\sigma)$
w_0	$-1.23^{+0.13}_{-0.13} \quad (+1.1\sigma)$	z_{re}	$< 8.72 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1921^{+37}_{-36} \quad (+1.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.042^{+0.027}_{-0.024} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.057}_{-0.050} \quad (+0.2\sigma)$	$H(0.61)$	$94.2^{+1.1}_{-1.2} \quad (+1.1\sigma)$
n_{s}	$0.963^{+0.011}_{-0.011} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.025}_{-0.023} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2248^{+37}_{-37} \quad (+1.0\sigma)$
y_{cal}	$1.0003^{+0.0046}_{-0.0044} \quad (-0.0\sigma)$	D_{40}	$1231^{+30}_{-29} \quad (+0.1\sigma)$	$H(2.33)$	$234.0^{+2.2}_{-2.1} \quad (+0.7\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{220}	$5712^{+75}_{-71} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5760^{+29}_{-28} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2535^{+26}_{-24} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.476^{+0.029}_{-0.027} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{1420}	$813.9^{+9.8}_{-9.3} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.812^{+0.041}_{-0.040} \quad (-1.1\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.0\sigma)$	D_{2000}	$229.6^{+3.5}_{-3.3} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.516^{+0.037}_{-0.035} \quad (-1.1\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.963^{+0.011}_{-0.011} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.721^{+0.036}_{-0.035} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.24529^{+0.00017}_{-0.00019} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.521^{+0.037}_{-0.036} \quad (-1.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24662^{+0.00017}_{-0.00019} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.674^{+0.033}_{-0.032} \quad (-1.1\sigma)$
A^{kSZ}	$< 8.25 \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.633^{+0.075}_{-0.078} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.518^{+0.036}_{-0.035} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.4}_{-3.5} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.710^{+0.067}_{-0.069} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.641^{+0.030}_{-0.030} \quad (-1.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.28^{+0.74}_{-0.76} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.323^{+0.014}_{-0.015} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.0}_{-6.6} \quad (+0.0\sigma)$	r_*	$144.49^{+0.89}_{-0.90} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.328^{+0.012}_{-0.012} \quad (-1.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.04097^{+0.00093}_{-0.00088} \quad (-0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.880^{+0.083}_{-0.086} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0013}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.40^{+0.91}_{-0.84} \quad (-0.1\sigma)$	f_{2000}^{217}	$108.0^{+3.5}_{-3.8} \quad (+0.0\sigma)$
H_0	$73.7^{+3.2}_{-3.3} \quad (-1.1\sigma)$	r_{drag}	$147.23^{+0.90}_{-0.92} \quad (+0.0\sigma)$	χ_{small}^2	$396.6 \quad (\nu: 1.2) \quad (-0.1\sigma)$
Ω_{Λ}	$0.735^{+0.023}_{-0.025} \quad (-1.0\sigma)$	k_{D}	$0.1405^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.7) \quad (+0.2\sigma)$
Ω_{m}	$0.265^{+0.025}_{-0.023} \quad (+1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16107^{+0.00049}_{-0.00051} \quad (+0.1\sigma)$	χ_{plik}^2	$770.2 \quad (\nu: 14.2) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1433^{+0.0037}_{-0.0036} \quad (+0.0\sigma)$	z_{eq}	$3409^{+88}_{-86} \quad (+0.0\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$1.0 \quad (\nu: 1.0)$
$\Omega_{\mathrm{m}}h^3$	$0.1055^{+0.0053}_{-0.0054} \quad (-1.1\sigma)$	k_{eq}	$0.01040^{+0.00027}_{-0.00026} \quad (+0.0\sigma)$	χ_{prior}^2	$7.1 \quad (\nu: 6.4) \quad (-0.0\sigma)$
σ_8	$0.874^{+0.044}_{-0.043} \quad (-1.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.016}_{-0.016} \quad (-0.0\sigma)$	χ_{CMB}^2	$1190.3 \quad (\nu: 14.9) \quad (+0.1\sigma)$
S_8	$0.820^{+0.040}_{-0.039} \quad (+0.9\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4486^{+0.0084}_{-0.0083} \quad (-0.0\sigma)$		
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.022}_{-0.022} \quad (+0.9\sigma)$	$H(0.15)$	$76.2^{+1.9}_{-1.9} \quad (-1.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1198.47; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -13.34; R - 1 = 0.05306$$

18.7 base_w_plikHM_TTTEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022434	$0.02239^{+0.00030}_{-0.00029}$ (+1.1 σ)	$\Omega_m h^2$	0.14291	$0.1430^{+0.0025}_{-0.0025}$ (−0.1 σ)	k_{eq}	0.010376	$0.01038^{+0.00018}_{-0.00018}$ (−0.1 σ)
$\Omega_c h^2$	0.11983	$0.1199^{+0.0026}_{-0.0026}$ (−0.3 σ)	$\Omega_m h^3$	0.1427	$0.124^{+0.020}_{-0.025}$ (+0.2 σ)	$100\theta_{\text{eq}}$	0.8140	$0.814^{+0.011}_{-0.011}$ (+0.2 σ)
$100\theta_{\text{MC}}$	1.04097	$1.04094^{+0.00062}_{-0.00062}$ (+0.3 σ)	σ_8	1.072	$0.97^{+0.11}_{-0.15}$ (+0.1 σ)	$100\theta_{\text{s,eq}}$	0.4497	$0.4495^{+0.0058}_{-0.0057}$ (+0.2 σ)
τ	0.0540	$0.054^{+0.016}_{-0.016}$ (+0.3 σ)	S_8	0.741	$0.777^{+0.061}_{-0.051}$ (−0.3 σ)	$H(0.15)$	89.0	$82.9^{+6.7}_{-9.0}$ (+0.2 σ)
w_0	−1.947	$−1.58^{+0.52}_{-0.41}$ (−0.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4058	$0.426^{+0.033}_{-0.028}$ (−0.3 σ)	$D_{\text{M}}(0.15)$	480	537^{+90}_{-60} (−0.2 σ)
$\ln(10^{10} A_s)$	3.0435	$3.043^{+0.033}_{-0.031}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6596	$0.643^{+0.030}_{-0.035}$ (−0.0 σ)	$H(0.38)$	84.72	$84.5^{+1.5}_{-1.6}$ (+0.5 σ)
n_s	0.9667	$0.9654^{+0.0084}_{-0.0085}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	1.073	$1.045^{+0.047}_{-0.055}$ (−0.0 σ)	$D_{\text{M}}(0.38)$	1284	1368^{+140}_{-95} (−0.2 σ)
y_{cal}	1.00030	$1.0005^{+0.0049}_{-0.0048}$ (+0.1 σ)	$r_{\text{drag}} h$	146.9	127^{+20}_{-30} (+0.2 σ)	$H(0.51)$	87.01	$88.4^{+1.6}_{-1.8}$ (+0.2 σ)
A_{217}^{CIB}	45.5	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.522	$2.501^{+0.068}_{-0.071}$ (−0.1 σ)	$D_{\text{M}}(0.51)$	1739	1820^{+140}_{-96} (−0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.67	—	z_{re}	7.57	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	90.41	$92.5^{+2.8}_{-2.4}$ (+0.1 σ)
A_{143}^{tSZ}	7.02	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9 A_s$	2.098	$2.098^{+0.070}_{-0.065}$ (+0.3 σ)	$D_{\text{M}}(0.61)$	2077	2151^{+140}_{-92} (−0.3 σ)
A_{100}^{PS}	248	257^{+50}_{-50} (−0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8831	$1.883^{+0.023}_{-0.022}$ (−0.0 σ)	$H(2.33)$	230.42	$231.9^{+4.1}_{-3.1}$ (−0.2 σ)
A_{143}^{PS}	49.8	46^{+20}_{-20} (−0.4 σ)	D_{40}	1223.0	1227^{+25}_{-25} (−0.2 σ)	$D_{\text{M}}(2.33)$	5726.0	5735^{+30}_{-30} (−0.7 σ)
$A_{143 \times 217}^{\text{PS}}$	52.9	43^{+20}_{-20} (−0.1 σ)	D_{220}	5734	5735^{+76}_{-74} (+0.5 σ)	$f\sigma_8(0.15)$	0.5064	$0.489^{+0.030}_{-0.033}$ (−0.1 σ)
A_{217}^{PS}	122.0	116^{+20}_{-20} (+0.0 σ)	D_{810}	2539.6	2539^{+27}_{-26} (+0.2 σ)	$\sigma_8(0.15)$	1.011	$0.91^{+0.11}_{-0.14}$ (+0.1 σ)
A^{kSZ}	0.01	< 7.75 (−0.2 σ)	D_{1420}	817.8	$816.9^{+9.4}_{-9.3}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.642	$0.576^{+0.079}_{-0.093}$ (+0.1 σ)
A_{100}^{dustTT}	8.80	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{2000}	231.54	$231.1^{+3.1}_{-3.1}$ (+0.8 σ)	$\sigma_8(0.38)$	0.905	$0.81^{+0.10}_{-0.13}$ (+0.1 σ)
A_{143}^{dustTT}	10.97	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9667	$0.9654^{+0.0084}_{-0.0085}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.674	$0.595^{+0.092}_{-0.11}$ (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.0	$18.5^{+6.4}_{-6.5}$ (+0.1 σ)	Y_{P}	0.245420	$0.24540^{+0.00011}_{-0.00012}$ (+1.1 σ)	$\sigma_8(0.51)$	0.846	$0.760^{+0.095}_{-0.12}$ (+0.1 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246747	$0.24673^{+0.00011}_{-0.00012}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.680	$0.597^{+0.095}_{-0.12}$ (+0.1 σ)
A_{100}^{dustTE}	0.115	$0.114^{+0.075}_{-0.074}$	10^5D/H	2.574	$2.582^{+0.054}_{-0.053}$ (−1.1 σ)	$\sigma_8(0.61)$	0.803	$0.722^{+0.090}_{-0.12}$ (+0.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.058}$	Age/Gyr	13.427	$13.54^{+0.22}_{-0.15}$ (−0.4 σ)	$f\sigma_8(2.33)$	0.3998	$0.362^{+0.042}_{-0.056}$ (+0.2 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	z_*	1089.82	$1089.89^{+0.53}_{-0.54}$ (−0.9 σ)	$\sigma_8(2.33)$	0.4004	$0.365^{+0.040}_{-0.052}$ (+0.2 σ)
A_{143}^{dustTE}	0.225	$0.23^{+0.11}_{-0.10}$	r_*	144.43	$144.43^{+0.58}_{-0.59}$ (−0.1 σ)	f_{2000}^{143}	28.0	29^{+5}_{-5} (−0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	1.04114	$1.04112^{+0.00061}_{-0.00061}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	31.50	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.872	$13.873^{+0.054}_{-0.055}$ (−0.1 σ)	f_{2000}^{217}	106.10	$106.8^{+3.5}_{-3.5}$ (−0.6 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1060.09	$1059.98^{+0.60}_{-0.58}$ (+1.1 σ)	χ_{small}^2	395.85	397.0 (ν : 1.6) (+0.1 σ)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.06	$147.09^{+0.58}_{-0.59}$ (−0.3 σ)	χ_{lowl}^2	22.44	22.87 (ν : 0.4) (−0.3 σ)
H_0	99.9	> 69.9 (+0.2 σ)	k_{D}	0.14094	$0.14089^{+0.00062}_{-0.00061}$ (+0.6 σ)	χ_{plik}^2	2341.6	2357.3 (ν : 16.7) (+293.0 σ)
Ω_{Λ}	0.857	$0.802^{+0.058}_{-0.097}$ (+0.2 σ)	$100\theta_{\text{D}}$	0.160683	$0.16073^{+0.00034}_{-0.00034}$ (−1.1 σ)	χ_{prior}^2	1.5	11.5 (ν : 10.1) (+1.2 σ)
Ω_{m}	0.143	$0.198^{+0.097}_{-0.058}$ (−0.2 σ)	z_{eq}	3400	3401^{+60}_{-59} (−0.1 σ)	χ_{CMB}^2	2759.9	2777.1 (ν : 17.6) (+280.8 σ)

Best-fit $\chi_{\text{eff}}^2 = 2761.37$; $\Delta\chi_{\text{eff}}^2 = -4.40$; $\bar{\chi}_{\text{eff}}^2 = 2788.65$; $\Delta\bar{\chi}_{\text{eff}}^2 = -3.11$; $R - 1 = 0.00965$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.85 (Δ -0.20) commander_dx12.v3.2.29: 22.45 (Δ -0.81) plik_rd12_HM.v22b.TTTEE: 2341.57 (Δ -3.07)

18.8 base_w_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022465	$0.02243^{+0.00030}_{-0.00028}$ (+1.3 σ)	$\Omega_m h^3$	0.1420	$0.123^{+0.020}_{-0.024}$ (+0.1 σ)	$100\theta_{s,eq}$	0.4514	$0.4508^{+0.0050}_{-0.0051}$ (+0.5 σ)
$\Omega_c h^2$	0.11907	$0.1193^{+0.0024}_{-0.0023}$ (-0.5 σ)	σ_8	1.062	$0.96^{+0.11}_{-0.14}$ (+0.0 σ)	$H(0.15)$	89.2	$83.0^{+6.8}_{-8.9}$ (+0.2 σ)
$100\theta_{MC}$	1.04100	$1.04099^{+0.00060}_{-0.00062}$ (+0.4 σ)	S_8	0.732	$0.771^{+0.059}_{-0.049}$ (-0.4 σ)	$D_M(0.15)$	479	537^{+90}_{-60} (-0.2 σ)
τ	0.0523	$0.052^{+0.015}_{-0.015}$ (+0.1 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4011	$0.422^{+0.032}_{-0.027}$ (-0.4 σ)	$H(0.38)$	85.07	$84.7^{+1.4}_{-1.6}$ (+0.7 σ)
w_0	-1.925	$-1.57^{+0.50}_{-0.40}$ (-0.0 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6528	$0.637^{+0.025}_{-0.029}$ (-0.3 σ)	$D_M(0.38)$	1280	1366^{+140}_{-96} (-0.3 σ)
$\ln(10^{10} A_s)$	3.0373	$3.038^{+0.030}_{-0.029}$ (-0.1 σ)	$\sigma_8/h^{0.5}$	1.0631	$1.037^{+0.039}_{-0.046}$ (-0.3 σ)	$H(0.51)$	87.31	$88.6^{+1.4}_{-1.6}$ (+0.5 σ)
n_s	0.9683	$0.9666^{+0.0078}_{-0.0083}$ (+0.6 σ)	$r_{drag} h$	147.0	127^{+20}_{-20} (+0.2 σ)	$D_M(0.51)$	1733	1816^{+140}_{-97} (-0.3 σ)
y_{cal}	1.00007	$1.0003^{+0.0049}_{-0.0049}$ (-0.0 σ)	$\langle d^2 \rangle^{1/2}$	2.502	$2.485^{+0.050}_{-0.057}$ (-0.4 σ)	$H(0.61)$	90.65	$92.7^{+2.6}_{-2.3}$ (+0.2 σ)
A_{217}^{CIB}	46.3	47^{+10}_{-10} (-0.2 σ)	z_{re}	7.37	$7.4^{+1.5}_{-1.6}$ (+0.0 σ)	$D_M(0.61)$	2071	2147^{+130}_{-93} (-0.3 σ)
$\xi^{tSZ \times CIB}$	0.57	—	$10^9 A_s$	2.085	$2.087^{+0.062}_{-0.059}$ (-0.1 σ)	$H(2.33)$	229.89	$231.5^{+4.1}_{-2.9}$ (-0.3 σ)
A_{143}^{tSZ}	7.18	$5.5^{+3.9}_{-3.8}$ (+0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8779	$1.879^{+0.022}_{-0.021}$ (-0.3 σ)	$D_M(2.33)$	5721.7	5731^{+30}_{-29} (-0.8 σ)
A_{100}^{PS}	248	257^{+60}_{-50} (-0.2 σ)	D_{40}	1217.3	1223^{+24}_{-23} (-0.4 σ)	$f\sigma_8(0.15)$	0.4987	$0.483^{+0.025}_{-0.026}$ (-0.4 σ)
A_{143}^{PS}	48.5	45^{+20}_{-20} (-0.4 σ)	D_{220}	5730	5734^{+76}_{-74} (+0.4 σ)	$\sigma_8(0.15)$	1.002	$0.90^{+0.11}_{-0.14}$ (+0.0 σ)
$A_{143 \times 217}^{PS}$	50.3	42^{+20}_{-20} (-0.1 σ)	D_{810}	2536.5	2536^{+26}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.632	$0.569^{+0.073}_{-0.085}$ (-0.1 σ)
A_{217}^{PS}	120.5	115^{+20}_{-20} (-0.0 σ)	D_{1420}	817.3	$816.6^{+9.3}_{-9.4}$ (+0.5 σ)	$\sigma_8(0.38)$	0.898	$0.806^{+0.099}_{-0.13}$ (+0.0 σ)
A^{kSZ}	0.00	< 7.88 (-0.2 σ)	D_{2000}	231.36	$230.9^{+3.1}_{-3.1}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.664	$0.587^{+0.086}_{-0.10}$ (-0.0 σ)
A_{100}^{dustTT}	8.81	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	$n_{s,0.002}$	0.9683	$0.9666^{+0.0078}_{-0.0083}$ (+0.6 σ)	$\sigma_8(0.51)$	0.840	$0.755^{+0.092}_{-0.12}$ (+0.1 σ)
A_{143}^{dustTT}	11.06	$10.9^{+3.4}_{-3.6}$ (+0.1 σ)	Y_P	0.245432	$0.24542^{+0.00011}_{-0.00011}$ (+1.2 σ)	$f\sigma_8(0.61)$	0.671	$0.590^{+0.090}_{-0.11}$ (-0.0 σ)
$A_{143 \times 217}^{dustTT}$	20.1	$18.6^{+6.3}_{-6.6}$ (+0.1 σ)	Y_P^{BBN}	0.246758	$0.24674^{+0.00011}_{-0.00011}$ (+1.2 σ)	$\sigma_8(0.61)$	0.797	$0.717^{+0.087}_{-0.11}$ (+0.1 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.1 σ)	$10^5 D/H$	2.568	$2.576^{+0.053}_{-0.054}$ (-1.2 σ)	$f\sigma_8(2.33)$	0.3974	$0.360^{+0.041}_{-0.054}$ (+0.1 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.073}$ (+0.0 σ)	Age/Gyr	13.420	$13.54^{+0.21}_{-0.15}$ (-0.4 σ)	$\sigma_8(2.33)$	0.3981	$0.362^{+0.038}_{-0.049}$ (+0.1 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.057}$ (+0.0 σ)	z_*	1089.72	$1089.79^{+0.50}_{-0.51}$ (-1.1 σ)	f_{2000}^{143}	28.3	29^{+6}_{-5} (-0.6 σ)
$A_{100 \times 217}^{dustTE}$	0.484	$0.48^{+0.17}_{-0.16}$ (+0.0 σ)	r_*	144.60	$144.56^{+0.51}_{-0.53}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	31.58	32^{+4}_{-4} (-0.7 σ)
A_{143}^{dustTE}	0.223	$0.23^{+0.11}_{-0.10}$ (+0.0 σ)	$100\theta_*$	1.04118	$1.04117^{+0.00059}_{-0.00061}$ (+0.3 σ)	f_{2000}^{217}	106.15	$106.8^{+3.5}_{-3.4}$ (-0.6 σ)
$A_{143 \times 217}^{dustTE}$	0.665	$0.66^{+0.16}_{-0.16}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.8880	$13.885^{+0.047}_{-0.050}$ (+0.1 σ)	$\chi^2_{lensing}$	8.68	9.0 (ν : 0.6)
A_{217}^{dustTE}	2.08	$2.07^{+0.54}_{-0.53}$ (+0.0 σ)	z_{drag}	1060.09	$1060.02^{+0.60}_{-0.58}$ (+1.2 σ)	χ^2_{small}	396	1325 (ν : 479409.9) (+595.2 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.23	$147.21^{+0.51}_{-0.52}$ (-0.0 σ)	χ^2_{lowl}	22.13	22.59 (ν : 0.3) (-0.6 σ)
c_{217}	0.99818	$0.9982^{+0.0013}_{-0.0012}$ (-0.1 σ)	k_D	0.14079	$0.14079^{+0.00057}_{-0.00057}$ (+0.4 σ)	χ^2_{plik}	2342	1430 (ν : 479481.8) (+121.8 σ)
H_0	99.9	> 70.4 (+0.2 σ)	$100\theta_D$	0.160670	$0.16072^{+0.00034}_{-0.00035}$ (-1.2 σ)	χ^2_{prior}	1.6	11.6 (ν : 10.3) (+1.2 σ)
Ω_Λ	0.857	$0.803^{+0.058}_{-0.093}$ (+0.2 σ)	z_{eq}	3382	3388^{+54}_{-51} (-0.4 σ)	χ^2_{CMB}	2768.9	2786.1 (ν : 18.1) (+282.4 σ)
Ω_m	0.143	$0.197^{+0.093}_{-0.058}$ (-0.2 σ)	k_{eq}	0.010323	$0.01034^{+0.00016}_{-0.00016}$ (-0.4 σ)			
$\Omega_m h^2$	0.14218	$0.1424^{+0.0022}_{-0.0021}$ (-0.4 σ)	$100\theta_{eq}$	0.8172	$0.8162^{+0.0098}_{-0.010}$ (+0.5 σ)			

Best-fit $\chi^2_{eff} = 2770.54$; $\Delta\chi^2_{eff} = -4.10$; $\bar{\chi}^2_{eff} = 2797.72$; $\Delta\bar{\chi}^2_{eff} = -2.97$; $R - 1 = 0.01426$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.68 (Δ -0.19) small_100x143_offlike5_EE_Aplanck_B: 395.65 (Δ -0.40) commander_dx12_v3_2_29: 22.13 (Δ -1.12) plik_rd12_HM_v22b_TTTEEE: 2342.46 (Δ -2.47)

18.9 base_w_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022388	$0.02236^{+0.00029}_{-0.00028}$ (+1.0 σ)	$\Omega_m h^2$	0.14309	$0.1432^{+0.0025}_{-0.0025}$ (−0.0 σ)	k_{eq}	0.010389	$0.01040^{+0.00018}_{-0.00018}$ (−0.0 σ)
$\Omega_c h^2$	0.12006	$0.1202^{+0.0027}_{-0.0027}$ (−0.1 σ)	$\Omega_m h^3$	0.10551	$0.1055^{+0.0048}_{-0.0050}$ (−1.1 σ)	$100\theta_{\text{eq}}$	0.8130	$0.812^{+0.011}_{-0.011}$ (+0.1 σ)
$100\theta_{\text{MC}}$	1.04093	$1.04092^{+0.00063}_{-0.00064}$ (+0.2 σ)	σ_8	0.8704	$0.870^{+0.035}_{-0.035}$ (−1.1 σ)	$100\theta_{\text{s,eq}}$	0.4492	$0.4489^{+0.0058}_{-0.0057}$ (+0.0 σ)
τ	0.0545	$0.054^{+0.016}_{-0.016}$ (+0.3 σ)	S_8	0.8153	$0.816^{+0.031}_{-0.030}$ (+0.8 σ)	$H(0.15)$	76.46	$76.4^{+1.8}_{-1.9}$ (−1.1 σ)
w_0	−1.209	$−1.21^{+0.11}_{-0.11}$ (+1.2 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4465	$0.447^{+0.017}_{-0.017}$ (+0.8 σ)	$D_{\text{M}}(0.15)$	600.1	601^{+21}_{-19} (+1.0 σ)
$\ln(10^{10} A_s)$	3.0447	$3.044^{+0.034}_{-0.032}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6234	$0.624^{+0.020}_{-0.021}$ (−0.9 σ)	$H(0.38)$	83.87	$83.80^{+0.78}_{-0.79}$ (−0.2 σ)
n_s	0.9662	$0.9647^{+0.0082}_{-0.0081}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	1.0136	$1.014^{+0.029}_{-0.030}$ (−1.0 σ)	$D_{\text{M}}(0.38)$	1464.1	1466^{+34}_{-32} (+1.0 σ)
y_{cal}	1.00035	$1.0006^{+0.0049}_{-0.0045}$ (+0.1 σ)	$r_{\text{drag}} h$	108.43	$108.3^{+4.7}_{-4.8}$ (−1.1 σ)	$H(0.51)$	89.56	$89.50^{+0.73}_{-0.73}$ (+1.2 σ)
A_{217}^{CIB}	46.7	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.472	$2.476^{+0.064}_{-0.058}$ (−0.6 σ)	$D_{\text{M}}(0.51)$	1914.1	1916^{+36}_{-33} (+0.9 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.50	—	z_{re}	7.67	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	94.58	$94.53^{+0.79}_{-0.82}$ (+1.3 σ)
A_{143}^{tSZ}	7.11	$5.5^{+3.9}_{-3.7}$ (+0.2 σ)	$10^9 A_s$	2.100	$2.099^{+0.072}_{-0.066}$ (+0.3 σ)	$D_{\text{M}}(0.61)$	2240.0	2242^{+36}_{-34} (+0.9 σ)
A_{100}^{PS}	250	258^{+60}_{-50} (−0.2 σ)	$10^9 A_s e^{-2\tau}$	1.8835	$1.885^{+0.023}_{-0.022}$ (+0.1 σ)	$H(2.33)$	234.02	$234.1^{+1.6}_{-1.6}$ (+0.7 σ)
A_{143}^{PS}	48.2	46^{+20}_{-20} (−0.3 σ)	D_{40}	1226.4	1231^{+25}_{-25} (+0.0 σ)	$D_{\text{M}}(2.33)$	5745.8	5748^{+21}_{-21} (−0.1 σ)
$A_{143 \times 217}^{\text{PS}}$	49.0	43^{+20}_{-20} (−0.1 σ)	D_{220}	5728	5734^{+79}_{-72} (+0.4 σ)	$f\sigma_8(0.15)$	0.4714	$0.472^{+0.020}_{-0.021}$ (−0.9 σ)
A_{217}^{PS}	120.4	116^{+20}_{-20} (+0.0 σ)	D_{810}	2539.7	2540^{+26}_{-25} (+0.3 σ)	$\sigma_8(0.15)$	0.8083	$0.808^{+0.035}_{-0.035}$ (−1.1 σ)
A^{kSZ}	0.01	< 7.90 (−0.2 σ)	D_{1420}	817.8	$817.1^{+9.1}_{-9.0}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.5116	$0.512^{+0.026}_{-0.026}$ (−1.1 σ)
A_{100}^{dustTT}	8.76	$9.0^{+3.8}_{-3.5}$ (+0.0 σ)	D_{2000}	231.31	$231.0^{+3.0}_{-3.1}$ (+0.7 σ)	$\sigma_8(0.38)$	0.7185	$0.718^{+0.031}_{-0.031}$ (−1.1 σ)
A_{143}^{dustTT}	10.92	$11.0^{+3.5}_{-3.7}$ (+0.2 σ)	$n_{\text{s},0.002}$	0.9662	$0.9647^{+0.0082}_{-0.0081}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.5166	$0.517^{+0.028}_{-0.028}$ (−1.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.7^{+6.1}_{-6.4}$ (+0.2 σ)	Y_{P}	0.245402	$0.24539^{+0.00011}_{-0.00012}$ (+0.9 σ)	$\sigma_8(0.51)$	0.6723	$0.672^{+0.029}_{-0.029}$ (−1.1 σ)
A_{217}^{dustTT}	95.1	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246729	$0.24672^{+0.00011}_{-0.00012}$ (+0.9 σ)	$f\sigma_8(0.61)$	0.5142	$0.515^{+0.028}_{-0.028}$ (−1.1 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.069}$	$10^5 \text{D}/\text{H}$	2.582	$2.587^{+0.054}_{-0.052}$ (−1.0 σ)	$\sigma_8(0.61)$	0.6394	$0.639^{+0.027}_{-0.028}$ (−1.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.057}_{-0.059}$	Age/Gyr	13.681	$13.685^{+0.060}_{-0.058}$ (+0.7 σ)	$f\sigma_8(2.33)$	0.3224	$0.322^{+0.013}_{-0.014}$ (−1.1 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.18}_{-0.16}$	z_*	1089.90	$1089.95^{+0.52}_{-0.54}$ (−0.7 σ)	$\sigma_8(2.33)$	0.3282	$0.328^{+0.012}_{-0.012}$ (−1.1 σ)
A_{143}^{dustTE}	0.223	$0.23^{+0.11}_{-0.11}$	r_*	144.40	$144.38^{+0.61}_{-0.59}$ (−0.2 σ)	χ_{simall}^2	396	1288 (ν : 476761.4) (+571.5 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.669	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	1.04111	$1.04110^{+0.00062}_{-0.00062}$ (+0.2 σ)	χ_{lowl}^2	22.91	23.25 (ν : 0.4) (+0.0 σ)
A_{217}^{dustTE}	2.10	$2.08^{+0.53}_{-0.51}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.870	$13.868^{+0.057}_{-0.057}$ (−0.3 σ)	χ_{plik}^2	2343	1468 (ν : 476859.4) (+128.8 σ)
c_{100}	0.99971	$0.9997^{+0.0013}_{-0.0011}$ (+0.1 σ)	z_{drag}	1059.97	$1059.94^{+0.57}_{-0.58}$ (+1.0 σ)	χ_{H073p45}^2	0.03	0.97 (ν : 1.0)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.06	$147.04^{+0.61}_{-0.61}$ (−0.4 σ)	χ_{prior}^2	1.6	11.6 (ν : 10.4) (+1.2 σ)
H_0	73.73	$73.7^{+3.2}_{-3.2}$ (−1.1 σ)	k_{D}	0.14092	$0.14092^{+0.00063}_{-0.00063}$ (+0.7 σ)	χ_{CMB}^2	2762.3	2778.8 (ν : 18.3) (+281.1 σ)
Ω_{Λ}	0.7368	$0.736^{+0.022}_{-0.025}$ (−1.0 σ)	$100\theta_{\text{D}}$	0.160733	$0.16076^{+0.00033}_{-0.00034}$ (−1.0 σ)			
Ω_{m}	0.2632	$0.264^{+0.025}_{-0.022}$ (+1.0 σ)	z_{eq}	3404	3408^{+60}_{-60} (−0.0 σ)			

Best-fit $\chi_{\text{eff}}^2 = 2763.89$; $\Delta\chi_{\text{eff}}^2 = -14.04$; $\bar{\chi}_{\text{eff}}^2 = 2791.33$; $\Delta\bar{\chi}_{\text{eff}}^2 = -12.83$; $R - 1 = 0.07272$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.04 (Δ -0.43) commander_dx12_v3_2_29: 22.91 (Δ 0.37) plik_rd12_HM_v22b_TTTEEE: 2343.33 (Δ -3.43) Hubble - H073p45: 0.03 (Δ -10.56)

18.10 base_w_plikHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00030}_{-0.00028} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1429^{+0.0025}_{-0.0024} \quad (-0.2\sigma)$	k_{eq}	$0.01038^{+0.00018}_{-0.00018} \quad (-0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1199^{+0.0026}_{-0.0026} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.124^{+0.020}_{-0.025} \quad (+0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00062}_{-0.00061} \quad (+0.3\sigma)$	σ_8	$0.97^{+0.11}_{-0.15} \quad (+0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4496^{+0.0057}_{-0.0057} \quad (+0.2\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	S_8	$0.778^{+0.061}_{-0.051} \quad (-0.2\sigma)$	$H(0.15)$	$82.9^{+6.7}_{-9.1} \quad (+0.2\sigma)$
w_0	$-1.58^{+0.53}_{-0.41} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.426^{+0.033}_{-0.028} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$537^{+90}_{-60} \quad (-0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.029}_{-0.026} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.643^{+0.030}_{-0.034} \quad (+0.0\sigma)$	$H(0.38)$	$84.5^{+1.5}_{-1.6} \quad (+0.5\sigma)$
n_{s}	$0.9656^{+0.0083}_{-0.0084} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$1.046^{+0.046}_{-0.054} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1368^{+140}_{-95} \quad (-0.2\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$127^{+20}_{-30} \quad (+0.2\sigma)$	$H(0.51)$	$88.4^{+1.6}_{-1.8} \quad (+0.3\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.504^{+0.066}_{-0.069} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1819^{+140}_{-96} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 8.92 \quad (+0.4\sigma)$	$H(0.61)$	$92.5^{+2.8}_{-2.4} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.060}_{-0.054} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2151^{+140}_{-93} \quad (-0.3\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.023}_{-0.022} \quad (-0.1\sigma)$	$H(2.33)$	$231.8^{+4.1}_{-3.1} \quad (-0.2\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{40}	$1227^{+25}_{-24} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5735^{+30}_{-30} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5735^{+75}_{-74} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.489^{+0.030}_{-0.033} \quad (-0.1\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2538^{+27}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.91^{+0.11}_{-0.15} \quad (+0.1\sigma)$
A^{kSZ}	$< 7.71 \quad (-0.2\sigma)$	D_{1420}	$816.9^{+9.4}_{-9.2} \quad (+0.6\sigma)$	$f\sigma_8(0.38)$	$0.577^{+0.079}_{-0.093} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.0} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.81^{+0.10}_{-0.13} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9656^{+0.0083}_{-0.0084} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.595^{+0.092}_{-0.11} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.4}_{-6.5} \quad (+0.1\sigma)$	Y_{P}	$0.24540^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.761^{+0.095}_{-0.12} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(0.61)$	$0.597^{+0.095}_{-0.12} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.074}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.581^{+0.054}_{-0.053} \quad (-1.1\sigma)$	$\sigma_8(0.61)$	$0.723^{+0.090}_{-0.12} \quad (+0.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.057}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.54^{+0.22}_{-0.15} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.362^{+0.042}_{-0.057} \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	z_*	$1089.88^{+0.53}_{-0.54} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.365^{+0.040}_{-0.052} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.11}_{-0.11}$	r_*	$144.44^{+0.58}_{-0.59} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$100\theta_*$	$1.04113^{+0.00061}_{-0.00061} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.874^{+0.054}_{-0.055} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.5} \quad (-0.6\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	z_{drag}	$1059.99^{+0.59}_{-0.59} \quad (+1.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	r_{drag}	$147.09^{+0.57}_{-0.58} \quad (-0.3\sigma)$	χ_{lowl}^2	$22.87 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$> 69.8 \quad (+0.2\sigma)$	k_{D}	$0.14088^{+0.00062}_{-0.00061} \quad (+0.6\sigma)$	χ_{plik}^2	$2357.1 \quad (\nu: 16.5) \quad (+293.0\sigma)$
Ω_{Λ}	$0.802^{+0.058}_{-0.098} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00034}_{-0.00034} \quad (-1.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.1) \quad (+1.2\sigma)$
Ω_{m}	$0.198^{+0.098}_{-0.058} \quad (-0.2\sigma)$	z_{eq}	$3400^{+59}_{-59} \quad (-0.2\sigma)$	χ_{CMB}^2	$2776.9 \quad (\nu: 17.2) \quad (+280.7\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2788.38; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -3.15; R - 1 = 0.01060$$

18.11 base_w_plikHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02243^{+0.00030}_{-0.00028} \quad (+1.3\sigma)$	$\Omega_{\text{m}}h^3$	$0.123^{+0.020}_{-0.024} \quad (+0.1\sigma)$	$100\theta_{\text{s,eq}}$	$0.4510^{+0.0049}_{-0.0050} \quad (+0.5\sigma)$
$\Omega_{\text{c}}h^2$	$0.1192^{+0.0023}_{-0.0022} \quad (-0.6\sigma)$	σ_8	$0.96^{+0.11}_{-0.14} \quad (+0.0\sigma)$	$H(0.15)$	$82.9^{+6.9}_{-9.0} \quad (+0.2\sigma)$
$100\theta_{\text{MC}}$	$1.04100^{+0.00060}_{-0.00061} \quad (+0.4\sigma)$	S_8	$0.771^{+0.059}_{-0.050} \quad (-0.4\sigma)$	$D_{\text{M}}(0.15)$	$537^{+90}_{-60} \quad (-0.2\sigma)$
τ	$0.054^{+0.012}_{-0.010} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.422^{+0.032}_{-0.027} \quad (-0.4\sigma)$	$H(0.38)$	$84.8^{+1.4}_{-1.6} \quad (+0.7\sigma)$
w_0	$-1.56^{+0.50}_{-0.40} \quad (-0.0\sigma)$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.637^{+0.025}_{-0.029} \quad (-0.3\sigma)$	$D_{\text{M}}(0.38)$	$1367^{+140}_{-97} \quad (-0.2\sigma)$
$\ln(10^{10}A_{\text{s}})$	$3.041^{+0.025}_{-0.022} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$1.037^{+0.039}_{-0.046} \quad (-0.2\sigma)$	$H(0.51)$	$88.7^{+1.4}_{-1.6} \quad (+0.5\sigma)$
n_{s}	$0.9669^{+0.0076}_{-0.0080} \quad (+0.7\sigma)$	$r_{\text{drag}}h$	$127^{+20}_{-20} \quad (+0.1\sigma)$	$D_{\text{M}}(0.51)$	$1817^{+140}_{-98} \quad (-0.3\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0048} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.487^{+0.050}_{-0.056} \quad (-0.4\sigma)$	$H(0.61)$	$92.8^{+2.5}_{-2.3} \quad (+0.2\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 8.65 \quad (+0.2\sigma)$	$D_{\text{M}}(0.61)$	$2148^{+140}_{-94} \quad (-0.3\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_{\text{s}}$	$2.093^{+0.052}_{-0.047} \quad (+0.1\sigma)$	$H(2.33)$	$231.5^{+4.2}_{-2.9} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.879^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\text{M}}(2.33)$	$5731^{+31}_{-29} \quad (-0.9\sigma)$
A_{100}^{PS}	$257^{+60}_{-60} \quad (-0.2\sigma)$	D_{40}	$1223^{+24}_{-22} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.483^{+0.025}_{-0.026} \quad (-0.4\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{220}	$5733^{+75}_{-73} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.90^{+0.11}_{-0.14} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.568^{+0.073}_{-0.085} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{1420}	$816.5^{+9.3}_{-9.3} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.81^{+0.10}_{-0.13} \quad (+0.0\sigma)$
A^{kSZ}	$< 7.82 \quad (-0.2\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.1} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.586^{+0.087}_{-0.10} \quad (-0.1\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$n_{\text{s},0.002}$	$0.9669^{+0.0076}_{-0.0080} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.754^{+0.093}_{-0.12} \quad (+0.0\sigma)$
A_{143}^{dustTT}	$10.9^{+3.3}_{-3.5} \quad (+0.1\sigma)$	Y_{P}	$0.24542^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$f\sigma_8(0.61)$	$0.589^{+0.091}_{-0.11} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.3}_{-6.6} \quad (+0.1\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24674^{+0.00011}_{-0.00011} \quad (+1.2\sigma)$	$\sigma_8(0.61)$	$0.716^{+0.088}_{-0.11} \quad (+0.0\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	10^5D/H	$2.574^{+0.053}_{-0.053} \quad (-1.3\sigma)$	$f\sigma_8(2.33)$	$0.359^{+0.041}_{-0.054} \quad (+0.1\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.073}$	Age/Gyr	$13.54^{+0.22}_{-0.15} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.362^{+0.039}_{-0.049} \quad (+0.1\sigma)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	z_*	$1089.78^{+0.50}_{-0.50} \quad (-1.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	r_*	$144.58^{+0.49}_{-0.51} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.10}$	$100\theta_*$	$1.04118^{+0.00059}_{-0.00061} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.7^{+3.5}_{-3.4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.886^{+0.046}_{-0.048} \quad (+0.2\sigma)$	χ_{lensing}^2	$9.0 \quad (\nu: 0.6)$
A_{217}^{dustTE}	$2.07^{+0.54}_{-0.54}$	z_{drag}	$1060.03^{+0.59}_{-0.59} \quad (+1.2\sigma)$	χ_{small}^2	$1339 \quad (\nu: 480033.5) \quad (+604.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.22^{+0.50}_{-0.51} \quad (+0.0\sigma)$	χ_{lowl}^2	$22.58 \quad (\nu: 0.3) \quad (-0.6\sigma)$
c_{217}	$0.9982^{+0.0013}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14077^{+0.00057}_{-0.00056} \quad (+0.4\sigma)$	χ_{plik}^2	$1416 \quad (\nu: 480047.8) \quad (+119.2\sigma)$
H_0	$> 70.1 \quad (+0.1\sigma)$	$100\theta_{\text{D}}$	$0.16071^{+0.00034}_{-0.00035} \quad (-1.2\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.1) \quad (+1.2\sigma)$
Ω_{Λ}	$0.802^{+0.059}_{-0.094} \quad (+0.2\sigma)$	z_{eq}	$3385^{+52}_{-50} \quad (-0.5\sigma)$	χ_{CMB}^2	$2785.8 \quad (\nu: 17.6) \quad (+282.3\sigma)$
Ω_{m}	$0.198^{+0.094}_{-0.059} \quad (-0.2\sigma)$	k_{eq}	$0.01033^{+0.00016}_{-0.00015} \quad (-0.5\sigma)$		
$\Omega_{\text{m}}h^2$	$0.1423^{+0.0022}_{-0.0021} \quad (-0.5\sigma)$	$100\theta_{\text{eq}}$	$0.8166^{+0.0096}_{-0.0098} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2797.43; \Delta\bar{\chi}_{\text{eff}}^2 = -3.08; R - 1 = 0.01516$$

18.12 base_w_plikHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02236^{+0.00030}_{-0.00028} \quad (+1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.1055^{+0.0048}_{-0.0051} \quad (-1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0058}_{-0.0057} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1202^{+0.0026}_{-0.0027} \quad (-0.1\sigma)$	σ_8	$0.872^{+0.035}_{-0.036} \quad (-1.1\sigma)$	$H(0.15)$	$76.4^{+1.8}_{-1.9} \quad (-1.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04092^{+0.00063}_{-0.00063} \quad (+0.2\sigma)$	S_8	$0.817^{+0.030}_{-0.029} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$601^{+21}_{-19} \quad (+1.0\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.017}_{-0.016} \quad (+0.9\sigma)$	$H(0.38)$	$83.80^{+0.77}_{-0.78} \quad (-0.2\sigma)$
w_0	$-1.21^{+0.11}_{-0.11} \quad (+1.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.625^{+0.020}_{-0.019} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1466^{+34}_{-31} \quad (+1.0\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.029}_{-0.026} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$1.015^{+0.028}_{-0.027} \quad (-0.9\sigma)$	$H(0.51)$	$89.50^{+0.73}_{-0.71} \quad (+1.3\sigma)$
n_{s}	$0.9648^{+0.0081}_{-0.0083} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$108.4^{+4.7}_{-4.8} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1916^{+36}_{-33} \quad (+0.9\sigma)$
y_{cal}	$1.0006^{+0.0045}_{-0.0046} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.479^{+0.061}_{-0.057} \quad (-0.5\sigma)$	$H(0.61)$	$94.53^{+0.80}_{-0.82} \quad (+1.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 8.97 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2242^{+36}_{-34} \quad (+0.9\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.105^{+0.062}_{-0.055} \quad (+0.5\sigma)$	$H(2.33)$	$234.1^{+1.6}_{-1.5} \quad (+0.7\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.6} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.884^{+0.023}_{-0.022} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5748^{+21}_{-21} \quad (-0.1\sigma)$
A_{100}^{PS}	$257^{+60}_{-50} \quad (-0.2\sigma)$	D_{40}	$1231^{+25}_{-24} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.473^{+0.020}_{-0.019} \quad (-0.9\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.3\sigma)$	D_{220}	$5733^{+77}_{-71} \quad (+0.4\sigma)$	$\sigma_8(0.15)$	$0.809^{+0.035}_{-0.035} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2539^{+25}_{-25} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.513^{+0.026}_{-0.026} \quad (-1.1\sigma)$
A_{217}^{PS}	$116^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$817.0^{+9.2}_{-8.8} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.719^{+0.031}_{-0.032} \quad (-1.1\sigma)$
A^{kSZ}	$< 7.90 \quad (-0.2\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.1} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.518^{+0.028}_{-0.028} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.5} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9648^{+0.0081}_{-0.0083} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.673^{+0.029}_{-0.030} \quad (-1.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.6} \quad (+0.1\sigma)$	Y_{P}	$0.24539^{+0.00011}_{-0.00011} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.515^{+0.028}_{-0.028} \quad (-1.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.7^{+6.0}_{-6.4} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00011} \quad (+0.9\sigma)$	$\sigma_8(0.61)$	$0.640^{+0.027}_{-0.028} \quad (-1.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.587^{+0.053}_{-0.053} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.323^{+0.013}_{-0.014} \quad (-1.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.069}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.685^{+0.060}_{-0.058} \quad (+0.7\sigma)$	$\sigma_8(2.33)$	$0.328^{+0.012}_{-0.012} \quad (-1.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.057}_{-0.059}$	z_*	$1089.95^{+0.50}_{-0.53} \quad (-0.7\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	r_*	$144.38^{+0.62}_{-0.60} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04110^{+0.00062}_{-0.00062} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.5} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.868^{+0.056}_{-0.053} \quad (-0.2\sigma)$	χ_{small}^2	$1305 \quad (\nu: 478113.6) \quad (+582.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	z_{drag}	$1059.94^{+0.53}_{-0.58} \quad (+1.0\sigma)$	χ_{lowl}^2	$23.28 \quad (\nu: 0.4) \quad (+0.0\sigma)$
c_{100}	$0.9997^{+0.0013}_{-0.0011} \quad (+0.1\sigma)$	r_{drag}	$147.05^{+0.60}_{-0.58} \quad (-0.4\sigma)$	χ_{plik}^2	$1450 \quad (\nu: 478081.3) \quad (+125.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14091^{+0.00064}_{-0.00062} \quad (+0.7\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$0.97 \quad (\nu: 1.0)$
H_0	$73.7^{+3.2}_{-3.3} \quad (-1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00033}_{-0.00033} \quad (-1.0\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_{Λ}	$0.736^{+0.022}_{-0.026} \quad (-1.0\sigma)$	z_{eq}	$3407^{+58}_{-60} \quad (-0.0\sigma)$	χ_{CMB}^2	$2778.4 \quad (\nu: 18.1) \quad (+281.0\sigma)$
Ω_{m}	$0.264^{+0.026}_{-0.022} \quad (+1.0\sigma)$	k_{eq}	$0.01040^{+0.00018}_{-0.00018} \quad (-0.0\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0024}_{-0.0025} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.011}_{-0.011} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2791.00; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -12.89; R - 1 = 0.07585$$

18.13 base_w_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022221	$0.02217^{+0.00043}_{-0.00043}$ $(+0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4063	$0.430^{+0.039}_{-0.035}$ (-0.0σ)	$H(0.15)$	88.7	$81.6^{+7.9}_{-10}$ (-0.0σ)
$\Omega_c h^2$	0.11998	$0.1202^{+0.0040}_{-0.0040}$ (-0.1σ)	$\sigma_8 \Omega_m^{0.25}$	0.6599	$0.641^{+0.039}_{-0.043}$ (-0.1σ)	$D_M(0.15)$	481	548^{+100}_{-70} $(+0.0\sigma)$
$100\theta_{MC}$	1.04096	$1.04088^{+0.00093}_{-0.00093}$ $(+0.2\sigma)$	$\sigma_8/h^{0.5}$	1.073	$1.042^{+0.059}_{-0.066}$ (-0.1σ)	$H(0.38)$	84.46	$84.1^{+2.1}_{-2.2}$ $(+0.1\sigma)$
τ	0.0524	$0.052^{+0.016}_{-0.016}$ $(+0.1\sigma)$	$r_{drag}h$	146.8	125^{+20}_{-30} (-0.0σ)	$D_M(0.38)$	1288	1388^{+200}_{-100} $(+0.0\sigma)$
w_0	-1.96	$-1.54^{+0.59}_{-0.48}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.520	$2.498^{+0.084}_{-0.094}$ (-0.1σ)	$H(0.51)$	86.77	$88.2^{+1.9}_{-2.2}$ $(+0.1\sigma)$
$\ln(10^{10} A_s)$	3.0381	$3.039^{+0.032}_{-0.033}$ (-0.0σ)	z_{re}	7.45	$7.5^{+1.6}_{-1.7}$ $(+0.1\sigma)$	$D_M(0.51)$	1744	1841^{+170}_{-120} $(+0.0\sigma)$
n_s	0.9653	$0.964^{+0.011}_{-0.011}$ $(+0.2\sigma)$	$10^9 A_s$	2.087	$2.088^{+0.068}_{-0.068}$ (-0.0σ)	$H(0.61)$	90.19	$92.5^{+2.8}_{-2.8}$ $(+0.1\sigma)$
y_{cal}	1.00015	$1.0004^{+0.0048}_{-0.0048}$ $(+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8790	$1.881^{+0.026}_{-0.026}$ (-0.2σ)	$D_M(0.61)$	2083	2173^{+160}_{-120} $(+0.0\sigma)$
A_{100}^{PS}	234.9	241^{+50}_{-50} (-0.7σ)	D_{40}	1221.3	1226^{+29}_{-29} (-0.3σ)	$H(2.33)$	230.35	$232.3^{+5.4}_{-4.3}$ (-0.0σ)
A_{143}^{PS}	42.9	40^{+20}_{-20} (-1.0σ)	D_{220}	5707	5707^{+80}_{-81} (-0.2σ)	$D_M(2.33)$	5735.6	5748^{+44}_{-44} (-0.1σ)
A_{217}^{PS}	101.3	102^{+30}_{-30} (-1.3σ)	D_{810}	2532.2	2533^{+27}_{-27} (-0.2σ)	$f\sigma_8(0.15)$	0.5076	$0.489^{+0.041}_{-0.040}$ (-0.1σ)
A_{217}^{CIB}	45.1	40^{+10}_{-10} (-1.1σ)	D_{1420}	814.0	814^{+10}_{-10} (-0.0σ)	$\sigma_8(0.15)$	1.010	$0.90^{+0.13}_{-0.16}$ (-0.1σ)
A_{143}^{tSZ}	6.50	< 7.41 (-0.7σ)	D_{2000}	229.96	$229.7^{+3.6}_{-3.6}$ $(+0.0\sigma)$	$f\sigma_8(0.38)$	0.644	$0.570^{+0.094}_{-0.10}$ (-0.1σ)
$r_{143 \times 217}^{PS}$	0.610	$0.65^{+0.25}_{-0.25}$	$n_{s,0.002}$	0.9653	$0.964^{+0.011}_{-0.011}$ $(+0.2\sigma)$	$\sigma_8(0.38)$	0.904	$0.80^{+0.12}_{-0.15}$ (-0.1σ)
$r_{143 \times 217}^{CIB}$	0.84	—	Y_P	0.245335	$0.24531^{+0.00017}_{-0.00020}$ $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.675	$0.59^{+0.11}_{-0.12}$ (-0.1σ)
$\xi^{tSZ \times CIB}$	0.24	—	Y_P^{BBN}	0.246661	$0.24664^{+0.00017}_{-0.00020}$ $(+0.1\sigma)$	$\sigma_8(0.51)$	0.845	$0.75^{+0.11}_{-0.14}$ (-0.1σ)
A^{kSZ}	0.1	—	$10^5 D/H$	2.614	$2.624^{+0.082}_{-0.080}$ (-0.1σ)	$f\sigma_8(0.61)$	0.681	$0.59^{+0.11}_{-0.13}$ (-0.1σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.39}$	Age/Gyr	13.449	$13.59^{+0.27}_{-0.19}$ $(+0.0\sigma)$	$\sigma_8(0.61)$	0.802	$0.71^{+0.10}_{-0.13}$ (-0.1σ)
A_{143}^{dust}	0.991	$0.97^{+0.34}_{-0.35}$	z_*	1090.11	$1090.20^{+0.79}_{-0.79}$ (-0.1σ)	$f\sigma_8(2.33)$	0.399	$0.356^{+0.049}_{-0.063}$ (-0.0σ)
A_{217}^{dust}	0.967	$0.97^{+0.20}_{-0.20}$	r_*	144.55	$144.52^{+0.91}_{-0.92}$ $(+0.1\sigma)$	$\sigma_8(2.33)$	0.400	$0.359^{+0.046}_{-0.057}$ (-0.0σ)
$A_{143 \times 217}^{dust}$	0.993	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04116	$1.04108^{+0.00092}_{-0.00091}$ $(+0.2\sigma)$	f_{2000}^{143}	30.5	30^{+6}_{-6} (-0.1σ)
c_{100}	0.99763	$0.9975^{+0.0021}_{-0.0021}$ (-3.4σ)	$D_M(z_*)/\text{Gpc}$	13.884	$13.882^{+0.084}_{-0.085}$ $(+0.1\sigma)$	f_{2000}^{217}	107.03	$107.3^{+4.0}_{-3.9}$ (-0.3σ)
c_{217}	1.00138	$1.0011^{+0.0031}_{-0.0031}$ $(+4.6\sigma)$	z_{drag}	1059.59	$1059.49^{+0.90}_{-0.89}$ $(+0.1\sigma)$	$f_{2000}^{143 \times 217}$	32.41	33^{+4}_{-4} (-0.3σ)
H_0	99.7	> 66.5 (-0.0σ)	r_{drag}	147.26	$147.25^{+0.92}_{-0.92}$ $(+0.1\sigma)$	χ_{simall}^2	395.72	$396.9 (\nu: 1.4)$ $(+0.1\sigma)$
Ω_Λ	0.856	$0.790^{+0.071}_{-0.12}$ (-0.0σ)	k_D	0.14057	$0.1405^{+0.0010}_{-0.0010}$ (-0.0σ)	χ_{lowl}^2	22.46	$23.0 (\nu: 0.6)$ (-0.2σ)
Ω_m	0.144	$0.210^{+0.12}_{-0.071}$ $(+0.0\sigma)$	$100\theta_D$	0.16097	$0.16103^{+0.00052}_{-0.00051}$ (-0.0σ)	$\chi_{CamSpec}^2$	7048.6	$7062.0 (\nu: 14.0)$
$\Omega_m h^2$	0.14284	$0.1431^{+0.0038}_{-0.0038}$ (-0.1σ)	z_{eq}	3398	3403^{+92}_{-90} (-0.1σ)	χ_{prior}^2	2.0	$7.6 (\nu: 5.8)$ $(+0.1\sigma)$
$\Omega_m h^3$	0.1424	$0.121^{+0.023}_{-0.027}$ (-0.1σ)	k_{eq}	0.010371	$0.01039^{+0.00028}_{-0.00027}$ (-0.1σ)	χ_{CMB}^2	7466.8	$7481.8 (\nu: 15.0)$ $(+1113.1\sigma)$
σ_8	1.072	$0.96^{+0.13}_{-0.16}$ (-0.1σ)	$100\theta_{eq}$	0.8137	$0.813^{+0.017}_{-0.017}$ $(+0.1\sigma)$			
S_8	0.742	$0.786^{+0.071}_{-0.064}$ (-0.0σ)	$100\theta_{s,eq}$	0.4497	$0.4492^{+0.0088}_{-0.0087}$ $(+0.1\sigma)$			

Best-fit $\chi_{eff}^2 = 7468.79$; $\Delta\chi_{eff}^2 = -2.94$; $\bar{\chi}_{eff}^2 = 7489.40$; $\Delta\bar{\chi}_{eff}^2 = -2.14$; $R - 1 = 0.00889$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.72 (Δ -0.11) commander_dx12.v3.2.29: 22.46 (Δ -0.94) CamSpec like_10.7HM: 7048.57 (Δ -1.76)

18.14 base_w_CamSpecHM_TT_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02222^{+0.00041}_{-0.00042} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.424^{+0.037}_{-0.031} \quad (-0.3\sigma)$	$H(0.15)$	$82.2^{+7.6}_{-9.6} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0032}_{-0.0031} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.635^{+0.028}_{-0.031} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$544^{+100}_{-70} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04097^{+0.00090}_{-0.00090} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$1.034^{+0.044}_{-0.050} \quad (-0.3\sigma)$	$H(0.38)$	$84.5^{+1.9}_{-2.0} \quad (+0.5\sigma)$
τ	$0.052^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$r_{\mathrm{drag}} h$	$126^{+20}_{-30} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1378^{+200}_{-100} \quad (-0.1\sigma)$
w_0	$-1.53^{+0.53}_{-0.44} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.481^{+0.056}_{-0.061} \quad (-0.5\sigma)$	$H(0.51)$	$88.5^{+1.6}_{-1.8} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.035^{+0.031}_{-0.030} \quad (-0.2\sigma)$	z_{re}	$7.4^{+1.6}_{-1.7} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1829^{+160}_{-110} \quad (-0.1\sigma)$
n_{s}	$0.9661^{+0.0099}_{-0.0097} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}}$	$2.081^{+0.064}_{-0.062} \quad (-0.2\sigma)$	$H(0.61)$	$92.7^{+2.5}_{-2.5} \quad (+0.2\sigma)$
y_{cal}	$1.0003^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.022}_{-0.023} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2161^{+150}_{-110} \quad (-0.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1221^{+26}_{-26} \quad (-0.6\sigma)$	$H(2.33)$	$231.5^{+5.0}_{-3.8} \quad (-0.3\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5709^{+80}_{-81} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5742^{+41}_{-40} \quad (-0.4\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2531^{+26}_{-27} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.482^{+0.029}_{-0.028} \quad (-0.4\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.0\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.89^{+0.12}_{-0.14} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.7\sigma)$	D_{2000}	$229.7^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.563^{+0.079}_{-0.089} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9661^{+0.0099}_{-0.0097} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.11}_{-0.13} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24533^{+0.00017}_{-0.00018} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.580^{+0.094}_{-0.11} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00017}_{-0.00018} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.75^{+0.10}_{-0.12} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.615^{+0.080}_{-0.076} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.583^{+0.098}_{-0.11} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.02^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.57^{+0.25}_{-0.18} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.709^{+0.095}_{-0.12} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.05^{+0.72}_{-0.70} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.356^{+0.045}_{-0.057} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.73^{+0.73}_{-0.74} \quad (+0.5\sigma)$	$\sigma_8(2.33)$	$0.359^{+0.042}_{-0.052} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04117^{+0.00089}_{-0.00089} \quad (+0.3\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.068}_{-0.068} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.3^{+4.1}_{-4.0} \quad (-0.3\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.53^{+0.90}_{-0.90} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
H_0	$> 68.2 \quad (+0.0\sigma)$	r_{drag}	$147.45^{+0.74}_{-0.74} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.0 \quad (\nu: 0.6)$
Ω_{Λ}	$0.796^{+0.067}_{-0.11} \quad (+0.1\sigma)$	k_{D}	$0.14038^{+0.00088}_{-0.00089} \quad (-0.4\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.1) \quad (-0.0\sigma)$
Ω_{m}	$0.204^{+0.11}_{-0.067} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16100^{+0.00052}_{-0.00050} \quad (-0.1\sigma)$	χ_{lowl}^2	$22.56 \quad (\nu: 0.4) \quad (-0.6\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0030}_{-0.0029} \quad (-0.5\sigma)$	z_{eq}	$3382^{+72}_{-69} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.1 \quad (\nu: 13.2)$
$\Omega_{\mathrm{m}} h^3$	$0.121^{+0.022}_{-0.025} \quad (-0.0\sigma)$	k_{eq}	$0.01032^{+0.00022}_{-0.00021} \quad (-0.5\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.95^{+0.12}_{-0.14} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.013}_{-0.014} \quad (+0.6\sigma)$	χ_{CMB}^2	$7490.4 \quad (\nu: 14.9) \quad (+1114.7\sigma)$
S_8	$0.774^{+0.068}_{-0.057} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4512^{+0.0069}_{-0.0070} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7497.94; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.30; R - 1 = 0.01572$$

18.15 base_w_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02218^{+0.00043}_{-0.00043} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.431^{+0.039}_{-0.035} \quad (-0.0\sigma)$	$H(0.15)$	$81.6^{+7.9}_{-10} \quad (-0.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0040}_{-0.0039} \quad (-0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.641^{+0.039}_{-0.043} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$548^{+100}_{-70} \quad (+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00093}_{-0.00092} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$1.043^{+0.059}_{-0.066} \quad (-0.1\sigma)$	$H(0.38)$	$84.1^{+2.1}_{-2.2} \quad (+0.1\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$124^{+20}_{-30} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1388^{+200}_{-100} \quad (+0.0\sigma)$
w_0	$-1.53^{+0.59}_{-0.48} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.500^{+0.087}_{-0.089} \quad (-0.1\sigma)$	$H(0.51)$	$88.3^{+1.8}_{-2.2} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.028}_{-0.026} \quad (+0.2\sigma)$	z_{re}	$< 8.84 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1841^{+170}_{-120} \quad (+0.0\sigma)$
n_{s}	$0.965^{+0.011}_{-0.011} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.059}_{-0.054} \quad (+0.2\sigma)$	$H(0.61)$	$92.6^{+2.8}_{-2.8} \quad (+0.1\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.026}_{-0.026} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2173^{+170}_{-120} \quad (+0.0\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1225^{+29}_{-29} \quad (-0.3\sigma)$	$H(2.33)$	$232.2^{+5.4}_{-4.4} \quad (-0.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5707^{+79}_{-81} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5748^{+44}_{-44} \quad (-0.1\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.489^{+0.041}_{-0.040} \quad (-0.1\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.90^{+0.13}_{-0.16} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.42 \quad (-0.7\sigma)$	D_{2000}	$229.8^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.569^{+0.094}_{-0.10} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.965^{+0.011}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.12}_{-0.15} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24531^{+0.00017}_{-0.00020} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.59^{+0.11}_{-0.12} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00017}_{-0.00020} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.75^{+0.11}_{-0.14} \quad (-0.0\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.622^{+0.082}_{-0.079} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.59^{+0.11}_{-0.13} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.59^{+0.27}_{-0.19} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.71^{+0.10}_{-0.13} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.18^{+0.78}_{-0.79} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.356^{+0.049}_{-0.064} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.54^{+0.91}_{-0.91} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.359^{+0.046}_{-0.058} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04109^{+0.00092}_{-0.00091} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.884^{+0.084}_{-0.084} \quad (+0.1\sigma)$	f_{2000}^{217}	$107.3^{+4.0}_{-4.0} \quad (-0.3\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.50^{+0.89}_{-0.90} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
H_0	$> 66.5 \quad (-0.0\sigma)$	r_{drag}	$147.27^{+0.92}_{-0.90} \quad (+0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.0\sigma)$
Ω_{Λ}	$0.790^{+0.071}_{-0.12} \quad (-0.0\sigma)$	k_{D}	$0.1405^{+0.0010}_{-0.0010} \quad (-0.1\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 0.6) \quad (-0.3\sigma)$
Ω_{m}	$0.210^{+0.12}_{-0.071} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00052}_{-0.00051} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7061.9 \quad (\nu: 14.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1430^{+0.0038}_{-0.0037} \quad (-0.1\sigma)$	z_{eq}	$3401^{+91}_{-89} \quad (-0.1\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.7) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.121^{+0.023}_{-0.027} \quad (-0.1\sigma)$	k_{eq}	$0.01038^{+0.00028}_{-0.00027} \quad (-0.1\sigma)$	χ_{CMB}^2	$7481.6 \quad (\nu: 14.7) \quad (+1113.1\sigma)$
σ_8	$0.96^{+0.13}_{-0.16} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.017}_{-0.017} \quad (+0.2\sigma)$		
S_8	$0.787^{+0.071}_{-0.064} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4494^{+0.0087}_{-0.0086} \quad (+0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7489.13$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.13$; $R - 1 = 0.01149$

18.16 base_w_CamSpecHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00041}_{-0.00041} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.424^{+0.037}_{-0.032} \quad (-0.3\sigma)$	$H(0.15)$	$82.2^{+7.7}_{-9.7} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0031}_{-0.0030} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.635^{+0.028}_{-0.031} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$544^{+100}_{-70} \quad (-0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04099^{+0.00090}_{-0.00090} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$1.034^{+0.044}_{-0.050} \quad (-0.3\sigma)$	$H(0.38)$	$84.5^{+1.9}_{-2.1} \quad (+0.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$125^{+20}_{-30} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1379^{+200}_{-100} \quad (-0.1\sigma)$
w_0	$-1.52^{+0.53}_{-0.44} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.482^{+0.055}_{-0.061} \quad (-0.5\sigma)$	$H(0.51)$	$88.6^{+1.5}_{-1.8} \quad (+0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.039^{+0.026}_{-0.023} \quad (-0.0\sigma)$	z_{re}	$< 8.74 \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1830^{+160}_{-110} \quad (-0.1\sigma)$
n_{s}	$0.9666^{+0.0096}_{-0.0094} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.088^{+0.054}_{-0.049} \quad (-0.0\sigma)$	$H(0.61)$	$92.8^{+2.5}_{-2.5} \quad (+0.3\sigma)$
y_{cal}	$1.0003^{+0.0048}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2161^{+150}_{-110} \quad (-0.2\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{40}	$1220^{+26}_{-25} \quad (-0.6\sigma)$	$H(2.33)$	$231.5^{+5.1}_{-3.8} \quad (-0.3\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5709^{+80}_{-81} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5740^{+42}_{-39} \quad (-0.4\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{810}	$2531^{+26}_{-27} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.481^{+0.029}_{-0.027} \quad (-0.5\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	D_{1420}	$814^{+10}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.89^{+0.12}_{-0.14} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.7\sigma)$	D_{2000}	$229.8^{+3.6}_{-3.6} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.562^{+0.079}_{-0.089} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9666^{+0.0096}_{-0.0094} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.11}_{-0.13} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24534^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.579^{+0.094}_{-0.11} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00017}_{-0.00018} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.75^{+0.10}_{-0.13} \quad (-0.1\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.612^{+0.080}_{-0.076} \quad (-0.4\sigma)$	$f\sigma_8(0.61)$	$0.581^{+0.098}_{-0.11} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.57^{+0.25}_{-0.18} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.708^{+0.096}_{-0.12} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	z_*	$1090.02^{+0.69}_{-0.69} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.355^{+0.046}_{-0.058} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.76^{+0.71}_{-0.71} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.359^{+0.043}_{-0.052} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04119^{+0.00088}_{-0.00089} \quad (+0.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.904^{+0.067}_{-0.067} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.2^{+4.1}_{-4.0} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1059.55^{+0.88}_{-0.88} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
H_0	$> 67.9 \quad (+0.0\sigma)$	r_{drag}	$147.48^{+0.74}_{-0.73} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.0 \quad (\nu: 0.6)$
Ω_{Λ}	$0.795^{+0.067}_{-0.11} \quad (+0.1\sigma)$	k_{D}	$0.14035^{+0.00086}_{-0.00090} \quad (-0.4\sigma)$	χ_{small}^2	$396.6 \quad (\nu: 1.0) \quad (-0.1\sigma)$
Ω_{m}	$0.205^{+0.11}_{-0.067} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16099^{+0.00053}_{-0.00051} \quad (-0.2\sigma)$	χ_{lowl}^2	$22.52 \quad (\nu: 0.4) \quad (-0.6\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0029}_{-0.0028} \quad (-0.6\sigma)$	z_{eq}	$3378^{+69}_{-68} \quad (-0.6\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.0 \quad (\nu: 13.3)$
$\Omega_{\mathrm{m}} h^3$	$0.121^{+0.022}_{-0.025} \quad (-0.1\sigma)$	k_{eq}	$0.01031^{+0.00021}_{-0.00021} \quad (-0.6\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.95^{+0.12}_{-0.14} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.013}_{-0.013} \quad (+0.6\sigma)$	χ_{CMB}^2	$7490.1 \quad (\nu: 14.6) \quad (+1114.6\sigma)$
S_8	$0.775^{+0.068}_{-0.058} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0067}_{-0.0066} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7497.68; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.33; R - 1 = 0.02078$$

18.17 base_w_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022361	$0.02233^{+0.00031}_{-0.00030}$ (+0.8 σ)	σ_8	1.060	$0.95^{+0.13}_{-0.16}$ (−0.1 σ)	$100\theta_{\text{eq}}$	0.8166	$0.816^{+0.011}_{-0.011}$ (+0.5 σ)
$\Omega_c h^2$	0.11924	$0.1194^{+0.0026}_{-0.0026}$ (−0.5 σ)	S_8	0.737	$0.776^{+0.063}_{-0.055}$ (−0.3 σ)	$100\theta_{\text{s,eq}}$	0.4511	$0.4508^{+0.0058}_{-0.0057}$ (+0.5 σ)
$100\theta_{\text{MC}}$	1.04093	$1.04091^{+0.00061}_{-0.00062}$ (+0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4035	$0.425^{+0.035}_{-0.030}$ (−0.3 σ)	$H(0.15)$	88.8	$82.1^{+7.6}_{-10}$ (+0.1 σ)
τ	0.0528	$0.052^{+0.015}_{-0.016}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6540	$0.635^{+0.033}_{-0.038}$ (−0.4 σ)	$D_{\text{M}}(0.15)$	482	546^{+100}_{-70} (−0.0 σ)
w_0	−1.92	$−1.52^{+0.56}_{-0.45}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	1.065	$1.034^{+0.051}_{-0.060}$ (−0.3 σ)	$H(0.38)$	84.89	$84.5^{+1.6}_{-2.0}$ (+0.4 σ)
$\ln(10^{10} A_{\text{s}})$	3.0380	$3.037^{+0.031}_{-0.032}$ (−0.1 σ)	$r_{\text{drag}} h$	146.0	125^{+20}_{-30} (−0.0 σ)	$D_{\text{M}}(0.38)$	1286	1381^{+200}_{-100} (−0.1 σ)
n_{s}	0.9676	$0.9665^{+0.0085}_{-0.0087}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.507	$2.481^{+0.073}_{-0.077}$ (−0.5 σ)	$H(0.51)$	87.21	$88.6^{+1.5}_{-1.8}$ (+0.4 σ)
y_{cal}	1.00017	$1.0003^{+0.0049}_{-0.0049}$ (−0.0 σ)	z_{re}	7.45	$7.4^{+1.5}_{-1.7}$ (+0.0 σ)	$D_{\text{M}}(0.51)$	1740	1832^{+160}_{-110} (−0.1 σ)
A_{100}^{PS}	230.4	238^{+50}_{-50} (−0.9 σ)	$10^9 A_{\text{s}}$	2.086	$2.085^{+0.065}_{-0.066}$ (−0.1 σ)	$H(0.61)$	90.60	$92.8^{+2.6}_{-2.5}$ (+0.3 σ)
A_{143}^{PS}	43.8	39^{+20}_{-20} (−1.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8772	$1.877^{+0.023}_{-0.023}$ (−0.5 σ)	$D_{\text{M}}(0.61)$	2078	2163^{+160}_{-110} (−0.1 σ)
A_{217}^{PS}	105.9	103^{+30}_{-30} (−1.2 σ)	D_{40}	1217.6	1221^{+25}_{-25} (−0.5 σ)	$H(2.33)$	229.95	$231.8^{+5.1}_{-3.5}$ (−0.2 σ)
A_{217}^{CIB}	40.9	39^{+10}_{-10} (−1.3 σ)	D_{220}	5719	5719^{+73}_{-75} (+0.1 σ)	$D_{\text{M}}(2.33)$	5727.8	5739^{+37}_{-32} (−0.5 σ)
A_{143}^{tSZ}	6.01	< 7.54 (−0.6 σ)	D_{810}	2534.2	2534^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.15)$	0.5003	$0.482^{+0.032}_{-0.035}$ (−0.4 σ)
$r_{143 \times 217}^{\text{PS}}$	0.718	$0.66^{+0.25}_{-0.25}$	D_{1420}	815.9	$815.3^{+9.4}_{-9.5}$ (+0.3 σ)	$\sigma_8(0.15)$	0.999	$0.89^{+0.13}_{-0.16}$ (−0.1 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.69	—	D_{2000}	230.76	$230.4^{+3.2}_{-3.1}$ (+0.4 σ)	$f\sigma_8(0.38)$	0.632	$0.562^{+0.085}_{-0.098}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.53	—	$n_{\text{s},0.002}$	0.9676	$0.9665^{+0.0085}_{-0.0087}$ (+0.6 σ)	$\sigma_8(0.38)$	0.895	$0.80^{+0.11}_{-0.14}$ (−0.1 σ)
A^{kSZ}	0.8	—	Y_{P}	0.245392	$0.24538^{+0.00012}_{-0.00013}$ (+0.8 σ)	$f\sigma_8(0.51)$	0.663	$0.579^{+0.099}_{-0.12}$ (−0.2 σ)
A_{100}^{dust}	1.001	$1.01^{+0.38}_{-0.39}$	$Y_{\text{P}}^{\text{BBN}}$	0.246719	$0.24670^{+0.00012}_{-0.00013}$ (+0.8 σ)	$\sigma_8(0.51)$	0.837	$0.74^{+0.11}_{-0.13}$ (−0.1 σ)
A_{143}^{dust}	0.943	$0.96^{+0.35}_{-0.35}$	$10^5 \text{D}/\text{H}$	2.587	$2.593^{+0.058}_{-0.055}$ (−0.8 σ)	$f\sigma_8(0.61)$	0.670	$0.58^{+0.10}_{-0.12}$ (−0.2 σ)
A_{217}^{dust}	0.977	$0.98^{+0.20}_{-0.20}$	Age/Gyr	13.437	$13.57^{+0.25}_{-0.17}$ (−0.2 σ)	$\sigma_8(0.61)$	0.794	$0.71^{+0.10}_{-0.13}$ (−0.1 σ)
$A_{143 \times 217}^{\text{dust}}$	1.037	$1.03^{+0.32}_{-0.32}$	z_*	1089.86	$1089.92^{+0.54}_{-0.53}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.396	$0.355^{+0.048}_{-0.062}$ (−0.1 σ)
c_{100}	0.99782	$0.9975^{+0.0021}_{-0.0021}$ (−3.3 σ)	r_*	144.63	$144.62^{+0.60}_{-0.60}$ (+0.3 σ)	$\sigma_8(2.33)$	0.397	$0.358^{+0.044}_{-0.056}$ (−0.1 σ)
c_{217}	1.00110	$1.0011^{+0.0031}_{-0.0031}$ (+4.5 σ)	$100\theta_*$	1.04111	$1.04110^{+0.00060}_{-0.00061}$ (+0.2 σ)	f_{2000}^{143}	28.9	29^{+6}_{-5} (−0.5 σ)
c_{TE}	0.9959	$0.9958^{+0.0098}_{-0.0096}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.892	$13.891^{+0.056}_{-0.056}$ (+0.3 σ)	f_{2000}^{217}	105.98	$106.6^{+3.8}_{-3.8}$ (−0.7 σ)
c_{EE}	0.9919	$0.9917^{+0.0096}_{-0.0097}$	z_{drag}	1059.86	$1059.81^{+0.62}_{-0.64}$ (+0.8 σ)	$f_{2000}^{143 \times 217}$	31.53	32^{+4}_{-4} (−0.8 σ)
H_0	99.1	> 67.2 (−0.0 σ)	r_{drag}	147.30	$147.29^{+0.62}_{-0.61}$ (+0.2 σ)	χ_{simall}^2	395.73	$396.7 (\nu: 1.1)$ (−0.0 σ)
Ω_{Λ}	0.855	$0.793^{+0.068}_{-0.11}$ (+0.0 σ)	k_{D}	0.14064	$0.14062^{+0.00068}_{-0.00070}$ (+0.1 σ)	χ_{lowl}^2	22.18	$22.57 (\nu: 0.3)$ (−0.6 σ)
Ω_{m}	0.145	$0.207^{+0.11}_{-0.068}$ (−0.0 σ)	$100\theta_{\text{D}}$	0.160796	$0.16083^{+0.00037}_{-0.00037}$ (−0.8 σ)	χ_{CamSpec}^2	11498.2	$11513.3 (\nu: 15.6)$
$\Omega_{\text{m}} h^2$	0.14224	$0.1424^{+0.0025}_{-0.0025}$ (−0.4 σ)	z_{eq}	3384	3387^{+60}_{-59} (−0.4 σ)	χ_{prior}^2	1.9	$7.8 (\nu: 5.8)$ (+0.2 σ)
$\Omega_{\text{m}} h^3$	0.1409	$0.121^{+0.022}_{-0.026}$ (−0.1 σ)	k_{eq}	0.010328	$0.01034^{+0.00018}_{-0.00018}$ (−0.4 σ)	χ_{CMB}^2	11916.1	$11932.6 (\nu: 16.5)$ (+1900.6 σ)

Best-fit $\chi_{\text{eff}}^2 = 11918.08$; $\Delta\chi_{\text{eff}}^2 = -2.68$; $\bar{\chi}_{\text{eff}}^2 = 11940.42$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.04$; $R - 1 = 0.01476$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.73 (Δ -0.16) commander_dx12.v3.2.29: 22.18 (Δ -0.83) CamSpec like_10.7HM.1400.unified: 11498.24 (Δ -1.41)

18.18 base_w_CamSpecHM_TTTEEE_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02235^{+0.00030}_{-0.00030} \quad (+0.9\sigma)$	S_8	$0.770^{+0.062}_{-0.051} \quad (-0.5\sigma)$	$H(0.15)$	$82.6^{+7.2}_{-9.3} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0024}_{-0.0023} \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.422^{+0.034}_{-0.028} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$541^{+90}_{-70} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00061}_{-0.00060} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.634^{+0.026}_{-0.030} \quad (-0.4\sigma)$	$H(0.38)$	$84.7^{+1.5}_{-1.8} \quad (+0.6\sigma)$
τ	$0.052^{+0.014}_{-0.015} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$1.032^{+0.041}_{-0.048} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1372^{+150}_{-100} \quad (-0.2\sigma)$
w_0	$-1.54^{+0.51}_{-0.41} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$126^{+20}_{-30} \quad (+0.1\sigma)$	$H(0.51)$	$88.7^{+1.4}_{-1.6} \quad (+0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.035^{+0.028}_{-0.029} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.476^{+0.051}_{-0.058} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1823^{+150}_{-100} \quad (-0.2\sigma)$
n_{s}	$0.9671^{+0.0080}_{-0.0082} \quad (+0.7\sigma)$	z_{re}	$7.3^{+1.5}_{-1.5} \quad (-0.1\sigma)$	$H(0.61)$	$92.8^{+2.5}_{-2.4} \quad (+0.3\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0049} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.080^{+0.059}_{-0.060} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2154^{+140}_{-98} \quad (-0.2\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.875^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$H(2.33)$	$231.4^{+4.5}_{-3.2} \quad (-0.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{40}	$1219^{+24}_{-23} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5735^{+33}_{-30} \quad (-0.7\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5719^{+72}_{-75} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.480^{+0.025}_{-0.027} \quad (-0.5\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2532^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.89^{+0.11}_{-0.14} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.58 \quad (-0.6\sigma)$	D_{1420}	$815.1^{+9.4}_{-9.3} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.563^{+0.075}_{-0.087} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{2000}	$230.3^{+3.1}_{-3.1} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.10}_{-0.13} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9671^{+0.0080}_{-0.0082} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.580^{+0.089}_{-0.10} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.747^{+0.097}_{-0.12} \quad (-0.1\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.583^{+0.093}_{-0.11} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.40}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.590^{+0.057}_{-0.055} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.710^{+0.091}_{-0.11} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.56^{+0.23}_{-0.16} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.356^{+0.043}_{-0.056} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.87^{+0.52}_{-0.50} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.359^{+0.040}_{-0.051} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.68^{+0.53}_{-0.54} \quad (+0.4\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04112^{+0.00060}_{-0.00059} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.6^{+3.8}_{-3.8} \quad (-0.7\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.050}_{-0.050} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{TE}	$0.9960^{+0.0097}_{-0.0097}$	z_{drag}	$1059.82^{+0.65}_{-0.65} \quad (+0.8\sigma)$	$\chi_{\mathrm{lensing}}^2$	$8.75 \quad (\nu: 0.3)$
c_{EE}	$0.9918^{+0.0094}_{-0.0099}$	r_{drag}	$147.36^{+0.55}_{-0.55} \quad (+0.3\sigma)$	χ_{small}^2	$396.6 \quad (\nu: 0.8) \quad (-0.1\sigma)$
H_0	$> 69.1 \quad (+0.1\sigma)$	k_{D}	$0.14057^{+0.00063}_{-0.00066} \quad (+0.0\sigma)$	χ_{lowl}^2	$22.42 \quad (\nu: 0.3) \quad (-0.7\sigma)$
Ω_{Λ}	$0.799^{+0.063}_{-0.10} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16082^{+0.00037}_{-0.00037} \quad (-0.8\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.1 \quad (\nu: 14.8)$
Ω_{m}	$0.201^{+0.10}_{-0.063} \quad (-0.1\sigma)$	z_{eq}	$3380^{+54}_{-52} \quad (-0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1421^{+0.0023}_{-0.0022} \quad (-0.6\sigma)$	k_{eq}	$0.01032^{+0.00016}_{-0.00016} \quad (-0.6\sigma)$	χ_{CMB}^2	$11940.9 \quad (\nu: 16.6) \quad (+1902.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.122^{+0.021}_{-0.024} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.010}_{-0.010} \quad (+0.6\sigma)$		
σ_8	$0.95^{+0.11}_{-0.14} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0051}_{-0.0052} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11948.65; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.80; R - 1 = 0.02333$$

18.19 base_w_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00028}_{-0.00029} \quad (+0.8\sigma)$	S_8	$0.809^{+0.029}_{-0.030} \quad (+0.6\sigma)$	$H(0.15)$	$76.4^{+1.9}_{-1.9} \quad (-1.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0029}_{-0.0028} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.443^{+0.016}_{-0.017} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$601^{+21}_{-20} \quad (+1.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00062}_{-0.00062} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.619^{+0.021}_{-0.021} \quad (-1.2\sigma)$	$H(0.38)$	$83.85^{+0.77}_{-0.81} \quad (-0.1\sigma)$
τ	$0.052^{+0.015}_{-0.014} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$1.007^{+0.030}_{-0.030} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1466^{+34}_{-33} \quad (+1.0\sigma)$
w_0	$-1.20^{+0.11}_{-0.12} \quad (+1.2\sigma)$	$r_{\mathrm{drag}} h$	$108.3^{+4.9}_{-4.8} \quad (-1.1\sigma)$	$H(0.51)$	$89.56^{+0.70}_{-0.75} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.030}_{-0.030} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.460^{+0.061}_{-0.064} \quad (-1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1916^{+36}_{-34} \quad (+0.9\sigma)$
n_{s}	$0.9659^{+0.0081}_{-0.0084} \quad (+0.5\sigma)$	z_{re}	$7.4^{+1.4}_{-1.6} \quad (+0.0\sigma)$	$H(0.61)$	$94.59^{+0.79}_{-0.83} \quad (+1.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.086^{+0.063}_{-0.063} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2242^{+36}_{-34} \quad (+0.9\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$H(2.33)$	$233.8^{+1.7}_{-1.8} \quad (+0.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{40}	$1225^{+24}_{-26} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5749^{+20}_{-20} \quad (-0.1\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{220}	$5721^{+71}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.467^{+0.021}_{-0.021} \quad (-1.1\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.802^{+0.036}_{-0.034} \quad (-1.2\sigma)$
A_{143}^{tSZ}	$< 7.62 \quad (-0.6\sigma)$	D_{1420}	$815.8^{+9.7}_{-9.3} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.507^{+0.027}_{-0.027} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.24}$	D_{2000}	$230.4^{+3.2}_{-2.9} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.713^{+0.032}_{-0.031} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9659^{+0.0081}_{-0.0084} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.512^{+0.030}_{-0.028} \quad (-1.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00011}_{-0.00011} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.667^{+0.030}_{-0.029} \quad (-1.2\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00011} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.509^{+0.030}_{-0.028} \quad (-1.2\sigma)$
A_{100}^{dust}	$1.00^{+0.36}_{-0.38}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.596^{+0.055}_{-0.050} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.634^{+0.028}_{-0.027} \quad (-1.2\sigma)$
A_{143}^{dust}	$0.96^{+0.36}_{-0.33}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.693^{+0.062}_{-0.058} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.320^{+0.014}_{-0.013} \quad (-1.2\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.96^{+0.50}_{-0.51} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.326^{+0.012}_{-0.012} \quad (-1.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.57^{+0.64}_{-0.66} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04108^{+0.00062}_{-0.00062} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.8^{+3.9}_{-3.7} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0030} \quad (+4.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.060}_{-0.059} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{TE}	$0.9961^{+0.0097}_{-0.010}$	z_{drag}	$1059.78^{+0.61}_{-0.61} \quad (+0.7\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 0.9) \quad (-0.1\sigma)$
c_{EE}	$0.9918^{+0.0094}_{-0.010}$	r_{drag}	$147.25^{+0.67}_{-0.66} \quad (+0.1\sigma)$	χ_{lowl}^2	$22.85 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$73.5^{+3.3}_{-3.2} \quad (-1.1\sigma)$	k_{D}	$0.14066^{+0.00075}_{-0.00073} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.7 \quad (\nu: 14.2)$
Ω_{Λ}	$0.736^{+0.023}_{-0.025} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00036}_{-0.00033} \quad (-0.7\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$1.0 \quad (\nu: 1.0)$
Ω_{m}	$0.264^{+0.025}_{-0.023} \quad (+1.0\sigma)$	z_{eq}	$3392^{+62}_{-63} \quad (-0.3\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0026}_{-0.0026} \quad (-0.3\sigma)$	k_{eq}	$0.01035^{+0.00019}_{-0.00019} \quad (-0.3\sigma)$	χ_{CMB}^2	$11933.2 \quad (\nu: 15.1) \quad (+1900.7\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.1049^{+0.0051}_{-0.0048} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.012} \quad (+0.4\sigma)$		
σ_8	$0.863^{+0.038}_{-0.035} \quad (-1.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0061}_{-0.0061} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11941.94; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -12.32; R - 1 = 0.08175$$

18.20 base_w_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02234^{+0.00030}_{-0.00030} \quad (+0.9\sigma)$	σ_8	$0.95^{+0.13}_{-0.16} \quad (-0.1\sigma)$	$100\theta_{\text{eq}}$	$0.816^{+0.011}_{-0.011} \quad (+0.5\sigma)$
$\Omega_c h^2$	$0.1194^{+0.0026}_{-0.0026} \quad (-0.5\sigma)$	S_8	$0.777^{+0.062}_{-0.054} \quad (-0.3\sigma)$	$100\theta_{\text{s,eq}}$	$0.4509^{+0.0058}_{-0.0057} \quad (+0.5\sigma)$
$100\theta_{\text{MC}}$	$1.04092^{+0.00061}_{-0.00061} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.426^{+0.034}_{-0.030} \quad (-0.3\sigma)$	$H(0.15)$	$82.0^{+7.7}_{-10} \quad (+0.1\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.636^{+0.033}_{-0.038} \quad (-0.3\sigma)$	$D_{\text{M}}(0.15)$	$546^{+100}_{-70} \quad (-0.0\sigma)$
w_0	$-1.52^{+0.57}_{-0.45} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$1.035^{+0.051}_{-0.060} \quad (-0.3\sigma)$	$H(0.38)$	$84.5^{+1.6}_{-2.0} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.040^{+0.026}_{-0.024} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$125^{+20}_{-30} \quad (-0.0\sigma)$	$D_{\text{M}}(0.38)$	$1381^{+200}_{-100} \quad (-0.1\sigma)$
n_{s}	$0.9667^{+0.0084}_{-0.0087} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.484^{+0.072}_{-0.076} \quad (-0.4\sigma)$	$H(0.51)$	$88.6^{+1.5}_{-1.8} \quad (+0.4\sigma)$
y_{cal}	$1.0003^{+0.0049}_{-0.0049} \quad (-0.0\sigma)$	z_{re}	$< 8.70 \quad (+0.3\sigma)$	$D_{\text{M}}(0.51)$	$1833^{+160}_{-110} \quad (-0.1\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\text{s}}$	$2.092^{+0.055}_{-0.050} \quad (+0.1\sigma)$	$H(0.61)$	$92.8^{+2.6}_{-2.5} \quad (+0.3\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$D_{\text{M}}(0.61)$	$2164^{+160}_{-110} \quad (-0.1\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1221^{+25}_{-25} \quad (-0.5\sigma)$	$H(2.33)$	$231.8^{+5.1}_{-3.5} \quad (-0.2\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{220}	$5719^{+72}_{-76} \quad (+0.1\sigma)$	$D_{\text{M}}(2.33)$	$5738^{+37}_{-32} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.6\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.482^{+0.032}_{-0.035} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$815.3^{+9.5}_{-9.6} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.89^{+0.13}_{-0.16} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.563^{+0.085}_{-0.098} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$n_{\text{s},0.002}$	$0.9667^{+0.0084}_{-0.0087} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.12}_{-0.15} \quad (-0.1\sigma)$
A^{kSZ}	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.58^{+0.10}_{-0.12} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$Y_{\text{P}}^{\text{BBN}}$	$0.24671^{+0.00012}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.74^{+0.11}_{-0.14} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	$10^5 \text{D}/\text{H}$	$2.592^{+0.057}_{-0.055} \quad (-0.9\sigma)$	$f\sigma_8(0.61)$	$0.58^{+0.10}_{-0.12} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	Age/Gyr	$13.57^{+0.25}_{-0.17} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.71^{+0.10}_{-0.13} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	z_*	$1089.91^{+0.53}_{-0.53} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.355^{+0.048}_{-0.062} \quad (-0.1\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	r_*	$144.62^{+0.61}_{-0.59} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.358^{+0.044}_{-0.056} \quad (-0.1\sigma)$
c_{217}	$1.0010^{+0.0032}_{-0.0031} \quad (+4.5\sigma)$	$100\theta_*$	$1.04111^{+0.00060}_{-0.00060} \quad (+0.2\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
c_{TE}	$0.9957^{+0.0098}_{-0.0096}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.891^{+0.057}_{-0.055} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.5^{+3.8}_{-3.8} \quad (-0.7\sigma)$
c_{EE}	$0.9916^{+0.0097}_{-0.0097}$	z_{drag}	$1059.82^{+0.65}_{-0.65} \quad (+0.8\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
H_0	$> 67.0 \quad (-0.0\sigma)$	r_{drag}	$147.30^{+0.61}_{-0.60} \quad (+0.2\sigma)$	χ_{small}^2	$396.6 \quad (\nu: 1.0) \quad (-0.1\sigma)$
Ω_{Λ}	$0.793^{+0.069}_{-0.11} \quad (+0.0\sigma)$	k_{D}	$0.14063^{+0.00068}_{-0.00070} \quad (+0.1\sigma)$	χ_{lowl}^2	$22.57 \quad (\nu: 0.3) \quad (-0.6\sigma)$
Ω_{m}	$0.207^{+0.11}_{-0.069} \quad (-0.0\sigma)$	$100\theta_{\text{D}}$	$0.16082^{+0.00037}_{-0.00037} \quad (-0.8\sigma)$	χ_{CamSpec}^2	$11513.1 \quad (\nu: 15.4)$
$\Omega_{\text{m}} h^2$	$0.1423^{+0.0025}_{-0.0025} \quad (-0.5\sigma)$	z_{eq}	$3386^{+59}_{-60} \quad (-0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.2\sigma)$
$\Omega_{\text{m}} h^3$	$0.121^{+0.022}_{-0.027} \quad (-0.1\sigma)$	k_{eq}	$0.01034^{+0.00018}_{-0.00018} \quad (-0.5\sigma)$	χ_{CMB}^2	$11932.3 \quad (\nu: 16.0) \quad (+1900.5\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 11940.09; \Delta\bar{\chi}_{\text{eff}}^2 = -2.09; R - 1 = 0.01385$$

18.21 base_w_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02236^{+0.00031}_{-0.00029} \quad (+0.9\sigma)$	S_8	$0.771^{+0.061}_{-0.051} \quad (-0.4\sigma)$	$H(0.15)$	$82.5^{+7.3}_{-9.4} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1190^{+0.0023}_{-0.0023} \quad (-0.7\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.422^{+0.034}_{-0.028} \quad (-0.4\sigma)$	$D_M(0.15)$	$542^{+90}_{-70} \quad (-0.1\sigma)$
$100\theta_{MC}$	$1.04095^{+0.00060}_{-0.00058} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.634^{+0.026}_{-0.030} \quad (-0.4\sigma)$	$H(0.38)$	$84.7^{+1.5}_{-1.8} \quad (+0.6\sigma)$
τ	$0.0534^{+0.011}_{-0.0099} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$1.032^{+0.041}_{-0.049} \quad (-0.4\sigma)$	$D_M(0.38)$	$1374^{+150}_{-100} \quad (-0.2\sigma)$
w_0	$-1.53^{+0.51}_{-0.42} \quad (+0.1\sigma)$	$r_{\text{drag}} h$	$126^{+20}_{-30} \quad (+0.1\sigma)$	$H(0.51)$	$88.7^{+1.4}_{-1.6} \quad (+0.5\sigma)$
$\ln(10^{10} A_s)$	$3.038^{+0.024}_{-0.022} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.478^{+0.052}_{-0.055} \quad (-0.6\sigma)$	$D_M(0.51)$	$1824^{+150}_{-100} \quad (-0.2\sigma)$
n_s	$0.9674^{+0.0079}_{-0.0083} \quad (+0.8\sigma)$	z_{re}	$< 8.55 \quad (+0.2\sigma)$	$H(0.61)$	$92.9^{+2.5}_{-2.3} \quad (+0.3\sigma)$
y_{cal}	$1.0002^{+0.0049}_{-0.0049} \quad (-0.1\sigma)$	$10^9 A_s$	$2.086^{+0.050}_{-0.045} \quad (-0.1\sigma)$	$D_M(0.61)$	$2155^{+150}_{-100} \quad (-0.2\sigma)$
A_{100}^{PS}	$238^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_s e^{-2\tau}$	$1.875^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$H(2.33)$	$231.4^{+4.6}_{-3.2} \quad (-0.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.3\sigma)$	D_{40}	$1219^{+24}_{-23} \quad (-0.7\sigma)$	$D_M(2.33)$	$5735^{+34}_{-30} \quad (-0.7\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5719^{+71}_{-75} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.480^{+0.026}_{-0.027} \quad (-0.5\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2532^{+26}_{-25} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.89^{+0.11}_{-0.14} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{1420}	$815.0^{+9.5}_{-9.4} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.562^{+0.075}_{-0.087} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.26}_{-0.25}$	D_{2000}	$230.3^{+3.1}_{-3.1} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.80^{+0.11}_{-0.13} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\text{CIB}}$	—	$n_{s,0.002}$	$0.9674^{+0.0079}_{-0.0083} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.579^{+0.090}_{-0.10} \quad (-0.2\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P	$0.24539^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$\sigma_8(0.51)$	$0.746^{+0.098}_{-0.12} \quad (-0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.24671^{+0.00011}_{-0.00012} \quad (+0.9\sigma)$	$f\sigma_8(0.61)$	$0.582^{+0.094}_{-0.11} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.40}$	10^5D/H	$2.588^{+0.055}_{-0.055} \quad (-0.9\sigma)$	$\sigma_8(0.61)$	$0.709^{+0.092}_{-0.12} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	Age/Gyr	$13.56^{+0.23}_{-0.16} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.356^{+0.044}_{-0.056} \quad (-0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1089.85^{+0.50}_{-0.50} \quad (-1.0\sigma)$	$\sigma_8(2.33)$	$0.359^{+0.041}_{-0.051} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	r_*	$144.70^{+0.53}_{-0.53} \quad (+0.5\sigma)$	f_{2000}^{143}	$29^{+6}_{-5} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.3\sigma)$	$100\theta_*$	$1.04113^{+0.00059}_{-0.00058} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.5^{+3.9}_{-3.8} \quad (-0.7\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.898^{+0.050}_{-0.050} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.8\sigma)$
c_{TE}	$0.9958^{+0.0096}_{-0.0096}$	z_{drag}	$1059.83^{+0.63}_{-0.63} \quad (+0.8\sigma)$	χ_{lensing}^2	$8.76 \quad (\nu: 0.4)$
c_{EE}	$0.9917^{+0.0094}_{-0.0099}$	r_{drag}	$147.37^{+0.54}_{-0.54} \quad (+0.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.2\sigma)$
H_0	$> 68.8 \quad (+0.0\sigma)$	k_D	$0.14056^{+0.00063}_{-0.00066} \quad (-0.0\sigma)$	χ_{lowl}^2	$22.41 \quad (\nu: 0.3) \quad (-0.7\sigma)$
Ω_Λ	$0.797^{+0.065}_{-0.10} \quad (+0.1\sigma)$	$100\theta_D$	$0.16081^{+0.00037}_{-0.00037} \quad (-0.8\sigma)$	χ_{CamSpec}^2	$11513.0 \quad (\nu: 14.8)$
Ω_m	$0.203^{+0.10}_{-0.065} \quad (-0.1\sigma)$	z_{eq}	$3378^{+54}_{-51} \quad (-0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.2\sigma)$
$\Omega_m h^2$	$0.1420^{+0.0022}_{-0.0021} \quad (-0.6\sigma)$	k_{eq}	$0.01031^{+0.00016}_{-0.00016} \quad (-0.6\sigma)$	χ_{CMB}^2	$11940.6 \quad (\nu: 16.2) \quad (+1902.0\sigma)$
$\Omega_m h^3$	$0.121^{+0.021}_{-0.025} \quad (-0.0\sigma)$	$100\theta_{\text{eq}}$	$0.8177^{+0.0099}_{-0.010} \quad (+0.7\sigma)$		
σ_8	$0.95^{+0.11}_{-0.14} \quad (-0.1\sigma)$	$100\theta_{s,\text{eq}}$	$0.4517^{+0.0050}_{-0.0052} \quad (+0.7\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 11948.34$; $\Delta\bar{\chi}_{\text{eff}}^2 = -2.91$; $R - 1 = 0.02464$

18.22 **base_w_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5**

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02232^{+0.00027}_{-0.00028} \quad (+0.8\sigma)$	S_8	$0.810^{+0.028}_{-0.028} \quad (+0.7\sigma)$	$H(0.15)$	$76.3^{+1.9}_{-1.9} \quad (-1.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0027}_{-0.0027} \quad (-0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.444^{+0.015}_{-0.016} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$602^{+21}_{-20} \quad (+1.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04090^{+0.00061}_{-0.00062} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.619^{+0.020}_{-0.020} \quad (-1.1\sigma)$	$H(0.38)$	$83.86^{+0.74}_{-0.78} \quad (-0.1\sigma)$
τ	$0.054^{+0.012}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$1.008^{+0.029}_{-0.028} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1466^{+34}_{-33} \quad (+1.0\sigma)$
w_0	$-1.20^{+0.11}_{-0.12} \quad (+1.2\sigma)$	$r_{\mathrm{drag}}h$	$108.3^{+4.9}_{-4.7} \quad (-1.1\sigma)$	$H(0.51)$	$89.58^{+0.69}_{-0.71} \quad (+1.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.026}_{-0.024} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.462^{+0.059}_{-0.059} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.51)$	$1916^{+36}_{-34} \quad (+0.9\sigma)$
n_{s}	$0.9661^{+0.0080}_{-0.0082} \quad (+0.5\sigma)$	z_{re}	$< 8.65 \quad (+0.3\sigma)$	$H(0.61)$	$94.60^{+0.71}_{-0.78} \quad (+1.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.054}_{-0.050} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2242^{+36}_{-34} \quad (+0.9\sigma)$
A_{100}^{PS}	$238^{+40}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.023}_{-0.022} \quad (-0.3\sigma)$	$H(2.33)$	$233.8^{+1.7}_{-1.8} \quad (+0.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{40}	$1225^{+24}_{-24} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5749^{+20}_{-19} \quad (-0.1\sigma)$
A_{217}^{PS}	$103^{+20}_{-30} \quad (-1.2\sigma)$	D_{220}	$5722^{+69}_{-76} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.468^{+0.020}_{-0.020} \quad (-1.1\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.802^{+0.037}_{-0.033} \quad (-1.2\sigma)$
A_{143}^{tSZ}	$< 7.62 \quad (-0.6\sigma)$	D_{1420}	$815.8^{+9.7}_{-9.3} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.507^{+0.027}_{-0.025} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.24}$	D_{2000}	$230.4^{+3.2}_{-3.1} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.713^{+0.032}_{-0.030} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9661^{+0.0080}_{-0.0082} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.512^{+0.029}_{-0.028} \quad (-1.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00011}_{-0.00011} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.668^{+0.030}_{-0.027} \quad (-1.2\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00011} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.509^{+0.029}_{-0.028} \quad (-1.2\sigma)$
A_{100}^{dust}	$0.995^{+0.36}_{-0.37}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.595^{+0.051}_{-0.051} \quad (-0.8\sigma)$	$\sigma_8(0.61)$	$0.635^{+0.028}_{-0.026} \quad (-1.2\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.33}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.693^{+0.061}_{-0.058} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.320^{+0.014}_{-0.013} \quad (-1.2\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.19}$	z_*	$1089.95^{+0.47}_{-0.50} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.326^{+0.012}_{-0.011} \quad (-1.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_*	$144.58^{+0.63}_{-0.63} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04109^{+0.00062}_{-0.00063} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.8^{+3.9}_{-3.9} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0029} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.062}_{-0.057} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{TE}	$0.9959^{+0.0092}_{-0.0099}$	z_{drag}	$1059.79^{+0.58}_{-0.58} \quad (+0.7\sigma)$	χ_{small}^2	$396.6 \quad (\nu: 0.8) \quad (-0.1\sigma)$
c_{EE}	$0.9918^{+0.0093}_{-0.0097}$	r_{drag}	$147.26^{+0.66}_{-0.62} \quad (+0.1\sigma)$	χ_{lowl}^2	$22.86 \quad (\nu: 0.3) \quad (-0.3\sigma)$
H_0	$73.5^{+3.3}_{-3.1} \quad (-1.1\sigma)$	k_{D}	$0.14065^{+0.00070}_{-0.00072} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.4 \quad (\nu: 14.3)$
Ω_{Λ}	$0.736^{+0.023}_{-0.025} \quad (-1.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00035}_{-0.00032} \quad (-0.7\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$1.0 \quad (\nu: 1.0)$
Ω_{m}	$0.264^{+0.025}_{-0.023} \quad (+1.0\sigma)$	z_{eq}	$3391^{+60}_{-63} \quad (-0.4\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1425^{+0.0025}_{-0.0026} \quad (-0.4\sigma)$	k_{eq}	$0.01035^{+0.00018}_{-0.00019} \quad (-0.4\sigma)$	χ_{CMB}^2	$11932.9 \quad (\nu: 14.7) \quad (+1900.6\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.1048^{+0.0051}_{-0.0047} \quad (-1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.011} \quad (+0.4\sigma)$		
σ_8	$0.864^{+0.038}_{-0.034} \quad (-1.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4504^{+0.0061}_{-0.0057} \quad (+0.4\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11941.58; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -12.43; R - 1 = 0.09840$$

18.23 base_w_plikHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022173	$0.02217^{+0.00040}_{-0.00039}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9895	$0.992^{+0.040}_{-0.040}$ (−1.6 σ)	$D_M(0.38)$	1524.8	1522^{+32}_{-33} (+1.7 σ)
$\Omega_c h^2$	0.11961	$0.1197^{+0.0034}_{-0.0035}$ (−0.4 σ)	$r_{\text{drag}} h$	100.45	$100.9^{+4.6}_{-3.9}$ (−1.6 σ)	$H(0.51)$	89.54	$89.50^{+0.71}_{-0.79}$ (+1.2 σ)
$100\theta_{\text{MC}}$	1.04092	$1.04090^{+0.00086}_{-0.00086}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.441	$2.445^{+0.077}_{-0.079}$ (−1.3 σ)	$D_M(0.51)$	1977.2	1974^{+33}_{-34} (+1.7 σ)
τ	0.0528	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	z_{re}	7.56	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	95.09	$95.02^{+0.83}_{-0.97}$ (+1.6 σ)
w_0	−1.027	$-1.04^{+0.13}_{-0.14}$ (+1.7 σ)	$10^9 A_s$	2.090	$2.091^{+0.070}_{-0.066}$ (+0.1 σ)	$D_M(0.61)$	2302.2	2299^{+33}_{-33} (+1.6 σ)
$\ln(10^{10} A_s)$	3.0400	$3.040^{+0.033}_{-0.032}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8811	$1.880^{+0.025}_{-0.025}$ (−0.2 σ)	$H(2.33)$	235.70	$235.6^{+1.6}_{-1.6}$ (+1.3 σ)
n_s	0.9655	$0.965^{+0.010}_{-0.0099}$ (+0.3 σ)	D_{40}	1227.4	1228^{+27}_{-27} (−0.1 σ)	$D_M(2.33)$	5768.2	5768^{+23}_{-24} (+0.8 σ)
y_{cal}	1.00058	$1.0005^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{220}	5717	5716^{+80}_{-79} (+0.0 σ)	$f\sigma_8(0.15)$	0.4594	$0.461^{+0.026}_{-0.026}$ (−1.4 σ)
A_{217}^{CIB}	49.6	48^{+10}_{-10} (+0.0 σ)	D_{810}	2537.6	2536^{+27}_{-27} (+0.1 σ)	$\sigma_8(0.15)$	0.7551	$0.759^{+0.045}_{-0.043}$ (−1.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.21	—	D_{1420}	815.8	$815.0^{+9.9}_{-9.9}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4799	$0.483^{+0.036}_{-0.033}$ (−1.7 σ)
A_{143}^{tSZ}	6.99	$5.1^{+3.8}_{-4.0}$ (−0.0 σ)	D_{2000}	230.04	$229.8^{+3.5}_{-3.4}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6694	$0.673^{+0.040}_{-0.038}$ (−1.7 σ)
A_{100}^{PS}	257	263^{+60}_{-60} (+0.0 σ)	$n_{s,0.002}$	0.9655	$0.965^{+0.010}_{-0.0099}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4791	$0.482^{+0.037}_{-0.034}$ (−1.7 σ)
A_{143}^{PS}	48.2	49^{+20}_{-20} (+0.0 σ)	Y_{P}	0.245315	$0.24531^{+0.00016}_{-0.00019}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6263	$0.629^{+0.036}_{-0.035}$ (−1.7 σ)
$A_{143 \times 217}^{\text{PS}}$	43.9	43^{+20}_{-20} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246641	$0.24664^{+0.00016}_{-0.00019}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4743	$0.477^{+0.038}_{-0.035}$ (−1.7 σ)
A_{217}^{PS}	117.7	115^{+20}_{-20} (−0.0 σ)	10^5D/H	2.623	$2.624^{+0.076}_{-0.074}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5959	$0.599^{+0.034}_{-0.032}$ (−1.7 σ)
A^{kSZ}	0.1	—	Age/Gyr	13.799	$13.794^{+0.069}_{-0.068}$ (+1.6 σ)	$f\sigma_8(2.33)$	0.3004	$0.302^{+0.017}_{-0.016}$ (−1.7 σ)
A_{100}^{dustTT}	8.86	$9.0^{+3.6}_{-3.6}$ (+0.0 σ)	z_*	1090.13	$1090.15^{+0.68}_{-0.70}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3090	$0.310^{+0.014}_{-0.014}$ (−1.7 σ)
A_{143}^{dustTT}	10.82	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	144.68	$144.66^{+0.84}_{-0.82}$ (+0.4 σ)	f_{2000}^{143}	30.7	31^{+6}_{-6} (+0.0 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.3	$18.3^{+6.4}_{-6.5}$ (+0.0 σ)	$100\theta_*$	1.04113	$1.04110^{+0.00085}_{-0.00085}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	33.38	33^{+4}_{-4} (+0.0 σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.897	$13.895^{+0.078}_{-0.076}$ (+0.4 σ)	f_{2000}^{217}	107.87	$108.0^{+3.8}_{-3.7}$ (+0.0 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.44	$1059.45^{+0.83}_{-0.85}$ (−0.0 σ)	χ_{simall}^2	395.86	$397.0 (\nu: 1.6)$ (+0.1 σ)
c_{217}	0.99829	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.42	$147.40^{+0.85}_{-0.84}$ (+0.4 σ)	χ_{lowl}^2	23.15	$23.3 (\nu: 0.5)$ (+0.1 σ)
H_0	68.14	$68.5^{+3.2}_{-2.8}$ (−1.6 σ)	k_{D}	0.14037	$0.14039^{+0.00093}_{-0.00096}$ (−0.3 σ)	χ_{plik}^2	759.1	$771.5 (\nu: 15.6)$ (+0.3 σ)
Ω_Λ	0.6933	$0.696^{+0.025}_{-0.024}$ (−1.7 σ)	$100\theta_{\text{D}}$	0.161047	$0.16105^{+0.00050}_{-0.00049}$ (+0.0 σ)	$\chi_{6\text{DF}}^2$	0.002	$0.13 (\nu: 0.0)$
Ω_{m}	0.3067	$0.304^{+0.024}_{-0.025}$ (+1.7 σ)	z_{eq}	3388	3390^{+79}_{-79} (−0.4 σ)	χ_{MGS}^2	1.54	$1.9 (\nu: 0.5)$
$\Omega_{\text{m}} h^2$	0.14243	$0.1425^{+0.0033}_{-0.0033}$ (−0.4 σ)	k_{eq}	0.010341	$0.01035^{+0.00024}_{-0.00024}$ (−0.4 σ)	χ_{DR12BAO}^2	4.36	$5.2 (\nu: 1.2)$
$\Omega_{\text{m}} h^3$	0.0971	$0.0976^{+0.0060}_{-0.0054}$ (−1.7 σ)	$100\theta_{\text{eq}}$	0.8153	$0.815^{+0.015}_{-0.015}$ (+0.4 σ)	χ_{prior}^2	1.5	$7.3 (\nu: 6.9)$ (+0.0 σ)
σ_8	0.8168	$0.821^{+0.047}_{-0.045}$ (−1.7 σ)	$100\theta_{\text{s,eq}}$	0.4506	$0.4504^{+0.0078}_{-0.0075}$ (+0.4 σ)	χ_{BAO}^2	5.90	$7.2 (\nu: 1.8)$
S_8	0.8260	$0.826^{+0.034}_{-0.033}$ (+1.1 σ)	$H(0.15)$	73.14	$73.3^{+1.8}_{-1.7}$ (−1.7 σ)	χ_{CMB}^2	1178.1	$1191.8 (\nu: 15.4)$ (+0.3 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4524	$0.452^{+0.018}_{-0.018}$ (+1.1 σ)	$D_M(0.15)$	637.7	636^{+20}_{-22} (+1.7 σ)			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6079	$0.609^{+0.027}_{-0.028}$ (−1.6 σ)	$H(0.38)$	82.94	$82.96^{+0.70}_{-0.67}$ (−0.9 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1185.52$; $\Delta\chi_{\text{eff}}^2 = -0.23$; $\bar{\chi}_{\text{eff}}^2 = 1206.32$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.29$; $R - 1 = 0.00799$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.02) MGS: 1.54 (Δ 0.26) DR12BAO: 4.36 (Δ 0.18) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.86 (Δ -0.03) commander_dx12_v3_2_29: 23.15 (Δ 0.32) plik_rd12_HM_v22.TT: 759.14 (Δ -0.96)

18.24 base_w_plikHM_TT_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022205	$0.02217^{+0.00039}_{-0.00038}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9908	$0.992^{+0.027}_{-0.027}$ (−1.6 σ)	$D_M(0.38)$	1523.4	1521^{+31}_{-33} (+1.7 σ)
$\Omega_c h^2$	0.11959	$0.1197^{+0.0027}_{-0.0027}$ (−0.4 σ)	$r_{\text{drag}} h$	100.60	$101.0^{+4.3}_{-3.7}$ (−1.6 σ)	$H(0.51)$	89.55	$89.52^{+0.61}_{-0.64}$ (+1.3 σ)
$100\theta_{\text{MC}}$	1.04086	$1.04090^{+0.00083}_{-0.00084}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.444	$2.445^{+0.053}_{-0.052}$ (−1.3 σ)	$D_M(0.51)$	1975.7	1973^{+33}_{-34} (+1.6 σ)
τ	0.0542	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	z_{re}	7.70	$7.6^{+1.5}_{-1.6}$ (+0.3 σ)	$H(0.61)$	95.09	$95.03^{+0.70}_{-0.79}$ (+1.6 σ)
w_0	−1.031	$−1.04^{+0.11}_{-0.11}$ (+1.7 σ)	$10^9 A_s$	2.096	$2.092^{+0.064}_{-0.061}$ (+0.1 σ)	$D_M(0.61)$	2300.6	2298^{+33}_{-33} (+1.6 σ)
$\ln(10^{10} A_s)$	3.0425	$3.041^{+0.030}_{-0.030}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8805	$1.880^{+0.021}_{-0.022}$ (−0.2 σ)	$H(2.33)$	235.66	$235.6^{+1.5}_{-1.5}$ (+1.3 σ)
n_s	0.9655	$0.9649^{+0.0088}_{-0.0087}$ (+0.3 σ)	D_{40}	1227.6	1229^{+24}_{-24} (−0.1 σ)	$D_M(2.33)$	5767.3	5768^{+23}_{-23} (+0.8 σ)
y_{cal}	1.00028	$1.0005^{+0.0047}_{-0.0048}$ (+0.1 σ)	D_{220}	5719	5718^{+80}_{-79} (+0.1 σ)	$f\sigma_8(0.15)$	0.4600	$0.461^{+0.018}_{-0.018}$ (−1.4 σ)
A_{217}^{CIB}	48.6	48^{+10}_{-10} (+0.0 σ)	D_{810}	2536.8	2536^{+25}_{-26} (+0.1 σ)	$\sigma_8(0.15)$	0.7568	$0.759^{+0.035}_{-0.032}$ (−1.7 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.32	—	D_{1420}	815.6	$815.0^{+9.6}_{-9.8}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4809	$0.483^{+0.026}_{-0.024}$ (−1.7 σ)
A_{143}^{tSZ}	7.02	$5.1^{+3.7}_{-4.0}$ (+0.0 σ)	D_{2000}	230.08	$229.8^{+3.3}_{-3.4}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6709	$0.673^{+0.031}_{-0.028}$ (−1.7 σ)
A_{100}^{PS}	254	263^{+60}_{-60} (+0.0 σ)	$n_{s,0.002}$	0.9655	$0.9649^{+0.0088}_{-0.0087}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4802	$0.482^{+0.028}_{-0.025}$ (−1.7 σ)
A_{143}^{PS}	49.2	49^{+20}_{-20} (+0.0 σ)	Y_{P}	0.245328	$0.24531^{+0.00016}_{-0.00018}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6278	$0.630^{+0.028}_{-0.026}$ (−1.7 σ)
$A_{143 \times 217}^{\text{PS}}$	46.9	43^{+20}_{-20} (−0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.246654	$0.24664^{+0.00016}_{-0.00018}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4754	$0.477^{+0.028}_{-0.026}$ (−1.7 σ)
A_{217}^{PS}	119.5	115^{+20}_{-20} (−0.0 σ)	$10^5 \text{D}/\text{H}$	2.617	$2.623^{+0.073}_{-0.073}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5973	$0.599^{+0.027}_{-0.025}$ (−1.7 σ)
A^{kSZ}	0.01	< 8.45 (+0.0 σ)	Age/Gyr	13.796	$13.793^{+0.067}_{-0.068}$ (+1.6 σ)	$f\sigma_8(2.33)$	0.3012	$0.302^{+0.013}_{-0.013}$ (−1.7 σ)
A_{100}^{dustTT}	8.88	$8.9^{+3.7}_{-3.6}$ (+0.0 σ)	z_*	1090.09	$1090.14^{+0.62}_{-0.63}$ (−0.3 σ)	$\sigma_8(2.33)$	0.3097	$0.310^{+0.011}_{-0.010}$ (−1.7 σ)
A_{143}^{dustTT}	10.80	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	144.66	$144.67^{+0.66}_{-0.65}$ (+0.4 σ)	f_{2000}^{143}	30.2	31^{+6}_{-6} (+0.0 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.3^{+6.3}_{-6.4}$ (+0.0 σ)	$100\theta_*$	1.04106	$1.04110^{+0.00082}_{-0.00083}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	33.12	33^{+4}_{-4} (+0.0 σ)
A_{217}^{dustTT}	94.5	93^{+10}_{-10} (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.896	$13.896^{+0.063}_{-0.061}$ (+0.4 σ)	f_{2000}^{217}	107.58	$108.0^{+3.8}_{-3.7}$ (+0.0 σ)
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.51	$1059.46^{+0.82}_{-0.86}$ (−0.0 σ)	χ_{lensing}^2	8.73	9.35 (ν : 0.4)
c_{217}	0.99823	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.39	$147.40^{+0.69}_{-0.68}$ (+0.4 σ)	χ_{small}^2	396.05	397.0 (ν : 1.5) (+0.1 σ)
H_0	68.25	$68.5^{+3.0}_{-2.6}$ (−1.6 σ)	k_{D}	0.14043	$0.14039^{+0.00085}_{-0.00087}$ (−0.3 σ)	χ_{lowl}^2	23.21	23.32 (ν : 0.4) (+0.1 σ)
Ω_Λ	0.6943	$0.696^{+0.024}_{-0.023}$ (−1.7 σ)	$100\theta_{\text{D}}$	0.16099	$0.16104^{+0.00051}_{-0.00050}$ (+0.0 σ)	χ_{plik}^2	759.0	770.9 (ν : 14.0) (+0.2 σ)
Ω_{m}	0.3057	$0.304^{+0.023}_{-0.024}$ (+1.7 σ)	z_{eq}	3388	3389^{+61}_{-62} (−0.4 σ)	$\chi_{6\text{DF}}^2$	0.000	0.13 (ν : 0.0)
$\Omega_{\text{m}} h^2$	0.14244	$0.1425^{+0.0025}_{-0.0026}$ (−0.4 σ)	k_{eq}	0.010342	$0.01034^{+0.00019}_{-0.00019}$ (−0.4 σ)	χ_{MGS}^2	1.61	1.92 (ν : 0.5)
$\Omega_{\text{m}} h^3$	0.09722	$0.0977^{+0.0050}_{-0.0045}$ (−1.7 σ)	$100\theta_{\text{eq}}$	0.8152	$0.815^{+0.012}_{-0.011}$ (+0.4 σ)	χ_{DR12BAO}^2	4.33	5.1 (ν : 1.0)
σ_8	0.8186	$0.821^{+0.036}_{-0.033}$ (−1.7 σ)	$100\theta_{\text{s,eq}}$	0.4505	$0.4505^{+0.0060}_{-0.0058}$ (+0.4 σ)	χ_{prior}^2	1.3	7.2 (ν : 6.6) (+0.0 σ)
S_8	0.8264	$0.825^{+0.024}_{-0.024}$ (+1.1 σ)	$H(0.15)$	73.21	$73.4^{+1.7}_{-1.6}$ (−1.6 σ)	χ_{CMB}^2	1187.0	1200.6 (ν : 15.6) (+1.9 σ)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4526	$0.452^{+0.013}_{-0.013}$ (+1.1 σ)	$D_M(0.15)$	636.9	635^{+19}_{-21} (+1.7 σ)	χ_{BAO}^2	5.94	7.2 (ν : 1.5)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6087	$0.609^{+0.019}_{-0.019}$ (−1.6 σ)	$H(0.38)$	82.97	$82.98^{+0.68}_{-0.66}$ (−0.9 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1194.29$; $\Delta\chi_{\text{eff}}^2 = -0.39$; $\bar{\chi}_{\text{eff}}^2 = 1214.98$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.25$; $R - 1 = 0.01126$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.61 (Δ 0.39) DR12BAO: 4.33 (Δ -0.04) CMB - smicadx12.Dec5.ftl.mv2.ndclpp.p.teb.consext8: 8.73 (Δ -0.14) small_100x143.offlike5_EE_Aplanc
396.05 (Δ -0.05) commander_dx12_v3.2.29: 23.21 (Δ 0.25) plik_rd12_HM.v22.TT: 759.05 (Δ -0.75)

18.25 base_w_plikHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02217^{+0.00040}_{-0.00039} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.039}_{-0.039} \quad (-1.6\sigma)$	$D_M(0.38)$	$1522^{+33}_{-33} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1197^{+0.0035}_{-0.0034} \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$100.9^{+4.5}_{-3.9} \quad (-1.6\sigma)$	$H(0.51)$	$89.51^{+0.70}_{-0.78} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04091^{+0.00086}_{-0.00086} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.076}_{-0.078} \quad (-1.2\sigma)$	$D_M(0.51)$	$1974^{+34}_{-34} \quad (+1.7\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.92 \quad (+0.4\sigma)$	$H(0.61)$	$95.03^{+0.86}_{-0.92} \quad (+1.6\sigma)$
w_0	$-1.04^{+0.13}_{-0.14} \quad (+1.7\sigma)$	$10^9 A_s$	$2.097^{+0.060}_{-0.055} \quad (+0.2\sigma)$	$D_M(0.61)$	$2299^{+33}_{-33} \quad (+1.6\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.028}_{-0.027} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$H(2.33)$	$235.6^{+1.6}_{-1.6} \quad (+1.3\sigma)$
n_s	$0.9651^{+0.0099}_{-0.010} \quad (+0.4\sigma)$	D_{40}	$1229^{+27}_{-27} \quad (-0.1\sigma)$	$D_M(2.33)$	$5768^{+23}_{-24} \quad (+0.8\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5716^{+80}_{-79} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.026}_{-0.025} \quad (-1.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.045}_{-0.042} \quad (-1.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.0^{+9.9}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.483^{+0.035}_{-0.033} \quad (-1.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.040}_{-0.037} \quad (-1.7\sigma)$
A_{100}^{PS}	$263^{+60}_{-60} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9651^{+0.0099}_{-0.010} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.482^{+0.037}_{-0.034} \quad (-1.7\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24531^{+0.00017}_{-0.00017} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.036}_{-0.035} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00016}_{-0.00018} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.478^{+0.038}_{-0.035} \quad (-1.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.623^{+0.075}_{-0.074} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.599^{+0.034}_{-0.032} \quad (-1.7\sigma)$
A^{kSZ}	—	Age/Gyr	$13.794^{+0.069}_{-0.067} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.302^{+0.017}_{-0.016} \quad (-1.7\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.14^{+0.68}_{-0.69} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.311^{+0.014}_{-0.013} \quad (-1.7\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.67^{+0.83}_{-0.83} \quad (+0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.04111^{+0.00084}_{-0.00085} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.896^{+0.078}_{-0.077} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.9^{+3.8}_{-3.7} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.46^{+0.82}_{-0.86} \quad (-0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.40^{+0.85}_{-0.85} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.5) \quad (+0.1\sigma)$
H_0	$68.5^{+3.2}_{-2.8} \quad (-1.6\sigma)$	k_{D}	$0.14039^{+0.00094}_{-0.00097} \quad (-0.3\sigma)$	χ_{plik}^2	$771.3 \quad (\nu: 15.5) \quad (+0.2\sigma)$
Ω_{Λ}	$0.696^{+0.025}_{-0.024} \quad (-1.7\sigma)$	$100\theta_{\text{D}}$	$0.16104^{+0.00050}_{-0.00049} \quad (+0.0\sigma)$	$\chi_{6\text{DF}}^2$	$0.13 \quad (\nu: 0.0)$
Ω_{m}	$0.304^{+0.024}_{-0.025} \quad (+1.7\sigma)$	z_{eq}	$3389^{+79}_{-79} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.88 \quad (\nu: 0.5)$
$\Omega_{\text{m}} h^2$	$0.1425^{+0.0033}_{-0.0033} \quad (-0.4\sigma)$	k_{eq}	$0.01034^{+0.00024}_{-0.00024} \quad (-0.4\sigma)$	χ_{DR12BAO}^2	$5.2 \quad (\nu: 1.2)$
$\Omega_{\text{m}} h^3$	$0.0976^{+0.0060}_{-0.0054} \quad (-1.7\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.015}_{-0.015} \quad (+0.4\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (+0.0\sigma)$
σ_8	$0.821^{+0.047}_{-0.045} \quad (-1.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4505^{+0.0077}_{-0.0076} \quad (+0.4\sigma)$	χ_{BAO}^2	$7.2 \quad (\nu: 1.8)$
S_8	$0.827^{+0.033}_{-0.033} \quad (+1.1\sigma)$	$H(0.15)$	$73.3^{+1.8}_{-1.7} \quad (-1.7\sigma)$	χ_{CMB}^2	$1191.6 \quad (\nu: 15.1) \quad (+0.3\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.453^{+0.018}_{-0.018} \quad (+1.1\sigma)$	$D_M(0.15)$	$636^{+20}_{-22} \quad (+1.7\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.610^{+0.027}_{-0.027} \quad (-1.6\sigma)$	$H(0.38)$	$82.96^{+0.70}_{-0.67} \quad (-0.9\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1206.07$; $\Delta \bar{\chi}_{\text{eff}}^2 = 0.31$; $R - 1 = 0.00764$

18.26 base_w_plikHM_TT_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02218^{+0.00039}_{-0.00038} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.027}_{-0.027} \quad (-1.6\sigma)$	$D_M(0.38)$	$1521^{+31}_{-33} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1196^{+0.0026}_{-0.0026} \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$101.0^{+4.1}_{-3.9} \quad (-1.6\sigma)$	$H(0.51)$	$89.54^{+0.60}_{-0.62} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04091^{+0.00082}_{-0.00083} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.053}_{-0.052} \quad (-1.3\sigma)$	$D_M(0.51)$	$1973^{+33}_{-34} \quad (+1.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.91 \quad (+0.4\sigma)$	$H(0.61)$	$95.05^{+0.69}_{-0.77} \quad (+1.6\sigma)$
w_0	$-1.04^{+0.11}_{-0.11} \quad (+1.7\sigma)$	$10^9 A_s$	$2.097^{+0.055}_{-0.051} \quad (+0.3\sigma)$	$D_M(0.61)$	$2298^{+33}_{-34} \quad (+1.6\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.026}_{-0.024} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.021}_{-0.022} \quad (-0.3\sigma)$	$H(2.33)$	$235.6^{+1.5}_{-1.5} \quad (+1.3\sigma)$
n_s	$0.9651^{+0.0087}_{-0.0085} \quad (+0.4\sigma)$	D_{40}	$1229^{+24}_{-24} \quad (-0.1\sigma)$	$D_M(2.33)$	$5767^{+23}_{-23} \quad (+0.7\sigma)$
y_{cal}	$1.0005^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5718^{+80}_{-79} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.018}_{-0.018} \quad (-1.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.034}_{-0.032} \quad (-1.7\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.1^{+9.5}_{-9.8} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.482^{+0.026}_{-0.024} \quad (-1.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.7}_{-4.0} \quad (+0.0\sigma)$	D_{2000}	$229.9^{+3.3}_{-3.4} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.031}_{-0.028} \quad (-1.7\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9651^{+0.0087}_{-0.0085} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.482^{+0.027}_{-0.025} \quad (-1.7\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24531^{+0.00015}_{-0.00018} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.028}_{-0.026} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00015}_{-0.00018} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.477^{+0.028}_{-0.025} \quad (-1.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	10^5D/H	$2.622^{+0.072}_{-0.072} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.599^{+0.027}_{-0.025} \quad (-1.7\sigma)$
A^{kSZ}	$< 8.39 \quad (-0.0\sigma)$	Age/Gyr	$13.793^{+0.066}_{-0.069} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.302^{+0.013}_{-0.013} \quad (-1.7\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.12^{+0.60}_{-0.62} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.311^{+0.011}_{-0.010} \quad (-1.7\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.4} \quad (+0.0\sigma)$	r_*	$144.69^{+0.65}_{-0.64} \quad (+0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.3}_{-6.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.04111^{+0.00081}_{-0.00082} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.898^{+0.063}_{-0.061} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.9^{+3.8}_{-3.7} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.47^{+0.85}_{-0.83} \quad (+0.0\sigma)$	χ_{lensing}^2	$9.33 \quad (\nu: 0.4)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.42^{+0.68}_{-0.68} \quad (+0.4\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (+0.1\sigma)$
H_0	$68.5^{+3.0}_{-2.6} \quad (-1.6\sigma)$	k_{D}	$0.14038^{+0.00085}_{-0.00087} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.31 \quad (\nu: 0.4) \quad (+0.1\sigma)$
Ω_Λ	$0.696^{+0.024}_{-0.023} \quad (-1.7\sigma)$	$100\theta_{\text{D}}$	$0.16104^{+0.00050}_{-0.00050} \quad (+0.0\sigma)$	χ_{plik}^2	$770.9 \quad (\nu: 14.0) \quad (+0.2\sigma)$
Ω_{m}	$0.304^{+0.023}_{-0.024} \quad (+1.7\sigma)$	z_{eq}	$3387^{+61}_{-60} \quad (-0.4\sigma)$	$\chi_{6\text{DF}}^2$	$0.13 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1424^{+0.0025}_{-0.0025} \quad (-0.4\sigma)$	k_{eq}	$0.01034^{+0.00019}_{-0.00018} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.91 \quad (\nu: 0.5)$
$\Omega_{\text{m}} h^3$	$0.0975^{+0.0048}_{-0.0046} \quad (-1.7\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.011}_{-0.011} \quad (+0.4\sigma)$	χ_{DR12BAO}^2	$5.1 \quad (\nu: 0.9)$
σ_8	$0.821^{+0.036}_{-0.033} \quad (-1.7\sigma)$	$100\theta_{\text{s,eq}}$	$0.4507^{+0.0059}_{-0.0057} \quad (+0.4\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.6) \quad (+0.0\sigma)$
S_8	$0.826^{+0.024}_{-0.024} \quad (+1.1\sigma)$	$H(0.15)$	$73.3^{+1.8}_{-1.6} \quad (-1.7\sigma)$	χ_{CMB}^2	$1200.4 \quad (\nu: 15.5) \quad (+1.8\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (+1.1\sigma)$	$D_M(0.15)$	$635^{+19}_{-20} \quad (+1.7\sigma)$	χ_{BAO}^2	$7.1 \quad (\nu: 1.5)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.609^{+0.019}_{-0.019} \quad (-1.6\sigma)$	$H(0.38)$	$83.00^{+0.68}_{-0.66} \quad (-0.9\sigma)$		

$\bar{\chi}_{\text{eff}}^2 = 1214.74$; $\Delta \bar{\chi}_{\text{eff}}^2 = 0.16$; $R - 1 = 0.01087$

18.27 base_w_plikHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022384	$0.02238^{+0.00028}_{-0.00028}$ (+1.1 σ)	σ_8	0.8230	$0.822^{+0.038}_{-0.037}$ (−1.7 σ)	$D_M(0.15)$	634.2	634^{+20}_{-20} (+1.7 σ)
$\Omega_c h^2$	0.11994	$0.1199^{+0.0025}_{-0.0024}$ (−0.3 σ)	S_8	0.8281	$0.827^{+0.026}_{-0.025}$ (+1.1 σ)	$H(0.38)$	83.12	$83.11^{+0.61}_{-0.60}$ (−0.8 σ)
$100\theta_{MC}$	1.04092	$1.04095^{+0.00061}_{-0.00060}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4536	$0.453^{+0.014}_{-0.014}$ (+1.1 σ)	$D_M(0.38)$	1518.4	1519^{+31}_{-32} (+1.6 σ)
τ	0.0544	$0.055^{+0.016}_{-0.015}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6110	$0.610^{+0.021}_{-0.020}$ (−1.5 σ)	$H(0.51)$	89.66	$89.66^{+0.51}_{-0.56}$ (+1.4 σ)
w_0	−1.041	$−1.04^{+0.11}_{-0.12}$ (+1.7 σ)	$\sigma_8/h^{0.5}$	0.9936	$0.993^{+0.031}_{-0.030}$ (−1.6 σ)	$D_M(0.51)$	1970.1	1970^{+33}_{-33} (+1.6 σ)
$\ln(10^{10} A_s)$	3.0443	$3.044^{+0.032}_{-0.031}$ (+0.3 σ)	$r_{drag} h$	100.92	$101.0^{+4.3}_{-3.9}$ (−1.6 σ)	$H(0.61)$	95.18	$95.18^{+0.65}_{-0.68}$ (+1.7 σ)
n_s	0.9663	$0.9654^{+0.0082}_{-0.0083}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.449	$2.449^{+0.062}_{-0.061}$ (−1.2 σ)	$D_M(0.61)$	2294.7	2295^{+33}_{-33} (+1.6 σ)
y_{cal}	1.00033	$1.0006^{+0.0049}_{-0.0049}$ (+0.1 σ)	z_{re}	7.68	$7.7^{+1.5}_{-1.6}$ (+0.4 σ)	$H(2.33)$	235.93	$236.0^{+1.4}_{-1.4}$ (+1.4 σ)
A_{217}^{CIB}	46.4	47^{+10}_{-10} (−0.1 σ)	$10^9 A_s$	2.099	$2.100^{+0.068}_{-0.065}$ (+0.3 σ)	$D_M(2.33)$	5758.7	5759^{+18}_{-18} (+0.4 σ)
$\xi^{tSZ \times CIB}$	0.56	—	$10^9 A_s e^{-2\tau}$	1.8829	$1.883^{+0.022}_{-0.023}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4618	$0.461^{+0.020}_{-0.019}$ (−1.4 σ)
A_{143}^{tSZ}	7.10	$5.5^{+3.8}_{-3.9}$ (+0.2 σ)	D_{40}	1227.5	1230^{+24}_{-24} (+0.0 σ)	$\sigma_8(0.15)$	0.7610	$0.760^{+0.037}_{-0.035}$ (−1.7 σ)
A_{100}^{PS}	249	259^{+60}_{-50} (−0.1 σ)	D_{220}	5729	5734^{+78}_{-76} (+0.5 σ)	$f\sigma_8(0.38)$	0.4838	$0.483^{+0.027}_{-0.025}$ (−1.7 σ)
A_{143}^{PS}	49.5	46^{+10}_{-20} (−0.4 σ)	D_{810}	2540.0	2539^{+27}_{-27} (+0.3 σ)	$\sigma_8(0.38)$	0.6747	$0.674^{+0.033}_{-0.031}$ (−1.7 σ)
$A_{143 \times 217}^{PS}$	50.8	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.0	$817.3^{+9.5}_{-9.5}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4833	$0.483^{+0.029}_{-0.027}$ (−1.7 σ)
A_{217}^{PS}	121.1	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.23	$231.0^{+3.1}_{-3.1}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6313	$0.631^{+0.030}_{-0.029}$ (−1.7 σ)
A^{kSZ}	0.00	< 8.10 (−0.1 σ)	$n_{s,0.002}$	0.9663	$0.9654^{+0.0082}_{-0.0083}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4786	$0.478^{+0.030}_{-0.027}$ (−1.7 σ)
A_{100}^{dustTT}	8.81	$8.9^{+3.5}_{-3.6}$ (+0.0 σ)	Y_P	0.245401	$0.24540^{+0.00011}_{-0.00012}$ (+1.0 σ)	$\sigma_8(0.61)$	0.6006	$0.600^{+0.029}_{-0.027}$ (−1.7 σ)
A_{143}^{dustTT}	11.04	$10.9^{+3.4}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246728	$0.24673^{+0.00011}_{-0.00012}$ (+1.0 σ)	$f\sigma_8(2.33)$	0.3028	$0.303^{+0.014}_{-0.014}$ (−1.7 σ)
$A_{143 \times 217}^{dustTT}$	20.0	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	$10^5 D/H$	2.583	$2.584^{+0.054}_{-0.051}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3112	$0.311^{+0.012}_{-0.012}$ (−1.7 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.771	$13.772^{+0.061}_{-0.060}$ (+1.4 σ)	f_{2000}^{143}	28.7	29^{+5}_{-5} (−0.5 σ)
A_{100}^{dustTE}	0.114	$0.115^{+0.075}_{-0.074}$	z_*	1089.90	$1089.89^{+0.51}_{-0.49}$ (−0.9 σ)	$f_{2000}^{143 \times 217}$	31.98	32^{+4}_{-4} (−0.6 σ)
$A_{100 \times 143}^{dustTE}$	0.136	$0.135^{+0.057}_{-0.058}$	r_*	144.44	$144.46^{+0.55}_{-0.55}$ (−0.1 σ)	f_{2000}^{217}	106.51	$107.0^{+3.5}_{-3.5}$ (−0.5 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04110	$1.04113^{+0.00060}_{-0.00060}$ (+0.3 σ)	χ_{small}^2	396.06	$397.1 (\nu: 1.8)$ (+0.2 σ)
A_{143}^{dustTE}	0.227	$0.22^{+0.11}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	13.873	$13.875^{+0.052}_{-0.052}$ (−0.1 σ)	χ_{lowl}^2	23.12	$23.35 (\nu: 0.4)$ (+0.1 σ)
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.97	$1059.96^{+0.59}_{-0.60}$ (+1.1 σ)	χ_{plik}^2	2344.5	$2359.4 (\nu: 17.6)$ (+293.4 σ)
A_{217}^{dustTE}	2.09	$2.08^{+0.53}_{-0.53}$	r_{drag}	147.09	$147.11^{+0.55}_{-0.55}$ (−0.2 σ)	χ_{6DF}^2	0.001	$0.13 (\nu: 0.0)$
c_{100}	0.99970	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14088	$0.14086^{+0.00061}_{-0.00062}$ (+0.6 σ)	χ_{MGS}^2	1.75	$1.89 (\nu: 0.5)$
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160740	$0.16075^{+0.00035}_{-0.00034}$ (−1.1 σ)	$\chi_{DR12BAO}^2$	4.40	$5.2 (\nu: 0.9)$
H_0	68.61	$68.6^{+3.0}_{-2.7}$ (−1.6 σ)	z_{eq}	3401	3399^{+56}_{-55} (−0.2 σ)	χ_{prior}^2	1.7	$11.5 (\nu: 10.1)$ (+1.2 σ)
Ω_Λ	0.6963	$0.696^{+0.024}_{-0.024}$ (−1.7 σ)	k_{eq}	0.010381	$0.01038^{+0.00017}_{-0.00017}$ (−0.2 σ)	χ_{BAO}^2	6.15	$7.2 (\nu: 1.5)$
Ω_m	0.3037	$0.304^{+0.024}_{-0.024}$ (+1.7 σ)	$100\theta_{eq}$	0.8135	$0.814^{+0.010}_{-0.010}$ (+0.2 σ)	χ_{CMB}^2	2763.7	$2779.9 (\nu: 17.5)$ (+281.3 σ)
$\Omega_m h^2$	0.14297	$0.1429^{+0.0023}_{-0.0023}$ (−0.2 σ)	$100\theta_{s,eq}$	0.4495	$0.4497^{+0.0053}_{-0.0053}$ (+0.2 σ)			
$\Omega_m h^3$	0.09809	$0.0981^{+0.0050}_{-0.0046}$ (−1.7 σ)	$H(0.15)$	73.46	$73.5^{+1.7}_{-1.6}$ (−1.6 σ)			

Best-fit $\chi_{eff}^2 = 2771.48$; $\Delta\chi_{eff}^2 = -0.44$; $\bar{\chi}_{eff}^2 = 2798.61$; $\Delta\bar{\chi}_{eff}^2 = 0.70$; $R - 1 = 0.00736$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.75 (Δ 0.53) DR12BAO: 4.40 (Δ -0.01) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ -0.14) commander_dx12_v3_2_29: 23.12 (Δ 0.25) plik_rd12_HM_v22b_TTTEEE: 2344.49 (Δ -1.02)

18.28 base_w_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022391	$0.02239^{+0.00028}_{-0.00028}$ (+1.1 σ)	σ_8	0.8220	$0.821^{+0.033}_{-0.030}$ (−1.7 σ)	$D_{\mathrm{M}}(0.15)$	634.3	634^{+19}_{-20} (+1.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.11983	$0.1198^{+0.0021}_{-0.0021}$ (−0.3 σ)	S_8	0.8271	$0.826^{+0.021}_{-0.020}$ (+1.1 σ)	$H(0.38)$	83.14	$83.14^{+0.61}_{-0.59}$ (−0.8 σ)
$100\theta_{\mathrm{MC}}$	1.04094	$1.04095^{+0.00060}_{-0.00060}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4530	$0.452^{+0.011}_{-0.011}$ (+1.1 σ)	$D_{\mathrm{M}}(0.38)$	1518.5	1518^{+30}_{-32} (+1.6 σ)
τ	0.0545	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6102	$0.609^{+0.016}_{-0.016}$ (−1.6 σ)	$H(0.51)$	89.688	$89.69^{+0.47}_{-0.50}$ (+1.4 σ)
w_0	−1.038	$−1.04^{+0.10}_{-0.10}$ (+1.7 σ)	$\sigma_8/h^{0.5}$	0.9926	$0.991^{+0.023}_{-0.023}$ (−1.7 σ)	$D_{\mathrm{M}}(0.51)$	1970.0	1970^{+32}_{-33} (+1.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0448	$3.044^{+0.029}_{-0.028}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	100.89	$101.0^{+4.0}_{-3.9}$ (−1.6 σ)	$H(0.61)$	95.21	$95.21^{+0.56}_{-0.63}$ (+1.7 σ)
n_{s}	0.9662	$0.9656^{+0.0076}_{-0.0078}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4477	$2.447^{+0.046}_{-0.046}$ (−1.2 σ)	$D_{\mathrm{M}}(0.61)$	2294.5	2294^{+32}_{-33} (+1.6 σ)
y_{cal}	1.00062	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	z_{re}	7.68	$7.7^{+1.5}_{-1.5}$ (+0.3 σ)	$H(2.33)$	235.90	$235.9^{+1.4}_{-1.4}$ (+1.4 σ)
A_{217}^{CIB}	46.4	47^{+10}_{-10} (−0.1 σ)	10^9A_{s}	2.100	$2.099^{+0.063}_{-0.059}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5758.1	5758^{+18}_{-18} (+0.3 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.58	—	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8837	$1.882^{+0.021}_{-0.021}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4611	$0.460^{+0.015}_{-0.014}$ (−1.4 σ)
A_{143}^{tSZ}	7.12	$5.4^{+3.8}_{-3.8}$ (+0.2 σ)	D_{40}	1228.7	1230^{+22}_{-22} (+0.0 σ)	$\sigma_8(0.15)$	0.7601	$0.759^{+0.032}_{-0.029}$ (−1.7 σ)
A_{100}^{PS}	249	259^{+60}_{-50} (−0.1 σ)	D_{220}	5735	5736^{+77}_{-76} (+0.5 σ)	$f\sigma_8(0.38)$	0.4829	$0.482^{+0.022}_{-0.020}$ (−1.7 σ)
A_{143}^{PS}	50.1	46^{+10}_{-20} (−0.4 σ)	D_{810}	2541.3	2539^{+26}_{-26} (+0.3 σ)	$\sigma_8(0.38)$	0.6739	$0.673^{+0.029}_{-0.026}$ (−1.7 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	51.5	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.4	$817.4^{+9.4}_{-9.5}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4824	$0.482^{+0.024}_{-0.022}$ (−1.7 σ)
A_{217}^{PS}	121.4	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.32	$231.0^{+3.1}_{-3.2}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6306	$0.630^{+0.027}_{-0.024}$ (−1.7 σ)
A^{kSZ}	0.01	< 8.09 (−0.1 σ)	$n_{\mathrm{s},0.002}$	0.9662	$0.9656^{+0.0076}_{-0.0078}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4777	$0.477^{+0.025}_{-0.023}$ (−1.7 σ)
$A_{100}^{\mathrm{dustTT}}$	8.80	$8.9^{+3.5}_{-3.6}$ (+0.0 σ)	Y_{P}	0.245404	$0.24540^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5999	$0.599^{+0.025}_{-0.023}$ (−1.7 σ)
$A_{143}^{\mathrm{dustTT}}$	11.00	$10.9^{+3.4}_{-3.4}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246730	$0.24673^{+0.00010}_{-0.00012}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3025	$0.302^{+0.013}_{-0.012}$ (−1.7 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.1	$18.6^{+6.4}_{-6.3}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.582	$2.582^{+0.054}_{-0.051}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3109	$0.311^{+0.011}_{-0.010}$ (−1.7 σ)
$A_{217}^{\mathrm{dustTT}}$	95.6	94^{+10}_{-10} (+0.0 σ)	Age/Gyr	13.771	$13.771^{+0.059}_{-0.059}$ (+1.4 σ)	f_{2000}^{143}	28.9	29^{+5}_{-5} (−0.5 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.076}_{-0.074}$	z_*	1089.878	$1089.87^{+0.48}_{-0.46}$ (−0.9 σ)	$f_{2000}^{143 \times 217}$	32.09	32^{+4}_{-3} (−0.6 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	144.459	$144.48^{+0.48}_{-0.48}$ (−0.0 σ)	f_{2000}^{217}	106.64	$107.0^{+3.5}_{-3.4}$ (−0.5 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	1.04112	$1.04113^{+0.00058}_{-0.00059}$ (+0.3 σ)	$\chi_{\mathrm{lensing}}^2$	8.75	9.16 (ν : 0.2)
$A_{143}^{\mathrm{dustTE}}$	0.226	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8754	$13.877^{+0.045}_{-0.045}$ (−0.0 σ)	χ_{small}^2	396	226 (ν : 17328.9) (−109.3 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.663	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.97	$1059.97^{+0.61}_{-0.58}$ (+1.1 σ)	χ_{lowl}^2	23	194 (ν : 17321.2) (+144.8 σ)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.54}_{-0.53}$	r_{drag}	147.114	$147.13^{+0.49}_{-0.49}$ (−0.2 σ)	χ_{plik}^2	2344.6	2359.2 (ν : 16.6) (+293.4 σ)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	0.14086	$0.14084^{+0.00058}_{-0.00059}$ (+0.5 σ)	$\chi_{6\mathrm{DF}}^2$	0.00	0.9 (ν : 0.6)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	0.160737	$0.16074^{+0.00036}_{-0.00034}$ (−1.1 σ)	χ_{MGS}^2	1.75	1.1 (ν : 0.7)
H_0	68.58	$68.6^{+2.7}_{-2.7}$ (−1.6 σ)	z_{eq}	3398.6	3397^{+48}_{-47} (−0.2 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.32	5.1 (ν : 0.8)
Ω_{Λ}	0.6962	$0.696^{+0.024}_{-0.023}$ (−1.7 σ)	k_{eq}	0.010373	$0.01037^{+0.00015}_{-0.00014}$ (−0.2 σ)	χ_{prior}^2	1.6	11.5 (ν : 9.9) (+1.2 σ)
Ω_{m}	0.3038	$0.304^{+0.023}_{-0.024}$ (+1.7 σ)	$100\theta_{\mathrm{eq}}$	0.8140	$0.8144^{+0.0089}_{-0.0089}$ (+0.3 σ)	χ_{CMB}^2	2772.5	2788.7 (ν : 17.5) (+282.8 σ)
$\Omega_{\mathrm{m}}h^2$	0.14286	$0.1428^{+0.0020}_{-0.0020}$ (−0.2 σ)	$100\theta_{\mathrm{s,eq}}$	0.44974	$0.4499^{+0.0045}_{-0.0046}$ (+0.3 σ)	χ_{BAO}^2	6.07	7.1 (ν : 1.3)
$\Omega_{\mathrm{m}}h^3$	0.09798	$0.0980^{+0.0047}_{-0.0042}$ (−1.7 σ)	$H(0.15)$	73.46	$73.5^{+1.7}_{-1.6}$ (−1.6 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2780.22$; $\Delta\chi_{\mathrm{eff}}^2 = -0.48$; $\bar{\chi}_{\mathrm{eff}}^2 = 2807.23$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.39$; $R - 1 = 0.01456$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.03) MGS: 1.75 (Δ 0.53) DR12BAO: 4.32 (Δ -0.10) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.75 (Δ 0.02) small_100x143_offlike5_EE_Aplanck 396.04 (Δ -0.48) commander_dx12_v3.2_29: 23.15 (Δ 0.25) plik_rd12_HM_v22b.TTTEEE: 2344.57 (Δ -0.75)

18.29 base_w_plikHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00029}_{-0.00028}$ (+1.1 σ)	σ_8	$0.823^{+0.038}_{-0.037}$ (−1.7 σ)	$D_{\mathrm{M}}(0.15)$	634^{+20}_{-20} (+1.7 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1198^{+0.0025}_{-0.0024}$ (−0.3 σ)	S_8	$0.828^{+0.025}_{-0.025}$ (+1.1 σ)	$H(0.38)$	$83.12^{+0.61}_{-0.60}$ (−0.8 σ)
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00061}_{-0.00060}$ (+0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014}$ (+1.1 σ)	$D_{\mathrm{M}}(0.38)$	1519^{+31}_{-32} (+1.6 σ)
τ	$0.056^{+0.013}_{-0.012}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.021}_{-0.020}$ (−1.5 σ)	$H(0.51)$	$89.67^{+0.50}_{-0.56}$ (+1.4 σ)
w_0	$-1.04^{+0.11}_{-0.12}$ (+1.7 σ)	$\sigma_8/h^{0.5}$	$0.993^{+0.030}_{-0.030}$ (−1.6 σ)	$D_{\mathrm{M}}(0.51)$	1970^{+33}_{-33} (+1.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.029}_{-0.027}$ (+0.5 σ)	$r_{\mathrm{drag}}h$	$100.9^{+4.3}_{-3.8}$ (−1.6 σ)	$H(0.61)$	$95.19^{+0.65}_{-0.67}$ (+1.7 σ)
n_{s}	$0.9656^{+0.0082}_{-0.0083}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.061}_{-0.060}$ (−1.2 σ)	$D_{\mathrm{M}}(0.61)$	2295^{+33}_{-32} (+1.6 σ)
y_{cal}	$1.0006^{+0.0049}_{-0.0049}$ (+0.1 σ)	z_{re}	< 8.99 (+0.5 σ)	$H(2.33)$	$235.9^{+1.4}_{-1.4}$ (+1.4 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	10^9A_{s}	$2.104^{+0.061}_{-0.057}$ (+0.5 σ)	$D_{\mathrm{M}}(2.33)$	5759^{+18}_{-18} (+0.4 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.022}_{-0.023}$ (−0.1 σ)	$f\sigma_8(0.15)$	$0.462^{+0.020}_{-0.019}$ (−1.4 σ)
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.9}$ (+0.2 σ)	D_{40}	1230^{+24}_{-24} (+0.0 σ)	$\sigma_8(0.15)$	$0.761^{+0.037}_{-0.035}$ (−1.7 σ)
A_{100}^{PS}	258^{+50}_{-50} (−0.2 σ)	D_{220}	5734^{+78}_{-76} (+0.5 σ)	$f\sigma_8(0.38)$	$0.483^{+0.027}_{-0.025}$ (−1.7 σ)
A_{143}^{PS}	46^{+10}_{-20} (−0.4 σ)	D_{810}	2539^{+27}_{-27} (+0.3 σ)	$\sigma_8(0.38)$	$0.675^{+0.033}_{-0.031}$ (−1.7 σ)
$A_{143\times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.1 σ)	D_{1420}	$817.4^{+9.5}_{-9.5}$ (+0.7 σ)	$f\sigma_8(0.51)$	$0.483^{+0.029}_{-0.027}$ (−1.7 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.0 σ)	D_{2000}	$231.0^{+3.1}_{-3.1}$ (+0.7 σ)	$\sigma_8(0.51)$	$0.631^{+0.030}_{-0.029}$ (−1.7 σ)
A^{kSZ}	< 8.08 (−0.1 σ)	$n_{\mathrm{s},0.002}$	$0.9656^{+0.0082}_{-0.0083}$ (+0.4 σ)	$f\sigma_8(0.61)$	$0.478^{+0.030}_{-0.028}$ (−1.7 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.6}$ (+0.0 σ)	Y_{P}	$0.24540^{+0.00011}_{-0.00011}$ (+1.0 σ)	$\sigma_8(0.61)$	$0.600^{+0.028}_{-0.027}$ (−1.7 σ)
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.4}_{-3.4}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00011}_{-0.00011}$ (+1.0 σ)	$f\sigma_8(2.33)$	$0.303^{+0.014}_{-0.014}$ (−1.7 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	$2.583^{+0.053}_{-0.051}$ (−1.1 σ)	$\sigma_8(2.33)$	$0.311^{+0.012}_{-0.012}$ (−1.7 σ)
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10} (+0.1 σ)	$\mathrm{Age}/\mathrm{Gyr}$	$13.772^{+0.061}_{-0.060}$ (+1.4 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.5 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.075}_{-0.074}$	z_*	$1089.89^{+0.51}_{-0.49}$ (−0.9 σ)	$f_{2000}^{143\times 217}$	32^{+4}_{-4} (−0.6 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.057}$	r_*	$144.46^{+0.55}_{-0.55}$ (−0.0 σ)	f_{2000}^{217}	$106.9^{+3.4}_{-3.5}$ (−0.5 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04114^{+0.00060}_{-0.00060}$ (+0.3 σ)	χ_{small}^2	397.1 (ν : 1.9) (+0.2 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.875^{+0.052}_{-0.052}$ (−0.1 σ)	χ_{lowl}^2	23.36 (ν : 0.4) (+0.1 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.96^{+0.58}_{-0.60}$ (+1.1 σ)	χ_{plik}^2	2359.2 (ν : 17.5) (+293.4 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	r_{drag}	$147.12^{+0.55}_{-0.55}$ (−0.2 σ)	$\chi_{6\mathrm{DF}}^2$	0.13 (ν : 0.0)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	$0.14085^{+0.00060}_{-0.00062}$ (+0.5 σ)	χ_{MGS}^2	1.88 (ν : 0.5)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00035}_{-0.00034}$ (−1.1 σ)	$\chi_{\mathrm{DR12BAO}}^2$	5.1 (ν : 0.9)
H_0	$68.6^{+2.9}_{-2.8}$ (−1.6 σ)	z_{eq}	3399^{+56}_{-55} (−0.2 σ)	χ_{prior}^2	11.5 (ν : 10.0) (+1.2 σ)
Ω_{Λ}	$0.696^{+0.024}_{-0.024}$ (−1.7 σ)	k_{eq}	$0.01037^{+0.00017}_{-0.00017}$ (−0.2 σ)	χ_{BAO}^2	7.2 (ν : 1.4)
Ω_{m}	$0.304^{+0.024}_{-0.024}$ (+1.7 σ)	$100\theta_{\mathrm{eq}}$	$0.814^{+0.010}_{-0.010}$ (+0.3 σ)	χ_{CMB}^2	2779.7 (ν : 17.1) (+281.2 σ)
$\Omega_{\mathrm{m}}h^2$	$0.1429^{+0.0023}_{-0.0023}$ (−0.2 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4497^{+0.0053}_{-0.0053}$ (+0.2 σ)		
$\Omega_{\mathrm{m}}h^3$	$0.0980^{+0.0050}_{-0.0045}$ (−1.7 σ)	$H(0.15)$	$73.5^{+1.7}_{-1.6}$ (−1.6 σ)		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.36; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.65; R - 1 = 0.00833$$

18.30 base_w_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00028}_{-0.00028} \quad (+1.1\sigma)$	σ_8	$0.821^{+0.033}_{-0.030} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$634^{+19}_{-20} \quad (+1.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0021}_{-0.0020} \quad (-0.4\sigma)$	S_8	$0.826^{+0.021}_{-0.020} \quad (+1.1\sigma)$	$H(0.38)$	$83.14^{+0.61}_{-0.59} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00060}_{-0.00060} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.011}_{-0.011} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1519^{+30}_{-32} \quad (+1.6\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.016}_{-0.016} \quad (-1.6\sigma)$	$H(0.51)$	$89.70^{+0.46}_{-0.48} \quad (+1.4\sigma)$
w_0	$-1.036^{+0.096}_{-0.11} \quad (+1.7\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.023}_{-0.023} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1970^{+32}_{-33} \quad (+1.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.026}_{-0.025} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$100.9^{+3.9}_{-3.9} \quad (-1.6\sigma)$	$H(0.61)$	$95.22^{+0.55}_{-0.62} \quad (+1.8\sigma)$
n_{s}	$0.9657^{+0.0076}_{-0.0076} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.046}_{-0.046} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+32}_{-33} \quad (+1.6\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 8.93 \quad (+0.5\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (+1.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.056}_{-0.052} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+18}_{-18} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.020}_{-0.021} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.015}_{-0.014} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1230^{+22}_{-22} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.759^{+0.031}_{-0.029} \quad (-1.7\sigma)$
A_{100}^{PS}	$259^{+60}_{-50} \quad (-0.1\sigma)$	D_{220}	$5736^{+77}_{-76} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.482^{+0.022}_{-0.020} \quad (-1.7\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (-0.4\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.673^{+0.028}_{-0.026} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.4^{+9.4}_{-9.5} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.482^{+0.024}_{-0.022} \quad (-1.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.2} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.630^{+0.026}_{-0.024} \quad (-1.7\sigma)$
A^{kSZ}	$< 8.08 \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9657^{+0.0076}_{-0.0076} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.477^{+0.025}_{-0.023} \quad (-1.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.6} \quad (+0.0\sigma)$	Y_{P}	$0.24540^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.599^{+0.025}_{-0.023} \quad (-1.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.4}_{-3.4} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.302^{+0.012}_{-0.012} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.3} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.581^{+0.052}_{-0.050} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.311^{+0.011}_{-0.0099} \quad (-1.7\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.771^{+0.059}_{-0.059} \quad (+1.4\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.076}_{-0.074}$	z_*	$1089.86^{+0.47}_{-0.46} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-3} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.057}$	r_*	$144.49^{+0.48}_{-0.47} \quad (+0.0\sigma)$	f_{2000}^{217}	$106.9^{+3.4}_{-3.4} \quad (-0.5\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	$1.04114^{+0.00059}_{-0.00059} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.15 \quad (\nu: 0.2)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.878^{+0.045}_{-0.045} \quad (-0.0\sigma)$	χ_{small}^2	$227 \quad (\nu: 17317.2) \quad (-108.9\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.15}$	z_{drag}	$1059.98^{+0.60}_{-0.58} \quad (+1.1\sigma)$	χ_{lowl}^2	$193 \quad (\nu: 17309.2) \quad (+144.3\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	r_{drag}	$147.14^{+0.49}_{-0.49} \quad (-0.2\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 16.6) \quad (+293.4\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14084^{+0.00057}_{-0.00059} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.9 \quad (\nu: 0.6)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00035}_{-0.00034} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.1 \quad (\nu: 0.7)$
H_0	$68.6^{+2.7}_{-2.7} \quad (-1.6\sigma)$	z_{eq}	$3396^{+47}_{-46} \quad (-0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 0.8)$
Ω_{Λ}	$0.696^{+0.024}_{-0.023} \quad (-1.7\sigma)$	k_{eq}	$0.01036^{+0.00014}_{-0.00014} \quad (-0.3\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.8) \quad (+1.2\sigma)$
Ω_{m}	$0.304^{+0.023}_{-0.024} \quad (+1.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8146^{+0.0088}_{-0.0088} \quad (+0.3\sigma)$	χ_{CMB}^2	$2788.5 \quad (\nu: 17.2) \quad (+282.8\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1427^{+0.0020}_{-0.0019} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4500^{+0.0045}_{-0.0045} \quad (+0.3\sigma)$	χ_{BAO}^2	$7.0 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}}h^3$	$0.0979^{+0.0046}_{-0.0042} \quad (-1.7\sigma)$	$H(0.15)$	$73.5^{+1.7}_{-1.6} \quad (-1.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.01; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.29; R - 1 = 0.01536$$

18.31 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022331	$0.02232^{+0.00031}_{-0.00030}$ (+0.8 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4490	$0.449^{+0.014}_{-0.014}$ (+0.9 σ)	$H(0.38)$	83.11	$83.08^{+0.62}_{-0.62}$ (−0.8 σ)
$\Omega_{\mathrm{c}} h^2$	0.11915	$0.1193^{+0.0025}_{-0.0024}$ (−0.6 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6039	$0.605^{+0.021}_{-0.021}$ (−1.8 σ)	$D_{\mathrm{M}}(0.38)$	1522.4	1522^{+33}_{-33} (+1.7 σ)
$100\theta_{\mathrm{MC}}$	1.04092	$1.04092^{+0.00060}_{-0.00061}$ (+0.2 σ)	$\sigma_8/h^{0.5}$	0.9835	$0.984^{+0.032}_{-0.030}$ (−1.9 σ)	$H(0.51)$	89.72	$89.68^{+0.50}_{-0.53}$ (+1.4 σ)
τ	0.0534	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	$r_{\mathrm{drag}} h$	100.49	$100.6^{+4.1}_{-4.1}$ (−1.7 σ)	$D_{\mathrm{M}}(0.51)$	1973.9	1974^{+34}_{-34} (+1.7 σ)
w_0	−1.019	$-1.02^{+0.11}_{-0.11}$ (+1.8 σ)	$\langle d^2 \rangle^{1/2}$	2.430	$2.431^{+0.063}_{-0.062}$ (−1.6 σ)	$H(0.61)$	95.27	$95.22^{+0.63}_{-0.65}$ (+1.8 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0385	$3.038^{+0.033}_{-0.032}$ (−0.1 σ)	z_{re}	7.58	$7.5^{+1.6}_{-1.6}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2298.3	2298^{+34}_{-33} (+1.6 σ)
n_{s}	0.9669	$0.9668^{+0.0084}_{-0.0084}$ (+0.7 σ)	$10^9 A_{\mathrm{s}}$	2.087	$2.087^{+0.069}_{-0.067}$ (−0.1 σ)	$H(2.33)$	235.67	$235.7^{+1.5}_{-1.5}$ (+1.3 σ)
y_{cal}	1.0003	$1.0005^{+0.0050}_{-0.0050}$ (+0.1 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8758	$1.877^{+0.024}_{-0.022}$ (−0.5 σ)	$D_{\mathrm{M}}(2.33)$	5761.2	5762^{+18}_{-18} (+0.5 σ)
A_{100}^{PS}	241.5	240^{+50}_{-50} (−0.8 σ)	D_{40}	1223.2	1224^{+25}_{-24} (−0.4 σ)	$f\sigma_8(0.15)$	0.4555	$0.456^{+0.020}_{-0.018}$ (−1.6 σ)
A_{143}^{PS}	42.1	39^{+20}_{-20} (−1.1 σ)	D_{220}	5719	5719^{+79}_{-76} (+0.1 σ)	$\sigma_8(0.15)$	0.7510	$0.752^{+0.038}_{-0.035}$ (−1.8 σ)
A_{217}^{PS}	102.2	102^{+30}_{-30} (−1.2 σ)	D_{810}	2533.6	2535^{+28}_{-27} (−0.0 σ)	$f\sigma_8(0.38)$	0.4759	$0.477^{+0.028}_{-0.025}$ (−1.8 σ)
A_{217}^{CIB}	39.1	40^{+10}_{-10} (−1.2 σ)	D_{1420}	815.6	$815.9^{+9.7}_{-9.6}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6660	$0.667^{+0.034}_{-0.031}$ (−1.8 σ)
A_{143}^{tSZ}	3.40	< 7.47 (−0.6 σ)	D_{2000}	230.26	$230.3^{+3.2}_{-3.2}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4752	$0.476^{+0.030}_{-0.027}$ (−1.8 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.669	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9669	$0.9668^{+0.0084}_{-0.0084}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6233	$0.624^{+0.031}_{-0.029}$ (−1.8 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.61	—	Y_{P}	0.245380	$0.24537^{+0.00012}_{-0.00012}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4705	$0.472^{+0.030}_{-0.027}$ (−1.8 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.69	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246706	$0.24670^{+0.00012}_{-0.00012}$ (+0.8 σ)	$\sigma_8(0.61)$	0.5931	$0.594^{+0.030}_{-0.027}$ (−1.8 σ)
A^{kSZ}	5.2	—	$10^5 \mathrm{D}/\mathrm{H}$	2.593	$2.596^{+0.056}_{-0.056}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.2992	$0.300^{+0.015}_{-0.014}$ (−1.8 σ)
A_{100}^{dust}	1.018	$1.01^{+0.39}_{-0.38}$	Age/Gyr	13.786	$13.786^{+0.064}_{-0.062}$ (+1.5 σ)	$\sigma_8(2.33)$	0.3080	$0.308^{+0.013}_{-0.012}$ (−1.8 σ)
A_{143}^{dust}	0.972	$0.96^{+0.35}_{-0.35}$	z_*	1089.89	$1089.92^{+0.51}_{-0.51}$ (−0.8 σ)	f_{2000}^{143}	29.9	30^{+5}_{-5} (−0.4 σ)
A_{217}^{dust}	0.983	$0.97^{+0.20}_{-0.20}$	r_*	144.68	$144.66^{+0.59}_{-0.59}$ (+0.4 σ)	f_{2000}^{217}	106.82	$106.8^{+3.7}_{-3.7}$ (−0.6 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.024	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04111	$1.04111^{+0.00060}_{-0.00060}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	32.13	32^{+4}_{-4} (−0.6 σ)
c_{100}	0.99750	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.897	$13.895^{+0.056}_{-0.055}$ (+0.4 σ)	χ_{small}^2	395.90	$396.9 (\nu: 1.4)$ (+0.1 σ)
c_{217}	1.00129	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	z_{drag}	1059.78	$1059.76^{+0.67}_{-0.63}$ (+0.7 σ)	χ_{lowl}^2	22.84	$22.91 (\nu: 0.4)$ (−0.3 σ)
c_{TE}	0.9965	$0.9967^{+0.0097}_{-0.0095}$	r_{drag}	147.36	$147.35^{+0.60}_{-0.60}$ (+0.3 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.9	$11514.7 (\nu: 16.5)$
c_{EE}	0.9920	$0.9921^{+0.0096}_{-0.0097}$	k_{D}	0.14055	$0.14056^{+0.00068}_{-0.00070}$ (−0.0 σ)	$\chi_{6\mathrm{DF}}^2$	0.001	$0.13 (\nu: 0.0)$
H_0	68.20	$68.3^{+2.9}_{-2.9}$ (−1.7 σ)	$100\theta_{\mathrm{D}}$	0.160841	$0.16085^{+0.00038}_{-0.00038}$ (−0.7 σ)	χ_{MGS}^2	1.61	$1.78 (\nu: 0.5)$
Ω_{Λ}	0.6944	$0.695^{+0.025}_{-0.024}$ (−1.7 σ)	z_{eq}	3381	3383^{+57}_{-56} (−0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.04	$4.9 (\nu: 1.0)$
Ω_{m}	0.3056	$0.305^{+0.024}_{-0.025}$ (+1.7 σ)	k_{eq}	0.010319	$0.01033^{+0.00018}_{-0.00017}$ (−0.5 σ)	χ_{prior}^2	2.4	$7.9 (\nu: 5.9)$ (+0.2 σ)
$\Omega_{\mathrm{m}} h^2$	0.14213	$0.1422^{+0.0024}_{-0.0023}$ (−0.5 σ)	$100\theta_{\mathrm{eq}}$	0.8170	$0.817^{+0.011}_{-0.011}$ (+0.6 σ)	χ_{BAO}^2	5.65	$6.9 (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	0.09693	$0.0971^{+0.0049}_{-0.0048}$ (−1.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.4513	$0.4512^{+0.0054}_{-0.0055}$ (+0.5 σ)	χ_{CMB}^2	11918.6	$11934.5 (\nu: 16.6)$ (+1900.9 σ)
σ_8	0.8122	$0.814^{+0.040}_{-0.037}$ (−1.8 σ)	$H(0.15)$	73.25	$73.3^{+1.8}_{-1.7}$ (−1.7 σ)			
S_8	0.8198	$0.820^{+0.026}_{-0.026}$ (+0.9 σ)	$D_{\mathrm{M}}(0.15)$	636.9	637^{+20}_{-21} (+1.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11926.60$; $\bar{\chi}_{\mathrm{eff}}^2 = 11949.21$; $\Delta\chi_{\mathrm{eff}}^2 = 0.93$; $R - 1 = 0.01464$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 4.04 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.90 commander_dx12_v3.2.29: 22.84 CamSpec like_10.7HM_1400_unified: 11499.85

18.32 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00030}_{-0.00029} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$H(0.38)$	$83.09^{+0.62}_{-0.61} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1194^{+0.0021}_{-0.0021} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.016}_{-0.016} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1520^{+31}_{-32} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00060}_{-0.00060} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.023}_{-0.023} \quad (-1.8\sigma)$	$H(0.51)$	$89.66^{+0.47}_{-0.47} \quad (+1.4\sigma)$
τ	$0.054^{+0.016}_{-0.014} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$100.8^{+4.0}_{-4.0} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+33}_{-33} \quad (+1.6\sigma)$
w_0	$-1.03^{+0.10}_{-0.11} \quad (+1.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.046}_{-0.047} \quad (-1.4\sigma)$	$H(0.61)$	$95.18^{+0.55}_{-0.62} \quad (+1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.030}_{-0.028} \quad (+0.1\sigma)$	z_{re}	$7.6^{+1.5}_{-1.5} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+33}_{-33} \quad (+1.6\sigma)$
n_{s}	$0.9662^{+0.0079}_{-0.0080} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.063}_{-0.059} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (+1.3\sigma)$
y_{cal}	$1.0006^{+0.0051}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+17}_{-18} \quad (+0.5\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1226^{+23}_{-22} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.015}_{-0.014} \quad (-1.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5722^{+78}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.756^{+0.032}_{-0.030} \quad (-1.8\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.023}_{-0.021} \quad (-1.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.0^{+9.6}_{-9.9} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.670^{+0.028}_{-0.027} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.3}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.025}_{-0.022} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.24}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9662^{+0.0079}_{-0.0080} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.026}_{-0.025} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.025}_{-0.023} \quad (-1.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.7\sigma)$	$\sigma_8(0.61)$	$0.597^{+0.025}_{-0.024} \quad (-1.8\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.596^{+0.055}_{-0.055} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.301^{+0.013}_{-0.012} \quad (-1.8\sigma)$
A_{100}^{dust}	$1.00^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.783^{+0.062}_{-0.061} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.011}_{-0.010} \quad (-1.7\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.94^{+0.47}_{-0.48} \quad (-0.7\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	r_*	$144.62^{+0.51}_{-0.51} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.7}_{-3.8} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00059}_{-0.00060} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.048}_{-0.048} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.26 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.77^{+0.66}_{-0.63} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (+0.1\sigma)$
c_{TE}	$0.9966^{+0.0096}_{-0.0092}$	r_{drag}	$147.31^{+0.53}_{-0.53} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.05 \quad (\nu: 0.3) \quad (-0.2\sigma)$
c_{EE}	$0.9922^{+0.0097}_{-0.0099}$	k_{D}	$0.14060^{+0.00063}_{-0.00065} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.0 \quad (\nu: 15.4)$
H_0	$68.5^{+2.9}_{-2.6} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00037}_{-0.00038} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.13 \quad (\nu: 0.0)$
Ω_{Λ}	$0.696^{+0.024}_{-0.024} \quad (-1.7\sigma)$	z_{eq}	$3387^{+49}_{-49} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.87 \quad (\nu: 0.5)$
Ω_{m}	$0.304^{+0.024}_{-0.024} \quad (+1.7\sigma)$	k_{eq}	$0.01034^{+0.00015}_{-0.00015} \quad (-0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0020}_{-0.0020} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8159^{+0.0092}_{-0.0091} \quad (+0.5\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0975^{+0.0047}_{-0.0043} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0047}_{-0.0047} \quad (+0.5\sigma)$	χ_{CMB}^2	$11943.2 \quad (\nu: 16.8) \quad (+1902.4\sigma)$
σ_8	$0.817^{+0.033}_{-0.031} \quad (-1.8\sigma)$	$H(0.15)$	$73.4^{+1.7}_{-1.6} \quad (-1.6\sigma)$	χ_{BAO}^2	$7.0 \quad (\nu: 1.5)$
S_8	$0.822^{+0.021}_{-0.021} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$635^{+19}_{-20} \quad (+1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.08; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.68; R - 1 = 0.01812$$

18.33 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00031}_{-0.00029} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.014}_{-0.014} \quad (+1.0\sigma)$	$H(0.38)$	$83.09^{+0.63}_{-0.61} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0025}_{-0.0025} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.021}_{-0.020} \quad (-1.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+33}_{-33} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00060}_{-0.00061} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.031}_{-0.030} \quad (-1.8\sigma)$	$H(0.51)$	$89.68^{+0.50}_{-0.53} \quad (+1.4\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+4.1}_{-4.1} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+34}_{-34} \quad (+1.7\sigma)$
w_0	$-1.02^{+0.11}_{-0.11} \quad (+1.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.061}_{-0.059} \quad (-1.5\sigma)$	$H(0.61)$	$95.23^{+0.62}_{-0.65} \quad (+1.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.026} \quad (+0.1\sigma)$	z_{re}	$< 8.85 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+34}_{-33} \quad (+1.6\sigma)$
n_{s}	$0.9669^{+0.0084}_{-0.0083} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.060}_{-0.054} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (+1.3\sigma)$
y_{cal}	$1.0005^{+0.0050}_{-0.0050} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.024}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+18}_{-18} \quad (+0.5\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+25}_{-24} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.020}_{-0.018} \quad (-1.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5719^{+79}_{-76} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.753^{+0.038}_{-0.035} \quad (-1.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.028}_{-0.025} \quad (-1.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$815.9^{+9.7}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.034}_{-0.031} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.030}_{-0.027} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9669^{+0.0084}_{-0.0083} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.032}_{-0.029} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00012}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.031}_{-0.028} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00012}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.030}_{-0.027} \quad (-1.8\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.595^{+0.055}_{-0.056} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.300^{+0.015}_{-0.014} \quad (-1.8\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.786^{+0.064}_{-0.062} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.309^{+0.013}_{-0.012} \quad (-1.7\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.91^{+0.50}_{-0.51} \quad (-0.8\sigma)$	f_{2000}^{143}	$30^{+5}_{-5} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.67^{+0.58}_{-0.59} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+3.7}_{-3.7} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04112^{+0.00060}_{-0.00061} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.896^{+0.056}_{-0.055} \quad (+0.4\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.77^{+0.66}_{-0.64} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.93 \quad (\nu: 0.4) \quad (-0.3\sigma)$
c_{TE}	$0.9966^{+0.0098}_{-0.0095}$	r_{drag}	$147.35^{+0.60}_{-0.60} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.5 \quad (\nu: 16.3)$
c_{EE}	$0.9921^{+0.0096}_{-0.0097}$	k_{D}	$0.14056^{+0.00068}_{-0.00069} \quad (-0.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.13 \quad (\nu: 0.0)$
H_0	$68.3^{+3.1}_{-2.7} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00037}_{-0.00038} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.78 \quad (\nu: 0.5)$
Ω_{Λ}	$0.695^{+0.025}_{-0.024} \quad (-1.7\sigma)$	z_{eq}	$3382^{+57}_{-56} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.0)$
Ω_{m}	$0.305^{+0.024}_{-0.025} \quad (+1.7\sigma)$	k_{eq}	$0.01032^{+0.00017}_{-0.00017} \quad (-0.5\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0024}_{-0.0023} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.011}_{-0.011} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.8 \quad (\nu: 1.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0971^{+0.0049}_{-0.0048} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4512^{+0.0055}_{-0.0055} \quad (+0.6\sigma)$	χ_{CMB}^2	$11934.2 \quad (\nu: 16.2) \quad (+1900.9\sigma)$
σ_8	$0.815^{+0.040}_{-0.037} \quad (-1.8\sigma)$	$H(0.15)$	$73.3^{+1.8}_{-1.7} \quad (-1.7\sigma)$		
S_8	$0.821^{+0.026}_{-0.025} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+20}_{-21} \quad (+1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11948.94; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.95; R - 1 = 0.01259$$

18.34 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00030}_{-0.00028} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.011} \quad (+1.0\sigma)$	$H(0.38)$	$83.10^{+0.62}_{-0.61} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1194^{+0.0021}_{-0.0021} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.016}_{-0.016} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+31}_{-32} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00059}_{-0.00061} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.023}_{-0.023} \quad (-1.8\sigma)$	$H(0.51)$	$89.67^{+0.46}_{-0.47} \quad (+1.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$100.8^{+4.0}_{-4.0} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+33}_{-33} \quad (+1.6\sigma)$
w_0	$-1.03^{+0.10}_{-0.11} \quad (+1.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.046}_{-0.046} \quad (-1.4\sigma)$	$H(0.61)$	$95.20^{+0.54}_{-0.62} \quad (+1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.027}_{-0.025} \quad (+0.2\sigma)$	z_{re}	$< 8.89 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2297^{+32}_{-33} \quad (+1.6\sigma)$
n_{s}	$0.9664^{+0.0078}_{-0.0078} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.056}_{-0.052} \quad (+0.2\sigma)$	$H(2.33)$	$235.7^{+1.4}_{-1.5} \quad (+1.3\sigma)$
y_{cal}	$1.0006^{+0.0051}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+17}_{-18} \quad (+0.5\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1226^{+23}_{-22} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.015}_{-0.014} \quad (-1.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	D_{220}	$5722^{+79}_{-75} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.756^{+0.032}_{-0.030} \quad (-1.8\sigma)$
A_{217}^{PS}	$103^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.023}_{-0.021} \quad (-1.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.0^{+9.6}_{-9.8} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.670^{+0.029}_{-0.027} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.3}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.025}_{-0.022} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9664^{+0.0078}_{-0.0078} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.027}_{-0.025} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.025}_{-0.023} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.597^{+0.025}_{-0.024} \quad (-1.8\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.596^{+0.054}_{-0.054} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.301^{+0.013}_{-0.012} \quad (-1.8\sigma)$
A_{100}^{dust}	$1.00^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.783^{+0.062}_{-0.061} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.310^{+0.011}_{-0.010} \quad (-1.7\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.93^{+0.47}_{-0.48} \quad (-0.8\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.98^{+0.21}_{-0.20}$	r_*	$144.63^{+0.51}_{-0.49} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.7}_{-3.7} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00059}_{-0.00060} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.047}_{-0.048} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.22 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.77^{+0.66}_{-0.64} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (+0.1\sigma)$
c_{TE}	$0.9965^{+0.0096}_{-0.0092}$	r_{drag}	$147.32^{+0.53}_{-0.52} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.04 \quad (\nu: 0.3) \quad (-0.2\sigma)$
c_{EE}	$0.9921^{+0.0097}_{-0.010}$	k_{D}	$0.14059^{+0.00063}_{-0.00065} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.9 \quad (\nu: 15.4)$
H_0	$68.4^{+2.8}_{-2.8} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00037}_{-0.00037} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.13 \quad (\nu: 0.0)$
Ω_{Λ}	$0.696^{+0.024}_{-0.024} \quad (-1.7\sigma)$	z_{eq}	$3386^{+48}_{-48} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.86 \quad (\nu: 0.5)$
Ω_{m}	$0.304^{+0.024}_{-0.024} \quad (+1.7\sigma)$	k_{eq}	$0.01033^{+0.00015}_{-0.00015} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0020}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8161^{+0.0091}_{-0.0090} \quad (+0.5\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.1) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0974^{+0.0047}_{-0.0043} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0047}_{-0.0046} \quad (+0.5\sigma)$	χ_{CMB}^2	$11943.0 \quad (\nu: 16.6) \quad (+1902.4\sigma)$
σ_8	$0.817^{+0.033}_{-0.031} \quad (-1.8\sigma)$	$H(0.15)$	$73.4^{+1.7}_{-1.6} \quad (-1.6\sigma)$	χ_{BAO}^2	$6.9 \quad (\nu: 1.5)$
S_8	$0.823^{+0.021}_{-0.021} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$636^{+19}_{-20} \quad (+1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.86; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.60; R - 1 = 0.01772$$

18.35 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022194	$0.02218^{+0.00039}_{-0.00039}$ (+0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6142	$0.613^{+0.022}_{-0.022}$ (−1.4 σ)	$D_M(0.38)$	1507.0	1507^{+21}_{-20} (+1.5 σ)
$\Omega_c h^2$	0.12001	$0.1199^{+0.0030}_{-0.0031}$ (−0.3 σ)	$\sigma_8/h^{0.5}$	0.9991	$0.998^{+0.031}_{-0.032}$ (−1.5 σ)	$H(0.51)$	89.51	$89.51^{+0.69}_{-0.72}$ (+1.3 σ)
$100\theta_{MC}$	1.04091	$1.04090^{+0.00085}_{-0.00087}$ (+0.2 σ)	$r_{drag}h$	102.71	$102.7^{+2.7}_{-2.6}$ (−1.5 σ)	$D_M(0.51)$	1958.9	1959^{+23}_{-22} (+1.5 σ)
τ	0.0527	$0.053^{+0.016}_{-0.016}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.455	$2.454^{+0.067}_{-0.067}$ (−1.1 σ)	$H(0.61)$	94.90	$94.90^{+0.74}_{-0.77}$ (+1.6 σ)
w_0	−1.085	$−1.084^{+0.081}_{-0.086}$ (+1.6 σ)	z_{re}	7.55	$7.5^{+1.6}_{-1.7}$ (+0.1 σ)	$D_M(0.61)$	2284.3	2285^{+23}_{-23} (+1.4 σ)
$\ln(10^{10} A_s)$	3.0406	$3.040^{+0.033}_{-0.032}$ (+0.0 σ)	$10^9 A_s$	2.092	$2.090^{+0.070}_{-0.067}$ (+0.0 σ)	$H(2.33)$	235.20	$235.2^{+1.5}_{-1.5}$ (+1.1 σ)
n_s	0.9652	$0.9645^{+0.0094}_{-0.0093}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8824	$1.881^{+0.025}_{-0.024}$ (−0.2 σ)	$D_M(2.33)$	5763.0	5764^{+24}_{-24} (+0.6 σ)
α_{JLA}	0.1420	$0.142^{+0.013}_{-0.013}$	D_{40}	1227.4	1229^{+27}_{-26} (−0.1 σ)	$f\sigma_8(0.15)$	0.4646	$0.464^{+0.022}_{-0.021}$ (−1.3 σ)
β_{JLA}	3.116	$3.12^{+0.16}_{-0.16}$	D_{220}	5715	5717^{+80}_{-78} (+0.0 σ)	$\sigma_8(0.15)$	0.7723	$0.771^{+0.030}_{-0.030}$ (−1.6 σ)
y_{cal}	1.00044	$1.0004^{+0.0050}_{-0.0049}$ (+0.0 σ)	D_{810}	2537.8	2536^{+28}_{-27} (+0.0 σ)	$f\sigma_8(0.38)$	0.4908	$0.490^{+0.026}_{-0.025}$ (−1.5 σ)
A_{217}^{CIB}	49.1	48^{+10}_{-10} (−0.0 σ)	D_{1420}	816.0	815^{+10}_{-10} (+0.2 σ)	$\sigma_8(0.38)$	0.6850	$0.684^{+0.026}_{-0.026}$ (−1.6 σ)
$\xi^{tSZ \times CIB}$	0.25	—	D_{2000}	230.24	$229.9^{+3.6}_{-3.5}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4916	$0.491^{+0.026}_{-0.025}$ (−1.6 σ)
A_{143}^{tSZ}	7.01	$5.1^{+3.8}_{-4.0}$ (−0.0 σ)	$n_{s,0.002}$	0.9652	$0.9645^{+0.0094}_{-0.0093}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6409	$0.640^{+0.024}_{-0.024}$ (−1.6 σ)
A_{100}^{PS}	255	263^{+50}_{-60} (−0.0 σ)	Y_P	0.245323	$0.24532^{+0.00016}_{-0.00017}$ (+0.2 σ)	$f\sigma_8(0.61)$	0.4874	$0.487^{+0.026}_{-0.025}$ (−1.6 σ)
A_{143}^{PS}	48.1	49^{+20}_{-20} (−0.0 σ)	Y_P^{BBN}	0.246649	$0.24664^{+0.00016}_{-0.00017}$ (+0.2 σ)	$\sigma_8(0.61)$	0.6097	$0.609^{+0.022}_{-0.022}$ (−1.6 σ)
$A_{143 \times 217}^{PS}$	44.8	43^{+20}_{-20} (−0.0 σ)	$10^5 D/H$	2.619	$2.621^{+0.074}_{-0.073}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.3074	$0.307^{+0.011}_{-0.011}$ (−1.6 σ)
A_{217}^{PS}	118.4	115^{+20}_{-20} (+0.0 σ)	Age/Gyr	13.766	$13.768^{+0.056}_{-0.054}$ (+1.4 σ)	$\sigma_8(2.33)$	0.3150	$0.3145^{+0.0094}_{-0.0092}$ (−1.6 σ)
A^{kSZ}	0.00	< 8.44 (+0.0 σ)	z_*	1090.14	$1090.15^{+0.64}_{-0.64}$ (−0.2 σ)	f_{2000}^{143}	30.2	31^{+6}_{-6} (−0.0 σ)
A_{100}^{dustTT}	8.92	$8.9^{+3.6}_{-3.6}$ (+0.0 σ)	r_*	144.56	$144.60^{+0.75}_{-0.73}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	33.03	33^{+4}_{-4} (−0.0 σ)
A_{143}^{dustTT}	10.76	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	$100\theta_*$	1.04112	$1.04111^{+0.00084}_{-0.00086}$ (+0.2 σ)	f_{2000}^{217}	107.53	$107.9^{+3.6}_{-3.7}$ (−0.0 σ)
$A_{143 \times 217}^{dustTT}$	19.1	$18.3^{+6.5}_{-6.4}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.886	$13.889^{+0.071}_{-0.070}$ (+0.2 σ)	χ_{simall}^2	395.87	$396.9 (\nu: 1.5)$ (+0.1 σ)
A_{217}^{dustTT}	94.2	93^{+10}_{-10} (+0.0 σ)	z_{drag}	1059.51	$1059.50^{+0.85}_{-0.86}$ (+0.1 σ)	χ_{lowl}^2	23.12	$23.3 (\nu: 0.5)$ (+0.1 σ)
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	r_{drag}	147.29	$147.32^{+0.78}_{-0.77}$ (+0.2 σ)	χ_{plik}^2	758.6	$771.0 (\nu: 14.4)$ (+0.2 σ)
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	k_D	0.14052	$0.14048^{+0.00092}_{-0.00093}$ (−0.2 σ)	$\chi_{H073p45}^2$	5.01	$5.4 (\nu: 3.2)$
H_0	69.73	$69.7^{+1.9}_{-1.8}$ (−1.5 σ)	$100\theta_D$	0.16100	$0.16102^{+0.00050}_{-0.00050}$ (−0.1 σ)	χ_{JLA}^2	696.56	$699.0 (\nu: 3.5)$
Ω_Λ	0.7063	$0.706^{+0.015}_{-0.016}$ (−1.5 σ)	z_{eq}	3398	3396^{+70}_{-71} (−0.3 σ)	χ_{6DF}^2	0.118	$0.17 (\nu: 0.0)$
Ω_m	0.2937	$0.294^{+0.016}_{-0.015}$ (+1.5 σ)	k_{eq}	0.010371	$0.01036^{+0.00021}_{-0.00022}$ (−0.3 σ)	χ_{MGS}^2	2.67	$2.73 (\nu: 0.3)$
$\Omega_m h^2$	0.14284	$0.1427^{+0.0029}_{-0.0030}$ (−0.3 σ)	$100\theta_{eq}$	0.8135	$0.814^{+0.013}_{-0.013}$ (+0.3 σ)	$\chi_{DR12BAO}^2$	4.52	$5.1 (\nu: 0.5)$
$\Omega_m h^3$	0.09961	$0.0995^{+0.0037}_{-0.0036}$ (−1.5 σ)	$100\theta_{s,eq}$	0.4496	$0.4499^{+0.0069}_{-0.0066}$ (+0.3 σ)	χ_{prior}^2	1.4	$7.3 (\nu: 6.8)$ (+0.0 σ)
σ_8	0.8343	$0.833^{+0.032}_{-0.032}$ (−1.6 σ)	$H(0.15)$	74.08	$74.1^{+1.1}_{-1.1}$ (−1.5 σ)	χ_{BAO}^2	7.31	$8.0 (\nu: 1.3)$
S_8	0.8256	$0.824^{+0.032}_{-0.032}$ (+1.0 σ)	$D_M(0.15)$	626.5	627^{+13}_{-12} (+1.5 σ)	χ_{CMB}^2	1177.6	$1191.3 (\nu: 14.5)$ (+0.2 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4522	$0.451^{+0.018}_{-0.017}$ (+1.0 σ)	$H(0.38)$	83.18	$83.17^{+0.68}_{-0.68}$ (−0.7 σ)			

Best-fit $\chi_{eff}^2 = 1887.89$; $\bar{\chi}_{eff}^2 = 1910.92$; $R - 1 = 0.00727$
 χ_{eff}^2 : BAO - 6DF: 0.12 MGS: 2.67 DR12BAO: 4.52 CMB - simall-100x143.offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3.2.29: 23.12 plik_rd12_HM_v22.TT: 758.61
Hubble - H073p45: 5.01 SN - JLA December_2013: 696.56

18.36 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022209	$0.02220^{+0.00038}_{-0.00039}$ $(+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6129	$0.612^{+0.016}_{-0.016}$ (-1.5σ)	$D_{\mathrm{M}}(0.38)$	1506.3	1507^{+21}_{-21} $(+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11977	$0.1197^{+0.0025}_{-0.0025}$ (-0.3σ)	$\sigma_8/h^{0.5}$	0.9973	$0.996^{+0.023}_{-0.023}$ (-1.5σ)	$H(0.51)$	89.55	$89.54^{+0.61}_{-0.63}$ $(+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.04085	$1.04090^{+0.00084}_{-0.00085}$ $(+0.2\sigma)$	$r_{\mathrm{drag}}h$	102.79	$102.7^{+2.7}_{-2.5}$ (-1.5σ)	$D_{\mathrm{M}}(0.51)$	1958.0	1959^{+23}_{-22} $(+1.5\sigma)$
τ	0.0529	$0.052^{+0.016}_{-0.015}$ $(+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4511	$2.450^{+0.048}_{-0.049}$ (-1.2σ)	$H(0.61)$	94.93	$94.93^{+0.66}_{-0.69}$ $(+1.6\sigma)$
w_0	-1.083	$-1.081^{+0.074}_{-0.078}$ $(+1.6\sigma)$	z_{re}	7.55	$7.5^{+1.5}_{-1.6}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2283.2	2284^{+23}_{-23} $(+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0404	$3.039^{+0.030}_{-0.030}$ $(+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	2.091	$2.089^{+0.063}_{-0.061}$ $(+0.0\sigma)$	$H(2.33)$	235.07	$235.1^{+1.3}_{-1.3}$ $(+1.1\sigma)$
n_{s}	0.9656	$0.9647^{+0.0085}_{-0.0085}$ $(+0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8815	$1.880^{+0.022}_{-0.021}$ (-0.2σ)	$D_{\mathrm{M}}(2.33)$	5762.6	5763^{+23}_{-23} $(+0.6\sigma)$
y_{cal}	1.00047	$1.0004^{+0.0048}_{-0.0048}$ $(+0.0\sigma)$	D_{40}	1226.7	1229^{+24}_{-23} (-0.1σ)	$f\sigma_8(0.15)$	0.4632	$0.463^{+0.016}_{-0.016}$ (-1.3σ)
α_{JLA}	0.1421	$0.142^{+0.013}_{-0.013}$	D_{220}	5717	5719^{+79}_{-77} $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7711	$0.770^{+0.024}_{-0.024}$ (-1.6σ)
β_{JLA}	3.113	$3.12^{+0.16}_{-0.16}$	D_{810}	2537.7	2536^{+27}_{-27} $(+0.0\sigma)$	$f\sigma_8(0.38)$	0.4895	$0.489^{+0.020}_{-0.019}$ (-1.6σ)
A_{217}^{CIB}	48.3	48^{+10}_{-10} (-0.0σ)	D_{1420}	816.1	815^{+10}_{-10} $(+0.2\sigma)$	$\sigma_8(0.38)$	0.6842	$0.683^{+0.021}_{-0.021}$ (-1.6σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.37	—	D_{2000}	230.26	$229.8^{+3.5}_{-3.5}$ $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4904	$0.489^{+0.020}_{-0.020}$ (-1.6σ)
A_{143}^{tSZ}	7.07	$5.1^{+3.9}_{-3.9}$ (-0.0σ)	$n_{\mathrm{s},0.002}$	0.9656	$0.9647^{+0.0085}_{-0.0085}$ $(+0.3\sigma)$	$\sigma_8(0.51)$	0.6402	$0.639^{+0.019}_{-0.019}$ (-1.6σ)
A_{100}^{PS}	253	263^{+50}_{-60} $(+0.0\sigma)$	Y_{P}	0.245330	$0.24532^{+0.00016}_{-0.00017}$ $(+0.2\sigma)$	$f\sigma_8(0.61)$	0.4863	$0.485^{+0.020}_{-0.020}$ (-1.6σ)
A_{143}^{PS}	49.7	49^{+20}_{-20} (-0.0σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246656	$0.24665^{+0.00016}_{-0.00017}$ $(+0.2\sigma)$	$\sigma_8(0.61)$	0.6090	$0.608^{+0.018}_{-0.018}$ (-1.6σ)
$A_{143 \times 217}^{\mathrm{PS}}$	48.0	43^{+20}_{-20} (-0.0σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.616	$2.619^{+0.074}_{-0.071}$ (-0.2σ)	$f\sigma_8(2.33)$	0.3071	$0.3065^{+0.0088}_{-0.0088}$ (-1.6σ)
A_{217}^{PS}	119.7	115^{+20}_{-20} (-0.0σ)	Age/Gyr	13.765	$13.767^{+0.056}_{-0.053}$ $(+1.4\sigma)$	$\sigma_8(2.33)$	0.3147	$0.3142^{+0.0077}_{-0.0075}$ (-1.6σ)
A^{kSZ}	0.01	< 8.48 $(+0.0\sigma)$	z_*	1090.10	$1090.12^{+0.59}_{-0.59}$ (-0.3σ)	f_{2000}^{143}	30.1	31^{+6}_{-6} (-0.0σ)
$A_{100}^{\mathrm{dustTT}}$	8.84	$8.9^{+3.5}_{-3.7}$ $(+0.0\sigma)$	r_*	144.61	$144.63^{+0.63}_{-0.62}$ $(+0.3\sigma)$	$f_{2000}^{143 \times 217}$	33.04	33^{+4}_{-4} (-0.0σ)
$A_{143}^{\mathrm{dustTT}}$	10.75	$10.7^{+3.5}_{-3.6}$ $(+0.0\sigma)$	$100\theta_*$	1.04106	$1.04110^{+0.00083}_{-0.00084}$ $(+0.2\sigma)$	f_{2000}^{217}	107.47	$107.9^{+3.6}_{-3.6}$ (-0.0σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.3^{+6.2}_{-6.5}$ $(+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.891	$13.892^{+0.062}_{-0.060}$ $(+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.72	9.22 (ν : 0.3)
$A_{217}^{\mathrm{dustTT}}$	94.7	93^{+10}_{-10} $(+0.0\sigma)$	z_{drag}	1059.55	$1059.51^{+0.84}_{-0.87}$ $(+0.1\sigma)$	χ_{small}^2	395.86	396.8 (ν : 1.3) $(+0.0\sigma)$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	r_{drag}	147.33	$147.36^{+0.68}_{-0.66}$ $(+0.3\sigma)$	χ_{lowl}^2	23.06	23.27 (ν : 0.4) $(+0.0\sigma)$
c_{217}	0.99823	$0.9983^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	k_{D}	0.14049	$0.14045^{+0.00084}_{-0.00087}$ (-0.2σ)	χ_{plik}^2	758.8	770.9 (ν : 13.7) $(+0.2\sigma)$
H_0	69.77	$69.7^{+1.9}_{-1.7}$ (-1.5σ)	$100\theta_{\mathrm{D}}$	0.16098	$0.16101^{+0.00051}_{-0.00050}$ (-0.1σ)	$\chi_{\mathrm{H073p45}}^2$	4.92	5.4 (ν : 3.1)
Ω_{Λ}	0.7070	$0.707^{+0.015}_{-0.015}$ (-1.5σ)	z_{eq}	3393	3392^{+57}_{-59} (-0.3σ)	χ_{JLA}^2	696.55	698.9 (ν : 3.3)
Ω_{m}	0.2930	$0.293^{+0.015}_{-0.015}$ $(+1.5\sigma)$	k_{eq}	0.010355	$0.01035^{+0.00017}_{-0.00018}$ (-0.3σ)	χ_{6DF}^2	0.131	0.18 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.14262	$0.1426^{+0.0024}_{-0.0025}$ (-0.3σ)	$100\theta_{\mathrm{eq}}$	0.8145	$0.815^{+0.011}_{-0.011}$ $(+0.3\sigma)$	χ_{MGS}^2	2.76	2.77 (ν : 0.3)
$\Omega_{\mathrm{m}}h^3$	0.09951	$0.0994^{+0.0033}_{-0.0032}$ (-1.6σ)	$100\theta_{\mathrm{s,eq}}$	0.4501	$0.4502^{+0.0057}_{-0.0054}$ $(+0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.50	4.96 (ν : 0.4)
σ_8	0.8330	$0.832^{+0.025}_{-0.025}$ (-1.6σ)	$H(0.15)$	74.12	$74.1^{+1.1}_{-1.1}$ (-1.5σ)	χ_{prior}^2	1.3	7.2 (ν : 6.5) $(+0.0\sigma)$
S_8	0.8232	$0.822^{+0.024}_{-0.024}$ $(+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	626.2	627^{+12}_{-12} $(+1.5\sigma)$	χ_{CMB}^2	1186.4	1200.3 (ν : 14.8) $(+1.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4509	$0.450^{+0.013}_{-0.013}$ $(+1.0\sigma)$	$H(0.38)$	83.22	$83.21^{+0.62}_{-0.63}$ (-0.7σ)	χ_{BAO}^2	7.38	7.9 (ν : 1.3)

Best-fit $\chi_{\mathrm{eff}}^2 = 1896.64$; $\Delta\chi_{\mathrm{eff}}^2 = -16.17$; $\bar{\chi}_{\mathrm{eff}}^2 = 1919.63$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -13.41$; $R - 1 = 0.00916$
 χ_{eff}^2 : BAO - 6DF: 0.13 (Δ 0.13) MGS: 2.76 (Δ 1.08) DR12BAO: 4.50 (Δ 1.00) CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.72 (Δ -0.23) small_100x143_offlike5_EE_Aplanck.
395.86 (Δ -0.97) commander_dx12_v3.2.29: 23.05 (Δ 0.47) plik_rd12_HM_v22.TT: 758.81 (Δ -2.01) Hubble - H073p45: 4.92 (Δ -5.68) SN - JLA December_2013: 696.55 (Δ -10.04)

18.37 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02219^{+0.00039}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.022}_{-0.022} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1507^{+21}_{-20} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1199^{+0.0030}_{-0.0031} \quad (-0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.999^{+0.031}_{-0.032} \quad (-1.4\sigma)$	$H(0.51)$	$89.52^{+0.69}_{-0.71} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00085}_{-0.00087} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$102.7^{+2.7}_{-2.6} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1959^{+23}_{-22} \quad (+1.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.456^{+0.066}_{-0.067} \quad (-1.0\sigma)$	$H(0.61)$	$94.91^{+0.74}_{-0.77} \quad (+1.6\sigma)$
w_0	$-1.083^{+0.081}_{-0.087} \quad (+1.6\sigma)$	z_{re}	$< 8.88 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2285^{+23}_{-23} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.029}_{-0.026} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.060}_{-0.054} \quad (+0.2\sigma)$	$H(2.33)$	$235.2^{+1.5}_{-1.5} \quad (+1.1\sigma)$
n_{s}	$0.9647^{+0.0094}_{-0.0093} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.025}_{-0.024} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+24}_{-23} \quad (+0.6\sigma)$
α_{JLA}	$0.142^{+0.013}_{-0.013}$	D_{40}	$1229^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.022}_{-0.022} \quad (-1.3\sigma)$
β_{JLA}	$3.12^{+0.16}_{-0.16}$	D_{220}	$5717^{+80}_{-78} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.772^{+0.030}_{-0.030} \quad (-1.6\sigma)$
y_{cal}	$1.0004^{+0.0051}_{-0.0049} \quad (+0.0\sigma)$	D_{810}	$2536^{+28}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.490^{+0.026}_{-0.025} \quad (-1.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.685^{+0.026}_{-0.026} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$229.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.491^{+0.026}_{-0.026} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9647^{+0.0094}_{-0.0093} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.641^{+0.024}_{-0.023} \quad (-1.6\sigma)$
A_{100}^{PS}	$262^{+50}_{-60} \quad (-0.0\sigma)$	Y_{P}	$0.24532^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.487^{+0.026}_{-0.025} \quad (-1.6\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.609^{+0.022}_{-0.022} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.620^{+0.075}_{-0.072} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.307^{+0.011}_{-0.011} \quad (-1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.767^{+0.056}_{-0.054} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3149^{+0.0092}_{-0.0090} \quad (-1.5\sigma)$
A^{kSZ}	$< 8.44 \quad (+0.0\sigma)$	z_*	$1090.14^{+0.64}_{-0.64} \quad (-0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.61^{+0.75}_{-0.74} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04112^{+0.00084}_{-0.00086} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.9^{+3.6}_{-3.7} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.4} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.890^{+0.071}_{-0.070} \quad (+0.2\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.5) \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.51^{+0.85}_{-0.87} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.5) \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.33^{+0.78}_{-0.77} \quad (+0.2\sigma)$	χ_{plik}^2	$770.9 \quad (\nu: 14.2) \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14047^{+0.00093}_{-0.00093} \quad (-0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.4 \quad (\nu: 3.2)$
H_0	$69.7^{+1.9}_{-1.8} \quad (-1.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00050}_{-0.00050} \quad (-0.1\sigma)$	χ_{JLA}^2	$698.9 \quad (\nu: 3.5)$
Ω_{Λ}	$0.706^{+0.015}_{-0.016} \quad (-1.5\sigma)$	z_{eq}	$3395^{+70}_{-71} \quad (-0.3\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.17 \quad (\nu: 0.0)$
Ω_{m}	$0.294^{+0.016}_{-0.015} \quad (+1.5\sigma)$	k_{eq}	$0.01036^{+0.00021}_{-0.00022} \quad (-0.3\sigma)$	χ_{MGS}^2	$2.74 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1427^{+0.0029}_{-0.0030} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.013}_{-0.013} \quad (+0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0995^{+0.0037}_{-0.0036} \quad (-1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4500^{+0.0069}_{-0.0066} \quad (+0.3\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
σ_8	$0.834^{+0.032}_{-0.032} \quad (-1.6\sigma)$	$H(0.15)$	$74.1^{+1.1}_{-1.1} \quad (-1.5\sigma)$	χ_{BAO}^2	$8.0 \quad (\nu: 1.3)$
S_8	$0.825^{+0.032}_{-0.032} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$627^{+13}_{-12} \quad (+1.5\sigma)$	χ_{CMB}^2	$1191.0 \quad (\nu: 14.2) \quad (+0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.017}_{-0.018} \quad (+1.1\sigma)$	$H(0.38)$	$83.19^{+0.68}_{-0.67} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1910.63; R - 1 = 0.00797$$

18.38 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00038}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.016}_{-0.016} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1507^{+21}_{-21} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0024}_{-0.0025} \quad (-0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.996^{+0.023}_{-0.023} \quad (-1.5\sigma)$	$H(0.51)$	$89.56^{+0.60}_{-0.62} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00084}_{-0.00084} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$102.7^{+2.7}_{-2.5} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1959^{+23}_{-22} \quad (+1.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.452^{+0.047}_{-0.049} \quad (-1.1\sigma)$	$H(0.61)$	$94.95^{+0.64}_{-0.67} \quad (+1.6\sigma)$
w_0	$-1.079^{+0.072}_{-0.077} \quad (+1.6\sigma)$	z_{re}	$< 8.81 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2284^{+23}_{-23} \quad (+1.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.026}_{-0.023} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.055}_{-0.049} \quad (+0.2\sigma)$	$H(2.33)$	$235.1^{+1.3}_{-1.3} \quad (+1.1\sigma)$
n_{s}	$0.9650^{+0.0085}_{-0.0084} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.022}_{-0.021} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+23}_{-22} \quad (+0.5\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	D_{40}	$1228^{+25}_{-23} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} \quad (-1.4\sigma)$
α_{JLA}	$0.142^{+0.013}_{-0.013}$	D_{220}	$5719^{+79}_{-77} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.770^{+0.024}_{-0.024} \quad (-1.6\sigma)$
β_{JLA}	$3.12^{+0.16}_{-0.16}$	D_{810}	$2535^{+27}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.489^{+0.020}_{-0.019} \quad (-1.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.683^{+0.021}_{-0.021} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$229.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.489^{+0.020}_{-0.020} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$5.1^{+3.9}_{-3.9} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9650^{+0.0085}_{-0.0084} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.639^{+0.019}_{-0.019} \quad (-1.6\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	Y_{P}	$0.24532^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.485^{+0.020}_{-0.020} \quad (-1.6\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.608^{+0.018}_{-0.018} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.618^{+0.074}_{-0.070} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.3067^{+0.0087}_{-0.0088} \quad (-1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.767^{+0.056}_{-0.054} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3145^{+0.0076}_{-0.0074} \quad (-1.6\sigma)$
A^{kSZ}	$< 8.48 \quad (+0.0\sigma)$	z_*	$1090.10^{+0.59}_{-0.59} \quad (-0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.7} \quad (-0.0\sigma)$	r_*	$144.65^{+0.62}_{-0.61} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (+0.0\sigma)$	$100\theta_*$	$1.04111^{+0.00083}_{-0.00084} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.3}_{-6.5} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.894^{+0.061}_{-0.059} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.20 \quad (\nu: 0.3)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.52^{+0.83}_{-0.84} \quad (+0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.3) \quad (-0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.38^{+0.67}_{-0.65} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.26 \quad (\nu: 0.4) \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14044^{+0.00085}_{-0.00086} \quad (-0.2\sigma)$	χ_{plik}^2	$770.8 \quad (\nu: 13.7) \quad (+0.2\sigma)$
H_0	$69.7^{+1.9}_{-1.7} \quad (-1.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00051}_{-0.00051} \quad (-0.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.4 \quad (\nu: 3.1)$
Ω_{Λ}	$0.707^{+0.015}_{-0.015} \quad (-1.5\sigma)$	z_{eq}	$3389^{+56}_{-58} \quad (-0.4\sigma)$	χ_{JLA}^2	$698.8 \quad (\nu: 3.3)$
Ω_{m}	$0.293^{+0.015}_{-0.015} \quad (+1.5\sigma)$	k_{eq}	$0.01035^{+0.00017}_{-0.00018} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.18 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1425^{+0.0024}_{-0.0024} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.010} \quad (+0.4\sigma)$	χ_{MGS}^2	$2.78 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.0993^{+0.0033}_{-0.0032} \quad (-1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0056}_{-0.0053} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.92 \quad (\nu: 0.4)$
σ_8	$0.832^{+0.025}_{-0.025} \quad (-1.6\sigma)$	$H(0.15)$	$74.1^{+1.1}_{-1.1} \quad (-1.5\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.5) \quad (+0.0\sigma)$
S_8	$0.822^{+0.024}_{-0.024} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$627^{+12}_{-12} \quad (+1.5\sigma)$	χ_{CMB}^2	$1200.0 \quad (\nu: 14.5) \quad (+1.8\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$H(0.38)$	$83.23^{+0.61}_{-0.62} \quad (-0.7\sigma)$	χ_{BAO}^2	$7.9 \quad (\nu: 1.3)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1919.34; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -13.61; R - 1 = 0.00910$$

18.39 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022407	$0.02239^{+0.00028}_{-0.00027}$ (+1.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.10004	$0.0999^{+0.0033}_{-0.0032}$ (−1.5 σ)	$D_{\mathrm{M}}(0.15)$	624.9	625^{+13}_{-12} (+1.5 σ)
$\Omega_{\mathrm{c}}h^2$	0.12001	$0.1199^{+0.0023}_{-0.0023}$ (−0.3 σ)	σ_8	0.8358	$0.834^{+0.028}_{-0.028}$ (−1.6 σ)	$H(0.38)$	83.37	$83.34^{+0.57}_{-0.58}$ (−0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04097	$1.04095^{+0.00060}_{-0.00058}$ (+0.3 σ)	S_8	0.8254	$0.824^{+0.026}_{-0.026}$ (+1.0 σ)	$D_{\mathrm{M}}(0.38)$	1503.3	1504^{+21}_{-20} (+1.5 σ)
τ	0.0545	$0.054^{+0.017}_{-0.015}$ (+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4521	$0.452^{+0.014}_{-0.014}$ (+1.0 σ)	$H(0.51)$	89.69	$89.67^{+0.53}_{-0.56}$ (+1.4 σ)
w_0	−1.084	$−1.082^{+0.074}_{-0.076}$ (+1.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6147	$0.614^{+0.018}_{-0.018}$ (−1.4 σ)	$D_{\mathrm{M}}(0.51)$	1954.2	1955^{+23}_{-22} (+1.4 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0450	$3.045^{+0.034}_{-0.031}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9995	$0.998^{+0.027}_{-0.027}$ (−1.4 σ)	$H(0.61)$	95.08	$95.07^{+0.60}_{-0.62}$ (+1.7 σ)
n_{s}	0.9667	$0.9654^{+0.0080}_{-0.0079}$ (+0.4 σ)	$r_{\mathrm{drag}}h$	102.83	$102.8^{+2.6}_{-2.6}$ (−1.5 σ)	$D_{\mathrm{M}}(0.61)$	2279.0	2280^{+23}_{-22} (+1.4 σ)
α_{JLA}	0.1420	$0.142^{+0.013}_{-0.012}$	$\langle d^2 \rangle^{1/2}$	2.455	$2.456^{+0.057}_{-0.058}$ (−1.0 σ)	$H(2.33)$	235.42	$235.4^{+1.2}_{-1.2}$ (+1.2 σ)
β_{JLA}	3.117	$3.12^{+0.16}_{-0.16}$	z_{re}	7.68	$7.6^{+1.6}_{-1.6}$ (+0.3 σ)	$D_{\mathrm{M}}(2.33)$	5753.2	5754^{+18}_{-17} (+0.2 σ)
y_{cal}	1.00045	$1.0007^{+0.0049}_{-0.0050}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}$	2.101	$2.100^{+0.072}_{-0.065}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4646	$0.464^{+0.017}_{-0.017}$ (−1.3 σ)
A_{217}^{CIB}	45.4	47^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8842	$1.884^{+0.023}_{-0.023}$ (+0.0 σ)	$\sigma_8(0.15)$	0.7737	$0.772^{+0.026}_{-0.027}$ (−1.6 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.72	—	D_{40}	1227.0	1230^{+24}_{-24} (+0.0 σ)	$f\sigma_8(0.38)$	0.4911	$0.490^{+0.021}_{-0.021}$ (−1.5 σ)
A_{143}^{tSZ}	7.07	$5.5^{+3.7}_{-3.7}$ (+0.2 σ)	D_{220}	5731	5737^{+78}_{-76} (+0.5 σ)	$\sigma_8(0.38)$	0.6865	$0.685^{+0.023}_{-0.024}$ (−1.6 σ)
A_{100}^{PS}	248	258^{+60}_{-60} (−0.2 σ)	D_{810}	2541.6	2540^{+27}_{-27} (+0.4 σ)	$f\sigma_8(0.51)$	0.4920	$0.491^{+0.021}_{-0.022}$ (−1.6 σ)
A_{143}^{PS}	51.2	46^{+10}_{-20} (−0.4 σ)	D_{1420}	818.8	$817.6^{+9.4}_{-9.1}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6423	$0.641^{+0.021}_{-0.022}$ (−1.6 σ)
$A_{143\times 217}^{\mathrm{PS}}$	54.7	43^{+20}_{-20} (−0.1 σ)	D_{2000}	231.56	$231.1^{+3.1}_{-3.0}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4879	$0.487^{+0.021}_{-0.022}$ (−1.6 σ)
A_{217}^{PS}	122.7	115^{+20}_{-20} (+0.0 σ)	$n_{\mathrm{s},0.002}$	0.9667	$0.9654^{+0.0080}_{-0.0079}$ (+0.4 σ)	$\sigma_8(0.61)$	0.6110	$0.610^{+0.020}_{-0.020}$ (−1.6 σ)
A^{kSZ}	0.01	< 7.86 (−0.2 σ)	Y_{P}	0.245410	$0.24540^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3082	$0.3075^{+0.0096}_{-0.010}$ (−1.6 σ)
$A_{100}^{\mathrm{dustTT}}$	8.80	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246736	$0.24673^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3158	$0.3152^{+0.0085}_{-0.0088}$ (−1.5 σ)
$A_{143}^{\mathrm{dustTT}}$	11.08	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.579	$2.582^{+0.052}_{-0.050}$ (−1.1 σ)	f_{2000}^{143}	28.4	29^{+5}_{-5} (−0.5 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	20.3	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	Age/Gyr	13.7426	$13.747^{+0.046}_{-0.044}$ (+1.2 σ)	$f_{2000}^{143\times 217}$	31.79	$32.1^{+3.6}_{-3.7}$ (−0.6 σ)
$A_{217}^{\mathrm{dustTT}}$	95.7	94^{+10}_{-10} (+0.1 σ)	z_*	1089.874	$1089.89^{+0.48}_{-0.48}$ (−0.9 σ)	f_{2000}^{217}	106.31	$106.9^{+3.4}_{-3.5}$ (−0.5 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.115^{+0.075}_{-0.073}$	r_*	144.40	$144.43^{+0.52}_{-0.53}$ (−0.1 σ)	χ_{small}^2	396.06	397.1 (ν : 1.9) (+0.2 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.057}_{-0.059}$	$100\theta_*$	1.04115	$1.04113^{+0.00059}_{-0.00058}$ (+0.3 σ)	χ_{lowl}^2	23.01	23.29 (ν : 0.4) (+0.0 σ)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8693	$13.873^{+0.049}_{-0.050}$ (−0.1 σ)	χ_{plik}^2	2344.3	2358.9 (ν : 17.3) (+293.3 σ)
$A_{143}^{\mathrm{dustTE}}$	0.226	$0.22^{+0.11}_{-0.11}$	z_{drag}	1060.01	$1059.97^{+0.57}_{-0.58}$ (+1.1 σ)	$\chi_{\mathrm{H073p45}}^2$	4.50	5.0 (ν : 3.1)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	r_{drag}	147.05	$147.09^{+0.52}_{-0.55}$ (−0.3 σ)	χ_{JLA}^2	696.62	698.9 (ν : 3.3)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.08^{+0.52}_{-0.53}$	k_{D}	0.14094	$0.14088^{+0.00061}_{-0.00059}$ (+0.6 σ)	χ_{6DF}^2	0.135	0.18 (ν : 0.0)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{\mathrm{D}}$	0.160715	$0.16074^{+0.00034}_{-0.00033}$ (−1.1 σ)	χ_{MGS}^2	2.76	2.77 (ν : 0.3)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3403	3401^{+53}_{-52} (−0.1 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.54	4.98 (ν : 0.4)
H_0	69.93	$69.9^{+1.8}_{-1.8}$ (−1.5 σ)	k_{eq}	0.010387	$0.01038^{+0.00016}_{-0.00016}$ (−0.1 σ)	χ_{prior}^2	1.6	11.6 (ν : 10.2) (+1.2 σ)
Ω_{Λ}	0.7074	$0.707^{+0.015}_{-0.016}$ (−1.5 σ)	$100\theta_{\mathrm{eq}}$	0.8132	$0.814^{+0.010}_{-0.0098}$ (+0.2 σ)	χ_{BAO}^2	7.44	7.9 (ν : 1.3)
Ω_{m}	0.2926	$0.293^{+0.016}_{-0.015}$ (+1.5 σ)	$100\theta_{\mathrm{s,eq}}$	0.4493	$0.4495^{+0.0051}_{-0.0050}$ (+0.2 σ)	χ_{CMB}^2	2763.3	2779.3 (ν : 17.3) (+281.2 σ)
$\Omega_{\mathrm{m}}h^2$	0.14306	$0.1430^{+0.0022}_{-0.0022}$ (−0.1 σ)	$H(0.15)$	74.27	$74.2^{+1.1}_{-1.1}$ (−1.5 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 3473.47$; $\bar{\chi}_{\mathrm{eff}}^2 = 3502.78$; $R - 1 = 0.01464$
 χ_{eff}^2 : BAO - 6DF: 0.14 MGS: 2.76 DR12BAO: 4.54 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 commander_dx12_v3_2_29: 23.01 plik_rd12_HM_v22b_TTTEEE: 2344.29 Hubble - H073p45: 4.50 SN - JLA December_2013: 696.62

18.40 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022427	$0.02240^{+0.00028}_{-0.00027}$ (+1.1 σ)	$\Omega_m h^3$	0.09975	$0.0998^{+0.0031}_{-0.0030}$ (−1.5 σ)	$D_M(0.15)$	625.2	625^{+13}_{-12} (+1.5 σ)
$\Omega_c h^2$	0.11970	$0.1197^{+0.0020}_{-0.0021}$ (−0.3 σ)	σ_8	0.8329	$0.832^{+0.023}_{-0.024}$ (−1.6 σ)	$H(0.38)$	83.41	$83.38^{+0.55}_{-0.55}$ (−0.6 σ)
$100\theta_{MC}$	1.04096	$1.04096^{+0.00060}_{-0.00059}$ (+0.3 σ)	S_8	0.8225	$0.822^{+0.021}_{-0.020}$ (+1.0 σ)	$D_M(0.38)$	1503.4	1504^{+21}_{-20} (+1.5 σ)
τ	0.0545	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4505	$0.450^{+0.011}_{-0.011}$ (+1.0 σ)	$H(0.51)$	89.747	$89.71^{+0.48}_{-0.50}$ (+1.4 σ)
w_0	−1.078	$−1.079^{+0.070}_{-0.069}$ (+1.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6126	$0.612^{+0.014}_{-0.014}$ (−1.5 σ)	$D_M(0.51)$	1954.1	1955^{+23}_{-21} (+1.4 σ)
$\ln(10^{10} A_s)$	3.0454	$3.043^{+0.030}_{-0.028}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9965	$0.996^{+0.020}_{-0.021}$ (−1.5 σ)	$H(0.61)$	95.14	$95.10^{+0.55}_{-0.54}$ (+1.7 σ)
n_s	0.9666	$0.9657^{+0.0074}_{-0.0073}$ (+0.5 σ)	$r_{drag} h$	102.77	$102.8^{+2.6}_{-2.7}$ (−1.5 σ)	$D_M(0.61)$	2278.6	2279^{+23}_{-22} (+1.4 σ)
y_{cal}	1.00089	$1.0006^{+0.0049}_{-0.0050}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4520	$2.452^{+0.044}_{-0.044}$ (−1.1 σ)	$H(2.33)$	235.32	$235.3^{+1.1}_{-1.1}$ (+1.2 σ)
α_{JLA}	0.1420	$0.142^{+0.013}_{-0.012}$	z_{re}	7.68	$7.6^{+1.6}_{-1.5}$ (+0.3 σ)	$D_M(2.33)$	5752.3	5754^{+17}_{-17} (+0.1 σ)
β_{JLA}	3.115	$3.12^{+0.16}_{-0.16}$	$10^9 A_s$	2.102	$2.097^{+0.064}_{-0.059}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4625	$0.462^{+0.013}_{-0.013}$ (−1.4 σ)
A_{217}^{CIB}	46.3	47^{+10}_{-10} (−0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8846	$1.883^{+0.022}_{-0.022}$ (−0.1 σ)	$\sigma_8(0.15)$	0.7711	$0.771^{+0.022}_{-0.023}$ (−1.6 σ)
$\xi^{tSZ \times CIB}$	0.58	—	D_{40}	1228.6	1229^{+23}_{-23} (−0.0 σ)	$f\sigma_8(0.38)$	0.4887	$0.489^{+0.017}_{-0.017}$ (−1.6 σ)
A_{143}^{tSZ}	7.13	$5.5^{+3.6}_{-3.7}$ (+0.2 σ)	D_{220}	5742	5737^{+78}_{-77} (+0.5 σ)	$\sigma_8(0.38)$	0.6843	$0.684^{+0.020}_{-0.020}$ (−1.6 σ)
A_{100}^{PS}	249	257^{+50}_{-60} (−0.2 σ)	D_{810}	2543.1	2539^{+27}_{-27} (+0.3 σ)	$f\sigma_8(0.51)$	0.4896	$0.489^{+0.018}_{-0.018}$ (−1.6 σ)
A_{143}^{PS}	49.4	46^{+20}_{-20} (−0.4 σ)	D_{1420}	819.1	$817.5^{+9.5}_{-9.1}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6404	$0.640^{+0.018}_{-0.019}$ (−1.6 σ)
$A_{143 \times 217}^{PS}$	51.2	42^{+20}_{-20} (−0.1 σ)	D_{2000}	231.63	$231.0^{+3.0}_{-3.0}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4856	$0.485^{+0.018}_{-0.018}$ (−1.6 σ)
A_{217}^{PS}	121.3	115^{+20}_{-20} (−0.0 σ)	$n_{s,0.002}$	0.9666	$0.9657^{+0.0074}_{-0.0073}$ (+0.5 σ)	$\sigma_8(0.61)$	0.6092	$0.609^{+0.017}_{-0.018}$ (−1.6 σ)
A^{kSZ}	0.01	< 7.89 (−0.1 σ)	Y_P	0.245418	$0.24541^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3073	$0.3070^{+0.0085}_{-0.0088}$ (−1.6 σ)
A_{100}^{dustTT}	8.80	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P^{BBN}	0.246744	$0.24673^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(2.33)$	0.3151	$0.3148^{+0.0075}_{-0.0077}$ (−1.5 σ)
A_{143}^{dustTT}	11.03	$10.9^{+3.5}_{-3.6}$ (+0.1 σ)	$10^5 D/H$	2.575	$2.580^{+0.051}_{-0.049}$ (−1.1 σ)	f_{2000}^{143}	28.6	29^{+5}_{-6} (−0.5 σ)
$A_{143 \times 217}^{dustTT}$	20.1	$18.6^{+6.3}_{-6.5}$ (+0.1 σ)	Age/Gyr	13.7430	$13.746^{+0.045}_{-0.045}$ (+1.2 σ)	$f_{2000}^{143 \times 217}$	31.86	32^{+4}_{-4} (−0.6 σ)
A_{217}^{dustTT}	95.6	94^{+10}_{-10} (+0.0 σ)	z_*	1089.821	$1089.86^{+0.45}_{-0.45}$ (−0.9 σ)	f_{2000}^{217}	106.52	$106.9^{+3.6}_{-3.5}$ (−0.5 σ)
A_{100}^{dustTE}	0.113	$0.114^{+0.077}_{-0.074}$	r_*	144.465	$144.47^{+0.47}_{-0.47}$ (−0.0 σ)	$\chi^2_{lensing}$	8.71	9.10 (ν : 0.2)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	1.04114	$1.04114^{+0.00058}_{-0.00058}$ (+0.3 σ)	χ^2_{small}	396.06	397.0 (ν : 1.5) (+0.1 σ)
$A_{100 \times 217}^{dustTE}$	0.483	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.8757	$13.876^{+0.045}_{-0.044}$ (−0.1 σ)	χ^2_{lowl}	23.04	23.21 (ν : 0.3) (−0.0 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.10}$	z_{drag}	1060.05	$1059.99^{+0.59}_{-0.59}$ (+1.2 σ)	χ^2_{plik}	2344.2	2358.8 (ν : 17.0) (+293.3 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.15}$	r_{drag}	147.107	$147.13^{+0.48}_{-0.47}$ (−0.2 σ)	$\chi^2_{H073p45}$	4.67	5.0 (ν : 3.0)
A_{217}^{dustTE}	2.08	$2.09^{+0.52}_{-0.51}$	k_D	0.14089	$0.14085^{+0.00057}_{-0.00055}$ (+0.6 σ)	χ^2_{JLA}	696.43	698.8 (ν : 3.1)
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_D$	0.160696	$0.16073^{+0.00034}_{-0.00034}$ (−1.1 σ)	χ^2_{6DF}	0.133	0.19 (ν : 0.0)
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3396.5	3397^{+46}_{-47} (−0.2 σ)	χ^2_{MGS}	2.76	2.81 (ν : 0.3)
H_0	69.86	$69.9^{+1.8}_{-1.8}$ (−1.5 σ)	k_{eq}	0.010366	$0.01037^{+0.00014}_{-0.00014}$ (−0.2 σ)	$\chi^2_{DR12BAO}$	4.45	4.91 (ν : 0.4)
Ω_Λ	0.7075	$0.707^{+0.015}_{-0.016}$ (−1.5 σ)	$100\theta_{eq}$	0.8145	$0.8144^{+0.0089}_{-0.0086}$ (+0.3 σ)	χ^2_{prior}	1.7	11.6 (ν : 10.0) (+1.2 σ)
Ω_m	0.2925	$0.293^{+0.016}_{-0.015}$ (+1.5 σ)	$100\theta_{s,eq}$	0.44998	$0.4499^{+0.0046}_{-0.0044}$ (+0.3 σ)	χ^2_{CMB}	2772.0	2788.1 (ν : 17.7) (+282.7 σ)
$\Omega_m h^2$	0.14277	$0.1428^{+0.0019}_{-0.0020}$ (−0.2 σ)	$H(0.15)$	74.26	$74.2^{+1.1}_{-1.1}$ (−1.5 σ)	χ^2_{BAO}	7.34	7.9 (ν : 1.3)

Best-fit $\chi^2_{eff} = 3482.22$; $\Delta\chi^2_{eff} = -16.38$; $\bar{\chi}^2_{eff} = 3511.42$; $\Delta\bar{\chi}^2_{eff} = -13.45$; $R - 1 = 0.02202$
 χ^2_{eff} : BAO - 6DF: 0.13 (Δ 0.13) MGS: 2.76 (Δ 1.15) DR12BAO: 4.45 (Δ 0.85) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.71 (Δ -0.04) small_100x143_offlike5_EE_Aplanck: 396.06 (Δ -0.87) commander_dx12.v3.2_29: 23.04 (Δ 0.40) plik_rd12_HM_v22b_TTTEEE: 2344.24 (Δ -2.12) Hubble - H073p45: 4.67 (Δ -5.73) SN - JLA December_2013: 696.43 (Δ -10.17)

18.41 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00028}_{-0.00027} \quad (+1.1\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0999^{+0.0033}_{-0.0032} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$625^{+13}_{-12} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1199^{+0.0023}_{-0.0023} \quad (-0.3\sigma)$	σ_8	$0.835^{+0.027}_{-0.028} \quad (-1.6\sigma)$	$H(0.38)$	$83.34^{+0.57}_{-0.58} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00060}_{-0.00058} \quad (+0.3\sigma)$	S_8	$0.825^{+0.026}_{-0.025} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1504^{+21}_{-20} \quad (+1.5\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (+1.1\sigma)$	$H(0.51)$	$89.68^{+0.53}_{-0.56} \quad (+1.4\sigma)$
w_0	$-1.081^{+0.074}_{-0.076} \quad (+1.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.018}_{-0.018} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1955^{+23}_{-22} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.029}_{-0.027} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.999^{+0.026}_{-0.026} \quad (-1.4\sigma)$	$H(0.61)$	$95.07^{+0.59}_{-0.61} \quad (+1.7\sigma)$
n_{s}	$0.9655^{+0.0079}_{-0.0079} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$102.8^{+2.6}_{-2.6} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2280^{+23}_{-22} \quad (+1.4\sigma)$
α_{JLA}	$0.142^{+0.013}_{-0.012}$	$\langle d^2 \rangle^{1/2}$	$2.459^{+0.055}_{-0.056} \quad (-1.0\sigma)$	$H(2.33)$	$235.4^{+1.2}_{-1.2} \quad (+1.2\sigma)$
β_{JLA}	$3.12^{+0.16}_{-0.16}$	z_{re}	$< 9.03 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5754^{+18}_{-17} \quad (+0.2\sigma)$
y_{cal}	$1.0007^{+0.0049}_{-0.0050} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.062}_{-0.056} \quad (+0.5\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.017}_{-0.017} \quad (-1.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.023}_{-0.023} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.773^{+0.026}_{-0.026} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{40}	$1230^{+24}_{-24} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.490^{+0.021}_{-0.021} \quad (-1.5\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.7} \quad (+0.2\sigma)$	D_{220}	$5736^{+78}_{-76} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.686^{+0.022}_{-0.023} \quad (-1.5\sigma)$
A_{100}^{PS}	$257^{+60}_{-60} \quad (-0.2\sigma)$	D_{810}	$2540^{+27}_{-27} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.491^{+0.021}_{-0.022} \quad (-1.5\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{1420}	$817.5^{+9.4}_{-9.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.642^{+0.021}_{-0.021} \quad (-1.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.0} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.487^{+0.021}_{-0.022} \quad (-1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9655^{+0.0079}_{-0.0079} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.610^{+0.019}_{-0.020} \quad (-1.5\sigma)$
A^{kSZ}	$< 7.84 \quad (-0.2\sigma)$	Y_{P}	$0.24540^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3078^{+0.0095}_{-0.0099} \quad (-1.5\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3156^{+0.0083}_{-0.0085} \quad (-1.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.582^{+0.051}_{-0.050} \quad (-1.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.746^{+0.046}_{-0.044} \quad (+1.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.89^{+0.48}_{-0.48} \quad (-0.9\sigma)$	f_{2000}^{217}	$106.9^{+3.4}_{-3.5} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.076}_{-0.074}$	r_*	$144.44^{+0.52}_{-0.53} \quad (-0.1\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.04113^{+0.00059}_{-0.00058} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.31 \quad (\nu: 0.4) \quad (+0.1\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.873^{+0.049}_{-0.050} \quad (-0.1\sigma)$	χ_{plik}^2	$2358.7 \quad (\nu: 17.2) \quad (+293.3\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	z_{drag}	$1059.98^{+0.56}_{-0.58} \quad (+1.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.0 \quad (\nu: 3.1)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.09^{+0.52}_{-0.55} \quad (-0.3\sigma)$	χ_{JLA}^2	$698.9 \quad (\nu: 3.3)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	k_{D}	$0.14088^{+0.00061}_{-0.00059} \quad (+0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.18 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00034}_{-0.00033} \quad (-1.1\sigma)$	χ_{MGS}^2	$2.78 \quad (\nu: 0.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3401^{+53}_{-52} \quad (-0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.97 \quad (\nu: 0.4)$
H_0	$69.9^{+1.8}_{-1.8} \quad (-1.5\sigma)$	k_{eq}	$0.01038^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_{Λ}	$0.707^{+0.015}_{-0.016} \quad (-1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.010}_{-0.0097} \quad (+0.2\sigma)$	χ_{BAO}^2	$7.9 \quad (\nu: 1.3)$
Ω_{m}	$0.293^{+0.016}_{-0.015} \quad (+1.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4496^{+0.0051}_{-0.0050} \quad (+0.2\sigma)$	χ_{CMB}^2	$2779.1 \quad (\nu: 17.0) \quad (+281.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1429^{+0.0022}_{-0.0022} \quad (-0.2\sigma)$	$H(0.15)$	$74.2^{+1.1}_{-1.1} \quad (-1.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3502.55; R - 1 = 0.01555$$

18.42 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00027}_{-0.00027} \quad (+1.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0997^{+0.0031}_{-0.0030} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$625^{+13}_{-12} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0020}_{-0.0021} \quad (-0.4\sigma)$	σ_8	$0.833^{+0.023}_{-0.024} \quad (-1.6\sigma)$	$H(0.38)$	$83.39^{+0.55}_{-0.55} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04097^{+0.00059}_{-0.00059} \quad (+0.3\sigma)$	S_8	$0.822^{+0.021}_{-0.020} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1504^{+21}_{-20} \quad (+1.5\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.011} \quad (+1.0\sigma)$	$H(0.51)$	$89.72^{+0.48}_{-0.49} \quad (+1.5\sigma)$
w_0	$-1.078^{+0.069}_{-0.069} \quad (+1.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.014}_{-0.014} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1955^{+23}_{-21} \quad (+1.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.027}_{-0.025} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.996^{+0.020}_{-0.020} \quad (-1.5\sigma)$	$H(0.61)$	$95.12^{+0.54}_{-0.53} \quad (+1.7\sigma)$
n_{s}	$0.9658^{+0.0074}_{-0.0073} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$102.8^{+2.6}_{-2.6} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2279^{+23}_{-22} \quad (+1.4\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0050} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.453^{+0.044}_{-0.044} \quad (-1.1\sigma)$	$H(2.33)$	$235.3^{+1.1}_{-1.1} \quad (+1.2\sigma)$
α_{JLA}	$0.142^{+0.013}_{-0.012}$	z_{re}	$< 8.89 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5753^{+17}_{-17} \quad (+0.1\sigma)$
β_{JLA}	$3.12^{+0.16}_{-0.16}$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.056}_{-0.051} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.013}_{-0.013} \quad (-1.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.021}_{-0.022} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.771^{+0.022}_{-0.023} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{40}	$1229^{+22}_{-23} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.489^{+0.017}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$5.6^{+3.6}_{-3.7} \quad (+0.2\sigma)$	D_{220}	$5736^{+78}_{-77} \quad (+0.5\sigma)$	$\sigma_8(0.38)$	$0.684^{+0.020}_{-0.020} \quad (-1.6\sigma)$
A_{100}^{PS}	$257^{+50}_{-60} \quad (-0.2\sigma)$	D_{810}	$2539^{+26}_{-27} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.490^{+0.018}_{-0.018} \quad (-1.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{1420}	$817.4^{+9.3}_{-9.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.640^{+0.018}_{-0.019} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$231.0^{+3.0}_{-3.0} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.485^{+0.018}_{-0.018} \quad (-1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9658^{+0.0074}_{-0.0073} \quad (+0.5\sigma)$	$\sigma_8(0.61)$	$0.609^{+0.017}_{-0.017} \quad (-1.6\sigma)$
A^{kSZ}	$< 7.89 \quad (-0.1\sigma)$	Y_{P}	$0.24541^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3072^{+0.0084}_{-0.0087} \quad (-1.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(2.33)$	$0.3150^{+0.0074}_{-0.0075} \quad (-1.5\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.050}_{-0.049} \quad (-1.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.2}_{-6.6} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.746^{+0.046}_{-0.045} \quad (+1.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_*	$1089.85^{+0.45}_{-0.45} \quad (-1.0\sigma)$	f_{2000}^{217}	$106.9^{+3.4}_{-3.5} \quad (-0.5\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.077}_{-0.074}$	r_*	$144.48^{+0.46}_{-0.46} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.09 \quad (\nu: 0.2)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.04115^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (+0.1\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.877^{+0.044}_{-0.044} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.21 \quad (\nu: 0.3) \quad (-0.0\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1059.99^{+0.59}_{-0.56} \quad (+1.2\sigma)$	χ_{plik}^2	$2358.7 \quad (\nu: 16.7) \quad (+293.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.15}$	r_{drag}	$147.13^{+0.48}_{-0.47} \quad (-0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$5.0 \quad (\nu: 3.0)$
$A_{217}^{\mathrm{dustTE}}$	$2.09^{+0.52}_{-0.51}$	k_{D}	$0.14085^{+0.00057}_{-0.00056} \quad (+0.5\sigma)$	χ_{JLA}^2	$698.8 \quad (\nu: 3.1)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00034}_{-0.00034} \quad (-1.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.19 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3396^{+46}_{-46} \quad (-0.3\sigma)$	χ_{MGS}^2	$2.81 \quad (\nu: 0.3)$
H_0	$69.9^{+1.8}_{-1.8} \quad (-1.5\sigma)$	k_{eq}	$0.01036^{+0.00014}_{-0.00014} \quad (-0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.89 \quad (\nu: 0.4)$
Ω_{Λ}	$0.707^{+0.015}_{-0.016} \quad (-1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8146^{+0.0089}_{-0.0085} \quad (+0.3\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.0) \quad (+1.2\sigma)$
Ω_{m}	$0.293^{+0.016}_{-0.015} \quad (+1.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4500^{+0.0046}_{-0.0044} \quad (+0.3\sigma)$	χ_{CMB}^2	$2787.9 \quad (\nu: 17.3) \quad (+282.7\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0019}_{-0.0019} \quad (-0.3\sigma)$	$H(0.15)$	$74.2^{+1.1}_{-1.1} \quad (-1.5\sigma)$	χ_{BAO}^2	$7.9 \quad (\nu: 1.3)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 3511.18; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -13.60; R - 1 = 0.02300$$

18.43 base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022184	$0.02218^{+0.00040}_{-0.00040}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9902	$0.989^{+0.031}_{-0.032}$ (−1.7 σ)	$D_{\mathrm{M}}(0.38)$	1524.9	1525^{+21}_{-21} (+1.7 σ)
$\Omega_{\mathrm{c}}h^2$	0.11970	$0.1195^{+0.0030}_{-0.0031}$ (−0.5 σ)	$r_{\mathrm{drag}}h$	100.43	$100.5^{+2.4}_{-2.3}$ (−1.7 σ)	$H(0.51)$	89.53	$89.55^{+0.66}_{-0.66}$ (+1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04089	$1.04092^{+0.00085}_{-0.00085}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.442	$2.441^{+0.067}_{-0.067}$ (−1.4 σ)	$D_{\mathrm{M}}(0.51)$	1977.4	1977^{+23}_{-23} (+1.7 σ)
τ	0.0527	$0.053^{+0.016}_{-0.016}$ (+0.2 σ)	z_{re}	7.54	$7.6^{+1.6}_{-1.7}$ (+0.2 σ)	$H(0.61)$	95.08	$95.10^{+0.68}_{-0.68}$ (+1.7 σ)
w_0	−1.029	$−1.027^{+0.071}_{-0.073}$ (+1.8 σ)	$10^9 A_{\mathrm{s}}$	2.090	$2.091^{+0.070}_{-0.067}$ (+0.1 σ)	$D_{\mathrm{M}}(0.61)$	2302.4	2302^{+24}_{-24} (+1.7 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0399	$3.040^{+0.033}_{-0.033}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8813	$1.880^{+0.024}_{-0.024}$ (−0.3 σ)	$H(2.33)$	235.75	$235.7^{+1.5}_{-1.5}$ (+1.3 σ)
n_{s}	0.9654	$0.9651^{+0.0092}_{-0.0093}$ (+0.4 σ)	D_{40}	1227.5	1228^{+26}_{-26} (−0.1 σ)	$D_{\mathrm{M}}(2.33)$	5768.3	5768^{+24}_{-24} (+0.8 σ)
y_{cal}	1.00054	$1.0005^{+0.0048}_{-0.0049}$ (+0.1 σ)	D_{220}	5717	5719^{+80}_{-80} (+0.1 σ)	$f\sigma_8(0.15)$	0.4599	$0.459^{+0.021}_{-0.021}$ (−1.5 σ)
A_{217}^{CIB}	49.7	48^{+10}_{-10} (+0.0 σ)	D_{810}	2537.7	2536^{+26}_{-27} (+0.0 σ)	$\sigma_8(0.15)$	0.7556	$0.754^{+0.027}_{-0.028}$ (−1.8 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.17	—	D_{1420}	815.9	$815.0^{+9.9}_{-9.8}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4805	$0.479^{+0.023}_{-0.023}$ (−1.7 σ)
A_{143}^{tSZ}	7.09	$5.1^{+3.8}_{-3.9}$ (−0.0 σ)	D_{2000}	230.10	$229.8^{+3.5}_{-3.4}$ (+0.0 σ)	$\sigma_8(0.38)$	0.6698	$0.669^{+0.023}_{-0.024}$ (−1.8 σ)
A_{100}^{PS}	257	263^{+60}_{-50} (+0.0 σ)	$n_{\mathrm{s},0.002}$	0.9654	$0.9651^{+0.0092}_{-0.0093}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4796	$0.479^{+0.023}_{-0.023}$ (−1.8 σ)
A_{143}^{PS}	47.0	49^{+20}_{-20} (+0.0 σ)	Y_{P}	0.245319	$0.24531^{+0.00017}_{-0.00018}$ (+0.1 σ)	$\sigma_8(0.51)$	0.6267	$0.626^{+0.021}_{-0.022}$ (−1.8 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	42.9	43^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246646	$0.24664^{+0.00017}_{-0.00018}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4748	$0.474^{+0.023}_{-0.023}$ (−1.8 σ)
A_{217}^{PS}	117.5	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.621	$2.623^{+0.076}_{-0.074}$ (−0.1 σ)	$\sigma_8(0.61)$	0.5962	$0.595^{+0.020}_{-0.021}$ (−1.8 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.798	$13.799^{+0.056}_{-0.057}$ (+1.7 σ)	$f\sigma_8(2.33)$	0.3006	$0.3002^{+0.0098}_{-0.010}$ (−1.8 σ)
$A_{100}^{\mathrm{dustTT}}$	8.84	$8.9^{+3.6}_{-3.6}$ (+0.0 σ)	z_*	1090.13	$1090.12^{+0.65}_{-0.64}$ (−0.3 σ)	$\sigma_8(2.33)$	0.3091	$0.3089^{+0.0086}_{-0.0088}$ (−1.7 σ)
$A_{143}^{\mathrm{dustTT}}$	10.75	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	144.65	$144.71^{+0.75}_{-0.73}$ (+0.5 σ)	f_{2000}^{143}	30.4	31^{+6}_{-6} (+0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.0	$18.3^{+6.5}_{-6.5}$ (+0.0 σ)	$100\theta_*$	1.04109	$1.04112^{+0.00084}_{-0.00084}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	33.24	33^{+4}_{-4} (+0.0 σ)
$A_{217}^{\mathrm{dustTT}}$	94.1	93^{+10}_{-10} (+0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.894	$13.899^{+0.071}_{-0.070}$ (+0.5 σ)	f_{2000}^{217}	107.71	$108.0^{+3.7}_{-3.7}$ (+0.1 σ)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.47	$1059.45^{+0.87}_{-0.89}$ (−0.0 σ)	χ_{small}^2	395.85	397.0 (ν : 1.6) (+0.1 σ)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.38	$147.44^{+0.78}_{-0.77}$ (+0.5 σ)	χ_{lowl}^2	23.15	23.3 (ν : 0.5) (+0.0 σ)
H_0	68.15	$68.2^{+1.6}_{-1.6}$ (−1.7 σ)	k_{D}	0.14042	$0.14035^{+0.00094}_{-0.00094}$ (−0.4 σ)	χ_{plik}^2	759.1	771.6 (ν : 14.8) (+0.3 σ)
Ω_{Λ}	0.6931	$0.694^{+0.015}_{-0.015}$ (−1.7 σ)	$100\theta_{\mathrm{D}}$	0.16102	$0.16105^{+0.00052}_{-0.00050}$ (+0.0 σ)	χ_{JLA}^2	1034.71	1035.4 (ν : 0.5)
Ω_{m}	0.3069	$0.306^{+0.015}_{-0.015}$ (+1.7 σ)	z_{eq}	3391	3386^{+69}_{-71} (−0.5 σ)	$\chi_{6\mathrm{DF}}^2$	0.002	0.049 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.14253	$0.1423^{+0.0029}_{-0.0030}$ (−0.5 σ)	k_{eq}	0.010348	$0.01033^{+0.00021}_{-0.00022}$ (−0.5 σ)	χ_{MGS}^2	1.54	1.64 (ν : 0.2)
$\Omega_{\mathrm{m}}h^3$	0.09713	$0.0970^{+0.0032}_{-0.0032}$ (−1.7 σ)	$100\theta_{\mathrm{eq}}$	0.8148	$0.816^{+0.013}_{-0.013}$ (+0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.45	4.9 (ν : 1.1)
σ_8	0.8174	$0.816^{+0.029}_{-0.030}$ (−1.8 σ)	$100\theta_{\mathrm{s,eq}}$	0.4503	$0.4508^{+0.0069}_{-0.0065}$ (+0.5 σ)	χ_{prior}^2	1.4	7.3 (ν : 6.7) (+0.0 σ)
S_8	0.8267	$0.825^{+0.033}_{-0.032}$ (+1.1 σ)	$H(0.15)$	73.13	$73.2^{+1.1}_{-1.0}$ (−1.7 σ)	χ_{BAO}^2	6.00	6.6 (ν : 0.8)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4528	$0.452^{+0.018}_{-0.018}$ (+1.1 σ)	$D_{\mathrm{M}}(0.15)$	637.7	638^{+12}_{-12} (+1.7 σ)	χ_{CMB}^2	1178.1	1191.9 (ν : 14.9) (+0.3 σ)
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6084	$0.607^{+0.021}_{-0.022}$ (−1.7 σ)	$H(0.38)$	82.93	$82.95^{+0.69}_{-0.66}$ (−1.0 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2220.25$; $\bar{\chi}_{\mathrm{eff}}^2 = 2241.16$; $R - 1 = 0.00635$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 4.45 CMB - small_100x143_offlike5_EE_Aplanck_B: 395.85 commander_dx12_v3.2.29: 23.15 plik_rd12_HM_v22_TT: 759.09
SN - JLA Pantheon18: 1034.71

18.44 base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022206	$0.02218^{+0.00039}_{-0.00039}$ $(+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6081	$0.608^{+0.016}_{-0.016}$ (-1.7σ)	$D_{\mathrm{M}}(0.15)$	637.6	637^{+12}_{-12} $(+1.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11964	$0.1195^{+0.0024}_{-0.0025}$ (-0.4σ)	$\sigma_8/h^{0.5}$	0.9897	$0.990^{+0.022}_{-0.023}$ (-1.7σ)	$H(0.38)$	82.97	$82.96^{+0.65}_{-0.61}$ (-0.9σ)
$100\theta_{\mathrm{MC}}$	1.04097	$1.04090^{+0.00083}_{-0.00085}$ $(+0.2\sigma)$	$r_{\mathrm{drag}}h$	100.44	$100.6^{+2.4}_{-2.3}$ (-1.7σ)	$D_{\mathrm{M}}(0.38)$	1524.4	1524^{+21}_{-21} $(+1.7\sigma)$
τ	0.0529	$0.054^{+0.016}_{-0.015}$ $(+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.4416	$2.443^{+0.047}_{-0.048}$ (-1.3σ)	$H(0.51)$	89.57	$89.55^{+0.60}_{-0.59}$ $(+1.3\sigma)$
w_0	-1.027	$-1.029^{+0.065}_{-0.068}$ $(+1.8\sigma)$	z_{re}	7.57	$7.6^{+1.5}_{-1.6}$ $(+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	1976.6	1977^{+23}_{-23} $(+1.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	3.0408	$3.041^{+0.030}_{-0.028}$ $(+0.1\sigma)$	10^9A_{s}	2.092	$2.093^{+0.064}_{-0.059}$ $(+0.1\sigma)$	$H(0.61)$	95.12	$95.09^{+0.60}_{-0.62}$ $(+1.7\sigma)$
n_{s}	0.9656	$0.9649^{+0.0085}_{-0.0085}$ $(+0.3\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8819	$1.880^{+0.021}_{-0.021}$ (-0.2σ)	$D_{\mathrm{M}}(0.61)$	2301.5	2301^{+24}_{-23} $(+1.7\sigma)$
y_{cal}	1.00071	$1.0006^{+0.0047}_{-0.0049}$ $(+0.1\sigma)$	D_{40}	1227.9	1229^{+23}_{-23} (-0.0σ)	$H(2.33)$	235.77	$235.7^{+1.3}_{-1.4}$ $(+1.3\sigma)$
A_{217}^{CIB}	49.4	48^{+10}_{-10} $(+0.0\sigma)$	D_{220}	5721	5721^{+80}_{-80} $(+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	5766.4	5768^{+23}_{-24} $(+0.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.23	—	D_{810}	2538.9	2536^{+26}_{-26} $(+0.1\sigma)$	$f\sigma_8(0.15)$	0.4595	$0.459^{+0.015}_{-0.015}$ (-1.5σ)
A_{143}^{tSZ}	7.00	$5.1^{+3.8}_{-3.8}$ (-0.0σ)	D_{1420}	816.4	$815^{+10}_{-9.8}$ $(+0.2\sigma)$	$\sigma_8(0.15)$	0.7553	$0.756^{+0.021}_{-0.022}$ (-1.8σ)
A_{100}^{PS}	258	263^{+50}_{-60} $(+0.0\sigma)$	D_{2000}	230.30	$229.8^{+3.5}_{-3.4}$ $(+0.1\sigma)$	$f\sigma_8(0.38)$	0.4800	$0.480^{+0.018}_{-0.018}$ (-1.7σ)
A_{143}^{PS}	48.0	49^{+20}_{-20} $(+0.0\sigma)$	$n_{\mathrm{s},0.002}$	0.9656	$0.9649^{+0.0085}_{-0.0085}$ $(+0.3\sigma)$	$\sigma_8(0.38)$	0.6696	$0.670^{+0.019}_{-0.019}$ (-1.8σ)
$A_{143 \times 217}^{\mathrm{PS}}$	44.2	43^{+20}_{-20} (-0.0σ)	Y_{P}	0.245328	$0.24531^{+0.00016}_{-0.00018}$ $(+0.1\sigma)$	$f\sigma_8(0.51)$	0.4792	$0.479^{+0.018}_{-0.018}$ (-1.7σ)
A_{217}^{PS}	118.1	115^{+20}_{-20} (-0.0σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246654	$0.24664^{+0.00016}_{-0.00018}$ $(+0.1\sigma)$	$\sigma_8(0.51)$	0.6265	$0.627^{+0.017}_{-0.018}$ (-1.8σ)
A^{kSZ}	0.0	—	$10^5\mathrm{D}/\mathrm{H}$	2.617	$2.622^{+0.075}_{-0.073}$ (-0.1σ)	$f\sigma_8(0.61)$	0.4744	$0.475^{+0.018}_{-0.018}$ (-1.7σ)
$A_{100}^{\mathrm{dustTT}}$	8.81	$8.9^{+3.6}_{-3.6}$ (-0.0σ)	Age/Gyr	13.795	$13.798^{+0.056}_{-0.057}$ $(+1.6\sigma)$	$\sigma_8(0.61)$	0.5961	$0.596^{+0.016}_{-0.017}$ (-1.8σ)
$A_{143}^{\mathrm{dustTT}}$	10.80	$10.7^{+3.5}_{-3.5}$ (-0.0σ)	z_*	1090.10	$1090.12^{+0.60}_{-0.61}$ (-0.3σ)	$f\sigma_8(2.33)$	0.3005	$0.3006^{+0.0080}_{-0.0083}$ (-1.8σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.2	$18.3^{+6.6}_{-6.5}$ $(+0.0\sigma)$	r_*	144.65	$144.69^{+0.62}_{-0.61}$ $(+0.4\sigma)$	$\sigma_8(2.33)$	0.3091	$0.3092^{+0.0070}_{-0.0072}$ (-1.7σ)
$A_{217}^{\mathrm{dustTT}}$	94.3	93^{+10}_{-10} $(+0.0\sigma)$	$100\theta_*$	1.04116	$1.04110^{+0.00081}_{-0.00084}$ $(+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	8.77	9.26 (ν : 0.3)
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.893	$13.898^{+0.059}_{-0.059}$ $(+0.4\sigma)$	χ_{small}^2	395.89	397.0 (ν : 1.4) $(+0.1\sigma)$
c_{217}	0.99823	$0.9982^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	z_{drag}	1059.51	$1059.46^{+0.89}_{-0.86}$ $(+0.0\sigma)$	χ_{lowl}^2	23.14	23.35 (ν : 0.4) $(+0.1\sigma)$
H_0	68.16	$68.2^{+1.6}_{-1.6}$ (-1.7σ)	r_{drag}	147.37	$147.42^{+0.66}_{-0.66}$ $(+0.4\sigma)$	χ_{plik}^2	759.3	771.2 (ν : 13.6) $(+0.2\sigma)$
Ω_{Λ}	0.6933	$0.694^{+0.015}_{-0.015}$ (-1.7σ)	k_{D}	0.14045	$0.14037^{+0.00085}_{-0.00085}$ (-0.4σ)	χ_{JLA}^2	1034.71	1035.40 (ν : 0.5)
Ω_{m}	0.3067	$0.306^{+0.015}_{-0.015}$ $(+1.7\sigma)$	$100\theta_{\mathrm{D}}$	0.16100	$0.16104^{+0.00051}_{-0.00050}$ $(+0.0\sigma)$	$\chi_{6\mathrm{DF}}^2$	0.002	0.048 (ν : 0.0)
$\Omega_{\mathrm{m}}h^2$	0.14249	$0.1424^{+0.0023}_{-0.0024}$ (-0.4σ)	z_{eq}	3390	3387^{+56}_{-56} (-0.4σ)	χ_{MGS}^2	1.54	1.66 (ν : 0.2)
$\Omega_{\mathrm{m}}h^3$	0.09712	$0.0971^{+0.0029}_{-0.0029}$ (-1.7σ)	k_{eq}	0.010346	$0.01034^{+0.00017}_{-0.00017}$ (-0.4σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.36	4.8 (ν : 0.8)
σ_8	0.8171	$0.817^{+0.023}_{-0.023}$ (-1.8σ)	$100\theta_{\mathrm{eq}}$	0.8151	$0.816^{+0.011}_{-0.010}$ $(+0.4\sigma)$	χ_{prior}^2	1.4	7.3 (ν : 6.8) $(+0.0\sigma)$
S_8	0.8262	$0.825^{+0.024}_{-0.024}$ $(+1.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4505	$0.4507^{+0.0055}_{-0.0053}$ $(+0.4\sigma)$	χ_{CMB}^2	1187.1	1200.8 (ν : 14.8) $(+1.9\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4525	$0.452^{+0.013}_{-0.013}$ $(+1.1\sigma)$	$H(0.15)$	73.16	$73.2^{+1.1}_{-1.1}$ (-1.7σ)	χ_{BAO}^2	5.90	6.5 (ν : 0.6)

Best-fit $\chi_{\mathrm{eff}}^2 = 2229.02$; $\Delta\chi_{\mathrm{eff}}^2 = -0.69$; $\bar{\chi}_{\mathrm{eff}}^2 = 2249.95$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.18$; $R - 1 = 0.00823$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.54 (Δ 0.20) DR12BAO: 4.36 (Δ 0.33) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.77 (Δ -0.11) simall_100x143_offlike5_EE_Aplanck 395.89 (Δ -0.48) commander_dx12_v3.2_29: 23.14 (Δ 0.33) plik_rd12_HM_v22.TT: 759.25 (Δ -0.53) SN - JLA Pantheon18: 1034.71 (Δ -0.24)

18.45 base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02218^{+0.00040}_{-0.00039} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.030}_{-0.031} \quad (-1.7\sigma)$	$D_M(0.38)$	$1524^{+21}_{-21} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1195^{+0.0030}_{-0.0030} \quad (-0.5\sigma)$	$r_{\text{drag}} h$	$100.5^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$H(0.51)$	$89.56^{+0.65}_{-0.65} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04092^{+0.00085}_{-0.00085} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.066}_{-0.065} \quad (-1.3\sigma)$	$D_M(0.51)$	$1977^{+23}_{-23} \quad (+1.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.92 \quad (+0.4\sigma)$	$H(0.61)$	$95.11^{+0.68}_{-0.68} \quad (+1.7\sigma)$
w_0	$-1.026^{+0.071}_{-0.072} \quad (+1.8\sigma)$	$10^9 A_s$	$2.097^{+0.060}_{-0.055} \quad (+0.2\sigma)$	$D_M(0.61)$	$2302^{+24}_{-24} \quad (+1.7\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.029}_{-0.026} \quad (+0.2\sigma)$	$10^9 A_s e^{-2\tau}$	$1.880^{+0.024}_{-0.024} \quad (-0.3\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (+1.3\sigma)$
n_s	$0.9653^{+0.0091}_{-0.0093} \quad (+0.4\sigma)$	D_{40}	$1228^{+27}_{-26} \quad (-0.1\sigma)$	$D_M(2.33)$	$5768^{+24}_{-24} \quad (+0.8\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5719^{+81}_{-80} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.021}_{-0.021} \quad (-1.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.755^{+0.027}_{-0.027} \quad (-1.8\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.0^{+9.9}_{-9.8} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.023}_{-0.023} \quad (-1.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (-0.0\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.670^{+0.023}_{-0.024} \quad (-1.8\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (+0.0\sigma)$	$n_{s,0.002}$	$0.9653^{+0.0091}_{-0.0093} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.023}_{-0.023} \quad (-1.7\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.24531^{+0.00016}_{-0.00018} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.021}_{-0.022} \quad (-1.8\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24664^{+0.00016}_{-0.00018} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.023}_{-0.023} \quad (-1.8\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.622^{+0.075}_{-0.073} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.596^{+0.020}_{-0.020} \quad (-1.8\sigma)$
A^{kSZ}	$< 8.49 \quad (+0.0\sigma)$	Age/Gyr	$13.799^{+0.056}_{-0.057} \quad (+1.7\sigma)$	$f\sigma_8(2.33)$	$0.3006^{+0.0097}_{-0.010} \quad (-1.8\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.7} \quad (+0.0\sigma)$	z_*	$1090.11^{+0.64}_{-0.64} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3092^{+0.0083}_{-0.0084} \quad (-1.7\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.72^{+0.75}_{-0.73} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04113^{+0.00083}_{-0.00084} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+0.0\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.900^{+0.071}_{-0.069} \quad (+0.5\sigma)$	f_{2000}^{217}	$108.0^{+3.7}_{-3.7} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.46^{+0.86}_{-0.86} \quad (-0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.45^{+0.78}_{-0.77} \quad (+0.5\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.5) \quad (+0.1\sigma)$
H_0	$68.2^{+1.6}_{-1.6} \quad (-1.7\sigma)$	k_{D}	$0.14035^{+0.00094}_{-0.00093} \quad (-0.4\sigma)$	χ_{plik}^2	$771.4 \quad (\nu: 14.5) \quad (+0.3\sigma)$
Ω_Λ	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	$100\theta_{\text{D}}$	$0.16104^{+0.00051}_{-0.00050} \quad (+0.0\sigma)$	χ_{JLA}^2	$1035.42 \quad (\nu: 0.5)$
Ω_{m}	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	z_{eq}	$3385^{+69}_{-70} \quad (-0.5\sigma)$	χ_{6DF}^2	$0.049 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^2$	$0.1423^{+0.0029}_{-0.0029} \quad (-0.5\sigma)$	k_{eq}	$0.01033^{+0.00021}_{-0.00021} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.65 \quad (\nu: 0.2)$
$\Omega_{\text{m}} h^3$	$0.0970^{+0.0032}_{-0.0032} \quad (-1.7\sigma)$	$100\theta_{\text{eq}}$	$0.816^{+0.013}_{-0.013} \quad (+0.5\sigma)$	χ_{DR12BAO}^2	$4.8 \quad (\nu: 1.0)$
σ_8	$0.817^{+0.029}_{-0.030} \quad (-1.8\sigma)$	$100\theta_{\text{s,eq}}$	$0.4509^{+0.0068}_{-0.0066} \quad (+0.5\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (+0.0\sigma)$
S_8	$0.825^{+0.032}_{-0.032} \quad (+1.1\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.0} \quad (-1.7\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.452^{+0.018}_{-0.018} \quad (+1.1\sigma)$	$D_M(0.15)$	$638^{+12}_{-12} \quad (+1.7\sigma)$	χ_{CMB}^2	$1191.6 \quad (\nu: 14.4) \quad (+0.3\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.608^{+0.021}_{-0.022} \quad (-1.7\sigma)$	$H(0.38)$	$82.96^{+0.68}_{-0.66} \quad (-0.9\sigma)$		

 $\bar{\chi}_{\text{eff}}^2 = 2240.85; R - 1 = 0.00444$

18.46 base_w_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02219^{+0.00039}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.022}_{-0.023} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+21}_{-20} \quad (+1.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1195^{+0.0024}_{-0.0024} \quad (-0.5\sigma)$	$r_{\mathrm{drag}} h$	$100.6^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$H(0.51)$	$89.56^{+0.59}_{-0.58} \quad (+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00082}_{-0.00085} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.444^{+0.047}_{-0.047} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+23}_{-23} \quad (+1.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.90 \quad (+0.4\sigma)$	$H(0.61)$	$95.11^{+0.59}_{-0.61} \quad (+1.7\sigma)$
w_0	$-1.028^{+0.064}_{-0.066} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.055}_{-0.051} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+23}_{-23} \quad (+1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.024} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$H(2.33)$	$235.6^{+1.3}_{-1.3} \quad (+1.3\sigma)$
n_{s}	$0.9651^{+0.0085}_{-0.0084} \quad (+0.4\sigma)$	D_{40}	$1229^{+23}_{-23} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5768^{+23}_{-23} \quad (+0.8\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5721^{+80}_{-79} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.015}_{-0.016} \quad (-1.5\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.756^{+0.021}_{-0.022} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815.1^{+9.9}_{-9.8} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.018} \quad (-1.7\sigma)$
A_{143}^{tSZ}	$5.1^{+3.7}_{-3.9} \quad (-0.0\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.670^{+0.019}_{-0.019} \quad (-1.8\sigma)$
A_{100}^{PS}	$263^{+50}_{-60} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9651^{+0.0085}_{-0.0084} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.018}_{-0.018} \quad (-1.7\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24532^{+0.00016}_{-0.00018} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.017}_{-0.017} \quad (-1.8\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00016}_{-0.00018} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.018}_{-0.018} \quad (-1.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.621^{+0.074}_{-0.073} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.597^{+0.016}_{-0.016} \quad (-1.8\sigma)$
A^{kSZ}	—	Age/Gyr	$13.798^{+0.056}_{-0.057} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.3008^{+0.0080}_{-0.0082} \quad (-1.8\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.11^{+0.59}_{-0.61} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3094^{+0.0070}_{-0.0071} \quad (-1.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.71^{+0.61}_{-0.60} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04111^{+0.00081}_{-0.00084} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.058}_{-0.058} \quad (+0.5\sigma)$	f_{2000}^{217}	$108.0^{+3.5}_{-3.7} \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	z_{drag}	$1059.47^{+0.88}_{-0.87} \quad (+0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.24 \quad (\nu: 0.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.44^{+0.66}_{-0.65} \quad (+0.5\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (+0.1\sigma)$
H_0	$68.2^{+1.6}_{-1.6} \quad (-1.7\sigma)$	k_{D}	$0.14036^{+0.00084}_{-0.00085} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.34 \quad (\nu: 0.4) \quad (+0.1\sigma)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00050}_{-0.00050} \quad (-0.0\sigma)$	χ_{plik}^2	$771.1 \quad (\nu: 13.5) \quad (+0.2\sigma)$
Ω_{m}	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	z_{eq}	$3385^{+55}_{-55} \quad (-0.5\sigma)$	χ_{JLA}^2	$1035.38 \quad (\nu: 0.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0023}_{-0.0023} \quad (-0.5\sigma)$	k_{eq}	$0.01033^{+0.00017}_{-0.00017} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^3$	$0.0970^{+0.0029}_{-0.0029} \quad (-1.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.011}_{-0.010} \quad (+0.5\sigma)$	χ_{MGS}^2	$1.67 \quad (\nu: 0.2)$
σ_8	$0.818^{+0.023}_{-0.023} \quad (-1.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0054}_{-0.0052} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.7)$
S_8	$0.826^{+0.024}_{-0.024} \quad (+1.1\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.1} \quad (-1.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+1.7\sigma)$	χ_{CMB}^2	$1200.6 \quad (\nu: 14.6) \quad (+1.9\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.016}_{-0.016} \quad (-1.7\sigma)$	$H(0.38)$	$82.97^{+0.64}_{-0.59} \quad (-0.9\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.6)$

 $\bar{\chi}_{\mathrm{eff}}^2 = 2249.69; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.06; R - 1 = 0.00980$

18.47 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022402	$0.02239^{+0.00028}_{-0.00028}$ (+1.1 σ)	σ_8	0.8195	$0.819^{+0.025}_{-0.026}$ (−1.7 σ)	$D_M(0.15)$	635.7	636^{+12}_{-12} (+1.7 σ)
$\Omega_c h^2$	0.11974	$0.1197^{+0.0023}_{-0.0023}$ (−0.3 σ)	S_8	0.8269	$0.827^{+0.026}_{-0.026}$ (+1.1 σ)	$H(0.38)$	83.12	$83.09^{+0.54}_{-0.55}$ (−0.8 σ)
$100\theta_{MC}$	1.04094	$1.04096^{+0.00060}_{-0.00057}$ (+0.3 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4529	$0.453^{+0.014}_{-0.014}$ (+1.1 σ)	$D_M(0.38)$	1520.7	1522^{+20}_{-20} (+1.7 σ)
τ	0.0545	$0.055^{+0.016}_{-0.015}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6092	$0.609^{+0.018}_{-0.018}$ (−1.6 σ)	$H(0.51)$	89.71	$89.69^{+0.50}_{-0.51}$ (+1.4 σ)
w_0	−1.030	$−1.028^{+0.065}_{-0.066}$ (+1.8 σ)	$\sigma_8/h^{0.5}$	0.9911	$0.991^{+0.025}_{-0.026}$ (−1.7 σ)	$D_M(0.51)$	1972.2	1973^{+21}_{-21} (+1.6 σ)
$\ln(10^{10} A_s)$	3.0451	$3.045^{+0.032}_{-0.031}$ (+0.4 σ)	$r_{drag} h$	100.60	$100.5^{+2.4}_{-2.3}$ (−1.7 σ)	$H(0.61)$	95.25	$95.25^{+0.52}_{-0.53}$ (+1.8 σ)
n_s	0.9664	$0.9660^{+0.0078}_{-0.0078}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.445	$2.446^{+0.055}_{-0.057}$ (−1.3 σ)	$D_M(0.61)$	2296.6	2298^{+22}_{-22} (+1.6 σ)
y_{cal}	1.00092	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	z_{re}	7.68	$7.7^{+1.5}_{-1.6}$ (+0.4 σ)	$H(2.33)$	235.98	$236.0^{+1.2}_{-1.2}$ (+1.5 σ)
A_{217}^{CIB}	47.2	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.101	$2.101^{+0.069}_{-0.064}$ (+0.4 σ)	$D_M(2.33)$	5758.2	5759^{+17}_{-17} (+0.4 σ)
$\xi^{tSZ \times CIB}$	0.42	—	$10^9 A_s e^{-2\tau}$	1.8844	$1.882^{+0.022}_{-0.022}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4602	$0.460^{+0.017}_{-0.017}$ (−1.5 σ)
A_{143}^{tSZ}	7.25	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	D_{40}	1229.0	1229^{+24}_{-23} (−0.0 σ)	$\sigma_8(0.15)$	0.7577	$0.757^{+0.024}_{-0.024}$ (−1.7 σ)
A_{100}^{PS}	250	258^{+50}_{-50} (−0.2 σ)	D_{220}	5739	5734^{+74}_{-75} (+0.4 σ)	$f\sigma_8(0.38)$	0.4812	$0.481^{+0.019}_{-0.019}$ (−1.7 σ)
A_{143}^{PS}	47.2	46^{+10}_{-20} (−0.4 σ)	D_{810}	2542.6	2539^{+27}_{-26} (+0.3 σ)	$\sigma_8(0.38)$	0.6718	$0.671^{+0.021}_{-0.022}$ (−1.7 σ)
$A_{143 \times 217}^{PS}$	47.4	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.9	$817.5^{+9.4}_{-9.3}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4805	$0.480^{+0.019}_{-0.020}$ (−1.7 σ)
A_{217}^{PS}	119.8	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.47	$231.0^{+3.1}_{-3.1}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6286	$0.628^{+0.019}_{-0.020}$ (−1.7 σ)
A^{kSZ}	0.00	< 7.99 (−0.1 σ)	$n_{s,0.002}$	0.9664	$0.9660^{+0.0078}_{-0.0078}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4758	$0.475^{+0.019}_{-0.020}$ (−1.7 σ)
A_{100}^{dustTT}	8.82	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.245408	$0.24540^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5981	$0.597^{+0.018}_{-0.019}$ (−1.7 σ)
A_{143}^{dustTT}	10.97	$10.9^{+3.5}_{-3.4}$ (+0.1 σ)	Y_P^{BBN}	0.246735	$0.24673^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3016	$0.3012^{+0.0091}_{-0.0093}$ (−1.7 σ)
$A_{143 \times 217}^{dustTT}$	19.7	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	$10^5 D/H$	2.580	$2.582^{+0.052}_{-0.049}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3102	$0.3098^{+0.0080}_{-0.0081}$ (−1.7 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.7741	$13.777^{+0.044}_{-0.043}$ (+1.5 σ)	f_{2000}^{143}	28.8	29^{+5}_{-5} (−0.5 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.074}$	z_*	1089.856	$1089.87^{+0.48}_{-0.47}$ (−0.9 σ)	$f_{2000}^{143 \times 217}$	31.96	32^{+4}_{-4} (−0.6 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	144.47	$144.49^{+0.52}_{-0.52}$ (+0.0 σ)	f_{2000}^{217}	106.67	$106.9^{+3.5}_{-3.5}$ (−0.5 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04112	$1.04114^{+0.00059}_{-0.00056}$ (+0.3 σ)	χ_{small}^2	396.06	397.2 (ν : 2.0) (+0.3 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8768	$13.878^{+0.049}_{-0.049}$ (−0.0 σ)	χ_{lowl}^2	23.11	23.27 (ν : 0.4) (+0.0 σ)
$A_{143 \times 217}^{dustTE}$	0.665	$0.67^{+0.16}_{-0.16}$	z_{drag}	1060.01	$1059.96^{+0.58}_{-0.56}$ (+1.1 σ)	χ_{plik}^2	2344.5	2359.3 (ν : 16.8) (+293.4 σ)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.52}$	r_{drag}	147.12	$147.14^{+0.53}_{-0.53}$ (−0.2 σ)	χ_{JLA}^2	1034.74	1035.39 (ν : 0.5)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14086	$0.14083^{+0.00059}_{-0.00060}$ (+0.5 σ)	χ_{6DF}^2	0.000	0.048 (ν : 0.0)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160727	$0.16075^{+0.00034}_{-0.00033}$ (−1.1 σ)	χ_{MGS}^2	1.61	1.64 (ν : 0.2)
H_0	68.38	$68.3^{+1.6}_{-1.6}$ (−1.7 σ)	z_{eq}	3397	3396^{+52}_{-52} (−0.2 σ)	$\chi_{DR12BAO}^2$	4.35	4.8 (ν : 0.7)
Ω_Λ	0.6946	$0.694^{+0.015}_{-0.015}$ (−1.7 σ)	k_{eq}	0.010367	$0.01037^{+0.00016}_{-0.00016}$ (−0.2 σ)	χ_{prior}^2	1.9	11.5 (ν : 10.1) (+1.2 σ)
Ω_m	0.3054	$0.306^{+0.015}_{-0.015}$ (+1.7 σ)	$100\theta_{eq}$	0.8144	$0.8145^{+0.0098}_{-0.0097}$ (+0.3 σ)	χ_{BAO}^2	5.96	6.5 (ν : 0.5)
$\Omega_m h^2$	0.14279	$0.1428^{+0.0022}_{-0.0022}$ (−0.2 σ)	$100\theta_{s,eq}$	0.4499	$0.4500^{+0.0050}_{-0.0050}$ (+0.3 σ)	χ_{CMB}^2	2763.7	2779.8 (ν : 16.7) (+281.3 σ)
$\Omega_m h^3$	0.09763	$0.0975^{+0.0028}_{-0.0029}$ (−1.7 σ)	$H(0.15)$	73.34	$73.3^{+1.0}_{-1.0}$ (−1.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 3806.25$; $\bar{\chi}_{\text{eff}}^2 = 3833.20$; $R - 1 = 0.00703$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.61 DR12BAO: 4.35 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 commander_dx12_v3_2_29: 23.11 plik_rd12_HM_v22b_TTTEEE: 2344.51 SN - JLA Pantheon18: 1034.74

18.48 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022416	$0.02240^{+0.00027}_{-0.00027}$ (+1.1 σ)	$\Omega_{\mathrm{m}}h^3$	0.09767	$0.0975^{+0.0027}_{-0.0027}$ (−1.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.45013	$0.4501^{+0.0044}_{-0.0043}$ (+0.3 σ)
$\Omega_{\mathrm{c}}h^2$	0.11965	$0.1197^{+0.0020}_{-0.0020}$ (−0.4 σ)	σ_8	0.8197	$0.818^{+0.022}_{-0.022}$ (−1.8 σ)	$H(0.15)$	73.40	$73.3^{+1.0}_{-1.0}$ (−1.7 σ)
$100\theta_{\mathrm{MC}}$	1.04098	$1.04096^{+0.00059}_{-0.00056}$ (+0.3 σ)	S_8	0.8260	$0.826^{+0.021}_{-0.021}$ (+1.1 σ)	$D_{\mathrm{M}}(0.15)$	635.2	636^{+12}_{-12} (+1.7 σ)
τ	0.0551	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4524	$0.452^{+0.011}_{-0.011}$ (+1.1 σ)	$H(0.38)$	83.16	$83.11^{+0.53}_{-0.52}$ (−0.8 σ)
w_0	−1.030	$−1.028^{+0.062}_{-0.062}$ (+1.8 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6090	$0.608^{+0.013}_{-0.014}$ (−1.6 σ)	$D_{\mathrm{M}}(0.38)$	1519.6	1521^{+20}_{-20} (+1.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0459	$3.045^{+0.030}_{-0.027}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	0.9908	$0.990^{+0.020}_{-0.020}$ (−1.7 σ)	$H(0.51)$	89.739	$89.71^{+0.45}_{-0.47}$ (+1.4 σ)
n_{s}	0.9668	$0.9659^{+0.0074}_{-0.0075}$ (+0.5 σ)	$r_{\mathrm{drag}}h$	100.70	$100.6^{+2.4}_{-2.3}$ (−1.7 σ)	$D_{\mathrm{M}}(0.51)$	1970.9	1973^{+21}_{-21} (+1.6 σ)
y_{cal}	1.00070	$1.0006^{+0.0050}_{-0.0048}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.4445	$2.445^{+0.042}_{-0.044}$ (−1.3 σ)	$H(0.61)$	95.277	$95.26^{+0.47}_{-0.49}$ (+1.8 σ)
A_{217}^{CIB}	46.6	47^{+10}_{-10} (−0.1 σ)	z_{re}	7.75	$7.7^{+1.4}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(0.61)$	2295.2	2297^{+21}_{-22} (+1.6 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.56	—	10^9A_{s}	2.103	$2.101^{+0.063}_{-0.057}$ (+0.4 σ)	$H(2.33)$	235.93	$236.0^{+1.1}_{-1.1}$ (+1.4 σ)
A_{143}^{tSZ}	7.14	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	$10^9A_{\mathrm{s}}e^{-2\tau}$	1.8833	$1.882^{+0.020}_{-0.020}$ (−0.1 σ)	$D_{\mathrm{M}}(2.33)$	5756.9	5758^{+17}_{-17} (+0.4 σ)
A_{100}^{PS}	249	258^{+50}_{-50} (−0.2 σ)	D_{40}	1227.8	1229^{+22}_{-22} (−0.0 σ)	$f\sigma_8(0.15)$	0.4598	$0.460^{+0.013}_{-0.013}$ (−1.5 σ)
A_{143}^{PS}	49.4	46^{+10}_{-20} (−0.4 σ)	D_{220}	5737	5735^{+74}_{-75} (+0.5 σ)	$\sigma_8(0.15)$	0.7579	$0.757^{+0.020}_{-0.021}$ (−1.7 σ)
$A_{143\times 217}^{\mathrm{PS}}$	50.9	42^{+20}_{-20} (−0.1 σ)	D_{810}	2541.8	2539^{+27}_{-26} (+0.3 σ)	$f\sigma_8(0.38)$	0.4810	$0.480^{+0.016}_{-0.016}$ (−1.7 σ)
A_{217}^{PS}	120.9	115^{+20}_{-20} (−0.0 σ)	D_{1420}	818.8	$817.5^{+9.5}_{-9.3}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6721	$0.671^{+0.018}_{-0.018}$ (−1.7 σ)
A^{kSZ}	0.01	< 8.00 (−0.1 σ)	D_{2000}	231.49	$231.0^{+3.1}_{-3.1}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4804	$0.480^{+0.016}_{-0.016}$ (−1.7 σ)
$A_{100}^{\mathrm{dustTT}}$	8.82	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9668	$0.9659^{+0.0074}_{-0.0075}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6289	$0.628^{+0.017}_{-0.017}$ (−1.7 σ)
$A_{143}^{\mathrm{dustTT}}$	11.04	$10.9^{+3.4}_{-3.4}$ (+0.1 σ)	Y_{P}	0.245413	$0.24540^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(0.61)$	0.4758	$0.475^{+0.016}_{-0.016}$ (−1.7 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	20.0	$18.6^{+6.5}_{-6.4}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246740	$0.24673^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(0.61)$	0.5984	$0.597^{+0.016}_{-0.016}$ (−1.7 σ)
$A_{217}^{\mathrm{dustTT}}$	95.2	94^{+10}_{-10} (+0.1 σ)	$10^5\mathrm{D}/\mathrm{H}$	2.577	$2.581^{+0.051}_{-0.049}$ (−1.1 σ)	$f\sigma_8(2.33)$	0.3018	$0.3012^{+0.0079}_{-0.0080}$ (−1.8 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.076}_{-0.073}$	Age/Gyr	13.7710	$13.776^{+0.043}_{-0.043}$ (+1.5 σ)	$\sigma_8(2.33)$	0.3104	$0.3098^{+0.0069}_{-0.0069}$ (−1.7 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.135	$0.135^{+0.057}_{-0.059}$	z_*	1089.831	$1089.86^{+0.46}_{-0.45}$ (−0.9 σ)	$\chi^2_{\mathrm{lensing}}$	8.72	9.13 (ν : 0.2)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.481	$0.48^{+0.17}_{-0.16}$	r_*	144.488	$144.50^{+0.46}_{-0.46}$ (+0.0 σ)	χ^2_{small}	396.20	397.1 (ν : 1.6) (+0.2 σ)
$A_{143}^{\mathrm{dustTE}}$	0.225	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04116	$1.04114^{+0.00058}_{-0.00055}$ (+0.3 σ)	χ^2_{lowl}	23.06	23.27 (ν : 0.3) (+0.0 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.663	$0.66^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.8776	$13.879^{+0.044}_{-0.043}$ (−0.0 σ)	χ^2_{plik}	2344.7	2359.1 (ν : 15.8) (+293.4 σ)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.53}_{-0.52}$	z_{drag}	1060.01	$1059.97^{+0.57}_{-0.57}$ (+1.1 σ)	χ^2_{JLA}	1034.76	1035.36 (ν : 0.4)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.135	$147.15^{+0.47}_{-0.47}$ (−0.1 σ)	$\chi^2_{6\mathrm{DF}}$	0.000	0.046 (ν : 0.0)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.14086	$0.14082^{+0.00056}_{-0.00056}$ (+0.5 σ)	χ^2_{MGS}	1.68	1.67 (ν : 0.2)
H_0	68.44	$68.3^{+1.7}_{-1.6}$ (−1.7 σ)	$100\theta_{\mathrm{D}}$	0.160717	$0.16074^{+0.00034}_{-0.00033}$ (−1.1 σ)	$\chi^2_{\mathrm{DR12BAO}}$	4.23	4.7 (ν : 0.5)
Ω_{Λ}	0.6953	$0.694^{+0.015}_{-0.015}$ (−1.7 σ)	z_{eq}	3394.8	3395^{+45}_{-45} (−0.3 σ)	χ^2_{prior}	1.7	11.6 (ν : 10.2) (+1.2 σ)
Ω_{m}	0.3047	$0.306^{+0.015}_{-0.015}$ (+1.7 σ)	k_{eq}	0.010361	$0.01036^{+0.00014}_{-0.00014}$ (−0.3 σ)	χ^2_{CMB}	2772.6	2788.6 (ν : 16.5) (+282.8 σ)
$\Omega_{\mathrm{m}}h^2$	0.14271	$0.1427^{+0.0019}_{-0.0019}$ (−0.3 σ)	$100\theta_{\mathrm{eq}}$	0.8148	$0.8147^{+0.0086}_{-0.0084}$ (+0.3 σ)	χ^2_{BAO}	5.91	6.45 (ν : 0.4)

Best-fit $\chi^2_{\mathrm{eff}} = 3814.98$; $\Delta\chi^2_{\mathrm{eff}} = -0.69$; $\bar{\chi}^2_{\mathrm{eff}} = 3841.96$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.11$; $R - 1 = 0.01118$
 χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.02) MGS: 1.68 (Δ 0.40) DR12BAO: 4.23 (Δ -0.01) CMB - smicadx12.Dec5.ftl.mv2.ndclpp-p.teb.consext8: 8.72 (Δ -0.00) small_100x143.offlike5_EE_Aplanc
396.20 (Δ -0.32) commander_dx12_v3.2.29: 23.06 (Δ 0.18) plik_rd12_HM_v22b.TTTEEE: 2344.67 (Δ -0.60) SN - JLA Pantheon18: 1034.76 (Δ -0.22)

18.49 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00028}_{-0.00028} \quad (+1.1\sigma)$	σ_8	$0.819^{+0.025}_{-0.026} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$636^{+12}_{-12} \quad (+1.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0023}_{-0.0023} \quad (-0.4\sigma)$	S_8	$0.827^{+0.026}_{-0.025} \quad (+1.1\sigma)$	$H(0.38)$	$83.10^{+0.54}_{-0.54} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00060}_{-0.00057} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+20}_{-20} \quad (+1.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.017}_{-0.018} \quad (-1.6\sigma)$	$H(0.51)$	$89.70^{+0.50}_{-0.51} \quad (+1.4\sigma)$
w_0	$-1.028^{+0.065}_{-0.066} \quad (+1.8\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.025}_{-0.025} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1973^{+21}_{-21} \quad (+1.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.029}_{-0.027} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$100.5^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$H(0.61)$	$95.25^{+0.52}_{-0.53} \quad (+1.8\sigma)$
n_{s}	$0.9660^{+0.0078}_{-0.0078} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.054}_{-0.055} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2298^{+22}_{-22} \quad (+1.6\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 9.02 \quad (+0.5\sigma)$	$H(2.33)$	$236.0^{+1.2}_{-1.2} \quad (+1.5\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.061}_{-0.056} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5759^{+17}_{-17} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.016}_{-0.016} \quad (-1.5\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1229^{+23}_{-23} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.757^{+0.023}_{-0.024} \quad (-1.7\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5734^{+74}_{-75} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.019}_{-0.019} \quad (-1.7\sigma)$
A_{143}^{PS}	$46^{+10}_{-20} \quad (-0.4\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.672^{+0.021}_{-0.021} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.5^{+9.4}_{-9.2} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.480^{+0.019}_{-0.019} \quad (-1.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.0} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.628^{+0.019}_{-0.019} \quad (-1.7\sigma)$
A^{kSZ}	$< 7.96 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0078}_{-0.0078} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.476^{+0.019}_{-0.019} \quad (-1.7\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.24540^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.598^{+0.018}_{-0.018} \quad (-1.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3014^{+0.0089}_{-0.0091} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.4} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.582^{+0.052}_{-0.049} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3101^{+0.0078}_{-0.0078} \quad (-1.7\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.776^{+0.044}_{-0.043} \quad (+1.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.074}$	z_*	$1089.87^{+0.48}_{-0.47} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$144.49^{+0.52}_{-0.52} \quad (+0.0\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.5} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04114^{+0.00059}_{-0.00056} \quad (+0.3\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.878^{+0.049}_{-0.049} \quad (-0.0\sigma)$	χ_{lowl}^2	$23.28 \quad (\nu: 0.4) \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.96^{+0.58}_{-0.57} \quad (+1.1\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 16.6) \quad (+293.4\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.52}_{-0.52}$	r_{drag}	$147.14^{+0.53}_{-0.53} \quad (-0.2\sigma)$	χ_{JLA}^2	$1035.39 \quad (\nu: 0.5)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14083^{+0.00059}_{-0.00060} \quad (+0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00034}_{-0.00033} \quad (-1.1\sigma)$	χ_{MGS}^2	$1.64 \quad (\nu: 0.2)$
H_0	$68.3^{+1.6}_{-1.6} \quad (-1.7\sigma)$	z_{eq}	$3396^{+52}_{-51} \quad (-0.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 0.7)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	k_{eq}	$0.01036^{+0.00016}_{-0.00016} \quad (-0.3\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.1) \quad (+1.2\sigma)$
Ω_{m}	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8146^{+0.0097}_{-0.0097} \quad (+0.3\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0022}_{-0.0021} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4500^{+0.0050}_{-0.0050} \quad (+0.3\sigma)$	χ_{CMB}^2	$2779.6 \quad (\nu: 16.3) \quad (+281.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0975^{+0.0028}_{-0.0029} \quad (-1.7\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (-1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3832.98; R - 1 = 0.00746$$

18.50 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00027}_{-0.00027} \quad (+1.1\sigma)$	σ_8	$0.819^{+0.022}_{-0.022} \quad (-1.7\sigma)$	$D_M(0.15)$	$636^{+12}_{-12} \quad (+1.7\sigma)$
$\Omega_c h^2$	$0.1196^{+0.0020}_{-0.0020} \quad (-0.4\sigma)$	S_8	$0.826^{+0.021}_{-0.021} \quad (+1.1\sigma)$	$H(0.38)$	$83.12^{+0.52}_{-0.51} \quad (-0.8\sigma)$
$100\theta_{MC}$	$1.04097^{+0.00059}_{-0.00056} \quad (+0.3\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.011}_{-0.011} \quad (+1.1\sigma)$	$D_M(0.38)$	$1521^{+20}_{-20} \quad (+1.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.013}_{-0.014} \quad (-1.6\sigma)$	$H(0.51)$	$89.72^{+0.45}_{-0.46} \quad (+1.4\sigma)$
w_0	$-1.027^{+0.061}_{-0.062} \quad (+1.8\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.019}_{-0.020} \quad (-1.7\sigma)$	$D_M(0.51)$	$1973^{+21}_{-21} \quad (+1.6\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.026}_{-0.025} \quad (+0.5\sigma)$	$r_{drag} h$	$100.6^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$H(0.61)$	$95.27^{+0.47}_{-0.47} \quad (+1.8\sigma)$
n_s	$0.9661^{+0.0074}_{-0.0075} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.042}_{-0.043} \quad (-1.3\sigma)$	$D_M(0.61)$	$2297^{+22}_{-22} \quad (+1.6\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$H(2.33)$	$236.0^{+1.1}_{-1.1} \quad (+1.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	$10^9 A_s$	$2.104^{+0.055}_{-0.052} \quad (+0.5\sigma)$	$D_M(2.33)$	$5758^{+17}_{-17} \quad (+0.3\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.882^{+0.020}_{-0.020} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.013}_{-0.013} \quad (-1.5\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1229^{+22}_{-22} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.757^{+0.020}_{-0.020} \quad (-1.7\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5735^{+74}_{-76} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.481^{+0.016}_{-0.016} \quad (-1.7\sigma)$
A_{143}^{PS}	$45^{+10}_{-20} \quad (-0.4\sigma)$	D_{810}	$2539^{+27}_{-26} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.671^{+0.018}_{-0.018} \quad (-1.7\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.5^{+9.5}_{-9.3} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.480^{+0.016}_{-0.016} \quad (-1.7\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.628^{+0.017}_{-0.017} \quad (-1.7\sigma)$
A^{kSZ}	$< 8.02 \quad (-0.1\sigma)$	$n_{s,0.002}$	$0.9661^{+0.0074}_{-0.0075} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.016}_{-0.016} \quad (-1.7\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Y_P	$0.24540^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.598^{+0.016}_{-0.016} \quad (-1.7\sigma)$
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.4} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.24673^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3013^{+0.0078}_{-0.0080} \quad (-1.7\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	$10^5 D/H$	$2.581^{+0.051}_{-0.049} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3100^{+0.0068}_{-0.0068} \quad (-1.7\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.775^{+0.044}_{-0.043} \quad (+1.5\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.5\sigma)$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.073}$	z_*	$1089.85^{+0.45}_{-0.45} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.059}$	r_*	$144.51^{+0.46}_{-0.46} \quad (+0.0\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.5} \quad (-0.5\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04115^{+0.00058}_{-0.00055} \quad (+0.3\sigma)$	$\chi^2_{lensing}$	$9.11 \quad (\nu: 0.2)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	$13.879^{+0.044}_{-0.043} \quad (+0.0\sigma)$	χ^2_{small}	$397.1 \quad (\nu: 1.7) \quad (+0.2\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.98^{+0.57}_{-0.58} \quad (+1.1\sigma)$	χ^2_{lowl}	$23.27 \quad (\nu: 0.3) \quad (+0.0\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	r_{drag}	$147.16^{+0.47}_{-0.47} \quad (-0.1\sigma)$	χ^2_{plik}	$2359.0 \quad (\nu: 15.7) \quad (+293.4\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_D	$0.14082^{+0.00056}_{-0.00056} \quad (+0.5\sigma)$	χ^2_{JLA}	$1035.36 \quad (\nu: 0.4)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_D$	$0.16074^{+0.00034}_{-0.00033} \quad (-1.1\sigma)$	χ^2_{6DF}	$0.046 \quad (\nu: 0.0)$
H_0	$68.3^{+1.7}_{-1.6} \quad (-1.7\sigma)$	z_{eq}	$3394^{+45}_{-44} \quad (-0.3\sigma)$	χ^2_{MGS}	$1.67 \quad (\nu: 0.2)$
Ω_Λ	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	k_{eq}	$0.01036^{+0.00014}_{-0.00014} \quad (-0.3\sigma)$	$\chi^2_{DR12BAO}$	$4.7 \quad (\nu: 0.5)$
Ω_m	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	$100\theta_{eq}$	$0.8149^{+0.0085}_{-0.0083} \quad (+0.4\sigma)$	χ^2_{prior}	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
$\Omega_m h^2$	$0.1427^{+0.0019}_{-0.0019} \quad (-0.3\sigma)$	$100\theta_{s,eq}$	$0.4502^{+0.0043}_{-0.0043} \quad (+0.3\sigma)$	χ^2_{CMB}	$2788.4 \quad (\nu: 16.3) \quad (+282.8\sigma)$
$\Omega_m h^3$	$0.0975^{+0.0027}_{-0.0027} \quad (-1.7\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (-1.7\sigma)$	χ^2_{BAO}	$6.42 \quad (\nu: 0.4)$

$$\bar{\chi}^2_{eff} = 3841.79; \Delta\bar{\chi}^2_{eff} = 0.05; R - 1 = 0.01215$$

18.51 base_w_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022151	$0.02219^{+0.00039}_{-0.00039} (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6135	$0.606^{+0.022}_{-0.022} (-1.7\sigma)$	$H(0.38)$	82.86	$82.98^{+0.66}_{-0.66} (-0.9\sigma)$
$\Omega_c h^2$	0.12025	$0.1194^{+0.0030}_{-0.0030} (-0.5\sigma)$	$\sigma_8/h^{0.5}$	0.9976	$0.987^{+0.031}_{-0.031} (-1.8\sigma)$	$D_M(0.38)$	1525.4	$1524^{+20}_{-20} (+1.7\sigma)$
$100\theta_{MC}$	1.04092	$1.04098^{+0.00084}_{-0.00084} (+0.4\sigma)$	$r_{drag}h$	100.43	$100.5^{+2.4}_{-2.3} (-1.7\sigma)$	$H(0.51)$	89.45	$89.59^{+0.64}_{-0.65} (+1.3\sigma)$
τ	0.0540	$0.053^{+0.016}_{-0.015} (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	2.460	$2.436^{+0.067}_{-0.067} (-1.5\sigma)$	$D_M(0.51)$	1978.3	$1977^{+22}_{-23} (+1.7\sigma)$
w_0	-1.037	$-1.024^{+0.071}_{-0.073} (+1.8\sigma)$	z_{re}	7.69	$7.6^{+1.6}_{-1.6} (+0.2\sigma)$	$H(0.61)$	94.99	$95.14^{+0.67}_{-0.68} (+1.7\sigma)$
$\ln(10^{10} A_s)$	3.0460	$3.039^{+0.032}_{-0.032} (-0.0\sigma)$	$10^9 A_s$	2.103	$2.088^{+0.068}_{-0.065} (-0.0\sigma)$	$D_M(0.61)$	2303.6	$2301^{+23}_{-24} (+1.7\sigma)$
n_s	0.9637	$0.9660^{+0.0093}_{-0.0094} (+0.5\sigma)$	$10^9 A_s e^{-2\tau}$	1.8880	$1.877^{+0.024}_{-0.024} (-0.5\sigma)$	$H(2.33)$	235.96	$235.7^{+1.5}_{-1.5} (+1.3\sigma)$
y_{cal}	1.00232	$1.0005^{+0.0049}_{-0.0049} (+0.1\sigma)$	D_{40}	1234.6	$1225^{+26}_{-26} (-0.3\sigma)$	$D_M(2.33)$	5769.7	$5767^{+24}_{-24} (+0.7\sigma)$
A_{100}^{PS}	245.2	$243^{+50}_{-50} (-0.7\sigma)$	D_{220}	5730	$5709^{+80}_{-79} (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4646	$0.458^{+0.021}_{-0.020} (-1.6\sigma)$
A_{143}^{PS}	38.9	$41^{+20}_{-20} (-1.0\sigma)$	D_{810}	2543.3	$2533^{+27}_{-27} (-0.1\sigma)$	$\sigma_8(0.15)$	0.7614	$0.753^{+0.027}_{-0.028} (-1.8\sigma)$
A_{217}^{PS}	99.3	$101^{+30}_{-30} (-1.4\sigma)$	D_{1420}	817.0	$815^{+10}_{-10} (+0.1\sigma)$	$f\sigma_8(0.38)$	0.4855	$0.478^{+0.023}_{-0.023} (-1.8\sigma)$
A_{217}^{CIB}	45.0	$41^{+10}_{-10} (-1.0\sigma)$	D_{2000}	230.42	$229.7^{+3.5}_{-3.5} (+0.0\sigma)$	$\sigma_8(0.38)$	0.6747	$0.668^{+0.024}_{-0.024} (-1.8\sigma)$
A_{143}^{tSZ}	5.17	$< 7.41 (-0.7\sigma)$	$n_{s,0.002}$	0.9637	$0.9660^{+0.0093}_{-0.0094} (+0.5\sigma)$	$f\sigma_8(0.51)$	0.4845	$0.478^{+0.024}_{-0.023} (-1.8\sigma)$
$r_{143 \times 217}^{PS}$	0.560	$0.65^{+0.25}_{-0.25}$	Y_P	0.245306	$0.24532^{+0.00016}_{-0.00017} (+0.2\sigma)$	$\sigma_8(0.51)$	0.6311	$0.625^{+0.022}_{-0.022} (-1.8\sigma)$
$r_{143 \times 217}^{CIB}$	0.70	—	Y_P^{BBN}	0.246632	$0.24665^{+0.00016}_{-0.00017} (+0.2\sigma)$	$f\sigma_8(0.61)$	0.4796	$0.473^{+0.023}_{-0.023} (-1.8\sigma)$
$\xi^{tSZ \times CIB}$	0.00	—	$10^5 D/H$	2.627	$2.620^{+0.075}_{-0.073} (-0.2\sigma)$	$\sigma_8(0.61)$	0.6003	$0.595^{+0.020}_{-0.021} (-1.8\sigma)$
A^{kSZ}	2.3	—	Age/Gyr	13.798	$13.797^{+0.056}_{-0.055} (+1.6\sigma)$	$f\sigma_8(2.33)$	0.3026	$0.2998^{+0.0099}_{-0.010} (-1.8\sigma)$
A_{100}^{dust}	1.029	$1.01^{+0.38}_{-0.38}$	z_*	1090.22	$1090.10^{+0.65}_{-0.64} (-0.4\sigma)$	$\sigma_8(2.33)$	0.3109	$0.3085^{+0.0085}_{-0.0087} (-1.8\sigma)$
A_{143}^{dust}	0.987	$0.98^{+0.34}_{-0.34}$	r_*	144.53	$144.72^{+0.73}_{-0.72} (+0.5\sigma)$	f_{2000}^{143}	31.3	$31^{+6}_{-6} (-0.1\sigma)$
A_{217}^{dust}	0.965	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	1.04113	$1.04118^{+0.00083}_{-0.00083} (+0.4\sigma)$	f_{2000}^{217}	108.07	$107.5^{+4.0}_{-4.0} (-0.2\sigma)$
$A_{143 \times 217}^{dust}$	1.017	$1.03^{+0.32}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	13.883	$13.899^{+0.069}_{-0.069} (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	33.18	$33^{+4}_{-4} (-0.2\sigma)$
c_{100}	0.99756	$0.9975^{+0.0021}_{-0.0021} (-3.4\sigma)$	z_{drag}	1059.44	$1059.48^{+0.83}_{-0.88} (+0.0\sigma)$	χ_{simall}^2	396.06	$396.9 (\nu: 1.5) (+0.1\sigma)$
c_{217}	1.00140	$1.0012^{+0.0031}_{-0.0031} (+4.7\sigma)$	r_{drag}	147.27	$147.44^{+0.76}_{-0.75} (+0.5\sigma)$	χ_{lowl}^2	23.45	$23.05 (\nu: 0.5) (-0.2\sigma)$
H_0	68.19	$68.1^{+1.6}_{-1.6} (-1.7\sigma)$	k_D	0.14051	$0.14036^{+0.00092}_{-0.00091} (-0.4\sigma)$	$\chi_{CamSpec}^2$	7049.7	$7063.4 (\nu: 14.7)$
Ω_Λ	0.6924	$0.693^{+0.015}_{-0.015} (-1.7\sigma)$	$100\theta_D$	0.16106	$0.16104^{+0.00051}_{-0.00050} (+0.0\sigma)$	χ_{JLA}^2	1034.75	$1035.42 (\nu: 0.5)$
Ω_m	0.3076	$0.307^{+0.015}_{-0.015} (+1.7\sigma)$	z_{eq}	3403	$3384^{+69}_{-68} (-0.5\sigma)$	χ_{6DF}^2	0.004	$0.049 (\nu: 0.0)$
$\Omega_m h^2$	0.14304	$0.1423^{+0.0029}_{-0.0029} (-0.5\sigma)$	k_{eq}	0.010386	$0.01033^{+0.00021}_{-0.00021} (-0.5\sigma)$	χ_{MGS}^2	1.47	$1.64 (\nu: 0.2)$
$\Omega_m h^3$	0.09754	$0.0969^{+0.0032}_{-0.0032} (-1.7\sigma)$	$100\theta_{eq}$	0.8126	$0.816^{+0.013}_{-0.013} (+0.5\sigma)$	$\chi_{DR12BAO}^2$	4.86	$4.8 (\nu: 1.0)$
σ_8	0.8238	$0.815^{+0.030}_{-0.030} (-1.8\sigma)$	$100\theta_{s,eq}$	0.4492	$0.4510^{+0.0067}_{-0.0066} (+0.5\sigma)$	χ_{prior}^2	3.0	$7.7 (\nu: 6.1) (+0.1\sigma)$
S_8	0.8342	$0.824^{+0.033}_{-0.032} (+1.0\sigma)$	$H(0.15)$	73.11	$73.2^{+1.1}_{-1.0} (-1.7\sigma)$	χ_{BAO}^2	6.33	$6.5 (\nu: 0.8)$
$\sigma_8 \Omega_m^{0.5}$	0.4569	$0.451^{+0.018}_{-0.018} (+1.0\sigma)$	$D_M(0.15)$	637.6	$638^{+12}_{-12} (+1.7\sigma)$	χ_{CMB}^2	7469.2	$7483.4 (\nu: 14.6) (+1113.4\sigma)$

Best-fit $\chi_{eff}^2 = 8513.28$; $\bar{\chi}_{eff}^2 = 8532.92$; $R - 1 = 0.00642$

χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.47 DR12BAO: 4.86 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 commander_dx12_v3.2_29: 23.45 CamSpec like_10.7HM: 7049.66 SN - JLA Pantheon18: 1034.75

18.52 base_w_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02219^{+0.00038}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.022}_{-0.022} \quad (-1.7\sigma)$	$H(0.51)$	$89.56^{+0.57}_{-0.58} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0025}_{-0.0024} \quad (-0.4\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+22}_{-22} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00083}_{-0.00084} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.442^{+0.047}_{-0.048} \quad (-1.4\sigma)$	$H(0.61)$	$95.11^{+0.59}_{-0.61} \quad (+1.7\sigma)$
τ	$0.054^{+0.016}_{-0.014} \quad (+0.3\sigma)$	z_{re}	$7.7^{+1.5}_{-1.5} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+23}_{-23} \quad (+1.7\sigma)$
w_0	$-1.028^{+0.064}_{-0.066} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.062}_{-0.057} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+1.3}_{-1.4} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.029}_{-0.027} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+23}_{-23} \quad (+0.7\sigma)$
n_{s}	$0.9655^{+0.0085}_{-0.0086} \quad (+0.4\sigma)$	D_{40}	$1227^{+24}_{-23} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.016}_{-0.015} \quad (-1.5\sigma)$
y_{cal}	$1.0006^{+0.0050}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5712^{+81}_{-79} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.755^{+0.022}_{-0.022} \quad (-1.8\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.7\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.017} \quad (-1.7\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.670^{+0.019}_{-0.019} \quad (-1.8\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.018}_{-0.018} \quad (-1.7\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9655^{+0.0085}_{-0.0086} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.018}_{-0.018} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.7\sigma)$	Y_{P}	$0.24532^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.474^{+0.018}_{-0.018} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.596^{+0.016}_{-0.017} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.620^{+0.075}_{-0.071} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.3006^{+0.0081}_{-0.0083} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.796^{+0.056}_{-0.055} \quad (+1.6\sigma)$	$\sigma_8(2.33)$	$0.3092^{+0.0071}_{-0.0072} \quad (-1.7\sigma)$
A^{kSZ}	—	z_*	$1090.11^{+0.60}_{-0.60} \quad (-0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.37}$	r_*	$144.68^{+0.61}_{-0.60} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.5^{+4.0}_{-3.9} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	$100\theta_*$	$1.04116^{+0.00082}_{-0.00083} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.896^{+0.059}_{-0.058} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.34 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.49^{+0.86}_{-0.86} \quad (+0.1\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_{drag}	$147.40^{+0.66}_{-0.64} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.17 \quad (\nu: 0.4) \quad (-0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	k_{D}	$0.14040^{+0.00084}_{-0.00085} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.8 \quad (\nu: 13.2)$
H_0	$68.2^{+1.6}_{-1.6} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00051}_{-0.00050} \quad (-0.0\sigma)$	χ_{JLA}^2	$1035.38 \quad (\nu: 0.4)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	z_{eq}	$3388^{+57}_{-57} \quad (-0.4\sigma)$	χ_{6DF}^2	$0.047 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	k_{eq}	$0.01034^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.65 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0024}_{-0.0024} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.010} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.0971^{+0.0029}_{-0.0028} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4506^{+0.0055}_{-0.0053} \quad (+0.4\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.1) \quad (+0.1\sigma)$
σ_8	$0.817^{+0.023}_{-0.023} \quad (-1.8\sigma)$	$H(0.15)$	$73.2^{+1.0}_{-1.0} \quad (-1.7\sigma)$	χ_{CMB}^2	$7492.3 \quad (\nu: 14.3) \quad (+1115.0\sigma)$
S_8	$0.826^{+0.024}_{-0.024} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+1.7\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.6)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (+1.1\sigma)$	$H(0.38)$	$82.97^{+0.61}_{-0.61} \quad (-0.9\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.016}_{-0.016} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+20}_{-20} \quad (+1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8541.75; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.26; R - 1 = 0.00879$$

18.53 base_w_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00039}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.607^{+0.021}_{-0.021} \quad (-1.7\sigma)$	$H(0.38)$	$82.99^{+0.66}_{-0.66} \quad (-0.9\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1194^{+0.0030}_{-0.0030} \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.031}_{-0.031} \quad (-1.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+20}_{-20} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04098^{+0.00084}_{-0.00085} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$H(0.51)$	$89.59^{+0.64}_{-0.65} \quad (+1.3\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.065}_{-0.065} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1977^{+22}_{-23} \quad (+1.7\sigma)$
w_0	$-1.024^{+0.071}_{-0.072} \quad (+1.8\sigma)$	z_{re}	$< 8.90 \quad (+0.4\sigma)$	$H(0.61)$	$95.14^{+0.67}_{-0.68} \quad (+1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.026} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.059}_{-0.055} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+23}_{-24} \quad (+1.7\sigma)$
n_{s}	$0.9661^{+0.0093}_{-0.0094} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.024}_{-0.024} \quad (-0.5\sigma)$	$H(2.33)$	$235.7^{+1.5}_{-1.5} \quad (+1.3\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	D_{40}	$1225^{+27}_{-26} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+24}_{-24} \quad (+0.7\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5709^{+80}_{-79} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.021}_{-0.020} \quad (-1.5\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.754^{+0.027}_{-0.027} \quad (-1.8\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.023}_{-0.023} \quad (-1.8\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.669^{+0.023}_{-0.024} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.7\sigma)$	$n_{\mathrm{s},0.002}$	$0.9661^{+0.0093}_{-0.0094} \quad (+0.5\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.023}_{-0.023} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	Y_{P}	$0.24532^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.626^{+0.021}_{-0.022} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.023}_{-0.023} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.619^{+0.075}_{-0.073} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.020}_{-0.020} \quad (-1.8\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.797^{+0.056}_{-0.055} \quad (+1.6\sigma)$	$f\sigma_8(2.33)$	$0.3001^{+0.0097}_{-0.010} \quad (-1.8\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1090.09^{+0.65}_{-0.64} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3089^{+0.0083}_{-0.0084} \quad (-1.7\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	r_*	$144.72^{+0.73}_{-0.72} \quad (+0.5\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04118^{+0.00083}_{-0.00084} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.4^{+4.0}_{-4.0} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.069}_{-0.068} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.49^{+0.87}_{-0.89} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (+0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.45^{+0.76}_{-0.75} \quad (+0.5\sigma)$	χ_{lowl}^2	$23.07 \quad (\nu: 0.5) \quad (-0.2\sigma)$
H_0	$68.1^{+1.6}_{-1.6} \quad (-1.7\sigma)$	k_{D}	$0.14036^{+0.00092}_{-0.00091} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.2 \quad (\nu: 14.5)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00051}_{-0.00050} \quad (-0.0\sigma)$	χ_{JLA}^2	$1035.42 \quad (\nu: 0.5)$
Ω_{m}	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	z_{eq}	$3384^{+69}_{-69} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.049 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0029}_{-0.0029} \quad (-0.5\sigma)$	k_{eq}	$0.01033^{+0.00021}_{-0.00021} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.64 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0969^{+0.0032}_{-0.0032} \quad (-1.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.013}_{-0.013} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.0)$
σ_8	$0.816^{+0.029}_{-0.030} \quad (-1.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0067}_{-0.0066} \quad (+0.5\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
S_8	$0.824^{+0.032}_{-0.032} \quad (+1.0\sigma)$	$H(0.15)$	$73.2^{+1.1}_{-1.0} \quad (-1.7\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.018}_{-0.017} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$638^{+12}_{-12} \quad (+1.7\sigma)$	χ_{CMB}^2	$7483.1 \quad (\nu: 14.2) \quad (+1113.4\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 8532.67; R - 1 = 0.00753$

18.54 base_w_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00039}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.022}_{-0.022} \quad (-1.7\sigma)$	$H(0.51)$	$89.57^{+0.57}_{-0.57} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1195^{+0.0024}_{-0.0024} \quad (-0.4\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1976^{+22}_{-22} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00083}_{-0.00084} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.443^{+0.047}_{-0.047} \quad (-1.3\sigma)$	$H(0.61)$	$95.12^{+0.58}_{-0.61} \quad (+1.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.92 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+23}_{-23} \quad (+1.7\sigma)$
w_0	$-1.027^{+0.064}_{-0.066} \quad (+1.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.055}_{-0.051} \quad (+0.2\sigma)$	$H(2.33)$	$235.7^{+1.3}_{-1.4} \quad (+1.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.024} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+23}_{-23} \quad (+0.7\sigma)$
n_{s}	$0.9656^{+0.0085}_{-0.0085} \quad (+0.5\sigma)$	D_{40}	$1226^{+24}_{-23} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.015}_{-0.015} \quad (-1.5\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5711^{+80}_{-79} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.756^{+0.022}_{-0.022} \quad (-1.8\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.7\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.017} \quad (-1.7\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-1.0\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.670^{+0.019}_{-0.019} \quad (-1.8\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{2000}	$229.8^{+3.6}_{-3.5} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.479^{+0.018}_{-0.018} \quad (-1.7\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9656^{+0.0085}_{-0.0085} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.627^{+0.017}_{-0.018} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.36 \quad (-0.7\sigma)$	Y_{P}	$0.24532^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.475^{+0.018}_{-0.018} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00017} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.596^{+0.016}_{-0.017} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.619^{+0.075}_{-0.071} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.3007^{+0.0080}_{-0.0083} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.796^{+0.056}_{-0.055} \quad (+1.6\sigma)$	$\sigma_8(2.33)$	$0.3094^{+0.0070}_{-0.0071} \quad (-1.7\sigma)$
A^{kSZ}	—	z_*	$1090.10^{+0.60}_{-0.60} \quad (-0.3\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.37}$	r_*	$144.69^{+0.60}_{-0.59} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.4^{+4.0}_{-3.9} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	$100\theta_*$	$1.04116^{+0.00082}_{-0.00084} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.059}_{-0.057} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.30 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.50^{+0.86}_{-0.86} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_{drag}	$147.41^{+0.66}_{-0.64} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.16 \quad (\nu: 0.4) \quad (-0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	k_{D}	$0.14039^{+0.00084}_{-0.00085} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.8 \quad (\nu: 13.2)$
H_0	$68.2^{+1.6}_{-1.6} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00051}_{-0.00050} \quad (-0.0\sigma)$	χ_{JLA}^2	$1035.37 \quad (\nu: 0.4)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	z_{eq}	$3387^{+56}_{-56} \quad (-0.4\sigma)$	χ_{6DF}^2	$0.047 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	k_{eq}	$0.01034^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	χ_{MGS}^2	$1.65 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0023}_{-0.0023} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.011}_{-0.010} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}} h^3$	$0.0971^{+0.0028}_{-0.0028} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0054}_{-0.0053} \quad (+0.4\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.1) \quad (+0.1\sigma)$
σ_8	$0.817^{+0.023}_{-0.023} \quad (-1.8\sigma)$	$H(0.15)$	$73.2^{+1.0}_{-1.0} \quad (-1.7\sigma)$	χ_{CMB}^2	$7492.2 \quad (\nu: 14.1) \quad (+1115.0\sigma)$
S_8	$0.826^{+0.024}_{-0.023} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+1.7\sigma)$	χ_{BAO}^2	$6.5 \quad (\nu: 0.6)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.013}_{-0.013} \quad (+1.1\sigma)$	$H(0.38)$	$82.98^{+0.61}_{-0.60} \quad (-0.9\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.015}_{-0.016} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1524^{+20}_{-20} \quad (+1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8541.57; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.22; R - 1 = 0.00916$$

18.55 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022333	$0.02232^{+0.00029}_{-0.00029}$ (+0.8 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4496	$0.449^{+0.015}_{-0.014}$ (+0.9 σ)	$H(0.38)$	83.09	$83.09^{+0.56}_{-0.54}$ (−0.8 σ)
$\Omega_c h^2$	0.11922	$0.1192^{+0.0023}_{-0.0024}$ (−0.6 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6042	$0.604^{+0.018}_{-0.018}$ (−1.8 σ)	$D_M(0.38)$	1523.4	1523^{+20}_{-20} (+1.7 σ)
$100\theta_{MC}$	1.04096	$1.04093^{+0.00062}_{-0.00059}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9839	$0.984^{+0.027}_{-0.027}$ (−1.9 σ)	$H(0.51)$	89.72	$89.70^{+0.50}_{-0.51}$ (+1.4 σ)
τ	0.0533	$0.053^{+0.015}_{-0.015}$ (+0.2 σ)	$r_{drag}h$	100.36	$100.5^{+2.4}_{-2.3}$ (−1.7 σ)	$D_M(0.51)$	1975.0	1974^{+21}_{-21} (+1.7 σ)
w_0	−1.017	$−1.020^{+0.064}_{-0.068}$ (+1.8 σ)	$\langle d^2 \rangle^{1/2}$	2.430	$2.431^{+0.059}_{-0.058}$ (−1.6 σ)	$H(0.61)$	95.28	$95.25^{+0.52}_{-0.54}$ (+1.8 σ)
$\ln(10^{10} A_s)$	3.0390	$3.039^{+0.032}_{-0.032}$ (−0.0 σ)	z_{re}	7.57	$7.5^{+1.5}_{-1.6}$ (+0.2 σ)	$D_M(0.61)$	2299.3	2299^{+22}_{-22} (+1.6 σ)
n_s	0.9672	$0.9668^{+0.0082}_{-0.0081}$ (+0.7 σ)	$10^9 A_s$	2.088	$2.088^{+0.068}_{-0.066}$ (−0.0 σ)	$H(2.33)$	235.76	$235.7^{+1.2}_{-1.2}$ (+1.3 σ)
y_{cal}	1.00050	$1.0005^{+0.0049}_{-0.0050}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8774	$1.877^{+0.022}_{-0.022}$ (−0.5 σ)	$D_M(2.33)$	5761.0	5762^{+18}_{-18} (+0.5 σ)
A_{100}^{PS}	233.9	239^{+50}_{-50} (−0.8 σ)	D_{40}	1223.3	1224^{+24}_{-24} (−0.4 σ)	$f\sigma_8(0.15)$	0.4558	$0.456^{+0.017}_{-0.017}$ (−1.7 σ)
A_{143}^{PS}	39.1	39^{+20}_{-20} (−1.2 σ)	D_{220}	5720	5721^{+78}_{-77} (+0.1 σ)	$\sigma_8(0.15)$	0.7508	$0.751^{+0.025}_{-0.025}$ (−1.8 σ)
A_{217}^{PS}	102.1	102^{+30}_{-30} (−1.3 σ)	D_{810}	2535.6	2535^{+27}_{-27} (−0.0 σ)	$f\sigma_8(0.38)$	0.4759	$0.476^{+0.020}_{-0.020}$ (−1.8 σ)
A_{217}^{CIB}	44.4	40^{+10}_{-10} (−1.2 σ)	D_{1420}	816.4	$815.9^{+9.6}_{-9.5}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6657	$0.666^{+0.022}_{-0.022}$ (−1.8 σ)
A_{143}^{tSZ}	6.56	< 7.50 (−0.6 σ)	D_{2000}	230.53	$230.3^{+3.2}_{-3.2}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4751	$0.476^{+0.020}_{-0.020}$ (−1.8 σ)
$r_{143 \times 217}^{PS}$	0.597	$0.66^{+0.25}_{-0.25}$	$n_{s,0.002}$	0.9672	$0.9668^{+0.0082}_{-0.0081}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6231	$0.623^{+0.020}_{-0.020}$ (−1.8 σ)
$r_{143 \times 217}^{CIB}$	0.76	—	Y_P	0.245381	$0.24537^{+0.00011}_{-0.00012}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4704	$0.471^{+0.020}_{-0.020}$ (−1.8 σ)
$\xi^{tSZ \times CIB}$	0.08	—	Y_P^{BBN}	0.246707	$0.24670^{+0.00011}_{-0.00012}$ (+0.8 σ)	$\sigma_8(0.61)$	0.5929	$0.593^{+0.019}_{-0.019}$ (−1.8 σ)
A^{kSZ}	0.1	—	$10^5 D/H$	2.592	$2.595^{+0.056}_{-0.053}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.2990	$0.2992^{+0.0094}_{-0.0095}$ (−1.8 σ)
A_{100}^{dust}	1.014	$1.01^{+0.39}_{-0.38}$	Age/Gyr	13.7863	$13.787^{+0.046}_{-0.046}$ (+1.6 σ)	$\sigma_8(2.33)$	0.3079	$0.3080^{+0.0082}_{-0.0083}$ (−1.8 σ)
A_{143}^{dust}	0.966	$0.96^{+0.35}_{-0.35}$	z_*	1089.897	$1089.91^{+0.49}_{-0.49}$ (−0.8 σ)	f_{2000}^{143}	29.9	30^{+6}_{-6} (−0.4 σ)
A_{217}^{dust}	0.967	$0.97^{+0.20}_{-0.20}$	r_*	144.66	$144.67^{+0.55}_{-0.55}$ (+0.4 σ)	f_{2000}^{217}	106.72	$106.8^{+3.8}_{-3.7}$ (−0.6 σ)
$A_{143 \times 217}^{dust}$	1.011	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04115	$1.04112^{+0.00061}_{-0.00059}$ (+0.2 σ)	$f_{2000}^{143 \times 217}$	31.99	32^{+4}_{-4} (−0.6 σ)
c_{100}	0.99766	$0.9975^{+0.0021}_{-0.0021}$ (−3.3 σ)	$D_M(z_*)/\text{Gpc}$	13.894	$13.896^{+0.052}_{-0.052}$ (+0.4 σ)	χ_{small}^2	395.88	$396.9 (\nu: 1.3)$ (+0.1 σ)
c_{217}	1.00123	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	z_{drag}	1059.78	$1059.77^{+0.62}_{-0.64}$ (+0.7 σ)	χ_{lowl}^2	22.80	$22.94 (\nu: 0.4)$ (−0.3 σ)
c_{TE}	0.9964	$0.9966^{+0.0095}_{-0.0097}$	r_{drag}	147.34	$147.35^{+0.57}_{-0.57}$ (+0.3 σ)	χ_{CamSpec}^2	11499.9	$11514.5 (\nu: 16.0)$
c_{EE}	0.9922	$0.9922^{+0.0098}_{-0.0096}$	k_D	0.14058	$0.14055^{+0.00066}_{-0.00066}$ (−0.0 σ)	χ_{JLA}^2	1034.72	$1035.39 (\nu: 0.4)$
H_0	68.11	$68.2^{+1.7}_{-1.6}$ (−1.7 σ)	$100\theta_D$	0.160841	$0.16085^{+0.00038}_{-0.00036}$ (−0.7 σ)	χ_{6DF}^2	0.002	$0.048 (\nu: 0.0)$
Ω_Λ	0.6935	$0.694^{+0.015}_{-0.015}$ (−1.7 σ)	z_{eq}	3383	3382^{+54}_{-53} (−0.5 σ)	χ_{MGS}^2	1.54	$1.66 (\nu: 0.2)$
Ω_m	0.3065	$0.306^{+0.015}_{-0.015}$ (+1.7 σ)	k_{eq}	0.010324	$0.01032^{+0.00016}_{-0.00016}$ (−0.5 σ)	χ_{DR12BAO}^2	4.10	$4.6 (\nu: 0.6)$
$\Omega_m h^2$	0.14219	$0.1422^{+0.0022}_{-0.0022}$ (−0.5 σ)	$100\theta_{eq}$	0.8167	$0.817^{+0.010}_{-0.0099}$ (+0.6 σ)	χ_{prior}^2	2.2	$7.8 (\nu: 5.9)$ (+0.2 σ)
$\Omega_m h^3$	0.09685	$0.0969^{+0.0030}_{-0.0028}$ (−1.7 σ)	$100\theta_{s,eq}$	0.4512	$0.4512^{+0.0052}_{-0.0051}$ (+0.6 σ)	χ_{BAO}^2	5.64	$6.26 (\nu: 0.5)$
σ_8	0.8120	$0.813^{+0.027}_{-0.027}$ (−1.8 σ)	$H(0.15)$	73.20	$73.2^{+1.0}_{-1.0}$ (−1.7 σ)	χ_{CMB}^2	11918.5	$11934.4 (\nu: 16.2)$ (+1900.9 σ)
S_8	0.8208	$0.820^{+0.027}_{-0.026}$ (+0.9 σ)	$D_M(0.15)$	637.5	637^{+12}_{-12} (+1.7 σ)			

Best-fit $\chi_{\text{eff}}^2 = 12961.06$; $\bar{\chi}_{\text{eff}}^2 = 12983.86$; $R - 1 = 0.00833$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.54 DR12BAO: 4.10 CMB - small_100x143_offlike5_EE_Aplanck_B: 395.88 commander_dx12_v3.2.29: 22.80 CamSpec like_10.7HM_1400_unified: 11499.86 SN - JLA Pantheon18: 1034.72

18.56 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00029}_{-0.00029} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.012} \quad (+1.0\sigma)$	$H(0.38)$	$83.07^{+0.53}_{-0.51} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1194^{+0.0020}_{-0.0021} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.014}_{-0.014} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+20}_{-20} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00061}_{-0.00059} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.020}_{-0.020} \quad (-1.8\sigma)$	$H(0.51)$	$89.68^{+0.46}_{-0.47} \quad (+1.4\sigma)$
τ	$0.054^{+0.014}_{-0.014} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+21}_{-21} \quad (+1.7\sigma)$
w_0	$-1.024^{+0.060}_{-0.063} \quad (+1.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.044}_{-0.044} \quad (-1.5\sigma)$	$H(0.61)$	$95.22^{+0.47}_{-0.50} \quad (+1.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.029}_{-0.028} \quad (+0.2\sigma)$	z_{re}	$7.6^{+1.4}_{-1.4} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+22}_{-22} \quad (+1.6\sigma)$
n_{s}	$0.9663^{+0.0078}_{-0.0078} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.062}_{-0.057} \quad (+0.2\sigma)$	$H(2.33)$	$235.7^{+1.1}_{-1.1} \quad (+1.4\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+17}_{-17} \quad (+0.5\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1226^{+22}_{-22} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013} \quad (-1.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5724^{+78}_{-77} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.754^{+0.021}_{-0.020} \quad (-1.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.016}_{-0.016} \quad (-1.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.0^{+9.6}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.668^{+0.018}_{-0.018} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.45 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.1} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.017}_{-0.016} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9663^{+0.0078}_{-0.0078} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.625^{+0.017}_{-0.017} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.017}_{-0.016} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.016}_{-0.016} \quad (-1.8\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.595^{+0.054}_{-0.053} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.3001^{+0.0079}_{-0.0080} \quad (-1.8\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.786^{+0.045}_{-0.045} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3089^{+0.0069}_{-0.0070} \quad (-1.7\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.93^{+0.47}_{-0.47} \quad (-0.8\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.63^{+0.49}_{-0.49} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.8} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00061}_{-0.00059} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.046}_{-0.047} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.24 \quad (\nu: 0.3)$
c_{217}	$1.0011^{+0.0032}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.77^{+0.62}_{-0.60} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.2) \quad (+0.1\sigma)$
c_{TE}	$0.9966^{+0.0095}_{-0.0097}$	r_{drag}	$147.32^{+0.51}_{-0.52} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.07 \quad (\nu: 0.3) \quad (-0.1\sigma)$
c_{EE}	$0.9921^{+0.0098}_{-0.0097}$	k_{D}	$0.14059^{+0.00062}_{-0.00062} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.1 \quad (\nu: 14.9)$
H_0	$68.2^{+1.6}_{-1.6} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00037}_{-0.00036} \quad (-0.7\sigma)$	χ_{JLA}^2	$1035.35 \quad (\nu: 0.4)$
Ω_{Λ}	$0.694^{+0.014}_{-0.015} \quad (-1.7\sigma)$	z_{eq}	$3386^{+47}_{-47} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.015}_{-0.014} \quad (+1.7\sigma)$	k_{eq}	$0.01033^{+0.00014}_{-0.00014} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.67 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0020}_{-0.0020} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8161^{+0.0089}_{-0.0087} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.60 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0971^{+0.0027}_{-0.0026} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0046}_{-0.0045} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.2\sigma)$
σ_8	$0.815^{+0.022}_{-0.021} \quad (-1.8\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (-1.7\sigma)$	χ_{CMB}^2	$11943.3 \quad (\nu: 16.1) \quad (+1902.5\sigma)$
S_8	$0.823^{+0.021}_{-0.021} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+1.7\sigma)$	χ_{BAO}^2	$6.32 \quad (\nu: 0.4)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12992.76; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.37; R - 1 = 0.01319$$

18.57 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00029}_{-0.00029} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.014}_{-0.014} \quad (+1.0\sigma)$	$H(0.38)$	$83.09^{+0.56}_{-0.54} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0023}_{-0.0023} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.018}_{-0.018} \quad (-1.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1523^{+20}_{-20} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00062}_{-0.00060} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.026}_{-0.026} \quad (-1.8\sigma)$	$H(0.51)$	$89.71^{+0.50}_{-0.51} \quad (+1.4\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.4}_{-2.3} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+21}_{-21} \quad (+1.7\sigma)$
w_0	$-1.020^{+0.063}_{-0.068} \quad (+1.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.057}_{-0.054} \quad (-1.5\sigma)$	$H(0.61)$	$95.26^{+0.52}_{-0.54} \quad (+1.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.026} \quad (+0.1\sigma)$	z_{re}	$< 8.83 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+22}_{-22} \quad (+1.6\sigma)$
n_{s}	$0.9669^{+0.0082}_{-0.0081} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.058}_{-0.054} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+1.2}_{-1.2} \quad (+1.3\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+17}_{-18} \quad (+0.5\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+24}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.017}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5721^{+78}_{-77} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.752^{+0.024}_{-0.024} \quad (-1.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2535^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.020}_{-0.019} \quad (-1.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$815.9^{+9.6}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.667^{+0.021}_{-0.021} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.50 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.020}_{-0.020} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9669^{+0.0082}_{-0.0081} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.624^{+0.020}_{-0.019} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.020}_{-0.019} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.594^{+0.018}_{-0.018} \quad (-1.8\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.594^{+0.056}_{-0.053} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.2996^{+0.0092}_{-0.0090} \quad (-1.8\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.787^{+0.045}_{-0.045} \quad (+1.6\sigma)$	$\sigma_8(2.33)$	$0.3085^{+0.0080}_{-0.0078} \quad (-1.8\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.90^{+0.49}_{-0.49} \quad (-0.8\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.67^{+0.55}_{-0.55} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+3.7}_{-3.7} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.31}_{-0.32}$	$100\theta_*$	$1.04112^{+0.00062}_{-0.00059} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.896^{+0.052}_{-0.052} \quad (+0.4\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (+0.0\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.78^{+0.61}_{-0.64} \quad (+0.7\sigma)$	χ_{lowl}^2	$22.96 \quad (\nu: 0.4) \quad (-0.2\sigma)$
c_{TE}	$0.9965^{+0.0095}_{-0.0097}$	r_{drag}	$147.36^{+0.57}_{-0.57} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.4 \quad (\nu: 15.9)$
c_{EE}	$0.9921^{+0.0097}_{-0.0096}$	k_{D}	$0.14056^{+0.00065}_{-0.00066} \quad (-0.0\sigma)$	χ_{JLA}^2	$1035.39 \quad (\nu: 0.4)$
H_0	$68.2^{+1.6}_{-1.6} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16085^{+0.00037}_{-0.00036} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015} \quad (-1.7\sigma)$	z_{eq}	$3382^{+54}_{-53} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.67 \quad (\nu: 0.2)$
Ω_{m}	$0.306^{+0.015}_{-0.015} \quad (+1.7\sigma)$	k_{eq}	$0.01032^{+0.00016}_{-0.00016} \quad (-0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0022}_{-0.0022} \quad (-0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.817^{+0.010}_{-0.010} \quad (+0.6\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0969^{+0.0029}_{-0.0028} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4513^{+0.0053}_{-0.0051} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.25 \quad (\nu: 0.5)$
σ_8	$0.814^{+0.026}_{-0.025} \quad (-1.8\sigma)$	$H(0.15)$	$73.2^{+1.0}_{-1.0} \quad (-1.7\sigma)$	χ_{CMB}^2	$11934.1 \quad (\nu: 15.9) \quad (+1900.8\sigma)$
S_8	$0.821^{+0.026}_{-0.026} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+1.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12983.61; R - 1 = 0.00895$$

18.58 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00029}_{-0.00029} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.012} \quad (+1.0\sigma)$	$H(0.38)$	$83.08^{+0.53}_{-0.51} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0020}_{-0.0021} \quad (-0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.014}_{-0.014} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1522^{+20}_{-20} \quad (+1.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00061}_{-0.00059} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.987^{+0.020}_{-0.020} \quad (-1.8\sigma)$	$H(0.51)$	$89.68^{+0.46}_{-0.46} \quad (+1.4\sigma)$
τ	$0.055^{+0.012}_{-0.011} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$100.5^{+2.4}_{-2.4} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1974^{+21}_{-21} \quad (+1.7\sigma)$
w_0	$-1.023^{+0.060}_{-0.062} \quad (+1.8\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.043}_{-0.043} \quad (-1.4\sigma)$	$H(0.61)$	$95.23^{+0.47}_{-0.49} \quad (+1.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.024} \quad (+0.2\sigma)$	z_{re}	$< 8.83 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2299^{+22}_{-22} \quad (+1.6\sigma)$
n_{s}	$0.9664^{+0.0078}_{-0.0078} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.054}_{-0.050} \quad (+0.2\sigma)$	$H(2.33)$	$235.7^{+1.1}_{-1.1} \quad (+1.3\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+17}_{-17} \quad (+0.5\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1226^{+22}_{-22} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-1.6\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5724^{+78}_{-77} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.754^{+0.020}_{-0.020} \quad (-1.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2536^{+27}_{-27} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.016}_{-0.016} \quad (-1.8\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.0^{+9.6}_{-9.6} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.669^{+0.018}_{-0.018} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$< 7.45 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.1} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.017}_{-0.016} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9664^{+0.0078}_{-0.0078} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.626^{+0.017}_{-0.017} \quad (-1.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24537^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.473^{+0.017}_{-0.016} \quad (-1.8\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.595^{+0.016}_{-0.016} \quad (-1.8\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.595^{+0.054}_{-0.052} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.3002^{+0.0079}_{-0.0079} \quad (-1.8\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.786^{+0.045}_{-0.045} \quad (+1.5\sigma)$	$\sigma_8(2.33)$	$0.3090^{+0.0069}_{-0.0069} \quad (-1.7\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.92^{+0.46}_{-0.46} \quad (-0.8\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.97^{+0.21}_{-0.20}$	r_*	$144.64^{+0.48}_{-0.49} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.7}_{-3.7} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.32}$	$100\theta_*$	$1.04110^{+0.00061}_{-0.00059} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.893^{+0.046}_{-0.047} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.20 \quad (\nu: 0.2)$
c_{217}	$1.0011^{+0.0032}_{-0.0030} \quad (+4.6\sigma)$	z_{drag}	$1059.78^{+0.61}_{-0.61} \quad (+0.7\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (+0.0\sigma)$
c_{TE}	$0.9965^{+0.0095}_{-0.0097}$	r_{drag}	$147.32^{+0.51}_{-0.51} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.07 \quad (\nu: 0.3) \quad (-0.2\sigma)$
c_{EE}	$0.9921^{+0.0098}_{-0.0097}$	k_{D}	$0.14059^{+0.00061}_{-0.00063} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.0 \quad (\nu: 14.9)$
H_0	$68.2^{+1.6}_{-1.6} \quad (-1.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00036} \quad (-0.7\sigma)$	χ_{JLA}^2	$1035.35 \quad (\nu: 0.4)$
Ω_{Λ}	$0.694^{+0.014}_{-0.015} \quad (-1.7\sigma)$	z_{eq}	$3385^{+46}_{-46} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.047 \quad (\nu: 0.0)$
Ω_{m}	$0.306^{+0.015}_{-0.014} \quad (+1.7\sigma)$	k_{eq}	$0.01033^{+0.00014}_{-0.00014} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.68 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0019}_{-0.0019} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8163^{+0.0089}_{-0.0086} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.58 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.0971^{+0.0027}_{-0.0026} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0046}_{-0.0044} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.2\sigma)$
σ_8	$0.816^{+0.022}_{-0.021} \quad (-1.8\sigma)$	$H(0.15)$	$73.3^{+1.0}_{-1.0} \quad (-1.7\sigma)$	χ_{CMB}^2	$11943.1 \quad (\nu: 15.9) \quad (+1902.4\sigma)$
S_8	$0.823^{+0.021}_{-0.021} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+12}_{-12} \quad (+1.7\sigma)$	χ_{BAO}^2	$6.30 \quad (\nu: 0.4)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12992.59; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.34; R - 1 = 0.01370$$

18.59 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022206	$0.02220^{+0.00038}_{-0.00038}$ $(+0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9958	$0.994^{+0.030}_{-0.031}$ (-1.6σ)	$D_{\mathrm{M}}(0.38)$	1511.7	1512^{+19}_{-18} $(+1.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	0.11980	$0.1197^{+0.0030}_{-0.0030}$ (-0.4σ)	$r_{\mathrm{drag}}h$	102.07	$102.1^{+2.2}_{-2.2}$ (-1.6σ)	$H(0.51)$	89.55	$89.57^{+0.68}_{-0.69}$ $(+1.3\sigma)$
$100\theta_{\mathrm{MC}}$	1.04090	$1.04093^{+0.00085}_{-0.00087}$ $(+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	2.450	$2.448^{+0.066}_{-0.065}$ (-1.2σ)	$D_{\mathrm{M}}(0.51)$	1963.6	1964^{+21}_{-20} $(+1.5\sigma)$
τ	0.0531	$0.053^{+0.016}_{-0.016}$ $(+0.2\sigma)$	z_{re}	7.58	$7.5^{+1.6}_{-1.7}$ $(+0.2\sigma)$	$H(0.61)$	94.98	$95.00^{+0.69}_{-0.70}$ $(+1.6\sigma)$
w_0	-1.067	$-1.064^{+0.067}_{-0.068}$ $(+1.6\sigma)$	$10^9 A_{\mathrm{s}}$	2.092	$2.091^{+0.071}_{-0.067}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2288.8	2289^{+22}_{-22} $(+1.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0408	$3.040^{+0.034}_{-0.033}$ $(+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8814	$1.881^{+0.024}_{-0.023}$ (-0.2σ)	$H(2.33)$	235.31	$235.3^{+1.5}_{-1.5}$ $(+1.2\sigma)$
n_{s}	0.9656	$0.9650^{+0.0091}_{-0.0094}$ $(+0.3\sigma)$	D_{40}	1226.7	1229^{+27}_{-26} (-0.1σ)	$D_{\mathrm{M}}(2.33)$	5763.7	5764^{+24}_{-24} $(+0.6\sigma)$
y_{cal}	1.00039	$1.0005^{+0.0049}_{-0.0048}$ $(+0.1\sigma)$	D_{220}	5716	5721^{+78}_{-78} $(+0.1\sigma)$	$f\sigma_8(0.15)$	0.4626	$0.461^{+0.021}_{-0.020}$ (-1.4σ)
A_{217}^{CIB}	48.5	48^{+10}_{-10} (-0.0σ)	D_{810}	2537.5	2537^{+27}_{-26} $(+0.1\sigma)$	$\sigma_8(0.15)$	0.7670	$0.765^{+0.026}_{-0.026}$ (-1.6σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.34	—	D_{1420}	816.0	$815.3^{+9.8}_{-9.8}$ $(+0.3\sigma)$	$f\sigma_8(0.38)$	0.4872	$0.486^{+0.023}_{-0.023}$ (-1.6σ)
A_{143}^{tSZ}	7.01	$5.1^{+3.7}_{-3.9}$ $(+0.0\sigma)$	D_{2000}	230.24	$230.0^{+3.5}_{-3.4}$ $(+0.1\sigma)$	$\sigma_8(0.38)$	0.6803	$0.679^{+0.022}_{-0.022}$ (-1.6σ)
A_{100}^{PS}	254	262^{+60}_{-50} (-0.0σ)	$n_{\mathrm{s},0.002}$	0.9656	$0.9650^{+0.0091}_{-0.0094}$ $(+0.3\sigma)$	$f\sigma_8(0.51)$	0.4875	$0.486^{+0.023}_{-0.023}$ (-1.6σ)
A_{143}^{PS}	49.3	48^{+20}_{-20} (-0.0σ)	Y_{P}	0.245328	$0.24532^{+0.00016}_{-0.00017}$ $(+0.2\sigma)$	$\sigma_8(0.51)$	0.6365	$0.635^{+0.020}_{-0.021}$ (-1.6σ)
$A_{143 \times 217}^{\mathrm{PS}}$	47.2	43^{+20}_{-20} (-0.0σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246655	$0.24665^{+0.00016}_{-0.00017}$ $(+0.2\sigma)$	$f\sigma_8(0.61)$	0.4832	$0.482^{+0.022}_{-0.022}$ (-1.6σ)
A_{217}^{PS}	119.5	115^{+20}_{-20} (-0.0σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.617	$2.618^{+0.074}_{-0.071}$ (-0.2σ)	$\sigma_8(0.61)$	0.6055	$0.604^{+0.019}_{-0.019}$ (-1.6σ)
A^{kSZ}	0.00	< 8.42 $(+0.0\sigma)$	Age/Gyr	13.774	$13.775^{+0.054}_{-0.052}$ $(+1.5\sigma)$	$f\sigma_8(2.33)$	0.3054	$0.3048^{+0.0093}_{-0.0094}$ (-1.6σ)
$A_{100}^{\mathrm{dustTT}}$	8.92	$8.9^{+3.6}_{-3.6}$ $(+0.0\sigma)$	z_*	1090.11	$1090.11^{+0.64}_{-0.63}$ (-0.3σ)	$\sigma_8(2.33)$	0.3132	$0.3127^{+0.0082}_{-0.0082}$ (-1.6σ)
$A_{143}^{\mathrm{dustTT}}$	10.83	$10.7^{+3.5}_{-3.5}$ $(+0.0\sigma)$	r_*	144.61	$144.65^{+0.73}_{-0.72}$ $(+0.4\sigma)$	f_{2000}^{143}	30.1	31^{+6}_{-6} (-0.0σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	19.5	$18.3^{+6.5}_{-6.4}$ $(+0.0\sigma)$	$100\theta_*$	1.04110	$1.04113^{+0.00084}_{-0.00086}$ $(+0.3\sigma)$	$f_{2000}^{143 \times 217}$	33.09	33^{+4}_{-4} (-0.0σ)
$A_{217}^{\mathrm{dustTT}}$	94.8	93^{+10}_{-10} $(+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.890	$13.894^{+0.069}_{-0.068}$ $(+0.3\sigma)$	f_{2000}^{217}	107.53	$107.9^{+3.7}_{-3.7}$ (-0.0σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (-0.0σ)	z_{drag}	1059.55	$1059.52^{+0.83}_{-0.88}$ $(+0.1\sigma)$	χ_{small}^2	395.89	397.0 $(\nu: 1.6)$ $(+0.1\sigma)$
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$ $(+0.0\sigma)$	r_{drag}	147.33	$147.37^{+0.76}_{-0.75}$ $(+0.3\sigma)$	χ_{lowl}^2	23.08	23.28 $(\nu: 0.5)$ $(+0.0\sigma)$
H_0	69.28	$69.3^{+1.5}_{-1.5}$ (-1.6σ)	k_{D}	0.14049	$0.14044^{+0.00089}_{-0.00092}$ (-0.2σ)	χ_{plik}^2	758.8	771.1 $(\nu: 14.2)$ $(+0.2\sigma)$
Ω_{Λ}	0.7028	$0.703^{+0.013}_{-0.014}$ (-1.6σ)	$100\theta_{\mathrm{D}}$	0.160991	$0.16101^{+0.00051}_{-0.00049}$ (-0.1σ)	$\chi_{\mathrm{H073p45}}^2$	6.30	6.6 $(\nu: 2.7)$
Ω_{m}	0.2972	$0.297^{+0.014}_{-0.013}$ $(+1.6\sigma)$	z_{eq}	3394	3390^{+69}_{-68} (-0.4σ)	χ_{JLA}^2	1036.11	1036.6 $(\nu: 1.8)$
$\Omega_{\mathrm{m}}h^2$	0.14265	$0.1425^{+0.0029}_{-0.0029}$ (-0.4σ)	k_{eq}	0.010358	$0.01035^{+0.00021}_{-0.00021}$ (-0.4σ)	χ_{6DF}^2	0.056	0.098 $(\nu: 0.0)$
$\Omega_{\mathrm{m}}h^3$	0.09884	$0.0987^{+0.0029}_{-0.0030}$ (-1.6σ)	$100\theta_{\mathrm{eq}}$	0.8144	$0.815^{+0.013}_{-0.013}$ $(+0.4\sigma)$	χ_{MGS}^2	2.35	2.41 $(\nu: 0.2)$
σ_8	0.8289	$0.827^{+0.028}_{-0.028}$ (-1.6σ)	$100\theta_{\mathrm{s,eq}}$	0.4501	$0.4504^{+0.0066}_{-0.0065}$ $(+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	4.30	4.78 $(\nu: 0.5)$
S_8	0.8250	$0.823^{+0.032}_{-0.031}$ $(+1.0\sigma)$	$H(0.15)$	73.83	$73.82^{+0.96}_{-0.97}$ (-1.6σ)	χ_{prior}^2	1.4	7.3 $(\nu: 6.6)$ $(+0.0\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4519	$0.451^{+0.017}_{-0.017}$ $(+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	629.6	630^{+11}_{-10} $(+1.6\sigma)$	χ_{BAO}^2	6.70	7.3 $(\nu: 0.7)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6120	$0.611^{+0.021}_{-0.021}$ (-1.5σ)	$H(0.38)$	83.14	$83.15^{+0.67}_{-0.69}$ (-0.8σ)	χ_{CMB}^2	1177.8	1191.4 $(\nu: 14.5)$ $(+0.2\sigma)$

Best-fit $\chi_{\mathrm{eff}}^2 = 2228.28$; $\bar{\chi}_{\mathrm{eff}}^2 = 2249.11$; $R - 1 = 0.00515$
 χ_{eff}^2 : BAO - 6DF: 0.06 MGS: 2.35 DR12BAO: 4.30 CMB - small_100x143.offlike5_EE_Aplanck_B: 395.89 commander_dx12_v3.2.29: 23.08 plik_rd12_HM_v22.TT: 758.84
Hubble - H073p45: 6.30 SN - JLA Pantheon18: 1036.11

18.60 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022224	$0.02221^{+0.00038}_{-0.00038}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9924	$0.993^{+0.022}_{-0.022}$ (−1.6 σ)	$D_{\mathrm{M}}(0.38)$	1510.7	1511^{+19}_{-18} (+1.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.11947	$0.1196^{+0.0025}_{-0.0025}$ (−0.4 σ)	$r_{\mathrm{drag}}h$	102.15	$102.1^{+2.2}_{-2.2}$ (−1.6 σ)	$H(0.51)$	89.62	$89.58^{+0.60}_{-0.61}$ (+1.3 σ)
$100\theta_{\mathrm{MC}}$	1.04093	$1.04093^{+0.00084}_{-0.00086}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.4440	$2.447^{+0.047}_{-0.047}$ (−1.2 σ)	$D_{\mathrm{M}}(0.51)$	1962.3	1963^{+21}_{-20} (+1.5 σ)
τ	0.0529	$0.053^{+0.016}_{-0.015}$ (+0.2 σ)	z_{re}	7.55	$7.6^{+1.5}_{-1.6}$ (+0.2 σ)	$H(0.61)$	95.05	$95.02^{+0.63}_{-0.64}$ (+1.6 σ)
w_0	−1.063	$−1.064^{+0.061}_{-0.062}$ (+1.6 σ)	$10^9 A_{\mathrm{s}}$	2.090	$2.092^{+0.063}_{-0.060}$ (+0.1 σ)	$D_{\mathrm{M}}(0.61)$	2287.2	2288^{+21}_{-21} (+1.5 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0398	$3.040^{+0.030}_{-0.029}$ (+0.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8801	$1.880^{+0.021}_{-0.021}$ (−0.2 σ)	$H(2.33)$	235.16	$235.2^{+1.3}_{-1.3}$ (+1.1 σ)
n_{s}	0.9657	$0.9650^{+0.0084}_{-0.0086}$ (+0.3 σ)	D_{40}	1226.9	1229^{+24}_{-23} (−0.1 σ)	$D_{\mathrm{M}}(2.33)$	5762.1	5763^{+23}_{-23} (+0.6 σ)
y_{cal}	1.00046	$1.0005^{+0.0048}_{-0.0048}$ (+0.1 σ)	D_{220}	5721	5722^{+77}_{-77} (+0.2 σ)	$f\sigma_8(0.15)$	0.4602	$0.461^{+0.015}_{-0.015}$ (−1.4 σ)
A_{217}^{CIB}	50.3	48^{+10}_{-10} (−0.0 σ)	D_{810}	2537.0	2536^{+26}_{-26} (+0.1 σ)	$\sigma_8(0.15)$	0.7646	$0.765^{+0.020}_{-0.021}$ (−1.6 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.09	—	D_{1420}	815.8	$815.3^{+9.8}_{-9.8}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4847	$0.485^{+0.017}_{-0.017}$ (−1.6 σ)
A_{143}^{tSZ}	7.18	$5.1^{+3.8}_{-3.9}$ (+0.0 σ)	D_{2000}	230.14	$229.9^{+3.4}_{-3.4}$ (+0.1 σ)	$\sigma_8(0.38)$	0.6783	$0.679^{+0.018}_{-0.018}$ (−1.6 σ)
A_{100}^{PS}	256	263^{+60}_{-60} (−0.0 σ)	$n_{\mathrm{s},0.002}$	0.9657	$0.9650^{+0.0084}_{-0.0086}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4852	$0.486^{+0.018}_{-0.017}$ (−1.6 σ)
A_{143}^{PS}	45.4	48^{+20}_{-20} (−0.0 σ)	Y_{P}	0.245336	$0.24533^{+0.00016}_{-0.00017}$ (+0.3 σ)	$\sigma_8(0.51)$	0.6348	$0.635^{+0.016}_{-0.017}$ (−1.6 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	40.4	43^{+20}_{-20} (−0.0 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246662	$0.24665^{+0.00016}_{-0.00017}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4810	$0.482^{+0.017}_{-0.017}$ (−1.6 σ)
A_{217}^{PS}	116.4	115^{+20}_{-20} (−0.0 σ)	$10^5 \mathrm{D}/\mathrm{H}$	2.613	$2.616^{+0.073}_{-0.070}$ (−0.3 σ)	$\sigma_8(0.61)$	0.6039	$0.604^{+0.015}_{-0.016}$ (−1.6 σ)
A^{kSZ}	0.00	< 8.44 (+0.0 σ)	Age/Gyr	13.772	$13.774^{+0.054}_{-0.052}$ (+1.5 σ)	$f\sigma_8(2.33)$	0.3046	$0.3047^{+0.0076}_{-0.0077}$ (−1.6 σ)
$A_{100}^{\mathrm{dust}TT}$	8.84	$8.9^{+3.7}_{-3.6}$ (+0.0 σ)	z_*	1090.06	$1090.09^{+0.60}_{-0.58}$ (−0.4 σ)	$\sigma_8(2.33)$	0.3126	$0.3127^{+0.0068}_{-0.0067}$ (−1.6 σ)
$A_{143}^{\mathrm{dust}TT}$	10.79	$10.7^{+3.5}_{-3.5}$ (+0.0 σ)	r_*	144.68	$144.66^{+0.61}_{-0.60}$ (+0.4 σ)	$\chi_{\mathrm{lensing}}^2$	8.67	9.19 (ν : 0.3)
$A_{143 \times 217}^{\mathrm{dust}TT}$	18.9	$18.3^{+6.5}_{-6.5}$ (+0.0 σ)	$100\theta_*$	1.04113	$1.04113^{+0.00083}_{-0.00084}$ (+0.3 σ)	χ_{small}^2	395.85	396.9 (ν : 1.4) (+0.1 σ)
$A_{217}^{\mathrm{dust}TT}$	93.7	94^{+10}_{-10} (+0.0 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.896	$13.895^{+0.059}_{-0.058}$ (+0.4 σ)	χ_{lowl}^2	23.07	23.27 (ν : 0.4) (+0.0 σ)
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$ (−0.0 σ)	z_{drag}	1059.55	$1059.53^{+0.82}_{-0.86}$ (+0.2 σ)	χ_{plik}^2	758.9	770.9 (ν : 13.1) (+0.2 σ)
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.40	$147.38^{+0.66}_{-0.65}$ (+0.3 σ)	$\chi_{\mathrm{H073p45}}^2$	6.23	6.5 (ν : 2.6)
H_0	69.31	$69.3^{+1.4}_{-1.5}$ (−1.6 σ)	k_{D}	0.14044	$0.14043^{+0.00083}_{-0.00084}$ (−0.2 σ)	χ_{JLA}^2	1036.03	1036.6 (ν : 1.7)
Ω_{Λ}	0.7037	$0.703^{+0.013}_{-0.014}$ (−1.6 σ)	$100\theta_{\mathrm{D}}$	0.16098	$0.16100^{+0.00051}_{-0.00049}$ (−0.1 σ)	$\chi_{6\mathrm{DF}}^2$	0.067	0.10 (ν : 0.0)
Ω_{m}	0.2963	$0.297^{+0.014}_{-0.013}$ (+1.6 σ)	z_{eq}	3386	3388^{+56}_{-56} (−0.4 σ)	χ_{MGS}^2	2.43	2.44 (ν : 0.2)
$\Omega_{\mathrm{m}}h^2$	0.14234	$0.1424^{+0.0024}_{-0.0024}$ (−0.4 σ)	k_{eq}	0.010335	$0.01034^{+0.00017}_{-0.00017}$ (−0.4 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.18	4.66 (ν : 0.3)
$\Omega_{\mathrm{m}}h^3$	0.09865	$0.0987^{+0.0026}_{-0.0027}$ (−1.6 σ)	$100\theta_{\mathrm{eq}}$	0.8158	$0.815^{+0.011}_{-0.010}$ (+0.4 σ)	χ_{prior}^2	1.5	7.2 (ν : 6.6) (+0.0 σ)
σ_8	0.8261	$0.827^{+0.022}_{-0.022}$ (−1.7 σ)	$100\theta_{\mathrm{s,eq}}$	0.4508	$0.4506^{+0.0054}_{-0.0053}$ (+0.4 σ)	χ_{CMB}^2	1186.5	1200.2 (ν : 14.2) (+1.8 σ)
S_8	0.8211	$0.822^{+0.024}_{-0.024}$ (+1.0 σ)	$H(0.15)$	73.88	$73.84^{+0.95}_{-0.98}$ (−1.6 σ)	χ_{BAO}^2	6.68	7.2 (ν : 0.6)
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4497	$0.450^{+0.013}_{-0.013}$ (+1.0 σ)	$D_{\mathrm{M}}(0.15)$	629.3	630^{+11}_{-10} (+1.6 σ)			
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6095	$0.610^{+0.015}_{-0.015}$ (−1.6 σ)	$H(0.38)$	83.21	$83.17^{+0.62}_{-0.63}$ (−0.7 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2237.00$; $\Delta\chi_{\mathrm{eff}}^2 = -4.01$; $\bar{\chi}_{\mathrm{eff}}^2 = 2257.74$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -3.52$; $R - 1 = 0.00918$
 χ_{eff}^2 : BAO - 6DF: 0.07 (Δ 0.07) MGS: 2.43 (Δ 0.68) DR12BAO: 4.18 (Δ 0.75) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.68 (Δ -0.32) small_100x143_offlike5_EE_Aplanck: 395.85 (Δ -1.04) commander_dx12_v3.2_29: 23.07 (Δ 0.47) plik_rd12_HM_v22_TT: 758.91 (Δ -1.93) Hubble - H073p45: 6.23 (Δ -4.09) SN - JLA Pantheon18: 1036.03 (Δ 1.24)

18.61 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02221^{+0.00038}_{-0.00038} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.995^{+0.030}_{-0.030} \quad (-1.5\sigma)$	$D_M(0.38)$	$1512^{+19}_{-18} \quad (+1.6\sigma)$
$\Omega_c h^2$	$0.1196^{+0.0029}_{-0.0030} \quad (-0.4\sigma)$	$r_{\text{drag}} h$	$102.1^{+2.2}_{-2.2} \quad (-1.6\sigma)$	$H(0.51)$	$89.58^{+0.67}_{-0.68} \quad (+1.3\sigma)$
$100\theta_{\text{MC}}$	$1.04094^{+0.00086}_{-0.00086} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.065}_{-0.062} \quad (-1.2\sigma)$	$D_M(0.51)$	$1964^{+21}_{-20} \quad (+1.5\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.93 \quad (+0.4\sigma)$	$H(0.61)$	$95.01^{+0.69}_{-0.70} \quad (+1.6\sigma)$
w_0	$-1.064^{+0.067}_{-0.068} \quad (+1.6\sigma)$	$10^9 A_s$	$2.097^{+0.061}_{-0.055} \quad (+0.3\sigma)$	$D_M(0.61)$	$2289^{+22}_{-21} \quad (+1.5\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.029}_{-0.026} \quad (+0.3\sigma)$	$10^9 A_s e^{-2\tau}$	$1.881^{+0.024}_{-0.023} \quad (-0.2\sigma)$	$H(2.33)$	$235.3^{+1.5}_{-1.5} \quad (+1.2\sigma)$
n_s	$0.9651^{+0.0090}_{-0.0093} \quad (+0.4\sigma)$	D_{40}	$1229^{+27}_{-26} \quad (-0.1\sigma)$	$D_M(2.33)$	$5763^{+24}_{-24} \quad (+0.6\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5721^{+79}_{-79} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.020}_{-0.020} \quad (-1.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{810}	$2536^{+26}_{-27} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.766^{+0.026}_{-0.026} \quad (-1.6\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815.3^{+9.8}_{-9.8} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.486^{+0.023}_{-0.022} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{2000}	$230.0^{+3.4}_{-3.5} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.680^{+0.022}_{-0.022} \quad (-1.6\sigma)$
A_{100}^{PS}	$262^{+60}_{-50} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.9651^{+0.0090}_{-0.0093} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.487^{+0.023}_{-0.023} \quad (-1.6\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.636^{+0.020}_{-0.020} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.24665^{+0.00016}_{-0.00017} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.482^{+0.022}_{-0.022} \quad (-1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \text{D}/\text{H}$	$2.617^{+0.073}_{-0.071} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.605^{+0.019}_{-0.019} \quad (-1.6\sigma)$
A^{kSZ}	$< 8.39 \quad (-0.0\sigma)$	Age/Gyr	$13.774^{+0.054}_{-0.052} \quad (+1.5\sigma)$	$f\sigma_8(2.33)$	$0.3051^{+0.0091}_{-0.0091} \quad (-1.6\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	z_*	$1090.09^{+0.63}_{-0.63} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3131^{+0.0079}_{-0.0078} \quad (-1.6\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.66^{+0.73}_{-0.72} \quad (+0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.5}_{-6.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.04114^{+0.00085}_{-0.00085} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.894^{+0.070}_{-0.068} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.7} \quad (-0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.53^{+0.82}_{-0.86} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.38^{+0.77}_{-0.74} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.29 \quad (\nu: 0.5) \quad (+0.0\sigma)$
H_0	$69.3^{+1.5}_{-1.5} \quad (-1.6\sigma)$	k_{D}	$0.14044^{+0.00089}_{-0.00092} \quad (-0.2\sigma)$	χ_{plik}^2	$770.9 \quad (\nu: 14.0) \quad (+0.2\sigma)$
Ω_Λ	$0.703^{+0.013}_{-0.014} \quad (-1.6\sigma)$	$100\theta_{\text{D}}$	$0.16100^{+0.00051}_{-0.00048} \quad (-0.1\sigma)$	χ_{H073p45}^2	$6.6 \quad (\nu: 2.7)$
Ω_{m}	$0.297^{+0.014}_{-0.013} \quad (+1.6\sigma)$	z_{eq}	$3389^{+68}_{-69} \quad (-0.4\sigma)$	χ_{JLA}^2	$1036.6 \quad (\nu: 1.8)$
$\Omega_{\text{m}} h^2$	$0.1425^{+0.0028}_{-0.0029} \quad (-0.4\sigma)$	k_{eq}	$0.01034^{+0.00021}_{-0.00021} \quad (-0.4\sigma)$	χ_{6DF}^2	$0.099 \quad (\nu: 0.0)$
$\Omega_{\text{m}} h^3$	$0.0987^{+0.0029}_{-0.0030} \quad (-1.6\sigma)$	$100\theta_{\text{eq}}$	$0.815^{+0.013}_{-0.012} \quad (+0.4\sigma)$	χ_{MGS}^2	$2.42 \quad (\nu: 0.2)$
σ_8	$0.828^{+0.028}_{-0.028} \quad (-1.6\sigma)$	$100\theta_{\text{s,eq}}$	$0.4505^{+0.0066}_{-0.0064} \quad (+0.4\sigma)$	χ_{DR12BAO}^2	$4.76 \quad (\nu: 0.5)$
S_8	$0.824^{+0.032}_{-0.031} \quad (+1.0\sigma)$	$H(0.15)$	$73.82^{+0.96}_{-0.97} \quad (-1.6\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.6) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$D_M(0.15)$	$630^{+11}_{-10} \quad (+1.6\sigma)$	χ_{BAO}^2	$7.3 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.611^{+0.021}_{-0.021} \quad (-1.5\sigma)$	$H(0.38)$	$83.16^{+0.67}_{-0.68} \quad (-0.8\sigma)$	χ_{CMB}^2	$1191.1 \quad (\nu: 14.1) \quad (+0.2\sigma)$

$$\bar{\chi}_{\text{eff}}^2 = 2248.83; R - 1 = 0.00554$$

18.62 base_w_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02222^{+0.00037}_{-0.00038} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$102.1^{+2.2}_{-2.2} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1963^{+21}_{-20} \quad (+1.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1195^{+0.0024}_{-0.0024} \quad (-0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.046}_{-0.046} \quad (-1.2\sigma)$	$H(0.61)$	$95.04^{+0.62}_{-0.62} \quad (+1.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00085}_{-0.00086} \quad (+0.3\sigma)$	z_{re}	$< 8.86 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2288^{+21}_{-21} \quad (+1.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.055}_{-0.050} \quad (+0.2\sigma)$	$H(2.33)$	$235.2^{+1.3}_{-1.3} \quad (+1.1\sigma)$
w_0	$-1.062^{+0.060}_{-0.060} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+23}_{-23} \quad (+0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.026}_{-0.024} \quad (+0.2\sigma)$	D_{40}	$1228^{+24}_{-23} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.015}_{-0.015} \quad (-1.4\sigma)$
n_{s}	$0.9652^{+0.0082}_{-0.0085} \quad (+0.4\sigma)$	D_{220}	$5722^{+77}_{-78} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.765^{+0.020}_{-0.020} \quad (-1.6\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.485^{+0.017}_{-0.017} \quad (-1.6\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.0\sigma)$	D_{1420}	$815.3^{+9.7}_{-9.9} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.679^{+0.018}_{-0.018} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$230.0^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.486^{+0.018}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$5.2^{+3.8}_{-3.9} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9652^{+0.0082}_{-0.0085} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.635^{+0.016}_{-0.016} \quad (-1.6\sigma)$
A_{100}^{PS}	$262^{+60}_{-60} \quad (-0.0\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.482^{+0.017}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.604^{+0.015}_{-0.015} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.615^{+0.072}_{-0.069} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.3049^{+0.0075}_{-0.0077} \quad (-1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.773^{+0.054}_{-0.052} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3129^{+0.0067}_{-0.0066} \quad (-1.6\sigma)$
A^{kSZ}	$< 8.42 \quad (-0.0\sigma)$	z_*	$1090.07^{+0.59}_{-0.57} \quad (-0.4\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.68^{+0.61}_{-0.59} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	$100\theta_*$	$1.04114^{+0.00084}_{-0.00084} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.896^{+0.059}_{-0.058} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.17 \quad (\nu: 0.3)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.54^{+0.81}_{-0.87} \quad (+0.2\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (+0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.40^{+0.66}_{-0.65} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.26 \quad (\nu: 0.4) \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.14042^{+0.00083}_{-0.00084} \quad (-0.3\sigma)$	χ_{plik}^2	$770.7 \quad (\nu: 13.0) \quad (+0.1\sigma)$
H_0	$69.3^{+1.5}_{-1.5} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16099^{+0.00050}_{-0.00048} \quad (-0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.5 \quad (\nu: 2.6)$
Ω_{Λ}	$0.703^{+0.013}_{-0.014} \quad (-1.6\sigma)$	z_{eq}	$3386^{+55}_{-55} \quad (-0.5\sigma)$	χ_{JLA}^2	$1036.5 \quad (\nu: 1.6)$
Ω_{m}	$0.297^{+0.014}_{-0.013} \quad (+1.6\sigma)$	k_{eq}	$0.01034^{+0.00017}_{-0.00017} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.10 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1424^{+0.0023}_{-0.0023} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.010}_{-0.010} \quad (+0.5\sigma)$	χ_{MGS}^2	$2.46 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}}h^3$	$0.0986^{+0.0026}_{-0.0027} \quad (-1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4508^{+0.0054}_{-0.0052} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.63 \quad (\nu: 0.3)$
σ_8	$0.827^{+0.022}_{-0.022} \quad (-1.6\sigma)$	$H(0.15)$	$73.85^{+0.95}_{-0.98} \quad (-1.6\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.6) \quad (+0.0\sigma)$
S_8	$0.822^{+0.024}_{-0.023} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$630^{+11}_{-10} \quad (+1.6\sigma)$	χ_{CMB}^2	$1200.0 \quad (\nu: 13.9) \quad (+1.8\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$H(0.38)$	$83.19^{+0.61}_{-0.61} \quad (-0.7\sigma)$	χ_{BAO}^2	$7.2 \quad (\nu: 0.6)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.015}_{-0.015} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+19}_{-18} \quad (+1.6\sigma)$		
$\sigma_8/h^{0.5}$	$0.994^{+0.022}_{-0.022} \quad (-1.6\sigma)$	$H(0.51)$	$89.60^{+0.59}_{-0.60} \quad (+1.3\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2257.48; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -3.69; R - 1 = 0.01061$$

18.63 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022427	$0.02240^{+0.00027}_{-0.00027}$ (+1.1 σ)	σ_8	0.8277	$0.828^{+0.025}_{-0.025}$ (−1.6 σ)	$D_M(0.15)$	628.7	629^{+10}_{-11} (+1.6 σ)
$\Omega_c h^2$	0.11971	$0.1198^{+0.0023}_{-0.0023}$ (−0.3 σ)	S_8	0.8233	$0.824^{+0.026}_{-0.026}$ (+1.0 σ)	$H(0.38)$	83.33	$83.29^{+0.55}_{-0.55}$ (−0.6 σ)
$100\theta_{MC}$	1.04099	$1.04097^{+0.00059}_{-0.00059}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4510	$0.451^{+0.014}_{-0.014}$ (+1.0 σ)	$D_M(0.38)$	1509.1	1510^{+17}_{-18} (+1.5 σ)
τ	0.0546	$0.055^{+0.016}_{-0.015}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6109	$0.612^{+0.017}_{-0.017}$ (−1.5 σ)	$H(0.51)$	89.75	$89.71^{+0.51}_{-0.52}$ (+1.4 σ)
w_0	−1.061	$−1.063^{+0.059}_{-0.061}$ (+1.6 σ)	$\sigma_8/h^{0.5}$	0.9939	$0.995^{+0.025}_{-0.025}$ (−1.5 σ)	$D_M(0.51)$	1959.9	1961^{+19}_{-19} (+1.5 σ)
$\ln(10^{10} A_s)$	3.0442	$3.045^{+0.034}_{-0.031}$ (+0.4 σ)	$r_{drag} h$	102.02	$102.0^{+2.2}_{-2.1}$ (−1.6 σ)	$H(0.61)$	95.20	$95.16^{+0.54}_{-0.54}$ (+1.7 σ)
n_s	0.9666	$0.9658^{+0.0078}_{-0.0079}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.448	$2.451^{+0.056}_{-0.055}$ (−1.1 σ)	$D_M(0.61)$	2284.3	2285^{+20}_{-20} (+1.5 σ)
y_{cal}	1.00033	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.68	$7.7^{+1.6}_{-1.6}$ (+0.4 σ)	$H(2.33)$	235.55	$235.6^{+1.2}_{-1.2}$ (+1.3 σ)
A_{217}^{CIB}	47.0	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.099	$2.101^{+0.071}_{-0.065}$ (+0.4 σ)	$D_M(2.33)$	5753.4	5755^{+17}_{-17} (+0.2 σ)
$\xi^{tSZ \times CIB}$	0.52	—	$10^9 A_s e^{-2\tau}$	1.8821	$1.882^{+0.022}_{-0.022}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4613	$0.462^{+0.016}_{-0.016}$ (−1.4 σ)
A_{143}^{tSZ}	7.14	$5.5^{+3.7}_{-3.7}$ (+0.2 σ)	D_{40}	1227.2	1229^{+24}_{-24} (−0.0 σ)	$\sigma_8(0.15)$	0.7659	$0.767^{+0.024}_{-0.023}$ (−1.6 σ)
A_{100}^{PS}	249	258^{+50}_{-50} (−0.2 σ)	D_{220}	5734	5735^{+76}_{-74} (+0.5 σ)	$f\sigma_8(0.38)$	0.4856	$0.486^{+0.019}_{-0.019}$ (−1.6 σ)
A_{143}^{PS}	48.8	45^{+20}_{-20} (−0.4 σ)	D_{810}	2539.9	2539^{+26}_{-27} (+0.3 σ)	$\sigma_8(0.38)$	0.6795	$0.680^{+0.021}_{-0.020}$ (−1.6 σ)
$A_{143 \times 217}^{PS}$	49.7	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.2	$817.6^{+9.3}_{-9.3}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4860	$0.487^{+0.019}_{-0.019}$ (−1.6 σ)
A_{217}^{PS}	120.0	115^{+20}_{-20} (+0.0 σ)	D_{2000}	231.33	$231.1^{+3.1}_{-3.0}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6359	$0.636^{+0.019}_{-0.019}$ (−1.6 σ)
A^{kSZ}	0.01	< 7.93 (−0.2 σ)	$n_{s,0.002}$	0.9666	$0.9658^{+0.0078}_{-0.0079}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4818	$0.482^{+0.019}_{-0.019}$ (−1.6 σ)
A_{100}^{dustTT}	8.85	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	Y_P	0.245418	$0.24541^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(0.61)$	0.6050	$0.605^{+0.018}_{-0.017}$ (−1.6 σ)
A_{143}^{dustTT}	11.02	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.246745	$0.24673^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3052	$0.3053^{+0.0088}_{-0.0086}$ (−1.6 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	$10^5 D/H$	2.575	$2.580^{+0.051}_{-0.049}$ (−1.1 σ)	$\sigma_8(2.33)$	0.3132	$0.3134^{+0.0079}_{-0.0075}$ (−1.6 σ)
A_{217}^{dustTT}	95.0	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.7518	$13.755^{+0.041}_{-0.041}$ (+1.3 σ)	f_{2000}^{143}	28.7	29^{+5}_{-5} (−0.6 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.075}$	z_*	1089.821	$1089.86^{+0.48}_{-0.48}$ (−0.9 σ)	$f_{2000}^{143 \times 217}$	31.94	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 143}^{dustTE}$	0.134	$0.135^{+0.057}_{-0.058}$	r_*	144.46	$144.47^{+0.52}_{-0.52}$ (−0.0 σ)	f_{2000}^{217}	106.43	$106.9^{+3.4}_{-3.4}$ (−0.6 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04117	$1.04115^{+0.00059}_{-0.00058}$ (+0.3 σ)	χ_{small}^2	396.06	397.2 (ν : 2.0) (+0.2 σ)
A_{143}^{dustTE}	0.224	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8750	$13.876^{+0.049}_{-0.049}$ (−0.1 σ)	χ_{lowl}^2	23.05	23.25 (ν : 0.4) (+0.0 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.05	$1059.99^{+0.55}_{-0.56}$ (+1.2 σ)	χ_{plik}^2	2344.5	2359.1 (ν : 17.0) (+293.4 σ)
A_{217}^{dustTE}	2.09	$2.08^{+0.53}_{-0.53}$	r_{drag}	147.10	$147.12^{+0.53}_{-0.53}$ (−0.2 σ)	$\chi_{H073p45}^2$	6.09	6.3 (ν : 2.5)
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14090	$0.14086^{+0.00060}_{-0.00059}$ (+0.6 σ)	χ_{JLA}^2	1035.90	1036.5 (ν : 1.8)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160700	$0.16073^{+0.00034}_{-0.00033}$ (−1.1 σ)	χ_{6DF}^2	0.055	0.09 (ν : 0.0)
H_0	69.35	$69.4^{+1.5}_{-1.4}$ (−1.6 σ)	z_{eq}	3397	3398^{+52}_{-52} (−0.2 σ)	χ_{MGS}^2	2.35	2.40 (ν : 0.2)
Ω_Λ	0.7031	$0.703^{+0.013}_{-0.013}$ (−1.6 σ)	k_{eq}	0.010367	$0.01037^{+0.00016}_{-0.00016}$ (−0.2 σ)	$\chi_{DR12BAO}^2$	4.21	4.65 (ν : 0.3)
Ω_m	0.2969	$0.297^{+0.013}_{-0.013}$ (+1.6 σ)	$100\theta_{eq}$	0.8145	$0.8143^{+0.0098}_{-0.0095}$ (+0.3 σ)	χ_{prior}^2	1.7	11.5 (ν : 10.2) (+1.2 σ)
$\Omega_m h^2$	0.14278	$0.1428^{+0.0022}_{-0.0022}$ (−0.2 σ)	$100\theta_{s,eq}$	0.44997	$0.4499^{+0.0050}_{-0.0049}$ (+0.3 σ)	χ_{BAO}^2	6.61	7.1 (ν : 0.6)
$\Omega_m h^3$	0.09902	$0.0991^{+0.0027}_{-0.0026}$ (−1.6 σ)	$H(0.15)$	73.95	$73.93^{+0.95}_{-0.91}$ (−1.5 σ)	χ_{CMB}^2	2763.6	2779.5 (ν : 16.6) (+281.2 σ)

Best-fit $\chi_{eff}^2 = 3813.86$; $\bar{\chi}_{eff}^2 = 3841.02$; $R - 1 = 0.00783$

χ_{eff}^2 : BAO - 6DF: 0.06 MGS: 2.35 DR12BAO: 4.21 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 commander_dx12_v3_2_29: 23.05 plik_rd12_HM_v22b_TTTEEE: 2344.47 Hubble - H073p45: 6.09 SN - JLA Pantheon18: 1035.90

18.64 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022427	$0.02241^{+0.00027}_{-0.00027}$ (+1.2 σ)	σ_8	0.8281	$0.827^{+0.021}_{-0.021}$ (−1.6 σ)	$D_M(0.15)$	628.7	629^{+10}_{-11} (+1.6 σ)
$\Omega_c h^2$	0.11967	$0.1197^{+0.0020}_{-0.0020}$ (−0.4 σ)	S_8	0.8237	$0.823^{+0.021}_{-0.020}$ (+1.0 σ)	$H(0.38)$	83.33	$83.32^{+0.52}_{-0.52}$ (−0.6 σ)
$100\theta_{MC}$	1.04098	$1.04098^{+0.00059}_{-0.00058}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4512	$0.451^{+0.011}_{-0.011}$ (+1.0 σ)	$D_M(0.38)$	1509.1	1509^{+17}_{-18} (+1.5 σ)
τ	0.0552	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6112	$0.611^{+0.014}_{-0.014}$ (−1.5 σ)	$H(0.51)$	89.755	$89.74^{+0.47}_{-0.47}$ (+1.5 σ)
w_0	−1.060	$−1.061^{+0.056}_{-0.057}$ (+1.6 σ)	$\sigma_8/h^{0.5}$	0.9944	$0.993^{+0.020}_{-0.020}$ (−1.6 σ)	$D_M(0.51)$	1959.9	1960^{+19}_{-19} (+1.5 σ)
$\ln(10^{10} A_s)$	3.0457	$3.044^{+0.029}_{-0.028}$ (+0.3 σ)	$r_{drag} h$	102.02	$102.1^{+2.3}_{-2.1}$ (−1.6 σ)	$H(0.61)$	95.199	$95.18^{+0.49}_{-0.49}$ (+1.7 σ)
n_s	0.9667	$0.9660^{+0.0075}_{-0.0075}$ (+0.5 σ)	$\langle d^2 \rangle^{1/2}$	2.4493	$2.448^{+0.044}_{-0.042}$ (−1.2 σ)	$D_M(0.61)$	2284.3	2285^{+20}_{-20} (+1.4 σ)
y_{cal}	1.00050	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	z_{re}	7.75	$7.7^{+1.4}_{-1.5}$ (+0.3 σ)	$H(2.33)$	235.53	$235.5^{+1.1}_{-1.1}$ (+1.3 σ)
A_{217}^{CIB}	46.6	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s$	2.103	$2.099^{+0.062}_{-0.058}$ (+0.3 σ)	$D_M(2.33)$	5753.5	5754^{+17}_{-17} (+0.2 σ)
$\xi^{tSZ \times CIB}$	0.52	—	$10^9 A_s e^{-2\tau}$	1.8827	$1.882^{+0.021}_{-0.021}$ (−0.1 σ)	$f\sigma_8(0.15)$	0.4614	$0.461^{+0.013}_{-0.013}$ (−1.4 σ)
A_{143}^{tSZ}	7.19	$5.5^{+3.7}_{-3.7}$ (+0.2 σ)	D_{40}	1227.5	1229^{+23}_{-22} (−0.1 σ)	$\sigma_8(0.15)$	0.7664	$0.766^{+0.020}_{-0.019}$ (−1.6 σ)
A_{100}^{PS}	249	258^{+50}_{-50} (−0.2 σ)	D_{220}	5736	5736^{+77}_{-75} (+0.5 σ)	$f\sigma_8(0.38)$	0.4858	$0.485^{+0.015}_{-0.015}$ (−1.6 σ)
A_{143}^{PS}	48.4	45^{+20}_{-20} (−0.4 σ)	D_{810}	2540.8	2539^{+26}_{-26} (+0.3 σ)	$\sigma_8(0.38)$	0.6799	$0.679^{+0.017}_{-0.017}$ (−1.6 σ)
$A_{143 \times 217}^{PS}$	49.5	42^{+20}_{-20} (−0.1 σ)	D_{1420}	818.5	$817.5^{+9.2}_{-9.4}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4862	$0.486^{+0.016}_{-0.015}$ (−1.6 σ)
A_{217}^{PS}	120.6	115^{+20}_{-20} (−0.0 σ)	D_{2000}	231.43	$231.1^{+3.0}_{-3.0}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6362	$0.636^{+0.016}_{-0.016}$ (−1.6 σ)
A^{kSZ}	0.01	< 7.95 (−0.2 σ)	$n_{s,0.002}$	0.9667	$0.9660^{+0.0075}_{-0.0075}$ (+0.5 σ)	$f\sigma_8(0.61)$	0.4820	$0.482^{+0.016}_{-0.016}$ (−1.6 σ)
A_{100}^{dustTT}	8.82	$8.9^{+3.5}_{-3.6}$ (+0.0 σ)	Y_P	0.245418	$0.24541^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(0.61)$	0.6053	$0.605^{+0.015}_{-0.015}$ (−1.6 σ)
A_{143}^{dustTT}	10.97	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	Y_P^{BBN}	0.246745	$0.24674^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(2.33)$	0.3053	$0.3050^{+0.0075}_{-0.0073}$ (−1.6 σ)
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	$10^5 D/H$	2.5749	$2.579^{+0.051}_{-0.048}$ (−1.2 σ)	$\sigma_8(2.33)$	0.3134	$0.3131^{+0.0068}_{-0.0065}$ (−1.6 σ)
A_{217}^{dustTT}	95.3	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.7523	$13.754^{+0.041}_{-0.042}$ (+1.3 σ)	$\chi^2_{lensing}$	8.70	9.09 (ν : 0.2)
A_{100}^{dustTE}	0.114	$0.114^{+0.074}_{-0.075}$	z_*	1089.818	$1089.84^{+0.45}_{-0.45}$ (−1.0 σ)	χ^2_{small}	396.19	397.0 (ν : 1.5) (+0.1 σ)
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.057}_{-0.058}$	r_*	144.472	$144.49^{+0.47}_{-0.46}$ (+0.0 σ)	χ^2_{lowl}	23.05	23.20 (ν : 0.3) (−0.0 σ)
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.16}_{-0.17}$	$100\theta_*$	1.04116	$1.04116^{+0.00058}_{-0.00058}$ (+0.3 σ)	χ^2_{plik}	2344.4	2359.1 (ν : 16.3) (+293.4 σ)
A_{143}^{dustTE}	0.225	$0.22^{+0.11}_{-0.10}$	$D_M(z_*)/Gpc$	13.8761	$13.878^{+0.045}_{-0.045}$ (−0.0 σ)	$\chi^2_{H073p45}$	6.10	6.3 (ν : 2.5)
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.16}$	z_{drag}	1060.05	$1060.00^{+0.58}_{-0.57}$ (+1.2 σ)	χ^2_{JLA}	1035.89	1036.5 (ν : 1.7)
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.53}$	r_{drag}	147.114	$147.14^{+0.48}_{-0.47}$ (−0.2 σ)	χ^2_{6DF}	0.055	0.097 (ν : 0.0)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14089	$0.14085^{+0.00056}_{-0.00056}$ (+0.5 σ)	χ^2_{MGS}	2.35	2.42 (ν : 0.2)
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.160699	$0.16072^{+0.00034}_{-0.00033}$ (−1.2 σ)	$\chi^2_{DR12BAO}$	4.20	4.58 (ν : 0.2)
H_0	69.35	$69.4^{+1.5}_{-1.4}$ (−1.6 σ)	z_{eq}	3395.7	3395^{+46}_{-45} (−0.3 σ)	χ^2_{prior}	1.6	11.6 (ν : 10.2) (+1.2 σ)
Ω_Λ	0.7032	$0.703^{+0.013}_{-0.013}$ (−1.6 σ)	k_{eq}	0.010364	$0.01036^{+0.00014}_{-0.00014}$ (−0.3 σ)	χ^2_{CMB}	2772.3	2788.3 (ν : 16.7) (+282.8 σ)
Ω_m	0.2968	$0.297^{+0.013}_{-0.013}$ (+1.6 σ)	$100\theta_{eq}$	0.8147	$0.8148^{+0.0086}_{-0.0085}$ (+0.3 σ)	χ^2_{BAO}	6.60	7.1 (ν : 0.6)
$\Omega_m h^2$	0.14274	$0.1427^{+0.0019}_{-0.0019}$ (−0.3 σ)	$100\theta_{s,eq}$	0.45005	$0.4501^{+0.0044}_{-0.0044}$ (+0.3 σ)			
$\Omega_m h^3$	0.09899	$0.0990^{+0.0025}_{-0.0024}$ (−1.6 σ)	$H(0.15)$	73.95	$73.95^{+0.95}_{-0.91}$ (−1.5 σ)			

Best-fit $\chi^2_{eff} = 3822.55$; $\Delta\chi^2_{eff} = -4.28$; $\bar{\chi}^2_{eff} = 3849.70$; $\Delta\bar{\chi}^2_{eff} = -3.39$; $R - 1 = 0.00999$
 χ^2_{eff} : BAO - 6DF: 0.06 (Δ 0.05) MGS: 2.35 (Δ 0.81) DR12BAO: 4.20 (Δ 0.51) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.70 (Δ -0.04) small_100x143_offlike5_EE_Aplanck. 396.19 (Δ -0.73) commander_dx12_v3.2.29: 23.05 (Δ 0.37) plik_rd12_HM.v22b_TTTEEE: 2344.38 (Δ -1.80) Hubble - H073p45: 6.10 (Δ -4.54) SN - JLA Pantheon18: 1035.89 (Δ 1.05)

18.65 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00027}_{-0.00027} \quad (+1.2\sigma)$	σ_8	$0.829^{+0.025}_{-0.024} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+10}_{-10} \quad (+1.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1198^{+0.0023}_{-0.0023} \quad (-0.3\sigma)$	S_8	$0.825^{+0.026}_{-0.025} \quad (+1.1\sigma)$	$H(0.38)$	$83.30^{+0.54}_{-0.55} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04097^{+0.00059}_{-0.00059} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.014} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1510^{+18}_{-18} \quad (+1.5\sigma)$
τ	$0.056^{+0.014}_{-0.012} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.017}_{-0.017} \quad (-1.5\sigma)$	$H(0.51)$	$89.72^{+0.51}_{-0.52} \quad (+1.4\sigma)$
w_0	$-1.062^{+0.059}_{-0.061} \quad (+1.6\sigma)$	$\sigma_8/h^{0.5}$	$0.996^{+0.025}_{-0.024} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1961^{+19}_{-19} \quad (+1.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.029}_{-0.027} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$102.0^{+2.2}_{-2.1} \quad (-1.6\sigma)$	$H(0.61)$	$95.16^{+0.53}_{-0.53} \quad (+1.7\sigma)$
n_{s}	$0.9659^{+0.0078}_{-0.0079} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.453^{+0.055}_{-0.053} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2285^{+20}_{-20} \quad (+1.5\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	z_{re}	$< 9.03 \quad (+0.5\sigma)$	$H(2.33)$	$235.6^{+1.2}_{-1.2} \quad (+1.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.062}_{-0.057} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5755^{+17}_{-17} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016} \quad (-1.4\sigma)$
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.7} \quad (+0.2\sigma)$	D_{40}	$1229^{+24}_{-24} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.767^{+0.023}_{-0.023} \quad (-1.6\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{220}	$5735^{+76}_{-74} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.487^{+0.019}_{-0.018} \quad (-1.6\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{810}	$2539^{+26}_{-27} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.681^{+0.020}_{-0.020} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$817.6^{+9.3}_{-9.4} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.487^{+0.019}_{-0.019} \quad (-1.6\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.0} \quad (+0.8\sigma)$	$\sigma_8(0.51)$	$0.637^{+0.019}_{-0.018} \quad (-1.6\sigma)$
A^{kSZ}	$< 7.90 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9659^{+0.0078}_{-0.0079} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.483^{+0.019}_{-0.019} \quad (-1.6\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.5}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.24541^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$\sigma_8(0.61)$	$0.606^{+0.018}_{-0.017} \quad (-1.6\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.4}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011} \quad (+1.1\sigma)$	$f\sigma_8(2.33)$	$0.3056^{+0.0087}_{-0.0084} \quad (-1.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$10^5 \mathrm{D}/\mathrm{H}$	$2.580^{+0.051}_{-0.049} \quad (-1.1\sigma)$	$\sigma_8(2.33)$	$0.3137^{+0.0078}_{-0.0073} \quad (-1.6\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$\mathrm{Age}/\mathrm{Gyr}$	$13.755^{+0.041}_{-0.041} \quad (+1.3\sigma)$	f_{2000}^{143}	$29^{+5}_{-5} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.075}$	z_*	$1089.86^{+0.48}_{-0.48} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.058}$	r_*	$144.47^{+0.52}_{-0.52} \quad (-0.0\sigma)$	f_{2000}^{217}	$106.8^{+3.4}_{-3.4} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04115^{+0.00059}_{-0.00058} \quad (+0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.1) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.876^{+0.049}_{-0.049} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.26 \quad (\nu: 0.4) \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1060.00^{+0.55}_{-0.56} \quad (+1.2\sigma)$	χ_{plik}^2	$2358.9 \quad (\nu: 16.7) \quad (+293.3\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	r_{drag}	$147.12^{+0.53}_{-0.52} \quad (-0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.3 \quad (\nu: 2.5)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14086^{+0.00059}_{-0.00059} \quad (+0.6\sigma)$	χ_{JLA}^2	$1036.5 \quad (\nu: 1.7)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16073^{+0.00034}_{-0.00033} \quad (-1.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.09 \quad (\nu: 0.0)$
H_0	$69.3^{+1.5}_{-1.4} \quad (-1.6\sigma)$	z_{eq}	$3397^{+52}_{-51} \quad (-0.2\sigma)$	χ_{MGS}^2	$2.40 \quad (\nu: 0.2)$
Ω_{Λ}	$0.703^{+0.013}_{-0.013} \quad (-1.6\sigma)$	k_{eq}	$0.01037^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.64 \quad (\nu: 0.3)$
Ω_{m}	$0.297^{+0.013}_{-0.013} \quad (+1.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8144^{+0.0098}_{-0.0095} \quad (+0.3\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0022}_{-0.0021} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4499^{+0.0050}_{-0.0049} \quad (+0.3\sigma)$	χ_{BAO}^2	$7.1 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}}h^3$	$0.0990^{+0.0026}_{-0.0026} \quad (-1.6\sigma)$	$H(0.15)$	$73.93^{+0.95}_{-0.91} \quad (-1.5\sigma)$	χ_{CMB}^2	$2779.3 \quad (\nu: 16.2) \quad (+281.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 3840.79; R - 1 = 0.00674$$

18.66 base_w_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02241^{+0.00027}_{-0.00027}$ (+1.2 σ)	S_8	$0.823^{+0.021}_{-0.020}$ (+1.0 σ)	$D_M(0.38)$	1509^{+17}_{-18} (+1.5 σ)
$\Omega_c h^2$	$0.1196^{+0.0020}_{-0.0020}$ (−0.4 σ)	$\sigma_8 \Omega_m^{0.5}$	$0.451^{+0.011}_{-0.011}$ (+1.0 σ)	$H(0.51)$	$89.75^{+0.47}_{-0.47}$ (+1.5 σ)
$100\theta_{MC}$	$1.04098^{+0.00059}_{-0.00058}$ (+0.4 σ)	$\sigma_8 \Omega_m^{0.25}$	$0.611^{+0.014}_{-0.014}$ (−1.5 σ)	$D_M(0.51)$	1960^{+19}_{-19} (+1.5 σ)
τ	$0.055^{+0.013}_{-0.012}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	$0.994^{+0.020}_{-0.020}$ (−1.6 σ)	$H(0.61)$	$95.19^{+0.49}_{-0.49}$ (+1.7 σ)
w_0	$-1.060^{+0.056}_{-0.057}$ (+1.7 σ)	$r_{drag} h$	$102.1^{+2.2}_{-2.1}$ (−1.6 σ)	$D_M(0.61)$	2284^{+20}_{-20} (+1.4 σ)
$\ln(10^{10} A_s)$	$3.045^{+0.026}_{-0.024}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	$2.450^{+0.044}_{-0.042}$ (−1.2 σ)	$H(2.33)$	$235.5^{+1.1}_{-1.1}$ (+1.3 σ)
n_s	$0.9661^{+0.0075}_{-0.0074}$ (+0.5 σ)	z_{re}	< 8.89 (+0.5 σ)	$D_M(2.33)$	5754^{+17}_{-17} (+0.2 σ)
y_{cal}	$1.0005^{+0.0048}_{-0.0048}$ (+0.1 σ)	$10^9 A_s$	$2.102^{+0.055}_{-0.051}$ (+0.4 σ)	$f\sigma_8(0.15)$	$0.461^{+0.013}_{-0.013}$ (−1.4 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	$10^9 A_s e^{-2\tau}$	$1.882^{+0.021}_{-0.021}$ (−0.2 σ)	$\sigma_8(0.15)$	$0.766^{+0.019}_{-0.019}$ (−1.6 σ)
$\xi^{tSZ \times CIB}$	—	D_{40}	1229^{+23}_{-22} (−0.1 σ)	$f\sigma_8(0.38)$	$0.485^{+0.015}_{-0.015}$ (−1.6 σ)
A_{143}^{tSZ}	$5.5^{+3.7}_{-3.7}$ (+0.2 σ)	D_{220}	5736^{+76}_{-74} (+0.5 σ)	$\sigma_8(0.38)$	$0.679^{+0.017}_{-0.017}$ (−1.6 σ)
A_{100}^{PS}	257^{+50}_{-50} (−0.2 σ)	D_{810}	2539^{+26}_{-26} (+0.3 σ)	$f\sigma_8(0.51)$	$0.486^{+0.016}_{-0.015}$ (−1.6 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.4 σ)	D_{1420}	$817.5^{+9.2}_{-9.4}$ (+0.7 σ)	$\sigma_8(0.51)$	$0.636^{+0.016}_{-0.016}$ (−1.6 σ)
$A_{143 \times 217}^{PS}$	42^{+20}_{-20} (−0.1 σ)	D_{2000}	$231.1^{+3.0}_{-3.0}$ (+0.8 σ)	$f\sigma_8(0.61)$	$0.482^{+0.016}_{-0.015}$ (−1.6 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.0 σ)	$n_{s,0.002}$	$0.9661^{+0.0075}_{-0.0074}$ (+0.5 σ)	$\sigma_8(0.61)$	$0.605^{+0.015}_{-0.015}$ (−1.6 σ)
A^{kSZ}	< 7.93 (−0.2 σ)	Y_P	$0.24541^{+0.00010}_{-0.00011}$ (+1.1 σ)	$f\sigma_8(2.33)$	$0.3051^{+0.0074}_{-0.0073}$ (−1.6 σ)
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.6}$ (+0.0 σ)	Y_P^{BBN}	$0.24674^{+0.00010}_{-0.00011}$ (+1.1 σ)	$\sigma_8(2.33)$	$0.3133^{+0.0067}_{-0.0063}$ (−1.6 σ)
A_{143}^{dustTT}	$10.9^{+3.4}_{-3.5}$ (+0.1 σ)	$10^5 D/H$	$2.578^{+0.050}_{-0.048}$ (−1.2 σ)	f_{2000}^{143}	29^{+5}_{-5} (−0.6 σ)
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.4}_{-6.5}$ (+0.1 σ)	Age/Gyr	$13.754^{+0.041}_{-0.041}$ (+1.3 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dustTT}	94^{+10}_{-10} (+0.1 σ)	z_*	$1089.83^{+0.45}_{-0.45}$ (−1.0 σ)	f_{2000}^{217}	$106.8^{+3.4}_{-3.5}$ (−0.6 σ)
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.075}$	r_*	$144.50^{+0.46}_{-0.46}$ (+0.0 σ)	$\chi_{lensing}^2$	9.07 (ν : 0.2)
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.057}_{-0.058}$	$100\theta_*$	$1.04116^{+0.00058}_{-0.00058}$ (+0.3 σ)	χ_{small}^2	396.9 (ν : 1.5) (+0.1 σ)
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.16}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.879^{+0.044}_{-0.044}$ (−0.0 σ)	χ_{lowl}^2	23.20 (ν : 0.3) (−0.0 σ)
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1060.01^{+0.57}_{-0.57}$ (+1.2 σ)	χ_{plik}^2	2358.9 (ν : 16.1) (+293.3 σ)
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.15^{+0.48}_{-0.47}$ (−0.1 σ)	$\chi_{H073p45}^2$	6.3 (ν : 2.5)
A_{217}^{dustTE}	$2.08^{+0.51}_{-0.53}$	k_D	$0.14084^{+0.00055}_{-0.00055}$ (+0.5 σ)	χ_{JLA}^2	1036.4 (ν : 1.6)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_D$	$0.16072^{+0.00034}_{-0.00033}$ (−1.2 σ)	χ_{6DF}^2	0.097 (ν : 0.0)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3394^{+46}_{-45} (−0.3 σ)	χ_{MGS}^2	2.43 (ν : 0.2)
H_0	$69.4^{+1.5}_{-1.4}$ (−1.6 σ)	k_{eq}	$0.01036^{+0.00014}_{-0.00014}$ (−0.3 σ)	$\chi_{DR12BAO}^2$	4.56 (ν : 0.2)
Ω_Λ	$0.703^{+0.013}_{-0.013}$ (−1.6 σ)	$100\theta_{eq}$	$0.8150^{+0.0085}_{-0.0085}$ (+0.4 σ)	χ_{prior}^2	11.5 (ν : 10.1) (+1.2 σ)
Ω_m	$0.297^{+0.013}_{-0.013}$ (+1.6 σ)	$100\theta_{s,eq}$	$0.4502^{+0.0044}_{-0.0044}$ (+0.3 σ)	χ_{CMB}^2	2788.1 (ν : 16.3) (+282.7 σ)
$\Omega_m h^2$	$0.1427^{+0.0019}_{-0.0019}$ (−0.3 σ)	$H(0.15)$	$73.95^{+0.94}_{-0.91}$ (−1.5 σ)	χ_{BAO}^2	7.1 (ν : 0.6)
$\Omega_m h^3$	$0.0989^{+0.0024}_{-0.0024}$ (−1.6 σ)	$D_M(0.15)$	629^{+10}_{-11} (+1.6 σ)		
σ_8	$0.828^{+0.020}_{-0.020}$ (−1.6 σ)	$H(0.38)$	$83.32^{+0.51}_{-0.52}$ (−0.6 σ)		

$$\bar{\chi}_{\text{eff}}^2 = 3849.47; \Delta\bar{\chi}_{\text{eff}}^2 = -3.54; R - 1 = 0.00919$$

18.67 base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022203	$0.02222^{+0.00040}_{-0.00039}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	1.0025	$0.993^{+0.030}_{-0.032}$ (−1.6 σ)	$H(0.51)$	89.52	$89.62^{+0.68}_{-0.66}$ (+1.4 σ)
$\Omega_c h^2$	0.12017	$0.1196^{+0.0029}_{-0.0031}$ (−0.4 σ)	$r_{\text{drag}} h$	101.84	$102.1^{+2.1}_{-2.2}$ (−1.6 σ)	$D_M(0.51)$	1965.5	1963^{+21}_{-20} (+1.5 σ)
$100\theta_{\text{MC}}$	1.04099	$1.04101^{+0.00085}_{-0.00082}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.467	$2.444^{+0.064}_{-0.068}$ (−1.3 σ)	$H(0.61)$	94.97	$95.05^{+0.71}_{-0.69}$ (+1.7 σ)
τ	0.0574	$0.054^{+0.017}_{-0.016}$ (+0.3 σ)	z_{re}	8.03	$7.6^{+1.6}_{-1.7}$ (+0.3 σ)	$D_M(0.61)$	2290.7	2288^{+22}_{-21} (+1.5 σ)
w_0	−1.067	$−1.062^{+0.069}_{-0.069}$ (+1.6 σ)	$10^9 A_s$	2.112	$2.090^{+0.071}_{-0.067}$ (+0.1 σ)	$H(2.33)$	235.56	$235.3^{+1.5}_{-1.5}$ (+1.2 σ)
$\ln(10^{10} A_s)$	3.0502	$3.040^{+0.033}_{-0.033}$ (+0.1 σ)	$10^9 A_s e^{-2\tau}$	1.8828	$1.878^{+0.024}_{-0.025}$ (−0.4 σ)	$D_M(2.33)$	5763.6	5762^{+23}_{-24} (+0.5 σ)
n_s	0.9645	$0.9660^{+0.0097}_{-0.0093}$ (+0.5 σ)	D_{40}	1230.8	1225^{+27}_{-26} (−0.3 σ)	$f\sigma_8(0.15)$	0.4665	$0.461^{+0.021}_{-0.021}$ (−1.4 σ)
y_{cal}	1.00099	$1.0005^{+0.0049}_{-0.0049}$ (+0.1 σ)	D_{220}	5717	5711^{+81}_{-78} (−0.1 σ)	$\sigma_8(0.15)$	0.7713	$0.765^{+0.026}_{-0.028}$ (−1.7 σ)
A_{100}^{PS}	238.7	241^{+50}_{-50} (−0.8 σ)	D_{810}	2536.9	2534^{+27}_{-27} (−0.1 σ)	$f\sigma_8(0.38)$	0.4908	$0.485^{+0.023}_{-0.024}$ (−1.6 σ)
A_{143}^{PS}	42.8	40^{+20}_{-20} (−1.1 σ)	D_{1420}	815.4	$815^{+10}_{-9.8}$ (+0.2 σ)	$\sigma_8(0.38)$	0.6839	$0.678^{+0.023}_{-0.024}$ (−1.6 σ)
A_{217}^{PS}	97.1	101^{+30}_{-30} (−1.4 σ)	D_{2000}	230.16	$230.0^{+3.6}_{-3.5}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4909	$0.485^{+0.023}_{-0.024}$ (−1.6 σ)
A_{217}^{CIB}	46.2	41^{+10}_{-10} (−1.1 σ)	$n_{s,0.002}$	0.9645	$0.9660^{+0.0097}_{-0.0093}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6398	$0.635^{+0.021}_{-0.022}$ (−1.6 σ)
A_{143}^{tSZ}	5.70	< 7.55 (−0.6 σ)	Y_P	0.245327	$0.24533^{+0.00016}_{-0.00017}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4864	$0.481^{+0.022}_{-0.023}$ (−1.6 σ)
$r_{143 \times 217}^{\text{PS}}$	0.566	$0.65^{+0.25}_{-0.25}$	Y_P^{BBN}	0.246653	$0.24666^{+0.00016}_{-0.00017}$ (+0.3 σ)	$\sigma_8(0.61)$	0.6086	$0.604^{+0.019}_{-0.020}$ (−1.6 σ)
$r_{143 \times 217}^{\text{CIB}}$	0.91	—	10^5D/H	2.617	$2.614^{+0.074}_{-0.073}$ (−0.3 σ)	$f\sigma_8(2.33)$	0.3068	$0.3046^{+0.0093}_{-0.010}$ (−1.6 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.29	—	Age/Gyr	13.773	$13.771^{+0.053}_{-0.052}$ (+1.4 σ)	$\sigma_8(2.33)$	0.3147	$0.3126^{+0.0082}_{-0.0086}$ (−1.6 σ)
A^{kSZ}	1.7	—	z_*	1090.14	$1090.07^{+0.64}_{-0.64}$ (−0.4 σ)	f_{2000}^{143}	31.1	30^{+6}_{-6} (−0.2 σ)
A_{100}^{dust}	1.012	$1.01^{+0.38}_{-0.38}$	r_*	144.51	$144.65^{+0.75}_{-0.72}$ (+0.4 σ)	f_{2000}^{217}	107.40	$107.3^{+4.0}_{-4.0}$ (−0.4 σ)
A_{143}^{dust}	1.003	$0.98^{+0.35}_{-0.35}$	$100\theta_*$	1.04119	$1.04121^{+0.00084}_{-0.00081}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	32.58	33^{+4}_{-4} (−0.4 σ)
A_{217}^{dust}	0.954	$0.97^{+0.20}_{-0.20}$	$D_M(z_*)/\text{Gpc}$	13.880	$13.893^{+0.071}_{-0.068}$ (+0.3 σ)	χ_{simall}	396.83	397.0 (ν : 1.7) (+0.2 σ)
$A_{143 \times 217}^{\text{dust}}$	0.931	$1.03^{+0.32}_{-0.31}$	z_{drag}	1059.55	$1059.57^{+0.86}_{-0.85}$ (+0.2 σ)	χ_{lowl}^2	23.38	23.02 (ν : 0.5) (−0.2 σ)
c_{100}	0.99751	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	r_{drag}	147.23	$147.37^{+0.78}_{-0.75}$ (+0.3 σ)	χ_{CamSpec}^2	7049.3	7063.1 (ν : 14.5)
c_{217}	1.00152	$1.0012^{+0.0031}_{-0.0031}$ (+4.6 σ)	k_D	0.14059	$0.14046^{+0.00091}_{-0.00092}$ (−0.2 σ)	χ_{H073p45}^2	6.64	6.6 (ν : 2.7)
H_0	69.17	$69.3^{+1.4}_{-1.5}$ (−1.6 σ)	$100\theta_D$	0.16100	$0.16099^{+0.00051}_{-0.00049}$ (−0.2 σ)	χ_{JLA}^2	1035.92	1036.5 (ν : 1.8)
Ω_Λ	0.7011	$0.703^{+0.013}_{-0.014}$ (−1.6 σ)	z_{eq}	3402	3388^{+68}_{-70} (−0.4 σ)	$\chi_{6\text{DF}}^2$	0.036	0.099 (ν : 0.0)
Ω_m	0.2989	$0.297^{+0.014}_{-0.013}$ (+1.6 σ)	k_{eq}	0.010384	$0.01034^{+0.00021}_{-0.00021}$ (−0.4 σ)	χ_{MGS}^2	2.19	2.43 (ν : 0.2)
$\Omega_m h^2$	0.14302	$0.1424^{+0.0028}_{-0.0029}$ (−0.4 σ)	$100\theta_{\text{eq}}$	0.8129	$0.815^{+0.013}_{-0.012}$ (+0.4 σ)	χ_{DR12BAO}^2	4.41	4.71 (ν : 0.4)
$\Omega_m h^3$	0.09893	$0.0987^{+0.0030}_{-0.0031}$ (−1.6 σ)	$100\theta_{s,\text{eq}}$	0.4493	$0.4506^{+0.0069}_{-0.0064}$ (+0.4 σ)	χ_{prior}^2	2.6	7.6 (ν : 6.0) (+0.1 σ)
σ_8	0.8338	$0.826^{+0.029}_{-0.030}$ (−1.7 σ)	$H(0.15)$	73.74	$73.84^{+0.93}_{-0.96}$ (−1.6 σ)	χ_{BAO}^2	6.64	7.2 (ν : 0.7)
S_8	0.8322	$0.822^{+0.032}_{-0.033}$ (+1.0 σ)	$D_M(0.15)$	630.5	630^{+11}_{-10} (+1.6 σ)	χ_{CMB}^2	7469.5	7483.1 (ν : 14.6) (+1113.4 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4558	$0.450^{+0.017}_{-0.018}$ (+1.0 σ)	$H(0.38)$	83.09	$83.20^{+0.68}_{-0.66}$ (−0.7 σ)			
$\sigma_8 \Omega_m^{0.25}$	0.6165	$0.610^{+0.021}_{-0.022}$ (−1.6 σ)	$D_M(0.38)$	1513.4	1511^{+18}_{-18} (+1.6 σ)			

Best-fit $\chi_{\text{eff}}^2 = 8521.38$; $\bar{\chi}_{\text{eff}}^2 = 8541.10$; $R - 1 = 0.00624$
 χ_{eff}^2 : BAO - 6DF: 0.04 MGS: 2.19 DR12BAO: 4.41 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.83 commander_dx12_v3.2.29: 23.38 CamSpec like_10.7HM: 7049.34
Hubble - H073p45: 6.64 SN - JLA Pantheon18: 1035.92

18.68 base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00040}_{-0.00038} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.022}_{-0.022} \quad (-1.6\sigma)$	$H(0.51)$	$89.61^{+0.62}_{-0.59} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0025}_{-0.0025} \quad (-0.4\sigma)$	$r_{\mathrm{drag}} h$	$102.1^{+2.1}_{-2.2} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1963^{+20}_{-19} \quad (+1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00085}_{-0.00080} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.047}_{-0.048} \quad (-1.2\sigma)$	$H(0.61)$	$95.04^{+0.65}_{-0.61} \quad (+1.6\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.3\sigma)$	z_{re}	$7.7^{+1.5}_{-1.5} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2288^{+21}_{-21} \quad (+1.5\sigma)$
w_0	$-1.063^{+0.062}_{-0.061} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.064}_{-0.059} \quad (+0.1\sigma)$	$H(2.33)$	$235.3^{+1.3}_{-1.3} \quad (+1.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.030}_{-0.029} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.022}_{-0.022} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+23}_{-23} \quad (+0.5\sigma)$
n_{s}	$0.9657^{+0.0086}_{-0.0087} \quad (+0.5\sigma)$	D_{40}	$1226^{+24}_{-23} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.015}_{-0.015} \quad (-1.4\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5713^{+81}_{-77} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.766^{+0.020}_{-0.021} \quad (-1.6\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.7\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.486^{+0.018}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-9.8} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.679^{+0.018}_{-0.018} \quad (-1.6\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$230.0^{+3.5}_{-3.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.486^{+0.018}_{-0.018} \quad (-1.6\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9657^{+0.0086}_{-0.0087} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.636^{+0.016}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$< 7.61 \quad (-0.6\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00016} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.482^{+0.017}_{-0.017} \quad (-1.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.605^{+0.015}_{-0.016} \quad (-1.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.613^{+0.073}_{-0.073} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.3049^{+0.0076}_{-0.0078} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.770^{+0.053}_{-0.053} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3130^{+0.0068}_{-0.0068} \quad (-1.6\sigma)$
A^{kSZ}	—	z_*	$1090.07^{+0.59}_{-0.61} \quad (-0.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.64^{+0.62}_{-0.61} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.3^{+4.0}_{-4.0} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	$1.04120^{+0.00085}_{-0.00080} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.059}_{-0.059} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.25 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.57^{+0.89}_{-0.86} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_{drag}	$147.35^{+0.66}_{-0.66} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.08 \quad (\nu: 0.4) \quad (-0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	k_{D}	$0.14048^{+0.00084}_{-0.00083} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.7 \quad (\nu: 13.7)$
H_0	$69.3^{+1.4}_{-1.5} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16098^{+0.00050}_{-0.00051} \quad (-0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.5 \quad (\nu: 2.6)$
Ω_{Λ}	$0.703^{+0.013}_{-0.014} \quad (-1.6\sigma)$	z_{eq}	$3390^{+57}_{-57} \quad (-0.4\sigma)$	χ_{JLA}^2	$1036.6 \quad (\nu: 1.7)$
Ω_{m}	$0.297^{+0.014}_{-0.013} \quad (+1.6\sigma)$	k_{eq}	$0.01035^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.10 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1425^{+0.0024}_{-0.0024} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.010} \quad (+0.4\sigma)$	χ_{MGS}^2	$2.45 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0987^{+0.0027}_{-0.0028} \quad (-1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0055}_{-0.0053} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.64 \quad (\nu: 0.3)$
σ_8	$0.827^{+0.022}_{-0.022} \quad (-1.6\sigma)$	$H(0.15)$	$73.86^{+0.92}_{-0.94} \quad (-1.5\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.8) \quad (+0.1\sigma)$
S_8	$0.823^{+0.023}_{-0.024} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+11}_{-9.9} \quad (+1.6\sigma)$	χ_{CMB}^2	$7492.0 \quad (\nu: 14.8) \quad (+1114.9\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$H(0.38)$	$83.20^{+0.62}_{-0.61} \quad (-0.7\sigma)$	χ_{BAO}^2	$7.2 \quad (\nu: 0.6)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.016}_{-0.016} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+18}_{-17} \quad (+1.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8549.81; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.99; R - 1 = 0.01112$$

18.69 base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00040}_{-0.00039} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.030}_{-0.031} \quad (-1.6\sigma)$	$H(0.51)$	$89.62^{+0.68}_{-0.66} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1195^{+0.0029}_{-0.0030} \quad (-0.4\sigma)$	$r_{\mathrm{drag}} h$	$102.1^{+2.1}_{-2.2} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1963^{+21}_{-20} \quad (+1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04102^{+0.00085}_{-0.00081} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.063}_{-0.066} \quad (-1.2\sigma)$	$H(0.61)$	$95.06^{+0.71}_{-0.68} \quad (+1.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.98 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2288^{+22}_{-21} \quad (+1.5\sigma)$
w_0	$-1.061^{+0.069}_{-0.069} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.062}_{-0.056} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+1.5}_{-1.5} \quad (+1.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.029}_{-0.027} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.024}_{-0.025} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+23}_{-24} \quad (+0.5\sigma)$
n_{s}	$0.9661^{+0.0096}_{-0.0092} \quad (+0.6\sigma)$	D_{40}	$1225^{+27}_{-26} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.020}_{-0.021} \quad (-1.4\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5711^{+81}_{-78} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.765^{+0.026}_{-0.027} \quad (-1.6\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.485^{+0.023}_{-0.023} \quad (-1.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-9.8} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.679^{+0.022}_{-0.023} \quad (-1.6\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$230.0^{+3.6}_{-3.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.486^{+0.023}_{-0.023} \quad (-1.6\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9661^{+0.0096}_{-0.0092} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.635^{+0.020}_{-0.021} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$< 7.55 \quad (-0.6\sigma)$	Y_{P}	$0.24533^{+0.00016}_{-0.00017} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.482^{+0.022}_{-0.023} \quad (-1.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00017} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.605^{+0.019}_{-0.020} \quad (-1.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.613^{+0.074}_{-0.073} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.3049^{+0.0091}_{-0.0096} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.771^{+0.053}_{-0.052} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3130^{+0.0080}_{-0.0081} \quad (-1.6\sigma)$
A^{kSZ}	—	z_*	$1090.06^{+0.64}_{-0.64} \quad (-0.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.66^{+0.75}_{-0.72} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.2^{+4.0}_{-4.0} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.98^{+0.35}_{-0.35}$	$100\theta_*$	$1.04122^{+0.00084}_{-0.00081} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.893^{+0.071}_{-0.068} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.8) \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.57^{+0.86}_{-0.86} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.03 \quad (\nu: 0.5) \quad (-0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_{drag}	$147.37^{+0.78}_{-0.75} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.9 \quad (\nu: 14.4)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	k_{D}	$0.14046^{+0.00090}_{-0.00091} \quad (-0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.6 \quad (\nu: 2.7)$
H_0	$69.3^{+1.5}_{-1.5} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16099^{+0.00050}_{-0.00049} \quad (-0.2\sigma)$	χ_{JLA}^2	$1036.5 \quad (\nu: 1.8)$
Ω_{Λ}	$0.703^{+0.013}_{-0.014} \quad (-1.6\sigma)$	z_{eq}	$3388^{+68}_{-70} \quad (-0.4\sigma)$	χ_{6DF}^2	$0.10 \quad (\nu: 0.0)$
Ω_{m}	$0.297^{+0.014}_{-0.013} \quad (+1.6\sigma)$	k_{eq}	$0.01034^{+0.00021}_{-0.00021} \quad (-0.4\sigma)$	χ_{MGS}^2	$2.44 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0028}_{-0.0029} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.70 \quad (\nu: 0.4)$
$\Omega_{\mathrm{m}} h^3$	$0.0986^{+0.0030}_{-0.0031} \quad (-1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0068}_{-0.0064} \quad (+0.4\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.827^{+0.028}_{-0.029} \quad (-1.6\sigma)$	$H(0.15)$	$73.85^{+0.93}_{-0.96} \quad (-1.6\sigma)$	χ_{BAO}^2	$7.2 \quad (\nu: 0.7)$
S_8	$0.823^{+0.032}_{-0.032} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$630^{+11}_{-10} \quad (+1.6\sigma)$	χ_{CMB}^2	$7482.9 \quad (\nu: 14.3) \quad (+1113.3\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.017}_{-0.017} \quad (+1.0\sigma)$	$H(0.38)$	$83.20^{+0.68}_{-0.66} \quad (-0.7\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.021}_{-0.021} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+19}_{-18} \quad (+1.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8540.87; \quad R - 1 = 0.00534$$

18.70 base_w_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02223^{+0.00039}_{-0.00038} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.022}_{-0.022} \quad (-1.6\sigma)$	$H(0.51)$	$89.62^{+0.61}_{-0.58} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1195^{+0.0024}_{-0.0024} \quad (-0.4\sigma)$	$r_{\mathrm{drag}} h$	$102.1^{+2.1}_{-2.2} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1963^{+21}_{-19} \quad (+1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04100^{+0.00085}_{-0.00080} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.046}_{-0.047} \quad (-1.2\sigma)$	$H(0.61)$	$95.06^{+0.64}_{-0.59} \quad (+1.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.92 \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2287^{+21}_{-21} \quad (+1.5\sigma)$
w_0	$-1.062^{+0.062}_{-0.060} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.057}_{-0.051} \quad (+0.2\sigma)$	$H(2.33)$	$235.3^{+1.3}_{-1.3} \quad (+1.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.027}_{-0.025} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.022}_{-0.022} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+22}_{-23} \quad (+0.5\sigma)$
n_{s}	$0.9659^{+0.0086}_{-0.0084} \quad (+0.5\sigma)$	D_{40}	$1226^{+24}_{-23} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.015}_{-0.015} \quad (-1.4\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.1\sigma)$	D_{220}	$5713^{+81}_{-77} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.766^{+0.020}_{-0.021} \quad (-1.6\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{810}	$2534^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.486^{+0.017}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-9.8} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.679^{+0.018}_{-0.018} \quad (-1.6\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{2000}	$230.0^{+3.5}_{-3.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.486^{+0.018}_{-0.018} \quad (-1.6\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9659^{+0.0086}_{-0.0084} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.636^{+0.016}_{-0.017} \quad (-1.6\sigma)$
A_{143}^{tSZ}	$< 7.64 \quad (-0.6\sigma)$	Y_{P}	$0.24534^{+0.00016}_{-0.00016} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.482^{+0.017}_{-0.017} \quad (-1.6\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24666^{+0.00016}_{-0.00016} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.605^{+0.015}_{-0.016} \quad (-1.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.612^{+0.073}_{-0.072} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.3051^{+0.0076}_{-0.0078} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.770^{+0.053}_{-0.052} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3131^{+0.0067}_{-0.0067} \quad (-1.6\sigma)$
A^{kSZ}	—	z_*	$1090.06^{+0.58}_{-0.60} \quad (-0.5\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.65^{+0.61}_{-0.60} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.3^{+4.0}_{-4.0} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	$1.04120^{+0.00084}_{-0.00080} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.893^{+0.059}_{-0.058} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.22 \quad (\nu: 0.3)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.58^{+0.89}_{-0.83} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	r_{drag}	$147.37^{+0.65}_{-0.65} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.06 \quad (\nu: 0.4) \quad (-0.2\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	k_{D}	$0.14047^{+0.00084}_{-0.00083} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7062.6 \quad (\nu: 13.6)$
H_0	$69.3^{+1.4}_{-1.5} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16098^{+0.00050}_{-0.00050} \quad (-0.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.5 \quad (\nu: 2.6)$
Ω_{Λ}	$0.703^{+0.013}_{-0.014} \quad (-1.6\sigma)$	z_{eq}	$3388^{+55}_{-57} \quad (-0.4\sigma)$	χ_{JLA}^2	$1036.5 \quad (\nu: 1.7)$
Ω_{m}	$0.297^{+0.014}_{-0.013} \quad (+1.6\sigma)$	k_{eq}	$0.01034^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.10 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1424^{+0.0023}_{-0.0024} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.816^{+0.010}_{-0.010} \quad (+0.4\sigma)$	χ_{MGS}^2	$2.46 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0987^{+0.0027}_{-0.0027} \quad (-1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4507^{+0.0054}_{-0.0053} \quad (+0.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.61 \quad (\nu: 0.3)$
σ_8	$0.828^{+0.022}_{-0.022} \quad (-1.6\sigma)$	$H(0.15)$	$73.87^{+0.93}_{-0.95} \quad (-1.5\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.8) \quad (+0.1\sigma)$
S_8	$0.823^{+0.023}_{-0.024} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+11}_{-10} \quad (+1.6\sigma)$	χ_{CMB}^2	$7491.8 \quad (\nu: 14.5) \quad (+1114.9\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (+1.0\sigma)$	$H(0.38)$	$83.21^{+0.62}_{-0.60} \quad (-0.7\sigma)$	χ_{BAO}^2	$7.2 \quad (\nu: 0.6)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.015}_{-0.016} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1511^{+18}_{-17} \quad (+1.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8549.61; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -3.12; R - 1 = 0.01012$$

18.71 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022344	$0.02233^{+0.00030}_{-0.00029}$ (+0.8 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4481	$0.448^{+0.014}_{-0.014}$ (+0.9 σ)	$H(0.38)$	83.30	$83.30^{+0.56}_{-0.54}$ (−0.6 σ)
$\Omega_{\mathrm{c}} h^2$	0.11925	$0.1193^{+0.0023}_{-0.0022}$ (−0.6 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6069	$0.607^{+0.017}_{-0.017}$ (−1.7 σ)	$D_{\mathrm{M}}(0.38)$	1510.6	1510^{+18}_{-18} (+1.5 σ)
$100\theta_{\mathrm{MC}}$	1.04095	$1.04094^{+0.00059}_{-0.00058}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9883	$0.989^{+0.025}_{-0.025}$ (−1.7 σ)	$H(0.51)$	89.74	$89.72^{+0.52}_{-0.51}$ (+1.4 σ)
τ	0.0531	$0.053^{+0.015}_{-0.015}$ (+0.2 σ)	$r_{\mathrm{drag}} h$	101.96	$102.1^{+2.3}_{-2.2}$ (−1.6 σ)	$D_{\mathrm{M}}(0.51)$	1961.6	1961^{+20}_{-20} (+1.5 σ)
w_0	−1.053	$−1.056^{+0.061}_{-0.062}$ (+1.7 σ)	$\langle d^2 \rangle^{1/2}$	2.435	$2.436^{+0.055}_{-0.055}$ (−1.5 σ)	$H(0.61)$	95.19	$95.16^{+0.54}_{-0.54}$ (+1.7 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0387	$3.038^{+0.032}_{-0.032}$ (−0.0 σ)	z_{re}	7.55	$7.5^{+1.5}_{-1.6}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2286.0	2286^{+20}_{-20} (+1.5 σ)
n_{s}	0.9671	$0.9667^{+0.0083}_{-0.0080}$ (+0.7 σ)	$10^9 A_{\mathrm{s}}$	2.088	$2.087^{+0.067}_{-0.065}$ (−0.0 σ)	$H(2.33)$	235.27	$235.2^{+1.2}_{-1.2}$ (+1.2 σ)
y_{cal}	1.00045	$1.0005^{+0.0049}_{-0.0049}$ (+0.0 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8772	$1.877^{+0.022}_{-0.022}$ (−0.5 σ)	$D_{\mathrm{M}}(2.33)$	5757.0	5758^{+17}_{-18} (+0.3 σ)
A_{100}^{PS}	233.8	240^{+50}_{-50} (−0.8 σ)	D_{40}	1222.9	1224^{+24}_{-24} (−0.4 σ)	$f\sigma_8(0.15)$	0.4577	$0.458^{+0.016}_{-0.016}$ (−1.6 σ)
A_{143}^{PS}	39.3	39^{+20}_{-20} (−1.2 σ)	D_{220}	5720	5721^{+75}_{-77} (+0.1 σ)	$\sigma_8(0.15)$	0.7609	$0.762^{+0.023}_{-0.023}$ (−1.7 σ)
A_{217}^{PS}	102.2	102^{+30}_{-30} (−1.3 σ)	D_{810}	2535.2	2535^{+26}_{-27} (−0.0 σ)	$f\sigma_8(0.38)$	0.4816	$0.482^{+0.019}_{-0.018}$ (−1.7 σ)
A_{217}^{CIB}	44.2	40^{+10}_{-10} (−1.2 σ)	D_{1420}	816.3	$816.0^{+9.4}_{-9.5}$ (+0.4 σ)	$\sigma_8(0.38)$	0.6751	$0.676^{+0.020}_{-0.020}$ (−1.7 σ)
A_{143}^{tSZ}	6.58	< 7.48 (−0.6 σ)	D_{2000}	230.55	$230.4^{+3.1}_{-3.1}$ (+0.4 σ)	$f\sigma_8(0.51)$	0.4820	$0.483^{+0.019}_{-0.019}$ (−1.7 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.600	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	0.9671	$0.9667^{+0.0083}_{-0.0080}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6319	$0.632^{+0.018}_{-0.019}$ (−1.7 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.78	—	Y_{P}	0.245385	$0.24538^{+0.00011}_{-0.00012}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4778	$0.478^{+0.019}_{-0.019}$ (−1.7 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.11	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246712	$0.24671^{+0.00011}_{-0.00012}$ (+0.8 σ)	$\sigma_8(0.61)$	0.6012	$0.602^{+0.017}_{-0.018}$ (−1.7 σ)
A^{kSZ}	0.0	—	$10^5 \mathrm{D}/\mathrm{H}$	2.590	$2.593^{+0.055}_{-0.054}$ (−0.8 σ)	$f\sigma_8(2.33)$	0.3033	$0.3036^{+0.0085}_{-0.0088}$ (−1.7 σ)
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	Age/Gyr	13.7637	$13.764^{+0.043}_{-0.043}$ (+1.4 σ)	$\sigma_8(2.33)$	0.3116	$0.3118^{+0.0076}_{-0.0077}$ (−1.6 σ)
A_{143}^{dust}	0.977	$0.96^{+0.35}_{-0.34}$	z_*	1089.886	$1089.90^{+0.49}_{-0.49}$ (−0.8 σ)	f_{2000}^{143}	29.7	30^{+6}_{-6} (−0.5 σ)
A_{217}^{dust}	0.971	$0.97^{+0.20}_{-0.20}$	r_*	144.65	$144.65^{+0.54}_{-0.53}$ (+0.4 σ)	f_{2000}^{217}	106.67	$106.7^{+3.8}_{-3.8}$ (−0.6 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.002	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	1.04114	$1.04113^{+0.00059}_{-0.00058}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	31.95	32^{+4}_{-4} (−0.7 σ)
c_{100}	0.99765	$0.9975^{+0.0021}_{-0.0021}$ (−3.3 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.893	$13.894^{+0.050}_{-0.050}$ (+0.3 σ)	χ_{simall}^2	395.86	$396.9 (\nu: 1.3)$ (+0.1 σ)
c_{217}	1.00129	$1.0011^{+0.0030}_{-0.0031}$ (+4.5 σ)	z_{drag}	1059.82	$1059.80^{+0.63}_{-0.63}$ (+0.7 σ)	χ_{lowl}^2	22.75	$22.88 (\nu: 0.4)$ (−0.3 σ)
c_{TE}	0.9964	$0.9965^{+0.0098}_{-0.0096}$	r_{drag}	147.32	$147.33^{+0.55}_{-0.54}$ (+0.2 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.6	$11514.4 (\nu: 15.8)$
c_{EE}	0.9917	$0.9919^{+0.0097}_{-0.0097}$	k_{D}	0.14061	$0.14059^{+0.00064}_{-0.00065}$ (+0.0 σ)	$\chi_{\mathrm{H073p45}}^2$	6.53	$6.5 (\nu: 2.7)$
H_0	69.21	$69.3^{+1.6}_{-1.5}$ (−1.6 σ)	$100\theta_{\mathrm{D}}$	0.160825	$0.16084^{+0.00037}_{-0.00037}$ (−0.7 σ)	χ_{JLA}^2	1035.62	$1036.4 (\nu: 1.7)$
Ω_{Λ}	0.7030	$0.704^{+0.013}_{-0.014}$ (−1.6 σ)	z_{eq}	3384	3384^{+52}_{-51} (−0.5 σ)	χ_{6DF}^2	0.054	$0.10 (\nu: 0.0)$
Ω_{m}	0.2970	$0.296^{+0.014}_{-0.013}$ (+1.6 σ)	k_{eq}	0.010327	$0.01033^{+0.00016}_{-0.00016}$ (−0.5 σ)	χ_{MGS}^2	2.35	$2.47 (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	0.14224	$0.1422^{+0.0022}_{-0.0021}$ (−0.5 σ)	$100\theta_{\mathrm{eq}}$	0.8166	$0.8165^{+0.0097}_{-0.0097}$ (+0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.05	$4.51 (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	0.09844	$0.0986^{+0.0027}_{-0.0027}$ (−1.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.4511	$0.4511^{+0.0050}_{-0.0050}$ (+0.5 σ)	χ_{prior}^2	2.2	$7.8 (\nu: 5.8)$ (+0.2 σ)
σ_8	0.8222	$0.823^{+0.024}_{-0.025}$ (−1.7 σ)	$H(0.15)$	73.87	$73.91^{+0.97}_{-0.94}$ (−1.5 σ)	χ_{BAO}^2	6.46	$7.1 (\nu: 0.7)$
S_8	0.8180	$0.818^{+0.026}_{-0.025}$ (+0.9 σ)	$D_{\mathrm{M}}(0.15)$	629.7	629^{+11}_{-11} (+1.6 σ)	χ_{CMB}^2	11918.2	$11934.1 (\nu: 16.1)$ (+1900.8 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 12969.03$; $\bar{\chi}_{\mathrm{eff}}^2 = 12991.92$; $R - 1 = 0.00648$
 χ_{eff}^2 : BAO - 6DF: 0.05 MGS: 2.35 DR12BAO: 4.05 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3.2.29: 22.75 CamSpec like_10.7HM_1400_unified: 11499.61 Hubble - H073p45: 6.54 SN - JLA Pantheon18: 1035.62

18.72 **base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing**

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00029}_{-0.00029} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.014}_{-0.014} \quad (-1.6\sigma)$	$H(0.51)$	$89.71^{+0.48}_{-0.48} \quad (+1.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0021}_{-0.0020} \quad (-0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.020} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1961^{+20}_{-20} \quad (+1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00058}_{-0.00057} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$102.1^{+2.3}_{-2.2} \quad (-1.6\sigma)$	$H(0.61)$	$95.14^{+0.50}_{-0.51} \quad (+1.7\sigma)$
τ	$0.054^{+0.015}_{-0.014} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.043}_{-0.043} \quad (-1.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2285^{+20}_{-20} \quad (+1.5\sigma)$
w_0	$-1.059^{+0.058}_{-0.060} \quad (+1.7\sigma)$	z_{re}	$7.6^{+1.4}_{-1.5} \quad (+0.3\sigma)$	$H(2.33)$	$235.3^{+1.1}_{-1.1} \quad (+1.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.028} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.060}_{-0.057} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+17}_{-18} \quad (+0.3\sigma)$
n_{s}	$0.9664^{+0.0080}_{-0.0077} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.020}_{-0.021} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013} \quad (-1.5\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	D_{40}	$1225^{+23}_{-23} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.763^{+0.019}_{-0.020} \quad (-1.7\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{220}	$5724^{+72}_{-75} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.483^{+0.015}_{-0.015} \quad (-1.7\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.677^{+0.017}_{-0.017} \quad (-1.7\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$816.1^{+9.3}_{-9.4} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.484^{+0.016}_{-0.016} \quad (-1.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{2000}	$230.4^{+3.1}_{-3.1} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.634^{+0.016}_{-0.016} \quad (-1.7\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.9664^{+0.0080}_{-0.0077} \quad (+0.6\sigma)$	$f\sigma_8(0.61)$	$0.480^{+0.016}_{-0.016} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.603^{+0.015}_{-0.015} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(2.33)$	$0.3042^{+0.0074}_{-0.0075} \quad (-1.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.593^{+0.055}_{-0.053} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3123^{+0.0065}_{-0.0066} \quad (-1.6\sigma)$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.763^{+0.043}_{-0.043} \quad (+1.4\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.91^{+0.47}_{-0.47} \quad (-0.8\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.9} \quad (-0.6\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	r_*	$144.63^{+0.49}_{-0.48} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04111^{+0.00058}_{-0.00056} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.13 \quad (\nu: 0.2)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.892^{+0.046}_{-0.046} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.2) \quad (+0.1\sigma)$
c_{100}	$0.9976^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.80^{+0.63}_{-0.63} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.98 \quad (\nu: 0.3) \quad (-0.2\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.5\sigma)$	r_{drag}	$147.31^{+0.51}_{-0.49} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.9 \quad (\nu: 15.5)$
c_{TE}	$0.9964^{+0.0098}_{-0.0096}$	k_{D}	$0.14061^{+0.00060}_{-0.00062} \quad (+0.1\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.4 \quad (\nu: 2.7)$
c_{EE}	$0.9919^{+0.0098}_{-0.0097}$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00037}_{-0.00036} \quad (-0.8\sigma)$	χ_{JLA}^2	$1036.5 \quad (\nu: 1.8)$
H_0	$69.3^{+1.6}_{-1.5} \quad (-1.6\sigma)$	z_{eq}	$3386^{+47}_{-46} \quad (-0.5\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.11 \quad (\nu: 0.0)$
Ω_{Λ}	$0.704^{+0.013}_{-0.014} \quad (-1.5\sigma)$	k_{eq}	$0.01033^{+0.00014}_{-0.00014} \quad (-0.5\sigma)$	χ_{MGS}^2	$2.48 \quad (\nu: 0.2)$
Ω_{m}	$0.296^{+0.014}_{-0.013} \quad (+1.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8162^{+0.0088}_{-0.0088} \quad (+0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.51 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0020}_{-0.0019} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0045}_{-0.0045} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0987^{+0.0026}_{-0.0026} \quad (-1.6\sigma)$	$H(0.15)$	$73.92^{+0.96}_{-0.95} \quad (-1.5\sigma)$	χ_{CMB}^2	$11942.9 \quad (\nu: 16.7) \quad (+1902.4\sigma)$
σ_8	$0.825^{+0.020}_{-0.021} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+11}_{-11} \quad (+1.6\sigma)$	χ_{BAO}^2	$7.1 \quad (\nu: 0.7)$
S_8	$0.819^{+0.021}_{-0.020} \quad (+0.9\sigma)$	$H(0.38)$	$83.29^{+0.53}_{-0.51} \quad (-0.6\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.011}_{-0.011} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1510^{+18}_{-18} \quad (+1.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 13000.66; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.98; R - 1 = 0.00726$$

18.73 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00030}_{-0.00029} \quad (+0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.014}_{-0.013} \quad (+0.9\sigma)$	$H(0.38)$	$83.30^{+0.56}_{-0.54} \quad (-0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1192^{+0.0023}_{-0.0022} \quad (-0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.017}_{-0.017} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1510^{+18}_{-18} \quad (+1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00060}_{-0.00058} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.024}_{-0.024} \quad (-1.7\sigma)$	$H(0.51)$	$89.73^{+0.52}_{-0.52} \quad (+1.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$102.1^{+2.3}_{-2.2} \quad (-1.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1961^{+20}_{-20} \quad (+1.5\sigma)$
w_0	$-1.056^{+0.061}_{-0.062} \quad (+1.7\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.053}_{-0.052} \quad (-1.4\sigma)$	$H(0.61)$	$95.17^{+0.54}_{-0.54} \quad (+1.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.027}_{-0.025} \quad (+0.1\sigma)$	z_{re}	$< 8.83 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2286^{+20}_{-20} \quad (+1.5\sigma)$
n_{s}	$0.9669^{+0.0083}_{-0.0080} \quad (+0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.057}_{-0.053} \quad (+0.1\sigma)$	$H(2.33)$	$235.2^{+1.2}_{-1.2} \quad (+1.1\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.022}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5757^{+18}_{-18} \quad (+0.3\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+24}_{-25} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.016}_{-0.016} \quad (-1.5\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5720^{+74}_{-77} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.762^{+0.022}_{-0.023} \quad (-1.7\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-27} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.483^{+0.018}_{-0.018} \quad (-1.7\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{1420}	$815.9^{+9.4}_{-9.5} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.677^{+0.019}_{-0.020} \quad (-1.7\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.1}_{-3.1} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.483^{+0.019}_{-0.018} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9669^{+0.0083}_{-0.0080} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.633^{+0.018}_{-0.018} \quad (-1.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.24538^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.479^{+0.018}_{-0.018} \quad (-1.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012} \quad (+0.8\sigma)$	$\sigma_8(0.61)$	$0.602^{+0.017}_{-0.017} \quad (-1.7\sigma)$
A^{kSZ}	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.056}_{-0.054} \quad (-0.8\sigma)$	$f\sigma_8(2.33)$	$0.3039^{+0.0083}_{-0.0084} \quad (-1.7\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.764^{+0.043}_{-0.044} \quad (+1.4\sigma)$	$\sigma_8(2.33)$	$0.3122^{+0.0073}_{-0.0073} \quad (-1.6\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	z_*	$1089.90^{+0.49}_{-0.49} \quad (-0.9\sigma)$	f_{2000}^{143}	$30^{+6}_{-5} \quad (-0.5\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	r_*	$144.66^{+0.54}_{-0.53} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04113^{+0.00059}_{-0.00057} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.894^{+0.050}_{-0.051} \quad (+0.3\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.0\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.5\sigma)$	z_{drag}	$1059.80^{+0.63}_{-0.63} \quad (+0.8\sigma)$	χ_{lowl}^2	$22.89 \quad (\nu: 0.4) \quad (-0.3\sigma)$
c_{TE}	$0.9964^{+0.0098}_{-0.0096}$	r_{drag}	$147.33^{+0.55}_{-0.54} \quad (+0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.2 \quad (\nu: 15.7)$
c_{EE}	$0.9919^{+0.0097}_{-0.0097}$	k_{D}	$0.14059^{+0.00064}_{-0.00065} \quad (+0.0\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$6.5 \quad (\nu: 2.7)$
H_0	$69.3^{+1.5}_{-1.5} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00037}_{-0.00037} \quad (-0.8\sigma)$	χ_{JLA}^2	$1036.4 \quad (\nu: 1.6)$
Ω_{Λ}	$0.704^{+0.013}_{-0.014} \quad (-1.6\sigma)$	z_{eq}	$3383^{+52}_{-51} \quad (-0.5\sigma)$	χ_{6DF}^2	$0.10 \quad (\nu: 0.0)$
Ω_{m}	$0.296^{+0.014}_{-0.013} \quad (+1.6\sigma)$	k_{eq}	$0.01033^{+0.00016}_{-0.00016} \quad (-0.5\sigma)$	χ_{MGS}^2	$2.47 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1422^{+0.0022}_{-0.0021} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8167^{+0.0097}_{-0.0097} \quad (+0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.50 \quad (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.0985^{+0.0027}_{-0.0027} \quad (-1.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4512^{+0.0050}_{-0.0050} \quad (+0.5\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.2\sigma)$
σ_8	$0.824^{+0.024}_{-0.024} \quad (-1.7\sigma)$	$H(0.15)$	$73.91^{+0.97}_{-0.95} \quad (-1.5\sigma)$	χ_{BAO}^2	$7.1 \quad (\nu: 0.7)$
S_8	$0.819^{+0.026}_{-0.024} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+11}_{-11} \quad (+1.6\sigma)$	χ_{CMB}^2	$11933.9 \quad (\nu: 15.8) \quad (+1900.8\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 12991.69; R - 1 = 0.00727$$

18.74 base_w_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02234^{+0.00029}_{-0.00029}$ (+0.8 σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.014}_{-0.013}$ (−1.6 σ)	$H(0.51)$	$89.72^{+0.48}_{-0.48}$ (+1.4 σ)
$\Omega_{\mathrm{c}} h^2$	$0.1193^{+0.0021}_{-0.0020}$ (−0.6 σ)	$\sigma_8/h^{0.5}$	$0.991^{+0.020}_{-0.019}$ (−1.7 σ)	$D_{\mathrm{M}}(0.51)$	1961^{+20}_{-20} (+1.5 σ)
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00058}_{-0.00057}$ (+0.3 σ)	$r_{\mathrm{drag}} h$	$102.1^{+2.3}_{-2.2}$ (−1.6 σ)	$H(0.61)$	$95.16^{+0.49}_{-0.51}$ (+1.7 σ)
τ	$0.055^{+0.012}_{-0.011}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	$2.442^{+0.043}_{-0.042}$ (−1.3 σ)	$D_{\mathrm{M}}(0.61)$	2285^{+20}_{-20} (+1.5 σ)
w_0	$-1.058^{+0.057}_{-0.060}$ (+1.7 σ)	z_{re}	< 8.84 (+0.4 σ)	$H(2.33)$	$235.2^{+1.1}_{-1.1}$ (+1.2 σ)
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.026}_{-0.024}$ (+0.2 σ)	$10^9 A_{\mathrm{s}}$	$2.096^{+0.054}_{-0.050}$ (+0.2 σ)	$D_{\mathrm{M}}(2.33)$	5757^{+17}_{-18} (+0.3 σ)
n_{s}	$0.9666^{+0.0079}_{-0.0076}$ (+0.6 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.020}_{-0.021}$ (−0.4 σ)	$f\sigma_8(0.15)$	$0.459^{+0.013}_{-0.013}$ (−1.5 σ)
y_{cal}	$1.0006^{+0.0048}_{-0.0048}$ (+0.1 σ)	D_{40}	1225^{+23}_{-23} (−0.3 σ)	$\sigma_8(0.15)$	$0.764^{+0.019}_{-0.019}$ (−1.7 σ)
A_{100}^{PS}	239^{+50}_{-50} (−0.8 σ)	D_{220}	5723^{+72}_{-76} (+0.2 σ)	$f\sigma_8(0.38)$	$0.483^{+0.015}_{-0.015}$ (−1.7 σ)
A_{143}^{PS}	39^{+20}_{-20} (−1.2 σ)	D_{810}	2535^{+26}_{-26} (−0.0 σ)	$\sigma_8(0.38)$	$0.678^{+0.017}_{-0.017}$ (−1.7 σ)
A_{217}^{PS}	102^{+30}_{-30} (−1.3 σ)	D_{1420}	$816.0^{+9.2}_{-9.4}$ (+0.4 σ)	$f\sigma_8(0.51)$	$0.484^{+0.016}_{-0.016}$ (−1.7 σ)
A_{217}^{CIB}	40^{+10}_{-10} (−1.2 σ)	D_{2000}	$230.5^{+3.1}_{-3.1}$ (+0.4 σ)	$\sigma_8(0.51)$	$0.634^{+0.016}_{-0.016}$ (−1.7 σ)
A_{143}^{tSZ}	< 7.53 (−0.6 σ)	$n_{\mathrm{s},0.002}$	$0.9666^{+0.0079}_{-0.0076}$ (+0.6 σ)	$f\sigma_8(0.61)$	$0.480^{+0.016}_{-0.016}$ (−1.7 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	Y_{P}	$0.24538^{+0.00011}_{-0.00012}$ (+0.8 σ)	$\sigma_8(0.61)$	$0.603^{+0.015}_{-0.015}$ (−1.7 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24671^{+0.00011}_{-0.00012}$ (+0.8 σ)	$f\sigma_8(2.33)$	$0.3044^{+0.0073}_{-0.0074}$ (−1.7 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.592^{+0.056}_{-0.053}$ (−0.8 σ)	$\sigma_8(2.33)$	$0.3126^{+0.0064}_{-0.0064}$ (−1.6 σ)
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.763^{+0.043}_{-0.043}$ (+1.4 σ)	f_{2000}^{143}	30^{+6}_{-5} (−0.5 σ)
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.90^{+0.47}_{-0.46}$ (−0.8 σ)	f_{2000}^{217}	$106.7^{+3.8}_{-3.9}$ (−0.6 σ)
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$144.64^{+0.48}_{-0.47}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.7 σ)
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04112^{+0.00058}_{-0.00056}$ (+0.2 σ)	$\chi_{\mathrm{lensing}}^2$	9.09 (ν : 0.2)
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.893^{+0.046}_{-0.046}$ (+0.3 σ)	χ_{small}^2	396.8 (ν : 1.3) (+0.0 σ)
c_{100}	$0.9975^{+0.0021}_{-0.0021}$ (−3.3 σ)	z_{drag}	$1059.81^{+0.62}_{-0.64}$ (+0.8 σ)	χ_{lowl}^2	22.97 (ν : 0.3) (−0.2 σ)
c_{217}	$1.0011^{+0.0030}_{-0.0031}$ (+4.5 σ)	r_{drag}	$147.32^{+0.50}_{-0.50}$ (+0.2 σ)	$\chi_{\mathrm{CamSpec}}^2$	11513.9 (ν : 15.6)
c_{TE}	$0.9964^{+0.0098}_{-0.0096}$	k_{D}	$0.14060^{+0.00060}_{-0.00062}$ (+0.1 σ)	$\chi_{\mathrm{H073p45}}^2$	6.4 (ν : 2.7)
c_{EE}	$0.9919^{+0.0098}_{-0.0097}$	$100\theta_{\mathrm{D}}$	$0.16083^{+0.00038}_{-0.00036}$ (−0.8 σ)	χ_{JLA}^2	1036.4 (ν : 1.7)
H_0	$69.3^{+1.6}_{-1.5}$ (−1.6 σ)	z_{eq}	3385^{+47}_{-46} (−0.5 σ)	$\chi_{6\mathrm{DF}}^2$	0.11 (ν : 0.0)
Ω_{Λ}	$0.704^{+0.013}_{-0.014}$ (−1.5 σ)	k_{eq}	$0.01033^{+0.00014}_{-0.00014}$ (−0.5 σ)	χ_{MGS}^2	2.48 (ν : 0.2)
Ω_{m}	$0.296^{+0.014}_{-0.013}$ (+1.5 σ)	$100\theta_{\mathrm{eq}}$	$0.8164^{+0.0087}_{-0.0087}$ (+0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.50 (ν : 0.2)
$\Omega_{\mathrm{m}} h^2$	$0.1423^{+0.0019}_{-0.0019}$ (−0.5 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0045}_{-0.0045}$ (+0.5 σ)	χ_{prior}^2	7.8 (ν : 5.8) (+0.2 σ)
$\Omega_{\mathrm{m}} h^3$	$0.0986^{+0.0026}_{-0.0025}$ (−1.6 σ)	$H(0.15)$	$73.93^{+0.96}_{-0.95}$ (−1.5 σ)	χ_{CMB}^2	11942.8 (ν : 16.5) (+1902.4 σ)
σ_8	$0.825^{+0.020}_{-0.021}$ (−1.7 σ)	$D_{\mathrm{M}}(0.15)$	629^{+11}_{-11} (+1.6 σ)	χ_{BAO}^2	7.1 (ν : 0.7)
S_8	$0.820^{+0.021}_{-0.020}$ (+0.9 σ)	$H(0.38)$	$83.30^{+0.53}_{-0.51}$ (−0.6 σ)		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.011}_{-0.011}$ (+0.9 σ)	$D_{\mathrm{M}}(0.38)$	1510^{+18}_{-18} (+1.5 σ)		

$$\bar{\chi}_{\mathrm{eff}}^2 = 13000.46; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -3.08; R - 1 = 0.00765$$

18.75 base_w_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022163	$0.02215^{+0.00043}_{-0.00043} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	1.076	$1.041^{+0.059}_{-0.066} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	481	$547^{+100}_{-70} \quad (+0.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.12011	$0.1201^{+0.0041}_{-0.0040} \quad (-0.2\sigma)$	$r_{\mathrm{drag}} h$	147.3	$125^{+20}_{-30} \quad (-0.0\sigma)$	$H(0.38)$	84.30	$84.1^{+2.1}_{-2.2} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	1.04087	$1.04084^{+0.00090}_{-0.00091} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.529	$2.498^{+0.086}_{-0.093} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	1288	$1386^{+200}_{-100} \quad (-0.0\sigma)$
τ	0.0528	$0.052^{+0.016}_{-0.016} \quad (+0.0\sigma)$	z_{re}	7.51	$7.4^{+1.6}_{-1.7} \quad (+0.0\sigma)$	$H(0.51)$	86.59	$88.2^{+1.9}_{-2.2} \quad (+0.1\sigma)$
w_0	-1.97	$-1.55^{+0.60}_{-0.48} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	2.089	$2.085^{+0.069}_{-0.066} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	1745	$1839^{+170}_{-120} \quad (-0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0393	$3.037^{+0.033}_{-0.032} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8795	$1.879^{+0.027}_{-0.028} \quad (-0.3\sigma)$	$H(0.61)$	90.02	$92.5^{+2.9}_{-2.8} \quad (+0.1\sigma)$
n_{s}	0.9632	$0.963^{+0.011}_{-0.011} \quad (+0.0\sigma)$	D_{40}	1226.3	$1228^{+31}_{-30} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2085	$2171^{+160}_{-120} \quad (-0.0\sigma)$
y_{cal}	1.00014	$1.0004^{+0.0050}_{-0.0049} \quad (+0.0\sigma)$	D_{220}	5711	$5710^{+84}_{-82} \quad (-0.1\sigma)$	$H(2.33)$	230.38	$232.1^{+5.4}_{-4.3} \quad (-0.1\sigma)$
A_{100}^{PS}	250	$254^{+50}_{-50} \quad (-0.3\sigma)$	D_{810}	2530.7	$2531^{+28}_{-27} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	5739.8	$5749^{+44}_{-43} \quad (-0.1\sigma)$
A_{143}^{tSZ}	6.15	$< 7.42 \quad (-0.7\sigma)$	D_{1420}	812.4	$812.5^{+9.9}_{-10} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	0.5097	$0.488^{+0.043}_{-0.040} \quad (-0.1\sigma)$
A^{kSZ}	0.4	—	D_{2000}	229.29	$229.2^{+3.5}_{-3.6} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	1.014	$0.90^{+0.13}_{-0.16} \quad (-0.0\sigma)$
A_{100}^{dust}	1.003	$1.01^{+0.38}_{-0.38}$	$n_{\mathrm{s},0.002}$	0.9632	$0.963^{+0.011}_{-0.011} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	0.647	$0.570^{+0.091}_{-0.11} \quad (-0.1\sigma)$
A_{143}^{power}	11.68	$10.2^{+4.7}_{-4.2}$	Y_{P}	0.245310	$0.24530^{+0.00017}_{-0.00020} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	0.908	$0.80^{+0.12}_{-0.15} \quad (-0.0\sigma)$
A_{217}^{power}	11.02	$8.0^{+4.9}_{-4.1}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.246637	$0.24663^{+0.00017}_{-0.00020} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	0.679	$0.59^{+0.11}_{-0.12} \quad (-0.1\sigma)$
$A_{143 \times 217}^{\mathrm{power}}$	7.34	< 8.27	$10^5 \mathrm{D}/\mathrm{H}$	2.625	$2.628^{+0.083}_{-0.080} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	0.848	$0.75^{+0.11}_{-0.14} \quad (-0.0\sigma)$
$\gamma_{143}^{\mathrm{power}}$	1.34	$1.34^{+0.97}_{-0.84}$	Age/Gyr	13.456	$13.59^{+0.26}_{-0.19} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	0.685	$0.59^{+0.11}_{-0.13} \quad (-0.1\sigma)$
$\gamma_{217}^{\mathrm{power}}$	1.35	> 0.358	z_*	1090.19	$1090.21^{+0.81}_{-0.78} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	0.804	$0.71^{+0.10}_{-0.13} \quad (-0.0\sigma)$
$\gamma_{143 \times 217}^{\mathrm{power}}$	1.27	> 0.368	r_*	144.56	$144.56^{+0.92}_{-0.94} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	0.400	$0.356^{+0.049}_{-0.063} \quad (-0.0\sigma)$
c_{100}	0.99813	$0.9978^{+0.0020}_{-0.0021} \quad (-2.9\sigma)$	$100\theta_*$	1.04107	$1.04105^{+0.00088}_{-0.00090} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.401	$0.359^{+0.045}_{-0.058} \quad (-0.0\sigma)$
c_{217}	0.99899	$0.9994^{+0.0031}_{-0.0028} \quad (+1.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.886	$13.886^{+0.085}_{-0.086} \quad (+0.2\sigma)$	f_{2000}^{143}	23.0	$23^{+6}_{-6} \quad (-2.7\sigma)$
H_0	99.98	$> 66.7 \quad (-0.0\sigma)$	z_{drag}	1059.47	$1059.44^{+0.88}_{-0.88} \quad (-0.1\sigma)$	f_{2000}^{217}	16.62	$16.6^{+3.9}_{-3.8} \quad (-47.9\sigma)$
Ω_{Λ}	0.857	$0.792^{+0.070}_{-0.12} \quad (-0.0\sigma)$	r_{drag}	147.29	$147.30^{+0.92}_{-0.94} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	10.95	$10.8^{+4.2}_{-4.1} \quad (-11.2\sigma)$
Ω_{m}	0.143	$0.208^{+0.12}_{-0.070} \quad (+0.0\sigma)$	k_{D}	0.14049	$0.1405^{+0.0010}_{-0.0010} \quad (-0.2\sigma)$	χ_{small}^2	395.78	$396.8 \quad (\nu: 1.3) \quad (+0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	0.14292	$0.1429^{+0.0039}_{-0.0038} \quad (-0.2\sigma)$	$100\theta_{\mathrm{D}}$	0.16104	$0.16105^{+0.00053}_{-0.00051} \quad (+0.1\sigma)$	χ_{lowl}^2	22.79	$23.1 \quad (\nu: 0.6) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	0.1429	$0.121^{+0.023}_{-0.027} \quad (-0.0\sigma)$	z_{eq}	3400	$3400^{+94}_{-91} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	6702.4	$6715.0 \quad (\nu: 13.0)$
σ_8	1.075	$0.96^{+0.13}_{-0.16} \quad (-0.1\sigma)$	k_{eq}	0.010377	$0.01038^{+0.00029}_{-0.00028} \quad (-0.2\sigma)$	χ_{prior}^2	1.2	$5.2 \quad (\nu: 4.2) \quad (-0.5\sigma)$
S_8	0.742	$0.783^{+0.072}_{-0.064} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	0.8131	$0.813^{+0.017}_{-0.017} \quad (+0.2\sigma)$	χ_{CMB}^2	7121.0	$7135.0 \quad (\nu: 14.0) \quad (+1051.8\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4067	$0.429^{+0.039}_{-0.035} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4494	$0.4494^{+0.0089}_{-0.0089} \quad (+0.2\sigma)$			
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6613	$0.640^{+0.038}_{-0.044} \quad (-0.1\sigma)$	$H(0.15)$	88.7	$81.8^{+7.8}_{-10} \quad (+0.0\sigma)$			

Best-fit $\chi_{\mathrm{eff}}^2 = 7122.16$; $\Delta\chi_{\mathrm{eff}}^2 = -2.96$; $\bar{\chi}_{\mathrm{eff}}^2 = 7140.23$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.98$; $R - 1 = 0.00669$

χ_{eff}^2 : CMB - small_100x143_offlike5_EE_Aplanck_B: 395.78 (Δ -0.00) commander_dx12.v3.2.29: 22.79 (Δ -0.91) CamSpec like_10.7cleaned: 6702.39 (Δ -2.04)

19 w+wa

19.1 base_w_wa_plikHM_TT_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022172	$0.02213^{+0.00041}_{-0.00041}$	$\sigma_8 \Omega_m^{0.25}$	0.6089	$0.609^{+0.028}_{-0.027}$	$H(0.38)$	84.71	$84.8^{+2.0}_{-2.2}$
$\Omega_c h^2$	0.12035	$0.1206^{+0.0036}_{-0.0036}$	$\sigma_8/h^{0.5}$	0.9899	$0.990^{+0.040}_{-0.039}$	$D_M(0.38)$	1527.0	1527^{+34}_{-35}
$100\theta_{MC}$	1.04079	$1.04078^{+0.00090}_{-0.00090}$	$r_{drag}h$	95.6	$95.5^{+7.2}_{-6.7}$	$H(0.51)$	91.42	$91.4^{+2.3}_{-2.4}$
τ	0.0530	$0.052^{+0.016}_{-0.016}$	$\langle d^2 \rangle^{1/2}$	2.466	$2.469^{+0.082}_{-0.084}$	$D_M(0.51)$	1969.8	1969^{+35}_{-35}
w_0	-0.62	$-0.59^{+0.50}_{-0.51}$	z_{re}	7.57	$7.4^{+1.6}_{-1.8}$	$H(0.61)$	96.82	$96.8^{+2.3}_{-2.3}$
w_a	-1.20	$-1.3^{+1.4}_{-1.6}$	$10^9 A_s$	2.093	$2.089^{+0.069}_{-0.068}$	$D_M(0.61)$	2288.5	2288^{+36}_{-36}
$\ln(10^{10} A_s)$	3.0413	$3.039^{+0.033}_{-0.033}$	$10^9 A_s e^{-2\tau}$	1.8827	$1.884^{+0.025}_{-0.026}$	$H(2.33)$	233.96	$234.0^{+2.5}_{-2.3}$
n_s	0.9644	$0.963^{+0.011}_{-0.010}$	D_{40}	1228.6	1232^{+28}_{-29}	$D_M(2.33)$	5754.1	5757^{+28}_{-29}
y_{cal}	1.00010	$1.0004^{+0.0049}_{-0.0048}$	D_{220}	5710	5714^{+81}_{-78}	$f\sigma_8(0.15)$	0.4487	$0.449^{+0.028}_{-0.027}$
A_{217}^{CIB}	48.3	48^{+10}_{-10}	D_{810}	2536.0	2536^{+27}_{-27}	$\sigma_8(0.15)$	0.7361	$0.736^{+0.051}_{-0.047}$
$\xi^{tSZ \times CIB}$	0.37	—	D_{1420}	815.1	$814.4^{+9.9}_{-9.9}$	$f\sigma_8(0.38)$	0.4595	$0.460^{+0.043}_{-0.039}$
A_{143}^{tSZ}	6.99	$5.1^{+3.8}_{-3.9}$	D_{2000}	230.03	$229.7^{+3.5}_{-3.4}$	$\sigma_8(0.38)$	0.6535	$0.653^{+0.044}_{-0.041}$
A_{100}^{PS}	253	262^{+60}_{-50}	$n_{s,0.002}$	0.9644	$0.963^{+0.011}_{-0.010}$	$f\sigma_8(0.51)$	0.4597	$0.460^{+0.044}_{-0.041}$
A_{143}^{PS}	49.9	49^{+20}_{-20}	Y_P	0.245314	$0.24529^{+0.00017}_{-0.00019}$	$\sigma_8(0.51)$	0.6122	$0.612^{+0.040}_{-0.037}$
$A_{143 \times 217}^{PS}$	48.0	44^{+20}_{-20}	Y_P^{BBN}	0.246641	$0.24662^{+0.00017}_{-0.00020}$	$f\sigma_8(0.61)$	0.4569	$0.458^{+0.043}_{-0.040}$
A_{217}^{PS}	119.8	115^{+20}_{-20}	$10^5 D/H$	2.623	$2.631^{+0.079}_{-0.076}$	$\sigma_8(0.61)$	0.5830	$0.583^{+0.038}_{-0.035}$
A^{kSZ}	0.01	< 8.38	Age/Gyr	13.775	$13.777^{+0.069}_{-0.067}$	$f\sigma_8(2.33)$	0.2963	$0.296^{+0.017}_{-0.016}$
A_{100}^{dustTT}	8.90	$8.9^{+3.6}_{-3.6}$	z_*	1090.20	$1090.28^{+0.71}_{-0.72}$	$\sigma_8(2.33)$	0.3014	$0.301^{+0.017}_{-0.016}$
A_{143}^{dustTT}	10.75	$10.7^{+3.5}_{-3.5}$	r_*	144.49	$144.47^{+0.86}_{-0.85}$	f_{2000}^{143}	30.1	31^{+6}_{-6}
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.5}_{-6.5}$	$100\theta_*$	1.04100	$1.04099^{+0.00089}_{-0.00088}$	$f_{2000}^{143 \times 217}$	33.07	33^{+4}_{-4}
A_{217}^{dustTT}	94.6	93^{+10}_{-10}	$D_M(z_*)/\text{Gpc}$	13.880	$13.878^{+0.081}_{-0.079}$	f_{2000}^{217}	107.46	$108.0^{+3.7}_{-3.7}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	1059.51	$1059.42^{+0.86}_{-0.86}$	χ_{simall}^2	395.89	$396.9 (\nu: 1.4)$
c_{217}	0.99825	$0.9982^{+0.0012}_{-0.0012}$	r_{drag}	147.22	$147.21^{+0.88}_{-0.87}$	χ_{lowl}^2	23.46	$23.8 (\nu: 0.7)$
H_0	64.94	$64.9^{+4.9}_{-4.5}$	k_D	0.14058	$0.14055^{+0.00098}_{-0.00098}$	χ_{plik}^2	758.0	$770.5 (\nu: 14.3)$
Ω_Λ	0.6605	$0.658^{+0.050}_{-0.049}$	$100\theta_D$	0.16101	$0.16106^{+0.00052}_{-0.00050}$	χ_{6DF}^2	0.32	$0.56 (\nu: 0.2)$
Ω_m	0.3395	$0.342^{+0.049}_{-0.050}$	z_{eq}	3406	3410^{+83}_{-84}	χ_{MGS}^2	0.63	$0.89 (\nu: 0.4)$
$\Omega_m h^2$	0.14316	$0.1433^{+0.0035}_{-0.0035}$	k_{eq}	0.010395	$0.01041^{+0.00025}_{-0.00026}$	$\chi_{DR12BAO}^2$	3.49	$5.0 (\nu: 1.1)$
$\Omega_m h^3$	0.0930	$0.0930^{+0.0077}_{-0.0067}$	$100\theta_{eq}$	0.8120	$0.811^{+0.016}_{-0.015}$	χ_{prior}^2	1.3	$7.2 (\nu: 6.4)$
σ_8	0.798	$0.798^{+0.053}_{-0.049}$	$100\theta_{s,eq}$	0.4489	$0.4485^{+0.0081}_{-0.0079}$	χ_{BAO}^2	4.43	$6.4 (\nu: 1.7)$
S_8	0.8486	$0.850^{+0.043}_{-0.044}$	$H(0.15)$	73.09	$73.1^{+1.9}_{-1.7}$	χ_{CMB}^2	1177.3	$1191.2 (\nu: 14.9)$
$\sigma_8 \Omega_m^{0.5}$	0.4648	$0.466^{+0.024}_{-0.024}$	$D_M(0.15)$	651.6	652^{+27}_{-29}			

Best-fit $\chi_{eff}^2 = 1183.08$; $\Delta\chi_{eff}^2 = -2.67$; $\bar{\chi}_{eff}^2 = 1204.85$; $\Delta\bar{\chi}_{eff}^2 = -1.18$; $R - 1 = 0.00724$

χ_{eff}^2 : BAO - 6DF: 0.32 (Δ 0.29) MGS: 0.62 (Δ -0.65) DR12BAO: 3.49 (Δ -0.70) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.89 (Δ 0.00) commander_dx12_v3_2_29: 23.46 (Δ 0.64) plik_rd12_HM_v22_TT: 757.98 (Δ -2.12)

19.2 base_w_wa_plikHM_TT_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022196	$0.02216^{+0.00039}_{-0.00039}$	$\sigma_8 \Omega_m^{0.25}$	0.6047	$0.605^{+0.019}_{-0.019}$	$H(0.38)$	84.55	$84.7^{+2.2}_{-2.2}$
$\Omega_c h^2$	0.11973	$0.1199^{+0.0027}_{-0.0028}$	$\sigma_8/h^{0.5}$	0.9841	$0.984^{+0.028}_{-0.028}$	$D_M(0.38)$	1527.2	1528^{+33}_{-34}
$100\theta_{MC}$	1.04093	$1.04083^{+0.00086}_{-0.00086}$	$r_{drag}h$	96.1	$95.7^{+7.2}_{-6.8}$	$H(0.51)$	91.30	$91.5^{+2.4}_{-2.4}$
τ	0.0525	$0.051^{+0.015}_{-0.016}$	$\langle d^2 \rangle^{1/2}$	2.451	$2.455^{+0.052}_{-0.053}$	$D_M(0.51)$	1970.8	1970^{+34}_{-35}
w_0	-0.66	$-0.61^{+0.50}_{-0.53}$	z_{re}	7.51	$7.4^{+1.6}_{-1.6}$	$H(0.61)$	96.75	$96.9^{+2.3}_{-2.3}$
w_a	-1.01	$-1.2^{+1.4}_{-1.5}$	$10^9 A_s$	2.088	$2.084^{+0.062}_{-0.063}$	$D_M(0.61)$	2289.8	2289^{+35}_{-36}
$\ln(10^{10} A_s)$	3.0389	$3.037^{+0.030}_{-0.030}$	$10^9 A_s e^{-2\tau}$	1.8801	$1.881^{+0.022}_{-0.022}$	$H(2.33)$	234.01	$233.9^{+2.6}_{-2.3}$
n_s	0.9657	$0.9641^{+0.0092}_{-0.0088}$	D_{40}	1225.7	1229^{+24}_{-24}	$D_M(2.33)$	5752.4	5755^{+29}_{-28}
y_{cal}	1.00014	$1.0003^{+0.0047}_{-0.0048}$	D_{220}	5712	5715^{+81}_{-78}	$f\sigma_8(0.15)$	0.4463	$0.445^{+0.025}_{-0.024}$
A_{217}^{CIB}	48.8	48^{+10}_{-10}	D_{810}	2535.8	2535^{+26}_{-26}	$\sigma_8(0.15)$	0.7336	$0.732^{+0.046}_{-0.042}$
$\xi^{tSZ \times CIB}$	0.30	—	D_{1420}	815.4	$814.4^{+9.8}_{-9.9}$	$f\sigma_8(0.38)$	0.4577	$0.456^{+0.039}_{-0.038}$
A_{143}^{tSZ}	7.06	$5.1^{+3.8}_{-3.9}$	D_{2000}	230.09	$229.6^{+3.5}_{-3.4}$	$\sigma_8(0.38)$	0.6513	$0.650^{+0.040}_{-0.037}$
A_{100}^{PS}	254	263^{+50}_{-50}	$n_{s,0.002}$	0.9657	$0.9641^{+0.0092}_{-0.0088}$	$f\sigma_8(0.51)$	0.4577	$0.456^{+0.041}_{-0.037}$
A_{143}^{PS}	48.8	49^{+20}_{-20}	Y_P	0.245324	$0.24531^{+0.00016}_{-0.00019}$	$\sigma_8(0.51)$	0.6103	$0.609^{+0.037}_{-0.034}$
$A_{143 \times 217}^{PS}$	46.1	43^{+20}_{-20}	Y_P^{BBN}	0.246650	$0.24663^{+0.00016}_{-0.00019}$	$f\sigma_8(0.61)$	0.4547	$0.453^{+0.040}_{-0.037}$
A_{217}^{PS}	118.8	115^{+20}_{-20}	$10^5 D/H$	2.619	$2.626^{+0.076}_{-0.073}$	$\sigma_8(0.61)$	0.5811	$0.580^{+0.035}_{-0.032}$
A^{kSZ}	0.0	—	Age/Gyr	13.776	$13.779^{+0.068}_{-0.068}$	$f\sigma_8(2.33)$	0.2953	$0.294^{+0.015}_{-0.014}$
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.6}$	z_*	1090.12	$1090.18^{+0.63}_{-0.63}$	$\sigma_8(2.33)$	0.3011	$0.300^{+0.016}_{-0.015}$
A_{143}^{dustTT}	10.84	$10.7^{+3.4}_{-3.5}$	r_*	144.63	$144.61^{+0.68}_{-0.65}$	f_{2000}^{143}	30.2	31^{+6}_{-6}
$A_{143 \times 217}^{dustTT}$	19.5	$18.3^{+6.5}_{-6.4}$	$100\theta_*$	1.04112	$1.04104^{+0.00085}_{-0.00084}$	$f_{2000}^{143 \times 217}$	33.06	33^{+4}_{-4}
A_{217}^{dustTT}	94.6	93^{+10}_{-10}	$D_M(z_*)/\text{Gpc}$	13.892	$13.891^{+0.064}_{-0.062}$	f_{2000}^{217}	107.48	$108.0^{+3.7}_{-3.7}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	1059.51	$1059.44^{+0.87}_{-0.88}$	$\chi_{lensing}^2$	8.80	$9.4 (\nu: 0.5)$
c_{217}	0.99825	$0.9982^{+0.0012}_{-0.0012}$	r_{drag}	147.36	$147.35^{+0.71}_{-0.69}$	χ_{small}^2	395.81	$396.8 (\nu: 1.1)$
H_0	65.23	$64.9^{+4.9}_{-4.6}$	k_D	0.14045	$0.14043^{+0.00086}_{-0.00085}$	χ_{lowl}^2	23.18	$23.52 (\nu: 0.4)$
Ω_Λ	0.6649	$0.660^{+0.050}_{-0.049}$	$100\theta_D$	0.16101	$0.16104^{+0.00051}_{-0.00050}$	χ_{plik}^2	758.6	$770.6 (\nu: 13.3)$
Ω_m	0.3351	$0.340^{+0.049}_{-0.050}$	z_{eq}	3392	3395^{+62}_{-63}	χ_{6DF}^2	0.25	$0.55 (\nu: 0.2)$
$\Omega_m h^2$	0.14257	$0.1427^{+0.0026}_{-0.0026}$	k_{eq}	0.010352	$0.01036^{+0.00019}_{-0.00019}$	χ_{MGS}^2	0.72	$0.91 (\nu: 0.4)$
$\Omega_m h^3$	0.0930	$0.0927^{+0.0076}_{-0.0067}$	$100\theta_{eq}$	0.8147	$0.814^{+0.012}_{-0.012}$	$\chi_{DR12BAO}^2$	3.34	$4.9 (\nu: 1.2)$
σ_8	0.7948	$0.793^{+0.048}_{-0.044}$	$100\theta_{s,eq}$	0.4502	$0.4499^{+0.0061}_{-0.0059}$	χ_{prior}^2	1.4	$7.2 (\nu: 6.5)$
S_8	0.8400	$0.842^{+0.031}_{-0.031}$	$H(0.15)$	73.05	$73.1^{+1.8}_{-1.7}$	χ_{CMB}^2	1186.4	$1200.3 (\nu: 14.7)$
$\sigma_8 \Omega_m^{0.5}$	0.4601	$0.461^{+0.017}_{-0.017}$	$D_M(0.15)$	650.6	652^{+28}_{-29}	χ_{BAO}^2	4.31	$6.3 (\nu: 1.9)$

Best-fit $\chi_{eff}^2 = 1192.04$; $\Delta\chi_{eff}^2 = -2.65$; $\bar{\chi}_{eff}^2 = 1213.89$; $\Delta\bar{\chi}_{eff}^2 = -0.84$; $R - 1 = 0.01045$

χ_{eff}^2 : BAO - 6DF: 0.25 (Δ 0.23) MGS: 0.72 (Δ -0.50) DR12BAO: 3.34 (Δ -1.03) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.80 (Δ -0.08) small_100x143_offlike5_EE_Aplanc. 395.81 (Δ -0.28) commander_dx12_v3.2_29: 23.18 (Δ 0.22) plik_rd12_HM_v22.TT: 758.58 (Δ -1.23)

19.3 base_w_wa_plikHM_TT_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02214^{+0.00041}_{-0.00040}$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.610^{+0.028}_{-0.027}$	$H(0.38)$	$84.8^{+2.1}_{-2.2}$
$\Omega_{\text{c}}h^2$	$0.1205^{+0.0036}_{-0.0036}$	$\sigma_8/h^{0.5}$	$0.992^{+0.040}_{-0.039}$	$D_{\text{M}}(0.38)$	1527^{+34}_{-35}
$100\theta_{\text{MC}}$	$1.04079^{+0.00090}_{-0.00090}$	$r_{\text{drag}}h$	$95.6^{+7.2}_{-6.7}$	$H(0.51)$	$91.4^{+2.3}_{-2.4}$
τ	$0.054^{+0.013}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.472^{+0.081}_{-0.083}$	$D_{\text{M}}(0.51)$	1969^{+35}_{-35}
w_0	$-0.59^{+0.50}_{-0.51}$	z_{re}	< 8.79	$H(0.61)$	$96.8^{+2.3}_{-2.3}$
w_a	$-1.3^{+1.4}_{-1.6}$	$10^9 A_{\text{s}}$	$2.097^{+0.058}_{-0.054}$	$D_{\text{M}}(0.61)$	2288^{+37}_{-36}
$\ln(10^{10} A_{\text{s}})$	$3.043^{+0.028}_{-0.026}$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.884^{+0.026}_{-0.026}$	$H(2.33)$	$234.0^{+2.5}_{-2.3}$
n_{s}	$0.963^{+0.011}_{-0.010}$	D_{40}	1232^{+28}_{-29}	$D_{\text{M}}(2.33)$	5757^{+28}_{-29}
y_{cal}	$1.0004^{+0.0049}_{-0.0048}$	D_{220}	5714^{+82}_{-79}	$f\sigma_8(0.15)$	$0.449^{+0.028}_{-0.027}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{810}	2536^{+27}_{-27}	$\sigma_8(0.15)$	$0.737^{+0.050}_{-0.047}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$814.4^{+9.9}_{-9.9}$	$f\sigma_8(0.38)$	$0.460^{+0.043}_{-0.039}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$	D_{2000}	$229.7^{+3.5}_{-3.4}$	$\sigma_8(0.38)$	$0.654^{+0.044}_{-0.041}$
A_{100}^{PS}	262^{+60}_{-50}	$n_{\text{s},0.002}$	$0.963^{+0.011}_{-0.010}$	$f\sigma_8(0.51)$	$0.461^{+0.044}_{-0.041}$
A_{143}^{PS}	49^{+20}_{-20}	Y_{P}	$0.24530^{+0.00017}_{-0.00018}$	$\sigma_8(0.51)$	$0.613^{+0.040}_{-0.037}$
$A_{143 \times 217}^{\text{PS}}$	44^{+20}_{-20}	$Y_{\text{P}}^{\text{BBN}}$	$0.24662^{+0.00017}_{-0.00019}$	$f\sigma_8(0.61)$	$0.458^{+0.043}_{-0.040}$
A_{217}^{PS}	115^{+20}_{-20}	$10^5 \text{D}/\text{H}$	$2.630^{+0.078}_{-0.076}$	$\sigma_8(0.61)$	$0.584^{+0.037}_{-0.034}$
A^{kSZ}	< 8.35	Age/Gyr	$13.777^{+0.070}_{-0.067}$	$f\sigma_8(2.33)$	$0.296^{+0.017}_{-0.016}$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.6}$	z_*	$1090.26^{+0.71}_{-0.72}$	$\sigma_8(2.33)$	$0.301^{+0.017}_{-0.015}$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.5}$	r_*	$144.48^{+0.87}_{-0.85}$	f_{2000}^{143}	31^{+6}_{-6}
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.5}$	$100\theta_*$	$1.04100^{+0.00089}_{-0.00088}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
A_{217}^{dustTT}	93^{+10}_{-10}	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.879^{+0.081}_{-0.080}$	f_{2000}^{217}	$108.0^{+3.7}_{-3.7}$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	$1059.43^{+0.85}_{-0.87}$	χ_{simall}^2	$396.7 (\nu: 1.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	r_{drag}	$147.22^{+0.88}_{-0.87}$	χ_{lowl}^2	$23.8 (\nu: 0.7)$
H_0	$64.9^{+4.9}_{-4.5}$	k_{D}	$0.14055^{+0.00098}_{-0.00098}$	χ_{plik}^2	$770.3 (\nu: 14.3)$
Ω_{Λ}	$0.659^{+0.050}_{-0.049}$	$100\theta_{\text{D}}$	$0.16105^{+0.00051}_{-0.00050}$	$\chi_{6\text{DF}}^2$	$0.56 (\nu: 0.2)$
Ω_{m}	$0.341^{+0.049}_{-0.050}$	z_{eq}	3408^{+83}_{-84}	χ_{MGS}^2	$0.89 (\nu: 0.4)$
$\Omega_{\text{m}}h^2$	$0.1433^{+0.0035}_{-0.0035}$	k_{eq}	$0.01040^{+0.00025}_{-0.00026}$	χ_{DR12BAO}^2	$5.0 (\nu: 1.1)$
$\Omega_{\text{m}}h^3$	$0.0930^{+0.0077}_{-0.0067}$	$100\theta_{\text{eq}}$	$0.812^{+0.016}_{-0.015}$	χ_{prior}^2	$7.2 (\nu: 6.4)$
σ_8	$0.799^{+0.053}_{-0.049}$	$100\theta_{\text{s,eq}}$	$0.4486^{+0.0081}_{-0.0079}$	χ_{BAO}^2	$6.4 (\nu: 1.8)$
S_8	$0.851^{+0.043}_{-0.044}$	$H(0.15)$	$73.1^{+1.9}_{-1.7}$	χ_{CMB}^2	$1190.9 (\nu: 14.5)$
$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.466^{+0.024}_{-0.024}$	$D_{\text{M}}(0.15)$	652^{+28}_{-29}		

$$\bar{\chi}_{\text{eff}}^2 = 1204.53; \Delta\bar{\chi}_{\text{eff}}^2 = -1.22; R - 1 = 0.00721$$

19.4 base_w_wa_plikHM_TT_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02217^{+0.00039}_{-0.00039}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.019}_{-0.019}$	$H(0.38)$	$84.7^{+2.2}_{-2.2}$
$\Omega_{\mathrm{c}} h^2$	$0.1198^{+0.0026}_{-0.0027}$	$\sigma_8/h^{0.5}$	$0.984^{+0.028}_{-0.028}$	$D_{\mathrm{M}}(0.38)$	1528^{+33}_{-34}
$100\theta_{\mathrm{MC}}$	$1.04085^{+0.00085}_{-0.00086}$	$r_{\mathrm{drag}} h$	$95.7^{+7.2}_{-6.8}$	$H(0.51)$	$91.5^{+2.4}_{-2.5}$
τ	$0.053^{+0.012}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.456^{+0.052}_{-0.053}$	$D_{\mathrm{M}}(0.51)$	1971^{+35}_{-35}
w_0	$-0.61^{+0.52}_{-0.51}$	z_{re}	< 8.71	$H(0.61)$	$96.9^{+2.3}_{-2.3}$
w_a	$-1.2^{+1.4}_{-1.5}$	$10^9 A_{\mathrm{s}}$	$2.091^{+0.053}_{-0.048}$	$D_{\mathrm{M}}(0.61)$	2289^{+36}_{-36}
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.025}_{-0.023}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.022}_{-0.021}$	$H(2.33)$	$233.9^{+2.6}_{-2.3}$
n_{s}	$0.9645^{+0.0090}_{-0.0088}$	D_{40}	1229^{+24}_{-25}	$D_{\mathrm{M}}(2.33)$	5755^{+29}_{-28}
y_{cal}	$1.0003^{+0.0048}_{-0.0048}$	D_{220}	5715^{+81}_{-78}	$f\sigma_8(0.15)$	$0.445^{+0.026}_{-0.024}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{810}	2535^{+26}_{-26}	$\sigma_8(0.15)$	$0.732^{+0.046}_{-0.043}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$814.4^{+9.8}_{-9.9}$	$f\sigma_8(0.38)$	$0.456^{+0.039}_{-0.038}$
A_{143}^{tSZ}	$5.1^{+3.7}_{-3.9}$	D_{2000}	$229.7^{+3.5}_{-3.4}$	$\sigma_8(0.38)$	$0.650^{+0.041}_{-0.037}$
A_{100}^{PS}	263^{+50}_{-60}	$n_{\mathrm{s},0.002}$	$0.9645^{+0.0090}_{-0.0088}$	$f\sigma_8(0.51)$	$0.456^{+0.041}_{-0.037}$
A_{143}^{PS}	49^{+20}_{-20}	Y_{P}	$0.24531^{+0.00016}_{-0.00018}$	$\sigma_8(0.51)$	$0.609^{+0.037}_{-0.034}$
$A_{143 \times 217}^{\mathrm{PS}}$	43^{+20}_{-20}	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00016}_{-0.00018}$	$f\sigma_8(0.61)$	$0.454^{+0.040}_{-0.037}$
A_{217}^{PS}	115^{+20}_{-20}	$10^5 \mathrm{D}/\mathrm{H}$	$2.624^{+0.074}_{-0.073}$	$\sigma_8(0.61)$	$0.580^{+0.034}_{-0.032}$
A^{kSZ}	< 8.36	$\mathrm{Age}/\mathrm{Gyr}$	$13.780^{+0.069}_{-0.068}$	$f\sigma_8(2.33)$	$0.295^{+0.015}_{-0.014}$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6}$	z_*	$1090.15^{+0.62}_{-0.62}$	$\sigma_8(2.33)$	$0.300^{+0.016}_{-0.015}$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5}$	r_*	$144.64^{+0.66}_{-0.63}$	f_{2000}^{143}	31^{+6}_{-6}
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.4}$	$100\theta_*$	$1.04105^{+0.00084}_{-0.00084}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
$A_{217}^{\mathrm{dustTT}}$	93^{+10}_{-10}	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.894^{+0.063}_{-0.060}$	f_{2000}^{217}	$108.0^{+3.7}_{-3.6}$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	$1059.46^{+0.86}_{-0.86}$	$\chi_{\mathrm{lensing}}^2$	$9.4 (\nu: 0.5)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	r_{drag}	$147.38^{+0.69}_{-0.67}$	χ_{simall}^2	$396.6 (\nu: 1.0)$
H_0	$65.0^{+4.9}_{-4.6}$	k_{D}	$0.14041^{+0.00085}_{-0.00083}$	χ_{lowl}^2	$23.50 (\nu: 0.4)$
Ω_{Λ}	$0.661^{+0.049}_{-0.049}$	$100\theta_{\mathrm{D}}$	$0.16104^{+0.00051}_{-0.00050}$	χ_{plik}^2	$770.5 (\nu: 13.4)$
Ω_{m}	$0.339^{+0.049}_{-0.049}$	z_{eq}	3392^{+59}_{-61}	$\chi_{6\mathrm{DF}}^2$	$0.54 (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0025}_{-0.0026}$	k_{eq}	$0.01035^{+0.00018}_{-0.00019}$	χ_{MGS}^2	$0.91 (\nu: 0.4)$
$\Omega_{\mathrm{m}} h^3$	$0.0926^{+0.0076}_{-0.0067}$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.011}$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 (\nu: 1.2)$
σ_8	$0.793^{+0.048}_{-0.044}$	$100\theta_{\mathrm{s,eq}}$	$0.4502^{+0.0059}_{-0.0056}$	χ_{prior}^2	$7.3 (\nu: 6.5)$
S_8	$0.842^{+0.031}_{-0.031}$	$H(0.15)$	$73.0^{+1.8}_{-1.8}$	χ_{CMB}^2	$1200.0 (\nu: 14.2)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.461^{+0.017}_{-0.017}$	$D_{\mathrm{M}}(0.15)$	652^{+28}_{-29}	χ_{BAO}^2	$6.3 (\nu: 1.9)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1213.56; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -1.01; R - 1 = 0.01398$$

19.5 base_w_wa_plikHM_TTTEE_lowl_lowE_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022395	$0.02236^{+0.00029}_{-0.00028}$	$\Omega_m h^3$	0.0929	$0.0930^{+0.0071}_{-0.0068}$	$H(0.15)$	73.19	$73.2^{+1.7}_{-1.7}$
$\Omega_c h^2$	0.12001	$0.1203^{+0.0025}_{-0.0025}$	σ_8	0.7948	$0.795^{+0.048}_{-0.044}$	$D_M(0.15)$	651.2	652^{+28}_{-29}
$100\theta_{MC}$	1.04093	$1.04089^{+0.00061}_{-0.00061}$	S_8	0.8454	$0.848^{+0.033}_{-0.034}$	$H(0.38)$	84.95	$85.0^{+2.1}_{-2.2}$
τ	0.0546	$0.054^{+0.016}_{-0.015}$	$\sigma_8 \Omega_m^{0.5}$	0.4631	$0.464^{+0.018}_{-0.019}$	$D_M(0.38)$	1524.6	1524^{+33}_{-32}
w_0	-0.60	$-0.58^{+0.50}_{-0.51}$	$\sigma_8 \Omega_m^{0.25}$	0.6067	$0.608^{+0.021}_{-0.020}$	$H(0.51)$	91.71	$91.7^{+2.2}_{-2.4}$
w_a	-1.20	$-1.3^{+1.4}_{-1.5}$	$\sigma_8/h^{0.5}$	0.9865	$0.988^{+0.031}_{-0.030}$	$D_M(0.51)$	1966.1	1965^{+34}_{-33}
$\ln(10^{10} A_s)$	3.0454	$3.044^{+0.032}_{-0.031}$	$r_{drag} h$	95.5	$95.4^{+7.1}_{-6.7}$	$H(0.61)$	97.14	$97.1^{+2.2}_{-2.3}$
n_s	0.9664	$0.9645^{+0.0082}_{-0.0085}$	$\langle d^2 \rangle^{1/2}$	2.461	$2.466^{+0.062}_{-0.062}$	$D_M(0.61)$	2283.8	2283^{+36}_{-34}
y_{cal}	1.00057	$1.0005^{+0.0048}_{-0.0049}$	z_{re}	7.68	$7.6^{+1.6}_{-1.6}$	$H(2.33)$	234.06	$234.1^{+2.3}_{-2.2}$
A_{217}^{CIB}	45.5	47^{+10}_{-10}	$10^9 A_s$	2.102	$2.099^{+0.068}_{-0.064}$	$D_M(2.33)$	5742.5	5746^{+23}_{-21}
$\xi^{tSZ \times CIB}$	0.69	—	$10^9 A_s e^{-2\tau}$	1.8846	$1.884^{+0.022}_{-0.023}$	$f\sigma_8(0.15)$	0.4460	$0.446^{+0.025}_{-0.022}$
A_{143}^{tSZ}	7.02	$5.5^{+3.8}_{-3.8}$	D_{40}	1228.1	1232^{+24}_{-24}	$\sigma_8(0.15)$	0.7335	$0.734^{+0.046}_{-0.043}$
A_{100}^{PS}	248	258^{+50}_{-50}	D_{220}	5732	5731^{+75}_{-75}	$f\sigma_8(0.38)$	0.4563	$0.457^{+0.038}_{-0.036}$
A_{143}^{PS}	51.1	46^{+10}_{-20}	D_{810}	2541.5	2539^{+25}_{-27}	$\sigma_8(0.38)$	0.6514	$0.652^{+0.040}_{-0.037}$
$A_{143 \times 217}^{PS}$	54.0	42^{+20}_{-20}	D_{1420}	818.5	$816.8^{+9.1}_{-9.4}$	$f\sigma_8(0.51)$	0.4565	$0.457^{+0.040}_{-0.036}$
A_{217}^{PS}	122.4	115^{+20}_{-20}	D_{2000}	231.50	$230.9^{+3.0}_{-3.1}$	$\sigma_8(0.51)$	0.6105	$0.611^{+0.037}_{-0.034}$
A^{kSZ}	0.01	< 7.92	$n_{s,0.002}$	0.9664	$0.9645^{+0.0082}_{-0.0085}$	$f\sigma_8(0.61)$	0.4538	$0.455^{+0.039}_{-0.035}$
A_{100}^{dustTT}	8.79	$8.9^{+3.6}_{-3.6}$	Y_P	0.245405	$0.24539^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	0.5814	$0.582^{+0.034}_{-0.032}$
A_{143}^{dustTT}	11.00	$10.9^{+3.5}_{-3.5}$	Y_P^{BBN}	0.246732	$0.24671^{+0.00011}_{-0.00012}$	$f\sigma_8(2.33)$	0.2958	$0.296^{+0.016}_{-0.015}$
$A_{143 \times 217}^{dustTT}$	20.2	$18.6^{+6.4}_{-6.4}$	$10^5 D/H$	2.581	$2.589^{+0.054}_{-0.052}$	$\sigma_8(2.33)$	0.3011	$0.301^{+0.016}_{-0.015}$
A_{217}^{dustTT}	95.7	94^{+10}_{-10}	Age/Gyr	13.753	$13.755^{+0.061}_{-0.056}$	f_{2000}^{143}	28.5	29^{+5}_{-5}
A_{100}^{dustTE}	0.115	$0.115^{+0.075}_{-0.074}$	z_*	1089.89	$1089.96^{+0.51}_{-0.50}$	$f_{2000}^{143 \times 217}$	31.83	32^{+4}_{-4}
$A_{100 \times 143}^{dustTE}$	0.135	$0.134^{+0.058}_{-0.057}$	r_*	144.41	$144.37^{+0.56}_{-0.57}$	f_{2000}^{217}	106.35	$106.9^{+3.4}_{-3.5}$
$A_{100 \times 217}^{dustTE}$	0.483	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04111	$1.04108^{+0.00061}_{-0.00060}$	χ_{small}^2	396.05	$397.0 (\nu: 1.6)$
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.871	$13.867^{+0.053}_{-0.053}$	χ_{lowl}^2	23.24	$23.63 (\nu: 0.4)$
$A_{143 \times 217}^{dustTE}$	0.665	$0.67^{+0.15}_{-0.16}$	z_{drag}	1060.01	$1059.92^{+0.58}_{-0.56}$	χ_{plik}^2	2343.6	$2358.5 (\nu: 16.6)$
A_{217}^{dustTE}	2.09	$2.09^{+0.52}_{-0.52}$	r_{drag}	147.06	$147.03^{+0.57}_{-0.57}$	χ_{6DF}^2	0.33	$0.57 (\nu: 0.2)$
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$	k_D	0.14092	$0.14092^{+0.00063}_{-0.00063}$	χ_{MGS}^2	0.63	$0.87 (\nu: 0.4)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_D$	0.160724	$0.16077^{+0.00035}_{-0.00034}$	$\chi_{DR12BAO}^2$	3.45	$4.9 (\nu: 1.1)$
H_0	64.92	$64.9^{+4.8}_{-4.6}$	z_{eq}	3403	3409^{+57}_{-56}	χ_{prior}^2	1.6	$11.5 (\nu: 10.0)$
Ω_Λ	0.6606	$0.658^{+0.050}_{-0.049}$	k_{eq}	0.010387	$0.01040^{+0.00017}_{-0.00017}$	χ_{BAO}^2	4.40	$6.3 (\nu: 1.7)$
Ω_m	0.3394	$0.342^{+0.049}_{-0.050}$	$100\theta_{eq}$	0.8132	$0.812^{+0.011}_{-0.011}$	χ_{CMB}^2	2762.9	$2779.1 (\nu: 17.0)$
$\Omega_m h^2$	0.14305	$0.1433^{+0.0024}_{-0.0023}$	$100\theta_{s,eq}$	0.4493	$0.4488^{+0.0054}_{-0.0054}$			

Best-fit $\chi_{eff}^2 = 2768.85$; $\Delta\chi_{eff}^2 = -3.07$; $\bar{\chi}_{eff}^2 = 2796.92$; $\Delta\bar{\chi}_{eff}^2 = -0.99$; $R - 1 = 0.01402$
 χ_{eff}^2 : BAO - 6DF: 0.33 (Δ 0.30) MGS: 0.62 (Δ -0.59) DR12BAO: 3.45 (Δ -0.96) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.05 (Δ -0.15) commander_dx12_v3_2_29: 23.24 (Δ 0.37) plik_rd12_HM_v22b_TTTEE: 2343.59 (Δ -1.91)

19.6 base_w_wa_plikHM_TTTEE_lowl_lowE_BAO_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022408	$0.02238^{+0.00028}_{-0.00028}$	$\Omega_m h^3$	0.0929	$0.0928^{+0.0071}_{-0.0068}$	$H(0.15)$	73.10	$73.2^{+1.7}_{-1.7}$
$\Omega_c h^2$	0.11969	$0.1199^{+0.0022}_{-0.0021}$	σ_8	0.7917	$0.792^{+0.046}_{-0.042}$	$D_M(0.15)$	651.2	651^{+28}_{-29}
$100\theta_{MC}$	1.04095	$1.04092^{+0.00060}_{-0.00061}$	S_8	0.8396	$0.842^{+0.027}_{-0.028}$	$H(0.38)$	84.79	$85.0^{+2.1}_{-2.2}$
τ	0.0530	$0.053^{+0.015}_{-0.015}$	$\sigma_8 \Omega_m^{0.5}$	0.4599	$0.461^{+0.015}_{-0.015}$	$D_M(0.38)$	1526.2	1525^{+32}_{-33}
w_0	-0.63	$-0.59^{+0.50}_{-0.52}$	$\sigma_8 \Omega_m^{0.25}$	0.6034	$0.604^{+0.017}_{-0.016}$	$H(0.51)$	91.58	$91.7^{+2.3}_{-2.4}$
w_a	-1.07	$-1.2^{+1.4}_{-1.5}$	$\sigma_8/h^{0.5}$	0.9817	$0.983^{+0.025}_{-0.025}$	$D_M(0.51)$	1968.5	1966^{+34}_{-33}
$\ln(10^{10} A_s)$	3.0408	$3.041^{+0.030}_{-0.028}$	$r_{drag} h$	95.7	$95.6^{+7.1}_{-6.8}$	$H(0.61)$	97.05	$97.1^{+2.2}_{-2.3}$
n_s	0.9671	$0.9652^{+0.0076}_{-0.0077}$	$\langle d^2 \rangle^{1/2}$	2.4480	$2.455^{+0.046}_{-0.047}$	$D_M(0.61)$	2286.5	2284^{+35}_{-34}
y_{cal}	1.00045	$1.0004^{+0.0047}_{-0.0049}$	z_{re}	7.51	$7.5^{+1.5}_{-1.5}$	$H(2.33)$	234.19	$234.1^{+2.4}_{-2.2}$
A_{217}^{CIB}	46.6	47^{+10}_{-10}	$10^9 A_s$	2.092	$2.092^{+0.063}_{-0.059}$	$D_M(2.33)$	5742.7	5744^{+23}_{-22}
$\xi^{tSZ \times CIB}$	0.52	—	$10^9 A_s e^{-2\tau}$	1.8818	$1.882^{+0.020}_{-0.021}$	$f\sigma_8(0.15)$	0.4444	$0.444^{+0.024}_{-0.021}$
A_{143}^{tSZ}	7.16	$5.5^{+3.7}_{-4.0}$	D_{40}	1225.3	1229^{+22}_{-22}	$\sigma_8(0.15)$	0.7307	$0.731^{+0.045}_{-0.041}$
A_{100}^{PS}	249	258^{+50}_{-50}	D_{220}	5729	5732^{+75}_{-75}	$f\sigma_8(0.38)$	0.4549	$0.455^{+0.039}_{-0.034}$
A_{143}^{PS}	48.6	46^{+10}_{-20}	D_{810}	2539.7	2538^{+25}_{-26}	$\sigma_8(0.38)$	0.6489	$0.649^{+0.039}_{-0.036}$
$A_{143 \times 217}^{PS}$	49.7	42^{+20}_{-20}	D_{1420}	818.2	$816.7^{+9.1}_{-9.5}$	$f\sigma_8(0.51)$	0.4548	$0.455^{+0.039}_{-0.035}$
A_{217}^{PS}	120.6	115^{+20}_{-20}	D_{2000}	231.36	$230.8^{+3.0}_{-3.1}$	$\sigma_8(0.51)$	0.6081	$0.608^{+0.036}_{-0.033}$
A^{kSZ}	0.00	< 8.09	$n_{s,0.002}$	0.9671	$0.9652^{+0.0076}_{-0.0077}$	$f\sigma_8(0.61)$	0.4519	$0.452^{+0.038}_{-0.034}$
A_{100}^{dustTT}	8.85	$8.9^{+3.6}_{-3.5}$	Y_P	0.245411	$0.24540^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	0.5791	$0.579^{+0.034}_{-0.031}$
A_{143}^{dustTT}	11.02	$10.9^{+3.5}_{-3.4}$	Y_P^{BBN}	0.246737	$0.24672^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	0.2945	$0.295^{+0.015}_{-0.014}$
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.2}_{-6.4}$	$10^5 D/H$	2.578	$2.584^{+0.052}_{-0.050}$	$\sigma_8(2.33)$	0.3004	$0.300^{+0.016}_{-0.015}$
A_{217}^{dustTT}	95.2	94^{+10}_{-10}	Age/Gyr	13.757	$13.756^{+0.060}_{-0.056}$	f_{2000}^{143}	28.6	29^{+5}_{-5}
A_{100}^{dustTE}	0.114	$0.115^{+0.077}_{-0.074}$	z_*	1089.844	$1089.90^{+0.47}_{-0.47}$	$f_{2000}^{143 \times 217}$	31.89	32^{+4}_{-4}
$A_{100 \times 143}^{dustTE}$	0.135	$0.134^{+0.058}_{-0.058}$	r_*	144.481	$144.45^{+0.48}_{-0.48}$	f_{2000}^{217}	106.47	$106.9^{+3.4}_{-3.5}$
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.16}_{-0.16}$	$100\theta_*$	1.04113	$1.04111^{+0.00059}_{-0.00060}$	$\chi_{lensing}^2$	8.77	$9.28 (\nu: 0.4)$
A_{143}^{dustTE}	0.225	$0.22^{+0.10}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	13.8774	$13.875^{+0.046}_{-0.045}$	χ_{small}^2	395.82	$396.8 (\nu: 1.2)$
$A_{143 \times 217}^{dustTE}$	0.666	$0.67^{+0.16}_{-0.16}$	z_{drag}	1060.01	$1059.95^{+0.60}_{-0.59}$	χ_{lowl}^2	23.02	$23.44 (\nu: 0.3)$
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.52}$	r_{drag}	147.129	$147.11^{+0.50}_{-0.48}$	χ_{plik}^2	2344.2	$2358.6 (\nu: 16.1)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$	k_D	0.14085	$0.14085^{+0.00057}_{-0.00058}$	χ_{6DF}^2	0.31	$0.56 (\nu: 0.2)$
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_D$	0.160720	$0.16075^{+0.00035}_{-0.00034}$	χ_{MGS}^2	0.63	$0.89 (\nu: 0.4)$
H_0	65.05	$65.0^{+4.9}_{-4.6}$	z_{eq}	3395.8	3400^{+49}_{-47}	$\chi_{DR12BAO}^2$	3.35	$4.8 (\nu: 1.1)$
Ω_Λ	0.6627	$0.660^{+0.050}_{-0.050}$	k_{eq}	0.010364	$0.01038^{+0.00015}_{-0.00014}$	χ_{prior}^2	1.7	$11.5 (\nu: 10.2)$
Ω_m	0.3373	$0.340^{+0.050}_{-0.050}$	$100\theta_{eq}$	0.8146	$0.8137^{+0.0089}_{-0.0091}$	χ_{CMB}^2	2771.8	$2788.1 (\nu: 17.1)$
$\Omega_m h^2$	0.14275	$0.1429^{+0.0020}_{-0.0020}$	$100\theta_{s,eq}$	0.45002	$0.4496^{+0.0046}_{-0.0046}$	χ_{BAO}^2	4.28	$6.3 (\nu: 1.7)$

Best-fit $\chi_{eff}^2 = 2777.81$; $\Delta\chi_{eff}^2 = -2.88$; $\bar{\chi}_{eff}^2 = 2805.90$; $\Delta\bar{\chi}_{eff}^2 = -0.95$; $R - 1 = 0.01750$
 χ_{eff}^2 : BAO - 6DF: 0.31 (Δ 0.28) MGS: 0.62 (Δ -0.59) DR12BAO: 3.35 (Δ -1.07) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.77 (Δ 0.04) small_100x143_offlike5_EE_Aplanck 395.82 (Δ -0.70) commander_dx12_v3.2_29: 23.02 (Δ 0.12) plik_rd12_HM_v22b.TTTEE: 2344.24 (Δ -1.08)

19.7 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02236^{+0.00029}_{-0.00028}$	$\Omega_{\mathrm{m}}h^3$	$0.0929^{+0.0071}_{-0.0068}$	$H(0.15)$	$73.2^{+1.7}_{-1.7}$
$\Omega_{\mathrm{c}}h^2$	$0.1202^{+0.0025}_{-0.0025}$	σ_8	$0.796^{+0.048}_{-0.044}$	$D_{\mathrm{M}}(0.15)$	652^{+28}_{-29}
$100\theta_{\mathrm{MC}}$	$1.04090^{+0.00061}_{-0.00061}$	S_8	$0.848^{+0.033}_{-0.034}$	$H(0.38)$	$85.0^{+2.1}_{-2.2}$
τ	$0.055^{+0.013}_{-0.012}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.465^{+0.018}_{-0.019}$	$D_{\mathrm{M}}(0.38)$	1524^{+33}_{-32}
w_0	$-0.58^{+0.50}_{-0.51}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.021}_{-0.020}$	$H(0.51)$	$91.7^{+2.2}_{-2.4}$
w_a	$-1.3^{+1.4}_{-1.5}$	$\sigma_8/h^{0.5}$	$0.988^{+0.031}_{-0.029}$	$D_{\mathrm{M}}(0.51)$	1966^{+34}_{-33}
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.026}$	$r_{\mathrm{drag}}h$	$95.4^{+7.1}_{-6.7}$	$H(0.61)$	$97.1^{+2.2}_{-2.3}$
n_{s}	$0.9647^{+0.0082}_{-0.0085}$	$\langle d^2 \rangle^{1/2}$	$2.468^{+0.061}_{-0.061}$	$D_{\mathrm{M}}(0.61)$	2283^{+36}_{-34}
y_{cal}	$1.0005^{+0.0048}_{-0.0049}$	z_{re}	< 8.93	$H(2.33)$	$234.1^{+2.3}_{-2.2}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_{\mathrm{s}}$	$2.104^{+0.059}_{-0.054}$	$D_{\mathrm{M}}(2.33)$	5745^{+23}_{-21}
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.022}_{-0.022}$	$f\sigma_8(0.15)$	$0.447^{+0.025}_{-0.022}$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$	D_{40}	1232^{+24}_{-24}	$\sigma_8(0.15)$	$0.735^{+0.046}_{-0.042}$
A_{100}^{PS}	258^{+50}_{-50}	D_{220}	5731^{+74}_{-76}	$f\sigma_8(0.38)$	$0.457^{+0.038}_{-0.037}$
A_{143}^{PS}	46^{+10}_{-20}	D_{810}	2539^{+25}_{-27}	$\sigma_8(0.38)$	$0.652^{+0.040}_{-0.037}$
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20}	D_{1420}	$816.8^{+9.2}_{-9.4}$	$f\sigma_8(0.51)$	$0.458^{+0.039}_{-0.038}$
A_{217}^{PS}	115^{+20}_{-20}	D_{2000}	$230.9^{+3.0}_{-3.1}$	$\sigma_8(0.51)$	$0.611^{+0.037}_{-0.034}$
A^{kSZ}	< 7.90	$n_{\mathrm{s},0.002}$	$0.9647^{+0.0082}_{-0.0085}$	$f\sigma_8(0.61)$	$0.455^{+0.039}_{-0.035}$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6}$	Y_{P}	$0.24539^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	$0.582^{+0.034}_{-0.032}$
$A_{143}^{\mathrm{dust}TT}$	$10.9^{+3.5}_{-3.5}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012}$	$f\sigma_8(2.33)$	$0.296^{+0.015}_{-0.014}$
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.5^{+6.4}_{-6.4}$	$10^5 \mathrm{D}/\mathrm{H}$	$2.588^{+0.054}_{-0.052}$	$\sigma_8(2.33)$	$0.301^{+0.016}_{-0.015}$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	$\mathrm{Age}/\mathrm{Gyr}$	$13.755^{+0.061}_{-0.056}$	f_{2000}^{143}	29^{+5}_{-5}
$A_{100}^{\mathrm{dust}TE}$	$0.115^{+0.075}_{-0.074}$	z_*	$1089.96^{+0.51}_{-0.50}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
$A_{100 \times 143}^{\mathrm{dust}TE}$	$0.134^{+0.058}_{-0.057}$	r_*	$144.38^{+0.56}_{-0.57}$	f_{2000}^{217}	$106.9^{+3.4}_{-3.5}$
$A_{100 \times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04108^{+0.00061}_{-0.00061}$	χ_{simall}^2	$397.0 (\nu: 1.7)$
$A_{143}^{\mathrm{dust}TE}$	$0.22^{+0.11}_{-0.11}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.868^{+0.053}_{-0.053}$	χ_{lowl}^2	$23.64 (\nu: 0.4)$
$A_{143 \times 217}^{\mathrm{dust}TE}$	$0.67^{+0.15}_{-0.16}$	z_{drag}	$1059.93^{+0.58}_{-0.57}$	χ_{plik}^2	$2358.3 (\nu: 16.5)$
$A_{217}^{\mathrm{dust}TE}$	$2.09^{+0.52}_{-0.52}$	r_{drag}	$147.04^{+0.57}_{-0.57}$	$\chi_{6\mathrm{DF}}^2$	$0.57 (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_{D}	$0.14091^{+0.00063}_{-0.00062}$	χ_{MGS}^2	$0.87 (\nu: 0.4)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00035}_{-0.00034}$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 (\nu: 1.1)$
H_0	$64.9^{+4.8}_{-4.6}$	z_{eq}	3408^{+57}_{-55}	χ_{prior}^2	$11.5 (\nu: 10.0)$
Ω_{Λ}	$0.658^{+0.050}_{-0.049}$	k_{eq}	$0.01040^{+0.00017}_{-0.00017}$	χ_{BAO}^2	$6.3 (\nu: 1.7)$
Ω_{m}	$0.342^{+0.049}_{-0.050}$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.011}_{-0.010}$	χ_{CMB}^2	$2778.9 (\nu: 16.7)$
$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0024}_{-0.0023}$	$100\theta_{\mathrm{s,eq}}$	$0.4489^{+0.0054}_{-0.0054}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2796.70; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -1.01; R - 1 = 0.01451$$

19.8 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02238^{+0.00028}_{-0.00028}$	$\Omega_m h^3$	$0.0928^{+0.0071}_{-0.0068}$	$H(0.15)$	$73.2^{+1.7}_{-1.7}$
$\Omega_c h^2$	$0.1198^{+0.0021}_{-0.0021}$	σ_8	$0.792^{+0.046}_{-0.042}$	$D_M(0.15)$	652^{+28}_{-29}
$100\theta_{MC}$	$1.04093^{+0.00060}_{-0.00061}$	S_8	$0.842^{+0.027}_{-0.028}$	$H(0.38)$	$85.0^{+2.2}_{-2.2}$
τ	$0.054^{+0.012}_{-0.011}$	$\sigma_8 \Omega_m^{0.5}$	$0.461^{+0.015}_{-0.015}$	$D_M(0.38)$	1525^{+32}_{-33}
w_0	$-0.60^{+0.50}_{-0.52}$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.017}_{-0.016}$	$H(0.51)$	$91.7^{+2.3}_{-2.4}$
w_a	$-1.2^{+1.4}_{-1.5}$	$\sigma_8/h^{0.5}$	$0.983^{+0.025}_{-0.024}$	$D_M(0.51)$	1967^{+34}_{-33}
$\ln(10^{10} A_s)$	$3.043^{+0.026}_{-0.023}$	$r_{\text{drag}} h$	$95.6^{+7.1}_{-6.8}$	$H(0.61)$	$97.1^{+2.3}_{-2.3}$
n_s	$0.9655^{+0.0075}_{-0.0076}$	$\langle d^2 \rangle^{1/2}$	$2.457^{+0.046}_{-0.046}$	$D_M(0.61)$	2284^{+35}_{-34}
y_{cal}	$1.0003^{+0.0048}_{-0.0049}$	z_{re}	< 8.78	$H(2.33)$	$234.1^{+2.4}_{-2.3}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_s$	$2.097^{+0.054}_{-0.048}$	$D_M(2.33)$	5744^{+24}_{-22}
$\xi^{\text{tSZ} \times \text{CIB}}$	—	$10^9 A_s e^{-2\tau}$	$1.881^{+0.020}_{-0.021}$	$f\sigma_8(0.15)$	$0.444^{+0.023}_{-0.022}$
A_{143}^{tSZ}	$5.5^{+3.7}_{-4.0}$	D_{40}	1229^{+22}_{-22}	$\sigma_8(0.15)$	$0.731^{+0.045}_{-0.041}$
A_{100}^{PS}	258^{+50}_{-50}	D_{220}	5731^{+75}_{-75}	$f\sigma_8(0.38)$	$0.455^{+0.037}_{-0.036}$
A_{143}^{PS}	46^{+10}_{-20}	D_{810}	2537^{+25}_{-26}	$\sigma_8(0.38)$	$0.650^{+0.039}_{-0.036}$
$A_{143 \times 217}^{\text{PS}}$	42^{+20}_{-20}	D_{1420}	$816.7^{+9.2}_{-9.4}$	$f\sigma_8(0.51)$	$0.455^{+0.039}_{-0.035}$
A_{217}^{PS}	115^{+20}_{-20}	D_{2000}	$230.8^{+3.0}_{-3.1}$	$\sigma_8(0.51)$	$0.609^{+0.036}_{-0.033}$
A^{kSZ}	< 8.08	$n_{s,0.002}$	$0.9655^{+0.0075}_{-0.0076}$	$f\sigma_8(0.61)$	$0.452^{+0.038}_{-0.035}$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5}$	Y_P	$0.24540^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	$0.580^{+0.033}_{-0.031}$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4}$	Y_P^{BBN}	$0.24673^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	$0.295^{+0.015}_{-0.014}$
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.2}_{-6.4}$	10^5D/H	$2.583^{+0.052}_{-0.050}$	$\sigma_8(2.33)$	$0.300^{+0.016}_{-0.015}$
A_{217}^{dustTT}	94^{+10}_{-10}	Age/Gyr	$13.757^{+0.061}_{-0.056}$	f_{2000}^{143}	29^{+5}_{-5}
A_{100}^{dustTE}	$0.115^{+0.076}_{-0.074}$	z_*	$1089.89^{+0.46}_{-0.46}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	r_*	$144.47^{+0.48}_{-0.47}$	f_{2000}^{217}	$106.9^{+3.4}_{-3.5}$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$100\theta_*$	$1.04112^{+0.00059}_{-0.00060}$	χ_{lensing}^2	$9.29 (\nu: 0.4)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	$13.876^{+0.045}_{-0.045}$	χ_{simall}^2	$396.7 (\nu: 1.2)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.15}$	z_{drag}	$1059.95^{+0.59}_{-0.59}$	χ_{lowl}^2	$23.43 (\nu: 0.3)$
A_{217}^{dustTE}	$2.08^{+0.52}_{-0.52}$	r_{drag}	$147.12^{+0.49}_{-0.48}$	χ_{plik}^2	$2358.5 (\nu: 16.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_D	$0.14084^{+0.00057}_{-0.00058}$	$\chi_{6\text{DF}}^2$	$0.56 (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_D$	$0.16075^{+0.00035}_{-0.00034}$	χ_{MGS}^2	$0.89 (\nu: 0.4)$
H_0	$65.0^{+4.9}_{-4.6}$	z_{eq}	3398^{+48}_{-47}	χ_{DR12BAO}^2	$4.8 (\nu: 1.1)$
Ω_Λ	$0.660^{+0.050}_{-0.050}$	k_{eq}	$0.01037^{+0.00015}_{-0.00014}$	χ_{prior}^2	$11.5 (\nu: 10.2)$
Ω_m	$0.340^{+0.050}_{-0.050}$	$100\theta_{\text{eq}}$	$0.8141^{+0.0088}_{-0.0088}$	χ_{CMB}^2	$2787.9 (\nu: 16.8)$
$\Omega_m h^2$	$0.1429^{+0.0020}_{-0.0019}$	$100\theta_{s,\text{eq}}$	$0.4498^{+0.0045}_{-0.0045}$	χ_{BAO}^2	$6.3 (\nu: 1.7)$

$$\bar{\chi}_{\text{eff}}^2 = 2805.65; \Delta \bar{\chi}_{\text{eff}}^2 = -1.07; R - 1 = 0.01782$$

19.9 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022183	$0.02214^{+0.00042}_{-0.00040}$	$\sigma_8 \Omega_m^{0.5}$	0.4571	$0.458^{+0.021}_{-0.022}$	$H(0.38)$	83.67	$83.7^{+1.4}_{-1.3}$
$\Omega_c h^2$	0.12068	$0.1209^{+0.0033}_{-0.0036}$	$\sigma_8 \Omega_m^{0.25}$	0.6194	$0.620^{+0.025}_{-0.027}$	$D_M(0.38)$	1500.3	1499^{+27}_{-27}
$100\theta_{MC}$	1.04085	$1.04080^{+0.00088}_{-0.00089}$	$\sigma_8/h^{0.5}$	1.0064	$1.008^{+0.035}_{-0.038}$	$H(0.51)$	89.89	$89.8^{+1.1}_{-1.1}$
τ	0.0523	$0.052^{+0.016}_{-0.015}$	$r_{drag}h$	102.36	$102.4^{+2.8}_{-2.7}$	$D_M(0.51)$	1949.9	1949^{+32}_{-31}
w_0	-1.010	$-0.998^{+0.21}_{-0.20}$	$\langle d^2 \rangle^{1/2}$	2.473	$2.478^{+0.077}_{-0.083}$	$H(0.61)$	95.16	$95.1^{+1.0}_{-0.96}$
w_a	-0.31	$-0.40^{+0.81}_{-0.86}$	z_{re}	7.51	$7.5^{+1.5}_{-1.7}$	$D_M(0.61)$	2274.1	2273^{+34}_{-33}
$\ln(10^{10} A_s)$	3.0415	$3.041^{+0.031}_{-0.032}$	$10^9 A_s$	2.094	$2.092^{+0.066}_{-0.066}$	$H(2.33)$	234.70	$234.7^{+2.0}_{-1.9}$
n_s	0.9641	$0.962^{+0.010}_{-0.0097}$	$10^9 A_s e^{-2\tau}$	1.8857	$1.886^{+0.025}_{-0.025}$	$D_M(2.33)$	5758.8	5762^{+25}_{-26}
α_{JLA}	0.1417	$0.142^{+0.013}_{-0.013}$	D_{40}	1229.7	1233^{+28}_{-28}	$f\sigma_8(0.15)$	0.4661	$0.467^{+0.021}_{-0.022}$
β_{JLA}	3.111	$3.11^{+0.16}_{-0.16}$	D_{220}	5713	5714^{+79}_{-81}	$\sigma_8(0.15)$	0.7770	$0.778^{+0.032}_{-0.033}$
y_{cal}	1.00040	$1.0004^{+0.0047}_{-0.0049}$	D_{810}	2538.9	2537^{+26}_{-27}	$f\sigma_8(0.38)$	0.4925	$0.494^{+0.026}_{-0.026}$
A_{217}^{CIB}	48.0	48^{+10}_{-10}	D_{1420}	816.1	$814.5^{+9.8}_{-9.7}$	$\sigma_8(0.38)$	0.6895	$0.691^{+0.028}_{-0.029}$
$\xi^{tSZ \times CIB}$	0.47	—	D_{2000}	230.38	$229.8^{+3.4}_{-3.4}$	$f\sigma_8(0.51)$	0.4942	$0.496^{+0.027}_{-0.027}$
A_{143}^{tSZ}	6.99	$5.1^{+3.8}_{-3.9}$	$n_{s,0.002}$	0.9641	$0.962^{+0.010}_{-0.0097}$	$\sigma_8(0.51)$	0.6452	$0.646^{+0.026}_{-0.027}$
A_{100}^{PS}	252	263^{+60}_{-60}	Y_P	0.245319	$0.24530^{+0.00017}_{-0.00019}$	$f\sigma_8(0.61)$	0.4908	$0.492^{+0.028}_{-0.028}$
A_{143}^{PS}	51.0	49^{+20}_{-20}	Y_P^{BBN}	0.246645	$0.24662^{+0.00017}_{-0.00019}$	$\sigma_8(0.61)$	0.6138	$0.615^{+0.024}_{-0.025}$
$A_{143 \times 217}^{PS}$	50.5	44^{+20}_{-20}	$10^5 D/H$	2.621	$2.630^{+0.078}_{-0.078}$	$f\sigma_8(2.33)$	0.3100	$0.310^{+0.012}_{-0.013}$
A_{217}^{PS}	120.5	115^{+20}_{-20}	Age/Gyr	13.746	$13.749^{+0.068}_{-0.066}$	$\sigma_8(2.33)$	0.3161	$0.3161^{+0.0093}_{-0.0097}$
A^{kSZ}	0.05	< 8.38	z_*	1090.22	$1090.29^{+0.70}_{-0.72}$	f_{2000}^{143}	29.9	31^{+6}_{-6}
A_{100}^{dustTT}	8.91	$8.9^{+3.6}_{-3.5}$	r_*	144.40	$144.39^{+0.83}_{-0.79}$	$f_{2000}^{143 \times 217}$	33.00	33^{+4}_{-4}
A_{143}^{dustTT}	10.70	$10.7^{+3.5}_{-3.5}$	$100\theta_*$	1.04105	$1.04100^{+0.00087}_{-0.00088}$	f_{2000}^{217}	107.38	$107.9^{+3.7}_{-3.8}$
$A_{143 \times 217}^{dustTT}$	19.5	$18.2^{+6.5}_{-6.6}$	$D_M(z_*)/\text{Gpc}$	13.871	$13.870^{+0.078}_{-0.075}$	χ_{simall}^2	395.83	$396.9 (\nu: 1.3)$
A_{217}^{dustTT}	94.6	93^{+10}_{-10}	z_{drag}	1059.55	$1059.46^{+0.89}_{-0.86}$	χ_{lowl}^2	23.33	$23.7 (\nu: 0.6)$
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$	r_{drag}	147.12	$147.13^{+0.85}_{-0.81}$	χ_{plik}^2	758.1	$770.5 (\nu: 14.4)$
c_{217}	0.99824	$0.9982^{+0.0012}_{-0.0012}$	k_D	0.14069	$0.14065^{+0.00096}_{-0.00096}$	$\chi_{H073p45}^2$	5.5	$5.7 (\nu: 3.6)$
H_0	69.57	$69.6^{+1.9}_{-1.8}$	$100\theta_D$	0.16099	$0.16104^{+0.00052}_{-0.00051}$	χ_{JLA}^2	695.50	$698.3 (\nu: 3.4)$
Ω_Λ	0.7035	$0.703^{+0.017}_{-0.017}$	z_{eq}	3414	3417^{+77}_{-81}	χ_{6DF}^2	0.133	$0.21 (\nu: 0.0)$
Ω_m	0.2965	$0.297^{+0.017}_{-0.017}$	k_{eq}	0.010420	$0.01043^{+0.00023}_{-0.00025}$	χ_{MGS}^2	2.84	$2.99 (\nu: 0.3)$
$\Omega_m h^2$	0.14351	$0.1436^{+0.0032}_{-0.0034}$	$100\theta_{eq}$	0.8106	$0.810^{+0.015}_{-0.014}$	$\chi_{DR12BAO}^2$	4.81	$5.9 (\nu: 1.5)$
$\Omega_m h^3$	0.09984	$0.09999^{+0.0037}_{-0.0037}$	$100\theta_{s,eq}$	0.4481	$0.4478^{+0.0079}_{-0.0071}$	χ_{prior}^2	1.3	$7.2 (\nu: 6.6)$
σ_8	0.8395	$0.841^{+0.034}_{-0.036}$	$H(0.15)$	74.46	$74.6^{+1.5}_{-1.5}$	χ_{BAO}^2	7.78	$9.1 (\nu: 3.1)$
S_8	0.8345	$0.836^{+0.038}_{-0.039}$	$D_M(0.15)$	625.2	625^{+13}_{-13}	χ_{CMB}^2	1177.3	$1191.1 (\nu: 14.8)$

Best-fit $\chi_{\text{eff}}^2 = 1887.34$; $\bar{\chi}_{\text{eff}}^2 = 1911.34$; $R - 1 = 0.00894$
 χ_{eff}^2 : BAO - 6DF: 0.13 MGS: 2.84 DR12BAO: 4.81 CMB - simall-100x143.offlike5_EE_Aplanck_B: 395.83 commander_dx12_v3.2.29: 23.34 plik_rd12_HM_v22.TT: 758.14
Hubble - H073p45: 5.46 SN - JLA December_2013: 695.50

19.10 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\text{b}}h^2$	0.022220	$0.02217^{+0.00040}_{-0.00039}$	$\sigma_8\Omega_{\text{m}}^{0.25}$	0.6136	$0.615^{+0.017}_{-0.017}$	$H(0.51)$	89.90	$89.9^{+1.1}_{-1.1}$
$\Omega_{\text{c}}h^2$	0.11990	$0.1201^{+0.0026}_{-0.0025}$	$\sigma_8/h^{0.5}$	0.9982	$0.9997^{+0.024}_{-0.024}$	$D_{\text{M}}(0.51)$	1950.4	1950^{+31}_{-31}
$100\theta_{\text{MC}}$	1.04088	$1.04085^{+0.00086}_{-0.00088}$	$r_{\text{drag}}h$	102.59	$102.5^{+2.8}_{-2.7}$	$H(0.61)$	95.20	$95.15^{+0.97}_{-0.96}$
τ	0.0519	$0.051^{+0.015}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	2.455	$2.461^{+0.052}_{-0.053}$	$D_{\text{M}}(0.61)$	2274.5	2274^{+34}_{-34}
w_0	-1.025	$-1.01^{+0.20}_{-0.20}$	z_{re}	7.44	$7.4^{+1.5}_{-1.6}$	$H(2.33)$	234.57	$234.6^{+2.0}_{-1.9}$
w_{a}	-0.21	$-0.29^{+0.69}_{-0.79}$	$10^9 A_{\text{s}}$	2.088	$2.086^{+0.061}_{-0.060}$	$D_{\text{M}}(2.33)$	5757.3	5760^{+25}_{-26}
$\ln(10^{10} A_{\text{s}})$	3.0386	$3.038^{+0.029}_{-0.029}$	$10^9 A_{\text{s}} e^{-2\tau}$	1.8820	$1.882^{+0.022}_{-0.022}$	$f\sigma_8(0.15)$	0.4615	$0.462^{+0.016}_{-0.016}$
n_{s}	0.9654	$0.9638^{+0.0088}_{-0.0088}$	D_{40}	1226.5	1230^{+24}_{-24}	$\sigma_8(0.15)$	0.7713	$0.772^{+0.023}_{-0.024}$
y_{cal}	1.00035	$1.0003^{+0.0049}_{-0.0050}$	D_{220}	5717	5716^{+80}_{-82}	$f\sigma_8(0.38)$	0.4877	$0.488^{+0.020}_{-0.020}$
α_{JLA}	0.1415	$0.142^{+0.013}_{-0.013}$	D_{810}	2537.6	2535^{+26}_{-27}	$\sigma_8(0.38)$	0.6847	$0.685^{+0.021}_{-0.021}$
β_{JLA}	3.111	$3.11^{+0.16}_{-0.15}$	D_{1420}	816.1	$814.5^{+9.6}_{-9.7}$	$f\sigma_8(0.51)$	0.4893	$0.490^{+0.020}_{-0.021}$
A_{217}^{CIB}	48.1	48^{+10}_{-10}	D_{2000}	230.32	$229.7^{+3.5}_{-3.4}$	$\sigma_8(0.51)$	0.6408	$0.641^{+0.019}_{-0.020}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.44	—	$n_{\text{s},0.002}$	0.9654	$0.9638^{+0.0088}_{-0.0088}$	$f\sigma_8(0.61)$	0.4858	$0.487^{+0.020}_{-0.021}$
A_{143}^{tSZ}	6.97	$5.1^{+3.8}_{-4.0}$	Y_{P}	0.245334	$0.24531^{+0.00016}_{-0.00018}$	$\sigma_8(0.61)$	0.6097	$0.610^{+0.018}_{-0.019}$
A_{100}^{PS}	253	263^{+60}_{-60}	$Y_{\text{P}}^{\text{BBN}}$	0.246661	$0.24664^{+0.00016}_{-0.00018}$	$f\sigma_8(2.33)$	0.3080	$0.3081^{+0.0089}_{-0.0093}$
A_{143}^{PS}	50.7	49^{+20}_{-20}	$10^5 \text{D}/\text{H}$	2.614	$2.624^{+0.075}_{-0.074}$	$\sigma_8(2.33)$	0.3147	$0.3146^{+0.0075}_{-0.0077}$
$A_{143 \times 217}^{\text{PS}}$	49.8	43^{+20}_{-20}	Age/Gyr	13.749	$13.752^{+0.066}_{-0.067}$	f_{2000}^{143}	30.0	31^{+6}_{-6}
A_{217}^{PS}	120.2	115^{+20}_{-20}	z_*	1090.10	$1090.19^{+0.61}_{-0.62}$	$f_{2000}^{143 \times 217}$	33.06	33^{+4}_{-4}
A^{kSZ}	0.00	< 8.43	r_*	144.57	$144.55^{+0.63}_{-0.62}$	f_{2000}^{217}	107.41	$107.9^{+3.7}_{-3.7}$
A_{100}^{dustTT}	8.91	$8.9^{+3.6}_{-3.6}$	$100\theta_*$	1.04108	$1.04105^{+0.00085}_{-0.00087}$	χ_{lensing}^2	8.75	$9.4 (\nu: 0.6)$
A_{143}^{dustTT}	10.82	$10.7^{+3.5}_{-3.4}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.887	$13.885^{+0.060}_{-0.060}$	χ_{small}^2	395.76	$396.8 (\nu: 1.1)$
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$18.2^{+6.6}_{-6.6}$	z_{drag}	1059.59	$1059.48^{+0.87}_{-0.85}$	χ_{lowl}^2	23.05	$23.40 (\nu: 0.4)$
A_{217}^{dustTT}	94.6	93^{+10}_{-10}	r_{drag}	147.28	$147.28^{+0.67}_{-0.67}$	χ_{plik}^2	758.7	$770.7 (\nu: 14.1)$
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0013}$	k_{D}	0.14055	$0.14052^{+0.00086}_{-0.00085}$	χ_{H073p45}^2	5.2	$5.7 (\nu: 3.6)$
c_{217}	0.99826	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_{\text{D}}$	0.16096	$0.16102^{+0.00052}_{-0.00051}$	χ_{JLA}^2	695.66	$698.2 (\nu: 3.4)$
H_0	69.65	$69.6^{+1.9}_{-1.9}$	z_{eq}	3396	3401^{+59}_{-58}	$\chi_{6\text{DF}}^2$	0.155	$0.21 (\nu: 0.0)$
Ω_{Λ}	0.7057	$0.705^{+0.016}_{-0.016}$	k_{eq}	0.010365	$0.01038^{+0.00018}_{-0.00018}$	χ_{MGS}^2	2.92	$2.99 (\nu: 0.3)$
Ω_{m}	0.2943	$0.295^{+0.016}_{-0.016}$	$100\theta_{\text{eq}}$	0.8139	$0.813^{+0.011}_{-0.011}$	χ_{DR12BAO}^2	4.72	$5.7 (\nu: 1.5)$
$\Omega_{\text{m}}h^2$	0.14276	$0.1430^{+0.0025}_{-0.0024}$	$100\theta_{\text{s,eq}}$	0.4498	$0.4494^{+0.0056}_{-0.0056}$	χ_{prior}^2	1.3	$7.3 (\nu: 6.7)$
$\Omega_{\text{m}}h^3$	0.09944	$0.0995^{+0.0032}_{-0.0032}$	$H(0.15)$	74.43	$74.5^{+1.5}_{-1.4}$	χ_{CMB}^2	1186.3	$1200.2 (\nu: 15.4)$
σ_8	0.8331	$0.834^{+0.025}_{-0.026}$	$D_{\text{M}}(0.15)$	625.1	625^{+13}_{-13}	χ_{BAO}^2	7.79	$8.9 (\nu: 3.2)$
S_8	0.8251	$0.827^{+0.026}_{-0.026}$	$H(0.38)$	83.64	$83.7^{+1.4}_{-1.3}$			
$\sigma_8\Omega_{\text{m}}^{0.5}$	0.4519	$0.453^{+0.014}_{-0.014}$	$D_{\text{M}}(0.38)$	1500.7	1500^{+25}_{-27}			

Best-fit $\chi_{\text{eff}}^2 = 1896.26$; $\Delta\chi_{\text{eff}}^2 = -16.55$; $\bar{\chi}_{\text{eff}}^2 = 1920.42$; $\Delta\bar{\chi}_{\text{eff}}^2 = -12.63$; $R - 1 = 0.01184$
 χ_{eff}^2 : BAO - 6DF: 0.15 (Δ 0.15) MGS: 2.92 (Δ 1.25) DR12BAO: 4.72 (Δ 1.22) CMB - smicadx12_Dec5_ft1_mv2_ndclpp_p.teb_consext8: 8.75 (Δ -0.19) small_100x143_offlike5_EE_Aplanck: 395.76 (Δ -1.06) commander_dx12_v3.2_29: 23.05 (Δ 0.46) plik_rd12_HM_v22.TT: 758.73 (Δ -2.10) Hubble - H073p45: 5.23 (Δ -5.36) SN - JLA December_2013: 695.66 (Δ -10.93)

19.11 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\text{b}}h^2$	$0.02215^{+0.00041}_{-0.00040}$	$\sigma_8\Omega_{\text{m}}^{0.5}$	$0.458^{+0.020}_{-0.021}$	$H(0.38)$	$83.7^{+1.4}_{-1.3}$
$\Omega_{\text{c}}h^2$	$0.1208^{+0.0033}_{-0.0036}$	$\sigma_8\Omega_{\text{m}}^{0.25}$	$0.621^{+0.025}_{-0.026}$	$D_{\text{M}}(0.38)$	1499^{+27}_{-27}
$100\theta_{\text{MC}}$	$1.04081^{+0.00088}_{-0.00090}$	$\sigma_8/h^{0.5}$	$1.009^{+0.035}_{-0.037}$	$H(0.51)$	$89.9^{+1.1}_{-1.1}$
τ	$0.054^{+0.012}_{-0.011}$	$r_{\text{drag}}h$	$102.4^{+2.8}_{-2.7}$	$D_{\text{M}}(0.51)$	1949^{+32}_{-31}
w_0	$-0.999^{+0.21}_{-0.20}$	$\langle d^2 \rangle^{1/2}$	$2.481^{+0.076}_{-0.082}$	$H(0.61)$	$95.1^{+1.0}_{-0.96}$
w_a	$-0.39^{+0.81}_{-0.86}$	z_{re}	< 8.78	$D_{\text{M}}(0.61)$	2273^{+34}_{-33}
$\ln(10^{10}A_{\text{s}})$	$3.044^{+0.027}_{-0.025}$	$10^9 A_{\text{s}}$	$2.099^{+0.056}_{-0.053}$	$H(2.33)$	$234.7^{+2.0}_{-1.9}$
n_{s}	$0.963^{+0.010}_{-0.0097}$	$10^9 A_{\text{s}}e^{-2\tau}$	$1.885^{+0.025}_{-0.025}$	$D_{\text{M}}(2.33)$	5762^{+25}_{-26}
α_{JLA}	$0.142^{+0.013}_{-0.013}$	D_{40}	1233^{+28}_{-27}	$f\sigma_8(0.15)$	$0.467^{+0.021}_{-0.022}$
β_{JLA}	$3.11^{+0.16}_{-0.15}$	D_{220}	5714^{+79}_{-81}	$\sigma_8(0.15)$	$0.779^{+0.032}_{-0.032}$
y_{cal}	$1.0004^{+0.0047}_{-0.0049}$	D_{810}	2536^{+26}_{-27}	$f\sigma_8(0.38)$	$0.494^{+0.026}_{-0.026}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{1420}	$814.5^{+9.8}_{-9.8}$	$\sigma_8(0.38)$	$0.691^{+0.028}_{-0.028}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.8^{+3.4}_{-3.4}$	$f\sigma_8(0.51)$	$0.496^{+0.027}_{-0.027}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$	$n_{\text{s},0.002}$	$0.963^{+0.010}_{-0.0097}$	$\sigma_8(0.51)$	$0.647^{+0.026}_{-0.026}$
A_{100}^{PS}	263^{+50}_{-60}	Y_{P}	$0.24530^{+0.00017}_{-0.00019}$	$f\sigma_8(0.61)$	$0.493^{+0.028}_{-0.028}$
A_{143}^{PS}	49^{+20}_{-20}	$Y_{\text{P}}^{\text{BBN}}$	$0.24663^{+0.00017}_{-0.00019}$	$\sigma_8(0.61)$	$0.615^{+0.024}_{-0.024}$
$A_{143 \times 217}^{\text{PS}}$	44^{+20}_{-20}	$10^5 \text{D}/\text{H}$	$2.629^{+0.077}_{-0.077}$	$f\sigma_8(2.33)$	$0.311^{+0.012}_{-0.013}$
A_{217}^{PS}	115^{+20}_{-20}	Age/Gyr	$13.749^{+0.068}_{-0.067}$	$\sigma_8(2.33)$	$0.3165^{+0.0091}_{-0.0094}$
A^{kSZ}	< 8.35	z_*	$1090.28^{+0.69}_{-0.72}$	f_{2000}^{143}	31^{+6}_{-6}
$A_{100}^{\text{dust}TT}$	$8.9^{+3.6}_{-3.6}$	r_*	$144.40^{+0.83}_{-0.80}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
$A_{143}^{\text{dust}TT}$	$10.7^{+3.5}_{-3.5}$	$100\theta_*$	$1.04101^{+0.00087}_{-0.00089}$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7}$
$A_{143 \times 217}^{\text{dust}TT}$	$18.2^{+6.5}_{-6.6}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.871^{+0.078}_{-0.075}$	χ_{simall}^2	$396.8 (\nu: 1.2)$
$A_{217}^{\text{dust}TT}$	93^{+10}_{-10}	z_{drag}	$1059.47^{+0.88}_{-0.87}$	χ_{lowl}^2	$23.7 (\nu: 0.6)$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	r_{drag}	$147.13^{+0.86}_{-0.82}$	χ_{plik}^2	$770.3 (\nu: 14.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	$0.14065^{+0.00096}_{-0.00096}$	χ_{H073p45}^2	$5.7 (\nu: 3.6)$
H_0	$69.6^{+1.9}_{-1.8}$	$100\theta_{\text{D}}$	$0.16103^{+0.00052}_{-0.00050}$	χ_{JLA}^2	$698.3 (\nu: 3.4)$
Ω_{Λ}	$0.703^{+0.017}_{-0.017}$	z_{eq}	3416^{+77}_{-81}	$\chi_{6\text{DF}}^2$	$0.21 (\nu: 0.0)$
Ω_{m}	$0.297^{+0.017}_{-0.017}$	k_{eq}	$0.01043^{+0.00023}_{-0.00025}$	χ_{MGS}^2	$2.98 (\nu: 0.3)$
$\Omega_{\text{m}}h^2$	$0.1436^{+0.0032}_{-0.0034}$	$100\theta_{\text{eq}}$	$0.810^{+0.015}_{-0.014}$	χ_{DR12BAO}^2	$5.9 (\nu: 1.4)$
$\Omega_{\text{m}}h^3$	$0.0999^{+0.0037}_{-0.0037}$	$100\theta_{\text{s,eq}}$	$0.4479^{+0.0079}_{-0.0072}$	χ_{prior}^2	$7.2 (\nu: 6.6)$
σ_8	$0.842^{+0.034}_{-0.035}$	$H(0.15)$	$74.5^{+1.5}_{-1.5}$	χ_{BAO}^2	$9.1 (\nu: 3.1)$
S_8	$0.837^{+0.037}_{-0.039}$	$D_{\text{M}}(0.15)$	625^{+13}_{-13}	χ_{CMB}^2	$1190.8 (\nu: 14.2)$

$$\bar{\chi}_{\text{eff}}^2 = 1911.05; R - 1 = 0.01013$$

19.12 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02218^{+0.00039}_{-0.00039}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.615^{+0.017}_{-0.017}$	$H(0.51)$	$89.9^{+1.1}_{-1.1}$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0025}_{-0.0025}$	$\sigma_8/h^{0.5}$	$1.000^{+0.024}_{-0.024}$	$D_{\mathrm{M}}(0.51)$	1950^{+31}_{-31}
$100\theta_{\mathrm{MC}}$	$1.04087^{+0.00086}_{-0.00087}$	$r_{\mathrm{drag}}h$	$102.5^{+2.8}_{-2.7}$	$H(0.61)$	$95.17^{+0.97}_{-0.97}$
τ	$0.053^{+0.012}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.462^{+0.051}_{-0.053}$	$D_{\mathrm{M}}(0.61)$	2275^{+34}_{-34}
w_0	$-1.01^{+0.20}_{-0.20}$	z_{re}	< 8.71	$H(2.33)$	$234.6^{+2.0}_{-2.0}$
w_{a}	$-0.27^{+0.67}_{-0.78}$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.051}_{-0.048}$	$D_{\mathrm{M}}(2.33)$	5760^{+25}_{-26}
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.024}_{-0.023}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.881^{+0.021}_{-0.021}$	$f\sigma_8(0.15)$	$0.462^{+0.016}_{-0.016}$
n_{s}	$0.9642^{+0.0087}_{-0.0084}$	D_{40}	1229^{+23}_{-24}	$\sigma_8(0.15)$	$0.772^{+0.024}_{-0.024}$
y_{cal}	$1.0003^{+0.0048}_{-0.0050}$	D_{220}	5716^{+79}_{-82}	$f\sigma_8(0.38)$	$0.488^{+0.020}_{-0.020}$
α_{JLA}	$0.142^{+0.013}_{-0.013}$	D_{810}	2535^{+26}_{-27}	$\sigma_8(0.38)$	$0.686^{+0.021}_{-0.021}$
β_{JLA}	$3.11^{+0.15}_{-0.15}$	D_{1420}	$814.5^{+9.6}_{-9.8}$	$f\sigma_8(0.51)$	$0.490^{+0.020}_{-0.021}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{2000}	$229.8^{+3.4}_{-3.4}$	$\sigma_8(0.51)$	$0.642^{+0.019}_{-0.020}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9642^{+0.0087}_{-0.0084}$	$f\sigma_8(0.61)$	$0.487^{+0.020}_{-0.020}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$	Y_{P}	$0.24532^{+0.00017}_{-0.00017}$	$\sigma_8(0.61)$	$0.610^{+0.018}_{-0.018}$
A_{100}^{PS}	263^{+60}_{-60}	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00017}_{-0.00017}$	$f\sigma_8(2.33)$	$0.3083^{+0.0089}_{-0.0094}$
A_{143}^{PS}	49^{+20}_{-20}	$10^5 \mathrm{D}/\mathrm{H}$	$2.621^{+0.075}_{-0.073}$	$\sigma_8(2.33)$	$0.3149^{+0.0074}_{-0.0075}$
$A_{143 \times 217}^{\mathrm{PS}}$	43^{+20}_{-20}	Age/Gyr	$13.752^{+0.065}_{-0.067}$	f_{2000}^{143}	31^{+6}_{-6}
A_{217}^{PS}	115^{+20}_{-20}	z_*	$1090.16^{+0.61}_{-0.60}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
A^{kSZ}	< 8.43	r_*	$144.57^{+0.62}_{-0.63}$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7}$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6}$	$100\theta_*$	$1.04107^{+0.00084}_{-0.00088}$	$\chi_{\mathrm{lensing}}^2$	$9.4 (\nu: 0.6)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.059}_{-0.061}$	χ_{simall}^2	$396.6 (\nu: 1.0)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.6}_{-6.6}$	z_{drag}	$1059.50^{+0.89}_{-0.87}$	χ_{lowl}^2	$23.38 (\nu: 0.4)$
$A_{217}^{\mathrm{dustTT}}$	93^{+10}_{-10}	r_{drag}	$147.30^{+0.67}_{-0.67}$	χ_{plik}^2	$770.6 (\nu: 14.0)$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	k_{D}	$0.14050^{+0.00086}_{-0.00085}$	$\chi_{\mathrm{H073p45}}^2$	$5.7 (\nu: 3.6)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00052}_{-0.00051}$	χ_{JLA}^2	$698.2 (\nu: 3.4)$
H_0	$69.6^{+1.9}_{-1.8}$	z_{eq}	3398^{+58}_{-57}	$\chi_{6\mathrm{DF}}^2$	$0.21 (\nu: 0.0)$
Ω_{Λ}	$0.705^{+0.016}_{-0.017}$	k_{eq}	$0.01037^{+0.00018}_{-0.00017}$	χ_{MGS}^2	$2.98 (\nu: 0.3)$
Ω_{m}	$0.295^{+0.017}_{-0.016}$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.011}_{-0.011}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.7 (\nu: 1.5)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0024}_{-0.0024}$	$100\theta_{\mathrm{s,eq}}$	$0.4497^{+0.0055}_{-0.0055}$	χ_{prior}^2	$7.3 (\nu: 6.7)$
$\Omega_{\mathrm{m}}h^3$	$0.0994^{+0.0032}_{-0.0032}$	$H(0.15)$	$74.4^{+1.5}_{-1.4}$	χ_{CMB}^2	$1199.9 (\nu: 14.9)$
σ_8	$0.834^{+0.025}_{-0.026}$	$D_{\mathrm{M}}(0.15)$	625^{+13}_{-13}	χ_{BAO}^2	$8.8 (\nu: 3.2)$
S_8	$0.827^{+0.026}_{-0.026}$	$H(0.38)$	$83.7^{+1.4}_{-1.3}$		
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014}$	$D_{\mathrm{M}}(0.38)$	1501^{+25}_{-26}		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1920.07; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -12.87; R - 1 = 0.01435$$

19.13 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022383	$0.02237^{+0.00028}_{-0.00028}$	$\Omega_m h^2$	0.14321	$0.1434^{+0.0023}_{-0.0023}$	$H(0.15)$	74.51	$74.7^{+1.5}_{-1.4}$
$\Omega_c h^2$	0.12018	$0.1204^{+0.0024}_{-0.0025}$	$\Omega_m h^3$	0.09971	$0.09996^{+0.0031}_{-0.0031}$	$D_M(0.15)$	624.8	624^{+13}_{-13}
$100\theta_{MC}$	1.04092	$1.04090^{+0.00059}_{-0.00059}$	σ_8	0.8356	$0.837^{+0.027}_{-0.028}$	$H(0.38)$	83.79	$83.9^{+1.3}_{-1.3}$
τ	0.0544	$0.054^{+0.015}_{-0.015}$	S_8	0.8292	$0.831^{+0.028}_{-0.029}$	$D_M(0.38)$	1499.0	1497^{+26}_{-26}
w_0	-1.013	$-1.00^{+0.19}_{-0.19}$	$\sigma_8 \Omega_m^{0.5}$	0.4542	$0.455^{+0.015}_{-0.016}$	$H(0.51)$	90.06	$90.1^{+1.0}_{-1.1}$
w_a	-0.25	$-0.33^{+0.69}_{-0.71}$	$\sigma_8 \Omega_m^{0.25}$	0.6160	$0.617^{+0.019}_{-0.019}$	$D_M(0.51)$	1947.9	1945^{+31}_{-31}
$\ln(10^{10} A_s)$	3.0447	$3.044^{+0.032}_{-0.031}$	$\sigma_8/h^{0.5}$	1.0014	$1.003^{+0.027}_{-0.028}$	$H(0.61)$	95.36	$95.33^{+0.87}_{-0.91}$
n_s	0.9661	$0.9645^{+0.0081}_{-0.0079}$	$r_{drag} h$	102.37	$102.5^{+2.7}_{-2.7}$	$D_M(0.61)$	2271.5	2269^{+33}_{-32}
α_{JLA}	0.1417	$0.142^{+0.013}_{-0.013}$	$\langle d^2 \rangle^{1/2}$	2.463	$2.469^{+0.060}_{-0.062}$	$H(2.33)$	234.84	$234.8^{+1.9}_{-1.8}$
β_{JLA}	3.108	$3.11^{+0.16}_{-0.16}$	z_{re}	7.67	$7.6^{+1.5}_{-1.6}$	$D_M(2.33)$	5749.9	5751^{+21}_{-19}
y_{cal}	1.00035	$1.0006^{+0.0049}_{-0.0049}$	$10^9 A_s$	2.100	$2.099^{+0.068}_{-0.064}$	$f\sigma_8(0.15)$	0.4630	$0.464^{+0.017}_{-0.017}$
A_{217}^{CIB}	46.8	46^{+10}_{-10}	$10^9 A_s e^{-2\tau}$	1.8840	$1.885^{+0.022}_{-0.022}$	$\sigma_8(0.15)$	0.7736	$0.775^{+0.026}_{-0.027}$
$\xi^{tSZ \times CIB}$	0.48	—	D_{40}	1227.4	1232^{+24}_{-24}	$f\sigma_8(0.38)$	0.4890	$0.490^{+0.020}_{-0.020}$
A_{143}^{tSZ}	7.20	$5.5^{+3.6}_{-3.9}$	D_{220}	5727	5734^{+75}_{-75}	$\sigma_8(0.38)$	0.6867	$0.688^{+0.023}_{-0.024}$
A_{100}^{PS}	248	258^{+50}_{-50}	D_{810}	2540.1	2540^{+26}_{-26}	$f\sigma_8(0.51)$	0.4906	$0.492^{+0.021}_{-0.021}$
A_{143}^{PS}	47.6	46^{+20}_{-20}	D_{1420}	818.0	$817.3^{+9.3}_{-9.2}$	$\sigma_8(0.51)$	0.6427	$0.644^{+0.021}_{-0.022}$
$A_{143 \times 217}^{PS}$	48.4	43^{+20}_{-20}	D_{2000}	231.32	$231.0^{+3.0}_{-3.1}$	$f\sigma_8(0.61)$	0.4872	$0.489^{+0.022}_{-0.021}$
A_{217}^{PS}	120.1	116^{+20}_{-20}	$n_{s,0.002}$	0.9661	$0.9645^{+0.0081}_{-0.0079}$	$\sigma_8(0.61)$	0.6115	$0.613^{+0.020}_{-0.021}$
A^{kSZ}	0.00	< 8.02	Y_P	0.245401	$0.24539^{+0.00011}_{-0.00012}$	$f\sigma_8(2.33)$	0.3090	$0.3095^{+0.0099}_{-0.011}$
A_{100}^{dustTT}	8.94	$8.9^{+3.6}_{-3.6}$	Y_P^{BBN}	0.246727	$0.24672^{+0.00011}_{-0.00012}$	$\sigma_8(2.33)$	0.3155	$0.3158^{+0.0083}_{-0.0085}$
A_{143}^{dustTT}	10.97	$10.8^{+3.5}_{-3.5}$	$10^5 D/H$	2.583	$2.587^{+0.054}_{-0.051}$	f_{2000}^{143}	28.5	29^{+5}_{-5}
$A_{143 \times 217}^{dustTT}$	19.8	$18.5^{+6.5}_{-6.5}$	Age/Gyr	13.731	$13.729^{+0.059}_{-0.056}$	$f_{2000}^{143 \times 217}$	31.77	$32.0^{+3.5}_{-3.6}$
A_{217}^{dustTT}	95.0	94^{+10}_{-10}	z_*	1089.92	$1089.96^{+0.51}_{-0.50}$	f_{2000}^{217}	106.41	$106.9^{+3.4}_{-3.4}$
A_{100}^{dustTE}	0.114	$0.114^{+0.076}_{-0.075}$	r_*	144.38	$144.34^{+0.55}_{-0.53}$	χ_{small}^2	396.04	$397.0 (\nu: 1.6)$
$A_{100 \times 143}^{dustTE}$	0.134	$0.134^{+0.058}_{-0.058}$	$100\theta_*$	1.04110	$1.04108^{+0.00058}_{-0.00058}$	χ_{lowl}^2	23.09	$23.43 (\nu: 0.4)$
$A_{100 \times 217}^{dustTE}$	0.481	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.868	$13.864^{+0.051}_{-0.049}$	χ_{plik}^2	2343.7	$2358.5 (\nu: 16.5)$
A_{143}^{dustTE}	0.223	$0.23^{+0.11}_{-0.10}$	z_{drag}	1059.97	$1059.95^{+0.59}_{-0.59}$	$\chi_{H073p45}^2$	5.31	$5.4 (\nu: 3.4)$
$A_{143 \times 217}^{dustTE}$	0.669	$0.67^{+0.16}_{-0.16}$	r_{drag}	147.03	$147.00^{+0.55}_{-0.53}$	χ_{JLA}^2	695.47	$698.2 (\nu: 3.3)$
A_{217}^{dustTE}	2.08	$2.08^{+0.53}_{-0.52}$	k_D	0.14094	$0.14096^{+0.00058}_{-0.00060}$	χ_{6DF}^2	0.133	$0.22 (\nu: 0.0)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_D$	0.160734	$0.16075^{+0.00034}_{-0.00033}$	χ_{MGS}^2	2.84	$3.02 (\nu: 0.3)$
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3407	3411^{+54}_{-56}	$\chi_{DR12BAO}^2$	4.68	$5.8 (\nu: 1.5)$
H_0	69.63	$69.7^{+1.9}_{-1.9}$	k_{eq}	0.010398	$0.01041^{+0.00017}_{-0.00017}$	χ_{prior}^2	1.7	$11.5 (\nu: 10.2)$
Ω_Λ	0.7046	$0.705^{+0.016}_{-0.017}$	$100\theta_{eq}$	0.8125	$0.812^{+0.011}_{-0.010}$	χ_{BAO}^2	7.65	$9.0 (\nu: 3.4)$
Ω_m	0.2954	$0.295^{+0.017}_{-0.016}$	$100\theta_{s,eq}$	0.4490	$0.4485^{+0.0054}_{-0.0051}$	χ_{CMB}^2	2762.8	$2778.9 (\nu: 16.9)$

Best-fit $\chi_{eff}^2 = 3472.92$; $\bar{\chi}_{eff}^2 = 3502.96$; $R - 1 = 0.01220$
 χ_{eff}^2 : BAO - 6DF: 0.13 MGS: 2.84 DR12BAO: 4.67 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.04 commander_dx12_v3_2_29: 23.09 plik_rd12_HM_v22b_TTTEEE: 2343.70 Hubble - H073p45: 5.30 SN - JLA December_2013: 695.47

19.14 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022394	$0.02239^{+0.00028}_{-0.00028}$	$\Omega_m h^3$	0.09957	$0.0997^{+0.0030}_{-0.0030}$	$H(0.38)$	83.84	$83.9^{+1.3}_{-1.3}$
$\Omega_c h^2$	0.11988	$0.1200^{+0.0021}_{-0.0021}$	σ_8	0.8326	$0.833^{+0.023}_{-0.023}$	$D_M(0.38)$	1498.2	1498^{+26}_{-27}
$100\theta_{MC}$	1.04096	$1.04093^{+0.00057}_{-0.00058}$	S_8	0.8249	$0.826^{+0.022}_{-0.022}$	$H(0.51)$	90.10	$90.1^{+1.0}_{-1.1}$
τ	0.0531	$0.053^{+0.014}_{-0.014}$	$\sigma_8 \Omega_m^{0.5}$	0.4518	$0.452^{+0.012}_{-0.012}$	$D_M(0.51)$	1946.8	1946^{+30}_{-31}
w_0	-1.012	$-1.01^{+0.18}_{-0.18}$	$\sigma_8 \Omega_m^{0.25}$	0.6133	$0.614^{+0.014}_{-0.015}$	$H(0.61)$	95.41	$95.37^{+0.85}_{-0.93}$
w_a	-0.24	$-0.28^{+0.62}_{-0.70}$	$\sigma_8/h^{0.5}$	0.9975	$0.998^{+0.021}_{-0.021}$	$D_M(0.61)$	2270.2	2270^{+32}_{-33}
$\ln(10^{10} A_s)$	3.0418	$3.041^{+0.028}_{-0.028}$	$r_{drag} h$	102.48	$102.5^{+2.7}_{-2.7}$	$H(2.33)$	234.72	$234.7^{+1.9}_{-1.8}$
n_s	0.9663	$0.9651^{+0.0076}_{-0.0075}$	$\langle d^2 \rangle^{1/2}$	2.4558	$2.459^{+0.045}_{-0.045}$	$D_M(2.33)$	5748.7	5750^{+21}_{-19}
y_{cal}	1.00044	$1.0005^{+0.0048}_{-0.0049}$	z_{re}	7.53	$7.5^{+1.4}_{-1.5}$	$f\sigma_8(0.15)$	0.4606	$0.461^{+0.014}_{-0.014}$
α_{JLA}	0.1417	$0.142^{+0.013}_{-0.013}$	$10^9 A_s$	2.094	$2.092^{+0.059}_{-0.058}$	$\sigma_8(0.15)$	0.7709	$0.772^{+0.022}_{-0.022}$
β_{JLA}	3.106	$3.12^{+0.16}_{-0.16}$	$10^9 A_s e^{-2\tau}$	1.8834	$1.883^{+0.020}_{-0.020}$	$f\sigma_8(0.38)$	0.4865	$0.487^{+0.018}_{-0.017}$
A_{217}^{CIB}	46.0	47^{+10}_{-10}	D_{40}	1227.1	1230^{+22}_{-22}	$\sigma_8(0.38)$	0.6845	$0.685^{+0.020}_{-0.020}$
$\xi^{tSZ \times CIB}$	0.63	—	D_{220}	5732	5734^{+75}_{-75}	$f\sigma_8(0.51)$	0.4882	$0.489^{+0.018}_{-0.018}$
A_{143}^{tSZ}	7.09	$5.5^{+3.6}_{-3.9}$	D_{810}	2540.5	2539^{+26}_{-26}	$\sigma_8(0.51)$	0.6407	$0.641^{+0.018}_{-0.019}$
A_{100}^{PS}	249	259^{+50}_{-50}	D_{1420}	818.2	$817.1^{+9.4}_{-9.2}$	$f\sigma_8(0.61)$	0.4849	$0.486^{+0.018}_{-0.018}$
A_{143}^{PS}	50.7	46^{+10}_{-20}	D_{2000}	231.31	$230.9^{+3.1}_{-3.0}$	$\sigma_8(0.61)$	0.6096	$0.610^{+0.017}_{-0.018}$
$A_{143 \times 217}^{PS}$	52.9	42^{+20}_{-20}	$n_{s,0.002}$	0.9663	$0.9651^{+0.0076}_{-0.0075}$	$f\sigma_8(2.33)$	0.3081	$0.3082^{+0.0088}_{-0.0090}$
A_{217}^{PS}	122.0	115^{+20}_{-20}	Y_P	0.245405	$0.24540^{+0.00010}_{-0.00011}$	$\sigma_8(2.33)$	0.3148	$0.3148^{+0.0075}_{-0.0075}$
A^{kSZ}	0.01	< 8.17	Y_P^{BBN}	0.246731	$0.24673^{+0.00010}_{-0.00011}$	f_{2000}^{143}	28.8	29^{+5}_{-5}
A_{100}^{dustTT}	8.79	$8.9^{+3.6}_{-3.5}$	$10^5 D/H$	2.581	$2.583^{+0.052}_{-0.050}$	$f_{2000}^{143 \times 217}$	32.04	$32.1^{+3.6}_{-3.6}$
A_{143}^{dustTT}	11.02	$10.8^{+3.4}_{-3.5}$	Age/Gyr	13.730	$13.730^{+0.058}_{-0.055}$	f_{2000}^{217}	106.55	$106.9^{+3.4}_{-3.4}$
$A_{143 \times 217}^{dustTT}$	20.2	$18.5^{+6.4}_{-6.7}$	z_*	1089.879	$1089.90^{+0.47}_{-0.47}$	$\chi_{lensing}^2$	8.77	$9.23 (\nu: 0.4)$
A_{217}^{dustTT}	95.6	94^{+10}_{-10}	r_*	144.443	$144.41^{+0.48}_{-0.48}$	χ_{small}^2	396	$216 (\nu: 19035.3)$
A_{100}^{dustTE}	0.114	$0.114^{+0.077}_{-0.075}$	$100\theta_*$	1.04113	$1.04111^{+0.00056}_{-0.00058}$	χ_{lowl}^2	23.02	$23.27 (\nu: 0.3)$
$A_{100 \times 143}^{dustTE}$	0.135	$0.134^{+0.057}_{-0.057}$	$D_M(z_*)/Gpc$	13.8736	$13.871^{+0.046}_{-0.045}$	χ_{plik}^2	2344.1	$2358.6 (\nu: 15.3)$
$A_{100 \times 217}^{dustTE}$	0.485	$0.48^{+0.17}_{-0.16}$	z_{drag}	1059.97	$1059.97^{+0.57}_{-0.58}$	$\chi_{H073p45}^2$	5	$186 (\nu: 19024.8)$
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.10}$	r_{drag}	147.097	$147.06^{+0.50}_{-0.49}$	χ_{JLA}^2	695.46	$698.2 (\nu: 3.4)$
$A_{143 \times 217}^{dustTE}$	0.665	$0.66^{+0.15}_{-0.16}$	k_D	0.14088	$0.14091^{+0.00057}_{-0.00057}$	χ_{6DF}^2	0.150	$0.22 (\nu: 0.0)$
A_{217}^{dustTE}	2.09	$2.08^{+0.53}_{-0.53}$	$100\theta_D$	0.160734	$0.16074^{+0.00034}_{-0.00033}$	χ_{MGS}^2	2.92	$3.02 (\nu: 0.3)$
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$	z_{eq}	3400.0	3404^{+48}_{-47}	$\chi_{DR12BAO}^2$	4.74	$5.7 (\nu: 1.5)$
c_{217}	0.99820	$0.9982^{+0.0012}_{-0.0012}$	k_{eq}	0.010377	$0.01039^{+0.00015}_{-0.00014}$	χ_{prior}^2	1.6	$11.5 (\nu: 10.1)$
H_0	69.67	$69.7^{+1.8}_{-1.8}$	$100\theta_{eq}$	0.8138	$0.8131^{+0.0092}_{-0.0089}$	χ_{CMB}^2	2772	$2607 (\nu: 19062.9)$
Ω_Λ	0.7055	$0.705^{+0.016}_{-0.016}$	$100\theta_{s,eq}$	0.44962	$0.4493^{+0.0046}_{-0.0045}$	χ_{BAO}^2	7.81	$8.9 (\nu: 3.4)$
Ω_m	0.2945	$0.295^{+0.016}_{-0.016}$	$H(0.15)$	74.56	$74.6^{+1.5}_{-1.4}$			
$\Omega_m h^2$	0.14292	$0.1431^{+0.0020}_{-0.0020}$	$D_M(0.15)$	624.4	624^{+13}_{-13}			

Best-fit $\chi_{eff}^2 = 3481.83$; $\Delta\chi_{eff}^2 = -16.77$; $\bar{\chi}_{eff}^2 = 3511.91$; $\Delta\bar{\chi}_{eff}^2 = -12.96$; $R - 1 = 0.02088$
 χ_{eff}^2 : BAO - 6DF: 0.15 (Δ 0.15) MGS: 2.92 (Δ 1.32) DR12BAO: 4.74 (Δ 1.14) CMB - smicadx12.Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.77 (Δ 0.02) small_100x143_offlike5_EE_Aplanck.L
395.84 (Δ -1.09) commander_dx12.v3.2_29: 23.02 (Δ 0.38) plik_rd12_HM_v22b_TTTEEE: 2344.12 (Δ -2.24) Hubble - H073p45: 5.19 (Δ -5.20) SN - JLA December.2013:
695.46 (Δ -11.14)

19.15 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02237^{+0.00028}_{-0.00028}$	$\Omega_{\mathrm{m}}h^2$	$0.1434^{+0.0023}_{-0.0023}$	$H(0.15)$	$74.6^{+1.5}_{-1.4}$
$\Omega_{\mathrm{c}}h^2$	$0.1203^{+0.0024}_{-0.0025}$	$\Omega_{\mathrm{m}}h^3$	$0.0999^{+0.0032}_{-0.0031}$	$D_{\mathrm{M}}(0.15)$	624^{+13}_{-13}
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00059}_{-0.00059}$	σ_8	$0.838^{+0.027}_{-0.028}$	$H(0.38)$	$83.9^{+1.3}_{-1.3}$
τ	$0.055^{+0.013}_{-0.012}$	S_8	$0.831^{+0.028}_{-0.029}$	$D_{\mathrm{M}}(0.38)$	1497^{+26}_{-26}
w_0	$-1.00^{+0.19}_{-0.19}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.015}_{-0.016}$	$H(0.51)$	$90.1^{+1.0}_{-1.1}$
w_a	$-0.33^{+0.69}_{-0.71}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.618^{+0.019}_{-0.019}$	$D_{\mathrm{M}}(0.51)$	1946^{+31}_{-31}
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.026}$	$\sigma_8/h^{0.5}$	$1.004^{+0.027}_{-0.028}$	$H(0.61)$	$95.34^{+0.86}_{-0.91}$
n_{s}	$0.9646^{+0.0080}_{-0.0079}$	$r_{\mathrm{drag}}h$	$102.5^{+2.7}_{-2.7}$	$D_{\mathrm{M}}(0.61)$	2269^{+33}_{-33}
α_{JLA}	$0.142^{+0.013}_{-0.013}$	$\langle d^2 \rangle^{1/2}$	$2.471^{+0.059}_{-0.060}$	$H(2.33)$	$234.8^{+1.9}_{-1.8}$
β_{JLA}	$3.11^{+0.16}_{-0.16}$	z_{re}	< 8.86	$D_{\mathrm{M}}(2.33)$	5751^{+21}_{-19}
y_{cal}	$1.0006^{+0.0048}_{-0.0049}$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.058}_{-0.054}$	$f\sigma_8(0.15)$	$0.464^{+0.017}_{-0.016}$
A_{217}^{CIB}	46^{+10}_{-10}	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.885^{+0.022}_{-0.022}$	$\sigma_8(0.15)$	$0.776^{+0.026}_{-0.026}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	D_{40}	1232^{+24}_{-24}	$f\sigma_8(0.38)$	$0.490^{+0.020}_{-0.020}$
A_{143}^{tSZ}	$5.5^{+3.6}_{-3.9}$	D_{220}	5733^{+75}_{-75}	$\sigma_8(0.38)$	$0.689^{+0.023}_{-0.023}$
A_{100}^{PS}	258^{+60}_{-50}	D_{810}	2540^{+26}_{-26}	$f\sigma_8(0.51)$	$0.492^{+0.021}_{-0.021}$
A_{143}^{PS}	46^{+20}_{-20}	D_{1420}	$817.3^{+9.2}_{-9.2}$	$\sigma_8(0.51)$	$0.645^{+0.021}_{-0.022}$
$A_{143\times 217}^{\mathrm{PS}}$	43^{+20}_{-20}	D_{2000}	$231.1^{+3.0}_{-3.0}$	$f\sigma_8(0.61)$	$0.489^{+0.021}_{-0.021}$
A_{217}^{PS}	116^{+20}_{-20}	$n_{\mathrm{s},0.002}$	$0.9646^{+0.0080}_{-0.0079}$	$\sigma_8(0.61)$	$0.613^{+0.020}_{-0.020}$
A^{kSZ}	< 7.98	Y_{P}	$0.24539^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	$0.3098^{+0.0098}_{-0.010}$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24672^{+0.00011}_{-0.00012}$	$\sigma_8(2.33)$	$0.3161^{+0.0081}_{-0.0083}$
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.5}_{-3.5}$	$10^5\mathrm{D}/\mathrm{H}$	$2.586^{+0.053}_{-0.051}$	f_{2000}^{143}	29^{+5}_{-5}
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.5^{+6.5}_{-6.5}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.729^{+0.059}_{-0.056}$	$f_{2000}^{143\times 217}$	$32.0^{+3.5}_{-3.6}$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	z_*	$1089.95^{+0.51}_{-0.50}$	f_{2000}^{217}	$106.9^{+3.4}_{-3.4}$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.076}_{-0.075}$	r_*	$144.34^{+0.55}_{-0.53}$	χ_{simall}^2	$396.9 (\nu: 1.6)$
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.134^{+0.058}_{-0.058}$	$100\theta_*$	$1.04109^{+0.00058}_{-0.00058}$	χ_{lowl}^2	$23.44 (\nu: 0.4)$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.865^{+0.051}_{-0.049}$	χ_{plik}^2	$2358.3 (\nu: 16.3)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.11}_{-0.11}$	z_{drag}	$1059.96^{+0.59}_{-0.56}$	$\chi_{\mathrm{H073p45}}^2$	$5.4 (\nu: 3.4)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.00^{+0.54}_{-0.52}$	χ_{JLA}^2	$698.2 (\nu: 3.4)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.53}_{-0.52}$	k_{D}	$0.14096^{+0.00058}_{-0.00060}$	$\chi_{6\mathrm{DF}}^2$	$0.22 (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_{\mathrm{D}}$	$0.16075^{+0.00034}_{-0.00033}$	χ_{MGS}^2	$3.02 (\nu: 0.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3411^{+54}_{-56}	$\chi_{\mathrm{DR12BAO}}^2$	$5.8 (\nu: 1.5)$
H_0	$69.7^{+1.9}_{-1.8}$	k_{eq}	$0.01041^{+0.00016}_{-0.00017}$	χ_{prior}^2	$11.5 (\nu: 10.1)$
Ω_{Λ}	$0.705^{+0.016}_{-0.017}$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.011}_{-0.010}$	χ_{BAO}^2	$9.0 (\nu: 3.4)$
Ω_{m}	$0.295^{+0.017}_{-0.016}$	$100\theta_{\mathrm{s,eq}}$	$0.4486^{+0.0054}_{-0.0051}$	χ_{CMB}^2	$2778.6 (\nu: 16.5)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 3502.71; R - 1 = 0.01370$$

19.16 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_JLA_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00028}_{-0.00027}$	$\Omega_{\mathrm{m}}h^3$	$0.0997^{+0.0030}_{-0.0030}$	$H(0.38)$	$83.8^{+1.3}_{-1.3}$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0020}_{-0.0021}$	σ_8	$0.834^{+0.023}_{-0.023}$	$D_{\mathrm{M}}(0.38)$	1498^{+26}_{-27}
$100\theta_{\mathrm{MC}}$	$1.04094^{+0.00057}_{-0.00058}$	S_8	$0.826^{+0.022}_{-0.022}$	$H(0.51)$	$90.1^{+1.0}_{-1.1}$
τ	$0.054^{+0.012}_{-0.011}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.51)$	1946^{+30}_{-31}
w_0	$-1.01^{+0.18}_{-0.18}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.014}_{-0.015}$	$H(0.61)$	$95.37^{+0.84}_{-0.93}$
w_a	$-0.27^{+0.63}_{-0.70}$	$\sigma_8/h^{0.5}$	$0.999^{+0.020}_{-0.021}$	$D_{\mathrm{M}}(0.61)$	2270^{+32}_{-33}
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.025}_{-0.023}$	$r_{\mathrm{drag}}h$	$102.5^{+2.7}_{-2.7}$	$H(2.33)$	$234.7^{+1.9}_{-1.8}$
n_{s}	$0.9653^{+0.0075}_{-0.0073}$	$\langle d^2 \rangle^{1/2}$	$2.460^{+0.045}_{-0.045}$	$D_{\mathrm{M}}(2.33)$	5750^{+20}_{-19}
y_{cal}	$1.0005^{+0.0048}_{-0.0049}$	z_{re}	< 8.68	$f\sigma_8(0.15)$	$0.461^{+0.014}_{-0.014}$
α_{JLA}	$0.142^{+0.013}_{-0.013}$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.052}_{-0.048}$	$\sigma_8(0.15)$	$0.772^{+0.022}_{-0.022}$
β_{JLA}	$3.12^{+0.16}_{-0.16}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.020}_{-0.020}$	$f\sigma_8(0.38)$	$0.487^{+0.018}_{-0.017}$
A_{217}^{CIB}	47^{+10}_{-10}	D_{40}	1229^{+22}_{-22}	$\sigma_8(0.38)$	$0.685^{+0.020}_{-0.020}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	D_{220}	5733^{+75}_{-74}	$f\sigma_8(0.51)$	$0.489^{+0.018}_{-0.018}$
A_{143}^{tSZ}	$5.5^{+3.6}_{-3.9}$	D_{810}	2539^{+26}_{-26}	$\sigma_8(0.51)$	$0.642^{+0.018}_{-0.018}$
A_{100}^{PS}	259^{+50}_{-50}	D_{1420}	$817.1^{+9.3}_{-9.1}$	$f\sigma_8(0.61)$	$0.486^{+0.018}_{-0.018}$
A_{143}^{PS}	46^{+10}_{-20}	D_{2000}	$231.0^{+3.1}_{-3.0}$	$\sigma_8(0.61)$	$0.610^{+0.017}_{-0.017}$
$A_{143\times 217}^{\mathrm{PS}}$	42^{+20}_{-20}	$n_{\mathrm{s},0.002}$	$0.9653^{+0.0075}_{-0.0073}$	$f\sigma_8(2.33)$	$0.3084^{+0.0087}_{-0.0088}$
A_{217}^{PS}	115^{+20}_{-20}	Y_{P}	$0.24540^{+0.00010}_{-0.00011}$	$\sigma_8(2.33)$	$0.3150^{+0.0074}_{-0.0072}$
A^{kSZ}	< 8.16	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24673^{+0.00010}_{-0.00011}$	f_{2000}^{143}	29^{+5}_{-5}
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.5}$	$10^5\mathrm{D}/\mathrm{H}$	$2.582^{+0.051}_{-0.049}$	$f_{2000}^{143\times 217}$	32^{+4}_{-4}
$A_{143}^{\mathrm{dust}TT}$	$10.8^{+3.4}_{-3.5}$	$\mathrm{Age}/\mathrm{Gyr}$	$13.730^{+0.058}_{-0.055}$	f_{2000}^{217}	$106.8^{+3.4}_{-3.4}$
$A_{143\times 217}^{\mathrm{dust}TT}$	$18.5^{+6.5}_{-6.7}$	z_*	$1089.89^{+0.46}_{-0.46}$	$\chi_{\mathrm{lensing}}^2$	$9.24 (\nu: 0.4)$
$A_{217}^{\mathrm{dust}TT}$	94^{+10}_{-10}	r_*	$144.43^{+0.48}_{-0.46}$	χ_{simall}^2	$218 (\nu: 19002.6)$
$A_{100}^{\mathrm{dust}TE}$	$0.114^{+0.078}_{-0.075}$	$100\theta_*$	$1.04112^{+0.00056}_{-0.00057}$	χ_{lowl}^2	$23.26 (\nu: 0.3)$
$A_{100\times 143}^{\mathrm{dust}TE}$	$0.134^{+0.057}_{-0.058}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.872^{+0.046}_{-0.044}$	χ_{plik}^2	$2358.4 (\nu: 15.3)$
$A_{100\times 217}^{\mathrm{dust}TE}$	$0.48^{+0.17}_{-0.16}$	z_{drag}	$1059.98^{+0.56}_{-0.58}$	$\chi_{\mathrm{H073p45}}^2$	$184 (\nu: 18991.4)$
$A_{143}^{\mathrm{dust}TE}$	$0.23^{+0.11}_{-0.10}$	r_{drag}	$147.08^{+0.48}_{-0.47}$	χ_{JLA}^2	$698.2 (\nu: 3.5)$
$A_{143\times 217}^{\mathrm{dust}TE}$	$0.66^{+0.15}_{-0.16}$	k_{D}	$0.14089^{+0.00057}_{-0.00056}$	$\chi_{6\mathrm{DF}}^2$	$0.22 (\nu: 0.0)$
$A_{217}^{\mathrm{dust}TE}$	$2.08^{+0.52}_{-0.53}$	$100\theta_{\mathrm{D}}$	$0.16074^{+0.00034}_{-0.00033}$	χ_{MGS}^2	$3.02 (\nu: 0.3)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	z_{eq}	3402^{+46}_{-48}	$\chi_{\mathrm{DR12BAO}}^2$	$5.7 (\nu: 1.5)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	k_{eq}	$0.01038^{+0.00014}_{-0.00015}$	χ_{prior}^2	$11.5 (\nu: 9.9)$
H_0	$69.7^{+1.8}_{-1.8}$	$100\theta_{\mathrm{eq}}$	$0.8135^{+0.0090}_{-0.0086}$	χ_{CMB}^2	$2609 (\nu: 19039.6)$
Ω_{Λ}	$0.705^{+0.015}_{-0.017}$	$100\theta_{\mathrm{s,eq}}$	$0.4495^{+0.0046}_{-0.0044}$	χ_{BAO}^2	$8.9 (\nu: 3.5)$
Ω_{m}	$0.295^{+0.017}_{-0.015}$	$H(0.15)$	$74.6^{+1.5}_{-1.4}$		
$\Omega_{\mathrm{m}}h^2$	$0.1430^{+0.0019}_{-0.0020}$	$D_{\mathrm{M}}(0.15)$	624^{+13}_{-13}		

$$\bar{\chi}_{\mathrm{eff}}^2 = 3511.63; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -13.15; R - 1 = 0.02239$$

19.17 base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022152	$0.02212^{+0.00041}_{-0.00040}$	$\sigma_8 \Omega_m^{0.25}$	0.6137	$0.615^{+0.025}_{-0.027}$	$H(0.38)$	83.41	$83.4^{+1.2}_{-1.2}$
$\Omega_c h^2$	0.12027	$0.1206^{+0.0036}_{-0.0035}$	$\sigma_8/h^{0.5}$	0.9978	$0.999^{+0.036}_{-0.038}$	$D_M(0.38)$	1516.3	1516^{+27}_{-27}
$100\theta_{MC}$	1.04082	$1.04079^{+0.00089}_{-0.00088}$	$r_{drag}h$	100.49	$100.3^{+2.5}_{-2.3}$	$H(0.51)$	89.88	$89.9^{+1.0}_{-0.98}$
τ	0.0526	$0.052^{+0.016}_{-0.016}$	$\langle d^2 \rangle^{1/2}$	2.460	$2.466^{+0.079}_{-0.084}$	$D_M(0.51)$	1966.6	1966^{+31}_{-31}
w_0	-0.971	$-0.95^{+0.17}_{-0.16}$	z_{re}	7.55	$7.5^{+1.6}_{-1.7}$	$H(0.61)$	95.31	$95.27^{+0.88}_{-0.85}$
w_a	-0.27	$-0.36^{+0.69}_{-0.74}$	$10^9 A_s$	2.092	$2.091^{+0.067}_{-0.067}$	$D_M(0.61)$	2290.6	2290^{+34}_{-33}
$\ln(10^{10} A_s)$	3.0406	$3.040^{+0.032}_{-0.032}$	$10^9 A_s e^{-2\tau}$	1.8828	$1.884^{+0.026}_{-0.025}$	$H(2.33)$	235.10	$235.1^{+1.9}_{-1.9}$
n_s	0.9646	$0.963^{+0.010}_{-0.010}$	D_{40}	1228.3	1232^{+28}_{-27}	$D_M(2.33)$	5763.8	5766^{+25}_{-25}
y_{cal}	1.00031	$1.0005^{+0.0049}_{-0.0049}$	D_{220}	5710	5713^{+80}_{-82}	$f\sigma_8(0.15)$	0.4618	$0.462^{+0.021}_{-0.022}$
A_{217}^{CIB}	48.9	48^{+10}_{-10}	D_{810}	2536.9	2536^{+27}_{-27}	$\sigma_8(0.15)$	0.7621	$0.763^{+0.031}_{-0.032}$
$\xi^{tSZ \times CIB}$	0.31	—	D_{1420}	815.3	$814.4^{+9.8}_{-10}$	$f\sigma_8(0.38)$	0.4832	$0.484^{+0.025}_{-0.025}$
A_{143}^{tSZ}	7.11	$5.1^{+3.8}_{-4.0}$	D_{2000}	230.01	$229.6^{+3.4}_{-3.5}$	$\sigma_8(0.38)$	0.6759	$0.676^{+0.027}_{-0.028}$
A_{100}^{PS}	254	263^{+60}_{-50}	$n_{s,0.002}$	0.9646	$0.963^{+0.010}_{-0.010}$	$f\sigma_8(0.51)$	0.4834	$0.484^{+0.026}_{-0.026}$
A_{143}^{PS}	49.0	49^{+20}_{-20}	Y_P	0.245306	$0.24529^{+0.00017}_{-0.00019}$	$\sigma_8(0.51)$	0.6325	$0.633^{+0.025}_{-0.026}$
$A_{143 \times 217}^{PS}$	46.5	43^{+20}_{-20}	Y_P^{BBN}	0.246632	$0.24661^{+0.00017}_{-0.00019}$	$f\sigma_8(0.61)$	0.4793	$0.480^{+0.026}_{-0.026}$
A_{217}^{PS}	119.0	115^{+20}_{-20}	$10^5 D/H$	2.627	$2.633^{+0.077}_{-0.077}$	$\sigma_8(0.61)$	0.6018	$0.602^{+0.023}_{-0.024}$
A^{kSZ}	0.0	—	Age/Gyr	13.778	$13.779^{+0.070}_{-0.066}$	$f\sigma_8(2.33)$	0.3040	$0.304^{+0.012}_{-0.013}$
A_{100}^{dustTT}	8.86	$9.0^{+3.6}_{-3.6}$	z_*	1090.22	$1090.29^{+0.72}_{-0.70}$	$\sigma_8(2.33)$	0.3110	$0.3108^{+0.0090}_{-0.0094}$
A_{143}^{dustTT}	10.85	$10.7^{+3.5}_{-3.5}$	r_*	144.53	$144.48^{+0.85}_{-0.84}$	f_{2000}^{143}	30.3	31^{+6}_{-6}
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.5}_{-6.5}$	$100\theta_*$	1.04103	$1.04100^{+0.00087}_{-0.00086}$	$f_{2000}^{143 \times 217}$	33.19	34^{+4}_{-4}
A_{217}^{dustTT}	94.5	93^{+10}_{-10}	$D_M(z_*)/\text{Gpc}$	13.883	$13.879^{+0.079}_{-0.078}$	f_{2000}^{217}	107.61	$108.1^{+3.7}_{-3.7}$
c_{100}	0.99966	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	1059.44	$1059.40^{+0.88}_{-0.84}$	χ_{simall}^2	395.87	$396.9 (\nu: 1.3)$
c_{217}	0.99825	$0.9983^{+0.0012}_{-0.0012}$	r_{drag}	147.26	$147.22^{+0.87}_{-0.86}$	χ_{lowl}^2	23.28	$23.7 (\nu: 0.6)$
H_0	68.24	$68.1^{+1.7}_{-1.6}$	k_D	0.14052	$0.1405^{+0.0010}_{-0.0010}$	χ_{plik}^2	758.4	$770.8 (\nu: 14.6)$
Ω_Λ	0.6928	$0.691^{+0.016}_{-0.016}$	$100\theta_D$	0.16104	$0.16107^{+0.00051}_{-0.00052}$	χ_{JLA}^2	1034.78	$1035.9 (\nu: 1.1)$
Ω_m	0.3072	$0.309^{+0.016}_{-0.016}$	z_{eq}	3404	3410^{+82}_{-81}	χ_{6DF}^2	0.001	$0.052 (\nu: 0.0)$
$\Omega_m h^2$	0.14307	$0.1433^{+0.0034}_{-0.0034}$	k_{eq}	0.010388	$0.01041^{+0.00025}_{-0.00025}$	χ_{MGS}^2	1.82	$1.87 (\nu: 0.2)$
$\Omega_m h^3$	0.09763	$0.0977^{+0.0034}_{-0.0034}$	$100\theta_{eq}$	0.8124	$0.811^{+0.015}_{-0.015}$	$\chi_{DR12BAO}^2$	4.04	$5.0 (\nu: 0.9)$
σ_8	0.8243	$0.825^{+0.033}_{-0.034}$	$100\theta_{s,eq}$	0.4491	$0.4485^{+0.0079}_{-0.0077}$	χ_{prior}^2	1.4	$7.3 (\nu: 6.8)$
S_8	0.8342	$0.837^{+0.039}_{-0.040}$	$H(0.15)$	73.60	$73.6^{+1.5}_{-1.4}$	χ_{BAO}^2	5.86	$6.9 (\nu: 1.1)$
$\sigma_8 \Omega_m^{0.5}$	0.4569	$0.458^{+0.021}_{-0.022}$	$D_M(0.15)$	634.9	635^{+13}_{-13}	χ_{CMB}^2	1177.5	$1191.3 (\nu: 15.0)$

Best-fit $\chi_{eff}^2 = 2219.53$; $\bar{\chi}_{eff}^2 = 2241.47$; $R - 1 = 0.00718$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 4.04 CMB - simall_100x143.offlike5_EE_Aplanck_B: 395.87 commander_dx12_v3.2.29: 23.29 plik_rd12_HM_v22.TT: 758.36
SN - JLA Pantheon18: 1034.78

19.18 base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022187	$0.02215^{+0.00039}_{-0.00038}$	$\sigma_8 \Omega_m^{0.25}$	0.6096	$0.611^{+0.017}_{-0.017}$	$H(0.38)$	83.40	$83.4^{+1.3}_{-1.2}$
$\Omega_c h^2$	0.11971	$0.1200^{+0.0027}_{-0.0026}$	$\sigma_8/h^{0.5}$	0.9921	$0.994^{+0.024}_{-0.024}$	$D_M(0.38)$	1517.3	1517^{+26}_{-27}
$100\theta_{MC}$	1.04081	$1.04083^{+0.00086}_{-0.00085}$	$r_{\text{drag}} h$	100.49	$100.4^{+2.4}_{-2.3}$	$H(0.51)$	89.90	$89.9^{+1.0}_{-0.99}$
τ	0.0528	$0.052^{+0.015}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	2.449	$2.455^{+0.052}_{-0.054}$	$D_M(0.51)$	1967.5	1967^{+31}_{-32}
w_0	-0.974	$-0.96^{+0.17}_{-0.15}$	z_{re}	7.55	$7.4^{+1.5}_{-1.7}$	$H(0.61)$	95.36	$95.33^{+0.88}_{-0.85}$
w_a	-0.22	$-0.29^{+0.59}_{-0.64}$	$10^9 A_s$	2.090	$2.087^{+0.061}_{-0.061}$	$D_M(0.61)$	2291.4	2291^{+33}_{-34}
$\ln(10^{10} A_s)$	3.0397	$3.038^{+0.029}_{-0.030}$	$10^9 A_s e^{-2\tau}$	1.8804	$1.882^{+0.022}_{-0.022}$	$H(2.33)$	235.02	$235.0^{+1.9}_{-2.0}$
n_s	0.9653	$0.9638^{+0.0084}_{-0.0089}$	D_{40}	1226.7	1230^{+24}_{-24}	$D_M(2.33)$	5762.9	5765^{+25}_{-25}
y_{cal}	1.00032	$1.0004^{+0.0049}_{-0.0049}$	D_{220}	5715	5716^{+79}_{-81}	$f\sigma_8(0.15)$	0.4584	$0.459^{+0.015}_{-0.015}$
A_{217}^{CIB}	49.0	48^{+10}_{-10}	D_{810}	2536.1	2535^{+26}_{-27}	$\sigma_8(0.15)$	0.7576	$0.759^{+0.022}_{-0.023}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.26	—	D_{1420}	815.3	$814.4^{+9.9}_{-9.9}$	$f\sigma_8(0.38)$	0.4794	$0.481^{+0.018}_{-0.018}$
A_{143}^{tSZ}	7.10	$5.1^{+3.8}_{-3.9}$	D_{2000}	229.98	$229.6^{+3.5}_{-3.5}$	$\sigma_8(0.38)$	0.6720	$0.673^{+0.020}_{-0.020}$
A_{100}^{PS}	255	264^{+60}_{-60}	$n_{s,0.002}$	0.9653	$0.9638^{+0.0084}_{-0.0089}$	$f\sigma_8(0.51)$	0.4795	$0.481^{+0.019}_{-0.018}$
A_{143}^{PS}	48.4	49^{+20}_{-20}	Y_P	0.245320	$0.24530^{+0.00016}_{-0.00018}$	$\sigma_8(0.51)$	0.6290	$0.630^{+0.018}_{-0.018}$
$A_{143 \times 217}^{\text{PS}}$	45.2	43^{+20}_{-20}	Y_P^{BBN}	0.246647	$0.24663^{+0.00016}_{-0.00018}$	$f\sigma_8(0.61)$	0.4754	$0.477^{+0.019}_{-0.018}$
A_{217}^{PS}	118.5	115^{+20}_{-20}	$10^5 D/H$	2.620	$2.628^{+0.074}_{-0.073}$	$\sigma_8(0.61)$	0.5985	$0.599^{+0.017}_{-0.017}$
A^{kSZ}	0.0	—	Age/Gyr	13.781	$13.781^{+0.068}_{-0.066}$	$f\sigma_8(2.33)$	0.3023	$0.3027^{+0.0089}_{-0.0093}$
A_{100}^{dustTT}	8.91	$9.0^{+3.6}_{-3.6}$	z_*	1090.13	$1090.21^{+0.62}_{-0.61}$	$\sigma_8(2.33)$	0.3098	$0.3098^{+0.0070}_{-0.0072}$
A_{143}^{dustTT}	10.82	$10.8^{+3.5}_{-3.6}$	r_*	144.65	$144.59^{+0.65}_{-0.65}$	χ_{lensing}^2	8.72	$9.40 (\nu: 0.5)$
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$18.3^{+6.4}_{-6.5}$	$100\theta_*$	1.04102	$1.04103^{+0.00086}_{-0.00084}$	χ_{small}^2	395.86	$396.8 (\nu: 1.1)$
A_{217}^{dustTT}	94.8	93^{+10}_{-10}	$D_M(z_*)/\text{Gpc}$	13.895	$13.889^{+0.063}_{-0.062}$	χ_{lowl}^2	23.14	$23.48 (\nu: 0.4)$
c_{100}	0.99963	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	1059.47	$1059.42^{+0.89}_{-0.87}$	χ_{plik}^2	758.7	$770.7 (\nu: 13.9)$
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$	r_{drag}	147.37	$147.33^{+0.69}_{-0.69}$	χ_{JLA}^2	1034.79	$1035.9 (\nu: 1.1)$
H_0	68.19	$68.1^{+1.6}_{-1.6}$	k_D	0.14043	$0.14045^{+0.00087}_{-0.00088}$	$\chi_{6\text{DF}}^2$	0.001	$0.053 (\nu: 0.0)$
Ω_Λ	0.6934	$0.692^{+0.015}_{-0.016}$	$100\theta_D$	0.16101	$0.16105^{+0.00051}_{-0.00051}$	χ_{MGS}^2	1.82	$1.89 (\nu: 0.2)$
Ω_m	0.3066	$0.308^{+0.016}_{-0.015}$	z_{eq}	3391	3398^{+62}_{-60}	χ_{DR12BAO}^2	3.86	$4.8 (\nu: 0.8)$
$\Omega_m h^2$	0.14254	$0.1428^{+0.0026}_{-0.0025}$	k_{eq}	0.010350	$0.01037^{+0.00019}_{-0.00018}$	χ_{prior}^2	1.5	$7.3 (\nu: 6.8)$
$\Omega_m h^3$	0.09720	$0.0973^{+0.0030}_{-0.0029}$	$100\theta_{\text{eq}}$	0.8147	$0.813^{+0.011}_{-0.011}$	χ_{CMB}^2	1186.4	$1200.4 (\nu: 15.5)$
σ_8	0.8193	$0.821^{+0.024}_{-0.024}$	$100\theta_{s,\text{eq}}$	0.4503	$0.4496^{+0.0058}_{-0.0058}$	χ_{BAO}^2	5.68	$6.7 (\nu: 1.1)$
S_8	0.8282	$0.831^{+0.026}_{-0.026}$	$H(0.15)$	73.54	$73.6^{+1.5}_{-1.4}$			
$\sigma_8 \Omega_m^{0.5}$	0.4536	$0.455^{+0.014}_{-0.014}$	$D_M(0.15)$	635.4	635^{+13}_{-13}			

Best-fit $\chi_{\text{eff}}^2 = 2228.36$; $\Delta\chi_{\text{eff}}^2 = -1.35$; $\bar{\chi}_{\text{eff}}^2 = 2250.30$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.53$; $R - 1 = 0.00973$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.01) MGS: 1.82 (Δ 0.48) DR12BAO: 3.86 (Δ -0.17) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.72 (Δ -0.16) small_100x143_offlike5_EE_Aplanc. 395.86 (Δ -0.51) commander_dx12_v3.2_29: 23.14 (Δ 0.33) plik_rd12_HM_v22.TT: 758.71 (Δ -1.08) SN - JLA Pantheon18: 1034.79 (Δ -0.16)

19.19 base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02213^{+0.00041}_{-0.00040}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.615^{+0.025}_{-0.026}$	$H(0.38)$	$83.4^{+1.2}_{-1.2}$
$\Omega_{\mathrm{c}} h^2$	$0.1205^{+0.0035}_{-0.0035}$	$\sigma_8/h^{0.5}$	$1.000^{+0.035}_{-0.037}$	$D_{\mathrm{M}}(0.38)$	1516^{+27}_{-27}
$100\theta_{\mathrm{MC}}$	$1.04080^{+0.00088}_{-0.00088}$	$r_{\mathrm{drag}} h$	$100.3^{+2.5}_{-2.4}$	$H(0.51)$	$89.9^{+1.0}_{-0.98}$
τ	$0.054^{+0.012}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.468^{+0.078}_{-0.082}$	$D_{\mathrm{M}}(0.51)$	1967^{+31}_{-31}
w_0	$-0.95^{+0.17}_{-0.16}$	z_{re}	< 8.79	$H(0.61)$	$95.29^{+0.89}_{-0.84}$
w_a	$-0.35^{+0.68}_{-0.73}$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.057}_{-0.053}$	$D_{\mathrm{M}}(0.61)$	2291^{+34}_{-33}
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.027}_{-0.026}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.025}_{-0.025}$	$H(2.33)$	$235.1^{+1.9}_{-1.9}$
n_{s}	$0.9632^{+0.0099}_{-0.010}$	D_{40}	1232^{+28}_{-27}	$D_{\mathrm{M}}(2.33)$	5766^{+25}_{-25}
y_{cal}	$1.0005^{+0.0050}_{-0.0050}$	D_{220}	5713^{+80}_{-82}	$f\sigma_8(0.15)$	$0.463^{+0.021}_{-0.021}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{810}	2536^{+27}_{-27}	$\sigma_8(0.15)$	$0.763^{+0.030}_{-0.031}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$814.5^{+9.9}_{-10}$	$f\sigma_8(0.38)$	$0.484^{+0.024}_{-0.024}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-4.0}$	D_{2000}	$229.7^{+3.4}_{-3.5}$	$\sigma_8(0.38)$	$0.677^{+0.027}_{-0.027}$
A_{100}^{PS}	263^{+60}_{-50}	$n_{\mathrm{s},0.002}$	$0.9632^{+0.0099}_{-0.010}$	$f\sigma_8(0.51)$	$0.485^{+0.026}_{-0.025}$
A_{143}^{PS}	49^{+20}_{-20}	Y_{P}	$0.24529^{+0.00017}_{-0.00019}$	$\sigma_8(0.51)$	$0.633^{+0.025}_{-0.025}$
$A_{143 \times 217}^{\mathrm{PS}}$	43^{+20}_{-20}	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24662^{+0.00017}_{-0.00019}$	$f\sigma_8(0.61)$	$0.481^{+0.026}_{-0.026}$
A_{217}^{PS}	115^{+20}_{-20}	$10^5 \mathrm{D}/\mathrm{H}$	$2.632^{+0.076}_{-0.077}$	$\sigma_8(0.61)$	$0.603^{+0.023}_{-0.024}$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.779^{+0.070}_{-0.066}$	$f\sigma_8(2.33)$	$0.304^{+0.011}_{-0.012}$
$A_{100}^{\mathrm{dust}TT}$	$8.9^{+3.6}_{-3.6}$	z_*	$1090.27^{+0.71}_{-0.70}$	$\sigma_8(2.33)$	$0.3111^{+0.0089}_{-0.0092}$
$A_{143}^{\mathrm{dust}TT}$	$10.7^{+3.5}_{-3.5}$	r_*	$144.49^{+0.84}_{-0.83}$	f_{2000}^{143}	31^{+6}_{-6}
$A_{143 \times 217}^{\mathrm{dust}TT}$	$18.3^{+6.5}_{-6.6}$	$100\theta_*$	$1.04101^{+0.00087}_{-0.00087}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
$A_{217}^{\mathrm{dust}TT}$	93^{+10}_{-10}	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.880^{+0.078}_{-0.078}$	f_{2000}^{217}	$108.0^{+3.7}_{-3.7}$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	$1059.41^{+0.87}_{-0.85}$	χ_{simall}^2	$396.8 (\nu: 1.3)$
c_{217}	$0.9983^{+0.0012}_{-0.0012}$	r_{drag}	$147.24^{+0.86}_{-0.85}$	χ_{lowl}^2	$23.7 (\nu: 0.6)$
H_0	$68.1^{+1.7}_{-1.6}$	k_{D}	$0.14053^{+0.00099}_{-0.0010}$	χ_{plik}^2	$770.6 (\nu: 14.5)$
Ω_{Λ}	$0.691^{+0.016}_{-0.016}$	$100\theta_{\mathrm{D}}$	$0.16107^{+0.00051}_{-0.00052}$	χ_{JLA}^2	$1035.9 (\nu: 1.2)$
Ω_{m}	$0.309^{+0.016}_{-0.016}$	z_{eq}	3408^{+80}_{-80}	$\chi_{6\mathrm{DF}}^2$	$0.053 (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1433^{+0.0034}_{-0.0033}$	k_{eq}	$0.01040^{+0.00025}_{-0.00024}$	χ_{MGS}^2	$1.86 (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0976^{+0.0034}_{-0.0034}$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.015}_{-0.015}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.0 (\nu: 0.9)$
σ_8	$0.826^{+0.033}_{-0.034}$	$100\theta_{\mathrm{s,eq}}$	$0.4487^{+0.0078}_{-0.0075}$	χ_{prior}^2	$7.3 (\nu: 6.8)$
S_8	$0.838^{+0.039}_{-0.039}$	$H(0.15)$	$73.6^{+1.5}_{-1.4}$	χ_{BAO}^2	$6.9 (\nu: 1.1)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.459^{+0.021}_{-0.022}$	$D_{\mathrm{M}}(0.15)$	635^{+13}_{-13}	χ_{CMB}^2	$1191.0 (\nu: 14.5)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2241.17; R - 1 = 0.00784$$

19.20 base_w_wa_plikHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02216^{+0.00039}_{-0.00038}$	$\sigma_8/h^{0.5}$	$0.994^{+0.024}_{-0.024}$	$H(0.51)$	$89.9^{+1.0}_{-0.99}$
$\Omega_c h^2$	$0.1199^{+0.0026}_{-0.0025}$	$r_{\text{drag}} h$	$100.4^{+2.4}_{-2.4}$	$D_{\text{M}}(0.51)$	1967^{+31}_{-31}
$100\theta_{\text{MC}}$	$1.04084^{+0.00086}_{-0.00086}$	$\langle d^2 \rangle^{1/2}$	$2.456^{+0.052}_{-0.054}$	$H(0.61)$	$95.35^{+0.88}_{-0.84}$
τ	$0.053^{+0.012}_{-0.011}$	z_{re}	< 8.72	$D_{\text{M}}(0.61)$	2291^{+33}_{-34}
w_0	$-0.96^{+0.17}_{-0.15}$	$10^9 A_{\text{s}}$	$2.093^{+0.052}_{-0.048}$	$H(2.33)$	$235.0^{+1.9}_{-2.0}$
w_a	$-0.28^{+0.59}_{-0.63}$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.881^{+0.022}_{-0.021}$	$D_{\text{M}}(2.33)$	5764^{+25}_{-25}
$\ln(10^{10} A_{\text{s}})$	$3.041^{+0.025}_{-0.023}$	D_{40}	1230^{+24}_{-24}	$f\sigma_8(0.15)$	$0.459^{+0.015}_{-0.015}$
n_{s}	$0.9642^{+0.0082}_{-0.0084}$	D_{220}	5716^{+80}_{-81}	$\sigma_8(0.15)$	$0.759^{+0.022}_{-0.023}$
y_{cal}	$1.0004^{+0.0049}_{-0.0050}$	D_{810}	2535^{+26}_{-27}	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.018}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{1420}	$814.5^{+9.9}_{-9.9}$	$\sigma_8(0.38)$	$0.673^{+0.020}_{-0.020}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{2000}	$229.7^{+3.4}_{-3.5}$	$f\sigma_8(0.51)$	$0.481^{+0.019}_{-0.018}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$	$n_{\text{s},0.002}$	$0.9642^{+0.0082}_{-0.0084}$	$\sigma_8(0.51)$	$0.630^{+0.018}_{-0.018}$
A_{100}^{PS}	263^{+60}_{-50}	Y_{P}	$0.24530^{+0.00016}_{-0.00018}$	$f\sigma_8(0.61)$	$0.477^{+0.019}_{-0.018}$
A_{143}^{PS}	49^{+20}_{-20}	$Y_{\text{P}}^{\text{BBN}}$	$0.24663^{+0.00016}_{-0.00018}$	$\sigma_8(0.61)$	$0.599^{+0.017}_{-0.017}$
$A_{143 \times 217}^{\text{PS}}$	43^{+20}_{-20}	$10^5 \text{D}/\text{H}$	$2.626^{+0.074}_{-0.073}$	$f\sigma_8(2.33)$	$0.3027^{+0.0089}_{-0.0094}$
A_{217}^{PS}	115^{+20}_{-20}	Age/Gyr	$13.781^{+0.069}_{-0.066}$	$\sigma_8(2.33)$	$0.3100^{+0.0070}_{-0.0071}$
A^{kSZ}	—	z_*	$1090.18^{+0.61}_{-0.61}$	f_{2000}^{143}	31^{+6}_{-6}
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6}$	r_*	$144.62^{+0.64}_{-0.63}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
A_{143}^{dustTT}	$10.8^{+3.5}_{-3.6}$	$100\theta_*$	$1.04104^{+0.00086}_{-0.00085}$	f_{2000}^{217}	$108.1^{+3.7}_{-3.7}$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.5}$	$D_{\text{M}}(z_*)/\text{Gpc}$	$13.892^{+0.061}_{-0.060}$	χ_{lensing}^2	$9.39 (\nu: 0.5)$
A_{217}^{dustTT}	93^{+10}_{-10}	z_{drag}	$1059.44^{+0.88}_{-0.84}$	χ_{simall}^2	$396.7 (\nu: 1.0)$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	r_{drag}	$147.35^{+0.69}_{-0.67}$	χ_{lowl}^2	$23.44 (\nu: 0.4)$
c_{217}	$0.9983^{+0.0012}_{-0.0012}$	k_{D}	$0.14043^{+0.00086}_{-0.00088}$	χ_{plik}^2	$770.6 (\nu: 14.1)$
H_0	$68.1^{+1.6}_{-1.6}$	$100\theta_{\text{D}}$	$0.16105^{+0.00051}_{-0.00051}$	χ_{JLA}^2	$1035.9 (\nu: 1.2)$
Ω_{Λ}	$0.692^{+0.015}_{-0.016}$	z_{eq}	3395^{+59}_{-59}	$\chi_{6\text{DF}}^2$	$0.053 (\nu: 0.0)$
Ω_{m}	$0.308^{+0.016}_{-0.015}$	k_{eq}	$0.01036^{+0.00018}_{-0.00018}$	χ_{MGS}^2	$1.88 (\nu: 0.2)$
$\Omega_{\text{m}} h^2$	$0.1427^{+0.0025}_{-0.0024}$	$100\theta_{\text{eq}}$	$0.814^{+0.011}_{-0.011}$	χ_{DR12BAO}^2	$4.8 (\nu: 0.8)$
$\Omega_{\text{m}} h^3$	$0.0972^{+0.0029}_{-0.0029}$	$100\theta_{\text{s,eq}}$	$0.4499^{+0.0056}_{-0.0056}$	χ_{prior}^2	$7.3 (\nu: 6.9)$
σ_8	$0.821^{+0.024}_{-0.024}$	$H(0.15)$	$73.6^{+1.5}_{-1.4}$	χ_{CMB}^2	$1200.1 (\nu: 15.3)$
S_8	$0.831^{+0.026}_{-0.026}$	$D_{\text{M}}(0.15)$	636^{+13}_{-13}	χ_{BAO}^2	$6.7 (\nu: 1.1)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.455^{+0.014}_{-0.014}$	$H(0.38)$	$83.4^{+1.3}_{-1.2}$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.611^{+0.017}_{-0.017}$	$D_{\text{M}}(0.38)$	1517^{+26}_{-27}		

$$\bar{\chi}_{\text{eff}}^2 = 2250.01; \Delta\bar{\chi}_{\text{eff}}^2 = 0.39; R - 1 = 0.01194$$

19.21 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022366	$0.02236^{+0.00028}_{-0.00028}$	$\Omega_m h^3$	0.09770	$0.0978^{+0.0028}_{-0.0029}$	$H(0.15)$	73.70	$73.8^{+1.4}_{-1.4}$
$\Omega_c h^2$	0.12004	$0.1202^{+0.0025}_{-0.0025}$	σ_8	0.8226	$0.823^{+0.027}_{-0.027}$	$D_M(0.15)$	634.2	634^{+13}_{-12}
$100\theta_{MC}$	1.04088	$1.04090^{+0.00059}_{-0.00059}$	S_8	0.8318	$0.833^{+0.029}_{-0.029}$	$H(0.38)$	83.57	$83.7^{+1.2}_{-1.2}$
τ	0.0544	$0.054^{+0.016}_{-0.015}$	$\sigma_8 \Omega_m^{0.5}$	0.4556	$0.456^{+0.016}_{-0.016}$	$D_M(0.38)$	1514.1	1512^{+26}_{-26}
w_0	-0.967	$-0.95^{+0.17}_{-0.16}$	$\sigma_8 \Omega_m^{0.25}$	0.6122	$0.613^{+0.019}_{-0.019}$	$H(0.51)$	90.07	$90.12^{+0.95}_{-0.96}$
w_a	-0.25	$-0.33^{+0.62}_{-0.66}$	$\sigma_8/h^{0.5}$	0.9954	$0.996^{+0.028}_{-0.028}$	$D_M(0.51)$	1963.5	1961^{+31}_{-30}
$\ln(10^{10} A_s)$	3.0448	$3.044^{+0.032}_{-0.031}$	$r_{drag} h$	100.45	$100.4^{+2.4}_{-2.3}$	$H(0.61)$	95.52	$95.53^{+0.79}_{-0.78}$
n_s	0.9661	$0.9646^{+0.0082}_{-0.0084}$	$\langle d^2 \rangle^{1/2}$	2.456	$2.461^{+0.062}_{-0.066}$	$D_M(0.61)$	2286.8	2285^{+33}_{-32}
y_{cal}	1.00059	$1.0005^{+0.0047}_{-0.0049}$	z_{re}	7.68	$7.6^{+1.5}_{-1.6}$	$H(2.33)$	235.30	$235.3^{+1.9}_{-1.8}$
A_{217}^{CIB}	46.9	47^{+10}_{-10}	$10^9 A_s$	2.101	$2.099^{+0.067}_{-0.064}$	$D_M(2.33)$	5754.1	5754^{+20}_{-19}
$\xi^{tSZ \times CIB}$	0.46	—	$10^9 A_s e^{-2\tau}$	1.8840	$1.884^{+0.022}_{-0.022}$	$f\sigma_8(0.15)$	0.4601	$0.460^{+0.016}_{-0.016}$
A_{143}^{tSZ}	7.23	$5.5^{+3.8}_{-3.8}$	D_{40}	1228.1	1231^{+24}_{-24}	$\sigma_8(0.15)$	0.7607	$0.761^{+0.025}_{-0.025}$
A_{100}^{PS}	249	259^{+50}_{-50}	D_{220}	5729	5733^{+73}_{-75}	$f\sigma_8(0.38)$	0.4813	$0.482^{+0.019}_{-0.019}$
A_{143}^{PS}	47.8	46^{+20}_{-20}	D_{810}	2540.6	2539^{+25}_{-26}	$\sigma_8(0.38)$	0.6748	$0.675^{+0.023}_{-0.023}$
$A_{143 \times 217}^{PS}$	48.3	42^{+20}_{-20}	D_{1420}	818.1	$817.0^{+9.2}_{-9.3}$	$f\sigma_8(0.51)$	0.4815	$0.482^{+0.020}_{-0.020}$
A_{217}^{PS}	120.2	115^{+20}_{-20}	D_{2000}	231.25	$230.9^{+3.0}_{-3.1}$	$\sigma_8(0.51)$	0.6316	$0.632^{+0.021}_{-0.021}$
A^{kSZ}	0.00	< 7.95	$n_{s,0.002}$	0.9661	$0.9646^{+0.0082}_{-0.0084}$	$f\sigma_8(0.61)$	0.4774	$0.478^{+0.021}_{-0.020}$
A_{100}^{dustTT}	8.87	$8.9^{+3.6}_{-3.5}$	Y_P	0.245394	$0.24539^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	0.6010	$0.601^{+0.020}_{-0.020}$
A_{143}^{dustTT}	11.00	$10.9^{+3.5}_{-3.5}$	Y_P^{BBN}	0.246721	$0.24672^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	0.3037	$0.304^{+0.010}_{-0.011}$
$A_{143 \times 217}^{dustTT}$	19.9	$18.6^{+6.5}_{-6.5}$	$10^5 D/H$	2.586	$2.587^{+0.053}_{-0.050}$	$\sigma_8(2.33)$	0.3110	$0.3109^{+0.0081}_{-0.0082}$
A_{217}^{dustTT}	95.3	94^{+10}_{-10}	Age/Gyr	13.759	$13.755^{+0.061}_{-0.056}$	f_{2000}^{143}	28.7	29^{+5}_{-5}
A_{100}^{dustTE}	0.113	$0.115^{+0.075}_{-0.075}$	z_*	1089.93	$1089.95^{+0.51}_{-0.50}$	$f_{2000}^{143 \times 217}$	31.95	32^{+4}_{-4}
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.059}$	r_*	144.42	$144.38^{+0.56}_{-0.55}$	f_{2000}^{217}	106.63	$107.0^{+3.4}_{-3.5}$
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04107	$1.04108^{+0.00058}_{-0.00058}$	χ_{simall}^2	396.04	$397.0 (\nu: 1.6)$
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	13.873	$13.869^{+0.052}_{-0.052}$	χ_{lowl}^2	23.14	$23.49 (\nu: 0.4)$
$A_{143 \times 217}^{dustTE}$	0.664	$0.67^{+0.16}_{-0.16}$	z_{drag}	1059.93	$1059.93^{+0.57}_{-0.57}$	χ_{plik}^2	2344.0	$2358.7 (\nu: 16.5)$
A_{217}^{dustTE}	2.08	$2.09^{+0.51}_{-0.52}$	r_{drag}	147.08	$147.04^{+0.55}_{-0.55}$	χ_{JLA}^2	1034.82	$1035.9 (\nu: 1.2)$
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$	k_D	0.14087	$0.14091^{+0.00061}_{-0.00061}$	χ_{6DF}^2	0.001	$0.054 (\nu: 0.0)$
c_{217}	0.99819	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_D$	0.160757	$0.16076^{+0.00034}_{-0.00033}$	χ_{MGS}^2	1.82	$1.95 (\nu: 0.2)$
H_0	68.29	$68.3^{+1.6}_{-1.6}$	z_{eq}	3403	3407^{+56}_{-56}	$\chi_{DR12BAO}^2$	3.91	$4.8 (\nu: 0.7)$
Ω_Λ	0.6933	$0.693^{+0.015}_{-0.016}$	k_{eq}	0.010387	$0.01040^{+0.00017}_{-0.00017}$	χ_{prior}^2	1.8	$11.6 (\nu: 10.4)$
Ω_m	0.3067	$0.307^{+0.016}_{-0.015}$	$100\theta_{eq}$	0.8131	$0.812^{+0.011}_{-0.010}$	χ_{BAO}^2	5.73	$6.8 (\nu: 1.1)$
$\Omega_m h^2$	0.14305	$0.1432^{+0.0023}_{-0.0023}$	$100\theta_{s,eq}$	0.4493	$0.4489^{+0.0054}_{-0.0053}$	χ_{CMB}^2	2763.1	$2779.2 (\nu: 16.6)$

Best-fit $\chi_{eff}^2 = 3805.46$; $\bar{\chi}_{eff}^2 = 3833.50$; $R - 1 = 0.00745$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.91 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.04 commander_dx12_v3_2_29: 23.14 plik_rd12_HM_v22b_TTTEEE: 2343.97 SN - JLA Pantheon18: 1034.82

19.22 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022398	$0.02238^{+0.00026}_{-0.00027}$	$\Omega_m h^3$	0.09764	$0.0977^{+0.0027}_{-0.0027}$	$H(0.15)$	73.71	$73.8^{+1.4}_{-1.3}$
$\Omega_c h^2$	0.11992	$0.1199^{+0.0021}_{-0.0021}$	σ_8	0.8210	$0.820^{+0.022}_{-0.021}$	$D_M(0.15)$	634.2	634^{+12}_{-12}
$100\theta_{MC}$	1.04094	$1.04092^{+0.00058}_{-0.00057}$	S_8	0.8298	$0.829^{+0.022}_{-0.021}$	$H(0.38)$	83.60	$83.7^{+1.2}_{-1.2}$
τ	0.0540	$0.053^{+0.015}_{-0.014}$	$\sigma_8 \Omega_m^{0.5}$	0.4545	$0.454^{+0.012}_{-0.012}$	$D_M(0.38)$	1513.9	1513^{+25}_{-25}
w_0	-0.967	$-0.96^{+0.16}_{-0.15}$	$\sigma_8 \Omega_m^{0.25}$	0.6108	$0.610^{+0.014}_{-0.014}$	$H(0.51)$	90.10	$90.13^{+0.95}_{-0.97}$
w_a	-0.24	$-0.29^{+0.58}_{-0.60}$	$\sigma_8/h^{0.5}$	0.9934	$0.993^{+0.021}_{-0.020}$	$D_M(0.51)$	1963.2	1962^{+30}_{-30}
$\ln(10^{10} A_s)$	3.0437	$3.042^{+0.029}_{-0.028}$	$r_{drag} h$	100.45	$100.5^{+2.4}_{-2.3}$	$H(0.61)$	95.56	$95.56^{+0.78}_{-0.79}$
n_s	0.9666	$0.9650^{+0.0078}_{-0.0079}$	$\langle d^2 \rangle^{1/2}$	2.4517	$2.454^{+0.046}_{-0.047}$	$D_M(0.61)$	2286.3	2285^{+32}_{-32}
y_{cal}	1.00050	$1.0004^{+0.0047}_{-0.0049}$	z_{re}	7.63	$7.6^{+1.5}_{-1.5}$	$H(2.33)$	235.33	$235.2^{+1.9}_{-1.8}$
A_{217}^{CIB}	46.3	47^{+10}_{-10}	$10^9 A_s$	2.098	$2.095^{+0.061}_{-0.058}$	$D_M(2.33)$	5752.4	5753^{+20}_{-19}
$\xi^{tSZ \times CIB}$	0.57	—	$10^9 A_s e^{-2\tau}$	1.8834	$1.883^{+0.020}_{-0.021}$	$f\sigma_8(0.15)$	0.4589	$0.458^{+0.013}_{-0.013}$
A_{143}^{tSZ}	7.19	$5.4^{+3.8}_{-3.8}$	D_{40}	1227.0	1230^{+22}_{-22}	$\sigma_8(0.15)$	0.7592	$0.759^{+0.021}_{-0.020}$
A_{100}^{PS}	249	259^{+50}_{-50}	D_{220}	5730	5734^{+73}_{-76}	$f\sigma_8(0.38)$	0.4800	$0.479^{+0.016}_{-0.015}$
A_{143}^{PS}	49.0	46^{+20}_{-20}	D_{810}	2540.7	2538^{+25}_{-26}	$\sigma_8(0.38)$	0.6735	$0.673^{+0.019}_{-0.018}$
$A_{143 \times 217}^{PS}$	50.9	42^{+20}_{-20}	D_{1420}	818.4	$816.9^{+9.4}_{-9.4}$	$f\sigma_8(0.51)$	0.4802	$0.480^{+0.016}_{-0.016}$
A_{217}^{PS}	121.1	115^{+20}_{-20}	D_{2000}	231.40	$230.8^{+3.0}_{-3.1}$	$\sigma_8(0.51)$	0.6304	$0.630^{+0.017}_{-0.017}$
A^{kSZ}	0.00	< 8.12	$n_{s,0.002}$	0.9666	$0.9650^{+0.0078}_{-0.0079}$	$f\sigma_8(0.61)$	0.4762	$0.476^{+0.017}_{-0.016}$
A_{100}^{dustTT}	8.85	$9.0^{+3.5}_{-3.5}$	Y_P	0.245406	$0.245398^{+0.000098}_{-0.00011}$	$\sigma_8(0.61)$	0.5999	$0.600^{+0.016}_{-0.016}$
A_{143}^{dustTT}	11.05	$10.9^{+3.4}_{-3.4}$	Y_P^{BBN}	0.246733	$0.246724^{+0.000098}_{-0.00011}$	$f\sigma_8(2.33)$	0.3031	$0.3030^{+0.0086}_{-0.0086}$
$A_{143 \times 217}^{dustTT}$	20.1	$18.6^{+6.5}_{-6.4}$	$10^5 D/H$	2.5803	$2.584^{+0.052}_{-0.047}$	$\sigma_8(2.33)$	0.3106	$0.3102^{+0.0071}_{-0.0069}$
A_{217}^{dustTT}	95.4	94^{+10}_{-10}	Age/Gyr	13.756	$13.756^{+0.059}_{-0.056}$	$\chi^2_{lensing}$	8.81	$9.20 (\nu: 0.3)$
A_{100}^{dustTE}	0.115	$0.114^{+0.074}_{-0.075}$	z_*	1089.877	$1089.90^{+0.46}_{-0.45}$	χ^2_{simall}	396.01	$396.9 (\nu: 1.2)$
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.056}_{-0.059}$	r_*	144.431	$144.44^{+0.47}_{-0.48}$	χ^2_{lowl}	23.05	$23.38 (\nu: 0.3)$
$A_{100 \times 217}^{dustTE}$	0.480	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04112	$1.04110^{+0.00058}_{-0.00056}$	χ^2_{plik}	2344.2	$2358.6 (\nu: 15.6)$
A_{143}^{dustTE}	0.226	$0.23^{+0.11}_{-0.11}$	$D_M(z_*)/\text{Gpc}$	13.8727	$13.874^{+0.045}_{-0.046}$	χ^2_{JLA}	1034.83	$1035.9 (\nu: 1.3)$
$A_{143 \times 217}^{dustTE}$	0.663	$0.67^{+0.16}_{-0.16}$	z_{drag}	1060.01	$1059.95^{+0.55}_{-0.56}$	χ^2_{6DF}	0.001	$0.053 (\nu: 0.0)$
A_{217}^{dustTE}	2.08	$2.08^{+0.52}_{-0.51}$	r_{drag}	147.081	$147.10^{+0.48}_{-0.49}$	χ^2_{MGS}	1.82	$1.96 (\nu: 0.2)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$	k_D	0.14090	$0.14087^{+0.00056}_{-0.00057}$	$\chi^2_{DR12BAO}$	3.86	$4.7 (\nu: 0.6)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_D$	0.160725	$0.16075^{+0.00033}_{-0.00033}$	χ^2_{prior}	1.7	$11.6 (\nu: 10.3)$
H_0	68.30	$68.3^{+1.6}_{-1.6}$	z_{eq}	3400.9	3401^{+48}_{-47}	χ^2_{CMB}	2772.1	$2788.0 (\nu: 16.6)$
Ω_Λ	0.6935	$0.693^{+0.014}_{-0.015}$	k_{eq}	0.010380	$0.01038^{+0.00015}_{-0.00014}$	χ^2_{BAO}	5.68	$6.7 (\nu: 1.0)$
Ω_m	0.3065	$0.307^{+0.015}_{-0.014}$	$100\theta_{eq}$	0.8136	$0.8136^{+0.0089}_{-0.0088}$			
$\Omega_m h^2$	0.14296	$0.1430^{+0.0020}_{-0.0020}$	$100\theta_{s,eq}$	0.44953	$0.4495^{+0.0046}_{-0.0045}$			

Best-fit $\chi^2_{eff} = 3814.30$; $\Delta\chi^2_{eff} = -1.37$; $\bar{\chi}^2_{eff} = 3842.17$; $\Delta\bar{\chi}^2_{eff} = 0.31$; $R - 1 = 0.01143$
 χ^2_{eff} : BAO - 6DF: 0.00 (Δ -0.02) MGS: 1.82 (Δ 0.54) DR12BAO: 3.86 (Δ -0.38) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.80 (Δ 0.09) simall_100x143_offlike5_EE_Aplanck
396.01 (Δ -0.51) commander_dx12_v3.2_29: 23.05 (Δ 0.17) plik_rd12_HM_v22b.TTTEEE: 2344.24 (Δ -1.03) SN - JLA Pantheon18: 1034.83 (Δ -0.14)

19.23 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00028}_{-0.00028}$	$\Omega_m h^3$	$0.0978^{+0.0028}_{-0.0029}$	$H(0.15)$	$73.8^{+1.4}_{-1.4}$
$\Omega_c h^2$	$0.1202^{+0.0025}_{-0.0025}$	σ_8	$0.824^{+0.026}_{-0.027}$	$D_M(0.15)$	634^{+13}_{-12}
$100\theta_{MC}$	$1.04090^{+0.00059}_{-0.00058}$	S_8	$0.833^{+0.028}_{-0.028}$	$H(0.38)$	$83.7^{+1.2}_{-1.2}$
τ	$0.055^{+0.013}_{-0.012}$	$\sigma_8 \Omega_m^{0.5}$	$0.456^{+0.015}_{-0.016}$	$D_M(0.38)$	1513^{+26}_{-26}
w_0	$-0.95^{+0.17}_{-0.16}$	$\sigma_8 \Omega_m^{0.25}$	$0.613^{+0.019}_{-0.019}$	$H(0.51)$	$90.12^{+0.95}_{-0.95}$
w_a	$-0.32^{+0.61}_{-0.65}$	$\sigma_8/h^{0.5}$	$0.997^{+0.027}_{-0.028}$	$D_M(0.51)$	1962^{+31}_{-30}
$\ln(10^{10} A_s)$	$3.046^{+0.028}_{-0.026}$	$r_{drag} h$	$100.4^{+2.4}_{-2.3}$	$H(0.61)$	$95.53^{+0.79}_{-0.78}$
n_s	$0.9647^{+0.0082}_{-0.0082}$	$\langle d^2 \rangle^{1/2}$	$2.463^{+0.061}_{-0.063}$	$D_M(0.61)$	2285^{+33}_{-32}
y_{cal}	$1.0005^{+0.0048}_{-0.0049}$	z_{re}	< 8.92	$H(2.33)$	$235.3^{+1.9}_{-1.8}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_s$	$2.104^{+0.059}_{-0.054}$	$D_M(2.33)$	5754^{+20}_{-19}
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.884^{+0.022}_{-0.022}$	$f\sigma_8(0.15)$	$0.460^{+0.016}_{-0.016}$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$	D_{40}	1231^{+24}_{-24}	$\sigma_8(0.15)$	$0.762^{+0.025}_{-0.025}$
A_{100}^{PS}	258^{+50}_{-50}	D_{220}	5732^{+74}_{-76}	$f\sigma_8(0.38)$	$0.482^{+0.019}_{-0.019}$
A_{143}^{PS}	46^{+20}_{-20}	D_{810}	2539^{+25}_{-26}	$\sigma_8(0.38)$	$0.676^{+0.022}_{-0.022}$
$A_{143 \times 217}^{PS}$	42^{+20}_{-20}	D_{1420}	$816.9^{+9.2}_{-9.4}$	$f\sigma_8(0.51)$	$0.482^{+0.020}_{-0.019}$
A_{217}^{PS}	115^{+20}_{-20}	D_{2000}	$230.9^{+3.0}_{-3.1}$	$\sigma_8(0.51)$	$0.633^{+0.021}_{-0.021}$
A^{kSZ}	< 7.92	$n_{s,0.002}$	$0.9647^{+0.0082}_{-0.0082}$	$f\sigma_8(0.61)$	$0.479^{+0.020}_{-0.020}$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5}$	Y_P	$0.24539^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	$0.602^{+0.019}_{-0.020}$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5}$	Y_P^{BBN}	$0.24672^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	$0.304^{+0.010}_{-0.010}$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.5}_{-6.5}$	$10^5 D/H$	$2.587^{+0.053}_{-0.050}$	$\sigma_8(2.33)$	$0.3112^{+0.0079}_{-0.0080}$
A_{217}^{dustTT}	94^{+10}_{-10}	Age/Gyr	$13.755^{+0.061}_{-0.056}$	f_{2000}^{143}	29^{+5}_{-5}
A_{100}^{dustTE}	$0.114^{+0.075}_{-0.075}$	z_*	$1089.94^{+0.51}_{-0.50}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
$A_{100 \times 143}^{dustTE}$	$0.135^{+0.058}_{-0.059}$	r_*	$144.39^{+0.56}_{-0.55}$	f_{2000}^{217}	$107.0^{+3.4}_{-3.5}$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04108^{+0.00058}_{-0.00057}$	χ_{simall}^2	$397.0 (\nu: 1.6)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	$13.869^{+0.052}_{-0.052}$	χ_{lowl}^2	$23.50 (\nu: 0.4)$
$A_{143 \times 217}^{dustTE}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.94^{+0.57}_{-0.58}$	χ_{plik}^2	$2358.5 (\nu: 16.3)$
A_{217}^{dustTE}	$2.09^{+0.51}_{-0.52}$	r_{drag}	$147.05^{+0.55}_{-0.55}$	χ_{JLA}^2	$1035.9 (\nu: 1.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	k_D	$0.14091^{+0.00061}_{-0.00061}$	χ_{6DF}^2	$0.054 (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_D$	$0.16076^{+0.00034}_{-0.00033}$	χ_{MGS}^2	$1.95 (\nu: 0.2)$
H_0	$68.3^{+1.6}_{-1.6}$	z_{eq}	3406^{+56}_{-56}	$\chi_{DR12BAO}^2$	$4.7 (\nu: 0.7)$
Ω_Λ	$0.693^{+0.015}_{-0.016}$	k_{eq}	$0.01040^{+0.00017}_{-0.00017}$	χ_{prior}^2	$11.6 (\nu: 10.5)$
Ω_m	$0.307^{+0.016}_{-0.015}$	$100\theta_{eq}$	$0.813^{+0.011}_{-0.010}$	χ_{BAO}^2	$6.7 (\nu: 1.1)$
$\Omega_m h^2$	$0.1432^{+0.0023}_{-0.0023}$	$100\theta_{s,eq}$	$0.4490^{+0.0054}_{-0.0053}$	χ_{CMB}^2	$2779.0 (\nu: 16.2)$

$$\bar{\chi}_{eff}^2 = 3833.27; R - 1 = 0.00878$$

19.24 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02238^{+0.00026}_{-0.00027}$	σ_8	$0.821^{+0.022}_{-0.021}$	$H(0.38)$	$83.6^{+1.2}_{-1.2}$
$\Omega_c h^2$	$0.1199^{+0.0021}_{-0.0021}$	S_8	$0.829^{+0.022}_{-0.021}$	$D_M(0.38)$	1513^{+25}_{-25}
$100\theta_{MC}$	$1.04092^{+0.00058}_{-0.00057}$	$\sigma_8 \Omega_m^{0.5}$	$0.454^{+0.012}_{-0.011}$	$H(0.51)$	$90.13^{+0.95}_{-0.97}$
τ	$0.055^{+0.013}_{-0.011}$	$\sigma_8 \Omega_m^{0.25}$	$0.611^{+0.014}_{-0.014}$	$D_M(0.51)$	1962^{+29}_{-30}
w_0	$-0.96^{+0.16}_{-0.15}$	$\sigma_8/h^{0.5}$	$0.993^{+0.020}_{-0.020}$	$H(0.61)$	$95.56^{+0.78}_{-0.79}$
w_a	$-0.28^{+0.57}_{-0.59}$	$r_{\text{drag}} h$	$100.5^{+2.4}_{-2.3}$	$D_M(0.61)$	2285^{+32}_{-32}
$\ln(10^{10} A_s)$	$3.044^{+0.026}_{-0.024}$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.045}_{-0.046}$	$H(2.33)$	$235.2^{+1.9}_{-1.8}$
n_s	$0.9653^{+0.0076}_{-0.0076}$	z_{re}	< 8.83	$D_M(2.33)$	5753^{+20}_{-19}
y_{cal}	$1.0004^{+0.0048}_{-0.0049}$	$10^9 A_s$	$2.099^{+0.054}_{-0.050}$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.012}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_s e^{-2\tau}$	$1.882^{+0.020}_{-0.020}$	$\sigma_8(0.15)$	$0.759^{+0.021}_{-0.020}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	1230^{+22}_{-22}	$f\sigma_8(0.38)$	$0.480^{+0.016}_{-0.015}$
A_{143}^{tSZ}	$5.4^{+3.8}_{-3.8}$	D_{220}	5733^{+73}_{-76}	$\sigma_8(0.38)$	$0.673^{+0.019}_{-0.018}$
A_{100}^{PS}	259^{+50}_{-50}	D_{810}	2538^{+25}_{-26}	$f\sigma_8(0.51)$	$0.480^{+0.016}_{-0.016}$
A_{143}^{PS}	46^{+20}_{-20}	D_{1420}	$816.8^{+9.4}_{-9.3}$	$\sigma_8(0.51)$	$0.630^{+0.017}_{-0.016}$
$A_{143 \times 217}^{\text{PS}}$	42^{+20}_{-20}	D_{2000}	$230.8^{+3.0}_{-3.1}$	$f\sigma_8(0.61)$	$0.476^{+0.017}_{-0.016}$
A_{217}^{PS}	115^{+20}_{-20}	$n_{s,0.002}$	$0.9653^{+0.0076}_{-0.0076}$	$\sigma_8(0.61)$	$0.600^{+0.016}_{-0.016}$
A^{kSZ}	< 8.10	Y_P	$0.245399^{+0.000096}_{-0.00011}$	$f\sigma_8(2.33)$	$0.3031^{+0.0086}_{-0.0084}$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5}$	Y_P^{BBN}	$0.246726^{+0.000097}_{-0.00011}$	$\sigma_8(2.33)$	$0.3104^{+0.0070}_{-0.0067}$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.4}$	$10^5 \text{D}/\text{H}$	$2.583^{+0.052}_{-0.047}$	f_{2000}^{143}	30^{+5}_{-5}
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.4}$	Age/Gyr	$13.756^{+0.059}_{-0.056}$	$f_{2000}^{143 \times 217}$	$32.2^{+3.5}_{-3.6}$
A_{217}^{dustTT}	94^{+10}_{-10}	z_*	$1089.89^{+0.46}_{-0.45}$	f_{2000}^{217}	$107.0^{+3.4}_{-3.5}$
A_{100}^{dustTE}	$0.114^{+0.074}_{-0.075}$	r_*	$144.45^{+0.47}_{-0.47}$	χ_{lensing}^2	$9.19 (\nu: 0.3)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.056}_{-0.059}$	$100\theta_*$	$1.04110^{+0.00057}_{-0.00056}$	χ_{simall}^2	$396.8 (\nu: 1.2)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.875^{+0.044}_{-0.045}$	χ_{lowl}^2	$23.37 (\nu: 0.3)$
A_{143}^{dustTE}	$0.23^{+0.11}_{-0.11}$	z_{drag}	$1059.96^{+0.55}_{-0.56}$	χ_{plik}^2	$2358.4 (\nu: 15.5)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.11^{+0.48}_{-0.48}$	χ_{JLA}^2	$1035.9 (\nu: 1.2)$
A_{217}^{dustTE}	$2.08^{+0.52}_{-0.51}$	k_D	$0.14086^{+0.00057}_{-0.00056}$	$\chi_{6\text{DF}}^2$	$0.053 (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_D$	$0.16074^{+0.00033}_{-0.00033}$	χ_{MGS}^2	$1.95 (\nu: 0.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3400^{+46}_{-46}	χ_{DR12BAO}^2	$4.6 (\nu: 0.6)$
H_0	$68.3^{+1.6}_{-1.6}$	k_{eq}	$0.01038^{+0.00014}_{-0.00014}$	χ_{prior}^2	$11.6 (\nu: 10.3)$
Ω_Λ	$0.694^{+0.015}_{-0.015}$	$100\theta_{\text{eq}}$	$0.8138^{+0.0088}_{-0.0087}$	χ_{CMB}^2	$2787.8 (\nu: 16.2)$
Ω_m	$0.306^{+0.015}_{-0.015}$	$100\theta_{s,\text{eq}}$	$0.4497^{+0.0045}_{-0.0045}$	χ_{BAO}^2	$6.6 (\nu: 1.0)$
$\Omega_m h^2$	$0.1429^{+0.0019}_{-0.0019}$	$H(0.15)$	$73.8^{+1.4}_{-1.3}$		
$\Omega_m h^3$	$0.0976^{+0.0027}_{-0.0027}$	$D_M(0.15)$	634^{+12}_{-12}		

$$\bar{\chi}_{\text{eff}}^2 = 3841.93; \Delta \bar{\chi}_{\text{eff}}^2 = 0.19; R - 1 = 0.01414$$

19.25 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022192	$0.02214^{+0.00041}_{-0.00040}$	$\sigma_8 \Omega_m^{0.25}$	0.6134	$0.614^{+0.026}_{-0.028}$	$D_M(0.38)$	1518.3	1516^{+27}_{-28}
$\Omega_c h^2$	0.11995	$0.1204^{+0.0035}_{-0.0037}$	$\sigma_8/h^{0.5}$	0.9979	$0.998^{+0.037}_{-0.039}$	$H(0.51)$	89.84	$89.90^{+0.99}_{-1.0}$
$100\theta_{MC}$	1.04095	$1.04085^{+0.00089}_{-0.00091}$	$r_{drag}h$	100.48	$100.4^{+2.5}_{-2.4}$	$D_M(0.51)$	1968.9	1966^{+32}_{-32}
τ	0.0590	$0.052^{+0.016}_{-0.016}$	$\langle d^2 \rangle^{1/2}$	2.462	$2.460^{+0.080}_{-0.087}$	$H(0.61)$	95.32	$95.30^{+0.87}_{-0.85}$
w_0	-0.985	$-0.96^{+0.17}_{-0.16}$	z_{re}	8.18	$7.5^{+1.6}_{-1.7}$	$D_M(0.61)$	2292.9	2290^{+34}_{-34}
w_a	-0.18	$-0.34^{+0.69}_{-0.75}$	$10^9 A_s$	2.109	$2.088^{+0.068}_{-0.067}$	$H(2.33)$	235.28	$235.1^{+1.9}_{-1.9}$
$\ln(10^{10} A_s)$	3.0490	$3.039^{+0.032}_{-0.032}$	$10^9 A_s e^{-2\tau}$	1.8748	$1.881^{+0.025}_{-0.025}$	$D_M(2.33)$	5762.3	5765^{+25}_{-26}
n_s	0.9649	$0.964^{+0.010}_{-0.010}$	D_{40}	1225.7	1228^{+27}_{-27}	$f\sigma_8(0.15)$	0.4619	$0.461^{+0.021}_{-0.023}$
y_{cal}	0.99919	$1.0004^{+0.0048}_{-0.0048}$	D_{220}	5695	5704^{+79}_{-78}	$\sigma_8(0.15)$	0.7620	$0.762^{+0.031}_{-0.033}$
A_{100}^{PS}	236.7	242^{+50}_{-50}	D_{810}	2527.2	2534^{+26}_{-26}	$f\sigma_8(0.38)$	0.4830	$0.483^{+0.025}_{-0.025}$
A_{143}^{PS}	44.0	41^{+20}_{-20}	D_{1420}	812.3	$814^{+10}_{-9.8}$	$\sigma_8(0.38)$	0.6758	$0.676^{+0.028}_{-0.029}$
A_{217}^{PS}	97.5	101^{+30}_{-30}	D_{2000}	229.24	$229.6^{+3.5}_{-3.5}$	$f\sigma_8(0.51)$	0.4829	$0.483^{+0.026}_{-0.027}$
A_{217}^{CIB}	46.0	41^{+10}_{-10}	$n_{s,0.002}$	0.9649	$0.964^{+0.010}_{-0.010}$	$\sigma_8(0.51)$	0.6324	$0.632^{+0.025}_{-0.027}$
A_{143}^{tSZ}	5.97	< 7.38	Y_P	0.245322	$0.24529^{+0.00017}_{-0.00019}$	$f\sigma_8(0.61)$	0.4786	$0.479^{+0.027}_{-0.027}$
$r_{143 \times 217}^{PS}$	0.614	$0.65^{+0.25}_{-0.25}$	Y_P^{BBN}	0.246649	$0.24662^{+0.00017}_{-0.00019}$	$\sigma_8(0.61)$	0.6017	$0.601^{+0.024}_{-0.025}$
$r_{143 \times 217}^{CIB}$	0.87	—	$10^5 D/H$	2.619	$2.631^{+0.077}_{-0.077}$	$f\sigma_8(2.33)$	0.3039	$0.304^{+0.012}_{-0.013}$
$\xi^{tSZ \times CIB}$	0.35	—	Age/Gyr	13.779	$13.777^{+0.072}_{-0.066}$	$\sigma_8(2.33)$	0.3115	$0.3106^{+0.0092}_{-0.0098}$
A^{kSZ}	1.2	—	z_*	1090.14	$1090.26^{+0.71}_{-0.71}$	f_{2000}^{143}	31.0	31^{+6}_{-6}
A_{100}^{dust}	1.010	$1.01^{+0.38}_{-0.38}$	r_*	144.58	$144.51^{+0.86}_{-0.82}$	f_{2000}^{217}	107.08	$107.5^{+3.9}_{-4.0}$
A_{143}^{dust}	0.996	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	1.04115	$1.04106^{+0.00088}_{-0.00090}$	$f_{2000}^{143 \times 217}$	32.79	33^{+4}_{-4}
A_{217}^{dust}	0.954	$0.97^{+0.20}_{-0.20}$	$D_M(z_*)/\text{Gpc}$	13.887	$13.881^{+0.080}_{-0.076}$	χ_{small}^2	397.31	$396.9 (\nu: 1.3)$
$A_{143 \times 217}^{dust}$	0.973	$1.03^{+0.32}_{-0.32}$	z_{drag}	1059.51	$1059.42^{+0.86}_{-0.86}$	χ_{lowl}^2	23.37	$23.4 (\nu: 0.6)$
c_{100}	0.99756	$0.9974^{+0.0021}_{-0.0021}$	r_{drag}	147.30	$147.25^{+0.86}_{-0.83}$	χ_{CamSpec}^2	7049.3	$7062.7 (\nu: 14.5)$
c_{217}	1.00160	$1.0012^{+0.0031}_{-0.0031}$	k_D	0.14050	$0.14052^{+0.00098}_{-0.00096}$	χ_{JLA}^2	1034.74	$1035.9 (\nu: 1.2)$
H_0	68.21	$68.2^{+1.7}_{-1.6}$	$100\theta_D$	0.16101	$0.16107^{+0.00050}_{-0.00050}$	χ_{6DF}^2	0.000	$0.056 (\nu: 0.0)$
Ω_Λ	0.6931	$0.692^{+0.016}_{-0.016}$	z_{eq}	3397	3406^{+80}_{-85}	χ_{MGS}^2	1.75	$1.92 (\nu: 0.3)$
Ω_m	0.3069	$0.308^{+0.016}_{-0.016}$	k_{eq}	0.010367	$0.01040^{+0.00024}_{-0.00026}$	χ_{DR12BAO}^2	3.97	$4.9 (\nu: 0.9)$
$\Omega_m h^2$	0.14278	$0.1432^{+0.0034}_{-0.0035}$	$100\theta_{eq}$	0.8138	$0.812^{+0.016}_{-0.015}$	χ_{prior}^2	2.5	$7.6 (\nu: 5.8)$
$\Omega_m h^3$	0.09739	$0.0976^{+0.0034}_{-0.0034}$	$100\theta_{s,eq}$	0.4498	$0.4489^{+0.0082}_{-0.0076}$	χ_{BAO}^2	5.72	$6.9 (\nu: 1.2)$
σ_8	0.8241	$0.824^{+0.034}_{-0.036}$	$H(0.15)$	73.49	$73.7^{+1.5}_{-1.4}$	χ_{CMB}^2	7470.0	$7483.0 (\nu: 14.6)$
S_8	0.8335	$0.835^{+0.039}_{-0.041}$	$D_M(0.15)$	635.6	635^{+13}_{-13}			
$\sigma_8 \Omega_m^{0.5}$	0.4565	$0.457^{+0.021}_{-0.023}$	$H(0.38)$	83.32	$83.5^{+1.2}_{-1.2}$			

Best-fit $\chi_{\text{eff}}^2 = 8512.97$; $\bar{\chi}_{\text{eff}}^2 = 8533.43$; $R - 1 = 0.00675$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.75 DR12BAO: 3.97 CMB - simall_100x143_offlike5_EE_Aplanck_B: 397.31 commander_dx12_v3.2.29: 23.37 CamSpec like_10.7HM: 7049.34
SN - JLA Pantheon18: 1034.74

19.26 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02215^{+0.00039}_{-0.00038}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.017}_{-0.017}$	$D_{\mathrm{M}}(0.38)$	1516^{+26}_{-27}
$\Omega_{\mathrm{c}}h^2$	$0.1201^{+0.0026}_{-0.0027}$	$\sigma_8/h^{0.5}$	$0.995^{+0.023}_{-0.024}$	$H(0.51)$	$89.93^{+0.99}_{-1.0}$
$100\theta_{\mathrm{MC}}$	$1.04086^{+0.00085}_{-0.00089}$	$r_{\mathrm{drag}}h$	$100.5^{+2.5}_{-2.4}$	$D_{\mathrm{M}}(0.51)$	1966^{+30}_{-31}
τ	$0.052^{+0.016}_{-0.016}$	$\langle d^2 \rangle^{1/2}$	$2.454^{+0.051}_{-0.054}$	$H(0.61)$	$95.34^{+0.86}_{-0.85}$
w_0	$-0.96^{+0.16}_{-0.15}$	z_{re}	$7.5^{+1.5}_{-1.7}$	$D_{\mathrm{M}}(0.61)$	2289^{+32}_{-33}
w_{a}	$-0.30^{+0.60}_{-0.64}$	$10^9 A_{\mathrm{s}}$	$2.086^{+0.063}_{-0.062}$	$H(2.33)$	$235.0^{+2.0}_{-1.9}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.038^{+0.030}_{-0.030}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.021}_{-0.021}$	$D_{\mathrm{M}}(2.33)$	5764^{+25}_{-25}
n_{s}	$0.9643^{+0.0088}_{-0.0088}$	D_{40}	1227^{+23}_{-24}	$f\sigma_8(0.15)$	$0.460^{+0.015}_{-0.015}$
y_{cal}	$1.0004^{+0.0048}_{-0.0047}$	D_{220}	5706^{+78}_{-79}	$\sigma_8(0.15)$	$0.760^{+0.023}_{-0.023}$
A_{100}^{PS}	243^{+50}_{-50}	D_{810}	2533^{+26}_{-26}	$f\sigma_8(0.38)$	$0.481^{+0.018}_{-0.018}$
A_{143}^{PS}	41^{+20}_{-20}	D_{1420}	$814^{+10}_{-9.9}$	$\sigma_8(0.38)$	$0.674^{+0.020}_{-0.021}$
A_{217}^{PS}	101^{+30}_{-30}	D_{2000}	$229.5^{+3.6}_{-3.5}$	$f\sigma_8(0.51)$	$0.481^{+0.019}_{-0.019}$
A_{217}^{CIB}	41^{+10}_{-10}	$n_{\mathrm{s},0.002}$	$0.9643^{+0.0088}_{-0.0088}$	$\sigma_8(0.51)$	$0.631^{+0.019}_{-0.019}$
A_{143}^{tSZ}	< 7.38	Y_{P}	$0.24530^{+0.00016}_{-0.00018}$	$f\sigma_8(0.61)$	$0.477^{+0.019}_{-0.019}$
$r_{143\times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00016}_{-0.00018}$	$\sigma_8(0.61)$	$0.600^{+0.018}_{-0.018}$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.627^{+0.074}_{-0.073}$	$f\sigma_8(2.33)$	$0.3030^{+0.0088}_{-0.0095}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.777^{+0.068}_{-0.066}$	$\sigma_8(2.33)$	$0.3101^{+0.0071}_{-0.0074}$
A^{kSZ}	—	z_*	$1090.21^{+0.62}_{-0.61}$	f_{2000}^{143}	31^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.57^{+0.64}_{-0.64}$	f_{2000}^{217}	$107.6^{+3.9}_{-3.9}$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	$100\theta_*$	$1.04107^{+0.00084}_{-0.00087}$	$f_{2000}^{143\times 217}$	33^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.062}_{-0.061}$	$\chi_{\mathrm{lensing}}^2$	$9.40 (\nu: 0.4)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.44^{+0.87}_{-0.84}$	χ_{simall}^2	$396.8 (\nu: 1.2)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	r_{drag}	$147.30^{+0.68}_{-0.69}$	χ_{lowl}^2	$23.29 (\nu: 0.4)$
c_{217}	$1.0012^{+0.0031}_{-0.0031}$	k_{D}	$0.14047^{+0.00087}_{-0.00085}$	$\chi_{\mathrm{CamSpec}}^2$	$7062.3 (\nu: 13.6)$
H_0	$68.2^{+1.7}_{-1.6}$	$100\theta_{\mathrm{D}}$	$0.16105^{+0.00051}_{-0.00051}$	χ_{JLA}^2	$1035.9 (\nu: 1.1)$
Ω_{Λ}	$0.693^{+0.016}_{-0.016}$	z_{eq}	3400^{+61}_{-62}	$\chi_{6\mathrm{DF}}^2$	$0.056 (\nu: 0.0)$
Ω_{m}	$0.307^{+0.016}_{-0.016}$	k_{eq}	$0.01038^{+0.00018}_{-0.00019}$	χ_{MGS}^2	$1.94 (\nu: 0.3)$
$\Omega_{\mathrm{m}}h^2$	$0.1429^{+0.0025}_{-0.0026}$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.012}_{-0.011}$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 (\nu: 0.8)$
$\Omega_{\mathrm{m}}h^3$	$0.0975^{+0.0030}_{-0.0029}$	$100\theta_{\mathrm{s,eq}}$	$0.4495^{+0.0059}_{-0.0057}$	χ_{prior}^2	$7.6 (\nu: 5.8)$
σ_8	$0.821^{+0.024}_{-0.024}$	$H(0.15)$	$73.6^{+1.5}_{-1.4}$	χ_{CMB}^2	$7491.9 (\nu: 14.9)$
S_8	$0.831^{+0.026}_{-0.026}$	$D_{\mathrm{M}}(0.15)$	635^{+13}_{-13}	χ_{BAO}^2	$6.8 (\nu: 1.2)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014}$	$H(0.38)$	$83.5^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8542.20; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.70; R - 1 = 0.00753$$

19.27 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02214^{+0.00041}_{-0.00039}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.026}_{-0.027}$	$D_{\mathrm{M}}(0.38)$	1516^{+27}_{-27}
$\Omega_{\mathrm{c}}h^2$	$0.1203^{+0.0035}_{-0.0037}$	$\sigma_8/h^{0.5}$	$0.998^{+0.036}_{-0.039}$	$H(0.51)$	$89.90^{+0.99}_{-1.0}$
$100\theta_{\mathrm{MC}}$	$1.04087^{+0.00089}_{-0.00090}$	$r_{\mathrm{drag}}h$	$100.4^{+2.5}_{-2.4}$	$D_{\mathrm{M}}(0.51)$	1966^{+32}_{-32}
τ	$0.054^{+0.013}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.462^{+0.080}_{-0.086}$	$H(0.61)$	$95.31^{+0.87}_{-0.84}$
w_0	$-0.96^{+0.17}_{-0.16}$	z_{re}	< 8.85	$D_{\mathrm{M}}(0.61)$	2290^{+34}_{-34}
w_{a}	$-0.33^{+0.68}_{-0.74}$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.058}_{-0.054}$	$H(2.33)$	$235.1^{+2.0}_{-1.9}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.042^{+0.028}_{-0.026}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.881^{+0.025}_{-0.025}$	$D_{\mathrm{M}}(2.33)$	5764^{+25}_{-25}
n_{s}	$0.964^{+0.010}_{-0.0099}$	D_{40}	1228^{+27}_{-27}	$f\sigma_8(0.15)$	$0.462^{+0.022}_{-0.022}$
y_{cal}	$1.0004^{+0.0048}_{-0.0048}$	D_{220}	5704^{+79}_{-78}	$\sigma_8(0.15)$	$0.762^{+0.031}_{-0.033}$
A_{100}^{PS}	242^{+50}_{-50}	D_{810}	2533^{+26}_{-26}	$f\sigma_8(0.38)$	$0.483^{+0.025}_{-0.025}$
A_{143}^{PS}	41^{+20}_{-20}	D_{1420}	$814^{+10}_{-9.7}$	$\sigma_8(0.38)$	$0.676^{+0.027}_{-0.029}$
A_{217}^{PS}	101^{+30}_{-30}	D_{2000}	$229.6^{+3.5}_{-3.4}$	$f\sigma_8(0.51)$	$0.484^{+0.026}_{-0.026}$
A_{217}^{CIB}	41^{+10}_{-10}	$n_{\mathrm{s},0.002}$	$0.964^{+0.010}_{-0.0099}$	$\sigma_8(0.51)$	$0.633^{+0.025}_{-0.027}$
A_{143}^{tSZ}	< 7.40	Y_{P}	$0.24530^{+0.00016}_{-0.00019}$	$f\sigma_8(0.61)$	$0.480^{+0.027}_{-0.027}$
$r_{143\times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24662^{+0.00017}_{-0.00019}$	$\sigma_8(0.61)$	$0.602^{+0.024}_{-0.025}$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.629^{+0.075}_{-0.076}$	$f\sigma_8(2.33)$	$0.304^{+0.012}_{-0.013}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.777^{+0.073}_{-0.067}$	$\sigma_8(2.33)$	$0.3109^{+0.0091}_{-0.0096}$
A^{kSZ}	—	z_*	$1090.24^{+0.71}_{-0.71}$	f_{2000}^{143}	31^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	r_*	$144.52^{+0.85}_{-0.81}$	f_{2000}^{217}	$107.5^{+3.9}_{-3.9}$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	$1.04107^{+0.00088}_{-0.00089}$	$f_{2000}^{143\times 217}$	33^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.882^{+0.079}_{-0.076}$	χ_{simall}^2	$396.8\ (\nu: 1.3)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{drag}	$1059.43^{+0.88}_{-0.83}$	χ_{lowl}^2	$23.4\ (\nu: 0.6)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	r_{drag}	$147.26^{+0.86}_{-0.83}$	$\chi_{\mathrm{CamSpec}}^2$	$7062.5\ (\nu: 14.5)$
c_{217}	$1.0012^{+0.0031}_{-0.0031}$	k_{D}	$0.14051^{+0.00098}_{-0.00096}$	χ_{JLA}^2	$1035.9\ (\nu: 1.2)$
H_0	$68.2^{+1.7}_{-1.6}$	$100\theta_{\mathrm{D}}$	$0.16106^{+0.00050}_{-0.00050}$	$\chi_{6\mathrm{DF}}^2$	$0.055\ (\nu: 0.0)$
Ω_{Λ}	$0.692^{+0.016}_{-0.016}$	z_{eq}	3404^{+80}_{-84}	χ_{MGS}^2	$1.91\ (\nu: 0.3)$
Ω_{m}	$0.308^{+0.016}_{-0.016}$	k_{eq}	$0.01039^{+0.00024}_{-0.00026}$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9\ (\nu: 0.9)$
$\Omega_{\mathrm{m}}h^2$	$0.1431^{+0.0034}_{-0.0035}$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.016}_{-0.015}$	χ_{prior}^2	$7.6\ (\nu: 5.8)$
$\Omega_{\mathrm{m}}h^3$	$0.0976^{+0.0034}_{-0.0034}$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0082}_{-0.0075}$	χ_{BAO}^2	$6.9\ (\nu: 1.2)$
σ_8	$0.824^{+0.034}_{-0.035}$	$H(0.15)$	$73.6^{+1.5}_{-1.4}$	χ_{CMB}^2	$7482.7\ (\nu: 14.3)$
S_8	$0.835^{+0.039}_{-0.041}$	$D_{\mathrm{M}}(0.15)$	635^{+13}_{-13}		
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.021}_{-0.023}$	$H(0.38)$	$83.5^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8533.12; R - 1 = 0.00716$$

19.28 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02216^{+0.00039}_{-0.00038}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.612^{+0.017}_{-0.017}$	$D_{\mathrm{M}}(0.38)$	1516^{+26}_{-27}
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0025}_{-0.0026}$	$\sigma_8/h^{0.5}$	$0.995^{+0.023}_{-0.024}$	$H(0.51)$	$89.94^{+0.99}_{-1.0}$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00084}_{-0.00087}$	$r_{\mathrm{drag}}h$	$100.5^{+2.5}_{-2.4}$	$D_{\mathrm{M}}(0.51)$	1966^{+31}_{-31}
τ	$0.054^{+0.013}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.051}_{-0.053}$	$H(0.61)$	$95.36^{+0.86}_{-0.85}$
w_0	$-0.96^{+0.16}_{-0.15}$	z_{re}	< 8.79	$D_{\mathrm{M}}(0.61)$	2290^{+33}_{-33}
w_{a}	$-0.29^{+0.59}_{-0.63}$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.054}_{-0.049}$	$H(2.33)$	$235.0^{+2.0}_{-1.9}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.026}_{-0.024}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.021}_{-0.021}$	$D_{\mathrm{M}}(2.33)$	5763^{+25}_{-25}
n_{s}	$0.9647^{+0.0087}_{-0.0085}$	D_{40}	1227^{+23}_{-23}	$f\sigma_8(0.15)$	$0.460^{+0.015}_{-0.015}$
y_{cal}	$1.0004^{+0.0048}_{-0.0047}$	D_{220}	5706^{+78}_{-79}	$\sigma_8(0.15)$	$0.760^{+0.023}_{-0.023}$
A_{100}^{PS}	242^{+50}_{-50}	D_{810}	2533^{+26}_{-25}	$f\sigma_8(0.38)$	$0.481^{+0.018}_{-0.018}$
A_{143}^{PS}	41^{+20}_{-20}	D_{1420}	$814^{+10}_{-9.9}$	$\sigma_8(0.38)$	$0.674^{+0.020}_{-0.020}$
A_{217}^{PS}	101^{+30}_{-30}	D_{2000}	$229.6^{+3.5}_{-3.5}$	$f\sigma_8(0.51)$	$0.481^{+0.019}_{-0.019}$
A_{217}^{CIB}	41^{+10}_{-10}	$n_{\mathrm{s},0.002}$	$0.9647^{+0.0087}_{-0.0085}$	$\sigma_8(0.51)$	$0.631^{+0.019}_{-0.019}$
A_{143}^{tSZ}	< 7.42	Y_{P}	$0.24531^{+0.00016}_{-0.00017}$	$f\sigma_8(0.61)$	$0.477^{+0.019}_{-0.019}$
$r_{143\times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.24}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00016}_{-0.00017}$	$\sigma_8(0.61)$	$0.600^{+0.018}_{-0.018}$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.625^{+0.073}_{-0.072}$	$f\sigma_8(2.33)$	$0.3032^{+0.0089}_{-0.0094}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.777^{+0.068}_{-0.067}$	$\sigma_8(2.33)$	$0.3104^{+0.0070}_{-0.0071}$
A^{kSZ}	—	z_*	$1090.18^{+0.60}_{-0.60}$	f_{2000}^{143}	31^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.60^{+0.63}_{-0.63}$	f_{2000}^{217}	$107.5^{+3.9}_{-3.9}$
A_{143}^{dust}	$0.98^{+0.34}_{-0.35}$	$100\theta_*$	$1.04109^{+0.00083}_{-0.00086}$	$f_{2000}^{143\times 217}$	33^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.061}_{-0.061}$	$\chi_{\mathrm{lensing}}^2$	$9.39 (\nu: 0.4)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.45^{+0.86}_{-0.82}$	χ_{simall}^2	$396.7 (\nu: 1.1)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	r_{drag}	$147.33^{+0.67}_{-0.67}$	χ_{lowl}^2	$23.26 (\nu: 0.4)$
c_{217}	$1.0012^{+0.0031}_{-0.0031}$	k_{D}	$0.14046^{+0.00086}_{-0.00084}$	$\chi_{\mathrm{CamSpec}}^2$	$7062.2 (\nu: 13.6)$
H_0	$68.2^{+1.7}_{-1.6}$	$100\theta_{\mathrm{D}}$	$0.16104^{+0.00050}_{-0.00051}$	χ_{JLA}^2	$1035.9 (\nu: 1.1)$
Ω_{Λ}	$0.693^{+0.016}_{-0.016}$	z_{eq}	3397^{+58}_{-61}	$\chi_{6\mathrm{DF}}^2$	$0.055 (\nu: 0.0)$
Ω_{m}	$0.307^{+0.016}_{-0.016}$	k_{eq}	$0.01037^{+0.00018}_{-0.00018}$	χ_{MGS}^2	$1.94 (\nu: 0.3)$
$\Omega_{\mathrm{m}}h^2$	$0.1428^{+0.0024}_{-0.0025}$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.011}_{-0.011}$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 (\nu: 0.8)$
$\Omega_{\mathrm{m}}h^3$	$0.0974^{+0.0030}_{-0.0029}$	$100\theta_{\mathrm{s,eq}}$	$0.4498^{+0.0058}_{-0.0055}$	χ_{prior}^2	$7.7 (\nu: 5.9)$
σ_8	$0.822^{+0.024}_{-0.024}$	$H(0.15)$	$73.6^{+1.5}_{-1.4}$	χ_{CMB}^2	$7491.6 (\nu: 14.5)$
S_8	$0.831^{+0.026}_{-0.026}$	$D_{\mathrm{M}}(0.15)$	635^{+13}_{-13}	χ_{BAO}^2	$6.8 (\nu: 1.2)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.455^{+0.014}_{-0.014}$	$H(0.38)$	$83.5^{+1.3}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8541.86; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.51; R - 1 = 0.00901$$

19.29 base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022301	$0.02229^{+0.00031}_{-0.00030}$	S_8	0.8238	$0.825^{+0.029}_{-0.029}$	$D_M(0.15)$	635.1	635^{+13}_{-13}
$\Omega_c h^2$	0.11951	$0.1196^{+0.0025}_{-0.0025}$	$\sigma_8 \Omega_m^{0.5}$	0.4512	$0.452^{+0.016}_{-0.016}$	$H(0.38)$	83.49	$83.5^{+1.2}_{-1.3}$
$100\theta_{MC}$	1.04091	$1.04088^{+0.00060}_{-0.00061}$	$\sigma_8 \Omega_m^{0.25}$	0.6066	$0.607^{+0.019}_{-0.020}$	$D_M(0.38)$	1516.1	1516^{+27}_{-26}
τ	0.0520	$0.052^{+0.016}_{-0.016}$	$\sigma_8/h^{0.5}$	0.9874	$0.989^{+0.028}_{-0.029}$	$H(0.51)$	90.02	$90.0^{+1.0}_{-1.0}$
w_0	-0.972	$-0.97^{+0.17}_{-0.16}$	$r_{\text{drag}} h$	100.48	$100.5^{+2.5}_{-2.4}$	$D_M(0.51)$	1965.8	1966^{+31}_{-31}
w_a	-0.20	$-0.24^{+0.60}_{-0.62}$	$\langle d^2 \rangle^{1/2}$	2.439	$2.442^{+0.063}_{-0.065}$	$H(0.61)$	95.49	$95.45^{+0.84}_{-0.84}$
$\ln(10^{10} A_s)$	3.0366	$3.038^{+0.032}_{-0.033}$	z_{re}	7.44	$7.5^{+1.5}_{-1.7}$	$D_M(0.61)$	2289.2	2289^{+34}_{-33}
n_s	0.9662	$0.9659^{+0.0084}_{-0.0083}$	$10^9 A_s$	2.083	$2.086^{+0.067}_{-0.067}$	$H(2.33)$	235.13	$235.1^{+2.0}_{-1.9}$
y_{cal}	1.00032	$1.0005^{+0.0051}_{-0.0049}$	$10^9 A_s e^{-2\tau}$	1.8777	$1.878^{+0.023}_{-0.022}$	$D_M(2.33)$	5757.1	5759^{+22}_{-21}
A_{100}^{PS}	234.8	240^{+50}_{-50}	D_{40}	1224.2	1225^{+25}_{-24}	$f\sigma_8(0.15)$	0.4557	$0.456^{+0.016}_{-0.017}$
A_{143}^{PS}	38.1	40^{+20}_{-20}	D_{220}	5717	5718^{+77}_{-75}	$\sigma_8(0.15)$	0.7541	$0.755^{+0.026}_{-0.026}$
A_{217}^{PS}	101.6	102^{+30}_{-30}	D_{810}	2534.1	2535^{+27}_{-26}	$f\sigma_8(0.38)$	0.4765	$0.477^{+0.019}_{-0.019}$
A_{217}^{CIB}	44.8	40^{+10}_{-10}	D_{1420}	815.5	$815.5^{+9.8}_{-9.4}$	$\sigma_8(0.38)$	0.6691	$0.670^{+0.023}_{-0.023}$
A_{143}^{tSZ}	6.65	< 7.43	D_{2000}	230.22	$230.2^{+3.3}_{-3.2}$	$f\sigma_8(0.51)$	0.4766	$0.477^{+0.020}_{-0.020}$
$r_{143 \times 217}^{\text{PS}}$	0.573	$0.66^{+0.25}_{-0.25}$	$n_{s,0.002}$	0.9662	$0.9659^{+0.0084}_{-0.0083}$	$\sigma_8(0.51)$	0.6263	$0.627^{+0.021}_{-0.022}$
$r_{143 \times 217}^{\text{CIB}}$	0.77	—	Y_P	0.245367	$0.24536^{+0.00012}_{-0.00013}$	$f\sigma_8(0.61)$	0.4725	$0.473^{+0.021}_{-0.020}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.01	—	Y_P^{BBN}	0.246694	$0.24669^{+0.00012}_{-0.00013}$	$\sigma_8(0.61)$	0.5960	$0.597^{+0.020}_{-0.020}$
A^{kSZ}	0.0	—	$10^5 D/H$	2.599	$2.600^{+0.057}_{-0.056}$	$f\sigma_8(2.33)$	0.3011	$0.301^{+0.010}_{-0.011}$
A_{100}^{dust}	1.006	$1.01^{+0.38}_{-0.38}$	Age/Gyr	13.770	$13.771^{+0.065}_{-0.060}$	$\sigma_8(2.33)$	0.3089	$0.3090^{+0.0083}_{-0.0086}$
A_{143}^{dust}	0.978	$0.96^{+0.35}_{-0.35}$	z_*	1089.97	$1089.98^{+0.52}_{-0.53}$	f_{2000}^{143}	30.1	30^{+6}_{-6}
A_{217}^{dust}	0.968	$0.97^{+0.20}_{-0.20}$	r_*	144.61	$144.59^{+0.59}_{-0.58}$	f_{2000}^{217}	106.86	$106.9^{+3.8}_{-3.8}$
$A_{143 \times 217}^{\text{dust}}$	1.003	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04110	$1.04107^{+0.00059}_{-0.00060}$	$f_{2000}^{143 \times 217}$	32.13	32^{+4}_{-4}
c_{100}	0.99760	$0.9975^{+0.0021}_{-0.0021}$	$D_M(z_*)/\text{Gpc}$	13.890	$13.889^{+0.055}_{-0.054}$	χ_{small}^2	395.76	$396.9 (\nu: 1.2)$
c_{217}	1.00127	$1.0011^{+0.0031}_{-0.0031}$	z_{drag}	1059.74	$1059.73^{+0.62}_{-0.64}$	χ_{lowl}^2	22.92	$23.05 (\nu: 0.4)$
c_{TE}	0.9964	$0.9965^{+0.0098}_{-0.0096}$	r_{drag}	147.30	$147.28^{+0.59}_{-0.58}$	χ_{CamSpec}^2	11499.4	$11514.3 (\nu: 16.0)$
c_{EE}	0.9921	$0.9921^{+0.0099}_{-0.0098}$	k_D	0.14060	$0.14060^{+0.00066}_{-0.00067}$	χ_{JLA}^2	1034.83	$1035.9 (\nu: 1.2)$
H_0	68.22	$68.2^{+1.7}_{-1.6}$	$100\theta_D$	0.160868	$0.16087^{+0.00038}_{-0.00038}$	$\chi_{6\text{DF}}^2$	0.001	$0.055 (\nu: 0.0)$
Ω_Λ	0.6939	$0.693^{+0.015}_{-0.016}$	z_{eq}	3389	3391^{+57}_{-57}	χ_{MGS}^2	1.82	$1.91 (\nu: 0.2)$
Ω_m	0.3061	$0.307^{+0.016}_{-0.015}$	k_{eq}	0.010343	$0.01035^{+0.00017}_{-0.00017}$	χ_{DR12BAO}^2	3.77	$4.7 (\nu: 0.8)$
$\Omega_m h^2$	0.14246	$0.1425^{+0.0024}_{-0.0024}$	$100\theta_{\text{eq}}$	0.8155	$0.815^{+0.011}_{-0.011}$	χ_{prior}^2	2.2	$7.8 (\nu: 5.9)$
$\Omega_m h^3$	0.09718	$0.0972^{+0.0029}_{-0.0029}$	$100\theta_{s,\text{eq}}$	0.4506	$0.4504^{+0.0055}_{-0.0054}$	χ_{BAO}^2	5.59	$6.6 (\nu: 1.1)$
σ_8	0.8155	$0.816^{+0.028}_{-0.028}$	$H(0.15)$	73.60	$73.6^{+1.4}_{-1.4}$	χ_{CMB}^2	11918.0	$11934.2 (\nu: 16.6)$

Best-fit $\chi_{\text{eff}}^2 = 12960.67$; $\bar{\chi}_{\text{eff}}^2 = 12984.58$; $R - 1 = 0.00938$
 χ_{eff}^2 : BAO - 6DF: 0.00 MGS: 1.82 DR12BAO: 3.77 CMB - small_100x143_offlike5_EE_Aplanck_B: 395.76 commander_dx12_v3_2_29: 22.92 CamSpec like_10.7HM_1400_unified: 11499.35 SN - JLA Pantheon18: 1034.83

19.30 base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02229^{+0.00030}_{-0.00029}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.38)$	1515^{+26}_{-26}
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0021}_{-0.0021}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.015}_{-0.014}$	$H(0.51)$	$90.0^{+1.0}_{-1.0}$
$100\theta_{\mathrm{MC}}$	$1.04087^{+0.00058}_{-0.00059}$	$\sigma_8/h^{0.5}$	$0.989^{+0.021}_{-0.021}$	$D_{\mathrm{M}}(0.51)$	1965^{+30}_{-30}
τ	$0.053^{+0.015}_{-0.015}$	$r_{\mathrm{drag}}h$	$100.5^{+2.5}_{-2.4}$	$H(0.61)$	$95.47^{+0.84}_{-0.83}$
w_0	$-0.96^{+0.16}_{-0.15}$	$\langle d^2 \rangle^{1/2}$	$2.444^{+0.047}_{-0.046}$	$D_{\mathrm{M}}(0.61)$	2288^{+33}_{-32}
w_{a}	$-0.25^{+0.55}_{-0.62}$	z_{re}	$7.5^{+1.5}_{-1.6}$	$H(2.33)$	$235.1^{+2.0}_{-1.8}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.039^{+0.029}_{-0.029}$	$10^9 A_{\mathrm{s}}$	$2.088^{+0.061}_{-0.060}$	$D_{\mathrm{M}}(2.33)$	5758^{+21}_{-21}
n_{s}	$0.9657^{+0.0078}_{-0.0077}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.021}_{-0.020}$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013}$
y_{cal}	$1.0005^{+0.0051}_{-0.0049}$	D_{40}	1226^{+23}_{-22}	$\sigma_8(0.15)$	$0.756^{+0.021}_{-0.021}$
A_{100}^{PS}	240^{+50}_{-50}	D_{220}	5720^{+78}_{-75}	$f\sigma_8(0.38)$	$0.478^{+0.016}_{-0.016}$
A_{143}^{PS}	40^{+20}_{-20}	D_{810}	2535^{+27}_{-26}	$\sigma_8(0.38)$	$0.671^{+0.019}_{-0.019}$
A_{217}^{PS}	102^{+30}_{-30}	D_{1420}	$815.5^{+9.7}_{-9.5}$	$f\sigma_8(0.51)$	$0.478^{+0.017}_{-0.016}$
A_{217}^{CIB}	40^{+10}_{-10}	D_{2000}	$230.2^{+3.2}_{-3.2}$	$\sigma_8(0.51)$	$0.628^{+0.018}_{-0.018}$
A_{143}^{tSZ}	< 7.39	$n_{\mathrm{s},0.002}$	$0.9657^{+0.0078}_{-0.0077}$	$f\sigma_8(0.61)$	$0.474^{+0.017}_{-0.017}$
$r_{143\times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	Y_{P}	$0.24536^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	$0.597^{+0.017}_{-0.017}$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00012}$	$f\sigma_8(2.33)$	$0.3017^{+0.0087}_{-0.0089}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.600^{+0.056}_{-0.055}$	$\sigma_8(2.33)$	$0.3093^{+0.0070}_{-0.0071}$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.770^{+0.062}_{-0.060}$	f_{2000}^{143}	30^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.98^{+0.48}_{-0.48}$	f_{2000}^{217}	$106.9^{+3.8}_{-3.7}$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	r_*	$144.59^{+0.50}_{-0.50}$	$f_{2000}^{143\times 217}$	32^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04106^{+0.00058}_{-0.00059}$	$\chi_{\mathrm{lensing}}^2$	$9.19 (\nu: 0.3)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.048}_{-0.048}$	χ_{simall}^2	$396.8 (\nu: 1.1)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	z_{drag}	$1059.73^{+0.66}_{-0.64}$	χ_{lowl}^2	$23.10 (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0030}$	r_{drag}	$147.28^{+0.52}_{-0.52}$	$\chi_{\mathrm{CamSpec}}^2$	$11513.9 (\nu: 15.0)$
c_{TE}	$0.9965^{+0.0097}_{-0.0096}$	k_{D}	$0.14061^{+0.00062}_{-0.00063}$	χ_{JLA}^2	$1035.9 (\nu: 1.2)$
c_{EE}	$0.9922^{+0.0099}_{-0.0097}$	$100\theta_{\mathrm{D}}$	$0.16087^{+0.00038}_{-0.00037}$	$\chi_{6\mathrm{DF}}^2$	$0.055 (\nu: 0.0)$
H_0	$68.2^{+1.7}_{-1.6}$	z_{eq}	3391^{+49}_{-48}	χ_{MGS}^2	$1.93 (\nu: 0.2)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015}$	k_{eq}	$0.01035^{+0.00015}_{-0.00015}$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 (\nu: 0.7)$
Ω_{m}	$0.306^{+0.015}_{-0.015}$	$100\theta_{\mathrm{eq}}$	$0.8150^{+0.0090}_{-0.0090}$	χ_{prior}^2	$7.8 (\nu: 5.7)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0020}_{-0.0020}$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0046}_{-0.0046}$	χ_{CMB}^2	$11942.9 (\nu: 16.5)$
$\Omega_{\mathrm{m}}h^3$	$0.0973^{+0.0028}_{-0.0027}$	$H(0.15)$	$73.7^{+1.4}_{-1.4}$	χ_{BAO}^2	$6.6 (\nu: 1.1)$
σ_8	$0.817^{+0.022}_{-0.022}$	$D_{\mathrm{M}}(0.15)$	635^{+13}_{-13}		
S_8	$0.826^{+0.022}_{-0.022}$	$H(0.38)$	$83.5^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12993.26; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.87; R - 1 = 0.00901$$

19.31 base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02230^{+0.00031}_{-0.00030}$	S_8	$0.826^{+0.029}_{-0.028}$	$D_M(0.15)$	635^{+13}_{-13}
$\Omega_c h^2$	$0.1195^{+0.0025}_{-0.0025}$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.016}_{-0.016}$	$H(0.38)$	$83.5^{+1.2}_{-1.3}$
$100\theta_{MC}$	$1.04089^{+0.00060}_{-0.00061}$	$\sigma_8 \Omega_m^{0.25}$	$0.608^{+0.019}_{-0.019}$	$D_M(0.38)$	1516^{+27}_{-26}
τ	$0.054^{+0.012}_{-0.011}$	$\sigma_8/h^{0.5}$	$0.990^{+0.027}_{-0.028}$	$H(0.51)$	$90.0^{+1.0}_{-1.0}$
w_0	$-0.97^{+0.16}_{-0.16}$	$r_{\text{drag}} h$	$100.5^{+2.5}_{-2.4}$	$D_M(0.51)$	1966^{+31}_{-31}
w_a	$-0.23^{+0.58}_{-0.65}$	$\langle d^2 \rangle^{1/2}$	$2.445^{+0.061}_{-0.062}$	$H(0.61)$	$95.45^{+0.85}_{-0.85}$
$\ln(10^{10} A_s)$	$3.041^{+0.027}_{-0.025}$	z_{re}	< 8.77	$D_M(0.61)$	2289^{+34}_{-33}
n_s	$0.9661^{+0.0084}_{-0.0083}$	$10^9 A_s$	$2.093^{+0.057}_{-0.052}$	$H(2.33)$	$235.2^{+2.0}_{-1.9}$
y_{cal}	$1.0005^{+0.0050}_{-0.0049}$	$10^9 A_s e^{-2\tau}$	$1.878^{+0.023}_{-0.022}$	$D_M(2.33)$	5759^{+22}_{-21}
A_{100}^{PS}	240^{+50}_{-50}	D_{40}	1225^{+25}_{-24}	$f\sigma_8(0.15)$	$0.457^{+0.016}_{-0.016}$
A_{143}^{PS}	39^{+20}_{-20}	D_{220}	5718^{+77}_{-74}	$\sigma_8(0.15)$	$0.756^{+0.026}_{-0.026}$
A_{217}^{PS}	102^{+30}_{-30}	D_{810}	2535^{+27}_{-26}	$f\sigma_8(0.38)$	$0.478^{+0.019}_{-0.019}$
A_{217}^{CIB}	40^{+10}_{-10}	D_{1420}	$815.6^{+9.8}_{-9.4}$	$\sigma_8(0.38)$	$0.671^{+0.023}_{-0.023}$
A_{143}^{tSZ}	< 7.43	D_{2000}	$230.3^{+3.2}_{-3.2}$	$f\sigma_8(0.51)$	$0.478^{+0.020}_{-0.020}$
$r_{143 \times 217}^{\text{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{s,0.002}$	$0.9661^{+0.0084}_{-0.0083}$	$\sigma_8(0.51)$	$0.628^{+0.021}_{-0.021}$
$r_{143 \times 217}^{\text{CIB}}$	—	Y_P	$0.24536^{+0.00012}_{-0.00012}$	$f\sigma_8(0.61)$	$0.474^{+0.021}_{-0.020}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	Y_P^{BBN}	$0.24669^{+0.00012}_{-0.00012}$	$\sigma_8(0.61)$	$0.597^{+0.020}_{-0.020}$
A^{kSZ}	—	$10^5 D/H$	$2.599^{+0.056}_{-0.056}$	$f\sigma_8(2.33)$	$0.302^{+0.010}_{-0.011}$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	Age/Gyr	$13.772^{+0.065}_{-0.060}$	$\sigma_8(2.33)$	$0.3094^{+0.0081}_{-0.0082}$
A_{143}^{dust}	$0.96^{+0.35}_{-0.35}$	z_*	$1089.97^{+0.51}_{-0.52}$	f_{2000}^{143}	30^{+6}_{-6}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.60^{+0.58}_{-0.57}$	f_{2000}^{217}	$106.8^{+3.8}_{-3.7}$
$A_{143 \times 217}^{\text{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04108^{+0.00059}_{-0.00060}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	$D_M(z_*)/\text{Gpc}$	$13.890^{+0.055}_{-0.053}$	χ_{simall}^2	$396.7 (\nu: 1.2)$
c_{217}	$1.0011^{+0.0031}_{-0.0031}$	z_{drag}	$1059.74^{+0.65}_{-0.64}$	χ_{lowl}^2	$23.06 (\nu: 0.4)$
c_{TE}	$0.9965^{+0.0098}_{-0.0096}$	r_{drag}	$147.29^{+0.59}_{-0.58}$	χ_{CamSpec}^2	$11514.2 (\nu: 15.9)$
c_{EE}	$0.9921^{+0.0099}_{-0.0097}$	k_D	$0.14060^{+0.00066}_{-0.00067}$	χ_{JLA}^2	$1035.9 (\nu: 1.2)$
H_0	$68.2^{+1.7}_{-1.6}$	$100\theta_D$	$0.16087^{+0.00038}_{-0.00038}$	$\chi_{6\text{DF}}^2$	$0.055 (\nu: 0.0)$
Ω_Λ	$0.694^{+0.015}_{-0.016}$	z_{eq}	3390^{+56}_{-56}	χ_{MGS}^2	$1.90 (\nu: 0.2)$
Ω_m	$0.306^{+0.016}_{-0.015}$	k_{eq}	$0.01035^{+0.00017}_{-0.00017}$	χ_{DR12BAO}^2	$4.7 (\nu: 0.7)$
$\Omega_m h^2$	$0.1425^{+0.0024}_{-0.0024}$	$100\theta_{\text{eq}}$	$0.815^{+0.011}_{-0.010}$	χ_{prior}^2	$7.8 (\nu: 5.9)$
$\Omega_m h^3$	$0.0972^{+0.0029}_{-0.0029}$	$100\theta_{s,\text{eq}}$	$0.4505^{+0.0055}_{-0.0054}$	χ_{BAO}^2	$6.6 (\nu: 1.1)$
σ_8	$0.817^{+0.027}_{-0.027}$	$H(0.15)$	$73.6^{+1.4}_{-1.4}$	χ_{CMB}^2	$11933.9 (\nu: 16.1)$

$$\bar{\chi}_{\text{eff}}^2 = 12984.26; R - 1 = 0.00880$$

19.32 base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02230^{+0.00030}_{-0.00029}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.38)$	1516^{+26}_{-26}
$\Omega_{\mathrm{c}} h^2$	$0.1195^{+0.0021}_{-0.0021}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.015}_{-0.014}$	$H(0.51)$	$90.0^{+1.0}_{-1.0}$
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00058}_{-0.00058}$	$\sigma_8/h^{0.5}$	$0.990^{+0.021}_{-0.021}$	$D_{\mathrm{M}}(0.51)$	1965^{+30}_{-30}
τ	$0.054^{+0.012}_{-0.011}$	$r_{\mathrm{drag}} h$	$100.5^{+2.5}_{-2.4}$	$H(0.61)$	$95.48^{+0.84}_{-0.84}$
w_0	$-0.97^{+0.16}_{-0.15}$	$\langle d^2 \rangle^{1/2}$	$2.446^{+0.047}_{-0.046}$	$D_{\mathrm{M}}(0.61)$	2289^{+33}_{-32}
w_a	$-0.24^{+0.55}_{-0.60}$	z_{re}	< 8.77	$H(2.33)$	$235.1^{+2.0}_{-1.8}$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.025}_{-0.023}$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.053}_{-0.049}$	$D_{\mathrm{M}}(2.33)$	5758^{+22}_{-21}
n_{s}	$0.9660^{+0.0077}_{-0.0076}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.020}$	$f\sigma_8(0.15)$	$0.457^{+0.013}_{-0.013}$
y_{cal}	$1.0005^{+0.0051}_{-0.0049}$	D_{40}	1226^{+23}_{-22}	$\sigma_8(0.15)$	$0.756^{+0.021}_{-0.021}$
A_{100}^{PS}	240^{+50}_{-50}	D_{220}	5719^{+78}_{-74}	$f\sigma_8(0.38)$	$0.478^{+0.016}_{-0.016}$
A_{143}^{PS}	40^{+20}_{-20}	D_{810}	2535^{+27}_{-26}	$\sigma_8(0.38)$	$0.671^{+0.019}_{-0.019}$
A_{217}^{PS}	102^{+30}_{-30}	D_{1420}	$815.5^{+9.7}_{-9.5}$	$f\sigma_8(0.51)$	$0.478^{+0.017}_{-0.016}$
A_{217}^{CIB}	40^{+10}_{-10}	D_{2000}	$230.3^{+3.2}_{-3.2}$	$\sigma_8(0.51)$	$0.628^{+0.018}_{-0.017}$
A_{143}^{tSZ}	< 7.39	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0077}_{-0.0076}$	$f\sigma_8(0.61)$	$0.474^{+0.017}_{-0.017}$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	Y_{P}	$0.24537^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	$0.598^{+0.017}_{-0.016}$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24669^{+0.00012}_{-0.00012}$	$f\sigma_8(2.33)$	$0.3019^{+0.0087}_{-0.0088}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.599^{+0.055}_{-0.055}$	$\sigma_8(2.33)$	$0.3096^{+0.0070}_{-0.0070}$
A^{kSZ}	—	Age/Gyr	$13.770^{+0.062}_{-0.060}$	f_{2000}^{143}	30^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.97^{+0.47}_{-0.48}$	f_{2000}^{217}	$106.9^{+3.8}_{-3.7}$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$144.60^{+0.50}_{-0.49}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04107^{+0.00057}_{-0.00058}$	$\chi_{\mathrm{lensing}}^2$	$9.16 (\nu: 0.2)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.890^{+0.047}_{-0.047}$	χ_{simall}^2	$396.7 (\nu: 1.1)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	z_{drag}	$1059.74^{+0.65}_{-0.61}$	χ_{lowl}^2	$23.09 (\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0031}$	r_{drag}	$147.29^{+0.52}_{-0.51}$	$\chi_{\mathrm{CamSpec}}^2$	$11513.8 (\nu: 14.9)$
c_{TE}	$0.9964^{+0.0098}_{-0.0096}$	k_{D}	$0.14060^{+0.00062}_{-0.00063}$	χ_{JLA}^2	$1035.9 (\nu: 1.2)$
c_{EE}	$0.9921^{+0.0099}_{-0.0097}$	$100\theta_{\mathrm{D}}$	$0.16086^{+0.00038}_{-0.00037}$	$\chi_{6\mathrm{DF}}^2$	$0.055 (\nu: 0.0)$
H_0	$68.2^{+1.7}_{-1.6}$	z_{eq}	3390^{+48}_{-47}	χ_{MGS}^2	$1.93 (\nu: 0.2)$
Ω_{Λ}	$0.694^{+0.015}_{-0.015}$	k_{eq}	$0.01035^{+0.00015}_{-0.00014}$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 (\nu: 0.7)$
Ω_{m}	$0.306^{+0.015}_{-0.015}$	$100\theta_{\mathrm{eq}}$	$0.8153^{+0.0088}_{-0.0088}$	χ_{prior}^2	$7.8 (\nu: 5.7)$
$\Omega_{\mathrm{m}} h^2$	$0.1425^{+0.0020}_{-0.0020}$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0046}_{-0.0045}$	χ_{CMB}^2	$11942.7 (\nu: 16.1)$
$\Omega_{\mathrm{m}} h^3$	$0.0972^{+0.0028}_{-0.0027}$	$H(0.15)$	$73.6^{+1.4}_{-1.3}$	χ_{BAO}^2	$6.6 (\nu: 1.1)$
σ_8	$0.818^{+0.022}_{-0.022}$	$D_{\mathrm{M}}(0.15)$	635^{+13}_{-13}		
S_8	$0.826^{+0.022}_{-0.022}$	$H(0.38)$	$83.5^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12993.01; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.76; R - 1 = 0.00841$$

19.33 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022181	$0.02216^{+0.00040}_{-0.00039}$	$\sigma_8/h^{0.5}$	1.0046	$1.004^{+0.036}_{-0.037}$	$H(0.51)$	89.93	$89.89^{+0.99}_{-0.99}$
$\Omega_c h^2$	0.12056	$0.1207^{+0.0035}_{-0.0035}$	$r_{\text{drag}} h$	102.01	$101.9^{+2.2}_{-2.2}$	$D_M(0.51)$	1952.1	1953^{+31}_{-30}
$100\theta_{\text{MC}}$	1.04082	$1.04082^{+0.00087}_{-0.00088}$	$\langle d^2 \rangle^{1/2}$	2.471	$2.473^{+0.079}_{-0.080}$	$H(0.61)$	95.22	$95.16^{+0.86}_{-0.83}$
τ	0.0525	$0.052^{+0.016}_{-0.016}$	z_{re}	7.52	$7.5^{+1.6}_{-1.7}$	$D_M(0.61)$	2276.1	2277^{+33}_{-32}
w_0	-0.997	$-0.99^{+0.17}_{-0.16}$	$10^9 A_s$	2.094	$2.092^{+0.070}_{-0.067}$	$H(2.33)$	234.69	$234.8^{+1.9}_{-1.9}$
w_a	-0.32	$-0.37^{+0.72}_{-0.77}$	$10^9 A_s e^{-2\tau}$	1.8854	$1.885^{+0.025}_{-0.025}$	$D_M(2.33)$	5759.2	5762^{+24}_{-25}
$\ln(10^{10} A_s)$	3.0417	$3.041^{+0.033}_{-0.032}$	D_{40}	1230.5	1233^{+28}_{-27}	$f\sigma_8(0.15)$	0.4649	$0.465^{+0.021}_{-0.022}$
n_s	0.9639	$0.963^{+0.010}_{-0.0098}$	D_{220}	5716	5716^{+79}_{-79}	$\sigma_8(0.15)$	0.7741	$0.774^{+0.030}_{-0.031}$
y_{cal}	1.00058	$1.0004^{+0.0049}_{-0.0048}$	D_{810}	2538.8	2537^{+27}_{-26}	$f\sigma_8(0.38)$	0.4903	$0.490^{+0.025}_{-0.025}$
A_{217}^{CIB}	49.1	48^{+10}_{-10}	D_{1420}	815.9	$814.7^{+9.9}_{-9.8}$	$\sigma_8(0.38)$	0.6869	$0.686^{+0.027}_{-0.027}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.24	—	D_{2000}	230.28	$229.8^{+3.4}_{-3.4}$	$f\sigma_8(0.51)$	0.4919	$0.492^{+0.026}_{-0.026}$
A_{143}^{tSZ}	7.13	$5.1^{+3.8}_{-3.9}$	$n_{s,0.002}$	0.9639	$0.963^{+0.010}_{-0.0098}$	$\sigma_8(0.51)$	0.6428	$0.642^{+0.024}_{-0.025}$
A_{100}^{PS}	254	262^{+60}_{-60}	Y_{P}	0.245318	$0.24530^{+0.00016}_{-0.00019}$	$f\sigma_8(0.61)$	0.4884	$0.489^{+0.026}_{-0.026}$
A_{143}^{PS}	47.5	49^{+20}_{-20}	$Y_{\text{P}}^{\text{BBN}}$	0.246644	$0.24663^{+0.00016}_{-0.00019}$	$\sigma_8(0.61)$	0.6115	$0.611^{+0.023}_{-0.024}$
$A_{143 \times 217}^{\text{PS}}$	44.6	43^{+20}_{-20}	10^5D/H	2.622	$2.627^{+0.076}_{-0.075}$	$f\sigma_8(2.33)$	0.3089	$0.309^{+0.011}_{-0.012}$
A_{217}^{PS}	118.2	115^{+20}_{-20}	Age/Gyr	13.751	$13.754^{+0.068}_{-0.064}$	$\sigma_8(2.33)$	0.3151	$0.3147^{+0.0089}_{-0.0091}$
A^{kSZ}	0.01	< 8.44	z_*	1090.21	$1090.25^{+0.70}_{-0.70}$	f_{2000}^{143}	30.1	31^{+6}_{-6}
A_{100}^{dustTT}	8.87	$8.9^{+3.6}_{-3.6}$	r_*	144.43	$144.42^{+0.83}_{-0.82}$	$f_{2000}^{143 \times 217}$	33.05	33^{+4}_{-4}
A_{143}^{dustTT}	10.74	$10.7^{+3.5}_{-3.5}$	$100\theta_*$	1.04103	$1.04102^{+0.00086}_{-0.00087}$	f_{2000}^{217}	107.56	$107.9^{+3.7}_{-3.7}$
$A_{143 \times 217}^{\text{dustTT}}$	19.3	$18.2^{+6.4}_{-6.5}$	$D_M(z_*)/\text{Gpc}$	13.874	$13.873^{+0.078}_{-0.077}$	χ_{simall}^2	395.86	$396.9 (\nu: 1.4)$
A_{217}^{dustTT}	94.5	93^{+10}_{-10}	z_{drag}	1059.55	$1059.49^{+0.87}_{-0.85}$	χ_{lowl}^2	23.38	$23.7 (\nu: 0.6)$
c_{100}	0.99967	$0.9996^{+0.0012}_{-0.0012}$	r_{drag}	147.15	$147.16^{+0.85}_{-0.84}$	χ_{plik}^2	757.9	$770.5 (\nu: 14.2)$
c_{217}	0.99827	$0.9983^{+0.0012}_{-0.0012}$	k_{D}	0.14065	$0.14063^{+0.00097}_{-0.00097}$	χ_{H073p45}^2	6.19	$6.6 (\nu: 2.8)$
H_0	69.32	$69.3^{+1.5}_{-1.5}$	$100\theta_{\text{D}}$	0.16099	$0.16102^{+0.00050}_{-0.00049}$	χ_{JLA}^2	1035.41	$1036.3 (\nu: 1.5)$
Ω_{Λ}	0.7016	$0.701^{+0.014}_{-0.015}$	z_{eq}	3411	3413^{+80}_{-81}	$\chi_{6\text{DF}}^2$	0.096	$0.14 (\nu: 0.0)$
Ω_{m}	0.2984	$0.299^{+0.015}_{-0.014}$	k_{eq}	0.010411	$0.01042^{+0.00024}_{-0.00025}$	χ_{MGS}^2	2.67	$2.71 (\nu: 0.3)$
$\Omega_{\text{m}} h^2$	0.14338	$0.1435^{+0.0034}_{-0.0034}$	$100\theta_{\text{eq}}$	0.8111	$0.811^{+0.015}_{-0.014}$	χ_{DR12BAO}^2	4.61	$5.5 (\nu: 1.1)$
$\Omega_{\text{m}} h^3$	0.09939	$0.0994^{+0.0032}_{-0.0033}$	$100\theta_{\text{s,eq}}$	0.4484	$0.4482^{+0.0078}_{-0.0075}$	χ_{prior}^2	1.4	$7.2 (\nu: 6.7)$
σ_8	0.8364	$0.836^{+0.033}_{-0.034}$	$H(0.15)$	74.34	$74.3^{+1.5}_{-1.4}$	χ_{BAO}^2	7.38	$8.4 (\nu: 2.2)$
S_8	0.8342	$0.835^{+0.039}_{-0.038}$	$D_M(0.15)$	626.8	627^{+12}_{-12}	χ_{CMB}^2	1177.2	$1191.1 (\nu: 14.9)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4569	$0.457^{+0.021}_{-0.021}$	$H(0.38)$	83.67	$83.7^{+1.2}_{-1.2}$			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6182	$0.618^{+0.025}_{-0.026}$	$D_M(0.38)$	1502.6	1503^{+26}_{-26}			

Best-fit $\chi_{\text{eff}}^2 = 2227.58$; $\bar{\chi}_{\text{eff}}^2 = 2249.60$; $R - 1 = 0.00852$
 χ_{eff}^2 : BAO - 6DF: 0.10 MGS: 2.67 DR12BAO: 4.61 CMB - simall-100x143.offlike5_EE_Aplanck_B: 395.86 commander_dx12_v3.2.29: 23.38 plik_rd12_HM_v22.TT: 757.93
Hubble - H073p45: 6.19 SN - JLA Pantheon18: 1035.41

19.34 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022209	$0.02219^{+0.00038}_{-0.00039}$	$\sigma_8 \Omega_m^{0.25}$	0.6128	$0.613^{+0.017}_{-0.017}$	$H(0.38)$	83.61	$83.6^{+1.2}_{-1.2}$
$\Omega_c h^2$	0.12003	$0.1200^{+0.0026}_{-0.0027}$	$\sigma_8/h^{0.5}$	0.9968	$0.997^{+0.024}_{-0.024}$	$D_M(0.38)$	1504.9	1504^{+25}_{-25}
$100\theta_{MC}$	1.04090	$1.04087^{+0.00085}_{-0.00085}$	$r_{\text{drag}} h$	101.92	$102.0^{+2.2}_{-2.2}$	$H(0.51)$	89.93	$89.9^{+1.0}_{-1.0}$
τ	0.0510	$0.052^{+0.016}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	2.455	$2.458^{+0.052}_{-0.052}$	$D_M(0.51)$	1954.5	1954^{+30}_{-30}
w_0	-1.004	$-0.998^{+0.16}_{-0.16}$	z_{re}	7.36	$7.4^{+1.5}_{-1.6}$	$H(0.61)$	95.27	$95.24^{+0.83}_{-0.84}$
w_a	-0.25	$-0.29^{+0.62}_{-0.65}$	$10^9 A_s$	2.084	$2.086^{+0.063}_{-0.061}$	$D_M(0.61)$	2278.5	2278^{+32}_{-32}
$\ln(10^{10} A_s)$	3.0368	$3.038^{+0.030}_{-0.030}$	$10^9 A_s e^{-2\tau}$	1.8818	$1.882^{+0.021}_{-0.022}$	$H(2.33)$	234.72	$234.6^{+1.9}_{-1.9}$
n_s	0.9648	$0.9639^{+0.0087}_{-0.0086}$	D_{40}	1227.4	1230^{+24}_{-24}	$D_M(2.33)$	5758.2	5760^{+25}_{-25}
y_{cal}	1.00028	$1.0004^{+0.0049}_{-0.0049}$	D_{220}	5716	5719^{+78}_{-80}	$f\sigma_8(0.15)$	0.4608	$0.461^{+0.015}_{-0.015}$
A_{217}^{CIB}	49.1	48^{+10}_{-10}	D_{810}	2536.6	2536^{+26}_{-26}	$\sigma_8(0.15)$	0.7674	$0.768^{+0.022}_{-0.022}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.24	—	D_{1420}	815.5	$814.7^{+9.9}_{-9.8}$	$f\sigma_8(0.38)$	0.4854	$0.486^{+0.018}_{-0.018}$
A_{143}^{tSZ}	7.22	$5.1^{+3.8}_{-3.9}$	D_{2000}	230.10	$229.8^{+3.4}_{-3.4}$	$\sigma_8(0.38)$	0.6811	$0.682^{+0.019}_{-0.020}$
A_{100}^{PS}	254	263^{+60}_{-60}	$n_{s,0.002}$	0.9648	$0.9639^{+0.0087}_{-0.0086}$	$f\sigma_8(0.51)$	0.4867	$0.487^{+0.018}_{-0.018}$
A_{143}^{PS}	47.8	49^{+20}_{-20}	Y_P	0.245330	$0.24532^{+0.00016}_{-0.00017}$	$\sigma_8(0.51)$	0.6375	$0.638^{+0.018}_{-0.018}$
$A_{143 \times 217}^{\text{PS}}$	44.7	43^{+20}_{-20}	Y_P^{BBN}	0.246656	$0.24664^{+0.00016}_{-0.00017}$	$f\sigma_8(0.61)$	0.4831	$0.484^{+0.019}_{-0.019}$
A_{217}^{PS}	118.5	115^{+20}_{-20}	$10^5 D/H$	2.616	$2.620^{+0.074}_{-0.071}$	$\sigma_8(0.61)$	0.6065	$0.607^{+0.017}_{-0.017}$
A^{kSZ}	0.0	—	Age/Gyr	13.755	$13.756^{+0.066}_{-0.064}$	$f\sigma_8(2.33)$	0.3064	$0.3067^{+0.0087}_{-0.0090}$
A_{100}^{dustTT}	8.87	$8.9^{+3.6}_{-3.7}$	z_*	1090.13	$1090.15^{+0.63}_{-0.61}$	$\sigma_8(2.33)$	0.3131	$0.3133^{+0.0069}_{-0.0069}$
A_{143}^{dustTT}	10.78	$10.7^{+3.6}_{-3.4}$	r_*	144.55	$144.56^{+0.63}_{-0.64}$	χ^2_{lensing}	8.75	$9.35 (\nu: 0.5)$
$A_{143 \times 217}^{\text{dustTT}}$	19.4	$18.2^{+6.3}_{-6.5}$	$100\theta_*$	1.04110	$1.04107^{+0.00083}_{-0.00084}$	χ^2_{small}	395.69	$396.8 (\nu: 1.1)$
A_{217}^{dustTT}	94.5	93^{+10}_{-10}	$D_M(z_*)/\text{Gpc}$	13.884	$13.886^{+0.060}_{-0.061}$	χ^2_{lowl}	23.16	$23.41 (\nu: 0.4)$
c_{100}	0.99964	$0.9996^{+0.0012}_{-0.0012}$	z_{drag}	1059.55	$1059.52^{+0.84}_{-0.84}$	χ^2_{plik}	758.5	$770.6 (\nu: 13.4)$
c_{217}	0.99826	$0.9983^{+0.0012}_{-0.0012}$	r_{drag}	147.26	$147.29^{+0.67}_{-0.69}$	χ^2_{H073p45}	6.52	$6.6 (\nu: 2.8)$
H_0	69.21	$69.2^{+1.5}_{-1.5}$	k_D	0.14056	$0.14052^{+0.00085}_{-0.00083}$	χ^2_{JLA}	1035.26	$1036.2 (\nu: 1.5)$
Ω_Λ	0.7017	$0.702^{+0.014}_{-0.014}$	$100\theta_D$	0.160979	$0.16100^{+0.00050}_{-0.00048}$	$\chi^2_{6\text{DF}}$	0.081	$0.14 (\nu: 0.0)$
Ω_m	0.2983	$0.298^{+0.014}_{-0.014}$	z_{eq}	3399	3399^{+60}_{-61}	χ^2_{MGS}	2.59	$2.72 (\nu: 0.3)$
$\Omega_m h^2$	0.14289	$0.1429^{+0.0025}_{-0.0025}$	k_{eq}	0.010375	$0.01037^{+0.00018}_{-0.00018}$	χ^2_{DR12BAO}	4.37	$5.3 (\nu: 1.0)$
$\Omega_m h^3$	0.09889	$0.0989^{+0.0028}_{-0.0028}$	$100\theta_{\text{eq}}$	0.8134	$0.813^{+0.012}_{-0.011}$	χ^2_{prior}	1.5	$7.2 (\nu: 6.8)$
σ_8	0.8292	$0.830^{+0.023}_{-0.024}$	$100\theta_{s,\text{eq}}$	0.4495	$0.4496^{+0.0059}_{-0.0057}$	χ^2_{CMB}	1186.1	$1200.1 (\nu: 14.6)$
S_8	0.8269	$0.827^{+0.026}_{-0.026}$	$H(0.15)$	74.21	$74.3^{+1.4}_{-1.4}$	χ^2_{BAO}	7.04	$8.2 (\nu: 2.2)$
$\sigma_8 \Omega_m^{0.5}$	0.4529	$0.453^{+0.014}_{-0.014}$	$D_M(0.15)$	627.9	628^{+12}_{-11}			

Best-fit $\chi^2_{\text{eff}} = 2236.45$; $\Delta\chi^2_{\text{eff}} = -4.56$; $\bar{\chi}^2_{\text{eff}} = 2258.39$; $\Delta\bar{\chi}^2_{\text{eff}} = -2.87$; $R - 1 = 0.00927$

χ^2_{eff} : BAO - 6DF: 0.08 (Δ 0.08) MGS: 2.59 (Δ 0.84) DR12BAO: 4.37 (Δ 0.93) CMB - smicadx12_Dec5_ftl_mv2_ndclpp-p.teb.consext8: 8.75 (Δ -0.25) small_100x143_offlike5_EE_Aplanck: 395.69 (Δ -1.19) commander_dx12_v3.2_29: 23.16 (Δ 0.56) plik_rd12_HM_v22_TT: 758.52 (Δ -2.32) Hubble - H073p45: 6.52 (Δ -3.80) SN - JLA Pantheon18: 1035.26 (Δ 0.47)

19.35 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02216^{+0.00040}_{-0.00040}$	$\sigma_8/h^{0.5}$	$1.006^{+0.036}_{-0.037}$	$H(0.51)$	$89.9^{+1.0}_{-0.99}$
$\Omega_{\mathrm{c}}h^2$	$0.1206^{+0.0035}_{-0.0035}$	$r_{\mathrm{drag}}h$	$101.9^{+2.2}_{-2.2}$	$D_{\mathrm{M}}(0.51)$	1953^{+31}_{-30}
$100\theta_{\mathrm{MC}}$	$1.04083^{+0.00087}_{-0.00087}$	$\langle d^2 \rangle^{1/2}$	$2.476^{+0.078}_{-0.079}$	$H(0.61)$	$95.17^{+0.86}_{-0.83}$
τ	$0.054^{+0.013}_{-0.011}$	z_{re}	< 8.83	$D_{\mathrm{M}}(0.61)$	2277^{+33}_{-32}
w_0	$-0.99^{+0.17}_{-0.16}$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.059}_{-0.054}$	$H(2.33)$	$234.8^{+1.9}_{-1.9}$
w_a	$-0.37^{+0.71}_{-0.76}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.885^{+0.025}_{-0.025}$	$D_{\mathrm{M}}(2.33)$	5761^{+25}_{-25}
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.028}_{-0.026}$	D_{40}	1233^{+28}_{-28}	$f\sigma_8(0.15)$	$0.465^{+0.021}_{-0.022}$
n_{s}	$0.963^{+0.010}_{-0.0098}$	D_{220}	5716^{+80}_{-79}	$\sigma_8(0.15)$	$0.774^{+0.030}_{-0.031}$
y_{cal}	$1.0004^{+0.0049}_{-0.0048}$	D_{810}	2537^{+27}_{-27}	$f\sigma_8(0.38)$	$0.491^{+0.025}_{-0.025}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{1420}	$815^{+10}_{-9.8}$	$\sigma_8(0.38)$	$0.687^{+0.026}_{-0.027}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$229.8^{+3.5}_{-3.4}$	$f\sigma_8(0.51)$	$0.492^{+0.026}_{-0.026}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$	$n_{\mathrm{s},0.002}$	$0.963^{+0.010}_{-0.0098}$	$\sigma_8(0.51)$	$0.643^{+0.024}_{-0.025}$
A_{100}^{PS}	262^{+60}_{-60}	Y_{P}	$0.24531^{+0.00017}_{-0.00018}$	$f\sigma_8(0.61)$	$0.489^{+0.027}_{-0.026}$
A_{143}^{PS}	49^{+20}_{-20}	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24663^{+0.00017}_{-0.00018}$	$\sigma_8(0.61)$	$0.612^{+0.023}_{-0.024}$
$A_{143 \times 217}^{\mathrm{PS}}$	43^{+20}_{-20}	$10^5 \mathrm{D}/\mathrm{H}$	$2.626^{+0.077}_{-0.075}$	$f\sigma_8(2.33)$	$0.309^{+0.011}_{-0.012}$
A_{217}^{PS}	115^{+20}_{-20}	Age/Gyr	$13.754^{+0.068}_{-0.065}$	$\sigma_8(2.33)$	$0.3151^{+0.0088}_{-0.0089}$
A^{kSZ}	< 8.43	z_*	$1090.24^{+0.70}_{-0.70}$	f_{2000}^{143}	31^{+6}_{-6}
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6}$	r_*	$144.44^{+0.83}_{-0.82}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.4}$	$100\theta_*$	$1.04103^{+0.00086}_{-0.00086}$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7}$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.874^{+0.077}_{-0.077}$	χ_{simall}^2	$396.8 (\nu: 1.4)$
$A_{217}^{\mathrm{dustTT}}$	93^{+10}_{-10}	z_{drag}	$1059.49^{+0.86}_{-0.86}$	χ_{lowl}^2	$23.7 (\nu: 0.6)$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	r_{drag}	$147.17^{+0.85}_{-0.84}$	χ_{plik}^2	$770.3 (\nu: 14.2)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	k_{D}	$0.14062^{+0.00098}_{-0.00097}$	$\chi_{\mathrm{H073p45}}^2$	$6.6 (\nu: 2.8)$
H_0	$69.3^{+1.5}_{-1.5}$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00051}_{-0.00049}$	χ_{JLA}^2	$1036.3 (\nu: 1.5)$
Ω_{Λ}	$0.701^{+0.014}_{-0.015}$	z_{eq}	3412^{+80}_{-81}	$\chi_{6\mathrm{DF}}^2$	$0.14 (\nu: 0.0)$
Ω_{m}	$0.299^{+0.015}_{-0.014}$	k_{eq}	$0.01041^{+0.00024}_{-0.00025}$	χ_{MGS}^2	$2.71 (\nu: 0.3)$
$\Omega_{\mathrm{m}}h^2$	$0.1434^{+0.0033}_{-0.0034}$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.015}_{-0.014}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.5 (\nu: 1.1)$
$\Omega_{\mathrm{m}}h^3$	$0.0993^{+0.0033}_{-0.0033}$	$100\theta_{\mathrm{s,eq}}$	$0.4484^{+0.0078}_{-0.0074}$	χ_{prior}^2	$7.2 (\nu: 6.7)$
σ_8	$0.837^{+0.033}_{-0.034}$	$H(0.15)$	$74.3^{+1.5}_{-1.4}$	χ_{BAO}^2	$8.3 (\nu: 2.3)$
S_8	$0.835^{+0.038}_{-0.039}$	$D_{\mathrm{M}}(0.15)$	627^{+12}_{-12}	χ_{CMB}^2	$1190.8 (\nu: 14.6)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.458^{+0.021}_{-0.021}$	$H(0.38)$	$83.7^{+1.2}_{-1.2}$		
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.619^{+0.025}_{-0.026}$	$D_{\mathrm{M}}(0.38)$	1503^{+26}_{-26}		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2249.33; R - 1 = 0.01064$$

19.36 base_w_wa_plikHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02220^{+0.00038}_{-0.00039}$	$\sigma_8/h^{0.5}$	$0.998^{+0.024}_{-0.024}$	$H(0.51)$	$89.9^{+1.0}_{-1.0}$
$\Omega_{\mathrm{c}}h^2$	$0.1199^{+0.0025}_{-0.0026}$	$r_{\mathrm{drag}}h$	$102.0^{+2.2}_{-2.2}$	$D_{\mathrm{M}}(0.51)$	1954^{+30}_{-30}
$100\theta_{\mathrm{MC}}$	$1.04088^{+0.00084}_{-0.00085}$	$\langle d^2 \rangle^{1/2}$	$2.459^{+0.052}_{-0.052}$	$H(0.61)$	$95.25^{+0.84}_{-0.84}$
τ	$0.053^{+0.012}_{-0.011}$	z_{re}	< 8.71	$D_{\mathrm{M}}(0.61)$	2278^{+32}_{-32}
w_0	$-1.00^{+0.16}_{-0.16}$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.053}_{-0.048}$	$H(2.33)$	$234.6^{+1.9}_{-1.9}$
w_a	$-0.27^{+0.61}_{-0.64}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.881^{+0.021}_{-0.022}$	$D_{\mathrm{M}}(2.33)$	5759^{+25}_{-25}
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.025}_{-0.023}$	D_{40}	1229^{+24}_{-24}	$f\sigma_8(0.15)$	$0.461^{+0.015}_{-0.016}$
n_{s}	$0.9643^{+0.0086}_{-0.0084}$	D_{220}	5718^{+78}_{-80}	$\sigma_8(0.15)$	$0.768^{+0.022}_{-0.022}$
y_{cal}	$1.0003^{+0.0049}_{-0.0049}$	D_{810}	2535^{+26}_{-26}	$f\sigma_8(0.38)$	$0.486^{+0.018}_{-0.018}$
A_{217}^{CIB}	48^{+10}_{-10}	D_{1420}	$815^{+10}_{-9.8}$	$\sigma_8(0.38)$	$0.682^{+0.020}_{-0.020}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{2000}	$229.8^{+3.4}_{-3.4}$	$f\sigma_8(0.51)$	$0.487^{+0.018}_{-0.019}$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9}$	$n_{\mathrm{s},0.002}$	$0.9643^{+0.0086}_{-0.0084}$	$\sigma_8(0.51)$	$0.638^{+0.018}_{-0.018}$
A_{100}^{PS}	263^{+50}_{-60}	Y_{P}	$0.24532^{+0.00016}_{-0.00017}$	$f\sigma_8(0.61)$	$0.484^{+0.019}_{-0.019}$
A_{143}^{PS}	48^{+20}_{-20}	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00017}$	$\sigma_8(0.61)$	$0.607^{+0.017}_{-0.017}$
$A_{143 \times 217}^{\mathrm{PS}}$	43^{+20}_{-20}	$10^5 \mathrm{D}/\mathrm{H}$	$2.619^{+0.074}_{-0.071}$	$f\sigma_8(2.33)$	$0.3068^{+0.0087}_{-0.0090}$
A_{217}^{PS}	115^{+20}_{-20}	$\mathrm{Age}/\mathrm{Gyr}$	$13.757^{+0.066}_{-0.066}$	$\sigma_8(2.33)$	$0.3136^{+0.0069}_{-0.0068}$
A^{kSZ}	< 8.54	z_*	$1090.13^{+0.62}_{-0.60}$	f_{2000}^{143}	31^{+6}_{-6}
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6}$	r_*	$144.59^{+0.61}_{-0.61}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.6}_{-3.4}$	$100\theta_*$	$1.04108^{+0.00083}_{-0.00084}$	f_{2000}^{217}	$107.9^{+3.7}_{-3.7}$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.5}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.059}_{-0.059}$	$\chi_{\mathrm{lensing}}^2$	$9.3 (\nu: 0.5)$
$A_{217}^{\mathrm{dustTT}}$	93^{+10}_{-10}	z_{drag}	$1059.53^{+0.86}_{-0.85}$	χ_{simall}^2	$396.6 (\nu: 1.1)$
c_{100}	$0.9996^{+0.0012}_{-0.0012}$	r_{drag}	$147.31^{+0.66}_{-0.67}$	χ_{lowl}^2	$23.38 (\nu: 0.4)$
c_{217}	$0.9983^{+0.0012}_{-0.0012}$	k_{D}	$0.14050^{+0.00086}_{-0.00083}$	χ_{plik}^2	$770.5 (\nu: 13.4)$
H_0	$69.2^{+1.5}_{-1.5}$	$100\theta_{\mathrm{D}}$	$0.16100^{+0.00050}_{-0.00049}$	$\chi_{\mathrm{H073p45}}^2$	$6.6 (\nu: 2.8)$
Ω_{Λ}	$0.702^{+0.013}_{-0.014}$	z_{eq}	3396^{+58}_{-59}	χ_{JLA}^2	$1036.2 (\nu: 1.4)$
Ω_{m}	$0.298^{+0.014}_{-0.013}$	k_{eq}	$0.01036^{+0.00018}_{-0.00018}$	$\chi_{6\mathrm{DF}}^2$	$0.14 (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1427^{+0.0024}_{-0.0025}$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.011}_{-0.011}$	χ_{MGS}^2	$2.72 (\nu: 0.3)$
$\Omega_{\mathrm{m}}h^3$	$0.0988^{+0.0028}_{-0.0028}$	$100\theta_{\mathrm{s,eq}}$	$0.4499^{+0.0058}_{-0.0055}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.3 (\nu: 1.0)$
σ_8	$0.830^{+0.024}_{-0.024}$	$H(0.15)$	$74.2^{+1.4}_{-1.3}$	χ_{prior}^2	$7.2 (\nu: 6.8)$
S_8	$0.827^{+0.026}_{-0.026}$	$D_{\mathrm{M}}(0.15)$	628^{+12}_{-11}	χ_{CMB}^2	$1199.9 (\nu: 14.4)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014}$	$H(0.38)$	$83.6^{+1.2}_{-1.2}$	χ_{BAO}^2	$8.1 (\nu: 2.2)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.613^{+0.017}_{-0.017}$	$D_{\mathrm{M}}(0.38)$	1504^{+25}_{-25}		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2258.12; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -3.04; R - 1 = 0.01181$$

19.37 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022393	$0.02237^{+0.00029}_{-0.00028}$	σ_8	0.8335	$0.833^{+0.026}_{-0.026}$	$H(0.38)$	83.78	$83.8^{+1.2}_{-1.2}$
$\Omega_c h^2$	0.12021	$0.1203^{+0.0024}_{-0.0024}$	S_8	0.8297	$0.831^{+0.028}_{-0.028}$	$D_M(0.38)$	1501.0	1501^{+25}_{-25}
$100\theta_{MC}$	1.04092	$1.04092^{+0.00062}_{-0.00060}$	$\sigma_8 \Omega_m^{0.5}$	0.4545	$0.455^{+0.015}_{-0.015}$	$H(0.51)$	90.08	$90.09^{+0.95}_{-0.95}$
τ	0.0538	$0.054^{+0.016}_{-0.015}$	$\sigma_8 \Omega_m^{0.25}$	0.6155	$0.616^{+0.019}_{-0.019}$	$D_M(0.51)$	1949.8	1950^{+30}_{-30}
w_0	-1.003	$-0.99^{+0.17}_{-0.15}$	$\sigma_8/h^{0.5}$	1.0004	$1.001^{+0.027}_{-0.028}$	$H(0.61)$	95.41	$95.39^{+0.78}_{-0.76}$
w_a	-0.26	$-0.32^{+0.63}_{-0.66}$	$r_{\text{drag}} h$	102.05	$102.0^{+2.2}_{-2.2}$	$D_M(0.61)$	2273.3	2273^{+32}_{-32}
$\ln(10^{10} A_s)$	3.0444	$3.044^{+0.032}_{-0.030}$	$\langle d^2 \rangle^{1/2}$	2.464	$2.466^{+0.061}_{-0.063}$	$H(2.33)$	234.92	$234.9^{+1.9}_{-1.8}$
n_s	0.9655	$0.9647^{+0.0083}_{-0.0081}$	z_{re}	7.61	$7.6^{+1.5}_{-1.5}$	$D_M(2.33)$	5749.8	5751^{+20}_{-19}
y_{cal}	1.00072	$1.0006^{+0.0049}_{-0.0049}$	$10^9 A_s$	2.100	$2.100^{+0.069}_{-0.063}$	$f\sigma_8(0.15)$	0.4625	$0.462^{+0.016}_{-0.016}$
A_{217}^{CIB}	47.2	47^{+10}_{-10}	$10^9 A_s e^{-2\tau}$	1.8856	$1.885^{+0.022}_{-0.022}$	$\sigma_8(0.15)$	0.7715	$0.771^{+0.025}_{-0.025}$
$\xi^{\text{tSZ} \times \text{CIB}}$	0.41	—	D_{40}	1230.0	1231^{+24}_{-24}	$f\sigma_8(0.38)$	0.4877	$0.488^{+0.019}_{-0.018}$
A_{143}^{tSZ}	7.22	$5.5^{+3.8}_{-3.8}$	D_{220}	5736	5733^{+76}_{-74}	$\sigma_8(0.38)$	0.6848	$0.685^{+0.022}_{-0.022}$
A_{100}^{PS}	249	258^{+50}_{-50}	D_{810}	2541.9	2540^{+26}_{-26}	$f\sigma_8(0.51)$	0.4891	$0.489^{+0.020}_{-0.019}$
A_{143}^{PS}	46.9	46^{+10}_{-20}	D_{1420}	818.4	$817.2^{+9.5}_{-9.3}$	$\sigma_8(0.51)$	0.6409	$0.641^{+0.021}_{-0.020}$
$A_{143 \times 217}^{\text{PS}}$	47.0	43^{+20}_{-20}	D_{2000}	231.40	$231.0^{+3.1}_{-3.1}$	$f\sigma_8(0.61)$	0.4857	$0.486^{+0.020}_{-0.020}$
A_{217}^{PS}	119.7	115^{+20}_{-20}	$n_{s,0.002}$	0.9655	$0.9647^{+0.0083}_{-0.0081}$	$\sigma_8(0.61)$	0.6098	$0.610^{+0.019}_{-0.019}$
A^{kSZ}	0.01	< 7.80	Y_P	0.245405	$0.24539^{+0.00011}_{-0.00011}$	$f\sigma_8(2.33)$	0.3081	$0.3080^{+0.0098}_{-0.010}$
A_{100}^{dustTT}	8.81	$8.9^{+3.6}_{-3.5}$	Y_P^{BBN}	0.246731	$0.24672^{+0.00011}_{-0.00012}$	$\sigma_8(2.33)$	0.3148	$0.3145^{+0.0080}_{-0.0079}$
A_{143}^{dustTT}	10.94	$10.9^{+3.5}_{-3.5}$	$10^5 D/H$	2.581	$2.587^{+0.053}_{-0.052}$	f_{2000}^{143}	28.7	29^{+5}_{-5}
$A_{143 \times 217}^{\text{dustTT}}$	19.7	$18.6^{+6.4}_{-6.4}$	Age/Gyr	13.734	$13.735^{+0.059}_{-0.055}$	$f_{2000}^{143 \times 217}$	31.90	32^{+4}_{-4}
A_{217}^{dustTT}	94.8	94^{+10}_{-10}	z_*	1089.91	$1089.95^{+0.50}_{-0.51}$	f_{2000}^{217}	106.65	$106.9^{+3.5}_{-3.4}$
A_{100}^{dustTE}	0.115	$0.114^{+0.076}_{-0.075}$	r_*	144.36	$144.36^{+0.55}_{-0.55}$	χ_{simall}^2	395.99	$397.0 (\nu: 1.7)$
$A_{100 \times 143}^{\text{dustTE}}$	0.134	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	1.04110	$1.04110^{+0.00061}_{-0.00059}$	χ_{lowl}^2	23.21	$23.42 (\nu: 0.4)$
$A_{100 \times 217}^{\text{dustTE}}$	0.480	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	13.866	$13.866^{+0.052}_{-0.052}$	χ_{plik}^2	2343.7	$2358.6 (\nu: 16.4)$
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	z_{drag}	1060.01	$1059.95^{+0.60}_{-0.59}$	χ_{H073p45}^2	5.90	$6.3 (\nu: 2.6)$
$A_{143 \times 217}^{\text{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	r_{drag}	147.01	$147.02^{+0.55}_{-0.55}$	χ_{JLA}^2	1035.39	$1036.2 (\nu: 1.3)$
A_{217}^{dustTE}	2.07	$2.09^{+0.53}_{-0.53}$	k_D	0.14097	$0.14094^{+0.00061}_{-0.00061}$	$\chi_{6\text{DF}}^2$	0.097	$0.14 (\nu: 0.0)$
c_{100}	0.99971	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_D$	0.160719	$0.16076^{+0.00035}_{-0.00034}$	χ_{MGS}^2	2.67	$2.73 (\nu: 0.3)$
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3408	3409^{+55}_{-55}	χ_{DR12BAO}^2	4.50	$5.3 (\nu: 1.1)$
H_0	69.42	$69.3^{+1.5}_{-1.5}$	k_{eq}	0.010401	$0.01040^{+0.00017}_{-0.00017}$	χ_{prior}^2	1.7	$11.5 (\nu: 10.1)$
Ω_Λ	0.7027	$0.702^{+0.014}_{-0.014}$	$100\theta_{\text{eq}}$	0.8124	$0.812^{+0.010}_{-0.010}$	χ_{BAO}^2	7.27	$8.2 (\nu: 2.3)$
Ω_m	0.2973	$0.298^{+0.014}_{-0.014}$	$100\theta_{s,\text{eq}}$	0.4489	$0.4488^{+0.0053}_{-0.0053}$	χ_{CMB}^2	2762.9	$2779.1 (\nu: 16.7)$
$\Omega_m h^2$	0.14325	$0.1433^{+0.0023}_{-0.0023}$	$H(0.15)$	74.41	$74.4^{+1.4}_{-1.4}$			
$\Omega_m h^3$	0.09944	$0.0994^{+0.0027}_{-0.0027}$	$D_M(0.15)$	626.1	626^{+12}_{-12}			

Best-fit $\chi_{\text{eff}}^2 = 3813.17$; $\bar{\chi}_{\text{eff}}^2 = 3841.27$; $R - 1 = 0.00757$
 χ_{eff}^2 : BAO - 6DF: 0.10 MGS: 2.67 DR12BAO: 4.50 CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.99 commander_dx12_v3_2_29: 23.21 plik_rd12_HM_v22b_TTTEEE: 2343.68 Hubble - H073p45: 5.90 SN - JLA Pantheon18: 1035.39

19.38 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022407	$0.02239^{+0.00028}_{-0.00028}$	$\Omega_m h^3$	0.09912	$0.0991^{+0.0025}_{-0.0025}$	$H(0.15)$	74.39	$74.4^{+1.4}_{-1.3}$
$\Omega_c h^2$	0.11988	$0.1199^{+0.0021}_{-0.0021}$	σ_8	0.8298	$0.830^{+0.021}_{-0.021}$	$D_M(0.15)$	626.5	627^{+11}_{-12}
$100\theta_{MC}$	1.04093	$1.04094^{+0.00061}_{-0.00059}$	S_8	0.8259	$0.826^{+0.022}_{-0.022}$	$H(0.38)$	83.82	$83.8^{+1.2}_{-1.2}$
τ	0.0531	$0.053^{+0.015}_{-0.014}$	$\sigma_8 \Omega_m^{0.5}$	0.4523	$0.452^{+0.012}_{-0.012}$	$D_M(0.38)$	1501.2	1502^{+25}_{-25}
w_0	-0.998	$-0.996^{+0.16}_{-0.15}$	$\sigma_8 \Omega_m^{0.25}$	0.6126	$0.613^{+0.014}_{-0.014}$	$H(0.51)$	90.14	$90.11^{+0.95}_{-0.97}$
w_a	-0.26	$-0.28^{+0.58}_{-0.61}$	$\sigma_8/h^{0.5}$	0.9964	$0.996^{+0.021}_{-0.021}$	$D_M(0.51)$	1949.8	1950^{+30}_{-30}
$\ln(10^{10} A_s)$	3.0421	$3.042^{+0.029}_{-0.028}$	$r_{drag} h$	102.00	$102.0^{+2.3}_{-2.2}$	$H(0.61)$	95.47	$95.43^{+0.78}_{-0.78}$
n_s	0.9663	$0.9653^{+0.0078}_{-0.0076}$	$\langle d^2 \rangle^{1/2}$	2.4549	$2.457^{+0.046}_{-0.047}$	$D_M(0.61)$	2273.0	2274^{+32}_{-32}
y_{cal}	1.00054	$1.0005^{+0.0047}_{-0.0048}$	z_{re}	7.53	$7.5^{+1.4}_{-1.5}$	$H(2.33)$	234.82	$234.9^{+1.9}_{-1.8}$
A_{217}^{CIB}	45.9	47^{+10}_{-10}	$10^9 A_s$	2.095	$2.094^{+0.061}_{-0.057}$	$D_M(2.33)$	5748.8	5750^{+20}_{-19}
$\xi^{tSZ \times CIB}$	0.65	—	$10^9 A_s e^{-2\tau}$	1.8840	$1.883^{+0.020}_{-0.021}$	$f\sigma_8(0.15)$	0.4599	$0.460^{+0.013}_{-0.013}$
A_{143}^{tSZ}	7.05	$5.5^{+3.8}_{-3.8}$	D_{40}	1227.6	1229^{+22}_{-22}	$\sigma_8(0.15)$	0.7681	$0.768^{+0.020}_{-0.020}$
A_{100}^{PS}	248	259^{+60}_{-50}	D_{220}	5735	5734^{+76}_{-74}	$f\sigma_8(0.38)$	0.4847	$0.485^{+0.015}_{-0.015}$
A_{143}^{PS}	50.8	46^{+10}_{-20}	D_{810}	2541.5	2539^{+26}_{-26}	$\sigma_8(0.38)$	0.6819	$0.682^{+0.018}_{-0.018}$
$A_{143 \times 217}^{PS}$	53.1	42^{+20}_{-20}	D_{1420}	818.6	$817.1^{+9.4}_{-9.3}$	$f\sigma_8(0.51)$	0.4861	$0.486^{+0.016}_{-0.016}$
A_{217}^{PS}	122.0	115^{+20}_{-20}	D_{2000}	231.44	$230.9^{+3.1}_{-3.0}$	$\sigma_8(0.51)$	0.6383	$0.638^{+0.017}_{-0.017}$
A^{kSZ}	0.01	< 7.84	$n_{s,0.002}$	0.9663	$0.9653^{+0.0078}_{-0.0076}$	$f\sigma_8(0.61)$	0.4827	$0.483^{+0.016}_{-0.016}$
A_{100}^{dustTT}	8.88	$8.9^{+3.6}_{-3.5}$	Y_P	0.245410	$0.24540^{+0.00010}_{-0.00011}$	$\sigma_8(0.61)$	0.6073	$0.607^{+0.016}_{-0.016}$
A_{143}^{dustTT}	11.01	$10.9^{+3.5}_{-3.4}$	Y_P^{BBN}	0.246737	$0.24673^{+0.00011}_{-0.00011}$	$f\sigma_8(2.33)$	0.3070	$0.3068^{+0.0081}_{-0.0086}$
$A_{143 \times 217}^{dustTT}$	20.1	$18.6^{+6.5}_{-6.3}$	$10^5 D/H$	2.579	$2.583^{+0.053}_{-0.051}$	$\sigma_8(2.33)$	0.3138	$0.3136^{+0.0067}_{-0.0067}$
A_{217}^{dustTT}	95.5	94^{+10}_{-10}	Age/Gyr	13.734	$13.737^{+0.059}_{-0.054}$	$\chi^2_{lensing}$	8.77	$9.20 (\nu: 0.3)$
A_{100}^{dustTE}	0.115	$0.114^{+0.077}_{-0.075}$	z_*	1089.862	$1089.89^{+0.47}_{-0.46}$	χ^2_{small}	395.84	$396.8 (\nu: 1.2)$
$A_{100 \times 143}^{dustTE}$	0.135	$0.135^{+0.058}_{-0.058}$	r_*	144.434	$144.43^{+0.47}_{-0.48}$	χ^2_{lowl}	23.04	$23.27 (\nu: 0.3)$
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04111	$1.04113^{+0.00060}_{-0.00058}$	χ^2_{plik}	2344.2	$2358.7 (\nu: 15.7)$
A_{143}^{dustTE}	0.226	$0.22^{+0.11}_{-0.11}$	$D_M(z_*)/Gpc$	13.8730	$13.873^{+0.045}_{-0.045}$	$\chi^2_{H073p45}$	6.10	$6.4 (\nu: 2.6)$
$A_{143 \times 217}^{dustTE}$	0.666	$0.66^{+0.16}_{-0.16}$	z_{drag}	1060.01	$1059.97^{+0.57}_{-0.57}$	χ^2_{JLA}	1035.24	$1036.1 (\nu: 1.3)$
A_{217}^{dustTE}	2.09	$2.08^{+0.53}_{-0.52}$	r_{drag}	147.083	$147.09^{+0.48}_{-0.49}$	χ^2_{6DF}	0.095	$0.14 (\nu: 0.0)$
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$	k_D	0.14091	$0.14088^{+0.00058}_{-0.00056}$	χ^2_{MGS}	2.67	$2.73 (\nu: 0.3)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$	$100\theta_D$	0.160713	$0.16074^{+0.00035}_{-0.00034}$	$\chi^2_{DR12BAO}$	4.44	$5.2 (\nu: 1.1)$
H_0	69.35	$69.3^{+1.5}_{-1.5}$	z_{eq}	3400.2	3401^{+48}_{-47}	χ^2_{prior}	1.6	$11.5 (\nu: 9.6)$
Ω_Λ	0.7028	$0.702^{+0.013}_{-0.014}$	k_{eq}	0.010378	$0.01038^{+0.00015}_{-0.00014}$	χ^2_{CMB}	2771.9	$2788.0 (\nu: 16.8)$
Ω_m	0.2972	$0.298^{+0.014}_{-0.013}$	$100\theta_{eq}$	0.8138	$0.8136^{+0.0088}_{-0.0089}$	χ^2_{BAO}	7.21	$8.1 (\nu: 2.4)$
$\Omega_m h^2$	0.14293	$0.1430^{+0.0020}_{-0.0020}$	$100\theta_{s,eq}$	0.44960	$0.4495^{+0.0045}_{-0.0045}$			

Best-fit $\chi^2_{eff} = 3821.98$; $\Delta\chi^2_{eff} = -4.85$; $\bar{\chi}^2_{eff} = 3850.02$; $\Delta\bar{\chi}^2_{eff} = -3.07$; $R - 1 = 0.01297$
 χ^2_{eff} : BAO - 6DF: 0.10 (Δ 0.09) MGS: 2.67 (Δ 1.13) DR12BAO: 4.44 (Δ 0.75) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb_consext8: 8.77 (Δ 0.04) small_100x143_offlike5_EE_Aplanck.L
395.84 (Δ -1.08) commander_dx12_v3.2.29: 23.04 (Δ 0.36) plik_rd12_HM.v22b_TTTEEE: 2344.24 (Δ -1.94) Hubble - H073p45: 6.10 (Δ -4.54) SN - JLA Pantheon18: 1035.24
(Δ 0.39)

19.39 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02237^{+0.00029}_{-0.00028}$	σ_8	$0.834^{+0.026}_{-0.026}$	$H(0.38)$	$83.8^{+1.2}_{-1.2}$
$\Omega_c h^2$	$0.1202^{+0.0024}_{-0.0024}$	S_8	$0.831^{+0.028}_{-0.028}$	$D_M(0.38)$	1501^{+25}_{-25}
$100\theta_{MC}$	$1.04092^{+0.00061}_{-0.00060}$	$\sigma_8 \Omega_m^{0.5}$	$0.455^{+0.015}_{-0.015}$	$H(0.51)$	$90.09^{+0.95}_{-0.95}$
τ	$0.055^{+0.013}_{-0.012}$	$\sigma_8 \Omega_m^{0.25}$	$0.616^{+0.019}_{-0.019}$	$D_M(0.51)$	1950^{+30}_{-30}
w_0	$-0.99^{+0.17}_{-0.15}$	$\sigma_8/h^{0.5}$	$1.002^{+0.027}_{-0.028}$	$H(0.61)$	$95.40^{+0.78}_{-0.76}$
w_a	$-0.31^{+0.63}_{-0.66}$	$r_{\text{drag}} h$	$102.0^{+2.2}_{-2.2}$	$D_M(0.61)$	2273^{+32}_{-32}
$\ln(10^{10} A_s)$	$3.047^{+0.028}_{-0.026}$	$\langle d^2 \rangle^{1/2}$	$2.468^{+0.061}_{-0.062}$	$H(2.33)$	$234.9^{+1.9}_{-1.8}$
n_s	$0.9648^{+0.0083}_{-0.0080}$	z_{re}	< 8.92	$D_M(2.33)$	5751^{+20}_{-19}
y_{cal}	$1.0006^{+0.0049}_{-0.0049}$	$10^9 A_s$	$2.104^{+0.060}_{-0.054}$	$f\sigma_8(0.15)$	$0.463^{+0.016}_{-0.016}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_s e^{-2\tau}$	$1.885^{+0.022}_{-0.022}$	$\sigma_8(0.15)$	$0.772^{+0.024}_{-0.025}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	1231^{+24}_{-24}	$f\sigma_8(0.38)$	$0.488^{+0.019}_{-0.018}$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8}$	D_{220}	5733^{+76}_{-74}	$\sigma_8(0.38)$	$0.685^{+0.022}_{-0.022}$
A_{100}^{PS}	258^{+50}_{-50}	D_{810}	2540^{+26}_{-26}	$f\sigma_8(0.51)$	$0.489^{+0.020}_{-0.019}$
A_{143}^{PS}	46^{+20}_{-20}	D_{1420}	$817.2^{+9.5}_{-9.3}$	$\sigma_8(0.51)$	$0.641^{+0.020}_{-0.020}$
$A_{143 \times 217}^{\text{PS}}$	43^{+20}_{-20}	D_{2000}	$231.0^{+3.1}_{-3.0}$	$f\sigma_8(0.61)$	$0.486^{+0.020}_{-0.020}$
A_{217}^{PS}	115^{+20}_{-20}	$n_{s,0.002}$	$0.9648^{+0.0083}_{-0.0080}$	$\sigma_8(0.61)$	$0.610^{+0.019}_{-0.019}$
A^{kSZ}	< 7.78	Y_P	$0.24539^{+0.00011}_{-0.00011}$	$f\sigma_8(2.33)$	$0.3083^{+0.0097}_{-0.010}$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5}$	Y_P^{BBN}	$0.24672^{+0.00011}_{-0.00012}$	$\sigma_8(2.33)$	$0.3148^{+0.0078}_{-0.0077}$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5}$	10^5D/H	$2.586^{+0.053}_{-0.051}$	f_{2000}^{143}	29^{+5}_{-5}
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.4}_{-6.4}$	Age/Gyr	$13.735^{+0.058}_{-0.055}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
A_{217}^{dustTT}	94^{+10}_{-10}	z_*	$1089.94^{+0.50}_{-0.51}$	f_{2000}^{217}	$106.9^{+3.5}_{-3.4}$
A_{100}^{dustTE}	$0.114^{+0.076}_{-0.075}$	r_*	$144.37^{+0.55}_{-0.55}$	χ_{simall}^2	$397.0 (\nu: 1.8)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.135^{+0.058}_{-0.058}$	$100\theta_*$	$1.04111^{+0.00061}_{-0.00059}$	χ_{lowl}^2	$23.43 (\nu: 0.4)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$13.867^{+0.051}_{-0.052}$	χ_{plik}^2	$2358.5 (\nu: 16.2)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	z_{drag}	$1059.95^{+0.59}_{-0.59}$	χ_{H073p45}^2	$6.3 (\nu: 2.6)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.03^{+0.55}_{-0.55}$	χ_{JLA}^2	$1036.2 (\nu: 1.3)$
A_{217}^{dustTE}	$2.09^{+0.53}_{-0.53}$	k_D	$0.14093^{+0.00061}_{-0.00061}$	$\chi_{6\text{DF}}^2$	$0.14 (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_D$	$0.16075^{+0.00035}_{-0.00034}$	χ_{MGS}^2	$2.73 (\nu: 0.3)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3408^{+55}_{-55}	χ_{DR12BAO}^2	$5.3 (\nu: 1.1)$
H_0	$69.3^{+1.5}_{-1.5}$	k_{eq}	$0.01040^{+0.00017}_{-0.00017}$	χ_{prior}^2	$11.5 (\nu: 10.1)$
Ω_Λ	$0.702^{+0.013}_{-0.014}$	$100\theta_{\text{eq}}$	$0.812^{+0.010}_{-0.010}$	χ_{BAO}^2	$8.2 (\nu: 2.4)$
Ω_m	$0.298^{+0.014}_{-0.013}$	$100\theta_{s,\text{eq}}$	$0.4489^{+0.0053}_{-0.0052}$	χ_{CMB}^2	$2778.9 (\nu: 16.4)$
$\Omega_m h^2$	$0.1433^{+0.0023}_{-0.0023}$	$H(0.15)$	$74.4^{+1.4}_{-1.3}$		
$\Omega_m h^3$	$0.0993^{+0.0027}_{-0.0027}$	$D_M(0.15)$	626^{+12}_{-12}		

$$\bar{\chi}_{\text{eff}}^2 = 3841.05; R - 1 = 0.00883$$

19.40 base_w_wa_plikHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02239^{+0.00028}_{-0.00028}$	σ_8	$0.830^{+0.021}_{-0.021}$	$H(0.38)$	$83.8^{+1.2}_{-1.2}$
$\Omega_c h^2$	$0.1199^{+0.0021}_{-0.0021}$	S_8	$0.826^{+0.022}_{-0.021}$	$D_M(0.38)$	1502^{+24}_{-25}
$100\theta_{MC}$	$1.04095^{+0.00060}_{-0.00059}$	$\sigma_8 \Omega_m^{0.5}$	$0.453^{+0.012}_{-0.012}$	$H(0.51)$	$90.10^{+0.96}_{-0.97}$
τ	$0.054^{+0.012}_{-0.011}$	$\sigma_8 \Omega_m^{0.25}$	$0.613^{+0.014}_{-0.014}$	$D_M(0.51)$	1950^{+29}_{-30}
w_0	$-0.998^{+0.16}_{-0.15}$	$\sigma_8/h^{0.5}$	$0.997^{+0.020}_{-0.021}$	$H(0.61)$	$95.43^{+0.78}_{-0.78}$
w_a	$-0.26^{+0.56}_{-0.63}$	$r_{\text{drag}} h$	$102.0^{+2.3}_{-2.2}$	$D_M(0.61)$	2274^{+32}_{-32}
$\ln(10^{10} A_s)$	$3.044^{+0.025}_{-0.023}$	$\langle d^2 \rangle^{1/2}$	$2.458^{+0.045}_{-0.047}$	$H(2.33)$	$234.9^{+1.9}_{-1.8}$
n_s	$0.9655^{+0.0077}_{-0.0075}$	z_{re}	< 8.76	$D_M(2.33)$	5750^{+20}_{-19}
y_{cal}	$1.0005^{+0.0048}_{-0.0048}$	$10^9 A_s$	$2.099^{+0.053}_{-0.049}$	$f\sigma_8(0.15)$	$0.460^{+0.013}_{-0.013}$
A_{217}^{CIB}	47^{+10}_{-10}	$10^9 A_s e^{-2\tau}$	$1.882^{+0.020}_{-0.020}$	$\sigma_8(0.15)$	$0.768^{+0.020}_{-0.020}$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{40}	1229^{+22}_{-22}	$f\sigma_8(0.38)$	$0.485^{+0.015}_{-0.015}$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.7}$	D_{220}	5734^{+76}_{-74}	$\sigma_8(0.38)$	$0.682^{+0.018}_{-0.018}$
A_{100}^{PS}	258^{+60}_{-50}	D_{810}	2539^{+26}_{-25}	$f\sigma_8(0.51)$	$0.486^{+0.016}_{-0.016}$
A_{143}^{PS}	46^{+20}_{-20}	D_{1420}	$817.1^{+9.4}_{-9.2}$	$\sigma_8(0.51)$	$0.638^{+0.017}_{-0.017}$
$A_{143 \times 217}^{\text{PS}}$	42^{+20}_{-20}	D_{2000}	$231.0^{+3.1}_{-3.0}$	$f\sigma_8(0.61)$	$0.483^{+0.016}_{-0.016}$
A_{217}^{PS}	115^{+20}_{-20}	$n_{s,0.002}$	$0.9655^{+0.0077}_{-0.0075}$	$\sigma_8(0.61)$	$0.607^{+0.016}_{-0.016}$
A^{kSZ}	< 7.83	Y_P	$0.24540^{+0.00010}_{-0.00011}$	$f\sigma_8(2.33)$	$0.3069^{+0.0081}_{-0.0086}$
A_{100}^{dustTT}	$8.9^{+3.5}_{-3.5}$	Y_P^{BBN}	$0.24673^{+0.00010}_{-0.00011}$	$\sigma_8(2.33)$	$0.3138^{+0.0066}_{-0.0065}$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5}$	$10^5 \text{D}/\text{H}$	$2.582^{+0.052}_{-0.050}$	f_{2000}^{143}	29^{+5}_{-5}
$A_{143 \times 217}^{\text{dustTT}}$	$18.6^{+6.5}_{-6.3}$	Age/Gyr	$13.737^{+0.059}_{-0.054}$	$f_{2000}^{143 \times 217}$	32^{+4}_{-4}
A_{217}^{dustTT}	94^{+10}_{-10}	z_*	$1089.88^{+0.47}_{-0.46}$	f_{2000}^{217}	$106.9^{+3.5}_{-3.4}$
A_{100}^{dustTE}	$0.114^{+0.077}_{-0.075}$	r_*	$144.45^{+0.47}_{-0.46}$	χ_{lensing}^2	$9.20 (\nu: 0.4)$
$A_{100 \times 143}^{\text{dustTE}}$	$0.134^{+0.058}_{-0.058}$	$100\theta_*$	$1.04113^{+0.00060}_{-0.00058}$	χ_{simall}^2	$396.7 (\nu: 1.2)$
$A_{100 \times 217}^{\text{dustTE}}$	$0.48^{+0.17}_{-0.16}$	$D_M(z_*)/\text{Gpc}$	$13.874^{+0.044}_{-0.044}$	χ_{lowl}^2	$23.26 (\nu: 0.3)$
A_{143}^{dustTE}	$0.22^{+0.10}_{-0.11}$	z_{drag}	$1059.98^{+0.60}_{-0.58}$	χ_{plik}^2	$2358.5 (\nu: 15.5)$
$A_{143 \times 217}^{\text{dustTE}}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.10^{+0.48}_{-0.47}$	χ_{H073p45}^2	$6.3 (\nu: 2.6)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.52}$	k_D	$0.14087^{+0.00057}_{-0.00056}$	χ_{JLA}^2	$1036.2 (\nu: 1.3)$
c_{100}	$0.9997^{+0.0012}_{-0.0012}$	$100\theta_D$	$0.16074^{+0.00035}_{-0.00034}$	$\chi_{6\text{DF}}^2$	$0.14 (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012}$	z_{eq}	3400^{+47}_{-47}	χ_{MGS}^2	$2.73 (\nu: 0.3)$
H_0	$69.3^{+1.5}_{-1.5}$	k_{eq}	$0.01038^{+0.00014}_{-0.00014}$	χ_{DR12BAO}^2	$5.2 (\nu: 1.1)$
Ω_Λ	$0.703^{+0.013}_{-0.014}$	$100\theta_{\text{eq}}$	$0.8139^{+0.0087}_{-0.0086}$	χ_{prior}^2	$11.5 (\nu: 9.6)$
Ω_m	$0.297^{+0.014}_{-0.013}$	$100\theta_{s,\text{eq}}$	$0.4497^{+0.0045}_{-0.0044}$	χ_{CMB}^2	$2787.7 (\nu: 16.4)$
$\Omega_m h^2$	$0.1429^{+0.0019}_{-0.0019}$	$H(0.15)$	$74.4^{+1.4}_{-1.3}$	χ_{BAO}^2	$8.1 (\nu: 2.4)$
$\Omega_m h^3$	$0.0991^{+0.0025}_{-0.0025}$	$D_M(0.15)$	627^{+11}_{-12}		

$$\bar{\chi}_{\text{eff}}^2 = 3849.79; \Delta \bar{\chi}_{\text{eff}}^2 = -3.21; R - 1 = 0.01314$$

19.41 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022142	$0.02217^{+0.00041}_{-0.00039}$	$\sigma_8 \Omega_m^{0.25}$	0.6189	$0.617^{+0.026}_{-0.026}$	$D_M(0.38)$	1508.8	1503^{+25}_{-26}
$\Omega_c h^2$	0.12049	$0.1205^{+0.0035}_{-0.0035}$	$\sigma_8/h^{0.5}$	1.0059	$1.003^{+0.037}_{-0.037}$	$H(0.51)$	89.62	$89.89^{+0.99}_{-0.97}$
$100\theta_{MC}$	1.04093	$1.04089^{+0.00088}_{-0.00089}$	$r_{drag}h$	102.03	$101.9^{+2.2}_{-2.2}$	$D_M(0.51)$	1960.1	1953^{+30}_{-30}
τ	0.0560	$0.052^{+0.016}_{-0.016}$	$\langle d^2 \rangle^{1/2}$	2.476	$2.467^{+0.080}_{-0.082}$	$H(0.61)$	95.00	$95.18^{+0.87}_{-0.83}$
w_0	-1.045	$-0.99^{+0.17}_{-0.16}$	z_{re}	7.89	$7.5^{+1.6}_{-1.7}$	$D_M(0.61)$	2285.1	2277^{+32}_{-32}
w_a	-0.13	$-0.34^{+0.71}_{-0.74}$	$10^9 A_s$	2.107	$2.089^{+0.069}_{-0.066}$	$H(2.33)$	235.19	$234.8^{+1.9}_{-1.9}$
$\ln(10^{10} A_s)$	3.0480	$3.039^{+0.033}_{-0.032}$	$10^9 A_s e^{-2\tau}$	1.8841	$1.882^{+0.026}_{-0.025}$	$D_M(2.33)$	5763.7	5761^{+24}_{-25}
n_s	0.9629	$0.964^{+0.010}_{-0.010}$	D_{40}	1233.5	1229^{+28}_{-27}	$f\sigma_8(0.15)$	0.4675	$0.464^{+0.021}_{-0.022}$
y_{cal}	1.00109	$1.0004^{+0.0049}_{-0.0049}$	D_{220}	5716	5706^{+80}_{-80}	$\sigma_8(0.15)$	0.7748	$0.772^{+0.031}_{-0.031}$
A_{100}^{PS}	249.2	242^{+50}_{-50}	D_{810}	2536.4	2534^{+27}_{-27}	$f\sigma_8(0.38)$	0.4927	$0.489^{+0.025}_{-0.025}$
A_{143}^{PS}	40.3	41^{+20}_{-20}	D_{1420}	814.5	814^{+10}_{-10}	$\sigma_8(0.38)$	0.6872	$0.685^{+0.027}_{-0.027}$
A_{217}^{PS}	96.7	101^{+30}_{-30}	D_{2000}	229.74	$229.7^{+3.5}_{-3.5}$	$f\sigma_8(0.51)$	0.4934	$0.491^{+0.026}_{-0.026}$
A_{217}^{CIB}	42.7	41^{+10}_{-10}	$n_{s,0.002}$	0.9629	$0.964^{+0.010}_{-0.010}$	$\sigma_8(0.51)$	0.6429	$0.641^{+0.025}_{-0.025}$
A_{143}^{tSZ}	2.99	< 7.40	Y_P	0.245302	$0.24531^{+0.00016}_{-0.00019}$	$f\sigma_8(0.61)$	0.4893	$0.487^{+0.027}_{-0.026}$
$r_{143 \times 217}^{PS}$	0.577	$0.65^{+0.25}_{-0.25}$	Y_P^{BBN}	0.246628	$0.24663^{+0.00016}_{-0.00019}$	$\sigma_8(0.61)$	0.6115	$0.610^{+0.023}_{-0.024}$
$r_{143 \times 217}^{CIB}$	0.66	—	$10^5 D/H$	2.629	$2.625^{+0.076}_{-0.075}$	$f\sigma_8(2.33)$	0.3086	$0.308^{+0.011}_{-0.012}$
$\xi^{tSZ \times CIB}$	0.34	—	Age/Gyr	13.767	$13.754^{+0.066}_{-0.065}$	$\sigma_8(2.33)$	0.3156	$0.3143^{+0.0090}_{-0.0092}$
A^{kSZ}	5.8	—	z_*	1090.25	$1090.23^{+0.70}_{-0.70}$	f_{2000}^{143}	31.4	31^{+6}_{-6}
A_{100}^{dust}	1.004	$1.01^{+0.38}_{-0.38}$	r_*	144.48	$144.46^{+0.83}_{-0.81}$	f_{2000}^{217}	107.86	$107.4^{+3.9}_{-3.9}$
A_{143}^{dust}	0.980	$0.98^{+0.35}_{-0.35}$	$100\theta_*$	1.04113	$1.04109^{+0.00087}_{-0.00088}$	$f_{2000}^{143 \times 217}$	33.10	33^{+4}_{-4}
A_{217}^{dust}	0.958	$0.97^{+0.20}_{-0.20}$	$D_M(z_*)/\text{Gpc}$	13.877	$13.875^{+0.078}_{-0.076}$	χ_{small}^2	396.52	$396.9 (\nu: 1.4)$
$A_{143 \times 217}^{dust}$	0.983	$1.03^{+0.32}_{-0.31}$	z_{drag}	1059.44	$1059.50^{+0.85}_{-0.86}$	χ_{lowl}^2	23.60	$23.4 (\nu: 0.6)$
c_{100}	0.99737	$0.9975^{+0.0021}_{-0.0020}$	r_{drag}	147.22	$147.18^{+0.85}_{-0.82}$	$\chi_{CamSpec}^2$	7049.0	$7062.4 (\nu: 14.0)$
c_{217}	1.00146	$1.0012^{+0.0031}_{-0.0031}$	k_D	0.14056	$0.14061^{+0.00096}_{-0.00096}$	$\chi_{H073p45}^2$	6.22	$6.6 (\nu: 2.8)$
H_0	69.31	$69.3^{+1.5}_{-1.5}$	$100\theta_D$	0.16106	$0.16103^{+0.00050}_{-0.00050}$	χ_{JLA}^2	1035.91	$1036.3 (\nu: 1.5)$
Ω_Λ	0.7017	$0.701^{+0.014}_{-0.015}$	z_{eq}	3409	3410^{+80}_{-80}	χ_{6DF}^2	0.065	$0.14 (\nu: 0.0)$
Ω_m	0.2983	$0.299^{+0.015}_{-0.014}$	k_{eq}	0.010403	$0.01041^{+0.00024}_{-0.00024}$	χ_{MGS}^2	2.43	$2.71 (\nu: 0.3)$
$\Omega_m h^2$	0.14328	$0.1433^{+0.0033}_{-0.0033}$	$100\theta_{eq}$	0.8115	$0.811^{+0.015}_{-0.015}$	$\chi_{DR12BAO}^2$	4.45	$5.4 (\nu: 1.0)$
$\Omega_m h^3$	0.09931	$0.0993^{+0.0033}_{-0.0033}$	$100\theta_{s,eq}$	0.4486	$0.4486^{+0.0077}_{-0.0075}$	χ_{prior}^2	2.6	$7.6 (\nu: 5.9)$
σ_8	0.8374	$0.834^{+0.034}_{-0.034}$	$H(0.15)$	74.00	$74.3^{+1.5}_{-1.4}$	χ_{BAO}^2	6.94	$8.3 (\nu: 2.2)$
S_8	0.8350	$0.833^{+0.039}_{-0.039}$	$D_M(0.15)$	628.6	627^{+12}_{-12}	χ_{CMB}^2	7469.2	$7482.7 (\nu: 14.4)$
$\sigma_8 \Omega_m^{0.5}$	0.4574	$0.456^{+0.021}_{-0.021}$	$H(0.38)$	83.28	$83.6^{+1.2}_{-1.2}$			

Best-fit $\chi_{eff}^2 = 8520.89$; $\bar{\chi}_{eff}^2 = 8541.50$; $R - 1 = 0.00869$
 χ_{eff}^2 : BAO - 6DF: 0.07 MGS: 2.43 DR12BAO: 4.45 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.52 commander_dx12_v3_2_29: 23.60 CamSpec like_10.7HM: 7049.04
Hubble - H073p45: 6.22 SN - JLA Pantheon18: 1035.91

19.42 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02219^{+0.00039}_{-0.00039}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.016}_{-0.017}$	$D_{\mathrm{M}}(0.38)$	1504^{+25}_{-25}
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0026}_{-0.0026}$	$\sigma_8 / h^{0.5}$	$0.998^{+0.023}_{-0.024}$	$H(0.51)$	$89.9^{+1.0}_{-0.98}$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00085}_{-0.00087}$	$r_{\mathrm{drag}} h$	$102.0^{+2.2}_{-2.2}$	$D_{\mathrm{M}}(0.51)$	1953^{+29}_{-30}
τ	$0.052^{+0.016}_{-0.015}$	$\langle d^2 \rangle^{1/2}$	$2.457^{+0.052}_{-0.054}$	$H(0.61)$	$95.24^{+0.86}_{-0.83}$
w_0	$-0.999^{+0.16}_{-0.15}$	z_{re}	$7.4^{+1.5}_{-1.7}$	$D_{\mathrm{M}}(0.61)$	2277^{+32}_{-32}
w_{a}	$-0.29^{+0.62}_{-0.64}$	$10^9 A_{\mathrm{s}}$	$2.086^{+0.062}_{-0.061}$	$H(2.33)$	$234.7^{+2.0}_{-1.9}$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.030}_{-0.030}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.021}_{-0.021}$	$D_{\mathrm{M}}(2.33)$	5759^{+24}_{-25}
n_{s}	$0.9645^{+0.0088}_{-0.0088}$	D_{40}	1227^{+24}_{-23}	$f\sigma_8(0.15)$	$0.461^{+0.015}_{-0.015}$
y_{cal}	$1.0004^{+0.0048}_{-0.0049}$	D_{220}	5708^{+79}_{-80}	$\sigma_8(0.15)$	$0.769^{+0.022}_{-0.022}$
A_{100}^{PS}	242^{+50}_{-50}	D_{810}	2533^{+26}_{-26}	$f\sigma_8(0.38)$	$0.486^{+0.018}_{-0.018}$
A_{143}^{PS}	41^{+20}_{-20}	D_{1420}	814^{+10}_{-10}	$\sigma_8(0.38)$	$0.682^{+0.019}_{-0.020}$
A_{217}^{PS}	101^{+30}_{-30}	D_{2000}	$229.7^{+3.5}_{-3.5}$	$f\sigma_8(0.51)$	$0.488^{+0.019}_{-0.019}$
A_{217}^{CIB}	41^{+10}_{-10}	$n_{\mathrm{s},0.002}$	$0.9645^{+0.0088}_{-0.0088}$	$\sigma_8(0.51)$	$0.638^{+0.018}_{-0.018}$
A_{143}^{tSZ}	< 7.47	Y_{P}	$0.24532^{+0.00015}_{-0.00018}$	$f\sigma_8(0.61)$	$0.484^{+0.019}_{-0.019}$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00016}_{-0.00018}$	$\sigma_8(0.61)$	$0.607^{+0.017}_{-0.017}$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.620^{+0.074}_{-0.072}$	$f\sigma_8(2.33)$	$0.3068^{+0.0086}_{-0.0090}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.755^{+0.065}_{-0.064}$	$\sigma_8(2.33)$	$0.3134^{+0.0069}_{-0.0069}$
A^{kSZ}	—	z_*	$1090.16^{+0.61}_{-0.61}$	f_{2000}^{143}	31^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.55^{+0.66}_{-0.63}$	f_{2000}^{217}	$107.4^{+4.0}_{-3.9}$
A_{143}^{dust}	$0.98^{+0.35}_{-0.35}$	$100\theta_*$	$1.04112^{+0.00084}_{-0.00086}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.884^{+0.062}_{-0.061}$	$\chi_{\mathrm{lensing}}^2$	$9.36 (\nu: 0.4)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.52^{+0.87}_{-0.85}$	χ_{simall}^2	$396.8 (\nu: 1.2)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	r_{drag}	$147.27^{+0.69}_{-0.67}$	χ_{lowl}^2	$23.21 (\nu: 0.4)$
c_{217}	$1.0012^{+0.0031}_{-0.0031}$	k_{D}	$0.14054^{+0.00084}_{-0.00086}$	$\chi_{\mathrm{CamSpec}}^2$	$7062.3 (\nu: 13.2)$
H_0	$69.3^{+1.5}_{-1.5}$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00050}_{-0.00050}$	$\chi_{\mathrm{H073p45}}^2$	$6.6 (\nu: 2.8)$
Ω_{Λ}	$0.702^{+0.013}_{-0.014}$	z_{eq}	3400^{+60}_{-61}	χ_{JLA}^2	$1036.2 (\nu: 1.4)$
Ω_{m}	$0.298^{+0.014}_{-0.013}$	k_{eq}	$0.01038^{+0.00018}_{-0.00019}$	$\chi_{6\mathrm{DF}}^2$	$0.14 (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1429^{+0.0025}_{-0.0026}$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.011}_{-0.011}$	χ_{MGS}^2	$2.72 (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.0990^{+0.0028}_{-0.0028}$	$100\theta_{\mathrm{s,eq}}$	$0.4495^{+0.0059}_{-0.0057}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.3 (\nu: 1.0)$
σ_8	$0.830^{+0.023}_{-0.024}$	$H(0.15)$	$74.3^{+1.4}_{-1.3}$	χ_{prior}^2	$7.6 (\nu: 5.8)$
S_8	$0.828^{+0.025}_{-0.026}$	$D_{\mathrm{M}}(0.15)$	627^{+12}_{-12}	χ_{CMB}^2	$7491.6 (\nu: 14.5)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014}$	$H(0.38)$	$83.6^{+1.2}_{-1.2}$	χ_{BAO}^2	$8.2 (\nu: 2.2)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 8550.26; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.54; R - 1 = 0.01140$$

19.43 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02217^{+0.00041}_{-0.00040}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.617^{+0.026}_{-0.026}$	$D_{\mathrm{M}}(0.38)$	1503^{+25}_{-26}
$\Omega_{\mathrm{c}} h^2$	$0.1205^{+0.0035}_{-0.0035}$	$\sigma_8/h^{0.5}$	$1.004^{+0.036}_{-0.037}$	$H(0.51)$	$89.9^{+1.0}_{-0.97}$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00087}_{-0.00090}$	$r_{\mathrm{drag}} h$	$102.0^{+2.2}_{-2.2}$	$D_{\mathrm{M}}(0.51)$	1953^{+30}_{-31}
τ	$0.054^{+0.013}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.469^{+0.080}_{-0.081}$	$H(0.61)$	$95.18^{+0.87}_{-0.83}$
w_0	$-0.99^{+0.17}_{-0.16}$	z_{re}	< 8.83	$D_{\mathrm{M}}(0.61)$	2277^{+32}_{-33}
w_{a}	$-0.33^{+0.70}_{-0.74}$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.059}_{-0.053}$	$H(2.33)$	$234.8^{+1.9}_{-1.9}$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.028}_{-0.026}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.026}_{-0.025}$	$D_{\mathrm{M}}(2.33)$	5760^{+25}_{-25}
n_{s}	$0.964^{+0.010}_{-0.010}$	D_{40}	1229^{+28}_{-27}	$f\sigma_8(0.15)$	$0.464^{+0.021}_{-0.022}$
y_{cal}	$1.0004^{+0.0049}_{-0.0049}$	D_{220}	5706^{+80}_{-80}	$\sigma_8(0.15)$	$0.773^{+0.031}_{-0.031}$
A_{100}^{PS}	241^{+50}_{-50}	D_{810}	2534^{+27}_{-27}	$f\sigma_8(0.38)$	$0.490^{+0.025}_{-0.025}$
A_{143}^{PS}	40^{+20}_{-20}	D_{1420}	814^{+10}_{-10}	$\sigma_8(0.38)$	$0.686^{+0.027}_{-0.027}$
A_{217}^{PS}	101^{+30}_{-30}	D_{2000}	$229.8^{+3.6}_{-3.5}$	$f\sigma_8(0.51)$	$0.491^{+0.026}_{-0.026}$
A_{217}^{CIB}	41^{+10}_{-10}	$n_{\mathrm{s},0.002}$	$0.964^{+0.010}_{-0.010}$	$\sigma_8(0.51)$	$0.642^{+0.025}_{-0.025}$
A_{143}^{tSZ}	< 7.41	Y_{P}	$0.24531^{+0.00016}_{-0.00019}$	$f\sigma_8(0.61)$	$0.488^{+0.027}_{-0.026}$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24664^{+0.00016}_{-0.00019}$	$\sigma_8(0.61)$	$0.611^{+0.023}_{-0.024}$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.624^{+0.077}_{-0.075}$	$f\sigma_8(2.33)$	$0.308^{+0.011}_{-0.012}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.754^{+0.067}_{-0.065}$	$\sigma_8(2.33)$	$0.3147^{+0.0087}_{-0.0090}$
A^{kSZ}	—	z_*	$1090.21^{+0.70}_{-0.71}$	f_{2000}^{143}	30^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.47^{+0.83}_{-0.82}$	f_{2000}^{217}	$107.3^{+3.9}_{-3.9}$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	$100\theta_*$	$1.04110^{+0.00086}_{-0.00089}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.876^{+0.078}_{-0.077}$	χ_{simall}^2	$396.8 (\nu: 1.3)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.51^{+0.88}_{-0.87}$	χ_{lowl}^2	$23.4 (\nu: 0.6)$
c_{100}	$0.9975^{+0.0021}_{-0.0020}$	r_{drag}	$147.19^{+0.84}_{-0.83}$	$\chi_{\mathrm{CamSpec}}^2$	$7062.3 (\nu: 13.9)$
c_{217}	$1.0012^{+0.0031}_{-0.0031}$	k_{D}	$0.14060^{+0.00096}_{-0.00097}$	$\chi_{\mathrm{H073p45}}^2$	$6.6 (\nu: 2.7)$
H_0	$69.3^{+1.5}_{-1.5}$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00050}_{-0.00050}$	χ_{JLA}^2	$1036.3 (\nu: 1.5)$
Ω_{Λ}	$0.701^{+0.014}_{-0.014}$	z_{eq}	3408^{+80}_{-80}	$\chi_{6\mathrm{DF}}^2$	$0.14 (\nu: 0.0)$
Ω_{m}	$0.299^{+0.014}_{-0.014}$	k_{eq}	$0.01040^{+0.00025}_{-0.00024}$	χ_{MGS}^2	$2.70 (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1433^{+0.0034}_{-0.0033}$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.015}_{-0.015}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.4 (\nu: 1.0)$
$\Omega_{\mathrm{m}} h^3$	$0.0992^{+0.0033}_{-0.0033}$	$100\theta_{\mathrm{s,eq}}$	$0.4487^{+0.0078}_{-0.0076}$	χ_{prior}^2	$7.6 (\nu: 5.9)$
σ_8	$0.835^{+0.033}_{-0.034}$	$H(0.15)$	$74.3^{+1.5}_{-1.4}$	χ_{BAO}^2	$8.2 (\nu: 2.2)$
S_8	$0.833^{+0.039}_{-0.039}$	$D_{\mathrm{M}}(0.15)$	627^{+12}_{-12}	χ_{CMB}^2	$7482.5 (\nu: 14.0)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.021}_{-0.021}$	$H(0.38)$	$83.6^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 8541.22; R - 1 = 0.00801$$

19.44 base_w_wa_CamSpecHM_TT_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02220^{+0.00039}_{-0.00039}$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.614^{+0.017}_{-0.017}$	$D_{\mathrm{M}}(0.38)$	1504^{+25}_{-25}
$\Omega_{\mathrm{c}} h^2$	$0.1200^{+0.0025}_{-0.0026}$	$\sigma_8/h^{0.5}$	$0.998^{+0.024}_{-0.024}$	$H(0.51)$	$89.9^{+1.0}_{-0.99}$
$100\theta_{\mathrm{MC}}$	$1.04093^{+0.00085}_{-0.00087}$	$r_{\mathrm{drag}} h$	$102.0^{+2.2}_{-2.2}$	$D_{\mathrm{M}}(0.51)$	1954^{+29}_{-30}
τ	$0.054^{+0.012}_{-0.011}$	$\langle d^2 \rangle^{1/2}$	$2.458^{+0.051}_{-0.053}$	$H(0.61)$	$95.25^{+0.86}_{-0.84}$
w_0	$-1.00^{+0.16}_{-0.15}$	z_{re}	< 8.78	$D_{\mathrm{M}}(0.61)$	2278^{+32}_{-32}
w_{a}	$-0.27^{+0.61}_{-0.63}$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.054}_{-0.048}$	$H(2.33)$	$234.7^{+2.0}_{-1.9}$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.025}_{-0.023}$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.021}_{-0.021}$	$D_{\mathrm{M}}(2.33)$	5759^{+25}_{-25}
n_{s}	$0.9649^{+0.0086}_{-0.0087}$	D_{40}	1227^{+24}_{-23}	$f\sigma_8(0.15)$	$0.461^{+0.015}_{-0.016}$
y_{cal}	$1.0004^{+0.0048}_{-0.0049}$	D_{220}	5708^{+80}_{-80}	$\sigma_8(0.15)$	$0.769^{+0.022}_{-0.022}$
A_{100}^{PS}	242^{+50}_{-50}	D_{810}	2533^{+26}_{-26}	$f\sigma_8(0.38)$	$0.486^{+0.018}_{-0.018}$
A_{143}^{PS}	40^{+20}_{-20}	D_{1420}	814^{+10}_{-10}	$\sigma_8(0.38)$	$0.682^{+0.019}_{-0.020}$
A_{217}^{PS}	101^{+30}_{-30}	D_{2000}	$229.8^{+3.5}_{-3.5}$	$f\sigma_8(0.51)$	$0.488^{+0.019}_{-0.019}$
A_{217}^{CIB}	41^{+10}_{-10}	$n_{\mathrm{s},0.002}$	$0.9649^{+0.0086}_{-0.0087}$	$\sigma_8(0.51)$	$0.639^{+0.018}_{-0.018}$
A_{143}^{tSZ}	< 7.50	Y_{P}	$0.24532^{+0.00015}_{-0.00018}$	$f\sigma_8(0.61)$	$0.484^{+0.019}_{-0.019}$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24665^{+0.00016}_{-0.00018}$	$\sigma_8(0.61)$	$0.608^{+0.017}_{-0.017}$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$10^5 \mathrm{D}/\mathrm{H}$	$2.619^{+0.076}_{-0.072}$	$f\sigma_8(2.33)$	$0.3069^{+0.0086}_{-0.0090}$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.756^{+0.065}_{-0.064}$	$\sigma_8(2.33)$	$0.3137^{+0.0068}_{-0.0067}$
A^{kSZ}	—	z_*	$1090.14^{+0.61}_{-0.61}$	f_{2000}^{143}	31^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.57^{+0.65}_{-0.62}$	f_{2000}^{217}	$107.3^{+3.9}_{-3.9}$
A_{143}^{dust}	$0.98^{+0.35}_{-0.35}$	$100\theta_*$	$1.04113^{+0.00084}_{-0.00086}$	$f_{2000}^{143 \times 217}$	33^{+4}_{-4}
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.886^{+0.062}_{-0.059}$	$\chi_{\mathrm{lensing}}^2$	$9.36 (\nu: 0.5)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.53^{+0.86}_{-0.89}$	χ_{simall}^2	$396.7 (\nu: 1.1)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	r_{drag}	$147.30^{+0.68}_{-0.66}$	χ_{lowl}^2	$23.19 (\nu: 0.4)$
c_{217}	$1.0012^{+0.0031}_{-0.0031}$	k_{D}	$0.14052^{+0.00085}_{-0.00086}$	$\chi_{\mathrm{CamSpec}}^2$	$7062.2 (\nu: 13.1)$
H_0	$69.3^{+1.5}_{-1.5}$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00051}_{-0.00050}$	$\chi_{\mathrm{H073p45}}^2$	$6.6 (\nu: 2.7)$
Ω_{Λ}	$0.702^{+0.013}_{-0.014}$	z_{eq}	3397^{+58}_{-60}	χ_{JLA}^2	$1036.2 (\nu: 1.4)$
Ω_{m}	$0.298^{+0.014}_{-0.013}$	k_{eq}	$0.01037^{+0.00018}_{-0.00018}$	$\chi_{6\mathrm{DF}}^2$	$0.14 (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1428^{+0.0024}_{-0.0025}$	$100\theta_{\mathrm{eq}}$	$0.814^{+0.011}_{-0.011}$	χ_{MGS}^2	$2.71 (\nu: 0.3)$
$\Omega_{\mathrm{m}} h^3$	$0.0989^{+0.0028}_{-0.0027}$	$100\theta_{\mathrm{s,eq}}$	$0.4498^{+0.0057}_{-0.0055}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.3 (\nu: 1.0)$
σ_8	$0.831^{+0.023}_{-0.024}$	$H(0.15)$	$74.3^{+1.4}_{-1.3}$	χ_{prior}^2	$7.6 (\nu: 5.8)$
S_8	$0.828^{+0.025}_{-0.026}$	$D_{\mathrm{M}}(0.15)$	628^{+12}_{-12}	χ_{CMB}^2	$7491.4 (\nu: 14.1)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.014}_{-0.014}$	$H(0.38)$	$83.6^{+1.3}_{-1.2}$	χ_{BAO}^2	$8.1 (\nu: 2.1)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 8549.95; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -2.78; R - 1 = 0.01139$$

19.45 base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022321	$0.02231^{+0.00030}_{-0.00030}$	$\sigma_8 \Omega_m^{0.5}$	0.4501	$0.451^{+0.016}_{-0.016}$	$D_M(0.38)$	1503.4	1504^{+25}_{-25}
$\Omega_c h^2$	0.11954	$0.1197^{+0.0025}_{-0.0025}$	$\sigma_8 \Omega_m^{0.25}$	0.6100	$0.610^{+0.019}_{-0.019}$	$H(0.51)$	90.02	$90.01^{+0.97}_{-0.98}$
$100\theta_{MC}$	1.04091	$1.04089^{+0.00061}_{-0.00059}$	$\sigma_8/h^{0.5}$	0.9928	$0.993^{+0.028}_{-0.028}$	$D_M(0.51)$	1952.7	1953^{+30}_{-30}
τ	0.0528	$0.052^{+0.015}_{-0.015}$	$r_{drag}h$	102.09	$102.0^{+2.2}_{-2.2}$	$H(0.61)$	95.37	$95.34^{+0.79}_{-0.80}$
w_0	-1.010	$-1.00^{+0.16}_{-0.15}$	$\langle d^2 \rangle^{1/2}$	2.446	$2.448^{+0.064}_{-0.064}$	$D_M(0.61)$	2276.3	2277^{+33}_{-32}
w_a	-0.20	$-0.24^{+0.60}_{-0.64}$	z_{re}	7.51	$7.5^{+1.5}_{-1.6}$	$H(2.33)$	234.70	$234.8^{+1.9}_{-1.8}$
$\ln(10^{10} A_s)$	3.0385	$3.038^{+0.032}_{-0.032}$	$10^9 A_s$	2.087	$2.087^{+0.067}_{-0.065}$	$D_M(2.33)$	5753.5	5755^{+21}_{-20}
n_s	0.9666	$0.9658^{+0.0084}_{-0.0084}$	$10^9 A_s e^{-2\tau}$	1.8782	$1.879^{+0.022}_{-0.022}$	$f\sigma_8(0.15)$	0.4582	$0.458^{+0.016}_{-0.016}$
y_{cal}	1.00031	$1.0004^{+0.0050}_{-0.0048}$	D_{40}	1223.5	1225^{+25}_{-24}	$\sigma_8(0.15)$	0.7652	$0.765^{+0.025}_{-0.025}$
A_{100}^{PS}	232.2	239^{+50}_{-50}	D_{220}	5717	5719^{+76}_{-76}	$f\sigma_8(0.38)$	0.4829	$0.483^{+0.019}_{-0.019}$
A_{143}^{PS}	42.0	39^{+20}_{-20}	D_{810}	2535.0	2535^{+27}_{-26}	$\sigma_8(0.38)$	0.6793	$0.679^{+0.022}_{-0.023}$
A_{217}^{PS}	103.0	103^{+30}_{-30}	D_{1420}	816.0	$815.6^{+9.6}_{-9.4}$	$f\sigma_8(0.51)$	0.4842	$0.484^{+0.020}_{-0.020}$
A_{217}^{CIB}	43.7	40^{+10}_{-10}	D_{2000}	230.48	$230.3^{+3.2}_{-3.2}$	$\sigma_8(0.51)$	0.6359	$0.636^{+0.020}_{-0.021}$
A_{143}^{tSZ}	6.62	< 7.46	$n_{s,0.002}$	0.9666	$0.9658^{+0.0084}_{-0.0084}$	$f\sigma_8(0.61)$	0.4806	$0.481^{+0.020}_{-0.020}$
$r_{143 \times 217}^{PS}$	0.642	$0.66^{+0.25}_{-0.25}$	Y_P	0.245376	$0.24537^{+0.00012}_{-0.00012}$	$\sigma_8(0.61)$	0.6051	$0.605^{+0.019}_{-0.020}$
$r_{143 \times 217}^{CIB}$	0.79	—	Y_P^{BBN}	0.246702	$0.24670^{+0.00012}_{-0.00012}$	$f\sigma_8(2.33)$	0.3057	$0.3055^{+0.0098}_{-0.011}$
$\xi^{tSZ \times CIB}$	0.28	—	$10^5 D/H$	2.595	$2.597^{+0.056}_{-0.055}$	$\sigma_8(2.33)$	0.3129	$0.3126^{+0.0079}_{-0.0082}$
A^{kSZ}	0.0	—	Age/Gyr	13.748	$13.749^{+0.061}_{-0.058}$	f_{2000}^{143}	29.7	30^{+6}_{-6}
A_{100}^{dust}	1.006	$1.01^{+0.39}_{-0.38}$	z_*	1089.94	$1089.96^{+0.52}_{-0.53}$	f_{2000}^{217}	106.53	$106.8^{+3.8}_{-3.8}$
A_{143}^{dust}	0.972	$0.96^{+0.34}_{-0.34}$	r_*	144.59	$144.56^{+0.57}_{-0.58}$	$f_{2000}^{143 \times 217}$	31.92	32^{+4}_{-4}
A_{217}^{dust}	0.972	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	1.04109	$1.04108^{+0.00060}_{-0.00059}$	χ_{small}^2	395.84	$396.8 (\nu: 1.2)$
$A_{143 \times 217}^{dust}$	1.011	$1.03^{+0.32}_{-0.32}$	$D_M(z_*)/\text{Gpc}$	13.888	$13.886^{+0.053}_{-0.054}$	χ_{lowl}^2	22.83	$23.03 (\nu: 0.4)$
c_{100}	0.99770	$0.9975^{+0.0021}_{-0.0021}$	z_{drag}	1059.78	$1059.78^{+0.65}_{-0.65}$	$\chi_{CamSpec}^2$	11499.2	$11514.1 (\nu: 15.6)$
c_{217}	1.00127	$1.0011^{+0.0031}_{-0.0030}$	r_{drag}	147.27	$147.24^{+0.58}_{-0.59}$	$\chi_{H073p45}^2$	6.18	$6.6 (\nu: 2.7)$
c_{TE}	0.9962	$0.9963^{+0.0096}_{-0.0096}$	k_D	0.14064	$0.14066^{+0.00067}_{-0.00067}$	χ_{JLA}^2	1035.34	$1036.1 (\nu: 1.3)$
c_{EE}	0.9916	$0.9917^{+0.0098}_{-0.0096}$	$100\theta_D$	0.160838	$0.16085^{+0.00037}_{-0.00037}$	χ_{6DF}^2	0.098	$0.14 (\nu: 0.0)$
H_0	69.32	$69.3^{+1.5}_{-1.5}$	z_{eq}	3390	3393^{+57}_{-56}	χ_{MGS}^2	2.67	$2.70 (\nu: 0.3)$
Ω_Λ	0.7035	$0.703^{+0.013}_{-0.014}$	k_{eq}	0.010347	$0.01036^{+0.00017}_{-0.00017}$	$\chi_{DR12BAO}^2$	4.36	$5.2 (\nu: 0.9)$
Ω_m	0.2965	$0.297^{+0.014}_{-0.013}$	$100\theta_{eq}$	0.8153	$0.815^{+0.011}_{-0.011}$	χ_{prior}^2	2.1	$7.8 (\nu: 5.7)$
$\Omega_m h^2$	0.14251	$0.1426^{+0.0024}_{-0.0024}$	$100\theta_{s,eq}$	0.4505	$0.4502^{+0.0055}_{-0.0055}$	χ_{BAO}^2	7.13	$8.0 (\nu: 2.1)$
$\Omega_m h^3$	0.09879	$0.0988^{+0.0027}_{-0.0027}$	$H(0.15)$	74.27	$74.3^{+1.4}_{-1.4}$	χ_{CMB}^2	11917.9	$11933.9 (\nu: 16.1)$
σ_8	0.8266	$0.827^{+0.026}_{-0.027}$	$D_M(0.15)$	627.2	628^{+12}_{-12}			
S_8	0.8218	$0.823^{+0.029}_{-0.029}$	$H(0.38)$	83.69	$83.7^{+1.2}_{-1.2}$			

Best-fit $\chi_{eff}^2 = 12968.70$; $\bar{\chi}_{eff}^2 = 12992.43$; $R - 1 = 0.01047$

χ_{eff}^2 : BAO - 6DF: 0.10 MGS: 2.67 DR12BAO: 4.36 CMB - small_100x143.offlike5_EE_Aplanck_B: 395.84 commander_dx12_v3_2_29: 22.83 CamSpec like_10.7HM_1400_unified: 11499.24 Hubble - H073p45: 6.18 SN - JLA Pantheon18: 1035.34

19.46 base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02232^{+0.00029}_{-0.00029}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.38)$	1503^{+25}_{-25}
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0021}_{-0.0021}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.014}_{-0.015}$	$H(0.51)$	$90.03^{+0.96}_{-0.98}$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00060}_{-0.00058}$	$\sigma_8/h^{0.5}$	$0.993^{+0.021}_{-0.021}$	$D_{\mathrm{M}}(0.51)$	1952^{+30}_{-30}
τ	$0.053^{+0.014}_{-0.014}$	$r_{\mathrm{drag}}h$	$102.0^{+2.2}_{-2.2}$	$H(0.61)$	$95.37^{+0.78}_{-0.79}$
w_0	$-1.00^{+0.15}_{-0.15}$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.047}_{-0.047}$	$D_{\mathrm{M}}(0.61)$	2276^{+32}_{-32}
w_{a}	$-0.24^{+0.57}_{-0.60}$	z_{re}	$7.5^{+1.4}_{-1.5}$	$H(2.33)$	$234.7^{+1.9}_{-1.8}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.038^{+0.028}_{-0.028}$	$10^9 A_{\mathrm{s}}$	$2.087^{+0.060}_{-0.058}$	$D_{\mathrm{M}}(2.33)$	5754^{+21}_{-20}
n_{s}	$0.9657^{+0.0080}_{-0.0079}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.021}_{-0.021}$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013}$
y_{cal}	$1.0004^{+0.0050}_{-0.0048}$	D_{40}	1226^{+23}_{-23}	$\sigma_8(0.15)$	$0.765^{+0.020}_{-0.020}$
A_{100}^{PS}	240^{+50}_{-50}	D_{220}	5721^{+75}_{-75}	$f\sigma_8(0.38)$	$0.483^{+0.016}_{-0.016}$
A_{143}^{PS}	39^{+20}_{-20}	D_{810}	2535^{+26}_{-25}	$\sigma_8(0.38)$	$0.679^{+0.018}_{-0.018}$
A_{217}^{PS}	103^{+30}_{-30}	D_{1420}	$815.6^{+9.6}_{-9.3}$	$f\sigma_8(0.51)$	$0.484^{+0.016}_{-0.016}$
A_{217}^{CIB}	40^{+10}_{-10}	D_{2000}	$230.3^{+3.2}_{-3.1}$	$\sigma_8(0.51)$	$0.636^{+0.017}_{-0.017}$
A_{143}^{tSZ}	< 7.38	$n_{\mathrm{s},0.002}$	$0.9657^{+0.0080}_{-0.0079}$	$f\sigma_8(0.61)$	$0.481^{+0.016}_{-0.016}$
$r_{143\times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	Y_{P}	$0.24537^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	$0.605^{+0.016}_{-0.016}$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012}$	$f\sigma_8(2.33)$	$0.3057^{+0.0082}_{-0.0086}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.596^{+0.054}_{-0.054}$	$\sigma_8(2.33)$	$0.3127^{+0.0067}_{-0.0068}$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.748^{+0.060}_{-0.056}$	f_{2000}^{143}	30^{+6}_{-5}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.96^{+0.48}_{-0.49}$	f_{2000}^{217}	$106.8^{+3.7}_{-3.8}$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$144.57^{+0.50}_{-0.49}$	$f_{2000}^{143\times 217}$	32^{+4}_{-4}
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04108^{+0.00060}_{-0.00058}$	$\chi_{\mathrm{lensing}}^2$	$9.13\,(\nu: 0.2)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.886^{+0.047}_{-0.047}$	χ_{simall}^2	$396.7\,(\nu: 1.0)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	z_{drag}	$1059.79^{+0.60}_{-0.62}$	χ_{lowl}^2	$23.05\,(\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0030}$	r_{drag}	$147.25^{+0.52}_{-0.51}$	$\chi_{\mathrm{CamSpec}}^2$	$11513.7\,(\nu: 15.0)$
c_{TE}	$0.9962^{+0.0096}_{-0.0098}$	k_{D}	$0.14066^{+0.00062}_{-0.00062}$	$\chi_{\mathrm{H073p45}}^2$	$6.5\,(\nu: 2.7)$
c_{EE}	$0.9918^{+0.0097}_{-0.0096}$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00037}$	χ_{JLA}^2	$1036.1\,(\nu: 1.3)$
H_0	$69.3^{+1.5}_{-1.5}$	z_{eq}	3392^{+48}_{-48}	$\chi_{6\mathrm{DF}}^2$	$0.14\,(\nu: 0.0)$
Ω_{Λ}	$0.703^{+0.013}_{-0.013}$	k_{eq}	$0.01035^{+0.00015}_{-0.00015}$	χ_{MGS}^2	$2.73\,(\nu: 0.3)$
Ω_{m}	$0.297^{+0.013}_{-0.013}$	$100\theta_{\mathrm{eq}}$	$0.8150^{+0.0091}_{-0.0090}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.2\,(\nu: 1.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0020}_{-0.0020}$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0047}_{-0.0046}$	χ_{prior}^2	$7.8\,(\nu: 5.7)$
$\Omega_{\mathrm{m}}h^3$	$0.0988^{+0.0025}_{-0.0026}$	$H(0.15)$	$74.3^{+1.4}_{-1.3}$	χ_{CMB}^2	$11942.6\,(\nu: 16.3)$
σ_8	$0.827^{+0.021}_{-0.022}$	$D_{\mathrm{M}}(0.15)$	627^{+12}_{-11}	χ_{BAO}^2	$8.1\,(\nu: 2.2)$
S_8	$0.823^{+0.022}_{-0.022}$	$H(0.38)$	$83.7^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 13001.06; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.57; R - 1 = 0.01205$$

19.47 base_w_wa_CamSpecHM_TTTEEE_lowl_lowE_BAO_Riess18_Pantheon18_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02232^{+0.00031}_{-0.00029}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.016}_{-0.015}$	$D_{\mathrm{M}}(0.38)$	1504^{+25}_{-25}
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0025}_{-0.0025}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.019}_{-0.019}$	$H(0.51)$	$90.01^{+0.96}_{-0.98}$
$100\theta_{\mathrm{MC}}$	$1.04090^{+0.00061}_{-0.00059}$	$\sigma_8/h^{0.5}$	$0.994^{+0.028}_{-0.027}$	$D_{\mathrm{M}}(0.51)$	1953^{+30}_{-30}
τ	$0.054^{+0.012}_{-0.011}$	$r_{\mathrm{drag}}h$	$102.0^{+2.2}_{-2.2}$	$H(0.61)$	$95.35^{+0.78}_{-0.79}$
w_0	$-1.00^{+0.16}_{-0.15}$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.062}_{-0.063}$	$D_{\mathrm{M}}(0.61)$	2277^{+33}_{-32}
w_{a}	$-0.23^{+0.60}_{-0.63}$	z_{re}	< 8.77	$H(2.33)$	$234.8^{+1.9}_{-1.8}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.027}_{-0.025}$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.057}_{-0.052}$	$D_{\mathrm{M}}(2.33)$	5755^{+21}_{-20}
n_{s}	$0.9660^{+0.0084}_{-0.0084}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.022}_{-0.022}$	$f\sigma_8(0.15)$	$0.459^{+0.016}_{-0.016}$
y_{cal}	$1.0004^{+0.0050}_{-0.0048}$	D_{40}	1226^{+25}_{-24}	$\sigma_8(0.15)$	$0.766^{+0.024}_{-0.025}$
A_{100}^{PS}	239^{+50}_{-50}	D_{220}	5719^{+76}_{-76}	$f\sigma_8(0.38)$	$0.484^{+0.019}_{-0.019}$
A_{143}^{PS}	39^{+20}_{-20}	D_{810}	2535^{+27}_{-26}	$\sigma_8(0.38)$	$0.680^{+0.022}_{-0.022}$
A_{217}^{PS}	103^{+30}_{-30}	D_{1420}	$815.6^{+9.6}_{-9.4}$	$f\sigma_8(0.51)$	$0.485^{+0.020}_{-0.020}$
A_{217}^{CIB}	39^{+10}_{-10}	D_{2000}	$230.4^{+3.2}_{-3.1}$	$\sigma_8(0.51)$	$0.637^{+0.020}_{-0.021}$
A_{143}^{tSZ}	< 7.47	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0084}_{-0.0084}$	$f\sigma_8(0.61)$	$0.481^{+0.020}_{-0.020}$
$r_{143\times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	Y_{P}	$0.24537^{+0.00012}_{-0.00012}$	$\sigma_8(0.61)$	$0.606^{+0.019}_{-0.020}$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00012}_{-0.00012}$	$f\sigma_8(2.33)$	$0.3059^{+0.0096}_{-0.010}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.596^{+0.056}_{-0.055}$	$\sigma_8(2.33)$	$0.3131^{+0.0077}_{-0.0078}$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.749^{+0.062}_{-0.058}$	f_{2000}^{143}	30^{+6}_{-5}
A_{100}^{dust}	$1.01^{+0.39}_{-0.38}$	z_*	$1089.95^{+0.51}_{-0.52}$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8}$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$144.57^{+0.57}_{-0.58}$	$f_{2000}^{143\times 217}$	32^{+4}_{-4}
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04109^{+0.00060}_{-0.00059}$	χ_{simall}^2	$396.7\ (\nu: 1.2)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.886^{+0.054}_{-0.054}$	χ_{lowl}^2	$23.04\ (\nu: 0.4)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	z_{drag}	$1059.79^{+0.64}_{-0.62}$	$\chi_{\mathrm{CamSpec}}^2$	$11513.9\ (\nu: 15.5)$
c_{217}	$1.0011^{+0.0031}_{-0.0030}$	r_{drag}	$147.25^{+0.58}_{-0.59}$	$\chi_{\mathrm{H073p45}}^2$	$6.6\ (\nu: 2.7)$
c_{TE}	$0.9961^{+0.0096}_{-0.0095}$	k_{D}	$0.14066^{+0.00067}_{-0.00067}$	χ_{JLA}^2	$1036.1\ (\nu: 1.3)$
c_{EE}	$0.9916^{+0.0098}_{-0.0096}$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00037}$	$\chi_{6\mathrm{DF}}^2$	$0.14\ (\nu: 0.0)$
H_0	$69.3^{+1.5}_{-1.5}$	z_{eq}	3392^{+57}_{-56}	χ_{MGS}^2	$2.70\ (\nu: 0.3)$
Ω_{Λ}	$0.703^{+0.013}_{-0.014}$	k_{eq}	$0.01035^{+0.00017}_{-0.00017}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.1\ (\nu: 0.9)$
Ω_{m}	$0.297^{+0.014}_{-0.013}$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.011}$	χ_{prior}^2	$7.8\ (\nu: 5.7)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0024}_{-0.0024}$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0055}_{-0.0055}$	χ_{BAO}^2	$8.0\ (\nu: 2.1)$
$\Omega_{\mathrm{m}}h^3$	$0.0988^{+0.0027}_{-0.0027}$	$H(0.15)$	$74.3^{+1.4}_{-1.4}$	χ_{CMB}^2	$11933.7\ (\nu: 15.7)$
σ_8	$0.828^{+0.026}_{-0.027}$	$D_{\mathrm{M}}(0.15)$	628^{+12}_{-12}		
S_8	$0.824^{+0.029}_{-0.028}$	$H(0.38)$	$83.7^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 12992.15; R - 1 = 0.01047$$

19.48 base_w_wa_CamSpecHM_TTTEE_lowl_lowE_BAO_Riess18_Pantheon18_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02232^{+0.00030}_{-0.00028}$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.012}_{-0.012}$	$D_{\mathrm{M}}(0.38)$	1503^{+25}_{-25}
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0021}_{-0.0021}$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.014}_{-0.014}$	$H(0.51)$	$90.03^{+0.96}_{-0.98}$
$100\theta_{\mathrm{MC}}$	$1.04090^{+0.00060}_{-0.00058}$	$\sigma_8/h^{0.5}$	$0.994^{+0.020}_{-0.021}$	$D_{\mathrm{M}}(0.51)$	1952^{+30}_{-30}
τ	$0.054^{+0.012}_{-0.011}$	$r_{\mathrm{drag}}h$	$102.0^{+2.2}_{-2.2}$	$H(0.61)$	$95.37^{+0.78}_{-0.79}$
w_0	$-1.00^{+0.15}_{-0.15}$	$\langle d^2 \rangle^{1/2}$	$2.450^{+0.046}_{-0.047}$	$D_{\mathrm{M}}(0.61)$	2276^{+32}_{-32}
w_{a}	$-0.23^{+0.56}_{-0.59}$	z_{re}	< 8.70	$H(2.33)$	$234.7^{+1.9}_{-1.8}$
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.025}_{-0.023}$	$10^9 A_{\mathrm{s}}$	$2.093^{+0.052}_{-0.047}$	$D_{\mathrm{M}}(2.33)$	5754^{+21}_{-20}
n_{s}	$0.9660^{+0.0080}_{-0.0078}$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.020}_{-0.020}$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013}$
y_{cal}	$1.0004^{+0.0050}_{-0.0048}$	D_{40}	1226^{+23}_{-23}	$\sigma_8(0.15)$	$0.766^{+0.020}_{-0.020}$
A_{100}^{PS}	239^{+50}_{-50}	D_{220}	5721^{+75}_{-75}	$f\sigma_8(0.38)$	$0.483^{+0.016}_{-0.016}$
A_{143}^{PS}	39^{+20}_{-20}	D_{810}	2535^{+26}_{-25}	$\sigma_8(0.38)$	$0.680^{+0.018}_{-0.018}$
A_{217}^{PS}	102^{+30}_{-30}	D_{1420}	$815.6^{+9.6}_{-9.3}$	$f\sigma_8(0.51)$	$0.484^{+0.016}_{-0.016}$
A_{217}^{CIB}	40^{+10}_{-10}	D_{2000}	$230.3^{+3.2}_{-3.1}$	$\sigma_8(0.51)$	$0.636^{+0.017}_{-0.017}$
A_{143}^{tSZ}	< 7.40	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0080}_{-0.0078}$	$f\sigma_8(0.61)$	$0.481^{+0.016}_{-0.016}$
$r_{143\times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	Y_{P}	$0.24537^{+0.00011}_{-0.00012}$	$\sigma_8(0.61)$	$0.605^{+0.016}_{-0.016}$
$r_{143\times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.24670^{+0.00011}_{-0.00012}$	$f\sigma_8(2.33)$	$0.3059^{+0.0081}_{-0.0085}$
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	—	$10^5\mathrm{D}/\mathrm{H}$	$2.595^{+0.054}_{-0.054}$	$\sigma_8(2.33)$	$0.3130^{+0.0066}_{-0.0065}$
A^{kSZ}	—	$\mathrm{Age}/\mathrm{Gyr}$	$13.748^{+0.060}_{-0.057}$	f_{2000}^{143}	30^{+6}_{-6}
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	z_*	$1089.94^{+0.47}_{-0.48}$	f_{2000}^{217}	$106.7^{+3.7}_{-3.9}$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	r_*	$144.58^{+0.50}_{-0.49}$	$f_{2000}^{143\times 217}$	32^{+4}_{-4}
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	$100\theta_*$	$1.04109^{+0.00060}_{-0.00058}$	$\chi_{\mathrm{lensing}}^2$	$9.10\,(\nu: 0.2)$
$A_{143\times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.047}_{-0.047}$	χ_{simall}^2	$396.6\,(\nu: 1.0)$
c_{100}	$0.9975^{+0.0021}_{-0.0021}$	z_{drag}	$1059.79^{+0.63}_{-0.62}$	χ_{lowl}^2	$23.04\,(\nu: 0.3)$
c_{217}	$1.0011^{+0.0031}_{-0.0030}$	r_{drag}	$147.26^{+0.51}_{-0.51}$	$\chi_{\mathrm{CamSpec}}^2$	$11513.6\,(\nu: 14.9)$
c_{TE}	$0.9961^{+0.0096}_{-0.0097}$	k_{D}	$0.14065^{+0.00062}_{-0.00062}$	$\chi_{\mathrm{H073p45}}^2$	$6.5\,(\nu: 2.7)$
c_{EE}	$0.9917^{+0.0097}_{-0.0096}$	$100\theta_{\mathrm{D}}$	$0.16084^{+0.00037}_{-0.00037}$	χ_{JLA}^2	$1036.1\,(\nu: 1.3)$
H_0	$69.3^{+1.5}_{-1.5}$	z_{eq}	3390^{+47}_{-47}	$\chi_{6\mathrm{DF}}^2$	$0.14\,(\nu: 0.0)$
Ω_{Λ}	$0.703^{+0.013}_{-0.013}$	k_{eq}	$0.01035^{+0.00014}_{-0.00014}$	χ_{MGS}^2	$2.73\,(\nu: 0.3)$
Ω_{m}	$0.297^{+0.013}_{-0.013}$	$100\theta_{\mathrm{eq}}$	$0.8153^{+0.0089}_{-0.0088}$	$\chi_{\mathrm{DR12BAO}}^2$	$5.2\,(\nu: 1.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1425^{+0.0020}_{-0.0020}$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0046}_{-0.0045}$	χ_{prior}^2	$7.8\,(\nu: 5.8)$
$\Omega_{\mathrm{m}}h^3$	$0.0987^{+0.0025}_{-0.0025}$	$H(0.15)$	$74.3^{+1.4}_{-1.3}$	χ_{CMB}^2	$11942.3\,(\nu: 15.9)$
σ_8	$0.827^{+0.021}_{-0.022}$	$D_{\mathrm{M}}(0.15)$	627^{+12}_{-11}	χ_{BAO}^2	$8.0\,(\nu: 2.2)$
S_8	$0.823^{+0.022}_{-0.022}$	$H(0.38)$	$83.7^{+1.2}_{-1.2}$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 13000.80; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -2.74; R - 1 = 0.01150$$

20 yhe

20.1 base_yhe_plikHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02210	$0.02212^{+0.00059}_{-0.00057}$	$\sigma_8 \Omega_m^{0.5}$	0.4596	$0.460^{+0.027}_{-0.026}$	$H(0.15)$	72.21	$72.3^{+1.9}_{-1.8}$
$\Omega_c h^2$	0.12062	$0.1206^{+0.0042}_{-0.0042}$	$\sigma_8 \Omega_m^{0.25}$	0.6106	$0.611^{+0.023}_{-0.023}$	$D_M(0.15)$	648.0	648^{+19}_{-19}
$100\theta_{MC}$	1.04067	$1.0408^{+0.0017}_{-0.0017}$	$\sigma_8/h^{0.5}$	0.9924	$0.992^{+0.031}_{-0.031}$	$H(0.38)$	82.48	$82.5^{+1.5}_{-1.4}$
τ	0.0518	$0.052^{+0.016}_{-0.016}$	$r_{drag} h$	98.40	$98.5^{+3.6}_{-3.5}$	$D_M(0.38)$	1543.1	1542^{+38}_{-38}
Y_P	0.2421	$0.246^{+0.039}_{-0.041}$	$\langle d^2 \rangle^{1/2}$	2.452	$2.453^{+0.084}_{-0.082}$	$H(0.51)$	89.28	$89.3^{+1.2}_{-1.1}$
$\ln(10^{10} A_s)$	3.0391	$3.040^{+0.035}_{-0.034}$	z_{re}	7.48	$7.5^{+1.6}_{-1.7}$	$D_M(0.51)$	1997.5	1996^{+45}_{-45}
n_s	0.9627	$0.963^{+0.021}_{-0.021}$	$10^9 A_s$	2.089	$2.091^{+0.074}_{-0.070}$	$H(0.61)$	94.97	$95.0^{+1.0}_{-0.97}$
y_{cal}	1.00043	$1.0004^{+0.0050}_{-0.0049}$	$10^9 A_s e^{-2\tau}$	1.8831	$1.885^{+0.031}_{-0.029}$	$D_M(0.61)$	2323.1	2322^{+48}_{-49}
A_{217}^{CIB}	48.2	48^{+10}_{-10}	D_{40}	1232.3	1233^{+43}_{-42}	$H(2.33)$	236.68	$236.7^{+2.5}_{-2.5}$
$\xi^{tSZ \times CIB}$	0.38	—	D_{220}	5709	5713^{+80}_{-82}	$D_M(2.33)$	5780	5777^{+49}_{-51}
A_{143}^{tSZ}	6.95	$5.0^{+3.9}_{-4.0}$	D_{810}	2537.4	2536^{+28}_{-27}	$f\sigma_8(0.15)$	0.4634	$0.463^{+0.024}_{-0.024}$
A_{100}^{PS}	254	264^{+60}_{-60}	D_{1420}	815.9	814^{+11}_{-10}	$\sigma_8(0.15)$	0.7487	$0.749^{+0.017}_{-0.016}$
A_{143}^{PS}	49.8	49^{+20}_{-20}	D_{2000}	230.27	$229.4^{+4.9}_{-4.8}$	$f\sigma_8(0.38)$	0.4797	$0.480^{+0.019}_{-0.019}$
$A_{143 \times 217}^{PS}$	48.3	43^{+20}_{-20}	$n_{s,0.002}$	0.9627	$0.963^{+0.021}_{-0.021}$	$\sigma_8(0.38)$	0.6627	$0.663^{+0.015}_{-0.014}$
A_{217}^{PS}	119.9	115^{+20}_{-20}	Y_P	0.2421	$0.246^{+0.039}_{-0.041}$	$f\sigma_8(0.51)$	0.4771	$0.477^{+0.016}_{-0.016}$
A^{kSZ}	0.0	—	Y_P^{BBN}	0.2434	$0.247^{+0.039}_{-0.041}$	$\sigma_8(0.51)$	0.6197	$0.620^{+0.014}_{-0.013}$
A_{100}^{dustTT}	8.89	$9.0^{+3.6}_{-3.6}$	Age/Gyr	13.835	$13.83^{+0.11}_{-0.11}$	$f\sigma_8(0.61)$	0.4714	$0.471^{+0.014}_{-0.014}$
A_{143}^{dustTT}	10.88	$10.7^{+3.6}_{-3.5}$	z_*	1090.18	$1090.3^{+1.3}_{-1.3}$	$\sigma_8(0.61)$	0.5894	$0.590^{+0.013}_{-0.013}$
$A_{143 \times 217}^{dustTT}$	19.4	$18.3^{+6.4}_{-6.5}$	r_*	144.49	$144.46^{+0.94}_{-0.93}$	$f\sigma_8(2.33)$	0.2968	$0.2970^{+0.0069}_{-0.0066}$
A_{217}^{dustTT}	94.7	93^{+10}_{-10}	$100\theta_*$	1.04096	$1.04099^{+0.00099}_{-0.00098}$	$\sigma_8(2.33)$	0.3056	$0.3059^{+0.0076}_{-0.0073}$
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$	$D_M(z_*)/\text{Gpc}$	13.880	$13.877^{+0.088}_{-0.087}$	f_{2000}^{143}	30.0	31^{+8}_{-8}
c_{217}	0.99823	$0.9983^{+0.0012}_{-0.0012}$	z_{drag}	1059.25	$1059.4^{+2.3}_{-2.3}$	$f_{2000}^{143 \times 217}$	33.0	34^{+6}_{-6}
H_0	66.83	$66.9^{+2.2}_{-2.1}$	r_{drag}	147.24	$147.21^{+0.98}_{-0.97}$	f_{2000}^{217}	107.5	$108.3^{+5.2}_{-5.1}$
Ω_Λ	0.6790	$0.679^{+0.028}_{-0.029}$	k_D	0.14064	$0.1405^{+0.0015}_{-0.0014}$	χ_{simall}^2	395.83	$396.9 (\nu: 1.4)$
Ω_m	0.3210	$0.321^{+0.029}_{-0.028}$	$100\theta_D$	0.16093	$0.1611^{+0.0015}_{-0.0015}$	χ_{lowl}^2	23.69	$24.0 (\nu: 2.1)$
$\Omega_m h^2$	0.14337	$0.1434^{+0.0040}_{-0.0039}$	z_{eq}	3411	3411^{+95}_{-94}	χ_{plik}^2	758.7	$772.2 (\nu: 16.6)$
$\Omega_m h^3$	0.09582	$0.0959^{+0.0015}_{-0.0015}$	k_{eq}	0.010410	$0.01041^{+0.00029}_{-0.00029}$	χ_{prior}^2	1.3	$7.3 (\nu: 6.8)$
σ_8	0.8113	$0.812^{+0.019}_{-0.018}$	$100\theta_{eq}$	0.8109	$0.811^{+0.018}_{-0.018}$	χ_{CMB}^2	1178.2	$1193.1 (\nu: 16.1)$
S_8	0.8392	$0.839^{+0.049}_{-0.047}$	$100\theta_{s,eq}$	0.4483	$0.4484^{+0.0094}_{-0.0091}$			

Best-fit $\chi_{eff}^2 = 1179.56$; $\Delta\chi_{eff}^2 = -0.01$; $\bar{\chi}_{eff}^2 = 1200.43$; $\Delta\bar{\chi}_{eff}^2 = 0.85$; $R - 1 = 0.00562$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.83 (Δ -0.04) commander_dx12_v3_2_29: 23.69 (Δ 0.09) plik_rd12_HM_v22_TT: 758.72 (Δ -0.02)

20.2 base_yhe_plikHM_TT_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022249	$0.02227^{+0.00049}_{-0.00048}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6030	$0.603^{+0.017}_{-0.016}$ (−0.6 σ)	$H(0.38)$	83.02	$83.07^{+0.87}_{-0.85}$ (+0.7 σ)
$\Omega_c h^2$	0.11890	$0.1190^{+0.0024}_{-0.0024}$ (−0.7 σ)	$\sigma_8/h^{0.5}$	0.9827	$0.983^{+0.024}_{-0.023}$ (−0.6 σ)	$D_M(0.38)$	1528.1	1527^{+21}_{-21} (−0.8 σ)
$100\theta_{MC}$	1.04108	$1.0413^{+0.0015}_{-0.0014}$ (+0.5 σ)	$r_{drag}h$	99.86	$99.9^{+1.9}_{-1.9}$ (+0.8 σ)	$H(0.51)$	89.72	$89.76^{+0.77}_{-0.74}$ (+0.7 σ)
τ	0.0545	$0.054^{+0.016}_{-0.015}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.425	$2.424^{+0.058}_{-0.055}$ (−0.7 σ)	$D_M(0.51)$	1979.9	1979^{+26}_{-26} (−0.7 σ)
Y_P	0.2484	$0.253^{+0.036}_{-0.037}$ (+0.4 σ)	z_{re}	7.73	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$H(0.61)$	95.31	$95.37^{+0.70}_{-0.67}$ (+0.7 σ)
$\ln(10^{10} A_s)$	3.0423	$3.042^{+0.035}_{-0.032}$ (+0.1 σ)	$10^9 A_s$	2.095	$2.095^{+0.075}_{-0.067}$ (+0.1 σ)	$D_M(0.61)$	2304.2	2303^{+28}_{-28} (−0.7 σ)
n_s	0.9688	$0.969^{+0.016}_{-0.016}$ (+0.6 σ)	$10^9 A_s e^{-2\tau}$	1.8788	$1.881^{+0.029}_{-0.028}$ (−0.2 σ)	$H(2.33)$	235.73	$235.8^{+1.6}_{-1.6}$ (−0.7 σ)
y_{cal}	1.00048	$1.0005^{+0.0050}_{-0.0048}$ (+0.0 σ)	D_{40}	1221.0	1221^{+34}_{-32} (−0.6 σ)	$D_M(2.33)$	5764.1	5761^{+36}_{-37} (−0.6 σ)
A_{217}^{CIB}	49.2	49^{+10}_{-10} (+0.1 σ)	D_{220}	5716	5720^{+79}_{-79} (+0.2 σ)	$f\sigma_8(0.15)$	0.4545	$0.455^{+0.016}_{-0.015}$ (−0.7 σ)
$\xi^{tSZ \times CIB}$	0.24	—	D_{810}	2537.3	2537^{+28}_{-27} (+0.0 σ)	$\sigma_8(0.15)$	0.7473	$0.748^{+0.017}_{-0.016}$ (−0.2 σ)
A_{143}^{tSZ}	7.03	$4.9^{+4.0}_{-3.9}$ (−0.1 σ)	D_{1420}	816.0	815^{+11}_{-10} (+0.0 σ)	$f\sigma_8(0.38)$	0.4732	$0.473^{+0.013}_{-0.013}$ (−0.6 σ)
A_{100}^{PS}	256	267^{+60}_{-50} (+0.1 σ)	D_{2000}	230.00	$229.1^{+4.7}_{-4.7}$ (−0.1 σ)	$\sigma_8(0.38)$	0.6627	$0.663^{+0.015}_{-0.014}$ (−0.0 σ)
A_{143}^{PS}	49.1	50^{+20}_{-20} (+0.1 σ)	$n_{s,0.002}$	0.9688	$0.969^{+0.016}_{-0.016}$ (+0.6 σ)	$f\sigma_8(0.51)$	0.4721	$0.472^{+0.012}_{-0.012}$ (−0.6 σ)
$A_{143 \times 217}^{PS}$	45.0	44^{+20}_{-20} (+0.0 σ)	Y_P	0.2484	$0.253^{+0.036}_{-0.037}$ (+0.4 σ)	$\sigma_8(0.51)$	0.6202	$0.621^{+0.014}_{-0.013}$ (+0.1 σ)
A_{217}^{PS}	118.6	115^{+20}_{-20} (−0.0 σ)	Y_P^{BBN}	0.2498	$0.255^{+0.036}_{-0.037}$ (+0.4 σ)	$f\sigma_8(0.61)$	0.4673	$0.468^{+0.012}_{-0.011}$ (−0.5 σ)
A^{kSZ}	0.0	—	Age/Gyr	13.800	$13.793^{+0.084}_{-0.085}$ (−0.6 σ)	$\sigma_8(0.61)$	0.5902	$0.591^{+0.013}_{-0.012}$ (+0.1 σ)
A_{100}^{dustTT}	8.93	$9.0^{+3.7}_{-3.6}$ (+0.0 σ)	z_*	1090.10	$1090.3^{+1.3}_{-1.2}$ (−0.1 σ)	$f\sigma_8(2.33)$	0.2977	$0.2978^{+0.0066}_{-0.0062}$ (+0.2 σ)
A_{143}^{dustTT}	10.77	$10.8^{+3.5}_{-3.6}$ (+0.0 σ)	r_*	144.80	$144.73^{+0.74}_{-0.76}$ (+0.6 σ)	$\sigma_8(2.33)$	0.3070	$0.3072^{+0.0069}_{-0.0065}$ (+0.3 σ)
$A_{143 \times 217}^{dustTT}$	19.5	$18.3^{+6.5}_{-6.4}$ (+0.0 σ)	$100\theta_*$	1.04121	$1.04123^{+0.00084}_{-0.00085}$ (+0.5 σ)	f_{2000}^{143}	30.7	32^{+7}_{-7} (+0.2 σ)
A_{217}^{dustTT}	94.8	93^{+10}_{-10} (−0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.907	$13.900^{+0.073}_{-0.075}$ (+0.5 σ)	$f_{2000}^{143 \times 217}$	33.4	34^{+6}_{-6} (+0.2 σ)
c_{100}	0.99961	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.67	$1059.9^{+2.1}_{-2.1}$ (+0.4 σ)	f_{2000}^{217}	107.9	$108.7^{+5.1}_{-5.0}$ (+0.2 σ)
c_{217}	0.99828	$0.9983^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.51	$147.44^{+0.84}_{-0.85}$ (+0.5 σ)	χ_{simall}^2	396.06	$397.0 (\nu: 1.5)$ (+0.0 σ)
H_0	67.70	$67.7^{+1.2}_{-1.2}$ (+0.8 σ)	k_D	0.14021	$0.1401^{+0.0011}_{-0.0011}$ (−0.6 σ)	χ_{lowl}^2	22.64	$22.8 (\nu: 0.9)$ (−0.6 σ)
Ω_Λ	0.6906	$0.691^{+0.015}_{-0.015}$ (+0.8 σ)	$100\theta_D$	0.16112	$0.1613^{+0.0014}_{-0.0014}$ (+0.3 σ)	χ_{plik}^2	760.1	$773.3 (\nu: 16.3)$ (+0.2 σ)
Ω_m	0.3094	$0.309^{+0.015}_{-0.015}$ (−0.8 σ)	z_{eq}	3373	3376^{+58}_{-57} (−0.7 σ)	χ_{6DF}^2	0.016	$0.056 (\nu: 0.0)$
$\Omega_m h^2$	0.14179	$0.1419^{+0.0024}_{-0.0024}$ (−0.7 σ)	k_{eq}	0.010295	$0.01030^{+0.00018}_{-0.00017}$ (−0.7 σ)	χ_{MGS}^2	1.34	$1.41 (\nu: 0.2)$
$\Omega_m h^3$	0.09599	$0.0961^{+0.0015}_{-0.0014}$ (+0.3 σ)	$100\theta_{eq}$	0.8183	$0.818^{+0.011}_{-0.010}$ (+0.8 σ)	$\chi_{DR12BAO}^2$	4.05	$4.7 (\nu: 1.3)$
σ_8	0.8085	$0.809^{+0.019}_{-0.017}$ (−0.3 σ)	$100\theta_{s,eq}$	0.4521	$0.4519^{+0.0055}_{-0.0054}$ (+0.7 σ)	χ_{prior}^2	1.5	$7.3 (\nu: 6.9)$ (+0.0 σ)
S_8	0.8211	$0.822^{+0.030}_{-0.029}$ (−0.7 σ)	$H(0.15)$	72.95	$73.0^{+1.1}_{-1.1}$ (+0.8 σ)	χ_{BAO}^2	5.41	$6.2 (\nu: 0.9)$
$\sigma_8 \Omega_m^{0.5}$	0.4497	$0.450^{+0.016}_{-0.016}$ (−0.7 σ)	$D_M(0.15)$	640.5	640^{+10}_{-10} (−0.8 σ)	χ_{CMB}^2	1178.8	$1193.1 (\nu: 15.7)$ (−0.0 σ)

Best-fit $\chi_{eff}^2 = 1185.74$; $\Delta\chi_{eff}^2 = -0.00$; $\bar{\chi}_{eff}^2 = 1206.53$; $\Delta\bar{\chi}_{eff}^2 = 0.51$; $R - 1 = 0.01126$
 χ_{eff}^2 : BAO - 6DF: 0.02 (Δ -0.01) MGS: 1.34 (Δ 0.06) DR12BAO: 4.05 (Δ -0.13) CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ 0.17) commander_dx12_v3_2_29: 22.64 (Δ -0.18) plik_rd12_HM_v22_TT: 760.12 (Δ 0.02)

20.3 base_yhe_plikHM_TT_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02213	$0.02213^{+0.00055}_{-0.00055}$ (+0.0 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4568	$0.457^{+0.017}_{-0.018}$ (−0.2 σ)	$H(0.15)$	72.36	$72.4^{+1.5}_{-1.5}$ (+0.1 σ)
$\Omega_c h^2$	0.12014	$0.1203^{+0.0031}_{-0.0032}$ (−0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6081	$0.609^{+0.015}_{-0.015}$ (−0.2 σ)	$D_M(0.15)$	646.5	646^{+15}_{-15} (−0.1 σ)
$100\theta_{MC}$	1.04064	$1.0408^{+0.0017}_{-0.0017}$ (−0.0 σ)	$\sigma_8/h^{0.5}$	0.9890	$0.990^{+0.021}_{-0.021}$ (−0.2 σ)	$H(0.38)$	82.57	$82.6^{+1.2}_{-1.2}$ (+0.1 σ)
τ	0.0525	$0.052^{+0.016}_{-0.016}$ (+0.0 σ)	$r_{\text{drag}} h$	98.74	$98.7^{+2.7}_{-2.7}$ (+0.1 σ)	$D_M(0.38)$	1540.2	1540^{+31}_{-31} (−0.1 σ)
Y_P	0.2394	$0.244^{+0.039}_{-0.040}$ (−0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.448	$2.448^{+0.056}_{-0.057}$ (−0.1 σ)	$H(0.51)$	89.35	$89.4^{+1.0}_{-0.99}$ (+0.1 σ)
$\ln(10^{10} A_s)$	3.0392	$3.039^{+0.033}_{-0.032}$ (−0.1 σ)	z_{re}	7.53	$7.5^{+1.6}_{-1.7}$ (−0.0 σ)	$D_M(0.51)$	1994.1	1994^{+37}_{-37} (−0.1 σ)
n_s	0.9626	$0.963^{+0.019}_{-0.019}$ (−0.0 σ)	$10^9 A_s$	2.089	$2.089^{+0.070}_{-0.066}$ (−0.1 σ)	$H(0.61)$	95.01	$95.05^{+0.90}_{-0.87}$ (+0.0 σ)
y_{cal}	1.00055	$1.0004^{+0.0049}_{-0.0048}$ (−0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8806	$1.882^{+0.027}_{-0.027}$ (−0.2 σ)	$D_M(0.61)$	2319.5	2319^{+40}_{-40} (−0.1 σ)
A_{217}^{CIB}	47.8	48^{+10}_{-10} (−0.0 σ)	D_{40}	1232.7	1233^{+37}_{-37} (−0.0 σ)	$H(2.33)$	236.39	$236.5^{+1.8}_{-1.9}$ (−0.2 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.46	—	D_{220}	5715	5716^{+80}_{-80} (+0.1 σ)	$D_M(2.33)$	5778.0	5776^{+45}_{-45} (−0.0 σ)
A_{143}^{tSZ}	6.93	$5.0^{+3.9}_{-4.0}$ (+0.0 σ)	D_{810}	2537.6	2536^{+27}_{-26} (−0.0 σ)	$f\sigma_8(0.15)$	0.4608	$0.461^{+0.016}_{-0.016}$ (−0.2 σ)
A_{100}^{PS}	252	264^{+60}_{-60} (−0.0 σ)	D_{1420}	816.7	814^{+11}_{-10} (+0.0 σ)	$\sigma_8(0.15)$	0.7475	$0.748^{+0.014}_{-0.014}$ (−0.2 σ)
A_{143}^{PS}	50.2	49^{+20}_{-20} (−0.1 σ)	D_{2000}	230.72	$229.6^{+4.7}_{-4.7}$ (+0.1 σ)	$f\sigma_8(0.38)$	0.4776	$0.478^{+0.012}_{-0.013}$ (−0.2 σ)
$A_{143 \times 217}^{\text{PS}}$	49.5	43^{+20}_{-20} (−0.0 σ)	$n_{s,0.002}$	0.9626	$0.963^{+0.019}_{-0.019}$ (−0.0 σ)	$\sigma_8(0.38)$	0.6618	$0.662^{+0.013}_{-0.013}$ (−0.1 σ)
A_{217}^{PS}	119.9	115^{+20}_{-20} (−0.0 σ)	Y_P	0.2394	$0.244^{+0.039}_{-0.040}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4754	$0.476^{+0.011}_{-0.011}$ (−0.2 σ)
A^{kSZ}	0.0	—	Y_P^{BBN}	0.2407	$0.246^{+0.039}_{-0.041}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6191	$0.619^{+0.013}_{-0.012}$ (−0.1 σ)
A_{100}^{dustTT}	8.86	$8.9^{+3.7}_{-3.6}$ (−0.0 σ)	Age/Gyr	13.831	$13.83^{+0.10}_{-0.10}$ (−0.0 σ)	$f\sigma_8(0.61)$	0.4699	$0.4701^{+0.0096}_{-0.0098}$ (−0.2 σ)
A_{143}^{dustTT}	10.77	$10.7^{+3.6}_{-3.6}$ (−0.0 σ)	z_*	1090.00	$1090.2^{+1.3}_{-1.2}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5889	$0.589^{+0.012}_{-0.012}$ (−0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.5	$18.3^{+6.4}_{-6.4}$ (+0.0 σ)	r_*	144.60	$144.55^{+0.76}_{-0.74}$ (+0.2 σ)	$f\sigma_8(2.33)$	0.2967	$0.2968^{+0.0067}_{-0.0064}$ (−0.1 σ)
A_{217}^{dustTT}	94.8	93^{+10}_{-10} (−0.0 σ)	$100\theta_*$	1.04100	$1.04101^{+0.00095}_{-0.00094}$ (+0.0 σ)	$\sigma_8(2.33)$	0.3055	$0.3057^{+0.0075}_{-0.0072}$ (−0.0 σ)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.891	$13.886^{+0.074}_{-0.072}$ (+0.2 σ)	f_{2000}^{143}	29.6	31^{+8}_{-8} (−0.1 σ)
c_{217}	0.99824	$0.9983^{+0.0013}_{-0.0012}$ (+0.0 σ)	z_{drag}	1059.17	$1059.4^{+2.3}_{-2.3}$ (−0.0 σ)	$f_{2000}^{143 \times 217}$	32.6	34^{+6}_{-6} (−0.1 σ)
H_0	67.01	$67.0^{+1.7}_{-1.7}$ (+0.1 σ)	r_{drag}	147.34	$147.30^{+0.82}_{-0.81}$ (+0.2 σ)	f_{2000}^{217}	107.0	$108.1^{+5.2}_{-5.0}$ (−0.1 σ)
Ω_Λ	0.6817	$0.681^{+0.021}_{-0.022}$ (+0.1 σ)	k_D	0.14065	$0.1405^{+0.0013}_{-0.0013}$ (−0.0 σ)	χ^2_{lensing}	8.83	9.48 (ν : 0.4)
Ω_m	0.3183	$0.319^{+0.022}_{-0.021}$ (−0.1 σ)	$100\theta_D$	0.16080	$0.1610^{+0.0015}_{-0.0015}$ (−0.1 σ)	χ^2_{small}	395.86	396.8 (ν : 1.2) (−0.0 σ)
$\Omega_m h^2$	0.14291	$0.1430^{+0.0029}_{-0.0030}$ (−0.2 σ)	z_{eq}	3400	3403^{+69}_{-71} (−0.2 σ)	χ^2_{lowl}	23.69	23.9 (ν : 1.6) (−0.0 σ)
$\Omega_m h^3$	0.09577	$0.0959^{+0.0015}_{-0.0015}$ (−0.1 σ)	k_{eq}	0.010376	$0.01038^{+0.00021}_{-0.00022}$ (−0.2 σ)	χ^2_{plik}	758.8	771.8 (ν : 15.4) (−0.1 σ)
σ_8	0.8096	$0.810^{+0.015}_{-0.015}$ (−0.2 σ)	$100\theta_{\text{eq}}$	0.8128	$0.813^{+0.014}_{-0.013}$ (+0.2 σ)	χ^2_{prior}	1.3	7.3 (ν : 6.9) (+0.0 σ)
S_8	0.8339	$0.835^{+0.032}_{-0.032}$ (−0.2 σ)	$100\theta_{s,\text{eq}}$	0.4493	$0.4492^{+0.0070}_{-0.0067}$ (+0.2 σ)	χ^2_{CMB}	1187.2	1202.1 (ν : 16.4) (+1.6 σ)

Best-fit $\chi^2_{\text{eff}} = 1188.45$; $\Delta\chi^2_{\text{eff}} = -0.12$; $\bar{\chi}^2_{\text{eff}} = 1209.39$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.98$; $R - 1 = 0.00784$

χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb.consext8: 8.83 (Δ -0.07) small_100x143_offlike5_EE_Aplanck_B: 395.86 (Δ -0.00) commander_dx12_v3_2_29: 23.69 (Δ 0.46) plik_rd12_HM_v22_TT: 758.77 (Δ -0.55)

20.4 base_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022238	$0.02226^{+0.00049}_{-0.00049}$ (+0.5 σ)	$\sigma_8/h^{0.5}$	0.9849	$0.985^{+0.019}_{-0.019}$ (−0.5 σ)	$H(0.51)$	89.66	$89.72^{+0.74}_{-0.72}$ (+0.6 σ)
$\Omega_c h^2$	0.11918	$0.1191^{+0.0022}_{-0.0021}$ (−0.7 σ)	$r_{\text{drag}} h$	99.65	$99.7^{+1.8}_{-1.7}$ (+0.7 σ)	$D_M(0.51)$	1982.2	1981^{+24}_{-25} (−0.7 σ)
$100\theta_{\text{MC}}$	1.04106	$1.0412^{+0.0015}_{-0.0014}$ (+0.4 σ)	$\langle d^2 \rangle^{1/2}$	2.4323	$2.431^{+0.047}_{-0.046}$ (−0.5 σ)	$H(0.61)$	95.28	$95.33^{+0.68}_{-0.66}$ (+0.6 σ)
τ	0.0549	$0.055^{+0.015}_{-0.014}$ (+0.4 σ)	z_{re}	7.77	$7.8^{+1.5}_{-1.5}$ (+0.3 σ)	$D_M(0.61)$	2306.6	2305^{+27}_{-27} (−0.7 σ)
Y_{P}	0.2480	$0.251^{+0.036}_{-0.037}$ (+0.3 σ)	$10^9 A_{\text{s}}$	2.098	$2.100^{+0.067}_{-0.062}$ (+0.3 σ)	$H(2.33)$	235.90	$235.9^{+1.5}_{-1.5}$ (−0.6 σ)
$\ln(10^{10} A_{\text{s}})$	3.0437	$3.045^{+0.031}_{-0.030}$ (+0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8802	$1.882^{+0.027}_{-0.026}$ (−0.2 σ)	$D_M(2.33)$	5765.6	5763^{+35}_{-37} (−0.6 σ)
n_{s}	0.9674	$0.968^{+0.016}_{-0.016}$ (+0.5 σ)	D_{40}	1224.6	1224^{+33}_{-32} (−0.4 σ)	$f\sigma_8(0.15)$	0.4562	$0.456^{+0.012}_{-0.012}$ (−0.6 σ)
y_{cal}	1.00054	$1.0006^{+0.0049}_{-0.0048}$ (+0.1 σ)	D_{220}	5720	5724^{+78}_{-79} (+0.3 σ)	$\sigma_8(0.15)$	0.7482	$0.749^{+0.014}_{-0.014}$ (−0.0 σ)
A_{217}^{CIB}	50.2	48^{+10}_{-10} (+0.0 σ)	D_{810}	2537.4	2538^{+27}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.4746	$0.475^{+0.011}_{-0.011}$ (−0.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.12	—	D_{1420}	815.7	815^{+11}_{-10} (+0.1 σ)	$\sigma_8(0.38)$	0.6633	$0.664^{+0.013}_{-0.012}$ (+0.1 σ)
A_{143}^{tSZ}	7.21	$4.9^{+3.9}_{-3.9}$ (−0.0 σ)	D_{2000}	229.90	$229.4^{+4.6}_{-4.6}$ (−0.0 σ)	$f\sigma_8(0.51)$	0.4732	$0.4733^{+0.0099}_{-0.0098}$ (−0.5 σ)
A_{100}^{PS}	256	266^{+60}_{-50} (+0.0 σ)	$n_{\text{s},0.002}$	0.9674	$0.968^{+0.016}_{-0.016}$ (+0.5 σ)	$\sigma_8(0.51)$	0.6207	$0.621^{+0.012}_{-0.012}$ (+0.2 σ)
A_{143}^{PS}	46.8	50^{+20}_{-20} (+0.1 σ)	Y_{P}	0.2480	$0.251^{+0.036}_{-0.037}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4683	$0.4684^{+0.0093}_{-0.0093}$ (−0.4 σ)
$A_{143 \times 217}^{\text{PS}}$	41.9	44^{+20}_{-20} (+0.0 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2494	$0.253^{+0.036}_{-0.037}$ (+0.3 σ)	$\sigma_8(0.61)$	0.5906	$0.591^{+0.012}_{-0.011}$ (+0.2 σ)
A_{217}^{PS}	117.1	115^{+20}_{-20} (+0.0 σ)	Age/Gyr	13.803	$13.797^{+0.082}_{-0.085}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.2978	$0.2981^{+0.0061}_{-0.0057}$ (+0.3 σ)
A^{kSZ}	0.0	—	z_*	1090.13	$1090.2^{+1.3}_{-1.2}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3071	$0.3074^{+0.0065}_{-0.0062}$ (+0.4 σ)
A_{100}^{dustTT}	8.95	$9.0^{+3.7}_{-3.6}$ (+0.0 σ)	r_*	144.74	$144.72^{+0.69}_{-0.70}$ (+0.5 σ)	f_{2000}^{143}	30.8	32^{+7}_{-7} (+0.1 σ)
A_{143}^{dustTT}	10.80	$10.7^{+3.5}_{-3.6}$ (+0.0 σ)	$100\theta_*$	1.04119	$1.04121^{+0.00085}_{-0.00085}$ (+0.4 σ)	$f_{2000}^{143 \times 217}$	33.5	34^{+5}_{-6} (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.2	$18.3^{+6.5}_{-6.4}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.901	$13.899^{+0.069}_{-0.070}$ (+0.5 σ)	f_{2000}^{217}	108.0	$108.6^{+5.0}_{-5.0}$ (+0.1 σ)
A_{217}^{dustTT}	94.2	93^{+10}_{-10} (−0.0 σ)	z_{drag}	1059.67	$1059.8^{+2.1}_{-2.1}$ (+0.3 σ)	χ^2_{lensing}	8.88	9.36 (ν : 0.3)
c_{100}	0.99965	$0.9996^{+0.0012}_{-0.0012}$ (+0.0 σ)	r_{drag}	147.45	$147.42^{+0.79}_{-0.80}$ (+0.4 σ)	χ^2_{simall}	396.18	397.0 (ν : 1.5) (+0.1 σ)
c_{217}	0.99826	$0.9983^{+0.0013}_{-0.0012}$ (+0.0 σ)	k_{D}	0.14028	$0.1402^{+0.0011}_{-0.0011}$ (−0.5 σ)	χ^2_{lowl}	22.92	23.0 (ν : 0.9) (−0.5 σ)
H_0	67.58	$67.7^{+1.2}_{-1.1}$ (+0.7 σ)	$100\theta_{\text{D}}$	0.16110	$0.1613^{+0.0014}_{-0.0014}$ (+0.2 σ)	χ^2_{plik}	759.5	772.7 (ν : 15.5) (+0.1 σ)
Ω_{Λ}	0.6890	$0.690^{+0.013}_{-0.014}$ (+0.7 σ)	z_{eq}	3379	3379^{+51}_{-51} (−0.7 σ)	$\chi^2_{6\text{DF}}$	0.029	0.057 (ν : 0.0)
Ω_{m}	0.3110	$0.310^{+0.014}_{-0.013}$ (−0.7 σ)	k_{eq}	0.010314	$0.01031^{+0.00016}_{-0.00016}$ (−0.7 σ)	χ^2_{MGS}	1.22	1.33 (ν : 0.1)
$\Omega_{\text{m}} h^2$	0.14206	$0.1421^{+0.0022}_{-0.0021}$ (−0.7 σ)	$100\theta_{\text{eq}}$	0.8171	$0.8174^{+0.0093}_{-0.0092}$ (+0.7 σ)	χ^2_{DR12BAO}	4.37	4.8 (ν : 1.2)
$\Omega_{\text{m}} h^3$	0.09601	$0.0961^{+0.0015}_{-0.0014}$ (+0.2 σ)	$100\theta_{\text{s,eq}}$	0.45149	$0.4516^{+0.0048}_{-0.0048}$ (+0.7 σ)	χ^2_{prior}	1.5	7.3 (ν : 7.0) (−0.0 σ)
σ_8	0.8096	$0.810^{+0.015}_{-0.015}$ (−0.2 σ)	$H(0.15)$	72.85	$72.9^{+1.0}_{-1.0}$ (+0.7 σ)	χ^2_{CMB}	1187.5	1202.1 (ν : 15.9) (+1.6 σ)
S_8	0.8244	$0.824^{+0.024}_{-0.024}$ (−0.6 σ)	$D_M(0.15)$	641.5	$640.9^{+9.9}_{-10}$ (−0.7 σ)	χ^2_{BAO}	5.62	6.2 (ν : 0.8)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4515	$0.451^{+0.013}_{-0.013}$ (−0.6 σ)	$H(0.38)$	82.95	$83.01^{+0.85}_{-0.82}$ (+0.7 σ)			
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6046	$0.605^{+0.013}_{-0.013}$ (−0.5 σ)	$D_M(0.38)$	1530.1	1529^{+20}_{-21} (−0.7 σ)			

Best-fit $\chi^2_{\text{eff}} = 1194.68$; $\Delta\chi^2_{\text{eff}} = -0.00$; $\bar{\chi}^2_{\text{eff}} = 1215.53$; $\Delta\bar{\chi}^2_{\text{eff}} = 0.80$; $R - 1 = 0.01408$

χ^2_{eff} : BAO - 6DF: 0.03 (Δ 0.00) MGS: 1.22 (Δ 0.00) DR12BAO: 4.37 (Δ 0.00) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.88 (Δ 0.00) simall_100x143_offlike5_EE_Aplanck.L
396.18 (Δ 0.09) commander_dx12.v3.2.29: 22.92 (Δ -0.04) plik_rd12_HM.v22.TT: 759.54 (Δ -0.26)

20.5 base_yhe_plikHM_TT_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02254	$0.02257^{+0.00053}_{-0.00055}$ (+1.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4379	$0.437^{+0.023}_{-0.023}$ (−1.7 σ)	$H(0.15)$	74.00	$74.1^{+1.8}_{-1.7}$ (+1.9 σ)
$\Omega_c h^2$	0.11695	$0.1168^{+0.0038}_{-0.0042}$ (−1.8 σ)	$\sigma_8 \Omega_m^{0.25}$	0.5940	$0.594^{+0.022}_{-0.021}$ (−1.5 σ)	$D_M(0.15)$	630.5	629^{+16}_{-16} (−1.9 σ)
$100\theta_{MC}$	1.04184	$1.0420^{+0.0016}_{-0.0016}$ (+1.4 σ)	$\sigma_8/h^{0.5}$	0.9709	$0.970^{+0.030}_{-0.030}$ (−1.4 σ)	$H(0.38)$	83.83	$84.0^{+1.4}_{-1.3}$ (+1.9 σ)
τ	0.0566	$0.057^{+0.018}_{-0.016}$ (+0.6 σ)	$r_{\text{drag}} h$	101.72	$101.9^{+3.4}_{-3.2}$ (+1.9 σ)	$D_M(0.38)$	1507.6	1505^{+33}_{-34} (−1.9 σ)
Y_P	0.2625	$0.268^{+0.037}_{-0.039}$ (+1.1 σ)	$\langle d^2 \rangle^{1/2}$	2.387	$2.382^{+0.076}_{-0.088}$ (−1.7 σ)	$H(0.51)$	90.39	$90.5^{+1.2}_{-1.1}$ (+1.9 σ)
$\ln(10^{10} A_s)$	3.0460	$3.047^{+0.035}_{-0.034}$ (+0.4 σ)	z_{re}	7.91	$7.9^{+1.8}_{-1.7}$ (+0.5 σ)	$D_M(0.51)$	1955.5	1952^{+39}_{-40} (−1.9 σ)
n_s	0.9787	$0.981^{+0.022}_{-0.020}$ (+1.6 σ)	$10^9 A_s$	2.103	$2.105^{+0.075}_{-0.071}$ (+0.4 σ)	$H(0.61)$	95.89	$96.0^{+1.0}_{-0.93}$ (+1.9 σ)
y_{cal}	1.0006	$1.0004^{+0.0053}_{-0.0058}$ (+0.0 σ)	$10^9 A_s e^{-2\tau}$	1.8778	$1.879^{+0.030}_{-0.034}$ (−0.4 σ)	$D_M(0.61)$	2277.5	2274^{+43}_{-44} (−1.9 σ)
A_{217}^{CIB}	50.3	50^{+10}_{-10} (+0.2 σ)	D_{40}	1203.8	1201^{+39}_{-45} (−1.5 σ)	$H(2.33)$	234.81	$234.8^{+2.3}_{-2.5}$ (−1.5 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.17	—	D_{220}	5729	5729^{+91}_{-89} (+0.4 σ)	$D_M(2.33)$	5737.2	5733^{+45}_{-46} (−1.7 σ)
A_{143}^{tSZ}	6.87	$4.7^{+3.9}_{-3.9}$ (−0.1 σ)	D_{810}	2539.4	2538^{+32}_{-30} (+0.1 σ)	$f\sigma_8(0.15)$	0.4437	$0.443^{+0.022}_{-0.022}$ (−1.7 σ)
A_{100}^{PS}	259	271^{+50}_{-50} (+0.2 σ)	D_{1420}	816.3	815^{+11}_{-11} (+0.1 σ)	$\sigma_8(0.15)$	0.7462	$0.747^{+0.018}_{-0.017}$ (−0.3 σ)
A_{143}^{PS}	49.2	52^{+20}_{-20} (+0.3 σ)	D_{2000}	229.42	$228.5^{+4.9}_{-4.5}$ (−0.4 σ)	$f\sigma_8(0.38)$	0.4656	$0.465^{+0.018}_{-0.019}$ (−1.5 σ)
$A_{143 \times 217}^{\text{PS}}$	43.9	44^{+20}_{-20} (+0.1 σ)	$n_{s,0.002}$	0.9787	$0.981^{+0.022}_{-0.020}$ (+1.6 σ)	$\sigma_8(0.38)$	0.6633	$0.664^{+0.016}_{-0.014}$ (+0.1 σ)
A_{217}^{PS}	117.7	114^{+20}_{-20} (−0.0 σ)	Y_P	0.2625	$0.268^{+0.037}_{-0.039}$ (+1.1 σ)	$f\sigma_8(0.51)$	0.4661	$0.466^{+0.016}_{-0.016}$ (−1.4 σ)
A^{kSZ}	0.6	—	Y_P^{BBN}	0.2639	$0.270^{+0.037}_{-0.039}$ (+1.1 σ)	$\sigma_8(0.51)$	0.6215	$0.622^{+0.015}_{-0.014}$ (+0.3 σ)
A_{100}^{dustTT}	8.98	$9.0^{+3.6}_{-3.4}$ (+0.0 σ)	Age/Gyr	13.740	$13.73^{+0.10}_{-0.10}$ (−1.7 σ)	$f\sigma_8(0.61)$	0.4624	$0.462^{+0.015}_{-0.015}$ (−1.3 σ)
A_{143}^{dustTT}	10.87	$10.8^{+3.7}_{-3.6}$ (+0.1 σ)	z_*	1090.14	$1090.3^{+1.3}_{-1.2}$ (+0.0 σ)	$\sigma_8(0.61)$	0.5918	$0.592^{+0.015}_{-0.012}$ (+0.4 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.2	$18.3^{+6.4}_{-6.5}$ (−0.0 σ)	r_*	145.03	$145.03^{+0.92}_{-0.93}$ (+1.2 σ)	$f\sigma_8(2.33)$	0.2991	$0.2994^{+0.0071}_{-0.0067}$ (+0.7 σ)
A_{217}^{dustTT}	93.9	92^{+10}_{-10} (−0.1 σ)	$100\theta_*$	1.04156	$1.04160^{+0.00089}_{-0.00092}$ (+1.2 σ)	$\sigma_8(2.33)$	0.3091	$0.3095^{+0.0076}_{-0.0073}$ (+1.0 σ)
c_{100}	0.99963	$0.9996^{+0.0013}_{-0.0013}$ (+0.0 σ)	$D_M(z_*)/\text{Gpc}$	13.925	$13.924^{+0.086}_{-0.088}$ (+1.0 σ)	f_{2000}^{143}	31.8	33^{+7}_{-7} (+0.4 σ)
c_{217}	0.99825	$0.9983^{+0.0011}_{-0.0011}$ (+0.0 σ)	z_{drag}	1060.66	$1060.9^{+2.1}_{-2.2}$ (+1.3 σ)	$f_{2000}^{143 \times 217}$	34.3	35^{+5}_{-6} (+0.5 σ)
H_0	68.88	$69.0^{+2.0}_{-1.9}$ (+1.9 σ)	r_{drag}	147.67	$147.65^{+0.99}_{-1.0}$ (+0.9 σ)	f_{2000}^{217}	108.73	$109.5^{+4.8}_{-4.9}$ (+0.5 σ)
Ω_Λ	0.7047	$0.706^{+0.024}_{-0.024}$ (+1.8 σ)	k_D	0.13970	$0.1395^{+0.0014}_{-0.0014}$ (−1.4 σ)	χ_{small}^2	396.26	397.3 (ν : 2.3) (+0.3 σ)
Ω_m	0.2953	$0.294^{+0.024}_{-0.024}$ (−1.8 σ)	$100\theta_D$	0.16150	$0.1618^{+0.0015}_{-0.0015}$ (+0.8 σ)	χ_{lowl}^2	21.31	21.4 (ν : 0.7) (−1.3 σ)
$\Omega_m h^2$	0.14014	$0.1400^{+0.0036}_{-0.0041}$ (−1.7 σ)	z_{eq}	3333	3331^{+86}_{-97} (−1.7 σ)	χ_{plik}^2	764.1	778.0 (ν : 23.1) (+1.0 σ)
$\Omega_m h^3$	0.09653	$0.0967^{+0.0015}_{-0.0014}$ (+1.0 σ)	k_{eq}	0.010174	$0.01017^{+0.00026}_{-0.00030}$ (−1.7 σ)	χ_{H073p45}^2	7.6	7.4 (ν : 5.3)
σ_8	0.8058	$0.806^{+0.020}_{-0.019}$ (−0.6 σ)	$100\theta_{\text{eq}}$	0.8270	$0.828^{+0.019}_{-0.017}$ (+1.8 σ)	χ_{prior}^2	1.6	7.5 (ν : 7.7) (+0.0 σ)
S_8	0.7995	$0.798^{+0.043}_{-0.042}$ (−1.7 σ)	$100\theta_{s,\text{eq}}$	0.4564	$0.4569^{+0.0099}_{-0.0085}$ (+1.8 σ)	χ_{CMB}^2	1181.6	1196.7 (ν : 20.3) (+0.6 σ)

Best-fit $\chi_{\text{eff}}^2 = 1190.84$; $\Delta\chi_{\text{eff}}^2 = -0.73$; $\bar{\chi}_{\text{eff}}^2 = 1211.61$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.47$; $R - 1 = 0.08259$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.26 (Δ 0.19) commander_dx12_v3_2_29: 21.31 (Δ -0.77) plik_rd12_HM_v22_TT: 764.07 (Δ 1.05) Hubble - H073p45: 7.57 (Δ -1.42)

20.6 base_yhe_plikHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02213^{+0.00059}_{-0.00057} \quad (+0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.460^{+0.027}_{-0.026} \quad (+0.0\sigma)$	$H(0.15)$	$72.3^{+1.9}_{-1.8} \quad (+0.1\sigma)$
$\Omega_c h^2$	$0.1205^{+0.0042}_{-0.0042} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.611^{+0.023}_{-0.023} \quad (+0.0\sigma)$	$D_M(0.15)$	$647^{+19}_{-18} \quad (-0.1\sigma)$
$100\theta_{MC}$	$1.0408^{+0.0017}_{-0.0017} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.993^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$H(0.38)$	$82.6^{+1.4}_{-1.4} \quad (+0.1\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{drag} h$	$98.6^{+3.5}_{-3.4} \quad (+0.1\sigma)$	$D_M(0.38)$	$1541^{+38}_{-38} \quad (-0.1\sigma)$
Y_P	$0.247^{+0.038}_{-0.041} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.084}_{-0.082} \quad (+0.0\sigma)$	$H(0.51)$	$89.4^{+1.2}_{-1.1} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.030}_{-0.028} \quad (+0.2\sigma)$	z_{re}	$< 8.86 \quad (+0.2\sigma)$	$D_M(0.51)$	$1995^{+44}_{-45} \quad (-0.1\sigma)$
n_s	$0.964^{+0.021}_{-0.021} \quad (+0.1\sigma)$	$10^9 A_s$	$2.098^{+0.064}_{-0.058} \quad (+0.2\sigma)$	$H(0.61)$	$95.1^{+1.0}_{-0.97} \quad (+0.1\sigma)$
y_{cal}	$1.0004^{+0.0050}_{-0.0049} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.885^{+0.031}_{-0.029} \quad (-0.0\sigma)$	$D_M(0.61)$	$2320^{+48}_{-49} \quad (-0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{40}	$1233^{+43}_{-42} \quad (-0.0\sigma)$	$H(2.33)$	$236.7^{+2.5}_{-2.5} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5713^{+80}_{-82} \quad (+0.0\sigma)$	$D_M(2.33)$	$5776^{+49}_{-50} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (-0.0\sigma)$	D_{810}	$2536^{+28}_{-27} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.024} \quad (+0.0\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (+0.0\sigma)$	D_{1420}	$814^{+11}_{-10} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.016}_{-0.015} \quad (+0.1\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$229.4^{+4.8}_{-4.7} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.019} \quad (+0.0\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.964^{+0.021}_{-0.021} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.013}_{-0.013} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.247^{+0.038}_{-0.041} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.248^{+0.039}_{-0.041} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.012} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$9.0^{+3.6}_{-3.6} \quad (+0.0\sigma)$	Age/Gyr	$13.83^{+0.11}_{-0.11} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.014}_{-0.014} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.5} \quad (-0.0\sigma)$	z_*	$1090.3^{+1.3}_{-1.3} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.012}_{-0.011} \quad (+0.2\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.4}_{-6.5} \quad (-0.0\sigma)$	r_*	$144.47^{+0.94}_{-0.94} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0062}_{-0.0059} \quad (+0.2\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.04101^{+0.00098}_{-0.00098} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0068}_{-0.0066} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.878^{+0.089}_{-0.088} \quad (+0.0\sigma)$	f_{2000}^{143}	$31^{+8}_{-8} \quad (+0.0\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.5^{+2.4}_{-2.3} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+6}_{-6} \quad (+0.0\sigma)$
H_0	$67.0^{+2.2}_{-2.1} \quad (+0.1\sigma)$	r_{drag}	$147.22^{+0.98}_{-0.97} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.3^{+5.2}_{-5.0} \quad (+0.0\sigma)$
Ω_Λ	$0.680^{+0.028}_{-0.029} \quad (+0.1\sigma)$	k_D	$0.1405^{+0.0015}_{-0.0014} \quad (-0.0\sigma)$	χ_{simall}^2	$396.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_m	$0.320^{+0.029}_{-0.028} \quad (-0.1\sigma)$	$100\theta_D$	$0.1611^{+0.0015}_{-0.0015} \quad (+0.0\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 2.1) \quad (-0.0\sigma)$
$\Omega_m h^2$	$0.1433^{+0.0039}_{-0.0039} \quad (-0.0\sigma)$	z_{eq}	$3409^{+94}_{-94} \quad (-0.0\sigma)$	χ_{plik}^2	$772.1 \quad (\nu: 16.7) \quad (-0.0\sigma)$
$\Omega_m h^3$	$0.0959^{+0.0015}_{-0.0015} \quad (+0.0\sigma)$	k_{eq}	$0.01040^{+0.00029}_{-0.00029} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
σ_8	$0.813^{+0.018}_{-0.017} \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.812^{+0.018}_{-0.018} \quad (+0.0\sigma)$	χ_{CMB}^2	$1192.9 \quad (\nu: 15.6) \quad (-0.0\sigma)$
S_8	$0.839^{+0.049}_{-0.047} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4486^{+0.0093}_{-0.0090} \quad (+0.0\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1200.15; \Delta \bar{\chi}_{\text{eff}}^2 = 0.83; R - 1 = 0.00514$$

20.7 base_yhe_plikHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00049}_{-0.00049} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.016}_{-0.015} \quad (-0.6\sigma)$	$H(0.38)$	$83.08^{+0.86}_{-0.84} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0025}_{-0.0024} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.024}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+21}_{-21} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0413^{+0.0015}_{-0.0014} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.9} \quad (+0.8\sigma)$	$H(0.51)$	$89.77^{+0.77}_{-0.74} \quad (+0.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.056}_{-0.053} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+26}_{-26} \quad (-0.8\sigma)$
Y_{P}	$0.253^{+0.036}_{-0.036} \quad (+0.4\sigma)$	z_{re}	$< 8.97 \quad (+0.3\sigma)$	$H(0.61)$	$95.37^{+0.70}_{-0.67} \quad (+0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.031}_{-0.028} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.065}_{-0.060} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+28}_{-28} \quad (-0.8\sigma)$
n_{s}	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.029}_{-0.028} \quad (-0.2\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.6} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	D_{40}	$1221^{+33}_{-32} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+36}_{-37} \quad (-0.6\sigma)$
A_{217}^{CIB}	$49^{+10}_{-10} \quad (+0.1\sigma)$	D_{220}	$5719^{+79}_{-79} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.015}_{-0.015} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2537^{+28}_{-27} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.015}_{-0.015} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (-0.1\sigma)$	D_{1420}	$815^{+11}_{-10} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.013}_{-0.013} \quad (-0.6\sigma)$
A_{100}^{PS}	$267^{+60}_{-50} \quad (+0.1\sigma)$	D_{2000}	$229.1^{+4.7}_{-4.7} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.014}_{-0.013} \quad (+0.1\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.012}_{-0.011} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.253^{+0.036}_{-0.036} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.013}_{-0.012} \quad (+0.2\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.255^{+0.036}_{-0.037} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A^{kSZ}	—	Age/Gyr	$13.792^{+0.084}_{-0.085} \quad (-0.6\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.7}_{-3.7} \quad (+0.0\sigma)$	z_*	$1090.3^{+1.3}_{-1.2} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0061}_{-0.0059} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.74^{+0.75}_{-0.76} \quad (+0.6\sigma)$	$\sigma_8(2.33)$	$0.3076^{+0.0064}_{-0.0062} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.4}_{-6.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.04124^{+0.00084}_{-0.00086} \quad (+0.5\sigma)$	f_{2000}^{143}	$32^{+7}_{-7} \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.073}_{-0.075} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+6}_{-6} \quad (+0.2\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0013} \quad (+0.0\sigma)$	z_{drag}	$1059.9^{+2.1}_{-2.1} \quad (+0.4\sigma)$	f_{2000}^{217}	$108.7^{+5.1}_{-5.0} \quad (+0.2\sigma)$
c_{217}	$0.9983^{+0.0013}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.44^{+0.84}_{-0.85} \quad (+0.5\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.6) \quad (+0.0\sigma)$
H_0	$67.8^{+1.2}_{-1.2} \quad (+0.8\sigma)$	k_{D}	$0.1401^{+0.0011}_{-0.0011} \quad (-0.6\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 0.9) \quad (-0.6\sigma)$
Ω_{Λ}	$0.691^{+0.015}_{-0.015} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1613^{+0.0014}_{-0.0014} \quad (+0.3\sigma)$	χ_{plik}^2	$773.2 \quad (\nu: 16.3) \quad (+0.2\sigma)$
Ω_{m}	$0.309^{+0.015}_{-0.015} \quad (-0.8\sigma)$	z_{eq}	$3376^{+58}_{-58} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0024}_{-0.0024} \quad (-0.7\sigma)$	k_{eq}	$0.01030^{+0.00018}_{-0.00018} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.43 \quad (\nu: 0.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0961^{+0.0015}_{-0.0015} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.011}_{-0.010} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.2)$
σ_8	$0.810^{+0.018}_{-0.016} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4520^{+0.0055}_{-0.0054} \quad (+0.8\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.9) \quad (+0.0\sigma)$
S_8	$0.822^{+0.030}_{-0.029} \quad (-0.7\sigma)$	$H(0.15)$	$73.0^{+1.1}_{-1.1} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+10}_{-10} \quad (-0.8\sigma)$	χ_{CMB}^2	$1192.9 \quad (\nu: 15.4) \quad (-0.0\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1206.38; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.62; R - 1 = 0.01225$$

20.8 base_yhe_plikHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02215^{+0.00054}_{-0.00055} \quad (+0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.457^{+0.017}_{-0.018} \quad (-0.2\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.4} \quad (+0.2\sigma)$
$\Omega_c h^2$	$0.1201^{+0.0030}_{-0.0031} \quad (-0.2\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$D_M(0.15)$	$646^{+15}_{-15} \quad (-0.2\sigma)$
$100\theta_{MC}$	$1.0408^{+0.0016}_{-0.0016} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} \quad (-0.1\sigma)$	$H(0.38)$	$82.7^{+1.2}_{-1.1} \quad (+0.2\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{drag} h$	$98.9^{+2.7}_{-2.6} \quad (+0.2\sigma)$	$D_M(0.38)$	$1538^{+30}_{-30} \quad (-0.2\sigma)$
Y_P	$0.245^{+0.038}_{-0.040} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.056}_{-0.056} \quad (-0.1\sigma)$	$H(0.51)$	$89.4^{+1.0}_{-0.96} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	$3.042^{+0.028}_{-0.026} \quad (+0.1\sigma)$	z_{re}	$< 8.81 \quad (+0.2\sigma)$	$D_M(0.51)$	$1992^{+35}_{-36} \quad (-0.2\sigma)$
n_s	$0.964^{+0.019}_{-0.019} \quad (+0.1\sigma)$	$10^9 A_s$	$2.095^{+0.060}_{-0.055} \quad (+0.1\sigma)$	$H(0.61)$	$95.08^{+0.88}_{-0.85} \quad (+0.1\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.882^{+0.027}_{-0.027} \quad (-0.2\sigma)$	$D_M(0.61)$	$2317^{+38}_{-39} \quad (-0.2\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{40}	$1232^{+37}_{-36} \quad (-0.1\sigma)$	$H(2.33)$	$236.4^{+1.8}_{-1.9} \quad (-0.2\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5716^{+80}_{-80} \quad (+0.1\sigma)$	$D_M(2.33)$	$5775^{+44}_{-44} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.0^{+3.9}_{-4.0} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{100}^{PS}	$264^{+60}_{-60} \quad (-0.0\sigma)$	D_{1420}	$814^{+11}_{-10} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.013} \quad (-0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$229.5^{+4.7}_{-4.6} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.2\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.964^{+0.019}_{-0.019} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.013}_{-0.011} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	Y_P	$0.245^{+0.038}_{-0.040} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.2\sigma)$
A^{kSZ}	—	Y_P^{BBN}	$0.246^{+0.038}_{-0.040} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.012}_{-0.011} \quad (+0.0\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	Age/Gyr	$13.82^{+0.10}_{-0.10} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0095}_{-0.0096} \quad (-0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.2^{+1.3}_{-1.2} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.011}_{-0.011} \quad (+0.0\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.4}_{-6.4} \quad (-0.0\sigma)$	r_*	$144.58^{+0.76}_{-0.73} \quad (+0.2\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0060}_{-0.0059} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	$100\theta_*$	$1.04103^{+0.00094}_{-0.00094} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0067}_{-0.0065} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.888^{+0.073}_{-0.072} \quad (+0.2\sigma)$	f_{2000}^{143}	$31^{+8}_{-8} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.4^{+2.3}_{-2.3} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+6}_{-6} \quad (-0.1\sigma)$
H_0	$67.1^{+1.7}_{-1.6} \quad (+0.2\sigma)$	r_{drag}	$147.32^{+0.82}_{-0.81} \quad (+0.2\sigma)$	f_{2000}^{217}	$108.1^{+5.2}_{-5.1} \quad (-0.0\sigma)$
Ω_Λ	$0.682^{+0.021}_{-0.021} \quad (+0.2\sigma)$	k_D	$0.1404^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$\chi_{lensing}^2$	$9.46 \quad (\nu: 0.4)$
Ω_m	$0.318^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$100\theta_D$	$0.1611^{+0.0015}_{-0.0015} \quad (-0.1\sigma)$	χ_{small}^2	$396.7 \quad (\nu: 1.2) \quad (-0.1\sigma)$
$\Omega_m h^2$	$0.1429^{+0.0028}_{-0.0029} \quad (-0.2\sigma)$	z_{eq}	$3399^{+67}_{-69} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 1.5) \quad (-0.1\sigma)$
$\Omega_m h^3$	$0.0959^{+0.0015}_{-0.0015} \quad (-0.0\sigma)$	k_{eq}	$0.01038^{+0.00020}_{-0.00021} \quad (-0.2\sigma)$	χ_{plik}^2	$771.8 \quad (\nu: 15.4) \quad (-0.1\sigma)$
σ_8	$0.811^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$100\theta_{eq}$	$0.813^{+0.013}_{-0.013} \quad (+0.2\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.8) \quad (+0.0\sigma)$
S_8	$0.834^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$100\theta_{s,eq}$	$0.4495^{+0.0069}_{-0.0065} \quad (+0.2\sigma)$	χ_{CMB}^2	$1201.8 \quad (\nu: 15.9) \quad (+1.5\sigma)$

$\bar{\chi}_{eff}^2 = 1209.13$; $\Delta \bar{\chi}_{eff}^2 = 0.97$; $R - 1 = 0.00826$

20.9 base_yhe_plikHM_TT_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02226^{+0.00049}_{-0.00049} \quad (+0.5\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.019}_{-0.018} \quad (-0.4\sigma)$	$H(0.51)$	$89.73^{+0.75}_{-0.72} \quad (+0.6\sigma)$
$\Omega_c h^2$	$0.1191^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$r_{\text{drag}} h$	$99.8^{+1.8}_{-1.7} \quad (+0.7\sigma)$	$D_M(0.51)$	$1980^{+24}_{-25} \quad (-0.7\sigma)$
$100\theta_{\text{MC}}$	$1.0412^{+0.0015}_{-0.0014} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.046}_{-0.044} \quad (-0.5\sigma)$	$H(0.61)$	$95.33^{+0.69}_{-0.66} \quad (+0.6\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$D_M(0.61)$	$2304^{+27}_{-27} \quad (-0.7\sigma)$
Y_{P}	$0.251^{+0.036}_{-0.037} \quad (+0.3\sigma)$	$10^9 A_{\text{s}}$	$2.103^{+0.060}_{-0.056} \quad (+0.3\sigma)$	$H(2.33)$	$235.9^{+1.5}_{-1.5} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\text{s}})$	$3.046^{+0.028}_{-0.027} \quad (+0.3\sigma)$	$10^9 A_{\text{s}} e^{-2\tau}$	$1.882^{+0.027}_{-0.026} \quad (-0.2\sigma)$	$D_M(2.33)$	$5763^{+36}_{-36} \quad (-0.6\sigma)$
n_{s}	$0.968^{+0.016}_{-0.016} \quad (+0.5\sigma)$	D_{40}	$1224^{+33}_{-32} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0049}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5723^{+77}_{-79} \quad (+0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.013} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (+0.0\sigma)$	D_{810}	$2537^{+27}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.010} \quad (-0.5\sigma)$
$\xi^{\text{tSZ} \times \text{CIB}}$	—	D_{1420}	$815^{+11}_{-10} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.013}_{-0.012} \quad (+0.2\sigma)$
A_{143}^{tSZ}	$4.9^{+3.9}_{-3.9} \quad (-0.0\sigma)$	D_{2000}	$229.4^{+4.6}_{-4.6} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.4735^{+0.0098}_{-0.0096} \quad (-0.4\sigma)$
A_{100}^{PS}	$266^{+60}_{-50} \quad (+0.0\sigma)$	$n_{\text{s},0.002}$	$0.968^{+0.016}_{-0.016} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.012}_{-0.011} \quad (+0.2\sigma)$
A_{143}^{PS}	$50^{+20}_{-20} \quad (+0.1\sigma)$	Y_{P}	$0.251^{+0.036}_{-0.037} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4687^{+0.0092}_{-0.0089} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\text{PS}}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\text{P}}^{\text{BBN}}$	$0.253^{+0.036}_{-0.037} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.011}_{-0.011} \quad (+0.3\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Age/Gyr	$13.797^{+0.083}_{-0.084} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2983^{+0.0057}_{-0.0056} \quad (+0.4\sigma)$
A^{kSZ}	—	z_*	$1090.2^{+1.3}_{-1.2} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3076^{+0.0062}_{-0.0061} \quad (+0.5\sigma)$
A_{100}^{dustTT}	$9.0^{+3.7}_{-3.6} \quad (+0.0\sigma)$	r_*	$144.72^{+0.69}_{-0.70} \quad (+0.5\sigma)$	f_{2000}^{143}	$32^{+7}_{-7} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (+0.0\sigma)$	$100\theta_*$	$1.04121^{+0.00085}_{-0.00085} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-6} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\text{dustTT}}$	$18.3^{+6.4}_{-6.4} \quad (+0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.899^{+0.069}_{-0.070} \quad (+0.5\sigma)$	f_{2000}^{217}	$108.6^{+5.0}_{-5.0} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (-0.0\sigma)$	z_{drag}	$1059.8^{+2.1}_{-2.1} \quad (+0.3\sigma)$	χ_{lensing}^2	$9.32 \quad (\nu: 0.3)$
c_{100}	$0.9996^{+0.0012}_{-0.0013} \quad (+0.0\sigma)$	r_{drag}	$147.43^{+0.79}_{-0.80} \quad (+0.4\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$0.9983^{+0.0013}_{-0.0012} \quad (+0.0\sigma)$	k_{D}	$0.1402^{+0.0011}_{-0.0011} \quad (-0.5\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.9) \quad (-0.5\sigma)$
H_0	$67.7^{+1.2}_{-1.1} \quad (+0.7\sigma)$	$100\theta_{\text{D}}$	$0.1613^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	χ_{plik}^2	$772.6 \quad (\nu: 15.5) \quad (+0.1\sigma)$
Ω_{Λ}	$0.690^{+0.013}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3378^{+51}_{-51} \quad (-0.7\sigma)$	$\chi_{6\text{DF}}^2$	$0.055 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.014}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00016}_{-0.00016} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.35 \quad (\nu: 0.1)$
$\Omega_{\text{m}} h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	$100\theta_{\text{eq}}$	$0.8175^{+0.0092}_{-0.0091} \quad (+0.7\sigma)$	χ_{DR12BAO}^2	$4.7 \quad (\nu: 1.1)$
$\Omega_{\text{m}} h^3$	$0.0961^{+0.0015}_{-0.0014} \quad (+0.2\sigma)$	$100\theta_{\text{s,eq}}$	$0.4517^{+0.0048}_{-0.0047} \quad (+0.7\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 7.0) \quad (-0.0\sigma)$
σ_8	$0.811^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$H(0.15)$	$72.9^{+1.0}_{-1.0} \quad (+0.7\sigma)$	χ_{CMB}^2	$1202.0 \quad (\nu: 15.7) \quad (+1.6\sigma)$
S_8	$0.824^{+0.024}_{-0.024} \quad (-0.6\sigma)$	$D_M(0.15)$	$640.8^{+9.9}_{-10} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\sigma_8 \Omega_{\text{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$83.02^{+0.85}_{-0.81} \quad (+0.7\sigma)$		
$\sigma_8 \Omega_{\text{m}}^{0.25}$	$0.605^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_M(0.38)$	$1529^{+20}_{-21} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 1215.38; \Delta \bar{\chi}_{\text{eff}}^2 = 0.80; R - 1 = 0.01428$$

20.10 base_yhe_plikHM_TT_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02258^{+0.00053}_{-0.00056} \quad (+1.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.437^{+0.024}_{-0.023} \quad (-1.7\sigma)$	$H(0.15)$	$74.2^{+1.7}_{-1.7} \quad (+2.0\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1168^{+0.0038}_{-0.0041} \quad (-1.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.594^{+0.022}_{-0.021} \quad (-1.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+16}_{-16} \quad (-1.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0421^{+0.0016}_{-0.0016} \quad (+1.4\sigma)$	$\sigma_8/h^{0.5}$	$0.971^{+0.030}_{-0.030} \quad (-1.4\sigma)$	$H(0.38)$	$84.0^{+1.4}_{-1.3} \quad (+2.0\sigma)$
τ	$0.058^{+0.016}_{-0.014} \quad (+0.7\sigma)$	$r_{\mathrm{drag}} h$	$102.0^{+3.4}_{-3.2} \quad (+1.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1504^{+33}_{-33} \quad (-1.9\sigma)$
Y_{P}	$0.268^{+0.037}_{-0.039} \quad (+1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.383^{+0.076}_{-0.084} \quad (-1.6\sigma)$	$H(0.51)$	$90.5^{+1.2}_{-1.1} \quad (+2.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.048^{+0.035}_{-0.031} \quad (+0.5\sigma)$	z_{re}	$8.0^{+1.4}_{-1.5} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1952^{+39}_{-40} \quad (-1.9\sigma)$
n_{s}	$0.981^{+0.021}_{-0.020} \quad (+1.6\sigma)$	$10^9 A_{\mathrm{s}}$	$2.109^{+0.074}_{-0.065} \quad (+0.5\sigma)$	$H(0.61)$	$96.0^{+1.0}_{-0.93} \quad (+1.9\sigma)$
y_{cal}	$1.0004^{+0.0053}_{-0.0058} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.029}_{-0.034} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2273^{+43}_{-43} \quad (-1.9\sigma)$
A_{217}^{CIB}	$50^{+10}_{-10} \quad (+0.2\sigma)$	D_{40}	$1201^{+40}_{-44} \quad (-1.5\sigma)$	$H(2.33)$	$234.7^{+2.3}_{-2.5} \quad (-1.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{220}	$5729^{+92}_{-89} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5732^{+45}_{-46} \quad (-1.8\sigma)$
A_{143}^{tSZ}	$4.7^{+3.9}_{-3.9} \quad (-0.1\sigma)$	D_{810}	$2538^{+31}_{-30} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.443^{+0.022}_{-0.022} \quad (-1.7\sigma)$
A_{100}^{PS}	$271^{+50}_{-50} \quad (+0.2\sigma)$	D_{1420}	$815^{+11}_{-11} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.017}_{-0.016} \quad (-0.2\sigma)$
A_{143}^{PS}	$52^{+20}_{-20} \quad (+0.3\sigma)$	D_{2000}	$228.5^{+4.9}_{-4.5} \quad (-0.4\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.018}_{-0.019} \quad (-1.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.981^{+0.021}_{-0.020} \quad (+1.6\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.015}_{-0.014} \quad (+0.2\sigma)$
A_{217}^{PS}	$114^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.268^{+0.037}_{-0.039} \quad (+1.1\sigma)$	$f\sigma_8(0.51)$	$0.466^{+0.016}_{-0.016} \quad (-1.4\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.270^{+0.037}_{-0.039} \quad (+1.1\sigma)$	$\sigma_8(0.51)$	$0.623^{+0.014}_{-0.013} \quad (+0.4\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.6}_{-3.4} \quad (+0.0\sigma)$	Age/Gyr	$13.73^{+0.10}_{-0.10} \quad (-1.7\sigma)$	$f\sigma_8(0.61)$	$0.462^{+0.015}_{-0.015} \quad (-1.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.7}_{-3.6} \quad (+0.1\sigma)$	z_*	$1090.3^{+1.3}_{-1.2} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.593^{+0.013}_{-0.012} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.2^{+6.4}_{-6.5} \quad (-0.0\sigma)$	r_*	$145.04^{+0.93}_{-0.94} \quad (+1.2\sigma)$	$f\sigma_8(2.33)$	$0.2997^{+0.0068}_{-0.0063} \quad (+0.8\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$92^{+10}_{-10} \quad (-0.1\sigma)$	$100\theta_*$	$1.04161^{+0.00088}_{-0.00090} \quad (+1.2\sigma)$	$\sigma_8(2.33)$	$0.3098^{+0.0073}_{-0.0068} \quad (+1.0\sigma)$
c_{100}	$0.9996^{+0.0013}_{-0.0013} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.924^{+0.086}_{-0.088} \quad (+1.0\sigma)$	f_{2000}^{143}	$33^{+7}_{-7} \quad (+0.4\sigma)$
c_{217}	$0.9983^{+0.0011}_{-0.0011} \quad (+0.0\sigma)$	z_{drag}	$1061.0^{+2.2}_{-2.2} \quad (+1.3\sigma)$	$f_{2000}^{143 \times 217}$	$35^{+5}_{-6} \quad (+0.5\sigma)$
H_0	$69.1^{+2.0}_{-1.9} \quad (+2.0\sigma)$	r_{drag}	$147.66^{+0.98}_{-1.0} \quad (+0.9\sigma)$	f_{2000}^{217}	$109.5^{+4.8}_{-4.9} \quad (+0.5\sigma)$
Ω_{Λ}	$0.706^{+0.023}_{-0.024} \quad (+1.8\sigma)$	k_{D}	$0.1395^{+0.0014}_{-0.0013} \quad (-1.4\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.4) \quad (+0.2\sigma)$
Ω_{m}	$0.294^{+0.024}_{-0.023} \quad (-1.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1618^{+0.0015}_{-0.0015} \quad (+0.8\sigma)$	χ_{lowl}^2	$21.4 \quad (\nu: 0.7) \quad (-1.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1400^{+0.0036}_{-0.0040} \quad (-1.7\sigma)$	z_{eq}	$3330^{+87}_{-96} \quad (-1.7\sigma)$	χ_{plik}^2	$777.9 \quad (\nu: 22.8) \quad (+1.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0967^{+0.0015}_{-0.0014} \quad (+1.0\sigma)$	k_{eq}	$0.01016^{+0.00026}_{-0.00029} \quad (-1.7\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$7.3 \quad (\nu: 5.3)$
σ_8	$0.807^{+0.020}_{-0.018} \quad (-0.5\sigma)$	$100\theta_{\mathrm{eq}}$	$0.828^{+0.019}_{-0.017} \quad (+1.8\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 7.8) \quad (+0.0\sigma)$
S_8	$0.798^{+0.043}_{-0.043} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4570^{+0.0098}_{-0.0085} \quad (+1.8\sigma)$	χ_{CMB}^2	$1196.6 \quad (\nu: 19.8) \quad (+0.6\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 1211.44$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = -0.37$; $R - 1 = 0.09941$

20.11 base_yhe_plikHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022281	$0.02229^{+0.00039}_{-0.00040}$ (+0.6 σ)	$\Omega_{\mathrm{m}}h^2$	0.14325	$0.1432^{+0.0025}_{-0.0026}$ (−0.1 σ)	$100\theta_{\mathrm{eq}}$	0.8118	$0.812^{+0.012}_{-0.011}$ (+0.1 σ)
$\Omega_{\mathrm{c}}h^2$	0.12033	$0.1202^{+0.0027}_{-0.0027}$ (−0.2 σ)	$\Omega_{\mathrm{m}}h^3$	0.09606	$0.0961^{+0.0010}_{-0.0010}$ (+0.3 σ)	$100\theta_{\mathrm{s,eq}}$	0.4486	$0.4489^{+0.0060}_{-0.0057}$ (+0.1 σ)
$100\theta_{\mathrm{MC}}$	1.04058	$1.0407^{+0.0011}_{-0.0011}$ (−0.1 σ)	σ_8	0.8109	$0.810^{+0.016}_{-0.016}$ (−0.1 σ)	$H(0.15)$	72.41	$72.5^{+1.2}_{-1.2}$ (+0.2 σ)
τ	0.0540	$0.054^{+0.017}_{-0.016}$ (+0.2 σ)	S_8	0.8357	$0.834^{+0.031}_{-0.032}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	646.0	645^{+12}_{-12} (−0.2 σ)
Y_{P}	0.2365	$0.240^{+0.024}_{-0.025}$ (−0.3 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4577	$0.457^{+0.017}_{-0.017}$ (−0.2 σ)	$H(0.38)$	82.64	$82.70^{+0.90}_{-0.88}$ (+0.2 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0431	$3.042^{+0.035}_{-0.034}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6093	$0.609^{+0.016}_{-0.017}$ (−0.2 σ)	$D_{\mathrm{M}}(0.38)$	1539.0	1538^{+24}_{-23} (−0.2 σ)
n_{s}	0.9621	$0.962^{+0.014}_{-0.014}$ (−0.1 σ)	$\sigma_8/h^{0.5}$	0.9903	$0.989^{+0.023}_{-0.024}$ (−0.2 σ)	$H(0.51)$	89.43	$89.48^{+0.75}_{-0.74}$ (+0.2 σ)
y_{cal}	1.00057	$1.0006^{+0.0046}_{-0.0048}$ (+0.1 σ)	$r_{\mathrm{drag}}h$	98.65	$98.8^{+2.2}_{-2.2}$ (+0.2 σ)	$D_{\mathrm{M}}(0.51)$	1992.5	1991^{+28}_{-28} (−0.2 σ)
A_{217}^{CIB}	44.3	46^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.454	$2.452^{+0.057}_{-0.058}$ (−0.0 σ)	$H(0.61)$	95.10	$95.15^{+0.64}_{-0.63}$ (+0.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.85	—	z_{re}	7.63	$7.6^{+1.6}_{-1.6}$ (+0.2 σ)	$D_{\mathrm{M}}(0.61)$	2317.7	2316^{+30}_{-30} (−0.2 σ)
A_{143}^{tSZ}	6.95	$5.5^{+3.7}_{-3.9}$ (+0.2 σ)	$10^9 A_{\mathrm{s}}$	2.097	$2.096^{+0.074}_{-0.070}$ (+0.1 σ)	$H(2.33)$	236.66	$236.6^{+1.6}_{-1.6}$ (−0.1 σ)
A_{100}^{PS}	245	257^{+60}_{-50} (−0.3 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8823	$1.882^{+0.024}_{-0.024}$ (−0.2 σ)	$D_{\mathrm{M}}(2.33)$	5772.5	5770^{+32}_{-32} (−0.3 σ)
A_{143}^{PS}	51.3	45^{+20}_{-20} (−0.5 σ)	D_{40}	1236.4	1236^{+31}_{-31} (+0.1 σ)	$f\sigma_8(0.15)$	0.4617	$0.461^{+0.016}_{-0.016}$ (−0.2 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	56.6	42^{+20}_{-20} (−0.2 σ)	D_{220}	5733	5733^{+75}_{-75} (+0.5 σ)	$\sigma_8(0.15)$	0.7487	$0.748^{+0.015}_{-0.014}$ (−0.1 σ)
A_{217}^{PS}	123.5	115^{+20}_{-20} (+0.0 σ)	D_{810}	2541.3	2538^{+25}_{-26} (+0.1 σ)	$f\sigma_8(0.38)$	0.4785	$0.478^{+0.013}_{-0.013}$ (−0.2 σ)
A^{kSZ}	0.01	< 7.89 (−0.2 σ)	D_{1420}	819.4	$817.5^{+9.1}_{-9.2}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6629	$0.663^{+0.013}_{-0.013}$ (−0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.71	$8.9^{+3.6}_{-3.5}$ (−0.0 σ)	D_{2000}	232.13	$231.2^{+3.5}_{-3.5}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4763	$0.476^{+0.012}_{-0.012}$ (−0.2 σ)
$A_{143}^{\mathrm{dustTT}}$	10.88	$10.8^{+3.5}_{-3.6}$ (+0.1 σ)	$n_{\mathrm{s},0.002}$	0.9621	$0.962^{+0.014}_{-0.014}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6200	$0.620^{+0.013}_{-0.012}$ (−0.0 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.1	$18.5^{+6.6}_{-6.4}$ (+0.1 σ)	Y_{P}	0.2365	$0.240^{+0.024}_{-0.025}$ (−0.3 σ)	$f\sigma_8(0.61)$	0.4707	$0.470^{+0.011}_{-0.011}$ (−0.2 σ)
$A_{217}^{\mathrm{dustTT}}$	95.7	94^{+10}_{-10} (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2378	$0.241^{+0.025}_{-0.025}$ (−0.3 σ)	$\sigma_8(0.61)$	0.5898	$0.590^{+0.012}_{-0.011}$ (−0.0 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.075}_{-0.075}$	Age/Gyr	13.818	$13.813^{+0.074}_{-0.073}$ (−0.3 σ)	$f\sigma_8(2.33)$	0.2971	$0.2970^{+0.0061}_{-0.0058}$ (−0.0 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.135	$0.134^{+0.058}_{-0.057}$	z_*	1089.71	$1089.81^{+0.84}_{-0.80}$ (−0.8 σ)	$\sigma_8(2.33)$	0.3060	$0.3060^{+0.0066}_{-0.0062}$ (+0.0 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.484	$0.48^{+0.17}_{-0.16}$	r_*	144.45	$144.45^{+0.64}_{-0.61}$ (−0.0 σ)	f_{2000}^{143}	27.4	29^{+6}_{-6} (−0.6 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	1.04100	$1.04103^{+0.00066}_{-0.00064}$ (+0.1 σ)	$f_{2000}^{143 \times 217}$	31.09	32^{+4}_{-4} (−0.7 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.665	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.876	$13.876^{+0.061}_{-0.058}$ (−0.0 σ)	f_{2000}^{217}	105.68	$106.6^{+4.1}_{-4.0}$ (−0.6 σ)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.09^{+0.52}_{-0.52}$	z_{drag}	1059.47	$1059.6^{+1.5}_{-1.6}$ (+0.1 σ)	χ_{small}^2	396.06	$397.1 (\nu: 1.9)$ (+0.1 σ)
c_{100}	0.99975	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.13	$147.13^{+0.65}_{-0.64}$ (−0.2 σ)	χ_{lowl}^2	23.94	$24.1 (\nu: 1.1)$ (+0.0 σ)
c_{217}	0.99815	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.14111	$0.14099^{+0.00082}_{-0.00081}$ (+0.6 σ)	χ_{plik}^2	2343.8	$2359.9 (\nu: 18.0)$ (+275.2 σ)
H_0	67.05	$67.1^{+1.4}_{-1.3}$ (+0.2 σ)	$100\theta_{\mathrm{D}}$	0.16045	$0.16059^{+0.00091}_{-0.00088}$ (−0.7 σ)	χ_{prior}^2	1.4	$11.5 (\nu: 10.1)$ (+1.1 σ)
Ω_{Λ}	0.6814	$0.682^{+0.017}_{-0.018}$ (+0.2 σ)	z_{eq}	3408	3406^{+59}_{-61} (−0.1 σ)	χ_{CMB}^2	2763.8	$2781.1 (\nu: 17.9)$ (+280.2 σ)
Ω_{m}	0.3186	$0.318^{+0.018}_{-0.017}$ (−0.2 σ)	k_{eq}	0.010401	$0.01040^{+0.00018}_{-0.00019}$ (−0.1 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2765.27$; $\Delta\chi_{\mathrm{eff}}^2 = -0.51$; $\bar{\chi}_{\mathrm{eff}}^2 = 2792.56$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.80$; $R - 1 = 0.00867$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 (Δ 0.01) commander_dx12_v3.2.29: 23.95 (Δ 0.69) plik_rd12_HM_v22b_TTTEEE: 2343.82 (Δ -0.83)

20.12 base_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022389	$0.02239^{+0.00035}_{-0.00035}$ (+0.9 σ)	$\Omega_m h^3$	0.09619	$0.0962^{+0.0010}_{-0.0010}$ (+0.4 σ)	$H(0.15)$	72.87	$72.90^{+0.84}_{-0.86}$ (+0.7 σ)
$\Omega_c h^2$	0.11930	$0.1193^{+0.0020}_{-0.0020}$ (−0.6 σ)	σ_8	0.8090	$0.809^{+0.017}_{-0.016}$ (−0.3 σ)	$D_M(0.15)$	641.4	$641.1^{+8.6}_{-8.1}$ (−0.7 σ)
$100\theta_{MC}$	1.04082	$1.0409^{+0.0010}_{-0.0010}$ (+0.1 σ)	S_8	0.8244	$0.824^{+0.026}_{-0.025}$ (−0.6 σ)	$H(0.38)$	82.98	$83.01^{+0.67}_{-0.67}$ (+0.7 σ)
τ	0.0553	$0.056^{+0.017}_{-0.015}$ (+0.5 σ)	$\sigma_8 \Omega_m^{0.5}$	0.4516	$0.451^{+0.014}_{-0.014}$ (−0.6 σ)	$D_M(0.38)$	1529.8	1529^{+17}_{-17} (−0.7 σ)
Y_P	0.2402	$0.243^{+0.023}_{-0.024}$ (−0.2 σ)	$\sigma_8 \Omega_m^{0.25}$	0.6044	$0.604^{+0.015}_{-0.014}$ (−0.6 σ)	$H(0.51)$	89.70	$89.73^{+0.59}_{-0.57}$ (+0.6 σ)
$\ln(10^{10} A_s)$	3.0444	$3.044^{+0.036}_{-0.034}$ (+0.3 σ)	$\sigma_8/h^{0.5}$	0.9840	$0.984^{+0.022}_{-0.021}$ (−0.5 σ)	$D_M(0.51)$	1981.7	1981^{+21}_{-20} (−0.7 σ)
n_s	0.9658	$0.966^{+0.012}_{-0.012}$ (+0.3 σ)	$r_{drag} h$	99.54	$99.6^{+1.5}_{-1.6}$ (+0.6 σ)	$H(0.61)$	95.32	$95.35^{+0.52}_{-0.51}$ (+0.6 σ)
y_{cal}	1.00071	$1.0006^{+0.0047}_{-0.0049}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	2.437	$2.437^{+0.052}_{-0.052}$ (−0.4 σ)	$D_M(0.61)$	2305.9	2305^{+22}_{-22} (−0.7 σ)
A_{217}^{CIB}	44.9	47^{+10}_{-10} (−0.2 σ)	z_{re}	7.75	$7.8^{+1.7}_{-1.6}$ (+0.3 σ)	$H(2.33)$	236.11	$236.1^{+1.3}_{-1.3}$ (−0.5 σ)
$\xi^{tSZ \times CIB}$	0.78	—	$10^9 A_s$	2.100	$2.100^{+0.077}_{-0.072}$ (+0.3 σ)	$D_M(2.33)$	5762.4	5761^{+26}_{-27} (−0.6 σ)
A_{143}^{tSZ}	6.99	$5.5^{+3.8}_{-3.8}$ (+0.3 σ)	$10^9 A_s e^{-2\tau}$	1.8798	$1.879^{+0.024}_{-0.024}$ (−0.4 σ)	$f\sigma_8(0.15)$	0.4561	$0.456^{+0.013}_{-0.013}$ (−0.6 σ)
A_{100}^{PS}	246	257^{+50}_{-50} (−0.2 σ)	D_{40}	1229.6	1229^{+29}_{-28} (−0.2 σ)	$\sigma_8(0.15)$	0.7475	$0.748^{+0.016}_{-0.015}$ (−0.2 σ)
A_{143}^{PS}	50.9	45^{+20}_{-20} (−0.5 σ)	D_{220}	5739	5737^{+75}_{-76} (+0.6 σ)	$f\sigma_8(0.38)$	0.4744	$0.474^{+0.012}_{-0.011}$ (−0.6 σ)
$A_{143 \times 217}^{PS}$	55.1	42^{+20}_{-20} (−0.2 σ)	D_{810}	2541.4	2539^{+25}_{-26} (+0.2 σ)	$\sigma_8(0.38)$	0.6626	$0.663^{+0.014}_{-0.013}$ (−0.0 σ)
A_{217}^{PS}	122.6	115^{+20}_{-20} (−0.0 σ)	D_{1420}	819.8	$817.9^{+9.2}_{-9.2}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4730	$0.473^{+0.011}_{-0.011}$ (−0.5 σ)
A^{kSZ}	0.00	< 7.92 (−0.2 σ)	D_{2000}	232.10	$231.3^{+3.5}_{-3.4}$ (+0.8 σ)	$\sigma_8(0.51)$	0.6201	$0.620^{+0.013}_{-0.012}$ (+0.0 σ)
A_{100}^{dustTT}	8.79	$8.9^{+3.6}_{-3.4}$ (−0.0 σ)	$n_{s,0.002}$	0.9658	$0.966^{+0.012}_{-0.012}$ (+0.3 σ)	$f\sigma_8(0.61)$	0.4680	$0.468^{+0.011}_{-0.010}$ (−0.5 σ)
A_{143}^{dustTT}	10.95	$10.9^{+3.5}_{-3.6}$ (+0.1 σ)	Y_P	0.2402	$0.243^{+0.023}_{-0.024}$ (−0.2 σ)	$\sigma_8(0.61)$	0.5900	$0.590^{+0.012}_{-0.012}$ (+0.1 σ)
$A_{143 \times 217}^{dustTT}$	20.2	$18.6^{+6.6}_{-6.5}$ (+0.1 σ)	Y_P^{BBN}	0.2415	$0.244^{+0.023}_{-0.024}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.2975	$0.2976^{+0.0063}_{-0.0059}$ (+0.2 σ)
A_{217}^{dustTT}	95.7	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	13.795	$13.793^{+0.061}_{-0.062}$ (−0.6 σ)	$\sigma_8(2.33)$	0.3067	$0.3068^{+0.0066}_{-0.0062}$ (+0.2 σ)
A_{100}^{dustTE}	0.113	$0.113^{+0.076}_{-0.074}$	z_*	1089.62	$1089.73^{+0.82}_{-0.78}$ (−0.9 σ)	f_{2000}^{143}	27.8	29^{+6}_{-6} (−0.6 σ)
$A_{100 \times 143}^{dustTE}$	0.136	$0.134^{+0.057}_{-0.058}$	r_*	144.62	$144.61^{+0.55}_{-0.54}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	31.26	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 217}^{dustTE}$	0.482	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	1.04114	$1.04116^{+0.00061}_{-0.00059}$ (+0.3 σ)	f_{2000}^{217}	105.85	$106.6^{+4.2}_{-3.9}$ (−0.6 σ)
A_{143}^{dustTE}	0.227	$0.22^{+0.11}_{-0.10}$	$D_M(z_*)/\text{Gpc}$	13.890	$13.890^{+0.055}_{-0.053}$ (+0.3 σ)	χ_{small}^2	396.22	$397.4 (\nu: 2.5)$ (+0.3 σ)
$A_{143 \times 217}^{dustTE}$	0.664	$0.66^{+0.16}_{-0.16}$	z_{drag}	1059.74	$1059.8^{+1.4}_{-1.4}$ (+0.3 σ)	χ_{lowl}^2	23.25	$23.4 (\nu: 0.7)$ (−0.3 σ)
A_{217}^{dustTE}	2.07	$2.08^{+0.54}_{-0.53}$	r_{drag}	147.27	$147.27^{+0.61}_{-0.60}$ (+0.1 σ)	χ_{plik}^2	2344.9	$2360.4 (\nu: 18.2)$ (+275.2 σ)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_D	0.14090	$0.14080^{+0.00073}_{-0.00072}$ (+0.4 σ)	χ_{6DF}^2	0.038	$0.061 (\nu: 0.0)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_D$	0.16052	$0.16064^{+0.00089}_{-0.00087}$ (−0.6 σ)	χ_{MGS}^2	1.16	$1.24 (\nu: 0.1)$
H_0	67.59	$67.62^{+0.94}_{-0.98}$ (+0.7 σ)	z_{eq}	3385.8	3385^{+46}_{-45} (−0.5 σ)	$\chi_{DR12BAO}^2$	4.62	$5.0 (\nu: 1.2)$
Ω_Λ	0.6884	$0.689^{+0.012}_{-0.013}$ (+0.6 σ)	k_{eq}	0.010334	$0.01033^{+0.00014}_{-0.00014}$ (−0.5 σ)	χ_{prior}^2	1.5	$11.6 (\nu: 10.3)$ (+1.2 σ)
Ω_m	0.3116	$0.311^{+0.013}_{-0.012}$ (−0.6 σ)	$100\theta_{eq}$	0.8162	$0.8164^{+0.0085}_{-0.0085}$ (+0.6 σ)	χ_{BAO}^2	5.82	$6.3 (\nu: 0.8)$
$\Omega_m h^2$	0.14233	$0.1423^{+0.0019}_{-0.0019}$ (−0.5 σ)	$100\theta_{s,eq}$	0.45089	$0.4510^{+0.0043}_{-0.0044}$ (+0.5 σ)	χ_{CMB}^2	2764.3	$2781.1 (\nu: 17.7)$ (+280.2 σ)

Best-fit $\chi_{\text{eff}}^2 = 2771.70$; $\Delta\chi_{\text{eff}}^2 = -0.21$; $\bar{\chi}_{\text{eff}}^2 = 2798.91$; $\Delta\bar{\chi}_{\text{eff}}^2 = 1.00$; $R - 1 = 0.02958$
 χ_{eff}^2 : BAO - 6DF: 0.04 (Δ 0.01) MGS: 1.16 (Δ -0.06) DR12BAO: 4.62 (Δ 0.21) CMB - smalll_100x143_offlike5_EE_Aplanck_B: 396.22 (Δ 0.02) commander_dx12_v3_2_29: 23.25 (Δ 0.38) plik_rd12_HM_v22b_TTTEEE: 2344.87 (Δ -0.64)

20.13 base_yhe_plikHM_TTTEEE_lowl_lowE_post_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.022304	$0.02230^{+0.00039}_{-0.00040}$ $(+0.6\sigma)$	$\Omega_{\mathrm{m}} h^2$	0.14297	$0.1430^{+0.0022}_{-0.0022}$ (-0.2σ)	$100\theta_{\mathrm{eq}}$	0.8131	$0.813^{+0.010}_{-0.0098}$ $(+0.2\sigma)$
$\Omega_{\mathrm{c}} h^2$	0.12002	$0.1201^{+0.0023}_{-0.0024}$ (-0.3σ)	$\Omega_{\mathrm{m}} h^3$	0.09606	$0.0961^{+0.0010}_{-0.0010}$ $(+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	0.4493	$0.4492^{+0.0053}_{-0.0050}$ $(+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	1.04061	$1.0407^{+0.0011}_{-0.0011}$ (-0.1σ)	σ_8	0.8097	$0.810^{+0.014}_{-0.014}$ (-0.2σ)	$H(0.15)$	72.52	$72.5^{+1.1}_{-1.1}$ $(+0.3\sigma)$
τ	0.0541	$0.054^{+0.015}_{-0.015}$ $(+0.2\sigma)$	S_8	0.8319	$0.832^{+0.025}_{-0.025}$ (-0.3σ)	$D_{\mathrm{M}}(0.15)$	644.9	645^{+11}_{-10} (-0.3σ)
Y_{P}	0.2366	$0.239^{+0.024}_{-0.025}$ (-0.3σ)	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4557	$0.456^{+0.014}_{-0.014}$ (-0.3σ)	$H(0.38)$	82.72	$82.73^{+0.83}_{-0.82}$ $(+0.3\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	3.0422	$3.042^{+0.032}_{-0.030}$ $(+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.6074	$0.607^{+0.013}_{-0.013}$ (-0.3σ)	$D_{\mathrm{M}}(0.38)$	1536.7	1537^{+22}_{-21} (-0.3σ)
n_{s}	0.9629	$0.962^{+0.014}_{-0.014}$ (-0.1σ)	$\sigma_8/h^{0.5}$	0.9878	$0.988^{+0.018}_{-0.018}$ (-0.3σ)	$H(0.51)$	89.49	$89.50^{+0.70}_{-0.70}$ $(+0.3\sigma)$
y_{cal}	1.00046	$1.0005^{+0.0047}_{-0.0048}$ $(+0.0\sigma)$	$r_{\mathrm{drag}} h$	98.89	$98.9^{+2.0}_{-1.9}$ $(+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	1989.8	1990^{+26}_{-25} (-0.3σ)
A_{217}^{CIB}	44.7	46^{+10}_{-10} (-0.3σ)	$\langle d^2 \rangle^{1/2}$	2.4484	$2.450^{+0.045}_{-0.046}$ (-0.1σ)	$H(0.61)$	95.15	$95.16^{+0.62}_{-0.61}$ $(+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.78	—	z_{re}	7.64	$7.6^{+1.5}_{-1.5}$ $(+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	2314.8	2315^{+28}_{-28} (-0.3σ)
A_{143}^{tSZ}	7.00	$5.5^{+3.7}_{-3.9}$ $(+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	2.095	$2.094^{+0.067}_{-0.061}$ $(+0.1\sigma)$	$H(2.33)$	236.48	$236.5^{+1.4}_{-1.5}$ (-0.2σ)
A_{100}^{PS}	245	257^{+50}_{-50} (-0.3σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8801	$1.881^{+0.023}_{-0.023}$ (-0.3σ)	$D_{\mathrm{M}}(2.33)$	5770.5	5770^{+31}_{-31} (-0.3σ)
A_{143}^{PS}	50.0	45^{+20}_{-20} (-0.5σ)	D_{40}	1234.0	1236^{+30}_{-29} $(+0.1\sigma)$	$f\sigma_8(0.15)$	0.4598	$0.460^{+0.013}_{-0.013}$ (-0.3σ)
$A_{143 \times 217}^{\mathrm{PS}}$	54.6	42^{+20}_{-20} (-0.2σ)	D_{220}	5731	5735^{+75}_{-76} $(+0.5\sigma)$	$\sigma_8(0.15)$	0.7477	$0.747^{+0.013}_{-0.013}$ (-0.2σ)
A_{217}^{PS}	122.5	115^{+20}_{-20} $(+0.0\sigma)$	D_{810}	2540.0	2538^{+25}_{-26} $(+0.1\sigma)$	$f\sigma_8(0.38)$	0.4770	$0.477^{+0.010}_{-0.010}$ (-0.3σ)
A^{kSZ}	0.01	< 7.90 (-0.2σ)	D_{1420}	819.3	$817.5^{+9.2}_{-9.2}$ $(+0.6\sigma)$	$\sigma_8(0.38)$	0.6622	$0.662^{+0.012}_{-0.011}$ (-0.1σ)
$A_{100}^{\mathrm{dustTT}}$	8.70	$8.9^{+3.6}_{-3.5}$ (-0.0σ)	D_{2000}	232.10	$231.3^{+3.6}_{-3.4}$ $(+0.8\sigma)$	$f\sigma_8(0.51)$	0.4750	$0.4749^{+0.0091}_{-0.0091}$ (-0.3σ)
$A_{143}^{\mathrm{dustTT}}$	10.94	$10.8^{+3.6}_{-3.5}$ $(+0.1\sigma)$	$n_{\mathrm{s},0.002}$	0.9629	$0.962^{+0.014}_{-0.014}$ (-0.1σ)	$\sigma_8(0.51)$	0.6195	$0.619^{+0.011}_{-0.011}$ (-0.1σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	20.0	$18.6^{+6.7}_{-6.4}$ $(+0.1\sigma)$	Y_{P}	0.2366	$0.239^{+0.024}_{-0.025}$ (-0.3σ)	$f\sigma_8(0.61)$	0.4696	$0.4695^{+0.0085}_{-0.0084}$ (-0.3σ)
$A_{217}^{\mathrm{dustTT}}$	95.7	94^{+10}_{-10} $(+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2379	$0.240^{+0.024}_{-0.025}$ (-0.3σ)	$\sigma_8(0.61)$	0.5893	$0.589^{+0.011}_{-0.010}$ (-0.1σ)
$A_{100}^{\mathrm{dustTE}}$	0.115	$0.113^{+0.076}_{-0.074}$	Age/Gyr	13.814	$13.812^{+0.072}_{-0.070}$ (-0.3σ)	$f\sigma_8(2.33)$	0.2969	$0.2968^{+0.0057}_{-0.0055}$ (-0.1σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.136	$0.134^{+0.058}_{-0.057}$	z_*	1089.66	$1089.76^{+0.82}_{-0.79}$ (-0.9σ)	$\sigma_8(2.33)$	0.3059	$0.3058^{+0.0063}_{-0.0060}$ (-0.0σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	r_*	144.51	$144.49^{+0.57}_{-0.56}$ $(+0.1\sigma)$	f_{2000}^{143}	27.4	29^{+6}_{-6} (-0.7σ)
$A_{143}^{\mathrm{dustTE}}$	0.226	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	1.04102	$1.04103^{+0.00065}_{-0.00063}$ $(+0.1\sigma)$	$f_{2000}^{143 \times 217}$	31.01	32^{+4}_{-4} (-0.7σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.666	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.881	$13.880^{+0.055}_{-0.054}$ $(+0.0\sigma)$	f_{2000}^{217}	105.61	$106.5^{+4.2}_{-3.9}$ (-0.7σ)
$A_{217}^{\mathrm{dustTE}}$	2.09	$2.08^{+0.54}_{-0.53}$	z_{drag}	1059.51	$1059.6^{+1.5}_{-1.5}$ $(+0.1\sigma)$	$\chi^2_{\mathrm{lensing}}$	8.76	9.18 $(\nu: 0.2)$
c_{100}	0.99973	$0.9997^{+0.0012}_{-0.0012}$ $(+0.1\sigma)$	r_{drag}	147.19	$147.17^{+0.61}_{-0.58}$ (-0.1σ)	χ^2_{small}	396.05	397.0 $(\nu: 1.5)$ $(+0.0\sigma)$
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (-0.1σ)	k_{D}	0.14107	$0.14098^{+0.00078}_{-0.00077}$ $(+0.6\sigma)$	χ^2_{lowl}	23.75	24.0 $(\nu: 0.9)$ $(+0.0\sigma)$
H_0	67.19	$67.2^{+1.2}_{-1.2}$ $(+0.3\sigma)$	$100\theta_{\mathrm{D}}$	0.16043	$0.16055^{+0.00089}_{-0.00088}$ (-0.7σ)	χ^2_{plik}	2344.0	2359.6 $(\nu: 17.1)$ $(+275.1\sigma)$
Ω_{Λ}	0.6833	$0.683^{+0.016}_{-0.016}$ $(+0.3\sigma)$	z_{eq}	3401	3402^{+52}_{-54} (-0.2σ)	χ^2_{prior}	1.5	11.5 $(\nu: 10.3)$ $(+1.1\sigma)$
Ω_{m}	0.3167	$0.317^{+0.016}_{-0.016}$ (-0.3σ)	k_{eq}	0.010380	$0.01038^{+0.00016}_{-0.00016}$ (-0.2σ)	χ^2_{CMB}	2772.6	2789.9 $(\nu: 18.1)$ $(+281.8\sigma)$

Best-fit $\chi^2_{\mathrm{eff}} = 2774.06$; $\Delta\chi^2_{\mathrm{eff}} = -0.57$; $\bar{\chi}^2_{\mathrm{eff}} = 2801.34$; $\Delta\bar{\chi}^2_{\mathrm{eff}} = 0.65$; $R - 1 = 0.01603$
 χ^2_{eff} : CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p.teb.consext8: 8.76 (Δ -0.11) small_100x143_offlike5_EE_Aplanck_B: 396.05 (Δ -0.00) commander_dx12_v3_2_29: 23.75 (Δ 0.50) plik_rd12_HM_v22b_TTTEEE: 2344.00 (Δ -0.93)

20.14 base_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022390	$0.02239^{+0.00035}_{-0.00035}$ (+0.9 σ)	σ_8	0.8089	$0.809^{+0.014}_{-0.014}$ (−0.2 σ)	$H(0.38)$	82.98	$83.00^{+0.65}_{-0.65}$ (+0.6 σ)
$\Omega_{\mathrm{c}}h^2$	0.11926	$0.1193^{+0.0019}_{-0.0019}$ (−0.6 σ)	S_8	0.8243	$0.825^{+0.021}_{-0.021}$ (−0.6 σ)	$D_{\mathrm{M}}(0.38)$	1529.8	1530^{+17}_{-16} (−0.6 σ)
$100\theta_{\mathrm{MC}}$	1.04080	$1.0409^{+0.0010}_{-0.0010}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4515	$0.452^{+0.011}_{-0.012}$ (−0.6 σ)	$H(0.51)$	89.70	$89.72^{+0.57}_{-0.56}$ (+0.6 σ)
τ	0.0559	$0.056^{+0.015}_{-0.014}$ (+0.5 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6043	$0.605^{+0.012}_{-0.012}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1981.7	1981^{+20}_{-19} (−0.6 σ)
Y_{P}	0.2395	$0.242^{+0.023}_{-0.024}$ (−0.2 σ)	$\sigma_8/h^{0.5}$	0.9840	$0.985^{+0.017}_{-0.017}$ (−0.5 σ)	$H(0.61)$	95.32	$95.34^{+0.51}_{-0.50}$ (+0.6 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0450	$3.046^{+0.031}_{-0.030}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	99.55	$99.6^{+1.4}_{-1.5}$ (+0.6 σ)	$D_{\mathrm{M}}(0.61)$	2305.9	2306^{+22}_{-21} (−0.6 σ)
n_{s}	0.9653	$0.965^{+0.012}_{-0.012}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.4386	$2.440^{+0.042}_{-0.042}$ (−0.3 σ)	$H(2.33)$	236.08	$236.1^{+1.2}_{-1.2}$ (−0.5 σ)
y_{cal}	1.00070	$1.0007^{+0.0047}_{-0.0048}$ (+0.1 σ)	z_{re}	7.80	$7.8^{+1.5}_{-1.5}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5762.6	5762^{+26}_{-27} (−0.6 σ)
A_{217}^{CIB}	46.0	46^{+10}_{-10} (−0.2 σ)	$10^9 A_{\mathrm{s}}$	2.101	$2.103^{+0.066}_{-0.062}$ (+0.3 σ)	$f\sigma_8(0.15)$	0.4561	$0.456^{+0.011}_{-0.011}$ (−0.6 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.57	—	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8788	$1.879^{+0.023}_{-0.023}$ (−0.3 σ)	$\sigma_8(0.15)$	0.7475	$0.748^{+0.013}_{-0.013}$ (−0.1 σ)
A_{143}^{tSZ}	7.15	$5.5^{+3.9}_{-3.8}$ (+0.3 σ)	D_{40}	1230.4	1231^{+28}_{-27} (−0.1 σ)	$f\sigma_8(0.38)$	0.4744	$0.4747^{+0.0094}_{-0.0096}$ (−0.5 σ)
A_{100}^{PS}	248	257^{+50}_{-50} (−0.3 σ)	D_{220}	5739	5740^{+77}_{-74} (+0.7 σ)	$\sigma_8(0.38)$	0.6626	$0.663^{+0.012}_{-0.011}$ (−0.0 σ)
A_{143}^{PS}	47.5	45^{+20}_{-20} (−0.5 σ)	D_{810}	2540.4	2539^{+25}_{-25} (+0.2 σ)	$f\sigma_8(0.51)$	0.4730	$0.4733^{+0.0087}_{-0.0089}$ (−0.5 σ)
$A_{143\times 217}^{\mathrm{PS}}$	49.7	42^{+20}_{-20} (−0.2 σ)	D_{1420}	819.4	$818.2^{+9.0}_{-9.2}$ (+0.7 σ)	$\sigma_8(0.51)$	0.6201	$0.621^{+0.011}_{-0.011}$ (+0.1 σ)
A_{217}^{PS}	120.5	115^{+20}_{-20} (−0.0 σ)	D_{2000}	232.04	$231.4^{+3.5}_{-3.4}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4680	$0.4683^{+0.0084}_{-0.0084}$ (−0.4 σ)
A^{kSZ}	0.00	< 7.84 (−0.2 σ)	$n_{\mathrm{s},0.002}$	0.9653	$0.965^{+0.012}_{-0.012}$ (+0.2 σ)	$\sigma_8(0.61)$	0.5900	$0.590^{+0.011}_{-0.010}$ (+0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	8.80	$8.9^{+3.7}_{-3.4}$ (−0.0 σ)	Y_{P}	0.2395	$0.242^{+0.023}_{-0.024}$ (−0.2 σ)	$f\sigma_8(2.33)$	0.2975	$0.2977^{+0.0056}_{-0.0053}$ (+0.2 σ)
$A_{143}^{\mathrm{dustTT}}$	10.92	$10.9^{+3.6}_{-3.5}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2408	$0.243^{+0.023}_{-0.024}$ (−0.2 σ)	$\sigma_8(2.33)$	0.3067	$0.3069^{+0.0060}_{-0.0056}$ (+0.3 σ)
$A_{143\times 217}^{\mathrm{dustTT}}$	19.8	$18.6^{+6.6}_{-6.4}$ (+0.1 σ)	Age/Gyr	13.796	$13.794^{+0.060}_{-0.061}$ (−0.6 σ)	f_{2000}^{143}	27.8	29^{+6}_{-6} (−0.7 σ)
$A_{217}^{\mathrm{dustTT}}$	95.3	94^{+10}_{-10} (+0.1 σ)	z_*	1089.59	$1089.70^{+0.80}_{-0.77}$ (−1.0 σ)	$f_{2000}^{143\times 217}$	31.23	32^{+5}_{-4} (−0.7 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.112^{+0.077}_{-0.074}$	r_*	144.63	$144.61^{+0.53}_{-0.50}$ (+0.3 σ)	f_{2000}^{217}	105.95	$106.5^{+4.2}_{-4.0}$ (−0.7 σ)
$A_{100\times 143}^{\mathrm{dustTE}}$	0.134	$0.134^{+0.057}_{-0.058}$	$100\theta_*$	1.04113	$1.04115^{+0.00061}_{-0.00059}$ (+0.3 σ)	$\chi_{\mathrm{lensing}}^2$	8.66	9.08 (ν : 0.2)
$A_{100\times 217}^{\mathrm{dustTE}}$	0.483	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.891	$13.890^{+0.052}_{-0.050}$ (+0.3 σ)	χ_{small}^2	396.33	397.3 (ν : 2.1) (+0.2 σ)
$A_{143}^{\mathrm{dustTE}}$	0.224	$0.22^{+0.11}_{-0.10}$	z_{drag}	1059.74	$1059.8^{+1.4}_{-1.4}$ (+0.3 σ)	χ_{lowl}^2	23.34	23.5 (ν : 0.7) (−0.3 σ)
$A_{143\times 217}^{\mathrm{dustTE}}$	0.664	$0.67^{+0.16}_{-0.16}$	r_{drag}	147.28	$147.27^{+0.59}_{-0.56}$ (+0.1 σ)	χ_{plik}^2	2344.6	2360.0 (ν : 17.4) (+275.2 σ)
$A_{217}^{\mathrm{dustTE}}$	2.08	$2.08^{+0.54}_{-0.53}$	k_{D}	0.14092	$0.14083^{+0.00073}_{-0.00071}$ (+0.4 σ)	$\chi_{6\mathrm{DF}}^2$	0.037	0.060 (ν : 0.0)
c_{100}	0.99974	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	$100\theta_{\mathrm{D}}$	0.16049	$0.16061^{+0.00089}_{-0.00086}$ (−0.7 σ)	χ_{MGS}^2	1.16	1.22 (ν : 0.1)
c_{217}	0.99818	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	z_{eq}	3385.1	3386^{+42}_{-44} (−0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.61	5.0 (ν : 1.1)
H_0	67.59	$67.60^{+0.93}_{-0.94}$ (+0.6 σ)	k_{eq}	0.010332	$0.01033^{+0.00013}_{-0.00013}$ (−0.5 σ)	χ_{prior}^2	1.6	11.6 (ν : 10.2) (+1.2 σ)
Ω_{Λ}	0.6885	$0.688^{+0.011}_{-0.012}$ (+0.6 σ)	$100\theta_{\mathrm{eq}}$	0.8163	$0.8163^{+0.0080}_{-0.0079}$ (+0.6 σ)	χ_{CMB}^2	2773.0	2789.8 (ν : 17.9) (+281.8 σ)
Ω_{m}	0.3115	$0.312^{+0.012}_{-0.011}$ (−0.6 σ)	$100\theta_{\mathrm{s,eq}}$	0.45095	$0.4509^{+0.0041}_{-0.0040}$ (+0.5 σ)	χ_{BAO}^2	5.80	6.2 (ν : 0.7)
$\Omega_{\mathrm{m}}h^2$	0.14230	$0.1423^{+0.0018}_{-0.0018}$ (−0.5 σ)	$H(0.15)$	72.87	$72.88^{+0.81}_{-0.83}$ (+0.6 σ)			
$\Omega_{\mathrm{m}}h^3$	0.09618	$0.09621^{+0.00097}_{-0.00099}$ (+0.4 σ)	$D_{\mathrm{M}}(0.15)$	641.4	$641.3^{+8.2}_{-7.9}$ (−0.6 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 2780.41$; $\Delta\chi_{\mathrm{eff}}^2 = -0.29$; $\bar{\chi}_{\mathrm{eff}}^2 = 2807.64$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.79$; $R - 1 = 0.02881$
 χ_{eff}^2 : BAO - 6DF: 0.04 (Δ 0.01) MGS: 1.16 (Δ -0.06) DR12BAO: 4.61 (Δ 0.19) CMB - smicadx12_Dec5_ftl_mv2_ndclpp_p_teb_consext8: 8.66 (Δ -0.07) small_100x143_offlike5_EE_Aplanck
396.33 (Δ -0.19) commander_dx12_v3.2_29: 23.34 (Δ 0.45) plik_rd12_HM_v22b_TTTEEE: 2344.62 (Δ -0.70)

20.15 base_yhe_plikHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022494	$0.02250^{+0.00035}_{-0.00038}$ (+1.3 σ)	$\Omega_m h^2$	0.14177	$0.1417^{+0.0024}_{-0.0025}$ (−0.8 σ)	$100\theta_{\text{eq}}$	0.8191	$0.819^{+0.011}_{-0.011}$ (+0.9 σ)
$\Omega_c h^2$	0.11863	$0.1186^{+0.0025}_{-0.0025}$ (−0.9 σ)	$\Omega_m h^3$	0.09639	$0.0964^{+0.0011}_{-0.0010}$ (+0.7 σ)	$100\theta_{\text{s,eq}}$	0.4523	$0.4525^{+0.0056}_{-0.0056}$ (+0.9 σ)
$100\theta_{\text{MC}}$	1.04107	$1.0412^{+0.0011}_{-0.0010}$ (+0.4 σ)	σ_8	0.8080	$0.809^{+0.018}_{-0.016}$ (−0.3 σ)	$H(0.15)$	73.22	$73.3^{+1.2}_{-1.1}$ (+1.1 σ)
τ	0.0563	$0.058^{+0.019}_{-0.016}$ (+0.7 σ)	S_8	0.8169	$0.817^{+0.029}_{-0.029}$ (−0.9 σ)	$D_{\text{M}}(0.15)$	638.0	637^{+11}_{-11} (−1.0 σ)
Y_{P}	0.2448	$0.247^{+0.023}_{-0.024}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4475	$0.448^{+0.016}_{-0.016}$ (−0.9 σ)	$H(0.38)$	83.26	$83.31^{+0.92}_{-0.83}$ (+1.1 σ)
$\ln(10^{10} A_{\text{s}})$	3.0454	$3.048^{+0.039}_{-0.035}$ (+0.5 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6013	$0.602^{+0.016}_{-0.015}$ (−0.8 σ)	$D_{\text{M}}(0.38)$	1522.7	1522^{+22}_{-23} (−1.0 σ)
n_{s}	0.9694	$0.970^{+0.014}_{-0.013}$ (+0.6 σ)	$\sigma_8/h^{0.5}$	0.9799	$0.981^{+0.023}_{-0.022}$ (−0.7 σ)	$H(0.51)$	89.93	$89.98^{+0.76}_{-0.70}$ (+1.1 σ)
y_{cal}	1.00050	$1.0007^{+0.0046}_{-0.0049}$ (+0.1 σ)	$r_{\text{drag}} h$	100.16	$100.3^{+2.1}_{-2.0}$ (+1.0 σ)	$D_{\text{M}}(0.51)$	1973.2	1972^{+26}_{-28} (−1.0 σ)
A_{217}^{CIB}	45.6	47^{+10}_{-10} (−0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.423	$2.425^{+0.056}_{-0.054}$ (−0.6 σ)	$H(0.61)$	95.52	$95.56^{+0.65}_{-0.60}$ (+1.0 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.70	—	z_{re}	7.83	$7.9^{+1.8}_{-1.6}$ (+0.6 σ)	$D_{\text{M}}(0.61)$	2296.8	2295^{+28}_{-30} (−1.1 σ)
A_{143}^{tSZ}	7.11	$5.5^{+3.8}_{-3.7}$ (+0.2 σ)	$10^9 A_{\text{s}}$	2.102	$2.108^{+0.083}_{-0.073}$ (+0.5 σ)	$H(2.33)$	235.80	$235.8^{+1.5}_{-1.6}$ (−0.7 σ)
A_{100}^{PS}	247	259^{+50}_{-50} (−0.2 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8779	$1.878^{+0.024}_{-0.023}$ (−0.4 σ)	$D_{\text{M}}(2.33)$	5753.1	5751^{+30}_{-32} (−1.0 σ)
A_{143}^{PS}	49.9	45^{+20}_{-20} (−0.5 σ)	D_{40}	1222.2	1223^{+31}_{-29} (−0.5 σ)	$f\sigma_8(0.15)$	0.4524	$0.453^{+0.015}_{-0.015}$ (−0.9 σ)
$A_{143 \times 217}^{\text{PS}}$	53.4	42^{+20}_{-20} (−0.2 σ)	D_{220}	5738	5740^{+73}_{-76} (+0.7 σ)	$\sigma_8(0.15)$	0.7471	$0.748^{+0.016}_{-0.015}$ (−0.1 σ)
A_{217}^{PS}	121.9	115^{+20}_{-20} (−0.0 σ)	D_{810}	2540.5	2539^{+25}_{-26} (+0.2 σ)	$f\sigma_8(0.38)$	0.4718	$0.472^{+0.013}_{-0.012}$ (−0.8 σ)
A^{kSZ}	0.00	< 8.04 (−0.2 σ)	D_{1420}	819.5	$818.3^{+9.0}_{-9.5}$ (+0.8 σ)	$\sigma_8(0.38)$	0.6628	$0.664^{+0.015}_{-0.013}$ (+0.1 σ)
A_{100}^{dustTT}	8.82	$9.0^{+3.8}_{-3.4}$ (+0.0 σ)	D_{2000}	231.85	$231.3^{+3.5}_{-3.5}$ (+0.7 σ)	$f\sigma_8(0.51)$	0.4710	$0.471^{+0.012}_{-0.011}$ (−0.7 σ)
A_{143}^{dustTT}	11.09	$11.0^{+3.6}_{-3.6}$ (+0.2 σ)	$n_{\text{s},0.002}$	0.9694	$0.970^{+0.014}_{-0.013}$ (+0.6 σ)	$\sigma_8(0.51)$	0.6205	$0.621^{+0.014}_{-0.012}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTT}}$	20.2	$18.6^{+7.1}_{-6.3}$ (+0.1 σ)	Y_{P}	0.2448	$0.247^{+0.023}_{-0.024}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4664	$0.467^{+0.011}_{-0.011}$ (−0.6 σ)
A_{217}^{dustTT}	95.5	94^{+10}_{-10} (+0.1 σ)	$Y_{\text{P}}^{\text{BBN}}$	0.2461	$0.249^{+0.023}_{-0.024}$ (+0.1 σ)	$\sigma_8(0.61)$	0.5905	$0.591^{+0.013}_{-0.012}$ (+0.2 σ)
A_{100}^{dustTE}	0.114	$0.112^{+0.071}_{-0.075}$	Age/Gyr	13.774	$13.770^{+0.068}_{-0.070}$ (−1.0 σ)	$f\sigma_8(2.33)$	0.2979	$0.2984^{+0.0066}_{-0.0059}$ (+0.4 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.133^{+0.061}_{-0.058}$	z_*	1089.62	$1089.72^{+0.80}_{-0.78}$ (−0.9 σ)	$\sigma_8(2.33)$	0.3074	$0.3079^{+0.0077}_{-0.0064}$ (+0.5 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.481	$0.48^{+0.17}_{-0.17}$	r_*	144.69	$144.69^{+0.63}_{-0.60}$ (+0.5 σ)	f_{2000}^{143}	28.0	29^{+6}_{-6} (−0.6 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	1.04127	$1.04130^{+0.00068}_{-0.00064}$ (+0.6 σ)	$f_{2000}^{143 \times 217}$	31.48	32^{+4}_{-4} (−0.6 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.661	$0.67^{+0.16}_{-0.16}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.896	$13.895^{+0.057}_{-0.058}$ (+0.4 σ)	f_{2000}^{217}	106.05	$106.8^{+3.9}_{-4.0}$ (−0.6 σ)
A_{217}^{dustTE}	2.07	$2.08^{+0.53}_{-0.52}$	z_{drag}	1060.12	$1060.2^{+1.5}_{-1.5}$ (+0.7 σ)	χ_{small}^2	396.34	397.7 (ν : 3.5) (+0.5 σ)
c_{100}	0.99973	$0.9997^{+0.0011}_{-0.0012}$ (+0.1 σ)	r_{drag}	147.32	$147.32^{+0.64}_{-0.64}$ (+0.2 σ)	χ_{lowl}^2	22.65	22.8 (ν : 0.7) (−0.6 σ)
c_{217}	0.99817	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	k_{D}	0.14075	$0.14064^{+0.00080}_{-0.00086}$ (+0.2 σ)	χ_{plik}^2	2346.5	2362.1 (ν : 21.6) (+275.5 σ)
H_0	67.99	$68.1^{+1.3}_{-1.2}$ (+1.0 σ)	$100\theta_{\text{D}}$	0.16063	$0.16076^{+0.00092}_{-0.00088}$ (−0.5 σ)	χ_{H073p45}^2	10.8	10.7 (ν : 3.1)
Ω_{Λ}	0.6933	$0.694^{+0.016}_{-0.016}$ (+1.0 σ)	z_{eq}	3373	3371^{+57}_{-60} (−0.8 σ)	χ_{prior}^2	1.6	11.6 (ν : 11.6) (+1.2 σ)
Ω_{m}	0.3067	$0.306^{+0.016}_{-0.016}$ (−1.0 σ)	k_{eq}	0.010293	$0.01029^{+0.00017}_{-0.00018}$ (−0.8 σ)	χ_{CMB}^2	2765.5	2782.6 (ν : 20.7) (+280.5 σ)

Best-fit $\chi_{\text{eff}}^2 = 2777.94$; $\Delta\chi_{\text{eff}}^2 = 0.01$; $\bar{\chi}_{\text{eff}}^2 = 2804.95$; $\Delta\bar{\chi}_{\text{eff}}^2 = 0.78$; $R - 1 = 0.08230$
 χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.34 (Δ -0.13) commander_dx12_v3.2.29: 22.65 (Δ 0.11) plik_rd12_HM_v22b_TTTEEE: 2346.53 (Δ -0.23) Hubble - H073p45: 10.82 (Δ 0.23)

20.16 base_yhe_plikHM_TTTEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02230^{+0.00039}_{-0.00039} \quad (+0.6\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0025}_{-0.0026} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.012}_{-0.011} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1202^{+0.0027}_{-0.0027} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0961^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0060}_{-0.0057} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0407^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	σ_8	$0.811^{+0.016}_{-0.014} \quad (-0.0\sigma)$	$H(0.15)$	$72.5^{+1.2}_{-1.2} \quad (+0.2\sigma)$
τ	$0.055^{+0.014}_{-0.012} \quad (+0.4\sigma)$	S_8	$0.835^{+0.031}_{-0.032} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+12}_{-12} \quad (-0.2\sigma)$
Y_{P}	$0.240^{+0.024}_{-0.025} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$H(0.38)$	$82.72^{+0.90}_{-0.89} \quad (+0.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.030}_{-0.028} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1537^{+24}_{-23} \quad (-0.2\sigma)$
n_{s}	$0.962^{+0.014}_{-0.014} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$H(0.51)$	$89.49^{+0.75}_{-0.74} \quad (+0.3\sigma)$
y_{cal}	$1.0006^{+0.0046}_{-0.0048} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.8^{+2.2}_{-2.2} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1990^{+28}_{-28} \quad (-0.2\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.056}_{-0.057} \quad (+0.0\sigma)$	$H(0.61)$	$95.16^{+0.64}_{-0.63} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 8.97 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2315^{+30}_{-30} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.064}_{-0.058} \quad (+0.3\sigma)$	$H(2.33)$	$236.6^{+1.6}_{-1.6} \quad (-0.1\sigma)$
A_{100}^{PS}	$257^{+60}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.882^{+0.024}_{-0.024} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5770^{+32}_{-32} \quad (-0.3\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1236^{+31}_{-31} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5733^{+75}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.012} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2538^{+25}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.013}_{-0.013} \quad (-0.1\sigma)$
A^{kSZ}	$< 7.85 \quad (-0.2\sigma)$	D_{1420}	$817.5^{+9.1}_{-9.2} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.012}_{-0.011} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	D_{2000}	$231.3^{+3.5}_{-3.5} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.012} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.6} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.962^{+0.014}_{-0.014} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.011}_{-0.010} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.6}_{-6.4} \quad (+0.1\sigma)$	Y_{P}	$0.240^{+0.024}_{-0.025} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.010}_{-0.010} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.241^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.011}_{-0.010} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.075}_{-0.075}$	Age/Gyr	$13.812^{+0.073}_{-0.072} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0055}_{-0.0051} \quad (+0.1\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.058}$	z_*	$1089.81^{+0.85}_{-0.80} \quad (-0.8\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0059}_{-0.0055} \quad (+0.1\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.45^{+0.64}_{-0.61} \quad (-0.0\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.10}_{-0.10}$	$100\theta_*$	$1.04103^{+0.00066}_{-0.00065} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.876^{+0.061}_{-0.058} \quad (-0.0\sigma)$	f_{2000}^{217}	$106.6^{+4.1}_{-4.0} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.09^{+0.52}_{-0.52}$	z_{drag}	$1059.6^{+1.5}_{-1.5} \quad (+0.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.0) \quad (+0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.13^{+0.65}_{-0.64} \quad (-0.2\sigma)$	χ_{lowl}^2	$24.1 \quad (\nu: 1.1) \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14099^{+0.00081}_{-0.00081} \quad (+0.6\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 17.9) \quad (+275.1\sigma)$
H_0	$67.2^{+1.3}_{-1.3} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16059^{+0.00091}_{-0.00088} \quad (-0.7\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.1) \quad (+1.1\sigma)$
Ω_{Λ}	$0.682^{+0.017}_{-0.018} \quad (+0.2\sigma)$	z_{eq}	$3406^{+60}_{-62} \quad (-0.1\sigma)$	χ_{CMB}^2	$2780.8 \quad (\nu: 17.5) \quad (+280.2\sigma)$
Ω_{m}	$0.318^{+0.018}_{-0.017} \quad (-0.2\sigma)$	k_{eq}	$0.01039^{+0.00018}_{-0.00019} \quad (-0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2792.32; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.79; R - 1 = 0.01241$$

20.17 base_yhe_plikHM_TTTEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00035}_{-0.00035}$ (+0.9 σ)	$\Omega_{\mathrm{m}}h^3$	$0.09624^{+0.00099}_{-0.00099}$ (+0.4 σ)	$H(0.15)$	$72.91^{+0.83}_{-0.86}$ (+0.7 σ)
$\Omega_{\mathrm{c}}h^2$	$0.1193^{+0.0020}_{-0.0020}$ (−0.6 σ)	σ_8	$0.810^{+0.017}_{-0.015}$ (−0.2 σ)	$D_{\mathrm{M}}(0.15)$	$641.0^{+8.5}_{-8.2}$ (−0.7 σ)
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0010}_{-0.0010}$ (+0.1 σ)	S_8	$0.825^{+0.025}_{-0.025}$ (−0.6 σ)	$H(0.38)$	$83.02^{+0.66}_{-0.67}$ (+0.7 σ)
τ	$0.057^{+0.014}_{-0.013}$ (+0.6 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.017}_{-0.014}$ (−0.6 σ)	$D_{\mathrm{M}}(0.38)$	1529^{+17}_{-17} (−0.7 σ)
Y_{P}	$0.243^{+0.023}_{-0.024}$ (−0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.014}_{-0.014}$ (−0.5 σ)	$H(0.51)$	$89.74^{+0.58}_{-0.57}$ (+0.7 σ)
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.032}_{-0.030}$ (+0.4 σ)	$\sigma_8/h^{0.5}$	$0.985^{+0.021}_{-0.020}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1981^{+20}_{-20} (−0.7 σ)
n_{s}	$0.966^{+0.012}_{-0.012}$ (+0.3 σ)	$r_{\mathrm{drag}}h$	$99.6^{+1.5}_{-1.6}$ (+0.6 σ)	$H(0.61)$	$95.36^{+0.52}_{-0.50}$ (+0.7 σ)
y_{cal}	$1.0006^{+0.0047}_{-0.0049}$ (+0.1 σ)	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.051}_{-0.048}$ (−0.3 σ)	$D_{\mathrm{M}}(0.61)$	2305^{+22}_{-21} (−0.7 σ)
A_{217}^{CIB}	47^{+10}_{-10} (−0.2 σ)	z_{re}	< 9.13 (+0.5 σ)	$H(2.33)$	$236.1^{+1.3}_{-1.3}$ (−0.5 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.104^{+0.068}_{-0.063}$ (+0.4 σ)	$D_{\mathrm{M}}(2.33)$	5761^{+26}_{-27} (−0.6 σ)
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8}$ (+0.3 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.024}_{-0.024}$ (−0.4 σ)	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.013}$ (−0.6 σ)
A_{100}^{PS}	257^{+50}_{-50} (−0.2 σ)	D_{40}	1229^{+29}_{-28} (−0.2 σ)	$\sigma_8(0.15)$	$0.748^{+0.014}_{-0.014}$ (−0.1 σ)
A_{143}^{PS}	45^{+20}_{-20} (−0.5 σ)	D_{220}	5736^{+75}_{-75} (+0.6 σ)	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.011}$ (−0.5 σ)
$A_{143 \times 217}^{\mathrm{PS}}$	42^{+20}_{-20} (−0.2 σ)	D_{810}	2539^{+25}_{-26} (+0.1 σ)	$\sigma_8(0.38)$	$0.663^{+0.013}_{-0.012}$ (+0.0 σ)
A_{217}^{PS}	115^{+20}_{-20} (−0.0 σ)	D_{1420}	$817.9^{+9.1}_{-9.2}$ (+0.7 σ)	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.010}$ (−0.5 σ)
A^{kSZ}	< 7.92 (−0.2 σ)	D_{2000}	$231.3^{+3.5}_{-3.3}$ (+0.8 σ)	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.011}$ (+0.1 σ)
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.4}$ (−0.0 σ)	$n_{\mathrm{s},0.002}$	$0.966^{+0.012}_{-0.012}$ (+0.3 σ)	$f\sigma_8(0.61)$	$0.468^{+0.010}_{-0.0096}$ (−0.4 σ)
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	Y_{P}	$0.243^{+0.023}_{-0.024}$ (−0.1 σ)	$\sigma_8(0.61)$	$0.591^{+0.011}_{-0.011}$ (+0.1 σ)
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.6}_{-6.4}$ (+0.1 σ)	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.244^{+0.023}_{-0.024}$ (−0.1 σ)	$f\sigma_8(2.33)$	$0.2979^{+0.0057}_{-0.0054}$ (+0.2 σ)
$A_{217}^{\mathrm{dustTT}}$	94^{+10}_{-10} (+0.1 σ)	Age/Gyr	$13.792^{+0.061}_{-0.062}$ (−0.6 σ)	$\sigma_8(2.33)$	$0.3071^{+0.0060}_{-0.0056}$ (+0.3 σ)
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.077}_{-0.074}$	z_*	$1089.73^{+0.82}_{-0.78}$ (−0.9 σ)	f_{2000}^{143}	29^{+6}_{-6} (−0.6 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.058}$	r_*	$144.61^{+0.55}_{-0.54}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	32^{+4}_{-4} (−0.7 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04117^{+0.00060}_{-0.00060}$ (+0.4 σ)	f_{2000}^{217}	$106.6^{+4.2}_{-3.9}$ (−0.6 σ)
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.055}_{-0.053}$ (+0.3 σ)	χ_{small}^2	397.3 (ν : 2.6) (+0.3 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	z_{drag}	$1059.9^{+1.4}_{-1.4}$ (+0.4 σ)	χ_{lowl}^2	23.4 (ν : 0.7) (−0.3 σ)
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.54}_{-0.53}$	r_{drag}	$147.27^{+0.62}_{-0.60}$ (+0.1 σ)	χ_{plik}^2	2360.2 (ν : 17.9) (+275.2 σ)
c_{100}	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	k_{D}	$0.14080^{+0.00073}_{-0.00072}$ (+0.4 σ)	$\chi_{6\mathrm{DF}}^2$	0.060 (ν : 0.0)
c_{217}	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	$100\theta_{\mathrm{D}}$	$0.16065^{+0.00090}_{-0.00087}$ (−0.6 σ)	χ_{MGS}^2	1.25 (ν : 0.1)
H_0	$67.63^{+0.96}_{-0.98}$ (+0.7 σ)	z_{eq}	3385^{+46}_{-46} (−0.5 σ)	$\chi_{\mathrm{DR12BAO}}^2$	4.9 (ν : 1.2)
Ω_{Λ}	$0.689^{+0.012}_{-0.013}$ (+0.7 σ)	k_{eq}	$0.01033^{+0.00014}_{-0.00014}$ (−0.5 σ)	χ_{prior}^2	11.6 (ν : 10.3) (+1.2 σ)
Ω_{m}	$0.311^{+0.013}_{-0.012}$ (−0.7 σ)	$100\theta_{\mathrm{eq}}$	$0.8164^{+0.0085}_{-0.0085}$ (+0.6 σ)	χ_{BAO}^2	6.2 (ν : 0.8)
$\Omega_{\mathrm{m}}h^2$	$0.1423^{+0.0019}_{-0.0019}$ (−0.5 σ)	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0044}_{-0.0044}$ (+0.6 σ)	χ_{CMB}^2	2780.9 (ν : 17.3) (+280.2 σ)

$$\bar{\chi}_{\mathrm{eff}}^2 = 2798.67; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.96; R - 1 = 0.03223$$

20.18 base_yhe_plikHM_TTTEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02231^{+0.00039}_{-0.00038} \quad (+0.6\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1430^{+0.0021}_{-0.0022} \quad (-0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.010}_{-0.0096} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0023}_{-0.0024} \quad (-0.3\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0961^{+0.0010}_{-0.0010} \quad (+0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4494^{+0.0053}_{-0.0049} \quad (+0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0407^{+0.0011}_{-0.0011} \quad (-0.1\sigma)$	σ_8	$0.810^{+0.013}_{-0.012} \quad (-0.1\sigma)$	$H(0.15)$	$72.6^{+1.0}_{-1.0} \quad (+0.3\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	S_8	$0.832^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+10}_{-10} \quad (-0.3\sigma)$
Y_{P}	$0.239^{+0.024}_{-0.025} \quad (-0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$H(0.38)$	$82.76^{+0.82}_{-0.82} \quad (+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.028}_{-0.026} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+21}_{-21} \quad (-0.3\sigma)$
n_{s}	$0.963^{+0.013}_{-0.013} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.018}_{-0.018} \quad (-0.3\sigma)$	$H(0.51)$	$89.52^{+0.69}_{-0.68} \quad (+0.3\sigma)$
y_{cal}	$1.0005^{+0.0047}_{-0.0048} \quad (+0.0\sigma)$	$r_{\mathrm{drag}}h$	$99.0^{+1.9}_{-1.9} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1989^{+25}_{-25} \quad (-0.3\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.451^{+0.045}_{-0.045} \quad (-0.0\sigma)$	$H(0.61)$	$95.18^{+0.61}_{-0.60} \quad (+0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 8.87 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2314^{+28}_{-27} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.059}_{-0.054} \quad (+0.2\sigma)$	$H(2.33)$	$236.5^{+1.4}_{-1.4} \quad (-0.2\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.880^{+0.023}_{-0.023} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5769^{+31}_{-30} \quad (-0.3\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1236^{+29}_{-29} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.012}_{-0.012} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5735^{+75}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.012}_{-0.011} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{810}	$2538^{+25}_{-26} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.3\sigma)$
A^{kSZ}	$< 7.88 \quad (-0.2\sigma)$	D_{1420}	$817.5^{+9.2}_{-9.3} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.0098} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	D_{2000}	$231.3^{+3.6}_{-3.4} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.4752^{+0.0090}_{-0.0090} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.963^{+0.013}_{-0.013} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.011}_{-0.0093} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.7}_{-6.4} \quad (+0.1\sigma)$	Y_{P}	$0.239^{+0.024}_{-0.025} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.4698^{+0.0083}_{-0.0083} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.240^{+0.024}_{-0.025} \quad (-0.3\sigma)$	$\sigma_8(0.61)$	$0.5898^{+0.0099}_{-0.0093} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.113^{+0.077}_{-0.074}$	Age/Gyr	$13.810^{+0.070}_{-0.069} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0052}_{-0.0049} \quad (+0.0\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.058}_{-0.057}$	z_*	$1089.76^{+0.82}_{-0.79} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0056}_{-0.0054} \quad (+0.1\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.50^{+0.57}_{-0.55} \quad (+0.1\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	$100\theta_*$	$1.04104^{+0.00065}_{-0.00063} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.880^{+0.055}_{-0.054} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.5^{+4.2}_{-4.0} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.54}_{-0.52}$	z_{drag}	$1059.6^{+1.4}_{-1.5} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.17 \quad (\nu: 0.2)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.18^{+0.61}_{-0.58} \quad (-0.1\sigma)$	χ_{simall}^2	$396.9 \quad (\nu: 1.6) \quad (+0.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14097^{+0.00077}_{-0.00077} \quad (+0.6\sigma)$	χ_{lowl}^2	$24.0 \quad (\nu: 0.9) \quad (+0.0\sigma)$
H_0	$67.2^{+1.2}_{-1.2} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16056^{+0.00089}_{-0.00088} \quad (-0.7\sigma)$	χ_{plik}^2	$2359.5 \quad (\nu: 17.0) \quad (+275.1\sigma)$
Ω_{Λ}	$0.684^{+0.015}_{-0.016} \quad (+0.3\sigma)$	z_{eq}	$3401^{+51}_{-53} \quad (-0.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
Ω_{m}	$0.316^{+0.016}_{-0.015} \quad (-0.3\sigma)$	k_{eq}	$0.01038^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	χ_{CMB}^2	$2789.6 \quad (\nu: 17.6) \quad (+281.7\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.11; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.60; R - 1 = 0.01737$$

20.19 base_yhe_plikHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00035}_{-0.00035} \quad (+0.9\sigma)$	σ_8	$0.810^{+0.014}_{-0.012} \quad (-0.2\sigma)$	$H(0.38)$	$83.01^{+0.65}_{-0.64} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1193^{+0.0018}_{-0.0019} \quad (-0.6\sigma)$	S_8	$0.825^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+16}_{-16} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0010}_{-0.0010} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.011}_{-0.012} \quad (-0.6\sigma)$	$H(0.51)$	$89.72^{+0.57}_{-0.55} \quad (+0.6\sigma)$
τ	$0.057^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.012}_{-0.012} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+20}_{-19} \quad (-0.7\sigma)$
Y_{P}	$0.242^{+0.023}_{-0.024} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.61)$	$95.34^{+0.51}_{-0.49} \quad (+0.6\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.030}_{-0.026} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.4}_{-1.5} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+21}_{-21} \quad (-0.7\sigma)$
n_{s}	$0.965^{+0.012}_{-0.012} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.041}_{-0.041} \quad (-0.3\sigma)$	$H(2.33)$	$236.1^{+1.2}_{-1.2} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0047}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+26}_{-26} \quad (-0.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.106^{+0.061}_{-0.058} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.010}_{-0.011} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.023}_{-0.023} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.012}_{-0.012} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.9}_{-3.8} \quad (+0.3\sigma)$	D_{40}	$1231^{+28}_{-28} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.4749^{+0.0093}_{-0.0094} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5740^{+77}_{-74} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.010} \quad (+0.1\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+25}_{-25} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4735^{+0.0086}_{-0.0085} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.2^{+9.0}_{-9.2} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.011}_{-0.010} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{2000}	$231.4^{+3.5}_{-3.4} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0083}_{-0.0080} \quad (-0.4\sigma)$
A^{kSZ}	$< 7.83 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.965^{+0.012}_{-0.012} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.010}_{-0.0096} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.4} \quad (-0.0\sigma)$	Y_{P}	$0.242^{+0.023}_{-0.024} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0052}_{-0.0050} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.6}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.243^{+0.023}_{-0.024} \quad (-0.2\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0058}_{-0.0051} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.6}_{-6.4} \quad (+0.1\sigma)$	Age/Gyr	$13.793^{+0.060}_{-0.061} \quad (-0.6\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.7\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.70^{+0.81}_{-0.77} \quad (-1.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.112^{+0.077}_{-0.074}$	r_*	$144.62^{+0.53}_{-0.51} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.5^{+4.2}_{-4.0} \quad (-0.7\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.057}_{-0.058}$	$100\theta_*$	$1.04115^{+0.00061}_{-0.00059} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.05 \quad (\nu: 0.2)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.890^{+0.052}_{-0.051} \quad (+0.3\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.1) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	z_{drag}	$1059.8^{+1.4}_{-1.4} \quad (+0.3\sigma)$	χ_{lowl}^2	$23.5 \quad (\nu: 0.7) \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	r_{drag}	$147.27^{+0.59}_{-0.56} \quad (+0.1\sigma)$	χ_{plik}^2	$2359.9 \quad (\nu: 17.3) \quad (+275.2\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.54}_{-0.53}$	k_{D}	$0.14082^{+0.00073}_{-0.00072} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16061^{+0.00089}_{-0.00086} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.23 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3385^{+42}_{-44} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.0)$
H_0	$67.62^{+0.91}_{-0.92} \quad (+0.6\sigma)$	k_{eq}	$0.01033^{+0.00013}_{-0.00013} \quad (-0.5\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 10.2) \quad (+1.2\sigma)$
Ω_{Λ}	$0.689^{+0.011}_{-0.012} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8164^{+0.0080}_{-0.0078} \quad (+0.6\sigma)$	χ_{CMB}^2	$2789.7 \quad (\nu: 17.6) \quad (+281.8\sigma)$
Ω_{m}	$0.311^{+0.012}_{-0.011} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4510^{+0.0041}_{-0.0040} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$
$\Omega_{\mathrm{m}}h^2$	$0.1423^{+0.0018}_{-0.0018} \quad (-0.5\sigma)$	$H(0.15)$	$72.90^{+0.81}_{-0.81} \quad (+0.6\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.09622^{+0.00098}_{-0.00099} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.2^{+8.1}_{-7.8} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.47; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.75; R - 1 = 0.03003$$

20.20 base_yhe_plikHM_TTTEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02251^{+0.00035}_{-0.00037} \quad (+1.3\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1417^{+0.0024}_{-0.0025} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.011}_{-0.011} \quad (+0.9\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1186^{+0.0025}_{-0.0024} \quad (-1.0\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.0965^{+0.0011}_{-0.0010} \quad (+0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4526^{+0.0056}_{-0.0056} \quad (+0.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0011}_{-0.0010} \quad (+0.4\sigma)$	σ_8	$0.810^{+0.017}_{-0.015} \quad (-0.2\sigma)$	$H(0.15)$	$73.3^{+1.2}_{-1.1} \quad (+1.1\sigma)$
τ	$0.058^{+0.017}_{-0.014} \quad (+0.8\sigma)$	S_8	$0.818^{+0.029}_{-0.029} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$637^{+11}_{-11} \quad (-1.1\sigma)$
Y_{P}	$0.248^{+0.023}_{-0.024} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.016}_{-0.016} \quad (-0.9\sigma)$	$H(0.38)$	$83.32^{+0.91}_{-0.83} \quad (+1.1\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.050^{+0.035}_{-0.032} \quad (+0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.016}_{-0.015} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1521^{+22}_{-23} \quad (-1.1\sigma)$
n_{s}	$0.970^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8/h^{0.5}$	$0.981^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$H(0.51)$	$89.99^{+0.75}_{-0.70} \quad (+1.1\sigma)$
y_{cal}	$1.0007^{+0.0045}_{-0.0048} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$100.3^{+2.0}_{-2.0} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1972^{+26}_{-27} \quad (-1.1\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.426^{+0.056}_{-0.050} \quad (-0.6\sigma)$	$H(0.61)$	$95.57^{+0.67}_{-0.60} \quad (+1.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 9.55 \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2295^{+28}_{-30} \quad (-1.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.7} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.111^{+0.075}_{-0.067} \quad (+0.5\sigma)$	$H(2.33)$	$235.8^{+1.5}_{-1.6} \quad (-0.7\sigma)$
A_{100}^{PS}	$259^{+50}_{-50} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.024}_{-0.023} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5751^{+30}_{-32} \quad (-1.0\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{40}	$1223^{+31}_{-29} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.015}_{-0.015} \quad (-0.9\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{220}	$5740^{+73}_{-75} \quad (+0.6\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.016}_{-0.014} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (-0.0\sigma)$	D_{810}	$2539^{+24}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.013}_{-0.012} \quad (-0.8\sigma)$
A^{kSZ}	$< 8.04 \quad (-0.2\sigma)$	D_{1420}	$818.3^{+8.8}_{-9.4} \quad (+0.8\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.013}_{-0.012} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$9.0^{+3.8}_{-3.4} \quad (+0.0\sigma)$	D_{2000}	$231.3^{+3.5}_{-3.4} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.012}_{-0.011} \quad (-0.7\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$11.0^{+3.5}_{-3.5} \quad (+0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.970^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.013}_{-0.012} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+7.1}_{-6.2} \quad (+0.1\sigma)$	Y_{P}	$0.248^{+0.023}_{-0.024} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.010} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.249^{+0.023}_{-0.024} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.012}_{-0.011} \quad (+0.3\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.111^{+0.071}_{-0.075}$	Age/Gyr	$13.769^{+0.068}_{-0.069} \quad (-1.0\sigma)$	$f\sigma_8(2.33)$	$0.2987^{+0.0064}_{-0.0053} \quad (+0.5\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.133^{+0.062}_{-0.058}$	z_*	$1089.72^{+0.80}_{-0.78} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3082^{+0.0068}_{-0.0061} \quad (+0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.69^{+0.62}_{-0.60} \quad (+0.5\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.6\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$100\theta_*$	$1.04130^{+0.00068}_{-0.00064} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.896^{+0.057}_{-0.058} \quad (+0.4\sigma)$	f_{2000}^{217}	$106.8^{+3.9}_{-4.0} \quad (-0.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	z_{drag}	$1060.2^{+1.5}_{-1.5} \quad (+0.7\sigma)$	χ_{small}^2	$397.7 \quad (\nu: 3.6) \quad (+0.5\sigma)$
c_{100}	$0.9997^{+0.0011}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.32^{+0.64}_{-0.65} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.8 \quad (\nu: 0.7) \quad (-0.6\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14064^{+0.00080}_{-0.00085} \quad (+0.2\sigma)$	χ_{plik}^2	$2362.0 \quad (\nu: 21.5) \quad (+275.5\sigma)$
H_0	$68.1^{+1.3}_{-1.2} \quad (+1.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16076^{+0.00093}_{-0.00087} \quad (-0.5\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$10.6 \quad (\nu: 3.1)$
Ω_{Λ}	$0.694^{+0.016}_{-0.016} \quad (+1.0\sigma)$	z_{eq}	$3371^{+57}_{-60} \quad (-0.8\sigma)$	χ_{prior}^2	$11.6 \quad (\nu: 11.6) \quad (+1.2\sigma)$
Ω_{m}	$0.306^{+0.016}_{-0.016} \quad (-1.0\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00018} \quad (-0.8\sigma)$	χ_{CMB}^2	$2782.5 \quad (\nu: 20.3) \quad (+280.5\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 2804.74; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.86; R - 1 = 0.08577$$

20.21 base_yhe_CamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02213	$0.02211^{+0.00058}_{-0.00058} \quad (-0.0\sigma)$	S_8	0.837	$0.838^{+0.051}_{-0.049} \quad (-0.1\sigma)$	$100\theta_{s,eq}$	0.4488	$0.4486^{+0.0097}_{-0.0097} \quad (+0.0\sigma)$
$\Omega_c h^2$	0.12043	$0.1205^{+0.0045}_{-0.0043} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.5}$	0.4583	$0.459^{+0.028}_{-0.027} \quad (-0.1\sigma)$	$H(0.15)$	72.37	$72.3^{+2.0}_{-1.9} \quad (-0.0\sigma)$
$100\theta_{MC}$	1.04094	$1.0407^{+0.0017}_{-0.0018} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6099	$0.610^{+0.024}_{-0.024} \quad (-0.1\sigma)$	$D_M(0.15)$	646.4	$648^{+20}_{-19} \quad (+0.0\sigma)$
τ	0.0525	$0.052^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	0.9914	$0.991^{+0.033}_{-0.032} \quad (-0.1\sigma)$	$H(0.38)$	82.61	$82.5^{+1.5}_{-1.4} \quad (-0.0\sigma)$
Y_P	0.2478	$0.242^{+0.040}_{-0.042} \quad (-0.2\sigma)$	$r_{drag} h$	98.67	$98.5^{+3.7}_{-3.6} \quad (+0.0\sigma)$	$D_M(0.38)$	1539.8	$1542^{+40}_{-39} \quad (+0.0\sigma)$
$\ln(10^{10} A_s)$	3.0397	$3.038^{+0.036}_{-0.035} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	2.447	$2.451^{+0.088}_{-0.085} \quad (-0.0\sigma)$	$H(0.51)$	89.39	$89.3^{+1.2}_{-1.2} \quad (-0.0\sigma)$
n_s	0.9644	$0.963^{+0.021}_{-0.021} \quad (-0.0\sigma)$	z_{re}	7.57	$7.5^{+1.6}_{-1.7} \quad (+0.0\sigma)$	$D_M(0.51)$	1993.5	$1996^{+47}_{-46} \quad (+0.0\sigma)$
y_{cal}	1.00033	$1.0004^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s$	2.090	$2.088^{+0.075}_{-0.072} \quad (-0.1\sigma)$	$H(0.61)$	95.07	$95.0^{+1.0}_{-1.0} \quad (-0.0\sigma)$
A_{100}^{PS}	247	$242^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_s e^{-2\tau}$	1.8815	$1.880^{+0.030}_{-0.029} \quad (-0.3\sigma)$	$D_M(0.61)$	2319	$2322^{+50}_{-50} \quad (+0.0\sigma)$
A_{143}^{PS}	38.4	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	1228.0	$1232^{+44}_{-43} \quad (-0.1\sigma)$	$H(2.33)$	236.61	$236.6^{+2.6}_{-2.5} \quad (-0.1\sigma)$
A_{217}^{PS}	99.1	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	5701	$5703^{+82}_{-81} \quad (-0.2\sigma)$	$D_M(2.33)$	5775	$5778^{+50}_{-50} \quad (+0.0\sigma)$
A_{217}^{CIB}	43.2	$41^{+20}_{-10} \quad (-1.1\sigma)$	D_{810}	2532.9	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	0.4623	$0.463^{+0.025}_{-0.025} \quad (-0.1\sigma)$
A_{143}^{tSZ}	3.96	$< 7.38 \quad (-0.6\sigma)$	D_{1420}	813.2	$814^{+10}_{-11} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	0.7492	$0.748^{+0.017}_{-0.017} \quad (-0.1\sigma)$
$r_{143 \times 217}^{PS}$	0.554	$0.65^{+0.26}_{-0.25}$	D_{2000}	229.03	$229.8^{+5.0}_{-4.9} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	0.4790	$0.479^{+0.019}_{-0.019} \quad (-0.1\sigma)$
$r_{143 \times 217}^{CIB}$	0.63	—	$n_{s,0.002}$	0.9644	$0.963^{+0.021}_{-0.021} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	0.6633	$0.662^{+0.015}_{-0.014} \quad (-0.1\sigma)$
$\xi^{tSZ \times CIB}$	0.00	—	Y_P	0.2478	$0.242^{+0.040}_{-0.042} \quad (-0.2\sigma)$	$f\sigma_8(0.51)$	0.4767	$0.477^{+0.017}_{-0.017} \quad (-0.1\sigma)$
A^{kSZ}	4.3	—	Y_P^{BBN}	0.2491	$0.244^{+0.040}_{-0.042} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	0.6204	$0.619^{+0.014}_{-0.013} \quad (-0.1\sigma)$
A_{100}^{dust}	1.008	$1.01^{+0.39}_{-0.39}$	Age/Gyr	13.823	$13.83^{+0.12}_{-0.11} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	0.4711	$0.471^{+0.015}_{-0.015} \quad (-0.1\sigma)$
A_{143}^{dust}	0.979	$0.97^{+0.34}_{-0.35}$	z_*	1090.36	$1090.2^{+1.4}_{-1.3} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	0.5901	$0.589^{+0.013}_{-0.013} \quad (-0.1\sigma)$
A_{217}^{dust}	0.962	$0.97^{+0.20}_{-0.20}$	r_*	144.49	$144.50^{+0.97}_{-0.98} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2973	$0.2967^{+0.0070}_{-0.0067} \quad (-0.1\sigma)$
$A_{143 \times 217}^{dust}$	1.011	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	1.04108	$1.04103^{+0.00099}_{-0.00098} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	0.3061	$0.3056^{+0.0076}_{-0.0074} \quad (-0.1\sigma)$
c_{100}	0.99736	$0.9975^{+0.0020}_{-0.0021} \quad (-3.5\sigma)$	$D_M(z_*)/\text{Gpc}$	13.879	$13.881^{+0.089}_{-0.091} \quad (+0.1\sigma)$	f_{2000}^{143}	31.7	$30^{+8}_{-8} \quad (-0.2\sigma)$
c_{217}	1.00131	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	1059.51	$1059.3^{+2.3}_{-2.4} \quad (-0.1\sigma)$	f_{2000}^{217}	108.1	$107.3^{+5.5}_{-5.5} \quad (-0.4\sigma)$
H_0	67.01	$66.9^{+2.2}_{-2.2} \quad (+0.0\sigma)$	r_{drag}	147.23	$147.25^{+0.97}_{-1.0} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	33.5	$33^{+6}_{-6} \quad (-0.4\sigma)$
Ω_Λ	0.6811	$0.679^{+0.029}_{-0.031} \quad (+0.0\sigma)$	k_D	0.14043	$0.1406^{+0.0016}_{-0.0015} \quad (+0.1\sigma)$	χ_{small}^2	395.89	$397.0 \quad (\nu: 1.4) \quad (+0.0\sigma)$
Ω_m	0.3189	$0.321^{+0.031}_{-0.029} \quad (-0.0\sigma)$	$100\theta_D$	0.16118	$0.1610^{+0.0016}_{-0.0016} \quad (-0.2\sigma)$	χ_{lowl}^2	23.34	$23.9 \quad (\nu: 2.2) \quad (-0.0\sigma)$
$\Omega_m h^2$	0.14321	$0.1433^{+0.0042}_{-0.0040} \quad (-0.0\sigma)$	z_{eq}	3407	$3409^{+100}_{-97} \quad (-0.0\sigma)$	$\chi_{CamSpec}^2$	7050.2	$7063.9 \quad (\nu: 15.9)$
$\Omega_m h^3$	0.09597	$0.0958^{+0.0015}_{-0.0015} \quad (-0.1\sigma)$	k_{eq}	0.010398	$0.01040^{+0.00031}_{-0.00030} \quad (-0.0\sigma)$	χ_{prior}^2	2.4	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	0.8116	$0.811^{+0.019}_{-0.019} \quad (-0.1\sigma)$	$100\theta_{eq}$	0.8118	$0.811^{+0.019}_{-0.019} \quad (+0.0\sigma)$	χ_{CMB}^2	7469.4	$7484.8 \quad (\nu: 16.2) \quad (+1110.3\sigma)$

Best-fit $\chi_{eff}^2 = 7471.80$; $\Delta\chi_{eff}^2 = 0.06$; $\bar{\chi}_{eff}^2 = 7492.39$; $\Delta\bar{\chi}_{eff}^2 = 0.85$; $R - 1 = 0.00648$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.89 (Δ 0.05) commander_dx12_v3.2.29: 23.34 (Δ -0.06) CamSpec like_10.7HM: 7050.19 (Δ -0.15)

20.22 base_yhe_CamSpecHM_TT_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02226^{+0.00047}_{-0.00048} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.017}_{-0.017} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+22}_{-21} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.024}_{-0.024} \quad (-0.7\sigma)$	$H(0.51)$	$89.75^{+0.77}_{-0.75} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0015}_{-0.0015} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.9} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+26}_{-26} \quad (-0.7\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.422^{+0.057}_{-0.057} \quad (-0.7\sigma)$	$H(0.61)$	$95.35^{+0.70}_{-0.70} \quad (+0.6\sigma)$
Y_{P}	$0.250^{+0.036}_{-0.038} \quad (+0.2\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+28}_{-28} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.035}_{-0.035} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.075}_{-0.071} \quad (+0.0\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.6} \quad (-0.7\sigma)$
n_{s}	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.029}_{-0.028} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+37}_{-36} \quad (-0.6\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	D_{40}	$1219^{+34}_{-34} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.016}_{-0.015} \quad (-0.8\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5709^{+80}_{-80} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.017}_{-0.017} \quad (-0.3\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.9\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.013} \quad (-0.7\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-11} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.015}_{-0.015} \quad (-0.1\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.5^{+4.8}_{-4.8} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.012}_{-0.013} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.014}_{-0.014} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_{P}	$0.250^{+0.036}_{-0.038} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.012}_{-0.012} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.251^{+0.036}_{-0.038} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.013}_{-0.013} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Age/Gyr	$13.796^{+0.085}_{-0.084} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0067}_{-0.0066} \quad (+0.1\sigma)$
A^{kSZ}	—	z_*	$1090.2^{+1.3}_{-1.3} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0069}_{-0.0068} \quad (+0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	r_*	$144.78^{+0.73}_{-0.72} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+8}_{-8} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	$1.04127^{+0.00084}_{-0.00086} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.8^{+5.3}_{-5.3} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.904^{+0.073}_{-0.071} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	z_{drag}	$1059.8^{+2.1}_{-2.1} \quad (+0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0022} \quad (-3.4\sigma)$	r_{drag}	$147.49^{+0.82}_{-0.81} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 0.8) \quad (-0.6\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	k_{D}	$0.1402^{+0.0012}_{-0.0012} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.8 \quad (\nu: 15.4)$
H_0	$67.7^{+1.2}_{-1.2} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0015} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.015}_{-0.015} \quad (+0.8\sigma)$	z_{eq}	$3374^{+57}_{-57} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.43 \quad (\nu: 0.2)$
Ω_{m}	$0.309^{+0.015}_{-0.015} \quad (-0.8\sigma)$	k_{eq}	$0.01030^{+0.00018}_{-0.00017} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.1) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0961^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4521^{+0.0054}_{-0.0054} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
σ_8	$0.808^{+0.019}_{-0.018} \quad (-0.4\sigma)$	$H(0.15)$	$73.0^{+1.1}_{-1.1} \quad (+0.7\sigma)$	χ_{CMB}^2	$7484.5 \quad (\nu: 15.3) \quad (+1110.3\sigma)$
S_8	$0.820^{+0.030}_{-0.030} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+11}_{-10} \quad (-0.8\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.016}_{-0.016} \quad (-0.8\sigma)$	$H(0.38)$	$83.06^{+0.87}_{-0.86} \quad (+0.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7498.32$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.77$; $R - 1 = 0.01513$

20.23 base_yhe_CamSpecHM_TT_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02211^{+0.00055}_{-0.00053} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.018} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$647^{+15}_{-15} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1203^{+0.0032}_{-0.0032} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$H(0.38)$	$82.6^{+1.2}_{-1.2} \quad (+0.0\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0407^{+0.0017}_{-0.0016} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1541^{+31}_{-32} \quad (-0.1\sigma)$
τ	$0.053^{+0.017}_{-0.016} \quad (+0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.7^{+2.8}_{-2.7} \quad (+0.1\sigma)$	$H(0.51)$	$89.3^{+1.0}_{-0.97} \quad (+0.0\sigma)$
Y_{P}	$0.241^{+0.040}_{-0.042} \quad (-0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.056}_{-0.057} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1995^{+36}_{-37} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.038^{+0.034}_{-0.033} \quad (-0.1\sigma)$	z_{re}	$7.5^{+1.6}_{-1.7} \quad (+0.1\sigma)$	$H(0.61)$	$95.02^{+0.91}_{-0.85} \quad (-0.0\sigma)$
n_{s}	$0.962^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.087^{+0.072}_{-0.068} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2320^{+40}_{-41} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.028}_{-0.027} \quad (-0.4\sigma)$	$H(2.33)$	$236.5^{+1.9}_{-1.9} \quad (-0.2\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1232^{+38}_{-37} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5778^{+44}_{-46} \quad (+0.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5707^{+82}_{-81} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{810}	$2533^{+27}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.015}_{-0.014} \quad (-0.2\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.6\sigma)$	D_{2000}	$230.0^{+4.9}_{-4.9} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.014}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.962^{+0.020}_{-0.019} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.241^{+0.040}_{-0.042} \quad (-0.3\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.013}_{-0.013} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.242^{+0.040}_{-0.042} \quad (-0.3\sigma)$	$f\sigma_8(0.61)$	$0.4701^{+0.0097}_{-0.0098} \quad (-0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.83^{+0.10}_{-0.11} \quad (+0.0\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.013}_{-0.012} \quad (-0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	z_*	$1090.1^{+1.3}_{-1.3} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2966^{+0.0069}_{-0.0067} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.35}$	r_*	$144.57^{+0.76}_{-0.77} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3055^{+0.0077}_{-0.0075} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04103^{+0.00092}_{-0.00093} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+8}_{-8} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.072}_{-0.074} \quad (+0.2\sigma)$	f_{2000}^{217}	$107.1^{+5.5}_{-5.5} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.2^{+2.3}_{-2.3} \quad (-0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-6} \quad (-0.4\sigma)$
c_{217}	$1.0011^{+0.0030}_{-0.0031} \quad (+4.6\sigma)$	r_{drag}	$147.31^{+0.81}_{-0.83} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.50 \quad (\nu: 0.4)$
H_0	$67.0^{+1.8}_{-1.7} \quad (+0.1\sigma)$	k_{D}	$0.1406^{+0.0014}_{-0.0013} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
Ω_{Λ}	$0.681^{+0.022}_{-0.023} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1609^{+0.0016}_{-0.0015} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.9 \quad (\nu: 1.6) \quad (-0.1\sigma)$
Ω_{m}	$0.319^{+0.023}_{-0.022} \quad (-0.1\sigma)$	z_{eq}	$3403^{+71}_{-71} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.4 \quad (\nu: 14.4)$
$\Omega_{\mathrm{m}} h^2$	$0.1431^{+0.0030}_{-0.0030} \quad (-0.2\sigma)$	k_{eq}	$0.01039^{+0.00022}_{-0.00022} \quad (-0.2\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0958^{+0.0015}_{-0.0015} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.014}_{-0.013} \quad (+0.1\sigma)$	χ_{CMB}^2	$7493.8 \quad (\nu: 15.9) \quad (+1111.9\sigma)$
σ_8	$0.810^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4491^{+0.0071}_{-0.0068} \quad (+0.1\sigma)$		
S_8	$0.835^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$72.3^{+1.6}_{-1.5} \quad (+0.1\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 7501.32; \Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.07; R - 1 = 0.00730$$

20.24 base_yhe_CamSpecHM_TT_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02225^{+0.00047}_{-0.00048} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+21}_{-21} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.019}_{-0.019} \quad (-0.5\sigma)$	$H(0.51)$	$89.70^{+0.74}_{-0.73} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0015}_{-0.0015} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.7}_{-1.8} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+25}_{-25} \quad (-0.7\sigma)$
τ	$0.056^{+0.015}_{-0.014} \quad (+0.5\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.047}_{-0.045} \quad (-0.5\sigma)$	$H(0.61)$	$95.31^{+0.70}_{-0.67} \quad (+0.6\sigma)$
Y_{P}	$0.248^{+0.036}_{-0.037} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.5}_{-1.5} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+27}_{-27} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.045^{+0.032}_{-0.031} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.101^{+0.069}_{-0.063} \quad (+0.3\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-0.7\sigma)$
n_{s}	$0.968^{+0.016}_{-0.016} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.027}_{-0.026} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+36}_{-37} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	D_{40}	$1223^{+33}_{-33} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{100}^{PS}	$243^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5715^{+79}_{-81} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.014} \quad (-0.1\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.9\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.010} \quad (-0.5\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.013}_{-0.013} \quad (+0.1\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.8^{+4.7}_{-4.8} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.4732^{+0.0099}_{-0.0096} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.47 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.016}_{-0.016} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.012} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_{P}	$0.248^{+0.036}_{-0.037} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4683^{+0.0093}_{-0.0092} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.249^{+0.037}_{-0.038} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Age/Gyr	$13.800^{+0.085}_{-0.085} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0061}_{-0.0061} \quad (+0.3\sigma)$
A^{kSZ}	—	z_*	$1090.1^{+1.3}_{-1.3} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0066}_{-0.0066} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	r_*	$144.74^{+0.69}_{-0.65} \quad (+0.6\sigma)$	f_{2000}^{143}	$31^{+8}_{-8} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.33}_{-0.34}$	$100\theta_*$	$1.04124^{+0.00084}_{-0.00086} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.6^{+5.4}_{-5.3} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.067}_{-0.066} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+6}_{-6} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.7^{+2.1}_{-2.0} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.42 \quad (\nu: 0.3)$
c_{100}	$0.9975^{+0.0020}_{-0.0022} \quad (-3.4\sigma)$	r_{drag}	$147.45^{+0.77}_{-0.75} \quad (+0.5\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.2\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0031} \quad (+4.7\sigma)$	k_{D}	$0.1403^{+0.0012}_{-0.0012} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.0 \quad (\nu: 0.9) \quad (-0.5\sigma)$
H_0	$67.6^{+1.2}_{-1.1} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1611^{+0.0015}_{-0.0015} \quad (-0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.1 \quad (\nu: 14.6)$
Ω_{Λ}	$0.689^{+0.013}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3378^{+51}_{-50} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
Ω_{m}	$0.311^{+0.014}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00016}_{-0.00015} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.33 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0091}_{-0.0092} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0960^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0048}_{-0.0048} \quad (+0.7\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.1) \quad (+0.1\sigma)$
σ_8	$0.810^{+0.016}_{-0.015} \quad (-0.2\sigma)$	$H(0.15)$	$72.9^{+1.0}_{-1.0} \quad (+0.7\sigma)$	χ_{CMB}^2	$7493.7 \quad (\nu: 15.4) \quad (+1111.9\sigma)$
S_8	$0.824^{+0.024}_{-0.023} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641^{+10}_{-9.9} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$83.00^{+0.85}_{-0.83} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7507.45$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.97$; $R - 1 = 0.01905$

20.25 base_yhe_CamSpecHM_TT_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02213^{+0.00058}_{-0.00057} \quad (+0.0\sigma)$	S_8	$0.838^{+0.051}_{-0.049} \quad (-0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4488^{+0.0096}_{-0.0096} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1204^{+0.0044}_{-0.0043} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.459^{+0.028}_{-0.027} \quad (-0.0\sigma)$	$H(0.15)$	$72.3^{+1.9}_{-1.9} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0017}_{-0.0017} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.610^{+0.024}_{-0.024} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$647^{+20}_{-19} \quad (-0.1\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.992^{+0.032}_{-0.032} \quad (-0.0\sigma)$	$H(0.38)$	$82.6^{+1.5}_{-1.4} \quad (+0.1\sigma)$
Y_{P}	$0.243^{+0.040}_{-0.042} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$98.6^{+3.7}_{-3.6} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1541^{+39}_{-39} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.030}_{-0.029} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.453^{+0.088}_{-0.084} \quad (-0.0\sigma)$	$H(0.51)$	$89.4^{+1.2}_{-1.2} \quad (+0.0\sigma)$
n_{s}	$0.963^{+0.021}_{-0.021} \quad (+0.0\sigma)$	z_{re}	$< 8.90 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1995^{+46}_{-45} \quad (-0.1\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.064}_{-0.060} \quad (+0.1\sigma)$	$H(0.61)$	$95.0^{+1.0}_{-0.98} \quad (+0.0\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.030}_{-0.029} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2320^{+50}_{-49} \quad (-0.1\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	$1231^{+44}_{-43} \quad (-0.1\sigma)$	$H(2.33)$	$236.6^{+2.6}_{-2.5} \quad (-0.1\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	$5704^{+82}_{-81} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5777^{+50}_{-50} \quad (-0.0\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.1\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.463^{+0.025}_{-0.025} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$< 7.40 \quad (-0.6\sigma)$	D_{1420}	$814^{+10}_{-11} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.016}_{-0.015} \quad (+0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	D_{2000}	$229.8^{+4.9}_{-4.9} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.019}_{-0.019} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.963^{+0.021}_{-0.021} \quad (+0.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.014}_{-0.013} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.243^{+0.040}_{-0.042} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.016}_{-0.017} \quad (-0.0\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.244^{+0.040}_{-0.042} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.013}_{-0.012} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	Age/Gyr	$13.83^{+0.11}_{-0.11} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.015}_{-0.015} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.2^{+1.4}_{-1.3} \quad (-0.2\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.013}_{-0.011} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.52^{+0.96}_{-0.98} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0063}_{-0.0060} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.32}$	$100\theta_*$	$1.04104^{+0.00099}_{-0.00098} \quad (+0.1\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0068}_{-0.0066} \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.5\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.882^{+0.089}_{-0.091} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+8}_{-8} \quad (-0.2\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	z_{drag}	$1059.3^{+2.3}_{-2.3} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.4^{+5.5}_{-5.5} \quad (-0.3\sigma)$
H_0	$67.0^{+2.2}_{-2.2} \quad (+0.1\sigma)$	r_{drag}	$147.26^{+0.98}_{-1.0} \quad (+0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+6}_{-6} \quad (-0.4\sigma)$
Ω_{Λ}	$0.680^{+0.028}_{-0.031} \quad (+0.1\sigma)$	k_{D}	$0.1406^{+0.0015}_{-0.0015} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
Ω_{m}	$0.320^{+0.031}_{-0.028} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0016}_{-0.0015} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 2.1) \quad (-0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1432^{+0.0042}_{-0.0040} \quad (-0.1\sigma)$	z_{eq}	$3407^{+99}_{-96} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.8 \quad (\nu: 15.9)$
$\Omega_{\mathrm{m}} h^3$	$0.0959^{+0.0015}_{-0.0015} \quad (-0.0\sigma)$	k_{eq}	$0.01040^{+0.00030}_{-0.00029} \quad (-0.1\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 5.9) \quad (+0.1\sigma)$
σ_8	$0.812^{+0.019}_{-0.018} \quad (+0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.019}_{-0.019} \quad (+0.1\sigma)$	χ_{CMB}^2	$7484.5 \quad (\nu: 15.8) \quad (+1110.3\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 7492.12$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.86$; $R - 1 = 0.00634$

20.26 base_yhe_CamSpecHM_TT_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02227^{+0.00047}_{-0.00048} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+22}_{-21} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.024}_{-0.023} \quad (-0.6\sigma)$	$H(0.51)$	$89.76^{+0.77}_{-0.75} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0412^{+0.0015}_{-0.0015} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.9}_{-1.9} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+26}_{-26} \quad (-0.8\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.425^{+0.056}_{-0.053} \quad (-0.7\sigma)$	$H(0.61)$	$95.36^{+0.69}_{-0.70} \quad (+0.7\sigma)$
Y_{P}	$0.250^{+0.036}_{-0.037} \quad (+0.2\sigma)$	z_{re}	$< 9.02 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+28}_{-28} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.032}_{-0.030} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.066}_{-0.062} \quad (+0.2\sigma)$	$H(2.33)$	$235.8^{+1.6}_{-1.6} \quad (-0.8\sigma)$
n_{s}	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.029}_{-0.028} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5762^{+37}_{-36} \quad (-0.6\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$	D_{40}	$1219^{+34}_{-33} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-0.7\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5710^{+81}_{-81} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.016}_{-0.015} \quad (-0.2\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.9\sigma)$	D_{810}	$2534^{+27}_{-27} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.013} \quad (-0.7\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.4\sigma)$	D_{1420}	$815^{+10}_{-11} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.014}_{-0.013} \quad (+0.0\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.5^{+4.8}_{-4.8} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.969^{+0.016}_{-0.016} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.013}_{-0.012} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_{P}	$0.250^{+0.036}_{-0.037} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.011} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.251^{+0.036}_{-0.038} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.013}_{-0.012} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Age/Gyr	$13.795^{+0.086}_{-0.084} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0064}_{-0.0060} \quad (+0.3\sigma)$
A^{kSZ}	—	z_*	$1090.2^{+1.3}_{-1.3} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0066}_{-0.0063} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	r_*	$144.78^{+0.73}_{-0.72} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+8}_{-8} \quad (-0.1\sigma)$
A_{143}^{dust}	$0.98^{+0.34}_{-0.34}$	$100\theta_*$	$1.04127^{+0.00084}_{-0.00086} \quad (+0.6\sigma)$	f_{2000}^{217}	$107.8^{+5.3}_{-5.3} \quad (-0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.904^{+0.073}_{-0.071} \quad (+0.6\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.31}$	z_{drag}	$1059.8^{+2.1}_{-2.1} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0022} \quad (-3.4\sigma)$	r_{drag}	$147.49^{+0.82}_{-0.81} \quad (+0.6\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 0.8) \quad (-0.6\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.8\sigma)$	k_{D}	$0.1402^{+0.0012}_{-0.0012} \quad (-0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.7 \quad (\nu: 15.5)$
H_0	$67.8^{+1.2}_{-1.2} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1612^{+0.0015}_{-0.0014} \quad (+0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.053 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.015}_{-0.015} \quad (+0.8\sigma)$	z_{eq}	$3373^{+58}_{-57} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.45 \quad (\nu: 0.2)$
Ω_{m}	$0.309^{+0.015}_{-0.015} \quad (-0.8\sigma)$	k_{eq}	$0.01030^{+0.00018}_{-0.00017} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	χ_{prior}^2	$7.7 \quad (\nu: 6.2) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0961^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4522^{+0.0054}_{-0.0054} \quad (+0.8\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
σ_8	$0.809^{+0.018}_{-0.017} \quad (-0.3\sigma)$	$H(0.15)$	$73.0^{+1.1}_{-1.1} \quad (+0.8\sigma)$	χ_{CMB}^2	$7484.4 \quad (\nu: 15.1) \quad (+1110.3\sigma)$
S_8	$0.821^{+0.030}_{-0.029} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+11}_{-10} \quad (-0.8\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.38)$	$83.07^{+0.87}_{-0.86} \quad (+0.7\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7498.14$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 0.82$; $R - 1 = 0.01531$

20.27 base_yhe_CamSpecHM_TT_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02213^{+0.00054}_{-0.00053} \quad (+0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.018} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+14}_{-15} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0030}_{-0.0031} \quad (-0.2\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$H(0.38)$	$82.6^{+1.2}_{-1.1} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0017}_{-0.0016} \quad (-0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1539^{+29}_{-31} \quad (-0.1\sigma)$
τ	$0.054^{+0.013}_{-0.012} \quad (+0.3\sigma)$	$r_{\mathrm{drag}} h$	$98.8^{+2.7}_{-2.5} \quad (+0.2\sigma)$	$H(0.51)$	$89.4^{+1.0}_{-0.94} \quad (+0.1\sigma)$
Y_{P}	$0.242^{+0.040}_{-0.042} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.056}_{-0.057} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+34}_{-37} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.029}_{-0.027} \quad (+0.1\sigma)$	z_{re}	$< 8.89 \quad (+0.3\sigma)$	$H(0.61)$	$95.06^{+0.90}_{-0.82} \quad (+0.1\sigma)$
n_{s}	$0.963^{+0.019}_{-0.019} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.062}_{-0.057} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+38}_{-40} \quad (-0.1\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.027}_{-0.027} \quad (-0.4\sigma)$	$H(2.33)$	$236.4^{+1.8}_{-1.8} \quad (-0.2\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1231^{+37}_{-37} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5776^{+43}_{-45} \quad (-0.0\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5707^{+82}_{-81} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
A_{217}^{PS}	$101^{+20}_{-30} \quad (-1.3\sigma)$	D_{810}	$2533^{+27}_{-27} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.014}_{-0.013} \quad (-0.1\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.1\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.6\sigma)$	D_{2000}	$230.0^{+4.9}_{-4.9} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.013}_{-0.012} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.963^{+0.019}_{-0.019} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.011}_{-0.011} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.242^{+0.040}_{-0.042} \quad (-0.2\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.013}_{-0.011} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.243^{+0.040}_{-0.042} \quad (-0.2\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0096}_{-0.0097} \quad (-0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.827^{+0.099}_{-0.10} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.012}_{-0.011} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	z_*	$1090.1^{+1.3}_{-1.3} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2971^{+0.0062}_{-0.0061} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	r_*	$144.59^{+0.76}_{-0.76} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0069}_{-0.0067} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04106^{+0.00092}_{-0.00093} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+8}_{-8} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.072}_{-0.073} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.2^{+5.5}_{-5.5} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.3^{+2.3}_{-2.3} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+6}_{-6} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	r_{drag}	$147.33^{+0.80}_{-0.82} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.48 \quad (\nu: 0.4)$
H_0	$67.1^{+1.7}_{-1.6} \quad (+0.1\sigma)$	k_{D}	$0.1406^{+0.0013}_{-0.0013} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
Ω_{Λ}	$0.682^{+0.021}_{-0.021} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.1609^{+0.0016}_{-0.0016} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 1.5) \quad (-0.1\sigma)$
Ω_{m}	$0.318^{+0.021}_{-0.021} \quad (-0.2\sigma)$	z_{eq}	$3400^{+68}_{-69} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7063.4 \quad (\nu: 14.5)$
$\Omega_{\mathrm{m}} h^2$	$0.1429^{+0.0028}_{-0.0029} \quad (-0.2\sigma)$	k_{eq}	$0.01038^{+0.00021}_{-0.00021} \quad (-0.2\sigma)$	χ_{prior}^2	$7.5 \quad (\nu: 5.9) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0958^{+0.0015}_{-0.0015} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.014}_{-0.013} \quad (+0.2\sigma)$	χ_{CMB}^2	$7493.5 \quad (\nu: 15.5) \quad (+1111.9\sigma)$
σ_8	$0.811^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4494^{+0.0069}_{-0.0065} \quad (+0.2\sigma)$		
S_8	$0.835^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$72.4^{+1.5}_{-1.4} \quad (+0.1\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7501.05$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 1.04$; $R - 1 = 0.00841$

20.28 base_yhe_CamSpecHM_TT_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02226^{+0.00047}_{-0.00048} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+20}_{-20} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.019}_{-0.018} \quad (-0.5\sigma)$	$H(0.51)$	$89.71^{+0.75}_{-0.73} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0015}_{-0.0015} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.7}_{-1.7} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+25}_{-25} \quad (-0.7\sigma)$
τ	$0.056^{+0.013}_{-0.013} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.046}_{-0.045} \quad (-0.5\sigma)$	$H(0.61)$	$95.32^{+0.70}_{-0.68} \quad (+0.6\sigma)$
Y_{P}	$0.248^{+0.036}_{-0.037} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.4} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+27}_{-27} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.029}_{-0.028} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.103^{+0.062}_{-0.059} \quad (+0.3\sigma)$	$H(2.33)$	$235.9^{+1.4}_{-1.4} \quad (-0.7\sigma)$
n_{s}	$0.968^{+0.016}_{-0.016} \quad (+0.5\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.027}_{-0.026} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+36}_{-37} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	D_{40}	$1223^{+32}_{-33} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	D_{220}	$5715^{+79}_{-81} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.014}_{-0.013} \quad (-0.0\sigma)$
A_{143}^{PS}	$41^{+20}_{-20} \quad (-0.9\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.010} \quad (-0.5\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{1420}	$815^{+10}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.013}_{-0.012} \quad (+0.1\sigma)$
A_{217}^{CIB}	$41^{+20}_{-10} \quad (-1.0\sigma)$	D_{2000}	$229.8^{+4.7}_{-4.8} \quad (+0.1\sigma)$	$f\sigma_8(0.51)$	$0.4734^{+0.0098}_{-0.0095} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.48 \quad (-0.6\sigma)$	$n_{\mathrm{s},0.002}$	$0.968^{+0.016}_{-0.016} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.012} \quad (+0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.26}_{-0.25}$	Y_{P}	$0.248^{+0.036}_{-0.037} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0092}_{-0.0089} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.249^{+0.037}_{-0.038} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.012}_{-0.011} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Age/Gyr	$13.799^{+0.084}_{-0.085} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2982^{+0.0060}_{-0.0058} \quad (+0.3\sigma)$
A^{kSZ}	—	z_*	$1090.1^{+1.3}_{-1.3} \quad (-0.3\sigma)$	$\sigma_8(2.33)$	$0.3075^{+0.0064}_{-0.0062} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	r_*	$144.74^{+0.68}_{-0.65} \quad (+0.6\sigma)$	f_{2000}^{143}	$31^{+8}_{-8} \quad (-0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.33}_{-0.34}$	$100\theta_*$	$1.04125^{+0.00083}_{-0.00087} \quad (+0.5\sigma)$	f_{2000}^{217}	$107.6^{+5.4}_{-5.3} \quad (-0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.901^{+0.067}_{-0.066} \quad (+0.5\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+6}_{-6} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	z_{drag}	$1059.7^{+2.1}_{-2.1} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.38 \quad (\nu: 0.3)$
c_{100}	$0.9975^{+0.0020}_{-0.0022} \quad (-3.4\sigma)$	r_{drag}	$147.45^{+0.77}_{-0.76} \quad (+0.5\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.2\sigma)$
c_{217}	$1.0012^{+0.0030}_{-0.0031} \quad (+4.7\sigma)$	k_{D}	$0.1403^{+0.0012}_{-0.0012} \quad (-0.3\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 0.9) \quad (-0.5\sigma)$
H_0	$67.7^{+1.2}_{-1.1} \quad (+0.7\sigma)$	$100\theta_{\mathrm{D}}$	$0.1611^{+0.0015}_{-0.0015} \quad (+0.0\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$7064.1 \quad (\nu: 14.6)$
Ω_{Λ}	$0.690^{+0.013}_{-0.014} \quad (+0.7\sigma)$	z_{eq}	$3378^{+51}_{-50} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.014}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8176^{+0.0091}_{-0.0092} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 1.2)$
$\Omega_{\mathrm{m}} h^3$	$0.0961^{+0.0014}_{-0.0014} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0047}_{-0.0048} \quad (+0.7\sigma)$	χ_{prior}^2	$7.6 \quad (\nu: 6.1) \quad (+0.1\sigma)$
σ_8	$0.810^{+0.015}_{-0.014} \quad (-0.1\sigma)$	$H(0.15)$	$72.9^{+1.0}_{-1.0} \quad (+0.7\sigma)$	χ_{CMB}^2	$7493.6 \quad (\nu: 15.3) \quad (+1111.9\sigma)$
S_8	$0.824^{+0.024}_{-0.023} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.9^{+9.9}_{-9.9} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$83.01^{+0.85}_{-0.82} \quad (+0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 7507.34$; $\Delta \bar{\chi}_{\mathrm{eff}}^2 = 1.01$; $R - 1 = 0.01969$

20.29 base_yhe_CamSpecHM_TTTEEE_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022312	$0.02230^{+0.00042}_{-0.00042}$ (+0.6 σ)	σ_8	0.8081	$0.808^{+0.016}_{-0.017}$ (−0.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.4507	$0.4504^{+0.0063}_{-0.0062}$ (+0.4 σ)
$\Omega_{\mathrm{c}}h^2$	0.11944	$0.1196^{+0.0029}_{-0.0028}$ (−0.5 σ)	S_8	0.8248	$0.826^{+0.033}_{-0.033}$ (−0.5 σ)	$H(0.15)$	72.79	$72.7^{+1.3}_{-1.3}$ (+0.5 σ)
$100\theta_{\mathrm{MC}}$	1.04093	$1.0409^{+0.0014}_{-0.0014}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4517	$0.452^{+0.018}_{-0.018}$ (−0.5 σ)	$D_{\mathrm{M}}(0.15)$	642.2	643^{+13}_{-13} (−0.5 σ)
τ	0.0532	$0.053^{+0.016}_{-0.016}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6042	$0.605^{+0.017}_{-0.017}$ (−0.5 σ)	$H(0.38)$	82.92	$82.9^{+1.1}_{-1.0}$ (+0.5 σ)
Y_{P}	0.2463	$0.246^{+0.035}_{-0.035}$ (+0.0 σ)	$\sigma_8/h^{0.5}$	0.9835	$0.984^{+0.024}_{-0.024}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1531.3	1532^{+27}_{-27} (−0.5 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0389	$3.039^{+0.034}_{-0.034}$ (−0.1 σ)	$r_{\mathrm{drag}}h$	99.43	$99.3^{+2.4}_{-2.4}$ (+0.5 σ)	$H(0.51)$	89.65	$89.62^{+0.89}_{-0.84}$ (+0.5 σ)
n_{s}	0.9671	$0.966^{+0.017}_{-0.016}$ (+0.3 σ)	$\langle d^2 \rangle^{1/2}$	2.430	$2.433^{+0.061}_{-0.063}$ (−0.5 σ)	$D_{\mathrm{M}}(0.51)$	1983.5	1985^{+31}_{-32} (−0.5 σ)
y_{cal}	1.00025	$1.0004^{+0.0049}_{-0.0048}$ (+0.0 σ)	z_{re}	7.57	$7.5^{+1.6}_{-1.7}$ (+0.0 σ)	$H(0.61)$	95.28	$95.26^{+0.77}_{-0.72}$ (+0.5 σ)
A_{100}^{PS}	232	240^{+50}_{-50} (−0.8 σ)	$10^9 A_{\mathrm{s}}$	2.088	$2.088^{+0.073}_{-0.070}$ (−0.1 σ)	$D_{\mathrm{M}}(0.61)$	2307.9	2309^{+34}_{-35} (−0.5 σ)
A_{143}^{PS}	41.4	40^{+20}_{-20} (−1.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8777	$1.879^{+0.026}_{-0.025}$ (−0.4 σ)	$H(2.33)$	236.14	$236.2^{+1.7}_{-1.6}$ (−0.4 σ)
A_{217}^{PS}	102.7	102^{+30}_{-30} (−1.3 σ)	D_{40}	1223.0	1226^{+34}_{-35} (−0.4 σ)	$D_{\mathrm{M}}(2.33)$	5764.8	5766^{+36}_{-38} (−0.4 σ)
A_{217}^{CIB}	44.1	40^{+20}_{-10} (−1.2 σ)	D_{220}	5714	5718^{+76}_{-77} (+0.1 σ)	$f\sigma_8(0.15)$	0.4562	$0.457^{+0.017}_{-0.017}$ (−0.5 σ)
A_{143}^{tSZ}	6.67	< 7.44 (−0.6 σ)	D_{810}	2534.5	2535^{+27}_{-26} (−0.1 σ)	$\sigma_8(0.15)$	0.7466	$0.747^{+0.015}_{-0.015}$ (−0.3 σ)
$r_{143 \times 217}^{\mathrm{PS}}$	0.625	$0.66^{+0.25}_{-0.25}$	D_{1420}	815.7	816^{+10}_{-10} (+0.2 σ)	$f\sigma_8(0.38)$	0.4743	$0.475^{+0.013}_{-0.014}$ (−0.5 σ)
$r_{143 \times 217}^{\mathrm{CIB}}$	0.80	—	D_{2000}	230.22	$230.1^{+4.4}_{-4.4}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6617	$0.662^{+0.013}_{-0.013}$ (−0.2 σ)
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	0.21	—	$n_{\mathrm{s},0.002}$	0.9671	$0.966^{+0.017}_{-0.016}$ (+0.3 σ)	$f\sigma_8(0.51)$	0.4728	$0.473^{+0.012}_{-0.012}$ (−0.5 σ)
A^{kSZ}	0.0	—	Y_{P}	0.2463	$0.246^{+0.035}_{-0.035}$ (+0.0 σ)	$\sigma_8(0.51)$	0.6192	$0.619^{+0.013}_{-0.013}$ (−0.2 σ)
A_{100}^{dust}	1.008	$1.01^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2477	$0.247^{+0.035}_{-0.035}$ (+0.0 σ)	$f\sigma_8(0.61)$	0.4677	$0.468^{+0.011}_{-0.011}$ (−0.5 σ)
A_{143}^{dust}	0.979	$0.96^{+0.34}_{-0.34}$	Age/Gyr	13.801	$13.803^{+0.083}_{-0.087}$ (−0.4 σ)	$\sigma_8(0.61)$	0.5891	$0.589^{+0.012}_{-0.012}$ (−0.1 σ)
A_{217}^{dust}	0.973	$0.97^{+0.20}_{-0.20}$	z_*	1089.98	$1090.0^{+1.1}_{-1.1}$ (−0.5 σ)	$f\sigma_8(2.33)$	0.2970	$0.2969^{+0.0064}_{-0.0063}$ (−0.1 σ)
$A_{143 \times 217}^{\mathrm{dust}}$	1.008	$1.03^{+0.32}_{-0.31}$	r_*	144.62	$144.59^{+0.64}_{-0.65}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3062	$0.3060^{+0.0069}_{-0.0067}$ (+0.0 σ)
c_{100}	0.99764	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	1.04109	$1.04107^{+0.00069}_{-0.00068}$ (+0.2 σ)	f_{2000}^{143}	30.0	30^{+7}_{-8} (−0.4 σ)
c_{217}	1.00130	$1.0012^{+0.0031}_{-0.0031}$ (+4.7 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.891	$13.889^{+0.061}_{-0.062}$ (+0.2 σ)	f_{2000}^{217}	106.8	$107.0^{+5.1}_{-5.1}$ (−0.5 σ)
c_{TE}	0.9968	$0.997^{+0.011}_{-0.010}$	z_{drag}	1059.78	$1059.8^{+1.9}_{-1.9}$ (+0.3 σ)	$f_{2000}^{143 \times 217}$	32.2	32^{+6}_{-6} (−0.5 σ)
c_{EE}	0.9923	$0.992^{+0.013}_{-0.013}$	r_{drag}	147.30	$147.28^{+0.66}_{-0.67}$ (+0.1 σ)	χ_{small}^2	395.88	396.9 (ν : 1.5) (+0.0 σ)
H_0	67.50	$67.4^{+1.5}_{-1.5}$ (+0.5 σ)	k_{D}	0.14056	$0.1406^{+0.0011}_{-0.0011}$ (+0.1 σ)	χ_{lowl}^2	22.85	23.2 (ν : 1.0) (−0.4 σ)
Ω_{Λ}	0.6875	$0.686^{+0.019}_{-0.020}$ (+0.5 σ)	$100\theta_{\mathrm{D}}$	0.16090	$0.1609^{+0.0014}_{-0.0013}$ (−0.3 σ)	$\chi_{\mathrm{CamSpec}}^2$	11499.8	11515.4 (ν : 17.0)
Ω_{m}	0.3125	$0.314^{+0.020}_{-0.019}$ (−0.5 σ)	z_{eq}	3388	3391^{+63}_{-62} (−0.4 σ)	χ_{prior}^2	2.2	7.9 (ν : 6.0) (+0.2 σ)
$\Omega_{\mathrm{m}}h^2$	0.14240	$0.1425^{+0.0026}_{-0.0026}$ (−0.4 σ)	k_{eq}	0.010339	$0.01035^{+0.00019}_{-0.00019}$ (−0.4 σ)	χ_{CMB}^2	11918.5	11935.5 (ν : 17.2) (+1895.8 σ)
$\Omega_{\mathrm{m}}h^3$	0.09612	$0.0961^{+0.0012}_{-0.0012}$ (+0.3 σ)	$100\theta_{\mathrm{eq}}$	0.8158	$0.815^{+0.012}_{-0.012}$ (+0.5 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 11920.73$; $\Delta\chi_{\mathrm{eff}}^2 = -0.03$; $\bar{\chi}_{\mathrm{eff}}^2 = 11943.34$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.88$; $R - 1 = 0.01242$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 (Δ -0.02) commander_dx12.v3.2.29: 22.85 (Δ -0.15) CamSpec like_10.7HM.1400.unified: 11499.82 (Δ 0.17)

20.30 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02237^{+0.00036}_{-0.00036} \quad (+0.8\sigma)$	S_8	$0.819^{+0.026}_{-0.026} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.7^{+9.0}_{-9.3} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0020}_{-0.0021} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$H(0.38)$	$83.12^{+0.78}_{-0.73} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0013}_{-0.0012} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.015}_{-0.015} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+18}_{-19} \quad (-0.8\sigma)$
τ	$0.054^{+0.016}_{-0.016} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.022}_{-0.022} \quad (-0.8\sigma)$	$H(0.51)$	$89.81^{+0.69}_{-0.63} \quad (+0.8\sigma)$
Y_{P}	$0.250^{+0.032}_{-0.032} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.7}_{-1.6} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1977^{+22}_{-23} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.035}_{-0.035} \quad (-0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.421^{+0.053}_{-0.053} \quad (-0.7\sigma)$	$H(0.61)$	$95.41^{+0.61}_{-0.57} \quad (+0.8\sigma)$
n_{s}	$0.969^{+0.015}_{-0.014} \quad (+0.6\sigma)$	z_{re}	$7.6^{+1.6}_{-1.7} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+24}_{-25} \quad (-0.8\sigma)$
y_{cal}	$1.0005^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.091^{+0.073}_{-0.073} \quad (-0.0\sigma)$	$H(2.33)$	$235.9^{+1.3}_{-1.3} \quad (-0.7\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.026}_{-0.025} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5759^{+30}_{-31} \quad (-0.7\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	$1220^{+31}_{-31} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.013}_{-0.014} \quad (-0.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	$5721^{+77}_{-76} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.015}_{-0.015} \quad (-0.3\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.012}_{-0.012} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$< 7.33 \quad (-0.6\sigma)$	D_{1420}	$815.5^{+9.8}_{-9.9} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.014}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.25}_{-0.25}$	D_{2000}	$229.9^{+4.4}_{-4.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.011}_{-0.011} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.969^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.013}_{-0.013} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.250^{+0.032}_{-0.032} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.466^{+0.010}_{-0.011} \quad (-0.7\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.251^{+0.032}_{-0.032} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.012}_{-0.012} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	Age/Gyr	$13.787^{+0.070}_{-0.071} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0064}_{-0.0061} \quad (+0.1\sigma)$
A_{143}^{dust}	$0.97^{+0.34}_{-0.34}$	z_*	$1090.0^{+1.2}_{-1.1} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0067}_{-0.0065} \quad (+0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.69^{+0.57}_{-0.58} \quad (+0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04118^{+0.00062}_{-0.00063} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.3^{+4.9}_{-5.0} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.056}_{-0.057} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-6} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1060.0^{+1.8}_{-1.7} \quad (+0.5\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{TE}	$0.997^{+0.011}_{-0.010}$	r_{drag}	$147.36^{+0.62}_{-0.63} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 0.7) \quad (-0.6\sigma)$
c_{EE}	$0.994^{+0.013}_{-0.012}$	k_{D}	$0.14039^{+0.00099}_{-0.0010} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.5 \quad (\nu: 16.4)$
H_0	$67.8^{+1.1}_{-1.0} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.013}_{-0.013} \quad (+0.8\sigma)$	z_{eq}	$3377^{+45}_{-47} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.42 \quad (\nu: 0.1)$
Ω_{m}	$0.309^{+0.013}_{-0.013} \quad (-0.8\sigma)$	k_{eq}	$0.01031^{+0.00014}_{-0.00014} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0019}_{-0.0020} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8181^{+0.0090}_{-0.0084} \quad (+0.8\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.0) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0962^{+0.0011}_{-0.0011} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0046}_{-0.0043} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.5)$
σ_8	$0.807^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.15)$	$73.05^{+0.96}_{-0.91} \quad (+0.8\sigma)$	χ_{CMB}^2	$11935.2 \quad (\nu: 16.5) \quad (+1895.7\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.00; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.71; R - 1 = 0.01838$$

20.31 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02228^{+0.00040}_{-0.00041} \quad (+0.6\sigma)$	σ_8	$0.809^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4501^{+0.0054}_{-0.0053} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1197^{+0.0024}_{-0.0024} \quad (-0.4\sigma)$	S_8	$0.828^{+0.026}_{-0.025} \quad (-0.4\sigma)$	$H(0.15)$	$72.7^{+1.2}_{-1.2} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0014}_{-0.0013} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+12}_{-12} \quad (-0.4\sigma)$
τ	$0.054^{+0.015}_{-0.015} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.38)$	$82.83^{+0.97}_{-0.92} \quad (+0.4\sigma)$
Y_{P}	$0.244^{+0.034}_{-0.035} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+24}_{-25} \quad (-0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.041^{+0.032}_{-0.030} \quad (+0.0\sigma)$	$r_{\mathrm{drag}}h$	$99.2^{+2.2}_{-2.1} \quad (+0.4\sigma)$	$H(0.51)$	$89.57^{+0.82}_{-0.79} \quad (+0.4\sigma)$
n_{s}	$0.965^{+0.017}_{-0.016} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.047}_{-0.049} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+29}_{-29} \quad (-0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.6^{+1.5}_{-1.5} \quad (+0.2\sigma)$	$H(0.61)$	$95.21^{+0.71}_{-0.68} \quad (+0.4\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	10^9A_{s}	$2.092^{+0.068}_{-0.063} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+31}_{-32} \quad (-0.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (-0.4\sigma)$	$H(2.33)$	$236.3^{+1.5}_{-1.4} \quad (-0.3\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1229^{+32}_{-33} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5768^{+35}_{-36} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{220}	$5721^{+77}_{-77} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.41 \quad (-0.6\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.014}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{1420}	$815.9^{+9.8}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.010}_{-0.010} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$230.4^{+4.3}_{-4.4} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.013}_{-0.012} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.965^{+0.017}_{-0.016} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4738^{+0.0092}_{-0.0093} \quad (-0.4\sigma)$
A^{kSZ}	—	Y_{P}	$0.244^{+0.034}_{-0.035} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.012}_{-0.012} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.245^{+0.034}_{-0.035} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4686^{+0.0086}_{-0.0087} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	Age/Gyr	$13.808^{+0.081}_{-0.083} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.012}_{-0.011} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1090.0^{+1.1}_{-1.1} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0062}_{-0.0059} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	r_*	$144.58^{+0.58}_{-0.59} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0068}_{-0.0065} \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04104^{+0.00066}_{-0.00066} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.056}_{-0.057} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.8^{+5.1}_{-5.1} \quad (-0.6\sigma)$
c_{TE}	$0.996^{+0.011}_{-0.010}$	z_{drag}	$1059.7^{+1.9}_{-1.8} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-6} \quad (-0.6\sigma)$
c_{EE}	$0.992^{+0.013}_{-0.013}$	r_{drag}	$147.27^{+0.62}_{-0.63} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.29 \quad (\nu: 0.3)$
H_0	$67.4^{+1.4}_{-1.4} \quad (+0.4\sigma)$	k_{D}	$0.1407^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
Ω_{Λ}	$0.685^{+0.017}_{-0.017} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.1608^{+0.0014}_{-0.0013} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 1.0) \quad (-0.3\sigma)$
Ω_{m}	$0.315^{+0.017}_{-0.017} \quad (-0.4\sigma)$	z_{eq}	$3393^{+55}_{-53} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.7 \quad (\nu: 15.9)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0023}_{-0.0022} \quad (-0.4\sigma)$	k_{eq}	$0.01036^{+0.00017}_{-0.00016} \quad (-0.4\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0961^{+0.0012}_{-0.0011} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.010} \quad (+0.4\sigma)$	χ_{CMB}^2	$11944.3 \quad (\nu: 17.1) \quad (+1897.3\sigma)$
$\bar{\chi}_{\mathrm{eff}}^2 = 11952.12; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.68; R - 1 = 0.01489$					

20.32 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02236^{+0.00036}_{-0.00036} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.011}_{-0.012} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+18}_{-19} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0018}_{-0.0019} \quad (-0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$H(0.51)$	$89.76^{+0.66}_{-0.61} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0410^{+0.0013}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.018}_{-0.017} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+21}_{-22} \quad (-0.7\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.6}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$95.37^{+0.59}_{-0.55} \quad (+0.7\sigma)$
Y_{P}	$0.248^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.430^{+0.043}_{-0.044} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+23}_{-25} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.032}_{-0.030} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.5}_{-1.4} \quad (+0.4\sigma)$	$H(2.33)$	$236.0^{+1.2}_{-1.2} \quad (-0.6\sigma)$
n_{s}	$0.968^{+0.015}_{-0.013} \quad (+0.5\sigma)$	10^9A_{s}	$2.099^{+0.067}_{-0.061} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5760^{+29}_{-30} \quad (-0.7\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+30}_{-30} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.014}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5725^{+75}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4738^{+0.0095}_{-0.0095} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.012} \quad (+0.0\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{1420}	$816.0^{+9.7}_{-9.8} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4726^{+0.0089}_{-0.0089} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.37 \quad (-0.6\sigma)$	D_{2000}	$230.2^{+4.4}_{-4.4} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.011} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.968^{+0.015}_{-0.013} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4678^{+0.0085}_{-0.0086} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.248^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.011}_{-0.011} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.250^{+0.032}_{-0.033} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0059}_{-0.0055} \quad (+0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.791^{+0.068}_{-0.070} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0064}_{-0.0060} \quad (+0.3\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	z_*	$1090.0^{+1.1}_{-1.1} \quad (-0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-8} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	r_*	$144.67^{+0.53}_{-0.55} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.1^{+4.9}_{-5.1} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04115^{+0.00061}_{-0.00062} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-6} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.895^{+0.054}_{-0.055} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.33 \quad (\nu: 0.3)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	z_{drag}	$1059.9^{+1.7}_{-1.7} \quad (+0.4\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	r_{drag}	$147.34^{+0.59}_{-0.61} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 0.7) \quad (-0.5\sigma)$
c_{TE}	$0.997^{+0.011}_{-0.010}$	k_{D}	$0.14047^{+0.00096}_{-0.00098} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.8 \quad (\nu: 15.8)$
c_{EE}	$0.993^{+0.013}_{-0.012}$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
H_0	$67.7^{+1.1}_{-0.99} \quad (+0.7\sigma)$	z_{eq}	$3380^{+42}_{-42} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.7\sigma)$	k_{eq}	$0.01032^{+0.00013}_{-0.00013} \quad (-0.6\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.9)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0081}_{-0.0078} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1421^{+0.0018}_{-0.0018} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0041}_{-0.0040} \quad (+0.7\sigma)$	χ_{CMB}^2	$11944.2 \quad (\nu: 16.6) \quad (+1897.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0962^{+0.0011}_{-0.0011} \quad (+0.4\sigma)$	$H(0.15)$	$72.98^{+0.94}_{-0.87} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.5)$
σ_8	$0.809^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.4^{+8.6}_{-9.0} \quad (-0.7\sigma)$		
S_8	$0.822^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$83.06^{+0.75}_{-0.70} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.04; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.63; R - 1 = 0.02077$$

20.33 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02255^{+0.00042}_{-0.00040} \quad (+1.4\sigma)$	σ_8	$0.807^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4545^{+0.0058}_{-0.0059} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1178^{+0.0027}_{-0.0026} \quad (-1.3\sigma)$	S_8	$0.807^{+0.030}_{-0.030} \quad (-1.3\sigma)$	$H(0.15)$	$73.7^{+1.2}_{-1.2} \quad (+1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0416^{+0.0012}_{-0.0013} \quad (+0.9\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.017}_{-0.017} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$633^{+12}_{-11} \quad (-1.5\sigma)$
τ	$0.056^{+0.018}_{-0.017} \quad (+0.5\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.597^{+0.016}_{-0.016} \quad (-1.2\sigma)$	$H(0.38)$	$83.63^{+0.96}_{-0.96} \quad (+1.5\sigma)$
Y_{P}	$0.261^{+0.031}_{-0.034} \quad (+0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.975^{+0.023}_{-0.023} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1513^{+25}_{-23} \quad (-1.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.035}_{-0.036} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$101.1^{+2.3}_{-2.2} \quad (+1.4\sigma)$	$H(0.51)$	$90.24^{+0.83}_{-0.82} \quad (+1.5\sigma)$
n_{s}	$0.976^{+0.015}_{-0.016} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.398^{+0.061}_{-0.057} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1962^{+29}_{-28} \quad (-1.5\sigma)$
y_{cal}	$1.0006^{+0.0046}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.8}_{-1.8} \quad (+0.4\sigma)$	$H(0.61)$	$95.78^{+0.74}_{-0.71} \quad (+1.5\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.074}_{-0.074} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2285^{+32}_{-30} \quad (-1.5\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.025}_{-0.025} \quad (-0.4\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.5} \quad (-1.1\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{40}	$1208^{+32}_{-31} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5741^{+35}_{-33} \quad (-1.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{220}	$5727^{+69}_{-74} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.447^{+0.016}_{-0.016} \quad (-1.3\sigma)$
A_{143}^{tSZ}	$< 7.24 \quad (-0.7\sigma)$	D_{810}	$2537^{+26}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.015}_{-0.016} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.25}$	D_{1420}	$815.5^{+9.7}_{-9.6} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.468^{+0.013}_{-0.013} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$229.3^{+4.6}_{-4.3} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.014}_{-0.014} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.976^{+0.015}_{-0.016} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.468^{+0.012}_{-0.011} \quad (-1.1\sigma)$
A^{kSZ}	—	Y_{P}	$0.261^{+0.031}_{-0.034} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.013}_{-0.013} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.262^{+0.031}_{-0.034} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.464^{+0.011}_{-0.011} \quad (-1.0\sigma)$
A_{143}^{dust}	$0.97^{+0.32}_{-0.34}$	Age/Gyr	$13.748^{+0.080}_{-0.077} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.012}_{-0.012} \quad (+0.2\sigma)$
A_{217}^{dust}	$0.97^{+0.19}_{-0.19}$	z_*	$1090.1^{+1.1}_{-1.1} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2986^{+0.0063}_{-0.0062} \quad (+0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.04^{+0.32}_{-0.30}$	r_*	$144.82^{+0.62}_{-0.62} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3084^{+0.0068}_{-0.0068} \quad (+0.7\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04140^{+0.00065}_{-0.00066} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.0\sigma)$
c_{217}	$1.0013^{+0.0031}_{-0.0031} \quad (+4.9\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.907^{+0.057}_{-0.059} \quad (+0.6\sigma)$	f_{2000}^{217}	$108.1^{+5.1}_{-5.1} \quad (-0.1\sigma)$
c_{TE}	$0.999^{+0.010}_{-0.011}$	z_{drag}	$1060.7^{+1.9}_{-1.8} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (-0.1\sigma)$
c_{EE}	$0.996^{+0.012}_{-0.013}$	r_{drag}	$147.44^{+0.65}_{-0.64} \quad (+0.5\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.0) \quad (+0.2\sigma)$
H_0	$68.5^{+1.3}_{-1.4} \quad (+1.5\sigma)$	k_{D}	$0.1400^{+0.0011}_{-0.0010} \quad (-0.7\sigma)$	χ_{lowl}^2	$21.8 \quad (\nu: 0.6) \quad (-1.1\sigma)$
Ω_{Λ}	$0.700^{+0.016}_{-0.017} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.1614^{+0.0012}_{-0.0014} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11518.2 \quad (\nu: 20.7)$
Ω_{m}	$0.300^{+0.017}_{-0.016} \quad (-1.4\sigma)$	z_{eq}	$3353^{+60}_{-57} \quad (-1.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$8.9 \quad (\nu: 3.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1409^{+0.0025}_{-0.0024} \quad (-1.2\sigma)$	k_{eq}	$0.01023^{+0.00018}_{-0.00017} \quad (-1.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.2) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0966^{+0.0012}_{-0.0012} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.011}_{-0.012} \quad (+1.3\sigma)$	χ_{CMB}^2	$11937.2 \quad (\nu: 19.4) \quad (+1896.1\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11954.03; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.24; R - 1 = 0.04865$$

20.34 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02231^{+0.00042}_{-0.00041} \quad (+0.6\sigma)$	σ_8	$0.809^{+0.016}_{-0.014} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0062}_{-0.0061} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1195^{+0.0028}_{-0.0028} \quad (-0.5\sigma)$	S_8	$0.827^{+0.033}_{-0.032} \quad (-0.5\sigma)$	$H(0.15)$	$72.8^{+1.3}_{-1.3} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0409^{+0.0014}_{-0.0014} \quad (+0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.018}_{-0.018} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$642^{+13}_{-13} \quad (-0.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.38)$	$82.9^{+1.0}_{-1.0} \quad (+0.5\sigma)$
Y_{P}	$0.246^{+0.035}_{-0.035} \quad (+0.0\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.022} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1532^{+26}_{-26} \quad (-0.5\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.042^{+0.030}_{-0.028} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$99.4^{+2.4}_{-2.4} \quad (+0.5\sigma)$	$H(0.51)$	$89.64^{+0.88}_{-0.84} \quad (+0.5\sigma)$
n_{s}	$0.967^{+0.017}_{-0.016} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.435^{+0.059}_{-0.060} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1984^{+31}_{-31} \quad (-0.5\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (+0.0\sigma)$	z_{re}	$< 8.87 \quad (+0.2\sigma)$	$H(0.61)$	$95.27^{+0.77}_{-0.72} \quad (+0.5\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.094^{+0.062}_{-0.057} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2309^{+34}_{-34} \quad (-0.5\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.026}_{-0.025} \quad (-0.4\sigma)$	$H(2.33)$	$236.2^{+1.7}_{-1.6} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{40}	$1225^{+33}_{-35} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+36}_{-38} \quad (-0.5\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{220}	$5717^{+75}_{-77} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.016}_{-0.016} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.45 \quad (-0.6\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.014}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$815.5^{+9.8}_{-10} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$230.1^{+4.4}_{-4.5} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.012} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.967^{+0.017}_{-0.016} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.474^{+0.012}_{-0.012} \quad (-0.4\sigma)$
A^{kSZ}	—	Y_{P}	$0.246^{+0.035}_{-0.035} \quad (+0.0\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.011}_{-0.011} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.248^{+0.035}_{-0.035} \quad (+0.0\sigma)$	$f\sigma_8(0.61)$	$0.469^{+0.011}_{-0.010} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.34}$	Age/Gyr	$13.801^{+0.083}_{-0.086} \quad (-0.5\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.011}_{-0.011} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1090.0^{+1.1}_{-1.1} \quad (-0.5\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0060}_{-0.0053} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	r_*	$144.59^{+0.63}_{-0.64} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0065}_{-0.0058} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04108^{+0.00069}_{-0.00068} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0031} \quad (+4.7\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.060}_{-0.061} \quad (+0.3\sigma)$	f_{2000}^{217}	$107.0^{+5.0}_{-5.1} \quad (-0.5\sigma)$
c_{TE}	$0.997^{+0.011}_{-0.010}$	z_{drag}	$1059.8^{+1.9}_{-1.9} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-6} \quad (-0.5\sigma)$
c_{EE}	$0.992^{+0.013}_{-0.013}$	r_{drag}	$147.28^{+0.65}_{-0.67} \quad (+0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.5) \quad (-0.1\sigma)$
H_0	$67.5^{+1.5}_{-1.5} \quad (+0.5\sigma)$	k_{D}	$0.1406^{+0.0011}_{-0.0012} \quad (+0.1\sigma)$	χ_{lowl}^2	$23.2 \quad (\nu: 1.0) \quad (-0.4\sigma)$
Ω_{Λ}	$0.687^{+0.019}_{-0.020} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1609^{+0.0014}_{-0.0013} \quad (-0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.2 \quad (\nu: 16.9)$
Ω_{m}	$0.313^{+0.020}_{-0.019} \quad (-0.5\sigma)$	z_{eq}	$3390^{+63}_{-62} \quad (-0.4\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.0) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1425^{+0.0026}_{-0.0026} \quad (-0.4\sigma)$	k_{eq}	$0.01035^{+0.00019}_{-0.00019} \quad (-0.4\sigma)$	χ_{CMB}^2	$11935.1 \quad (\nu: 16.8) \quad (+1895.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0961^{+0.0012}_{-0.0012} \quad (+0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.012} \quad (+0.5\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11943.03; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.84; R - 1 = 0.01121$$

20.35 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02237^{+0.00036}_{-0.00036} \quad (+0.8\sigma)$	S_8	$0.820^{+0.025}_{-0.025} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.15)$	$639.6^{+8.9}_{-9.2} \quad (-0.8\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0020}_{-0.0021} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.014}_{-0.014} \quad (-0.8\sigma)$	$H(0.38)$	$83.13^{+0.77}_{-0.72} \quad (+0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0013}_{-0.0012} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.014}_{-0.013} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1526^{+18}_{-19} \quad (-0.8\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.021}_{-0.019} \quad (-0.7\sigma)$	$H(0.51)$	$89.82^{+0.68}_{-0.62} \quad (+0.8\sigma)$
Y_{P}	$0.250^{+0.032}_{-0.032} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.9^{+1.7}_{-1.6} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1977^{+22}_{-23} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.030}_{-0.028} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.051}_{-0.049} \quad (-0.7\sigma)$	$H(0.61)$	$95.42^{+0.61}_{-0.56} \quad (+0.8\sigma)$
n_{s}	$0.969^{+0.015}_{-0.014} \quad (+0.6\sigma)$	z_{re}	$< 8.95 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2301^{+24}_{-25} \quad (-0.8\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.097^{+0.064}_{-0.059} \quad (+0.2\sigma)$	$H(2.33)$	$235.9^{+1.3}_{-1.3} \quad (-0.7\sigma)$
A_{100}^{PS}	$242^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.026}_{-0.025} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5758^{+30}_{-31} \quad (-0.7\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{40}	$1220^{+31}_{-32} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.3\sigma)$	D_{220}	$5720^{+75}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.014}_{-0.013} \quad (-0.2\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.1\sigma)$	D_{810}	$2535^{+27}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.33 \quad (-0.6\sigma)$	D_{1420}	$815.5^{+9.7}_{-10} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.012} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{2000}	$229.9^{+4.4}_{-4.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.0099} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.969^{+0.015}_{-0.014} \quad (+0.6\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.012}_{-0.011} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.250^{+0.032}_{-0.032} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.0093} \quad (-0.6\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.251^{+0.032}_{-0.032} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.011}_{-0.011} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	Age/Gyr	$13.786^{+0.069}_{-0.071} \quad (-0.7\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0057}_{-0.0054} \quad (+0.2\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.34}$	z_*	$1090.0^{+1.2}_{-1.1} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0061}_{-0.0058} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.69^{+0.57}_{-0.58} \quad (+0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.32}_{-0.31}$	$100\theta_*$	$1.04118^{+0.00062}_{-0.00063} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.3^{+4.9}_{-5.0} \quad (-0.4\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.897^{+0.056}_{-0.057} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+5}_{-6} \quad (-0.4\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	z_{drag}	$1060.0^{+1.7}_{-1.7} \quad (+0.5\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.7) \quad (+0.0\sigma)$
c_{TE}	$0.997^{+0.011}_{-0.010}$	r_{drag}	$147.36^{+0.62}_{-0.63} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.7 \quad (\nu: 0.7) \quad (-0.6\sigma)$
c_{EE}	$0.994^{+0.013}_{-0.012}$	k_{D}	$0.14039^{+0.00098}_{-0.00099} \quad (-0.2\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11515.3 \quad (\nu: 16.2)$
H_0	$67.8^{+1.1}_{-1.0} \quad (+0.8\sigma)$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.1\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.043 \quad (\nu: 0.0)$
Ω_{Λ}	$0.691^{+0.013}_{-0.013} \quad (+0.8\sigma)$	z_{eq}	$3376^{+46}_{-48} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.43 \quad (\nu: 0.1)$
Ω_{m}	$0.309^{+0.013}_{-0.013} \quad (-0.8\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00015} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0019}_{-0.0020} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8181^{+0.0090}_{-0.0084} \quad (+0.8\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.9) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0962^{+0.0011}_{-0.0011} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0046}_{-0.0043} \quad (+0.7\sigma)$	χ_{BAO}^2	$5.95 \quad (\nu: 0.5)$
σ_8	$0.808^{+0.016}_{-0.014} \quad (-0.3\sigma)$	$H(0.15)$	$73.06^{+0.96}_{-0.91} \quad (+0.8\sigma)$	χ_{CMB}^2	$11934.9 \quad (\nu: 16.0) \quad (+1895.7\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11948.72; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.73; R - 1 = 0.01724$$

20.36 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02229^{+0.00040}_{-0.00040} \quad (+0.6\sigma)$	σ_8	$0.810^{+0.014}_{-0.013} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0053}_{-0.0052} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0024}_{-0.0024} \quad (-0.5\sigma)$	S_8	$0.828^{+0.026}_{-0.025} \quad (-0.4\sigma)$	$H(0.15)$	$72.7^{+1.2}_{-1.2} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0408^{+0.0014}_{-0.0014} \quad (+0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+12}_{-12} \quad (-0.5\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$H(0.38)$	$82.86^{+0.95}_{-0.90} \quad (+0.4\sigma)$
Y_{P}	$0.244^{+0.034}_{-0.034} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+24}_{-24} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.028}_{-0.026} \quad (+0.2\sigma)$	$r_{\mathrm{drag}} h$	$99.3^{+2.1}_{-2.1} \quad (+0.4\sigma)$	$H(0.51)$	$89.60^{+0.81}_{-0.77} \quad (+0.4\sigma)$
n_{s}	$0.965^{+0.017}_{-0.015} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.440^{+0.047}_{-0.048} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+28}_{-29} \quad (-0.5\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0047} \quad (+0.0\sigma)$	z_{re}	$< 8.89 \quad (+0.3\sigma)$	$H(0.61)$	$95.23^{+0.71}_{-0.67} \quad (+0.4\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.059}_{-0.055} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2310^{+31}_{-32} \quad (-0.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (-0.4\sigma)$	$H(2.33)$	$236.2^{+1.4}_{-1.4} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1228^{+31}_{-32} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+35}_{-36} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{220}	$5721^{+75}_{-77} \quad (+0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.43 \quad (-0.6\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.012}_{-0.012} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.26}$	D_{1420}	$815.8^{+9.8}_{-9.7} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.010}_{-0.010} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$230.4^{+4.4}_{-4.4} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.011} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.965^{+0.017}_{-0.015} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4741^{+0.0091}_{-0.0091} \quad (-0.4\sigma)$
A^{kSZ}	—	Y_{P}	$0.244^{+0.034}_{-0.034} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.011}_{-0.011} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.246^{+0.034}_{-0.034} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4689^{+0.0085}_{-0.0084} \quad (-0.3\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	Age/Gyr	$13.806^{+0.080}_{-0.082} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.011}_{-0.010} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.20}$	z_*	$1090.0^{+1.1}_{-1.1} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0060}_{-0.0052} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.32}_{-0.31}$	r_*	$144.59^{+0.58}_{-0.58} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0066}_{-0.0057} \quad (+0.2\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	$100\theta_*$	$1.04105^{+0.00065}_{-0.00067} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0030} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.889^{+0.055}_{-0.056} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.8^{+5.0}_{-5.1} \quad (-0.6\sigma)$
c_{TE}	$0.996^{+0.011}_{-0.010}$	z_{drag}	$1059.7^{+1.8}_{-1.8} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+6}_{-6} \quad (-0.6\sigma)$
c_{EE}	$0.992^{+0.013}_{-0.013}$	r_{drag}	$147.28^{+0.61}_{-0.63} \quad (+0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.26 \quad (\nu: 0.2)$
H_0	$67.4^{+1.4}_{-1.3} \quad (+0.4\sigma)$	k_{D}	$0.1406^{+0.0011}_{-0.0011} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
Ω_{Λ}	$0.686^{+0.016}_{-0.017} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.1608^{+0.0014}_{-0.0013} \quad (-0.4\sigma)$	χ_{lowl}^2	$23.4 \quad (\nu: 0.9) \quad (-0.3\sigma)$
Ω_{m}	$0.314^{+0.017}_{-0.016} \quad (-0.5\sigma)$	z_{eq}	$3392^{+54}_{-53} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.6 \quad (\nu: 15.9)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0022}_{-0.0022} \quad (-0.4\sigma)$	k_{eq}	$0.01035^{+0.00016}_{-0.00016} \quad (-0.4\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0961^{+0.0012}_{-0.0012} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.011}_{-0.010} \quad (+0.4\sigma)$	χ_{CMB}^2	$11944.1 \quad (\nu: 16.7) \quad (+1897.3\sigma)$
$\bar{\chi}_{\mathrm{eff}}^2 = 11951.89; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.64; R - 1 = 0.01571$					

20.37 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02236^{+0.00035}_{-0.00036} \quad (+0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+17}_{-19} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0018}_{-0.0019} \quad (-0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.011} \quad (-0.6\sigma)$	$H(0.51)$	$89.77^{+0.65}_{-0.60} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0411^{+0.0013}_{-0.0012} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+21}_{-22} \quad (-0.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.6}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$95.38^{+0.58}_{-0.55} \quad (+0.7\sigma)$
Y_{P}	$0.248^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.042}_{-0.042} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2303^{+23}_{-25} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.028}_{-0.027} \quad (+0.3\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$H(2.33)$	$235.9^{+1.2}_{-1.2} \quad (-0.6\sigma)$
n_{s}	$0.968^{+0.015}_{-0.013} \quad (+0.5\sigma)$	10^9A_{s}	$2.102^{+0.060}_{-0.056} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5760^{+29}_{-30} \quad (-0.7\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.879^{+0.025}_{-0.024} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{100}^{PS}	$241^{+50}_{-50} \quad (-0.8\sigma)$	D_{40}	$1224^{+30}_{-30} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.012} \quad (-0.1\sigma)$
A_{143}^{PS}	$40^{+20}_{-20} \quad (-1.0\sigma)$	D_{220}	$5725^{+74}_{-75} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4740^{+0.0095}_{-0.0092} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.011} \quad (+0.1\sigma)$
A_{217}^{CIB}	$40^{+20}_{-10} \quad (-1.2\sigma)$	D_{1420}	$815.9^{+9.7}_{-9.8} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4728^{+0.0088}_{-0.0085} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.39 \quad (-0.6\sigma)$	D_{2000}	$230.2^{+4.3}_{-4.4} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.621^{+0.012}_{-0.010} \quad (+0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.968^{+0.015}_{-0.013} \quad (+0.5\sigma)$	$f\sigma_8(0.61)$	$0.4680^{+0.0084}_{-0.0082} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.248^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$\sigma_8(0.61)$	$0.591^{+0.011}_{-0.0097} \quad (+0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.250^{+0.032}_{-0.032} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0058}_{-0.0051} \quad (+0.3\sigma)$
A^{kSZ}	—	Age/Gyr	$13.790^{+0.068}_{-0.069} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3073^{+0.0059}_{-0.0057} \quad (+0.4\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.39}$	z_*	$1090.0^{+1.1}_{-1.1} \quad (-0.5\sigma)$	f_{2000}^{143}	$30^{+7}_{-7} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.35}_{-0.34}$	r_*	$144.67^{+0.53}_{-0.54} \quad (+0.4\sigma)$	f_{2000}^{217}	$107.1^{+4.9}_{-5.1} \quad (-0.4\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	$100\theta_*$	$1.04116^{+0.00061}_{-0.00062} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+5}_{-6} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.02^{+0.31}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.895^{+0.053}_{-0.054} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.28 \quad (\nu: 0.3)$
c_{100}	$0.9976^{+0.0020}_{-0.0020} \quad (-3.3\sigma)$	z_{drag}	$1060.0^{+1.7}_{-1.7} \quad (+0.4\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.7) \quad (+0.1\sigma)$
c_{217}	$1.0012^{+0.0031}_{-0.0030} \quad (+4.7\sigma)$	r_{drag}	$147.34^{+0.59}_{-0.60} \quad (+0.3\sigma)$	χ_{lowl}^2	$22.9 \quad (\nu: 0.7) \quad (-0.5\sigma)$
c_{TE}	$0.997^{+0.011}_{-0.010}$	k_{D}	$0.14046^{+0.00095}_{-0.00098} \quad (-0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.8 \quad (\nu: 15.7)$
c_{EE}	$0.993^{+0.013}_{-0.012}$	$100\theta_{\mathrm{D}}$	$0.1610^{+0.0013}_{-0.0013} \quad (-0.2\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
H_0	$67.7^{+1.0}_{-0.97} \quad (+0.7\sigma)$	z_{eq}	$3379^{+42}_{-42} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.35 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.7\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.8)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0081}_{-0.0077} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 6.0) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1421^{+0.0018}_{-0.0017} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0041}_{-0.0040} \quad (+0.7\sigma)$	χ_{CMB}^2	$11944.0 \quad (\nu: 16.2) \quad (+1897.3\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0962^{+0.0011}_{-0.0011} \quad (+0.4\sigma)$	$H(0.15)$	$72.99^{+0.93}_{-0.86} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.00 \quad (\nu: 0.5)$
σ_8	$0.810^{+0.014}_{-0.013} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.3^{+8.4}_{-8.9} \quad (-0.7\sigma)$		
S_8	$0.823^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$83.07^{+0.75}_{-0.69} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11957.86; \Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.60; R - 1 = 0.02091$$

20.38 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_post_Riess18_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02256^{+0.00042}_{-0.00041} \quad (+1.5\sigma)$	σ_8	$0.808^{+0.016}_{-0.015} \quad (-0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4546^{+0.0057}_{-0.0059} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1177^{+0.0027}_{-0.0025} \quad (-1.3\sigma)$	S_8	$0.808^{+0.030}_{-0.030} \quad (-1.3\sigma)$	$H(0.15)$	$73.7^{+1.2}_{-1.2} \quad (+1.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0417^{+0.0013}_{-0.0013} \quad (+1.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.016}_{-0.016} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$633^{+12}_{-11} \quad (-1.5\sigma)$
τ	$0.057^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.598^{+0.016}_{-0.016} \quad (-1.1\sigma)$	$H(0.38)$	$83.65^{+0.94}_{-0.96} \quad (+1.5\sigma)$
Y_{P}	$0.261^{+0.031}_{-0.033} \quad (+0.7\sigma)$	$\sigma_8/h^{0.5}$	$0.975^{+0.022}_{-0.023} \quad (-1.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1513^{+24}_{-23} \quad (-1.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.046^{+0.031}_{-0.029} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$101.1^{+2.2}_{-2.2} \quad (+1.4\sigma)$	$H(0.51)$	$90.25^{+0.80}_{-0.81} \quad (+1.5\sigma)$
n_{s}	$0.976^{+0.015}_{-0.016} \quad (+1.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.400^{+0.060}_{-0.056} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1962^{+29}_{-27} \quad (-1.5\sigma)$
y_{cal}	$1.0006^{+0.0046}_{-0.0047} \quad (+0.1\sigma)$	z_{re}	$< 9.16 \quad (+0.5\sigma)$	$H(0.61)$	$95.79^{+0.73}_{-0.71} \quad (+1.5\sigma)$
A_{100}^{PS}	$244^{+50}_{-50} \quad (-0.7\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.066}_{-0.061} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2284^{+32}_{-30} \quad (-1.5\sigma)$
A_{143}^{PS}	$42^{+20}_{-20} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.025}_{-0.024} \quad (-0.4\sigma)$	$H(2.33)$	$235.3^{+1.6}_{-1.5} \quad (-1.1\sigma)$
A_{217}^{PS}	$101^{+30}_{-30} \quad (-1.3\sigma)$	D_{40}	$1208^{+32}_{-31} \quad (-1.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5741^{+35}_{-35} \quad (-1.4\sigma)$
A_{217}^{CIB}	$41^{+10}_{-10} \quad (-1.0\sigma)$	D_{220}	$5727^{+67}_{-74} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.448^{+0.015}_{-0.016} \quad (-1.3\sigma)$
A_{143}^{tSZ}	$< 7.24 \quad (-0.7\sigma)$	D_{810}	$2537^{+25}_{-26} \quad (+0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.015}_{-0.013} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.65^{+0.24}_{-0.25}$	D_{1420}	$815.4^{+9.5}_{-9.9} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.469^{+0.013}_{-0.013} \quad (-1.2\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$229.3^{+4.6}_{-4.3} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.013}_{-0.012} \quad (+0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.976^{+0.015}_{-0.016} \quad (+1.2\sigma)$	$f\sigma_8(0.51)$	$0.469^{+0.011}_{-0.012} \quad (-1.1\sigma)$
A^{kSZ}	—	Y_{P}	$0.261^{+0.031}_{-0.033} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.622^{+0.012}_{-0.011} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.01^{+0.39}_{-0.39}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.262^{+0.032}_{-0.033} \quad (+0.7\sigma)$	$f\sigma_8(0.61)$	$0.465^{+0.011}_{-0.010} \quad (-1.0\sigma)$
A_{143}^{dust}	$0.97^{+0.32}_{-0.34}$	Age/Gyr	$13.747^{+0.080}_{-0.077} \quad (-1.4\sigma)$	$\sigma_8(0.61)$	$0.592^{+0.012}_{-0.010} \quad (+0.3\sigma)$
A_{217}^{dust}	$0.97^{+0.19}_{-0.19}$	z_*	$1090.1^{+1.1}_{-1.1} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2990^{+0.0060}_{-0.0054} \quad (+0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.04^{+0.32}_{-0.30}$	r_*	$144.82^{+0.61}_{-0.62} \quad (+0.8\sigma)$	$\sigma_8(2.33)$	$0.3088^{+0.0064}_{-0.0059} \quad (+0.8\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04140^{+0.00065}_{-0.00066} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+7}_{-7} \quad (-0.0\sigma)$
c_{217}	$1.0013^{+0.0030}_{-0.0031} \quad (+4.9\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.907^{+0.056}_{-0.059} \quad (+0.6\sigma)$	f_{2000}^{217}	$108.1^{+5.0}_{-5.1} \quad (-0.1\sigma)$
c_{TE}	$0.999^{+0.011}_{-0.011}$	z_{drag}	$1060.7^{+1.8}_{-1.8} \quad (+1.1\sigma)$	$f_{2000}^{143 \times 217}$	$34^{+5}_{-5} \quad (-0.1\sigma)$
c_{EE}	$0.996^{+0.012}_{-0.013}$	r_{drag}	$147.44^{+0.65}_{-0.64} \quad (+0.5\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 2.1) \quad (+0.1\sigma)$
H_0	$68.6^{+1.3}_{-1.4} \quad (+1.5\sigma)$	k_{D}	$0.1400^{+0.0011}_{-0.0010} \quad (-0.7\sigma)$	χ_{lowl}^2	$21.8 \quad (\nu: 0.6) \quad (-1.1\sigma)$
Ω_{Λ}	$0.700^{+0.016}_{-0.017} \quad (+1.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.1614^{+0.0012}_{-0.0014} \quad (+0.3\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11518.1 \quad (\nu: 20.3)$
Ω_{m}	$0.300^{+0.017}_{-0.016} \quad (-1.4\sigma)$	z_{eq}	$3352^{+60}_{-57} \quad (-1.2\sigma)$	$\chi_{\mathrm{H073p45}}^2$	$8.9 \quad (\nu: 3.3)$
$\Omega_{\mathrm{m}} h^2$	$0.1409^{+0.0025}_{-0.0024} \quad (-1.2\sigma)$	k_{eq}	$0.01023^{+0.00018}_{-0.00017} \quad (-1.2\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 6.2) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0966^{+0.0012}_{-0.0011} \quad (+0.9\sigma)$	$100\theta_{\mathrm{eq}}$	$0.823^{+0.011}_{-0.012} \quad (+1.3\sigma)$	χ_{CMB}^2	$11937.0 \quad (\nu: 18.7) \quad (+1896.0\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 11953.75; \Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.26; R - 1 = 0.05858$$

20.39 base_yhe_plikHM_TE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}} h^2$	0.02218	$0.02222^{+0.00073}_{-0.00065}$ (+0.3 σ)	$r_{\mathrm{drag}} h$	99.37	$99.6^{+4.5}_{-3.9}$ (+0.6 σ)	$H(0.15)$	72.47	$72.6^{+2.5}_{-2.3}$ (+0.4 σ)
$\Omega_{\mathrm{c}} h^2$	0.11849	$0.1184^{+0.0042}_{-0.0043}$ (−1.0 σ)	$\langle d^2 \rangle^{1/2}$	2.434	$2.43^{+0.11}_{-0.12}$ (−0.6 σ)	$D_{\mathrm{M}}(0.15)$	645.1	644^{+22}_{-25} (−0.4 σ)
$100\theta_{\mathrm{MC}}$	1.03933	$1.0396^{+0.0036}_{-0.0032}$ (−1.4 σ)	z_{re}	7.00	$6.9^{+1.7}_{-1.7}$ (−0.7 σ)	$H(0.38)$	82.57	$82.7^{+2.0}_{-1.8}$ (+0.2 σ)
τ	0.0498	$0.049^{+0.016}_{-0.017}$ (−0.4 σ)	$10^9 A_{\mathrm{s}}$	2.045	$2.042^{+0.076}_{-0.081}$ (−1.3 σ)	$D_{\mathrm{M}}(0.38)$	1538.1	1535^{+47}_{-49} (−0.3 σ)
Y_{P}	0.186	< 0.280 (−2.7 σ)	$10^9 A_{\mathrm{s}} e^{-2\tau}$	1.8509	$1.852^{+0.036}_{-0.034}$ (−2.2 σ)	$H(0.51)$	89.27	$89.4^{+1.7}_{-1.6}$ (+0.1 σ)
$\ln(10^{10} A_{\mathrm{s}})$	3.0179	$3.016^{+0.037}_{-0.040}$ (−1.4 σ)	D_{40}	1251	1247^{+80}_{-87} (+0.6 σ)	$D_{\mathrm{M}}(0.51)$	1992	1989^{+56}_{-59} (−0.3 σ)
n_{s}	0.9500	$0.952^{+0.036}_{-0.035}$ (−1.0 σ)	D_{220}	5746	5741^{+140}_{-150} (+0.7 σ)	$H(0.61)$	94.88	$95.0^{+1.5}_{-1.4}$ (−0.1 σ)
$A_{100}^{\mathrm{dustTE}}$	0.114	$0.114^{+0.075}_{-0.075}$	D_{810}	2532	2530^{+61}_{-66} (−0.5 σ)	$D_{\mathrm{M}}(0.61)$	2318	2314^{+62}_{-65} (−0.3 σ)
$A_{100 \times 143}^{\mathrm{dustTE}}$	0.136	$0.135^{+0.058}_{-0.057}$	D_{1420}	826.4	825^{+37}_{-42} (+1.9 σ)	$H(2.33)$	235.22	$235.2^{+2.4}_{-2.5}$ (−1.2 σ)
$A_{100 \times 217}^{\mathrm{dustTE}}$	0.477	$0.48^{+0.17}_{-0.16}$	D_{2000}	237.6	237^{+18}_{-19} (+3.0 σ)	$D_{\mathrm{M}}(2.33)$	5789	5783^{+71}_{-78} (+0.3 σ)
$A_{143}^{\mathrm{dustTE}}$	0.223	$0.22^{+0.11}_{-0.11}$	$n_{\mathrm{s},0.002}$	0.9500	$0.952^{+0.036}_{-0.035}$ (−1.0 σ)	$f\sigma_8(0.15)$	0.4465	$0.445^{+0.026}_{-0.026}$ (−1.5 σ)
$A_{143 \times 217}^{\mathrm{dustTE}}$	0.658	$0.66^{+0.16}_{-0.16}$	Y_{P}	0.186	$0.191^{+0.095}_{-0.089}$ (−2.7 σ)	$\sigma_8(0.15)$	0.7302	$0.730^{+0.020}_{-0.020}$ (−2.3 σ)
$A_{217}^{\mathrm{dustTE}}$	2.05	$2.04^{+0.53}_{-0.53}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.187	$0.192^{+0.095}_{-0.090}$ (−2.7 σ)	$f\sigma_8(0.38)$	0.4641	$0.463^{+0.020}_{-0.021}$ (−1.7 σ)
c_{100}	1.00016	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	Age/Gyr	13.858	$13.85^{+0.16}_{-0.18}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6471	$0.647^{+0.018}_{-0.017}$ (−2.2 σ)
c_{217}	0.99798	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	z_*	1087.79	$1088.0^{+3.1}_{-2.7}$ (−3.5 σ)	$f\sigma_8(0.51)$	0.4625	$0.462^{+0.017}_{-0.018}$ (−1.9 σ)
y_{cal}	0.99999	$1.0001^{+0.0050}_{-0.0049}$ (−0.1 σ)	r_*	145.17	$145.1^{+1.0}_{-0.97}$ (+1.4 σ)	$\sigma_8(0.51)$	0.6055	$0.606^{+0.017}_{-0.016}$ (−2.1 σ)
H_0	67.19	$67.4^{+2.8}_{-2.6}$ (+0.4 σ)	$100\theta_*$	1.04097	$1.0410^{+0.0015}_{-0.0013}$ (+0.1 σ)	$f\sigma_8(0.61)$	0.4576	$0.457^{+0.016}_{-0.016}$ (−2.0 σ)
Ω_{Λ}	0.6870	$0.688^{+0.033}_{-0.032}$ (+0.6 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.945	$13.942^{+0.097}_{-0.099}$ (+1.4 σ)	$\sigma_8(0.61)$	0.5761	$0.576^{+0.017}_{-0.016}$ (−2.1 σ)
Ω_{m}	0.3130	$0.312^{+0.032}_{-0.033}$ (−0.6 σ)	z_{drag}	1057.53	$1057.9^{+4.2}_{-3.7}$ (−1.3 σ)	$f\sigma_8(2.33)$	0.2904	$0.2905^{+0.0089}_{-0.0082}$ (−1.9 σ)
$\Omega_{\mathrm{m}} h^2$	0.14131	$0.1413^{+0.0039}_{-0.0039}$ (−1.1 σ)	r_{drag}	147.88	$147.8^{+1.1}_{-1.0}$ (+1.3 σ)	$\sigma_8(2.33)$	0.2994	$0.2996^{+0.0099}_{-0.0089}$ (−1.7 σ)
$\Omega_{\mathrm{m}} h^3$	0.09495	$0.0951^{+0.0025}_{-0.0023}$ (−1.0 σ)	k_{D}	0.14219	$0.1420^{+0.0029}_{-0.0032}$ (+2.0 σ)	χ_{small}^2	395.56	396.7 (ν : 1.2) (−0.1 σ)
σ_8	0.7904	$0.790^{+0.022}_{-0.022}$ (−2.3 σ)	$100\theta_{\mathrm{D}}$	0.15843	$0.1587^{+0.0039}_{-0.0034}$ (−3.1 σ)	χ_{plikTE}^2	851.8	859.4 (ν : 7.3)
S_8	0.807	$0.805^{+0.052}_{-0.052}$ (−1.4 σ)	z_{eq}	3361	3360^{+92}_{-94} (−1.1 σ)	χ_{prior}^2	0.4	7.4 (ν : 6.9) (+0.0 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	0.4422	$0.441^{+0.029}_{-0.028}$ (−1.4 σ)	k_{eq}	0.010259	$0.01026^{+0.00028}_{-0.00029}$ (−1.1 σ)	χ_{CMB}^2	1247.4	1256.1 (ν : 8.6) (+11.1 σ)
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	0.5912	$0.590^{+0.025}_{-0.025}$ (−1.8 σ)	$100\theta_{\mathrm{eq}}$	0.8189	$0.820^{+0.020}_{-0.019}$ (+0.9 σ)			
$\sigma_8/h^{0.5}$	0.9642	$0.963^{+0.035}_{-0.035}$ (−1.9 σ)	$100\theta_{\mathrm{s,eq}}$	0.4524	$0.453^{+0.010}_{-0.0094}$ (+0.9 σ)			

Best-fit $\chi_{\mathrm{eff}}^2 = 1247.84$; $\Delta\chi_{\mathrm{eff}}^2 = -1.15$; $\bar{\chi}_{\mathrm{eff}}^2 = 1263.54$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.46$; $R - 1 = 0.00777$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.56 (Δ -0.12) plik_rd12_HM_v22_TE: 851.83 (Δ -1.02)

20.40 base_yhe_plikHM_TE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02225	$0.02230^{+0.00054}_{-0.00053}$ (+0.6 σ)	$\langle d^2 \rangle^{1/2}$	2.416	$2.409^{+0.073}_{-0.076}$ (−1.0 σ)	$H(0.38)$	82.87	$83.0^{+1.2}_{-1.1}$ (+0.6 σ)
$\Omega_c h^2$	0.11773	$0.1178^{+0.0026}_{-0.0025}$ (−1.3 σ)	z_{re}	7.01	$6.9^{+1.7}_{-1.7}$ (−0.6 σ)	$D_{\text{M}}(0.38)$	1530.0	1528^{+25}_{-26} (−0.7 σ)
$100\theta_{\text{MC}}$	1.03971	$1.0400^{+0.0029}_{-0.0028}$ (−0.9 σ)	$10^9 A_{\text{s}}$	2.043	$2.041^{+0.076}_{-0.079}$ (−1.3 σ)	$H(0.51)$	89.52	$89.6^{+1.0}_{-1.0}$ (+0.5 σ)
τ	0.0498	$0.049^{+0.015}_{-0.017}$ (−0.3 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8489	$1.850^{+0.035}_{-0.032}$ (−2.3 σ)	$D_{\text{M}}(0.51)$	1982.7	1980^{+30}_{-32} (−0.7 σ)
Y_{P}	0.195	$0.201^{+0.082}_{-0.088}$ (−2.2 σ)	D_{40}	1243	1237^{+66}_{-64} (+0.2 σ)	$H(0.61)$	95.09	$95.19^{+0.98}_{-0.95}$ (+0.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.0168	$3.016^{+0.037}_{-0.039}$ (−1.4 σ)	D_{220}	5742	5733^{+140}_{-140} (+0.5 σ)	$D_{\text{M}}(0.61)$	2307.7	2305^{+34}_{-35} (−0.7 σ)
n_{s}	0.9539	$0.956^{+0.028}_{-0.028}$ (−0.6 σ)	D_{810}	2528	2526^{+58}_{-60} (−0.7 σ)	$H(2.33)$	234.82	$234.9^{+1.9}_{-1.9}$ (−1.4 σ)
y_{cal}	1.0001	$1.0001^{+0.0050}_{-0.0050}$ (−0.1 σ)	D_{1420}	823.9	822^{+36}_{-38} (+1.5 σ)	$D_{\text{M}}(2.33)$	5779	5774^{+52}_{-53} (−0.1 σ)
A_{100}^{dustTE}	0.114	$0.114^{+0.075}_{-0.073}$	D_{2000}	236.2	235^{+17}_{-18} (+2.4 σ)	$f\sigma_8(0.15)$	0.4419	$0.442^{+0.017}_{-0.016}$ (−1.8 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.136	$0.135^{+0.059}_{-0.058}$	$n_{\text{s},0.002}$	0.9539	$0.956^{+0.028}_{-0.028}$ (−0.6 σ)	$\sigma_8(0.15)$	0.7291	$0.730^{+0.021}_{-0.020}$ (−2.3 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.478	$0.48^{+0.17}_{-0.16}$	Y_{P}	0.195	$0.201^{+0.087}_{-0.084}$ (−2.2 σ)	$f\sigma_8(0.38)$	0.4607	$0.461^{+0.015}_{-0.014}$ (−2.0 σ)
A_{143}^{dustTE}	0.222	$0.22^{+0.11}_{-0.11}$	$Y_{\text{P}}^{\text{BBN}}$	0.197	$0.203^{+0.087}_{-0.084}$ (−2.2 σ)	$\sigma_8(0.38)$	0.6468	$0.647^{+0.019}_{-0.017}$ (−2.1 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.658	$0.65^{+0.16}_{-0.15}$	Age/Gyr	13.836	$13.82^{+0.12}_{-0.13}$ (−0.1 σ)	$f\sigma_8(0.51)$	0.4598	$0.460^{+0.014}_{-0.013}$ (−2.1 σ)
A_{217}^{dustTE}	2.03	$2.03^{+0.53}_{-0.53}$	z_*	1087.98	$1088.2^{+2.9}_{-2.8}$ (−3.2 σ)	$\sigma_8(0.51)$	0.6055	$0.606^{+0.018}_{-0.016}$ (−2.0 σ)
c_{100}	1.00018	$1.0002^{+0.0014}_{-0.0014}$ (+0.9 σ)	r_*	145.28	$145.21^{+0.94}_{-0.95}$ (+1.6 σ)	$f\sigma_8(0.61)$	0.4553	$0.455^{+0.014}_{-0.013}$ (−2.2 σ)
c_{217}	0.99799	$0.9980^{+0.0013}_{-0.0013}$ (−0.4 σ)	$100\theta_*$	1.04113	$1.0412^{+0.0011}_{-0.0011}$ (+0.4 σ)	$\sigma_8(0.61)$	0.5762	$0.577^{+0.017}_{-0.015}$ (−2.0 σ)
H_0	67.65	$67.8^{+1.4}_{-1.4}$ (+0.8 σ)	$D_{\text{M}}(z_*)/\text{Gpc}$	13.954	$13.947^{+0.098}_{-0.10}$ (+1.5 σ)	$f\sigma_8(2.33)$	0.2907	$0.2911^{+0.0085}_{-0.0079}$ (−1.7 σ)
Ω_{Λ}	0.6928	$0.694^{+0.015}_{-0.016}$ (+1.0 σ)	z_{drag}	1057.95	$1058.3^{+3.5}_{-3.4}$ (−0.9 σ)	$\sigma_8(2.33)$	0.2999	$0.3003^{+0.0090}_{-0.0084}$ (−1.5 σ)
Ω_{m}	0.3072	$0.306^{+0.016}_{-0.015}$ (−1.0 σ)	r_{drag}	147.97	$147.9^{+1.0}_{-1.1}$ (+1.4 σ)	χ_{small}^2	395.61	396.7 (ν : 1.2) (−0.1 σ)
$\Omega_{\text{m}} h^2$	0.14062	$0.1407^{+0.0026}_{-0.0026}$ (−1.3 σ)	k_{D}	0.14179	$0.1416^{+0.0024}_{-0.0026}$ (+1.5 σ)	χ_{plikTE}^2	852.0	859.0 (ν : 7.0)
$\Omega_{\text{m}} h^3$	0.09514	$0.0954^{+0.0022}_{-0.0022}$ (−0.7 σ)	$100\theta_{\text{D}}$	0.15878	$0.1591^{+0.0034}_{-0.0033}$ (−2.7 σ)	$\chi_{6\text{DF}}^2$	0.006	0.047 (ν : 0.0)
σ_8	0.7886	$0.789^{+0.023}_{-0.021}$ (−2.3 σ)	z_{eq}	3345	3347^{+61}_{-62} (−1.3 σ)	χ_{MGS}^2	1.47	1.62 (ν : 0.2)
S_8	0.7981	$0.798^{+0.032}_{-0.030}$ (−1.7 σ)	k_{eq}	0.010209	$0.01022^{+0.00019}_{-0.00019}$ (−1.3 σ)	χ_{DR12BAO}^2	3.79	4.4 (ν : 0.9)
$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4371	$0.437^{+0.018}_{-0.017}$ (−1.7 σ)	$100\theta_{\text{eq}}$	0.8224	$0.822^{+0.011}_{-0.010}$ (+1.2 σ)	χ_{prior}^2	0.4	7.4 (ν : 6.9) (+0.0 σ)
$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.5871	$0.587^{+0.019}_{-0.018}$ (−2.0 σ)	$100\theta_{\text{s,eq}}$	0.4542	$0.4542^{+0.0057}_{-0.0054}$ (+1.2 σ)	χ_{BAO}^2	5.26	6.0 (ν : 0.7)
$\sigma_8/h^{0.5}$	0.9588	$0.959^{+0.027}_{-0.026}$ (−2.1 σ)	$H(0.15)$	72.87	$73.0^{+1.3}_{-1.2}$ (+0.7 σ)	χ_{CMB}^2	1247.6	1255.7 (ν : 8.2) (+11.0 σ)
$r_{\text{drag}} h$	100.11	$100.2^{+2.0}_{-2.0}$ (+1.0 σ)	$D_{\text{M}}(0.15)$	641.1	640^{+12}_{-12} (−0.8 σ)			

Best-fit $\chi_{\text{eff}}^2 = 1253.32$; $\Delta\chi_{\text{eff}}^2 = -0.92$; $\bar{\chi}_{\text{eff}}^2 = 1269.20$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.22$; $R - 1 = 0.01067$

χ_{eff}^2 : BAO - 6DF: 0.01 (Δ 0.01) MGS: 1.47 (Δ -0.27) DR12BAO: 3.79 (Δ 0.35) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.61 (Δ -0.05) plik_rd12_HM_v22_TE: 852.01 (Δ -0.92)

20.41 base_yhe_plikHM_TE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02226^{+0.00074}_{-0.00067} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+4.3}_{-4.1} \quad (+0.7\sigma)$	$H(0.15)$	$72.7^{+2.5}_{-2.3} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1182^{+0.0041}_{-0.0043} \quad (-1.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.43^{+0.11}_{-0.12} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+23}_{-25} \quad (-0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0397^{+0.0037}_{-0.0033} \quad (-1.2\sigma)$	z_{re}	$< 8.36 \quad (-0.2\sigma)$	$H(0.38)$	$82.8^{+2.0}_{-1.9} \quad (+0.4\sigma)$
τ	$0.0529^{+0.011}_{-0.0091} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.059^{+0.062}_{-0.056} \quad (-0.9\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+46}_{-52} \quad (-0.5\sigma)$
Y_{P}	$< 0.285 \quad (-2.4\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.852^{+0.036}_{-0.035} \quad (-2.2\sigma)$	$H(0.51)$	$89.5^{+1.7}_{-1.6} \quad (+0.2\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.025^{+0.030}_{-0.028} \quad (-0.9\sigma)$	D_{40}	$1243^{+80}_{-88} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+55}_{-62} \quad (-0.4\sigma)$
n_{s}	$0.955^{+0.036}_{-0.035} \quad (-0.8\sigma)$	D_{220}	$5736^{+140}_{-150} \quad (+0.6\sigma)$	$H(0.61)$	$95.1^{+1.6}_{-1.4} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.073}_{-0.076}$	D_{810}	$2529^{+63}_{-67} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+60}_{-68} \quad (-0.4\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.058}_{-0.057}$	D_{1420}	$824^{+37}_{-42} \quad (+1.8\sigma)$	$H(2.33)$	$235.2^{+2.4}_{-2.4} \quad (-1.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.16}$	D_{2000}	$236^{+17}_{-20} \quad (+2.8\sigma)$	$D_{\mathrm{M}}(2.33)$	$5779^{+72}_{-79} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$n_{\mathrm{s},0.002}$	$0.955^{+0.036}_{-0.035} \quad (-0.8\sigma)$	$f\sigma_8(0.15)$	$0.446^{+0.026}_{-0.027} \quad (-1.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	Y_{P}	$0.196^{+0.097}_{-0.092} \quad (-2.4\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.019}_{-0.016} \quad (-1.9\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.04^{+0.52}_{-0.53}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.197^{+0.097}_{-0.092} \quad (-2.4\sigma)$	$f\sigma_8(0.38)$	$0.465^{+0.020}_{-0.021} \quad (-1.6\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	Age/Gyr	$13.84^{+0.17}_{-0.18} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.016}_{-0.015} \quad (-1.8\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	z_*	$1088.1^{+3.1}_{-2.8} \quad (-3.4\sigma)$	$f\sigma_8(0.51)$	$0.463^{+0.017}_{-0.017} \quad (-1.7\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0049} \quad (-0.1\sigma)$	r_*	$145.1^{+1.0}_{-0.98} \quad (+1.4\sigma)$	$\sigma_8(0.51)$	$0.609^{+0.015}_{-0.014} \quad (-1.7\sigma)$
H_0	$67.5^{+2.8}_{-2.7} \quad (+0.5\sigma)$	$100\theta_*$	$1.0411^{+0.0015}_{-0.0013} \quad (+0.2\sigma)$	$f\sigma_8(0.61)$	$0.459^{+0.015}_{-0.015} \quad (-1.8\sigma)$
Ω_{Λ}	$0.690^{+0.033}_{-0.032} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.941^{+0.098}_{-0.099} \quad (+1.4\sigma)$	$\sigma_8(0.61)$	$0.579^{+0.014}_{-0.013} \quad (-1.6\sigma)$
Ω_{m}	$0.310^{+0.032}_{-0.033} \quad (-0.7\sigma)$	z_{drag}	$1058.1^{+4.3}_{-3.8} \quad (-1.1\sigma)$	$f\sigma_8(2.33)$	$0.2920^{+0.0076}_{-0.0070} \quad (-1.5\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1411^{+0.0038}_{-0.0039} \quad (-1.1\sigma)$	r_{drag}	$147.8^{+1.1}_{-1.0} \quad (+1.2\sigma)$	$\sigma_8(2.33)$	$0.3012^{+0.0085}_{-0.0078} \quad (-1.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0952^{+0.0026}_{-0.0023} \quad (-0.9\sigma)$	k_{D}	$0.1419^{+0.0030}_{-0.0032} \quad (+1.8\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
σ_8	$0.793^{+0.020}_{-0.019} \quad (-1.9\sigma)$	$100\theta_{\mathrm{D}}$	$0.1589^{+0.0039}_{-0.0035} \quad (-2.9\sigma)$	χ_{plikTE}^2	$859.5 \quad (\nu: 7.5)$
S_8	$0.807^{+0.051}_{-0.053} \quad (-1.3\sigma)$	z_{eq}	$3357^{+91}_{-94} \quad (-1.1\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.442^{+0.028}_{-0.029} \quad (-1.3\sigma)$	k_{eq}	$0.01025^{+0.00028}_{-0.00029} \quad (-1.1\sigma)$	χ_{CMB}^2	$1255.9 \quad (\nu: 8.4) \quad (+11.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.592^{+0.024}_{-0.025} \quad (-1.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.020}_{-0.018} \quad (+1.0\sigma)$		
$\sigma_8/h^{0.5}$	$0.966^{+0.033}_{-0.034} \quad (-1.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.453^{+0.010}_{-0.0093} \quad (+1.0\sigma)$		

 $\bar{\chi}_{\mathrm{eff}}^2 = 1263.26; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -0.38; R - 1 = 0.00933$

20.42 base_yhe_plikHM_TE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02231^{+0.00055}_{-0.00054} \quad (+0.6\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.417^{+0.071}_{-0.071} \quad (-0.8\sigma)$	$H(0.38)$	$83.0^{+1.1}_{-1.0} \quad (+0.6\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1178^{+0.0025}_{-0.0026} \quad (-1.3\sigma)$	z_{re}	$< 8.38 \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1527^{+25}_{-26} \quad (-0.8\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0400^{+0.0029}_{-0.0028} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.058^{+0.063}_{-0.057} \quad (-0.9\sigma)$	$H(0.51)$	$89.7^{+1.1}_{-0.95} \quad (+0.5\sigma)$
τ	$0.0531^{+0.011}_{-0.0094} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.851^{+0.036}_{-0.033} \quad (-2.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1979^{+30}_{-31} \quad (-0.7\sigma)$
Y_{P}	$0.203^{+0.082}_{-0.088} \quad (-2.1\sigma)$	D_{40}	$1236^{+66}_{-66} \quad (+0.1\sigma)$	$H(0.61)$	$95.21^{+0.98}_{-0.94} \quad (+0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.024^{+0.030}_{-0.028} \quad (-0.9\sigma)$	D_{220}	$5731^{+140}_{-140} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+34}_{-35} \quad (-0.7\sigma)$
n_{s}	$0.958^{+0.028}_{-0.027} \quad (-0.5\sigma)$	D_{810}	$2527^{+58}_{-60} \quad (-0.7\sigma)$	$H(2.33)$	$234.9^{+1.9}_{-1.9} \quad (-1.4\sigma)$
y_{cal}	$1.0001^{+0.0049}_{-0.0050} \quad (-0.1\sigma)$	D_{1420}	$822^{+36}_{-39} \quad (+1.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5772^{+50}_{-56} \quad (-0.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.114^{+0.074}_{-0.073}$	D_{2000}	$235^{+17}_{-18} \quad (+2.4\sigma)$	$f\sigma_8(0.15)$	$0.444^{+0.016}_{-0.015} \quad (-1.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.059}_{-0.057}$	$n_{\mathrm{s},0.002}$	$0.958^{+0.028}_{-0.027} \quad (-0.5\sigma)$	$\sigma_8(0.15)$	$0.733^{+0.019}_{-0.017} \quad (-1.9\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.16}_{-0.16}$	Y_{P}	$0.203^{+0.086}_{-0.084} \quad (-2.1\sigma)$	$f\sigma_8(0.38)$	$0.463^{+0.014}_{-0.013} \quad (-1.8\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.11}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.204^{+0.086}_{-0.084} \quad (-2.1\sigma)$	$\sigma_8(0.38)$	$0.650^{+0.016}_{-0.015} \quad (-1.7\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.15}$	Age/Gyr	$13.82^{+0.12}_{-0.13} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.462^{+0.014}_{-0.012} \quad (-1.9\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.03^{+0.54}_{-0.52}$	z_*	$1088.3^{+2.9}_{-2.8} \quad (-3.2\sigma)$	$\sigma_8(0.51)$	$0.609^{+0.015}_{-0.014} \quad (-1.6\sigma)$
c_{100}	$1.0002^{+0.0014}_{-0.0014} \quad (+0.9\sigma)$	r_*	$145.20^{+0.95}_{-0.94} \quad (+1.5\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.013}_{-0.012} \quad (-1.9\sigma)$
c_{217}	$0.9980^{+0.0013}_{-0.0013} \quad (-0.4\sigma)$	$100\theta_*$	$1.0412^{+0.0012}_{-0.0011} \quad (+0.4\sigma)$	$\sigma_8(0.61)$	$0.580^{+0.014}_{-0.014} \quad (-1.6\sigma)$
H_0	$67.8^{+1.4}_{-1.4} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.945^{+0.098}_{-0.10} \quad (+1.5\sigma)$	$f\sigma_8(2.33)$	$0.2924^{+0.0073}_{-0.0070} \quad (-1.3\sigma)$
Ω_{Λ}	$0.694^{+0.015}_{-0.016} \quad (+1.0\sigma)$	z_{drag}	$1058.4^{+3.5}_{-3.4} \quad (-0.9\sigma)$	$\sigma_8(2.33)$	$0.3017^{+0.0080}_{-0.0071} \quad (-1.1\sigma)$
Ω_{m}	$0.306^{+0.016}_{-0.015} \quad (-1.0\sigma)$	r_{drag}	$147.9^{+1.0}_{-1.1} \quad (+1.3\sigma)$	χ_{small}^2	$396.4 \quad (\nu: 0.7) \quad (-0.3\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1407^{+0.0025}_{-0.0026} \quad (-1.3\sigma)$	k_{D}	$0.1416^{+0.0024}_{-0.0025} \quad (+1.4\sigma)$	χ_{plikTE}^2	$859.1 \quad (\nu: 7.3)$
$\Omega_{\mathrm{m}} h^3$	$0.0954^{+0.0023}_{-0.0021} \quad (-0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1591^{+0.0034}_{-0.0033} \quad (-2.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
σ_8	$0.793^{+0.020}_{-0.018} \quad (-2.0\sigma)$	z_{eq}	$3347^{+61}_{-62} \quad (-1.3\sigma)$	χ_{MGS}^2	$1.64 \quad (\nu: 0.2)$
S_8	$0.801^{+0.030}_{-0.029} \quad (-1.6\sigma)$	k_{eq}	$0.01022^{+0.00019}_{-0.00019} \quad (-1.3\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.3 \quad (\nu: 0.8)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.439^{+0.017}_{-0.016} \quad (-1.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.822^{+0.011}_{-0.010} \quad (+1.2\sigma)$	χ_{prior}^2	$7.4 \quad (\nu: 6.8) \quad (+0.0\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.590^{+0.018}_{-0.016} \quad (-1.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4542^{+0.0057}_{-0.0054} \quad (+1.2\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.6)$
$\sigma_8/h^{0.5}$	$0.963^{+0.026}_{-0.024} \quad (-1.9\sigma)$	$H(0.15)$	$73.0^{+1.3}_{-1.2} \quad (+0.8\sigma)$	χ_{CMB}^2	$1255.4 \quad (\nu: 8.1) \quad (+11.0\sigma)$
$r_{\mathrm{drag}} h$	$100.3^{+2.0}_{-2.0} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$640^{+12}_{-12} \quad (-0.8\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 1268.83; \Delta \bar{\chi}_{\mathrm{eff}}^2 = -0.16; R - 1 = 0.01490$$

20.43 base_yhe_plikHM_EE_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02336	$0.0235^{+0.0029}_{-0.0027}$ (+4.8 σ)	D_{40}	1259	1254^{+95}_{-100} (+1.0 σ)	$H(0.38)$	83.65	$84.0^{+4.8}_{-4.3}$ (+2.0 σ)
$\Omega_c h^2$	0.1161	$0.1160^{+0.0098}_{-0.0090}$ (−2.1 σ)	D_{220}	5977	5981^{+400}_{-390} (+6.5 σ)	$D_M(0.38)$	1511	1506^{+110}_{-110} (−1.8 σ)
$100\theta_{MC}$	1.03825	$1.0386^{+0.0050}_{-0.0043}$ (−2.5 σ)	D_{810}	2612	2606^{+90}_{-96} (+5.0 σ)	$H(0.51)$	90.22	$90.6^{+4.3}_{-3.8}$ (+2.0 σ)
τ	0.0521	$0.052^{+0.017}_{-0.018}$ (+0.0 σ)	D_{1420}	859	856^{+50}_{-57} (+7.8 σ)	$D_M(0.51)$	1960	1954^{+130}_{-130} (−1.8 σ)
Y_P	0.196	< 0.320 (−2.0 σ)	D_{2000}	249.1	247^{+22}_{-26} (+7.4 σ)	$H(0.61)$	95.73	$96.0^{+3.7}_{-3.5}$ (+2.0 σ)
$\ln(10^{10} A_s)$	3.0493	$3.050^{+0.044}_{-0.044}$ (+0.5 σ)	$n_{s,0.002}$	0.9659	$0.969^{+0.048}_{-0.044}$ (+0.6 σ)	$D_M(0.61)$	2283	2275^{+150}_{-140} (−1.8 σ)
n_s	0.9659	$0.969^{+0.048}_{-0.044}$ (+0.6 σ)	Y_P	0.196	$0.20^{+0.12}_{-0.10}$ (−2.0 σ)	$H(2.33)$	234.70	$234.9^{+4.6}_{-4.2}$ (−1.4 σ)
y_{cal}	1.00009	$1.0001^{+0.0049}_{-0.0048}$ (−0.1 σ)	Y_P^{BBN}	0.197	$0.21^{+0.12}_{-0.10}$ (−2.0 σ)	$D_M(2.33)$	5746	5732^{+170}_{-190} (−1.8 σ)
H_0	68.7	$69.0^{+6.3}_{-6.1}$ (+1.9 σ)	Age/Gyr	13.760	$13.73^{+0.39}_{-0.43}$ (−1.7 σ)	$f\sigma_8(0.15)$	0.438	$0.437^{+0.062}_{-0.057}$ (−2.2 σ)
Ω_Λ	0.703	$0.703^{+0.064}_{-0.068}$ (+1.7 σ)	z_*	1086.58	$1086.9^{+4.5}_{-4.2}$ (−5.3 σ)	$\sigma_8(0.15)$	0.7344	$0.734^{+0.030}_{-0.031}$ (−1.8 σ)
Ω_m	0.297	$0.297^{+0.068}_{-0.064}$ (−1.7 σ)	r_*	144.85	$144.7^{+1.7}_{-1.8}$ (+0.5 σ)	$f\sigma_8(0.38)$	0.4590	$0.458^{+0.046}_{-0.046}$ (−2.3 σ)
$\Omega_m h^2$	0.1401	$0.1402^{+0.0077}_{-0.0071}$ (−1.6 σ)	$100\theta_*$	1.03950	$1.0396^{+0.0023}_{-0.0021}$ (−2.8 σ)	$\sigma_8(0.38)$	0.6526	$0.652^{+0.024}_{-0.023}$ (−1.5 σ)
$\Omega_m h^3$	0.0962	$0.0967^{+0.0060}_{-0.0054}$ (+1.0 σ)	$D_M(z_*)/\text{Gpc}$	13.935	$13.92^{+0.17}_{-0.19}$ (+0.9 σ)	$f\sigma_8(0.51)$	0.4594	$0.458^{+0.038}_{-0.040}$ (−2.4 σ)
σ_8	0.7933	$0.793^{+0.036}_{-0.038}$ (−2.0 σ)	z_{drag}	1060.4	$1061.1^{+8.7}_{-8.1}$ (+1.4 σ)	$\sigma_8(0.51)$	0.6114	$0.611^{+0.022}_{-0.020}$ (−1.3 σ)
S_8	0.789	$0.79^{+0.12}_{-0.12}$ (−2.1 σ)	r_{drag}	147.18	$147.0^{+2.0}_{-2.2}$ (−0.4 σ)	$f\sigma_8(0.61)$	0.4556	$0.454^{+0.033}_{-0.035}$ (−2.4 σ)
$\sigma_8 \Omega_m^{0.5}$	0.432	$0.431^{+0.064}_{-0.063}$ (−2.1 σ)	k_D	0.14341	$0.1433^{+0.0032}_{-0.0034}$ (+3.6 σ)	$\sigma_8(0.61)$	0.5822	$0.582^{+0.021}_{-0.019}$ (−1.2 σ)
$\sigma_8 \Omega_m^{0.25}$	0.586	$0.584^{+0.057}_{-0.054}$ (−2.3 σ)	$100\theta_D$	0.15721	$0.1576^{+0.0049}_{-0.0043}$ (−4.6 σ)	$f\sigma_8(2.33)$	0.2941	$0.294^{+0.011}_{-0.0096}$ (−0.8 σ)
$\sigma_8/h^{0.5}$	0.957	$0.955^{+0.079}_{-0.078}$ (−2.4 σ)	z_{eq}	3332	3334^{+190}_{-170} (−1.6 σ)	$\sigma_8(2.33)$	0.3039	$0.304^{+0.012}_{-0.011}$ (−0.4 σ)
$r_{drag} h$	101.1	$101.5^{+8.7}_{-8.7}$ (+1.7 σ)	k_{eq}	0.01017	$0.01018^{+0.00056}_{-0.00052}$ (−1.6 σ)	χ^2_{small}	395.57	$396.7 (\nu: 1.2)$ (−0.1 σ)
$\langle d^2 \rangle^{1/2}$	2.411	$2.40^{+0.18}_{-0.18}$ (−1.2 σ)	$100\theta_{eq}$	0.8267	$0.828^{+0.039}_{-0.039}$ (+1.8 σ)	χ^2_{plikEE}	738.5	$744.0 (\nu: 5.6)$
z_{re}	6.99	$7.0^{+1.7}_{-1.7}$ (−0.6 σ)	$100\theta_{s,eq}$	0.4556	$0.456^{+0.018}_{-0.019}$ (+1.6 σ)	χ^2_{prior}	0.00	$0.99 (\nu: 0.9)$ (−1.7 σ)
$10^9 A_s$	2.110	$2.111^{+0.095}_{-0.091}$ (+0.6 σ)	$H(0.15)$	73.8	$74.2^{+5.7}_{-5.5}$ (+2.0 σ)	χ^2_{CMB}	1134.1	$1140.7 (\nu: 6.9)$ (−9.2 σ)
$10^9 A_s e^{-2\tau}$	1.9013	$1.902^{+0.048}_{-0.047}$ (+1.2 σ)	$D_M(0.15)$	632	630^{+55}_{-50} (−1.8 σ)			

Best-fit $\chi^2_{eff} = 1134.10$; $\Delta\chi^2_{eff} = -0.45$; $\bar{\chi}^2_{eff} = 1141.72$; $\Delta\bar{\chi}^2_{eff} = 0.10$; $R - 1 = 0.00767$

χ^2_{eff} : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.57 (Δ -0.03) plik_rd12_HM_v22_EE: 738.53 (Δ -0.42)

20.44 base_yhe_plikHM_EE_lowE_post_BAO

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02321	$0.0233^{+0.0014}_{-0.0013}$ (+3.8 σ)	D_{220}	5981	5957^{+290}_{-310} (+5.9 σ)	$H(0.51)$	89.97	$90.1^{+1.6}_{-1.5}$ (+1.3 σ)
$\Omega_c h^2$	0.11641	$0.1167^{+0.0037}_{-0.0037}$ (-1.8 σ)	D_{810}	2610	2605^{+83}_{-96} (+4.9 σ)	$D_M(0.51)$	1968.3	1966^{+42}_{-44} (-1.3 σ)
$100\theta_{MC}$	1.03789	$1.0384^{+0.0043}_{-0.0037}$ (-2.7 σ)	D_{1420}	859	855^{+48}_{-53} (+7.7 σ)	$H(0.61)$	95.50	$95.6^{+1.6}_{-1.5}$ (+1.2 σ)
τ	0.0512	$0.052^{+0.016}_{-0.017}$ (-0.0 σ)	D_{2000}	249.3	248^{+22}_{-25} (+7.4 σ)	$D_M(0.61)$	2291.8	2289^{+46}_{-50} (-1.3 σ)
Y_P	0.188	< 0.310 (-2.3 σ)	$n_{s,0.002}$	0.9608	$0.965^{+0.034}_{-0.031}$ (+0.2 σ)	$H(2.33)$	234.74	$235.0^{+3.3}_{-3.0}$ (-1.3 σ)
$\ln(10^{10} A_s)$	3.0468	$3.049^{+0.042}_{-0.042}$ (+0.5 σ)	Y_P	0.188	$0.198^{+0.12}_{-0.099}$ (-2.3 σ)	$D_M(2.33)$	5758	5750^{+85}_{-92} (-1.1 σ)
n_s	0.9608	$0.965^{+0.034}_{-0.031}$ (+0.2 σ)	Y_P^{BBN}	0.189	$0.20^{+0.12}_{-0.10}$ (-2.3 σ)	$f\sigma_8(0.15)$	0.4397	$0.442^{+0.021}_{-0.020}$ (-1.8 σ)
y_{cal}	0.99994	$1.0001^{+0.0050}_{-0.0048}$ (-0.1 σ)	Age/Gyr	13.787	$13.77^{+0.20}_{-0.22}$ (-1.0 σ)	$\sigma_8(0.15)$	0.7332	$0.736^{+0.027}_{-0.023}$ (-1.5 σ)
H_0	68.31	$68.4^{+1.9}_{-1.8}$ (+1.4 σ)	z_*	1086.49	$1087.0^{+4.2}_{-3.5}$ (-5.1 σ)	$f\sigma_8(0.38)$	0.4600	$0.462^{+0.019}_{-0.018}$ (-1.8 σ)
Ω_Λ	0.6994	$0.699^{+0.017}_{-0.017}$ (+1.4 σ)	r_*	144.90	$144.7^{+1.7}_{-1.8}$ (+0.6 σ)	$\sigma_8(0.38)$	0.6511	$0.654^{+0.024}_{-0.020}$ (-1.2 σ)
Ω_m	0.3006	$0.301^{+0.017}_{-0.017}$ (-1.4 σ)	$100\theta_*$	1.03934	$1.0395^{+0.0020}_{-0.0019}$ (-3.0 σ)	$f\sigma_8(0.51)$	0.4599	$0.462^{+0.018}_{-0.017}$ (-1.9 σ)
$\Omega_m h^2$	0.14026	$0.1406^{+0.0042}_{-0.0037}$ (-1.4 σ)	$D_M(z_*)/\text{Gpc}$	13.942	$13.92^{+0.17}_{-0.19}$ (+1.0 σ)	$\sigma_8(0.51)$	0.6098	$0.613^{+0.022}_{-0.019}$ (-1.1 σ)
$\Omega_m h^3$	0.09581	$0.0962^{+0.0043}_{-0.0038}$ (+0.4 σ)	z_{drag}	1059.9	$1060.4^{+6.1}_{-5.3}$ (+0.8 σ)	$f\sigma_8(0.61)$	0.4559	$0.458^{+0.018}_{-0.016}$ (-1.9 σ)
σ_8	0.7923	$0.796^{+0.029}_{-0.025}$ (-1.7 σ)	r_{drag}	147.27	$147.1^{+1.9}_{-2.2}$ (-0.2 σ)	$\sigma_8(0.61)$	0.5805	$0.583^{+0.021}_{-0.018}$ (-1.0 σ)
S_8	0.7931	$0.797^{+0.040}_{-0.038}$ (-1.7 σ)	k_D	0.14351	$0.1432^{+0.0031}_{-0.0033}$ (+3.6 σ)	$f\sigma_8(2.33)$	0.2932	$0.294^{+0.011}_{-0.0090}$ (-0.7 σ)
$\sigma_8 \Omega_m^{0.5}$	0.4344	$0.436^{+0.022}_{-0.021}$ (-1.7 σ)	$100\theta_D$	0.15702	$0.1576^{+0.0048}_{-0.0040}$ (-4.6 σ)	$\sigma_8(2.33)$	0.3027	$0.304^{+0.011}_{-0.0098}$ (-0.5 σ)
$\sigma_8 \Omega_m^{0.25}$	0.5866	$0.589^{+0.024}_{-0.022}$ (-1.8 σ)	z_{eq}	3336	3345^{+99}_{-88} (-1.4 σ)	χ_{simall}^2	395.52	$396.7 (\nu: 1.1)$ (-0.1 σ)
$\sigma_8/h^{0.5}$	0.9586	$0.962^{+0.035}_{-0.032}$ (-1.9 σ)	k_{eq}	0.010183	$0.01021^{+0.00030}_{-0.00027}$ (-1.4 σ)	χ_{plikEE}^2	738.5	$743.1 (\nu: 4.7)$
$r_{drag} h$	100.60	$100.6^{+2.3}_{-2.1}$ (+1.2 σ)	$100\theta_{eq}$	0.8252	$0.824^{+0.014}_{-0.015}$ (+1.4 σ)	χ_{6DF}^2	0.000	$0.054 (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	2.423	$2.419^{+0.079}_{-0.079}$ (-0.8 σ)	$100\theta_{s,eq}$	0.4549	$0.4544^{+0.0074}_{-0.0078}$ (+1.3 σ)	χ_{MGS}^2	1.75	$1.84 (\nu: 0.2)$
z_{re}	6.91	$7.0^{+1.7}_{-1.7}$ (-0.6 σ)	$H(0.15)$	73.47	$73.6^{+1.8}_{-1.7}$ (+1.4 σ)	$\chi_{DR12BAO}^2$	3.72	$4.5 (\nu: 0.8)$
$10^9 A_s$	2.105	$2.109^{+0.091}_{-0.087}$ (+0.5 σ)	$D_M(0.15)$	635.4	635^{+16}_{-17} (-1.3 σ)	χ_{prior}^2	0.00	$0.98 (\nu: 1.0)$ (-1.7 σ)
$10^9 A_s e^{-2\tau}$	1.8998	$1.902^{+0.047}_{-0.047}$ (+1.1 σ)	$H(0.38)$	83.37	$83.5^{+1.7}_{-1.6}$ (+1.3 σ)	χ_{BAO}^2	5.47	$6.4 (\nu: 0.8)$
D_{40}	1269	1259^{+89}_{-95} (+1.2 σ)	$D_M(0.38)$	1518.1	1516^{+34}_{-36} (-1.3 σ)	χ_{CMB}^2	1134.0	$1139.8 (\nu: 6.2)$ (-9.4 σ)

Best-fit $\chi_{\text{eff}}^2 = 1139.52$; $\Delta\chi_{\text{eff}}^2 = -0.65$; $\bar{\chi}_{\text{eff}}^2 = 1147.22$; $\Delta\bar{\chi}_{\text{eff}}^2 = -0.14$; $R - 1 = 0.01379$
 χ_{eff}^2 : BAO - 6DF: 0.00 (Δ -0.00) MGS: 1.75 (Δ -0.14) DR12BAO: 3.72 (Δ 0.13) CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.52 (Δ -0.09) plik_rd12_HM_v22_EE: 738.52 (Δ -0.52)

20.45 base_yhe_plikHM_EE_lowE_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.0236^{+0.0029}_{-0.0027} \quad (+4.9\sigma)$	D_{40}	$1249^{+92}_{-110} \quad (+0.7\sigma)$	$H(0.38)$	$84.1^{+4.8}_{-4.4} \quad (+2.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1160^{+0.0098}_{-0.0090} \quad (-2.1\sigma)$	D_{220}	$5966^{+400}_{-390} \quad (+6.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1505^{+110}_{-110} \quad (-1.9\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0389^{+0.0051}_{-0.0044} \quad (-2.2\sigma)$	D_{810}	$2602^{+90}_{-96} \quad (+4.6\sigma)$	$H(0.51)$	$90.6^{+4.3}_{-3.8} \quad (+2.1\sigma)$
τ	$0.056^{+0.013}_{-0.011} \quad (+0.5\sigma)$	D_{1420}	$853^{+51}_{-56} \quad (+7.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1952^{+140}_{-130} \quad (-1.9\sigma)$
Y_{P}	$< 0.327 \quad (-1.7\sigma)$	D_{2000}	$246^{+23}_{-26} \quad (+6.8\sigma)$	$H(0.61)$	$96.1^{+3.9}_{-3.4} \quad (+2.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.057^{+0.040}_{-0.035} \quad (+1.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.971^{+0.049}_{-0.045} \quad (+0.8\sigma)$	$D_{\mathrm{M}}(0.61)$	$2273^{+150}_{-140} \quad (-1.9\sigma)$
n_{s}	$0.971^{+0.049}_{-0.045} \quad (+0.8\sigma)$	Y_{P}	$0.21^{+0.12}_{-0.11} \quad (-1.7\sigma)$	$H(2.33)$	$235.0^{+4.6}_{-4.2} \quad (-1.4\sigma)$
y_{cal}	$1.0001^{+0.0050}_{-0.0048} \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.21^{+0.12}_{-0.11} \quad (-1.7\sigma)$	$D_{\mathrm{M}}(2.33)$	$5728^{+170}_{-190} \quad (-1.9\sigma)$
H_0	$69.1^{+6.4}_{-6.3} \quad (+2.0\sigma)$	Age/Gyr	$13.72^{+0.40}_{-0.43} \quad (-1.9\sigma)$	$f\sigma_8(0.15)$	$0.438^{+0.062}_{-0.057} \quad (-2.0\sigma)$
Ω_{Λ}	$0.704^{+0.065}_{-0.069} \quad (+1.7\sigma)$	z_*	$1087.1^{+4.6}_{-4.2} \quad (-4.9\sigma)$	$\sigma_8(0.15)$	$0.738^{+0.028}_{-0.028} \quad (-1.4\sigma)$
Ω_{m}	$0.296^{+0.069}_{-0.065} \quad (-1.7\sigma)$	r_*	$144.6^{+1.7}_{-1.9} \quad (+0.4\sigma)$	$f\sigma_8(0.38)$	$0.460^{+0.046}_{-0.046} \quad (-2.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1403^{+0.0077}_{-0.0072} \quad (-1.6\sigma)$	$100\theta_*$	$1.0397^{+0.0023}_{-0.0021} \quad (-2.6\sigma)$	$\sigma_8(0.38)$	$0.656^{+0.022}_{-0.020} \quad (-1.0\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.0969^{+0.0061}_{-0.0055} \quad (+1.2\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.91^{+0.18}_{-0.19} \quad (+0.8\sigma)$	$f\sigma_8(0.51)$	$0.460^{+0.038}_{-0.039} \quad (-2.1\sigma)$
σ_8	$0.797^{+0.034}_{-0.036} \quad (-1.6\sigma)$	z_{drag}	$1061.4^{+8.8}_{-8.2} \quad (+1.6\sigma)$	$\sigma_8(0.51)$	$0.614^{+0.021}_{-0.017} \quad (-0.8\sigma)$
S_8	$0.79^{+0.12}_{-0.12} \quad (-2.0\sigma)$	r_{drag}	$146.9^{+2.1}_{-2.2} \quad (-0.6\sigma)$	$f\sigma_8(0.61)$	$0.457^{+0.033}_{-0.035} \quad (-2.1\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.433^{+0.064}_{-0.064} \quad (-2.0\sigma)$	k_{D}	$0.1431^{+0.0031}_{-0.0034} \quad (+3.4\sigma)$	$\sigma_8(0.61)$	$0.585^{+0.019}_{-0.017} \quad (-0.7\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.587^{+0.056}_{-0.054} \quad (-2.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.1579^{+0.0049}_{-0.0044} \quad (-4.2\sigma)$	$f\sigma_8(2.33)$	$0.2958^{+0.0097}_{-0.0086} \quad (-0.4\sigma)$
$\sigma_8/h^{0.5}$	$0.959^{+0.079}_{-0.077} \quad (-2.1\sigma)$	z_{eq}	$3336^{+190}_{-170} \quad (-1.6\sigma)$	$\sigma_8(2.33)$	$0.306^{+0.011}_{-0.010} \quad (-0.0\sigma)$
$r_{\mathrm{drag}} h$	$101.6^{+8.8}_{-8.8} \quad (+1.7\sigma)$	k_{eq}	$0.01018^{+0.00056}_{-0.00053} \quad (-1.6\sigma)$	χ_{small}^2	$396.5 \quad (\nu: 0.9) \quad (-0.3\sigma)$
$\langle d^2 \rangle^{1/2}$	$2.41^{+0.18}_{-0.18} \quad (-1.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.828^{+0.039}_{-0.040} \quad (+1.8\sigma)$	χ_{plikEE}^2	$744.0 \quad (\nu: 5.7)$
z_{re}	$< 8.47 \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.456^{+0.019}_{-0.019} \quad (+1.6\sigma)$	χ_{prior}^2	$1.0 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_{\mathrm{s}}$	$2.127^{+0.086}_{-0.074} \quad (+1.0\sigma)$	$H(0.15)$	$74.2^{+5.8}_{-5.6} \quad (+2.1\sigma)$	χ_{CMB}^2	$1140.4 \quad (\nu: 6.7) \quad (-9.3\sigma)$
$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.902^{+0.048}_{-0.047} \quad (+1.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$629^{+56}_{-50} \quad (-1.9\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1141.45$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = 0.14$; $R - 1 = 0.00566$

20.46 base_yhe_plikHM_EE_lowE_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.0233^{+0.0014}_{-0.0013} \quad (+3.8\sigma)$	D_{220}	$5943^{+300}_{-310} \quad (+5.6\sigma)$	$H(0.51)$	$90.1^{+1.6}_{-1.6} \quad (+1.3\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1168^{+0.0039}_{-0.0035} \quad (-1.8\sigma)$	D_{810}	$2601^{+88}_{-93} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1965^{+42}_{-44} \quad (-1.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.0386^{+0.0044}_{-0.0038} \quad (-2.5\sigma)$	D_{1420}	$853^{+49}_{-54} \quad (+7.2\sigma)$	$H(0.61)$	$95.7^{+1.6}_{-1.5} \quad (+1.3\sigma)$
τ	$0.055^{+0.012}_{-0.010} \quad (+0.4\sigma)$	D_{2000}	$246^{+22}_{-25} \quad (+6.9\sigma)$	$D_{\mathrm{M}}(0.61)$	$2288^{+47}_{-50} \quad (-1.3\sigma)$
Y_{P}	$< 0.315 \quad (-2.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.967^{+0.034}_{-0.031} \quad (+0.3\sigma)$	$H(2.33)$	$235.1^{+3.4}_{-3.1} \quad (-1.2\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.056^{+0.038}_{-0.033} \quad (+0.9\sigma)$	Y_{P}	$0.20^{+0.12}_{-0.10} \quad (-2.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5748^{+87}_{-93} \quad (-1.1\sigma)$
n_{s}	$0.967^{+0.034}_{-0.031} \quad (+0.3\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.20^{+0.12}_{-0.10} \quad (-2.1\sigma)$	$f\sigma_{\mathrm{s}}(0.15)$	$0.444^{+0.021}_{-0.019} \quad (-1.6\sigma)$
y_{cal}	$1.0001^{+0.0052}_{-0.0047} \quad (-0.1\sigma)$	Age/Gyr	$13.76^{+0.21}_{-0.22} \quad (-1.1\sigma)$	$\sigma_{\mathrm{s}}(0.15)$	$0.740^{+0.024}_{-0.021} \quad (-1.1\sigma)$
H_0	$68.4^{+1.9}_{-1.8} \quad (+1.4\sigma)$	z_{*}	$1087.2^{+4.3}_{-3.6} \quad (-4.8\sigma)$	$f\sigma_{\mathrm{s}}(0.38)$	$0.464^{+0.019}_{-0.017} \quad (-1.6\sigma)$
Ω_{Λ}	$0.699^{+0.017}_{-0.017} \quad (+1.4\sigma)$	r_{*}	$144.7^{+1.7}_{-1.9} \quad (+0.5\sigma)$	$\sigma_{\mathrm{s}}(0.38)$	$0.657^{+0.021}_{-0.019} \quad (-0.8\sigma)$
Ω_{m}	$0.301^{+0.017}_{-0.017} \quad (-1.4\sigma)$	$100\theta_{*}$	$1.0396^{+0.0020}_{-0.0018} \quad (-2.8\sigma)$	$f\sigma_{\mathrm{s}}(0.51)$	$0.464^{+0.017}_{-0.016} \quad (-1.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1407^{+0.0042}_{-0.0039} \quad (-1.3\sigma)$	$D_{\mathrm{M}}(z_{*})/\mathrm{Gpc}$	$13.92^{+0.18}_{-0.19} \quad (+0.9\sigma)$	$\sigma_{\mathrm{s}}(0.51)$	$0.615^{+0.020}_{-0.018} \quad (-0.7\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.0963^{+0.0043}_{-0.0039} \quad (+0.5\sigma)$	z_{drag}	$1060.5^{+6.1}_{-5.5} \quad (+0.9\sigma)$	$f\sigma_{\mathrm{s}}(0.61)$	$0.460^{+0.016}_{-0.015} \quad (-1.6\sigma)$
σ_{s}	$0.800^{+0.026}_{-0.024} \quad (-1.3\sigma)$	r_{drag}	$147.1^{+2.0}_{-2.2} \quad (-0.3\sigma)$	$\sigma_{\mathrm{s}}(0.61)$	$0.586^{+0.019}_{-0.017} \quad (-0.6\sigma)$
S_{s}	$0.800^{+0.040}_{-0.037} \quad (-1.6\sigma)$	k_{D}	$0.1431^{+0.0031}_{-0.0033} \quad (+3.4\sigma)$	$f\sigma_{\mathrm{s}}(2.33)$	$0.2958^{+0.0096}_{-0.0085} \quad (-0.4\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.5}$	$0.438^{+0.022}_{-0.020} \quad (-1.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.1578^{+0.0049}_{-0.0041} \quad (-4.3\sigma)$	$\sigma_{\mathrm{s}}(2.33)$	$0.305^{+0.010}_{-0.0089} \quad (-0.1\sigma)$
$\sigma_{\mathrm{s}}\Omega_{\mathrm{m}}^{0.25}$	$0.592^{+0.023}_{-0.021} \quad (-1.6\sigma)$	z_{eq}	$3348^{+100}_{-94} \quad (-1.3\sigma)$	χ_{simall}^2	$396.5 \quad (\nu: 1.0) \quad (-0.2\sigma)$
$\sigma_{\mathrm{s}}/h^{0.5}$	$0.967^{+0.032}_{-0.031} \quad (-1.6\sigma)$	k_{eq}	$0.01022^{+0.00031}_{-0.00029} \quad (-1.3\sigma)$	χ_{plikEE}^2	$743.1 \quad (\nu: 4.7)$
$r_{\mathrm{drag}}h$	$100.6^{+2.2}_{-2.1} \quad (+1.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.824^{+0.014}_{-0.015} \quad (+1.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.054 \quad (\nu: 0.0)$
$\langle d^2 \rangle^{1/2}$	$2.425^{+0.076}_{-0.077} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4542^{+0.0075}_{-0.0078} \quad (+1.2\sigma)$	χ_{MGS}^2	$1.85 \quad (\nu: 0.2)$
z_{re}	$< 8.48 \quad (-0.1\sigma)$	$H(0.15)$	$73.6^{+1.8}_{-1.7} \quad (+1.4\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.5 \quad (\nu: 0.8)$
$10^9 A_{\mathrm{s}}$	$2.124^{+0.079}_{-0.074} \quad (+0.9\sigma)$	$D_{\mathrm{M}}(0.15)$	$634^{+16}_{-17} \quad (-1.4\sigma)$	χ_{prior}^2	$1.0 \quad (\nu: 1.0) \quad (-1.7\sigma)$
$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.901^{+0.047}_{-0.048} \quad (+1.1\sigma)$	$H(0.38)$	$83.5^{+1.7}_{-1.6} \quad (+1.4\sigma)$	χ_{BAO}^2	$6.4 \quad (\nu: 0.8)$
D_{40}	$1256^{+89}_{-94} \quad (+1.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1516^{+34}_{-36} \quad (-1.4\sigma)$	χ_{CMB}^2	$1139.6 \quad (\nu: 5.7) \quad (-9.5\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 1146.96$; $\Delta\bar{\chi}_{\mathrm{eff}}^2 = -0.10$; $R - 1 = 0.01420$

20.47 base_yhe_plikHM_TT_lowl_lowE_Aver15

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02209^{+0.00043}_{-0.00042} \quad (-0.1\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.460^{+0.026}_{-0.025} \quad (+0.0\sigma)$	$H(0.15)$	$72.2^{+1.5}_{-1.5} \quad (-0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1207^{+0.0042}_{-0.0040} \quad (+0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.611^{+0.023}_{-0.023} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.15)$	$648^{+16}_{-15} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04074^{+0.00094}_{-0.00097} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.993^{+0.031}_{-0.031} \quad (+0.0\sigma)$	$H(0.38)$	$82.5^{+1.1}_{-1.1} \quad (-0.1\sigma)$
τ	$0.052^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$r_{\mathrm{drag}} h$	$98.4^{+3.2}_{-3.2} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.38)$	$1543^{+32}_{-31} \quad (+0.1\sigma)$
Y_{P}	$0.2437^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.455^{+0.074}_{-0.073} \quad (+0.1\sigma)$	$H(0.51)$	$89.29^{+0.88}_{-0.86} \quad (-0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.032}_{-0.032} \quad (-0.0\sigma)$	z_{re}	$7.5^{+1.6}_{-1.7} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.51)$	$1997^{+37}_{-36} \quad (+0.1\sigma)$
n_{s}	$0.962^{+0.011}_{-0.012} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.091^{+0.068}_{-0.066} \quad (-0.0\sigma)$	$H(0.61)$	$94.98^{+0.70}_{-0.68} \quad (-0.1\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.884^{+0.027}_{-0.026} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2323^{+39}_{-39} \quad (+0.1\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{40}	$1235^{+31}_{-29} \quad (+0.1\sigma)$	$H(2.33)$	$236.7^{+2.5}_{-2.4} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{220}	$5712^{+81}_{-80} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5779^{+32}_{-32} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{810}	$2536^{+27}_{-26} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.023} \quad (+0.0\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (-0.1\sigma)$	D_{1420}	$814.7^{+9.8}_{-9.9} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.015}_{-0.014} \quad (-0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$229.7^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.019} \quad (+0.0\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$44^{+20}_{-20} \quad (+0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.962^{+0.011}_{-0.012} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.012}_{-0.012} \quad (-0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_{P}	$0.2437^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.016}_{-0.016} \quad (+0.0\sigma)$
A^{kSZ}	$< 8.38 \quad (-0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0076}_{-0.0079} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.011}_{-0.011} \quad (-0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	Age/Gyr	$13.833^{+0.072}_{-0.072} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.014}_{-0.014} \quad (+0.0\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (-0.0\sigma)$	z_*	$1090.27^{+0.82}_{-0.78} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.010}_{-0.010} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	r_*	$144.47^{+0.95}_{-0.95} \quad (+0.0\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0051}_{-0.0050} \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04099^{+0.00090}_{-0.00091} \quad (-0.0\sigma)$	$\sigma_8(2.33)$	$0.3057^{+0.0054}_{-0.0053} \quad (-0.0\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.879^{+0.087}_{-0.087} \quad (+0.0\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.29^{+0.95}_{-0.96} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
H_0	$66.8^{+1.8}_{-1.8} \quad (-0.1\sigma)$	r_{drag}	$147.23^{+0.95}_{-0.95} \quad (+0.0\sigma)$	f_{2000}^{217}	$108.0^{+3.8}_{-3.7} \quad (-0.1\sigma)$
Ω_{Λ}	$0.679^{+0.025}_{-0.027} \quad (-0.0\sigma)$	k_{D}	$0.1406^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.0\sigma)$
Ω_{m}	$0.321^{+0.027}_{-0.025} \quad (+0.0\sigma)$	$100\theta_{\mathrm{D}}$	$0.16103^{+0.00060}_{-0.00057} \quad (-0.1\sigma)$	χ_{lowl}^2	$24.0 \quad (\nu: 0.9) \quad (-0.0\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1434^{+0.0040}_{-0.0039} \quad (+0.0\sigma)$	z_{eq}	$3412^{+95}_{-93} \quad (+0.0\sigma)$	χ_{plik}^2	$771.3 \quad (\nu: 15.0) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09584^{+0.00093}_{-0.00092} \quad (-0.1\sigma)$	k_{eq}	$0.01041^{+0.00029}_{-0.00028} \quad (+0.0\sigma)$	χ_{Aver15}^2	$0.98 \quad (\nu: 1.0)$
σ_8	$0.812^{+0.017}_{-0.017} \quad (-0.0\sigma)$	$100\theta_{\mathrm{eq}}$	$0.811^{+0.017}_{-0.017} \quad (-0.0\sigma)$	χ_{prior}^2	$7.3 \quad (\nu: 6.7) \quad (-0.0\sigma)$
S_8	$0.840^{+0.048}_{-0.046} \quad (+0.0\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4483^{+0.0090}_{-0.0090} \quad (-0.0\sigma)$	χ_{CMB}^2	$1192.2 \quad (\nu: 15.5) \quad (-0.2\sigma)$

$$\bar{\chi}_{\mathrm{eff}}^2 = 1200.47; R - 1 = 0.00717$$

20.48 base_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02219^{+0.00038}_{-0.00038} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.023}_{-0.023} \quad (-0.7\sigma)$	$H(0.51)$	$89.63^{+0.57}_{-0.55} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.9}_{-1.8} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+22}_{-22} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04097^{+0.00086}_{-0.00084} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.429^{+0.054}_{-0.054} \quad (-0.5\sigma)$	$H(0.61)$	$95.24^{+0.49}_{-0.47} \quad (+0.4\sigma)$
τ	$0.054^{+0.016}_{-0.015} \quad (+0.3\sigma)$	z_{re}	$7.6^{+1.6}_{-1.6} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+23}_{-23} \quad (-0.6\sigma)$
Y_{P}	$0.2440^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.091^{+0.070}_{-0.065} \quad (+0.0\sigma)$	$H(2.33)$	$235.7^{+1.6}_{-1.5} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.033}_{-0.032} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5768^{+24}_{-25} \quad (-0.3\sigma)$
n_{s}	$0.9660^{+0.0088}_{-0.0085} \quad (+0.3\sigma)$	D_{40}	$1226^{+26}_{-24} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.015}_{-0.015} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0047}_{-0.0048} \quad (+0.0\sigma)$	D_{220}	$5719^{+78}_{-75} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.014}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2535^{+26}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.013} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815.5^{+9.7}_{-9.2} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.012}_{-0.011} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$230.0^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.012} \quad (-0.7\sigma)$
A_{100}^{PS}	$262^{+50}_{-60} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0088}_{-0.0085} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.619^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2440^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.011}_{-0.010} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.589^{+0.010}_{-0.0099} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Age/Gyr	$13.810^{+0.055}_{-0.057} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0052}_{-0.0050} \quad (-0.0\sigma)$
A^{kSZ}	—	z_*	$1090.01^{+0.64}_{-0.60} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0052}_{-0.0052} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_*	$144.84^{+0.62}_{-0.64} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (+0.0\sigma)$	$100\theta_*$	$1.04121^{+0.00083}_{-0.00080} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.4} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.911^{+0.061}_{-0.062} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.8} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.40^{+0.95}_{-0.96} \quad (-0.0\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.57^{+0.69}_{-0.70} \quad (+0.7\sigma)$	χ_{lowl}^2	$23.15 \quad (\nu: 0.4) \quad (-0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.14027^{+0.00092}_{-0.00088} \quad (-0.3\sigma)$	χ_{plik}^2	$772.1 \quad (\nu: 14.5) \quad (-0.0\sigma)$
H_0	$67.6^{+1.1}_{-1.1} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16100^{+0.00059}_{-0.00056} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.98 \quad (\nu: 1.0)$
Ω_{Λ}	$0.689^{+0.014}_{-0.015} \quad (+0.7\sigma)$	z_{eq}	$3373^{+57}_{-55} \quad (-0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.060 \quad (\nu: 0.0)$
Ω_{m}	$0.311^{+0.015}_{-0.014} \quad (-0.7\sigma)$	k_{eq}	$0.01030^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.34 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}} h^2$	$0.1418^{+0.0024}_{-0.0023} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}} h^3$	$0.09584^{+0.00095}_{-0.00092} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4520^{+0.0054}_{-0.0053} \quad (+0.8\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.3) \quad (-0.0\sigma)$
σ_8	$0.807^{+0.015}_{-0.015} \quad (-0.5\sigma)$	$H(0.15)$	$72.85^{+0.93}_{-0.91} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
S_8	$0.821^{+0.029}_{-0.029} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.5^{+9.2}_{-9.1} \quad (-0.6\sigma)$	χ_{CMB}^2	$1192.3 \quad (\nu: 14.5) \quad (-0.2\sigma)$
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.38)$	$82.94^{+0.69}_{-0.68} \quad (+0.5\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+18}_{-18} \quad (-0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1206.67; R - 1 = 0.01453$

20.49 base_yhe_plikHM_TT_lowl_lowE_Aver15_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02212^{+0.00041}_{-0.00040} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$H(0.38)$	$82.59^{+0.89}_{-0.85} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1202^{+0.0031}_{-0.0031} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.38)$	$1540^{+24}_{-24} \quad (-0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04078^{+0.00090}_{-0.00090} \quad (-0.0\sigma)$	$r_{\mathrm{drag}} h$	$98.7^{+2.4}_{-2.4} \quad (+0.1\sigma)$	$H(0.51)$	$89.37^{+0.72}_{-0.68} \quad (+0.1\sigma)$
τ	$0.052^{+0.016}_{-0.015} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.049}_{-0.049} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1994^{+28}_{-28} \quad (-0.1\sigma)$
Y_{P}	$0.2437^{+0.0076}_{-0.0077} \quad (-0.1\sigma)$	z_{re}	$7.5^{+1.6}_{-1.6} \quad (+0.0\sigma)$	$H(0.61)$	$95.04^{+0.60}_{-0.56} \quad (+0.0\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.039^{+0.030}_{-0.029} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.090^{+0.063}_{-0.061} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2319^{+30}_{-30} \quad (-0.1\sigma)$
n_{s}	$0.9628^{+0.0099}_{-0.0099} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.022}_{-0.023} \quad (-0.2\sigma)$	$H(2.33)$	$236.5^{+1.9}_{-1.8} \quad (-0.2\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	D_{40}	$1233^{+26}_{-25} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5777^{+27}_{-28} \quad (-0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5715^{+80}_{-80} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.011} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{1420}	$814.8^{+9.6}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.012} \quad (-0.2\sigma)$
A_{100}^{PS}	$263^{+50}_{-50} \quad (-0.0\sigma)$	D_{2000}	$229.8^{+3.4}_{-3.4} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6623^{+0.0097}_{-0.0095} \quad (-0.1\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9628^{+0.0099}_{-0.0099} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.2437^{+0.0076}_{-0.0077} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6195^{+0.0093}_{-0.0089} \quad (-0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4702^{+0.0092}_{-0.0094} \quad (-0.2\sigma)$
A^{kSZ}	—	Age/Gyr	$13.828^{+0.062}_{-0.064} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5893^{+0.0089}_{-0.0086} \quad (-0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.20^{+0.71}_{-0.69} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2968^{+0.0047}_{-0.0046} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.57^{+0.72}_{-0.73} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	$0.3057^{+0.0051}_{-0.0051} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.04103^{+0.00085}_{-0.00084} \quad (+0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.887^{+0.069}_{-0.069} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.31^{+0.97}_{-0.94} \quad (-0.1\sigma)$	f_{2000}^{217}	$108.0^{+3.8}_{-3.8} \quad (-0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.31^{+0.77}_{-0.76} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.45 \quad (\nu: 0.4)$
H_0	$67.0^{+1.4}_{-1.4} \quad (+0.1\sigma)$	k_{D}	$0.14050^{+0.00093}_{-0.00095} \quad (-0.0\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (-0.0\sigma)$
Ω_{Λ}	$0.681^{+0.019}_{-0.020} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16102^{+0.00059}_{-0.00056} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.8 \quad (\nu: 0.6) \quad (-0.1\sigma)$
Ω_{m}	$0.319^{+0.020}_{-0.019} \quad (-0.1\sigma)$	z_{eq}	$3402^{+70}_{-69} \quad (-0.2\sigma)$	χ_{plik}^2	$771.1 \quad (\nu: 13.8) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1430^{+0.0029}_{-0.0029} \quad (-0.2\sigma)$	k_{eq}	$0.01038^{+0.00021}_{-0.00021} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}} h^3$	$0.09583^{+0.00095}_{-0.00092} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.013}_{-0.013} \quad (+0.2\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.5) \quad (-0.0\sigma)$
σ_8	$0.810^{+0.012}_{-0.012} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4492^{+0.0068}_{-0.0067} \quad (+0.2\sigma)$	χ_{CMB}^2	$1201.2 \quad (\nu: 15.3) \quad (+1.4\sigma)$
S_8	$0.835^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$72.4^{+1.2}_{-1.2} \quad (+0.1\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+12}_{-12} \quad (-0.1\sigma)$		
$\bar{\chi}_{\mathrm{eff}}^2 = 1209.34; R - 1 = 0.01600$					

20.50 base_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00038}_{-0.00038} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.018}_{-0.017} \quad (-0.5\sigma)$	$H(0.51)$	$89.61^{+0.54}_{-0.53} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0022}_{-0.0021} \quad (-0.7\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1984^{+20}_{-20} \quad (-0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00086}_{-0.00083} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.042}_{-0.042} \quad (-0.4\sigma)$	$H(0.61)$	$95.22^{+0.48}_{-0.46} \quad (+0.4\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.4\sigma)$	z_{re}	$7.8^{+1.5}_{-1.4} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2308^{+21}_{-22} \quad (-0.5\sigma)$
Y_{P}	$0.2440^{+0.0076}_{-0.0079} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.098^{+0.061}_{-0.057} \quad (+0.2\sigma)$	$H(2.33)$	$235.8^{+1.4}_{-1.4} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.043^{+0.029}_{-0.027} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5769^{+24}_{-24} \quad (-0.3\sigma)$
n_{s}	$0.9655^{+0.0083}_{-0.0083} \quad (+0.2\sigma)$	D_{40}	$1228^{+25}_{-24} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5723^{+79}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2537^{+26}_{-25} \quad (+0.0\sigma)$	$f\sigma_8(0.38)$	$0.4742^{+0.0099}_{-0.0099} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815.7^{+9.5}_{-9.1} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0094} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$230.1^{+3.4}_{-3.3} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4728^{+0.0089}_{-0.0089} \quad (-0.5\sigma)$
A_{100}^{PS}	$262^{+50}_{-60} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9655^{+0.0083}_{-0.0083} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6200^{+0.0094}_{-0.0087} \quad (-0.0\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2440^{+0.0076}_{-0.0079} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4679^{+0.0081}_{-0.0082} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0076}_{-0.0079} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0090}_{-0.0083} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Age/Gyr	$13.811^{+0.056}_{-0.056} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0046}_{-0.0043} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.44 \quad (-0.1\sigma)$	z_*	$1090.02^{+0.62}_{-0.59} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0048}_{-0.0045} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	r_*	$144.80^{+0.56}_{-0.57} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (-0.0\sigma)$	$100\theta_*$	$1.04119^{+0.00082}_{-0.00079} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.3} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.907^{+0.056}_{-0.057} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.8} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.41^{+0.94}_{-0.96} \quad (-0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.25 \quad (\nu: 0.3)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.53^{+0.63}_{-0.64} \quad (+0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.14032^{+0.00088}_{-0.00084} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.30 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$67.53^{+0.99}_{-0.96} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16099^{+0.00059}_{-0.00055} \quad (-0.2\sigma)$	χ_{plik}^2	$771.5 \quad (\nu: 13.5) \quad (-0.1\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+0.6\sigma)$	z_{eq}	$3377^{+50}_{-49} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.98 \quad (\nu: 0.9)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.6\sigma)$	k_{eq}	$0.01031^{+0.00015}_{-0.00015} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.060 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1420^{+0.0021}_{-0.0020} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0091}_{-0.0091} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.27 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}}h^3$	$0.09586^{+0.00096}_{-0.00094} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0047}_{-0.0047} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.2)$
σ_8	$0.809^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$H(0.15)$	$72.80^{+0.86}_{-0.83} \quad (+0.5\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.3) \quad (-0.0\sigma)$
S_8	$0.824^{+0.023}_{-0.023} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$642.0^{+8.4}_{-8.4} \quad (-0.6\sigma)$	χ_{CMB}^2	$1201.2 \quad (\nu: 14.5) \quad (+1.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$82.90^{+0.66}_{-0.63} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.8)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+17}_{-17} \quad (-0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1215.53; R - 1 = 0.02107$

20.51 base_yhe_plikHM_TT_lowl_lowE_Aver15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02210^{+0.00042}_{-0.00042} \quad (-0.1\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.460^{+0.026}_{-0.025} \quad (+0.0\sigma)$	$H(0.15)$	$72.3^{+1.5}_{-1.5} \quad (-0.0\sigma)$
$\Omega_c h^2$	$0.1206^{+0.0041}_{-0.0040} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.611^{+0.023}_{-0.023} \quad (+0.1\sigma)$	$D_M(0.15)$	$648^{+16}_{-15} \quad (+0.0\sigma)$
$100\theta_{MC}$	$1.04075^{+0.00094}_{-0.00096} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.994^{+0.031}_{-0.031} \quad (+0.1\sigma)$	$H(0.38)$	$82.5^{+1.1}_{-1.1} \quad (-0.0\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$r_{drag} h$	$98.5^{+3.1}_{-3.1} \quad (-0.0\sigma)$	$D_M(0.38)$	$1542^{+31}_{-30} \quad (+0.0\sigma)$
Y_P	$0.2437^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.457^{+0.074}_{-0.072} \quad (+0.1\sigma)$	$H(0.51)$	$89.32^{+0.87}_{-0.84} \quad (-0.0\sigma)$
$\ln(10^{10} A_s)$	$3.043^{+0.028}_{-0.026} \quad (+0.2\sigma)$	z_{re}	$< 8.85 \quad (+0.2\sigma)$	$D_M(0.51)$	$1996^{+36}_{-35} \quad (+0.0\sigma)$
n_s	$0.962^{+0.011}_{-0.012} \quad (-0.0\sigma)$	$10^9 A_s$	$2.097^{+0.059}_{-0.054} \quad (+0.2\sigma)$	$H(0.61)$	$95.00^{+0.70}_{-0.66} \quad (-0.0\sigma)$
y_{cal}	$1.0005^{+0.0047}_{-0.0048} \quad (+0.0\sigma)$	$10^9 A_s e^{-2\tau}$	$1.883^{+0.026}_{-0.026} \quad (-0.1\sigma)$	$D_M(0.61)$	$2322^{+39}_{-38} \quad (+0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{40}	$1234^{+30}_{-29} \quad (+0.0\sigma)$	$H(2.33)$	$236.7^{+2.5}_{-2.4} \quad (-0.0\sigma)$
$\xi^{tSZ \times CIB}$	—	D_{220}	$5712^{+80}_{-80} \quad (-0.0\sigma)$	$D_M(2.33)$	$5778^{+31}_{-32} \quad (+0.1\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$f\sigma_8(0.15)$	$0.464^{+0.024}_{-0.024} \quad (+0.0\sigma)$
A_{100}^{PS}	$262^{+50}_{-50} \quad (-0.1\sigma)$	D_{1420}	$814.7^{+9.8}_{-9.9} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.014}_{-0.013} \quad (+0.1\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	D_{2000}	$229.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.480^{+0.018}_{-0.019} \quad (+0.1\sigma)$
$A_{143 \times 217}^{PS}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$n_{s,0.002}$	$0.962^{+0.011}_{-0.012} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.011}_{-0.010} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Y_P	$0.2437^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$f\sigma_8(0.51)$	$0.478^{+0.016}_{-0.016} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.33 \quad (-0.1\sigma)$	Y_P^{BBN}	$0.2451^{+0.0076}_{-0.0079} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6208^{+0.0099}_{-0.0094} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	Age/Gyr	$13.832^{+0.071}_{-0.071} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.472^{+0.014}_{-0.014} \quad (+0.1\sigma)$
A_{143}^{dustTT}	$10.7^{+3.5}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.25^{+0.82}_{-0.77} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5905^{+0.0092}_{-0.0087} \quad (+0.1\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.3^{+6.5}_{-6.5} \quad (+0.0\sigma)$	r_*	$144.50^{+0.94}_{-0.94} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0045}_{-0.0041} \quad (+0.1\sigma)$
A_{217}^{dustTT}	$93^{+10}_{-10} \quad (+0.0\sigma)$	$100\theta_*$	$1.04100^{+0.00090}_{-0.00090} \quad (+0.0\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0047}_{-0.0043} \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	$D_M(z_*)/\text{Gpc}$	$13.880^{+0.087}_{-0.086} \quad (+0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.30^{+0.94}_{-0.97} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
H_0	$66.9^{+1.8}_{-1.8} \quad (-0.0\sigma)$	r_{drag}	$147.25^{+0.95}_{-0.95} \quad (+0.1\sigma)$	f_{2000}^{217}	$108.0^{+3.8}_{-3.7} \quad (-0.1\sigma)$
Ω_Λ	$0.679^{+0.025}_{-0.026} \quad (+0.0\sigma)$	k_D	$0.1406^{+0.0011}_{-0.0011} \quad (+0.1\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.5) \quad (-0.0\sigma)$
Ω_m	$0.321^{+0.026}_{-0.025} \quad (-0.0\sigma)$	$100\theta_D$	$0.16103^{+0.00060}_{-0.00057} \quad (-0.1\sigma)$	χ_{lowl}^2	$24.0 \quad (\nu: 0.9) \quad (-0.0\sigma)$
$\Omega_m h^2$	$0.1433^{+0.0039}_{-0.0038} \quad (-0.0\sigma)$	z_{eq}	$3410^{+94}_{-92} \quad (-0.0\sigma)$	χ_{plik}^2	$771.1 \quad (\nu: 14.8) \quad (-0.2\sigma)$
$\Omega_m h^3$	$0.09584^{+0.00092}_{-0.00092} \quad (-0.1\sigma)$	k_{eq}	$0.01041^{+0.00029}_{-0.00028} \quad (-0.0\sigma)$	χ_{Aver15}^2	$0.98 \quad (\nu: 1.0)$
σ_8	$0.813^{+0.017}_{-0.016} \quad (+0.1\sigma)$	$100\theta_{eq}$	$0.811^{+0.017}_{-0.017} \quad (+0.0\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.7) \quad (-0.0\sigma)$
S_8	$0.840^{+0.047}_{-0.046} \quad (+0.0\sigma)$	$100\theta_{s,eq}$	$0.4485^{+0.0090}_{-0.0089} \quad (+0.0\sigma)$	χ_{CMB}^2	$1191.9 \quad (\nu: 14.8) \quad (-0.2\sigma)$

$$\bar{\chi}_{eff}^2 = 1200.15; R - 1 = 0.00690$$

20.52 base_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00038}_{-0.00038} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.022}_{-0.021} \quad (-0.6\sigma)$	$H(0.51)$	$89.64^{+0.57}_{-0.55} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1189^{+0.0024}_{-0.0024} \quad (-0.8\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.9}_{-1.8} \quad (+0.7\sigma)$	$D_{\mathrm{M}}(0.51)$	$1982^{+21}_{-21} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04098^{+0.00086}_{-0.00084} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.431^{+0.053}_{-0.050} \quad (-0.5\sigma)$	$H(0.61)$	$95.25^{+0.48}_{-0.47} \quad (+0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	z_{re}	$< 8.97 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2307^{+23}_{-23} \quad (-0.6\sigma)$
Y_{P}	$0.2441^{+0.0076}_{-0.0077} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.061}_{-0.057} \quad (+0.1\sigma)$	$H(2.33)$	$235.7^{+1.6}_{-1.5} \quad (-0.8\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.029}_{-0.027} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5768^{+24}_{-25} \quad (-0.4\sigma)$
n_{s}	$0.9662^{+0.0088}_{-0.0086} \quad (+0.3\sigma)$	D_{40}	$1226^{+26}_{-24} \quad (-0.3\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.015}_{-0.015} \quad (-0.7\sigma)$
y_{cal}	$1.0005^{+0.0047}_{-0.0048} \quad (+0.0\sigma)$	D_{220}	$5719^{+79}_{-76} \quad (+0.1\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.013}_{-0.012} \quad (-0.3\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2535^{+26}_{-25} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.473^{+0.013}_{-0.012} \quad (-0.7\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815.5^{+9.7}_{-9.2} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.011}_{-0.010} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.1^{+3.7}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$230.0^{+3.4}_{-3.4} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.472^{+0.011}_{-0.011} \quad (-0.6\sigma)$
A_{100}^{PS}	$262^{+50}_{-60} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9662^{+0.0088}_{-0.0086} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.6196^{+0.0098}_{-0.0094} \quad (-0.1\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2441^{+0.0076}_{-0.0077} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.467^{+0.010}_{-0.010} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2454^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5896^{+0.0093}_{-0.0089} \quad (-0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Age/Gyr	$13.809^{+0.055}_{-0.057} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0046}_{-0.0044} \quad (+0.1\sigma)$
A^{kSZ}	$< 8.45 \quad (-0.1\sigma)$	z_*	$1090.00^{+0.64}_{-0.61} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3066^{+0.0047}_{-0.0045} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.5} \quad (-0.0\sigma)$	r_*	$144.85^{+0.63}_{-0.63} \quad (+0.8\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (-0.0\sigma)$	$100\theta_*$	$1.04121^{+0.00084}_{-0.00080} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.4} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.911^{+0.062}_{-0.062} \quad (+0.8\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.8} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.41^{+0.94}_{-0.96} \quad (-0.0\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	r_{drag}	$147.57^{+0.70}_{-0.69} \quad (+0.7\sigma)$	χ_{lowl}^2	$23.16 \quad (\nu: 0.4) \quad (-0.4\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.14027^{+0.00092}_{-0.00088} \quad (-0.3\sigma)$	χ_{plik}^2	$771.9 \quad (\nu: 14.3) \quad (-0.1\sigma)$
H_0	$67.6^{+1.1}_{-1.1} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16100^{+0.00059}_{-0.00056} \quad (-0.2\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 1.0)$
Ω_{Λ}	$0.690^{+0.014}_{-0.015} \quad (+0.7\sigma)$	z_{eq}	$3373^{+56}_{-55} \quad (-0.8\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.058 \quad (\nu: 0.0)$
Ω_{m}	$0.310^{+0.015}_{-0.014} \quad (-0.7\sigma)$	k_{eq}	$0.01029^{+0.00017}_{-0.00017} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.35 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}}h^2$	$0.1418^{+0.0023}_{-0.0023} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.818^{+0.010}_{-0.010} \quad (+0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.3)$
$\Omega_{\mathrm{m}}h^3$	$0.09584^{+0.00094}_{-0.00094} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4521^{+0.0053}_{-0.0053} \quad (+0.8\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.3) \quad (-0.0\sigma)$
σ_8	$0.808^{+0.015}_{-0.013} \quad (-0.4\sigma)$	$H(0.15)$	$72.87^{+0.93}_{-0.91} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.9)$
S_8	$0.822^{+0.029}_{-0.029} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.4^{+9.1}_{-9.0} \quad (-0.6\sigma)$	χ_{CMB}^2	$1192.1 \quad (\nu: 14.1) \quad (-0.2\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.016}_{-0.016} \quad (-0.7\sigma)$	$H(0.38)$	$82.95^{+0.68}_{-0.67} \quad (+0.6\sigma)$		
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.016}_{-0.015} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1530^{+18}_{-18} \quad (-0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1206.42; R - 1 = 0.01542$

20.53 base_yhe_plikHM_TT_lowl_lowE_Aver15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02213^{+0.00041}_{-0.00040} \quad (+0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.015}_{-0.015} \quad (-0.2\sigma)$	$H(0.38)$	$82.63^{+0.87}_{-0.83} \quad (+0.1\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1201^{+0.0030}_{-0.0030} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.990^{+0.020}_{-0.021} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1539^{+23}_{-23} \quad (-0.2\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04079^{+0.00090}_{-0.00089} \quad (-0.0\sigma)$	$r_{\mathrm{drag}} h$	$98.8^{+2.4}_{-2.3} \quad (+0.2\sigma)$	$H(0.51)$	$89.40^{+0.71}_{-0.67} \quad (+0.1\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.449^{+0.049}_{-0.049} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.51)$	$1993^{+27}_{-27} \quad (-0.2\sigma)$
Y_{P}	$0.2437^{+0.0076}_{-0.0077} \quad (-0.1\sigma)$	z_{re}	$< 8.82 \quad (+0.2\sigma)$	$H(0.61)$	$95.06^{+0.59}_{-0.55} \quad (+0.1\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.025}_{-0.024} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.054}_{-0.050} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2318^{+29}_{-30} \quad (-0.1\sigma)$
n_{s}	$0.9632^{+0.0098}_{-0.0095} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.881^{+0.022}_{-0.022} \quad (-0.2\sigma)$	$H(2.33)$	$236.4^{+1.8}_{-1.8} \quad (-0.3\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	D_{40}	$1232^{+25}_{-25} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5776^{+27}_{-28} \quad (-0.0\sigma)$
A_{217}^{CIB}	$48^{+10}_{-10} \quad (-0.1\sigma)$	D_{220}	$5715^{+80}_{-80} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{810}	$2536^{+26}_{-26} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.010} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.0\sigma)$	D_{1420}	$814.8^{+9.6}_{-9.7} \quad (+0.1\sigma)$	$f\sigma_8(0.38)$	$0.478^{+0.012}_{-0.013} \quad (-0.2\sigma)$
A_{100}^{PS}	$263^{+50}_{-60} \quad (-0.1\sigma)$	D_{2000}	$229.8^{+3.4}_{-3.4} \quad (+0.1\sigma)$	$\sigma_8(0.38)$	$0.6630^{+0.0088}_{-0.0085} \quad (-0.0\sigma)$
A_{143}^{PS}	$49^{+20}_{-20} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9632^{+0.0098}_{-0.0095} \quad (+0.0\sigma)$	$f\sigma_8(0.51)$	$0.476^{+0.010}_{-0.011} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	Y_{P}	$0.2437^{+0.0076}_{-0.0077} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6202^{+0.0082}_{-0.0078} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0076}_{-0.0078} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4704^{+0.0091}_{-0.0094} \quad (-0.1\sigma)$
A^{kSZ}	$< 8.41 \quad (-0.1\sigma)$	Age/Gyr	$13.826^{+0.062}_{-0.063} \quad (-0.0\sigma)$	$\sigma_8(0.61)$	$0.5900^{+0.0078}_{-0.0074} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	z_*	$1090.18^{+0.71}_{-0.68} \quad (-0.2\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0041}_{-0.0038} \quad (+0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.5} \quad (+0.0\sigma)$	r_*	$144.60^{+0.71}_{-0.72} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3062^{+0.0045}_{-0.0042} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.4} \quad (+0.0\sigma)$	$100\theta_*$	$1.04104^{+0.00085}_{-0.00083} \quad (+0.1\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.890^{+0.067}_{-0.067} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.1\sigma)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (-0.0\sigma)$	z_{drag}	$1059.32^{+0.95}_{-0.96} \quad (-0.1\sigma)$	f_{2000}^{217}	$107.9^{+3.8}_{-3.7} \quad (-0.1\sigma)$
c_{217}	$0.9983^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	r_{drag}	$147.34^{+0.75}_{-0.74} \quad (+0.3\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.43 \quad (\nu: 0.4)$
H_0	$67.1^{+1.4}_{-1.3} \quad (+0.2\sigma)$	k_{D}	$0.14048^{+0.00092}_{-0.00094} \quad (-0.0\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.3) \quad (-0.1\sigma)$
Ω_{Λ}	$0.682^{+0.018}_{-0.019} \quad (+0.2\sigma)$	$100\theta_{\mathrm{D}}$	$0.16101^{+0.00059}_{-0.00056} \quad (-0.1\sigma)$	χ_{lowl}^2	$23.7 \quad (\nu: 0.5) \quad (-0.1\sigma)$
Ω_{m}	$0.318^{+0.019}_{-0.018} \quad (-0.2\sigma)$	z_{eq}	$3399^{+69}_{-67} \quad (-0.3\sigma)$	χ_{plik}^2	$770.9 \quad (\nu: 13.8) \quad (-0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1429^{+0.0029}_{-0.0028} \quad (-0.3\sigma)$	k_{eq}	$0.01037^{+0.00021}_{-0.00020} \quad (-0.3\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 0.9)$
$\Omega_{\mathrm{m}} h^3$	$0.09583^{+0.00094}_{-0.00092} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.013}_{-0.013} \quad (+0.2\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.5) \quad (-0.0\sigma)$
σ_8	$0.811^{+0.012}_{-0.012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4495^{+0.0066}_{-0.0065} \quad (+0.2\sigma)$	χ_{CMB}^2	$1200.9 \quad (\nu: 14.9) \quad (+1.4\sigma)$
S_8	$0.834^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$H(0.15)$	$72.4^{+1.2}_{-1.1} \quad (+0.2\sigma)$		
$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.017}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$646^{+12}_{-12} \quad (-0.2\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1209.04$; $R - 1 = 0.01844$

20.54 base_yhe_plikHM_TT_lowl_lowE_Aver15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02219^{+0.00038}_{-0.00039} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$H(0.51)$	$89.62^{+0.54}_{-0.52} \quad (+0.5\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1191^{+0.0021}_{-0.0021} \quad (-0.7\sigma)$	$r_{\mathrm{drag}}h$	$99.7^{+1.7}_{-1.6} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1983^{+20}_{-20} \quad (-0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04096^{+0.00086}_{-0.00083} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.436^{+0.041}_{-0.041} \quad (-0.4\sigma)$	$H(0.61)$	$95.23^{+0.48}_{-0.46} \quad (+0.4\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	z_{re}	$< 8.98 \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.61)$	$2308^{+21}_{-22} \quad (-0.5\sigma)$
Y_{P}	$0.2440^{+0.0076}_{-0.0079} \quad (-0.1\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.055}_{-0.054} \quad (+0.2\sigma)$	$H(2.33)$	$235.8^{+1.4}_{-1.4} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.026}_{-0.026} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5769^{+24}_{-24} \quad (-0.3\sigma)$
n_{s}	$0.9656^{+0.0082}_{-0.0082} \quad (+0.3\sigma)$	D_{40}	$1228^{+25}_{-24} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.012}_{-0.012} \quad (-0.6\sigma)$
y_{cal}	$1.0006^{+0.0047}_{-0.0048} \quad (+0.1\sigma)$	D_{220}	$5722^{+79}_{-75} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.2\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.1\sigma)$	D_{810}	$2536^{+26}_{-25} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	$0.4743^{+0.0098}_{-0.0098} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	D_{1420}	$815.7^{+9.5}_{-9.1} \quad (+0.3\sigma)$	$\sigma_8(0.38)$	$0.6628^{+0.0092}_{-0.0090} \quad (-0.0\sigma)$
A_{143}^{tSZ}	$5.1^{+3.8}_{-3.9} \quad (+0.1\sigma)$	D_{2000}	$230.1^{+3.4}_{-3.3} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4730^{+0.0088}_{-0.0088} \quad (-0.5\sigma)$
A_{100}^{PS}	$262^{+50}_{-60} \quad (-0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9656^{+0.0082}_{-0.0082} \quad (+0.3\sigma)$	$\sigma_8(0.51)$	$0.6203^{+0.0086}_{-0.0084} \quad (+0.0\sigma)$
A_{143}^{PS}	$48^{+20}_{-20} \quad (-0.1\sigma)$	Y_{P}	$0.2440^{+0.0076}_{-0.0079} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4680^{+0.0080}_{-0.0081} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.0\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0077}_{-0.0079} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5903^{+0.0082}_{-0.0080} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	Age/Gyr	$13.810^{+0.055}_{-0.055} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0042}_{-0.0041} \quad (+0.2\sigma)$
A^{kSZ}	$< 8.43 \quad (-0.1\sigma)$	z_*	$1090.01^{+0.62}_{-0.58} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0044}_{-0.0043} \quad (+0.3\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	r_*	$144.81^{+0.56}_{-0.57} \quad (+0.7\sigma)$	f_{2000}^{143}	$31^{+6}_{-6} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.7^{+3.5}_{-3.6} \quad (-0.0\sigma)$	$100\theta_*$	$1.04120^{+0.00082}_{-0.00080} \quad (+0.4\sigma)$	$f_{2000}^{143 \times 217}$	$33^{+4}_{-4} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.3^{+6.6}_{-6.3} \quad (-0.0\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.908^{+0.056}_{-0.056} \quad (+0.7\sigma)$	f_{2000}^{217}	$107.8^{+3.7}_{-3.8} \quad (-0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$93^{+10}_{-10} \quad (+0.0\sigma)$	z_{drag}	$1059.41^{+0.94}_{-0.97} \quad (-0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.22 \quad (\nu: 0.2)$
c_{100}	$0.9996^{+0.0012}_{-0.0012} \quad (+0.0\sigma)$	r_{drag}	$147.54^{+0.63}_{-0.64} \quad (+0.7\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0013} \quad (-0.0\sigma)$	k_{D}	$0.14031^{+0.00088}_{-0.00084} \quad (-0.3\sigma)$	χ_{lowl}^2	$23.30 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$67.55^{+0.98}_{-0.95} \quad (+0.6\sigma)$	$100\theta_{\mathrm{D}}$	$0.16099^{+0.00058}_{-0.00055} \quad (-0.2\sigma)$	χ_{plik}^2	$771.4 \quad (\nu: 13.4) \quad (-0.1\sigma)$
Ω_{Λ}	$0.689^{+0.013}_{-0.013} \quad (+0.7\sigma)$	z_{eq}	$3376^{+49}_{-48} \quad (-0.7\sigma)$	χ_{Aver15}^2	$0.97 \quad (\nu: 0.9)$
Ω_{m}	$0.311^{+0.013}_{-0.013} \quad (-0.7\sigma)$	k_{eq}	$0.01030^{+0.00015}_{-0.00015} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.057 \quad (\nu: 0.0)$
$\Omega_{\mathrm{m}}h^2$	$0.1419^{+0.0021}_{-0.0020} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8176^{+0.0091}_{-0.0090} \quad (+0.7\sigma)$	χ_{MGS}^2	$1.28 \quad (\nu: 0.1)$
$\Omega_{\mathrm{m}}h^3$	$0.09586^{+0.00095}_{-0.00095} \quad (-0.1\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4517^{+0.0046}_{-0.0047} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.8 \quad (\nu: 1.1)$
σ_8	$0.809^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$H(0.15)$	$72.82^{+0.85}_{-0.82} \quad (+0.6\sigma)$	χ_{prior}^2	$7.2 \quad (\nu: 6.3) \quad (-0.0\sigma)$
S_8	$0.824^{+0.023}_{-0.023} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.9^{+8.2}_{-8.3} \quad (-0.6\sigma)$	χ_{CMB}^2	$1201.0 \quad (\nu: 14.3) \quad (+1.4\sigma)$
$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.451^{+0.013}_{-0.013} \quad (-0.6\sigma)$	$H(0.38)$	$82.91^{+0.65}_{-0.62} \quad (+0.5\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.7)$
$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1531^{+17}_{-17} \quad (-0.6\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 1215.36; R - 1 = 0.02251$

20.55 base_yhe_plikHM_TTTEEE_lowl_lowE_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.022339	$0.02233^{+0.00031}_{-0.00030}$ (+0.7 σ)	Ω_m	0.3175	$0.317^{+0.017}_{-0.016}$ (−0.2 σ)	z_{eq}	3409	3407^{+62}_{-59} (−0.1 σ)
$\Omega_c h^2$	0.12031	$0.1202^{+0.0027}_{-0.0026}$ (−0.2 σ)	$\Omega_m h^2$	0.14330	$0.1432^{+0.0026}_{-0.0025}$ (−0.1 σ)	k_{eq}	0.010404	$0.01040^{+0.00019}_{-0.00018}$ (−0.1 σ)
$100\theta_{\text{MC}}$	1.04081	$1.04083^{+0.00066}_{-0.00068}$ (+0.0 σ)	$\Omega_m h^3$	0.09627	$0.09625^{+0.00064}_{-0.00062}$ (+0.4 σ)	$100\theta_{\text{eq}}$	0.8119	$0.812^{+0.011}_{-0.011}$ (+0.1 σ)
τ	0.0542	$0.054^{+0.016}_{-0.015}$ (+0.3 σ)	σ_8	0.8123	$0.812^{+0.015}_{-0.015}$ (−0.0 σ)	$100\theta_{\text{s,eq}}$	0.4487	$0.4489^{+0.0057}_{-0.0058}$ (+0.1 σ)
Y_{P}	0.2431	$0.2433^{+0.0074}_{-0.0075}$ (−0.1 σ)	S_8	0.8356	$0.834^{+0.032}_{-0.031}$ (−0.2 σ)	$H(0.15)$	72.53	$72.6^{+1.0}_{-1.0}$ (+0.3 σ)
$\ln(10^{10} A_{\text{s}})$	3.0445	$3.044^{+0.032}_{-0.032}$ (+0.2 σ)	$\sigma_8 \Omega_{\text{m}}^{0.5}$	0.4577	$0.457^{+0.018}_{-0.017}$ (−0.2 σ)	$D_{\text{M}}(0.15)$	644.9	645^{+11}_{-10} (−0.3 σ)
n_{s}	0.9647	$0.9638^{+0.0092}_{-0.0091}$ (+0.1 σ)	$\sigma_8 \Omega_{\text{m}}^{0.25}$	0.6097	$0.609^{+0.016}_{-0.016}$ (−0.1 σ)	$H(0.38)$	82.75	$82.77^{+0.75}_{-0.75}$ (+0.3 σ)
y_{cal}	1.00055	$1.0006^{+0.0048}_{-0.0049}$ (+0.1 σ)	$\sigma_8/h^{0.5}$	0.9910	$0.990^{+0.023}_{-0.023}$ (−0.2 σ)	$D_{\text{M}}(0.38)$	1536.6	1536^{+21}_{-20} (−0.3 σ)
A_{217}^{CIB}	45.9	47^{+10}_{-10} (−0.2 σ)	$r_{\text{drag}} h$	98.79	$98.9^{+2.0}_{-2.1}$ (+0.2 σ)	$H(0.51)$	89.53	$89.54^{+0.60}_{-0.58}$ (+0.3 σ)
$\xi^{\text{tSZ} \times \text{CIB}}$	0.60	—	$\langle d^2 \rangle^{1/2}$	2.450	$2.450^{+0.056}_{-0.055}$ (−0.1 σ)	$D_{\text{M}}(0.51)$	1989.5	1989^{+25}_{-24} (−0.3 σ)
A_{143}^{tSZ}	7.09	$5.5^{+3.8}_{-3.8}$ (+0.2 σ)	z_{re}	7.67	$7.6^{+1.5}_{-1.6}$ (+0.2 σ)	$H(0.61)$	95.199	$95.21^{+0.49}_{-0.47}$ (+0.4 σ)
A_{100}^{PS}	248	257^{+50}_{-50} (−0.2 σ)	$10^9 A_{\text{s}}$	2.100	$2.099^{+0.068}_{-0.065}$ (+0.2 σ)	$D_{\text{M}}(0.61)$	2314.3	2314^{+26}_{-26} (−0.3 σ)
A_{143}^{PS}	49.4	46^{+20}_{-20} (−0.4 σ)	$10^9 A_{\text{s}} e^{-2\tau}$	1.8844	$1.884^{+0.023}_{-0.023}$ (−0.1 σ)	$H(2.33)$	236.73	$236.7^{+1.6}_{-1.6}$ (−0.0 σ)
$A_{143 \times 217}^{\text{PS}}$	51.7	43^{+20}_{-20} (−0.1 σ)	D_{40}	1231.4	1234^{+26}_{-25} (+0.0 σ)	$D_{\text{M}}(2.33)$	5767.2	5767^{+22}_{-22} (−0.4 σ)
A_{217}^{PS}	121.7	115^{+20}_{-20} (+0.1 σ)	D_{220}	5729	5732^{+75}_{-75} (+0.5 σ)	$f\sigma_8(0.15)$	0.4618	$0.461^{+0.016}_{-0.016}$ (−0.2 σ)
A^{kSZ}	0.00	< 7.84 (−0.2 σ)	D_{810}	2541.3	2540^{+26}_{-27} (+0.2 σ)	$\sigma_8(0.15)$	0.7500	$0.749^{+0.013}_{-0.013}$ (+0.0 σ)
A_{100}^{dustTT}	8.78	$8.9^{+3.6}_{-3.6}$ (−0.0 σ)	D_{1420}	818.6	$817.5^{+9.3}_{-9.5}$ (+0.6 σ)	$f\sigma_8(0.38)$	0.4788	$0.478^{+0.013}_{-0.013}$ (−0.2 σ)
A_{143}^{dustTT}	11.01	$10.9^{+3.5}_{-3.5}$ (+0.1 σ)	D_{2000}	231.49	$231.1^{+3.2}_{-3.2}$ (+0.7 σ)	$\sigma_8(0.38)$	0.6641	$0.664^{+0.011}_{-0.011}$ (+0.1 σ)
$A_{143 \times 217}^{\text{dustTT}}$	19.9	$18.6^{+6.4}_{-6.6}$ (+0.1 σ)	$n_{\text{s},0.002}$	0.9647	$0.9638^{+0.0092}_{-0.0091}$ (+0.1 σ)	$f\sigma_8(0.51)$	0.4767	$0.476^{+0.012}_{-0.012}$ (−0.1 σ)
A_{217}^{dustTT}	95.4	94^{+10}_{-10} (+0.1 σ)	Y_{P}	0.2431	$0.2433^{+0.0074}_{-0.0075}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6213	$0.621^{+0.010}_{-0.010}$ (+0.1 σ)
A_{100}^{dustTE}	0.115	$0.115^{+0.075}_{-0.074}$	$Y_{\text{P}}^{\text{BBN}}$	0.2444	$0.2446^{+0.0074}_{-0.0075}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4712	$0.471^{+0.010}_{-0.011}$ (−0.1 σ)
$A_{100 \times 143}^{\text{dustTE}}$	0.135	$0.135^{+0.057}_{-0.057}$	Age/Gyr	13.805	$13.805^{+0.050}_{-0.050}$ (−0.4 σ)	$\sigma_8(0.61)$	0.5910	$0.5905^{+0.0099}_{-0.0096}$ (+0.1 σ)
$A_{100 \times 217}^{\text{dustTE}}$	0.482	$0.48^{+0.17}_{-0.17}$	z_*	1089.89	$1089.91^{+0.57}_{-0.57}$ (−0.7 σ)	$f\sigma_8(2.33)$	0.29774	$0.2975^{+0.0050}_{-0.0048}$ (+0.1 σ)
A_{143}^{dustTE}	0.224	$0.23^{+0.11}_{-0.10}$	r_*	144.38	$144.41^{+0.59}_{-0.60}$ (−0.1 σ)	$\sigma_8(2.33)$	0.3067	$0.3065^{+0.0053}_{-0.0051}$ (+0.2 σ)
$A_{143 \times 217}^{\text{dustTE}}$	0.666	$0.67^{+0.16}_{-0.16}$	$100\theta_*$	1.04105	$1.04107^{+0.00060}_{-0.00064}$ (+0.2 σ)	χ_{small}^2	396.06	397.1 (ν : 1.7) (+0.1 σ)
A_{217}^{dustTE}	2.09	$2.09^{+0.53}_{-0.53}$	$D_{\text{M}}(z_*)/\text{Gpc}$	13.869	$13.871^{+0.055}_{-0.056}$ (−0.1 σ)	χ_{lowl}^2	23.48	23.7 (ν : 0.5) (−0.1 σ)
c_{100}	0.99972	$0.9997^{+0.0012}_{-0.0012}$ (+0.1 σ)	z_{drag}	1059.82	$1059.79^{+0.72}_{-0.73}$ (+0.3 σ)	χ_{plik}^2	2344.4	2359.5 (ν : 17.2) (+275.1 σ)
c_{217}	0.99816	$0.9982^{+0.0012}_{-0.0012}$ (−0.1 σ)	r_{drag}	147.05	$147.08^{+0.59}_{-0.60}$ (−0.3 σ)	χ_{Aver15}^2	0.02	0.9 (ν : 0.8)
H_0	67.18	$67.2^{+1.2}_{-1.2}$ (+0.3 σ)	k_{D}	0.14098	$0.14093^{+0.00066}_{-0.00064}$ (+0.6 σ)	χ_{prior}^2	1.6	11.5 (ν : 9.9) (+1.1 σ)
Ω_{Λ}	0.6825	$0.683^{+0.016}_{-0.017}$ (+0.2 σ)	$100\theta_{\text{D}}$	0.160674	$0.16071^{+0.00043}_{-0.00042}$ (−0.5 σ)	χ_{CMB}^2	2764.0	2780.3 (ν : 17.4) (+280.1 σ)

Best-fit $\chi_{\text{eff}}^2 = 2765.57$; $\bar{\chi}_{\text{eff}}^2 = 2792.71$; $R - 1 = 0.01459$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.02 CMB - simall_100x143_offlike5_EE_Aplanck_B: 396.06 commander_dx12_v3.2_29: 23.48 plik_rd12_HM_v22b_TTTEEE: 2344.42

20.56 base_yhe_plikHM_TTTEE_lowl_lowE_Aver15_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02239^{+0.00028}_{-0.00027} \quad (+0.9\sigma)$	σ_8	$0.809^{+0.015}_{-0.014} \quad (-0.3\sigma)$	$H(0.38)$	$83.02^{+0.57}_{-0.56} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1193^{+0.0020}_{-0.0020} \quad (-0.6\sigma)$	S_8	$0.824^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+15}_{-15} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00060}_{-0.00062} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$H(0.51)$	$89.74^{+0.46}_{-0.45} \quad (+0.7\sigma)$
τ	$0.055^{+0.016}_{-0.015} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.604^{+0.014}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+18}_{-18} \quad (-0.7\sigma)$
Y_{P}	$0.2435^{+0.0074}_{-0.0073} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.984^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$H(0.61)$	$95.36^{+0.39}_{-0.38} \quad (+0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.044^{+0.033}_{-0.032} \quad (+0.3\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.5}_{-1.5} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+19}_{-19} \quad (-0.7\sigma)$
n_{s}	$0.9661^{+0.0080}_{-0.0079} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.049}_{-0.048} \quad (-0.4\sigma)$	$H(2.33)$	$236.1^{+1.2}_{-1.2} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.6}_{-1.6} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5761^{+18}_{-19} \quad (-0.6\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.100^{+0.071}_{-0.065} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.012} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.013}_{-0.013} \quad (-0.2\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1229^{+24}_{-23} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.474^{+0.011}_{-0.011} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+60}_{-50} \quad (-0.3\sigma)$	D_{220}	$5737^{+74}_{-74} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.011}_{-0.011} \quad (-0.0\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.010}_{-0.0099} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$818.0^{+9.0}_{-9.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.620^{+0.011}_{-0.010} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.3^{+3.1}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4681^{+0.0096}_{-0.0094} \quad (-0.5\sigma)$
A^{kSZ}	$< 7.96 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9661^{+0.0080}_{-0.0079} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.590^{+0.010}_{-0.0097} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.7} \quad (-0.0\sigma)$	Y_{P}	$0.2435^{+0.0074}_{-0.0073} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2976^{+0.0050}_{-0.0049} \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2448^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0053}_{-0.0051} \quad (+0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.791^{+0.042}_{-0.043} \quad (-0.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.76^{+0.48}_{-0.49} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.075}_{-0.074}$	r_*	$144.60^{+0.46}_{-0.47} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.5}_{-3.7} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.059}_{-0.058}$	$100\theta_*$	$1.04118^{+0.00057}_{-0.00058} \quad (+0.4\sigma)$	χ_{small}^2	$397.3 \quad (\nu: 2.0) \quad (+0.2\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.045}_{-0.045} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.26 \quad (\nu: 0.4) \quad (-0.4\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1059.88^{+0.70}_{-0.71} \quad (+0.4\sigma)$	χ_{plik}^2	$2359.8 \quad (\nu: 18.0) \quad (+275.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.25^{+0.49}_{-0.48} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.7)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	k_{D}	$0.14079^{+0.00059}_{-0.00059} \quad (+0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.059 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16067^{+0.00041}_{-0.00042} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3386^{+45}_{-44} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 1.1)$
H_0	$67.63^{+0.89}_{-0.89} \quad (+0.7\sigma)$	k_{eq}	$0.01034^{+0.00014}_{-0.00014} \quad (-0.5\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.2) \quad (+1.1\sigma)$
Ω_{Λ}	$0.689^{+0.012}_{-0.012} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8163^{+0.0084}_{-0.0083} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$
Ω_{m}	$0.311^{+0.012}_{-0.012} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0043}_{-0.0043} \quad (+0.5\sigma)$	χ_{CMB}^2	$2780.4 \quad (\nu: 17.5) \quad (+280.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1424^{+0.0019}_{-0.0019} \quad (-0.5\sigma)$	$H(0.15)$	$72.91^{+0.78}_{-0.76} \quad (+0.7\sigma)$		
$\Omega_{\mathrm{m}}h^3$	$0.09627^{+0.00063}_{-0.00061} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.1^{+7.6}_{-7.6} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2799.01; R - 1 = 0.02003$$

20.57 base_yhe_plikHM_TTTEE_lowl_lowE_Aver15_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02234^{+0.00030}_{-0.00029} \quad (+0.8\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09624^{+0.00063}_{-0.00062} \quad (+0.4\sigma)$	$H(0.15)$	$72.63^{+0.91}_{-0.93} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0024}_{-0.0023} \quad (-0.3\sigma)$	σ_8	$0.811^{+0.012}_{-0.012} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.9^{+9.4}_{-9.1} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04084^{+0.00064}_{-0.00068} \quad (+0.0\sigma)$	S_8	$0.832^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$H(0.38)$	$82.82^{+0.67}_{-0.68} \quad (+0.4\sigma)$
τ	$0.054^{+0.016}_{-0.014} \quad (+0.3\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1535^{+19}_{-18} \quad (-0.4\sigma)$
Y_{P}	$0.2432^{+0.0075}_{-0.0076} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.013}_{-0.013} \quad (-0.3\sigma)$	$H(0.51)$	$89.58^{+0.55}_{-0.55} \quad (+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.043^{+0.029}_{-0.028} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.988^{+0.018}_{-0.018} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+22}_{-21} \quad (-0.4\sigma)$
n_{s}	$0.9641^{+0.0088}_{-0.0087} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$99.0^{+1.8}_{-1.8} \quad (+0.3\sigma)$	$H(0.61)$	$95.24^{+0.45}_{-0.45} \quad (+0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0050} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.447^{+0.043}_{-0.042} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+24}_{-23} \quad (-0.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$7.6^{+1.5}_{-1.5} \quad (+0.2\sigma)$	$H(2.33)$	$236.5^{+1.4}_{-1.4} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.097^{+0.061}_{-0.057} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5766^{+21}_{-21} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.021}_{-0.021} \quad (-0.1\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{PS}	$258^{+50}_{-50} \quad (-0.2\sigma)$	D_{40}	$1233^{+24}_{-23} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.011}_{-0.011} \quad (-0.1\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{220}	$5734^{+74}_{-74} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6631^{+0.0094}_{-0.0092} \quad (+0.0\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$817.5^{+9.2}_{-9.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4752^{+0.0089}_{-0.0090} \quad (-0.2\sigma)$
A^{kSZ}	$< 8.03 \quad (-0.2\sigma)$	D_{2000}	$231.0^{+3.1}_{-3.3} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6204^{+0.0089}_{-0.0086} \quad (+0.0\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9641^{+0.0088}_{-0.0087} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4699^{+0.0082}_{-0.0081} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_{P}	$0.2432^{+0.0075}_{-0.0076} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5902^{+0.0086}_{-0.0083} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.4}_{-6.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2445^{+0.0075}_{-0.0076} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2974^{+0.0045}_{-0.0043} \quad (+0.1\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.802^{+0.048}_{-0.048} \quad (-0.4\sigma)$	$\sigma_8(2.33)$	$0.3064^{+0.0050}_{-0.0047} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.075}_{-0.074}$	z_*	$1089.87^{+0.53}_{-0.54} \quad (-0.7\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.5\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.056}$	r_*	$144.45^{+0.53}_{-0.54} \quad (-0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04109^{+0.00059}_{-0.00063} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.6} \quad (-0.5\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.875^{+0.050}_{-0.050} \quad (-0.1\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.21 \quad (\nu: 0.2)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.80^{+0.74}_{-0.71} \quad (+0.3\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.4) \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.09^{+0.53}_{-0.52}$	r_{drag}	$147.12^{+0.54}_{-0.53} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.64 \quad (\nu: 0.4) \quad (-0.2\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14090^{+0.00062}_{-0.00059} \quad (+0.5\sigma)$	χ_{plik}^2	$2359.3 \quad (\nu: 16.5) \quad (+275.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16069^{+0.00041}_{-0.00042} \quad (-0.5\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
H_0	$67.3^{+1.1}_{-1.1} \quad (+0.4\sigma)$	z_{eq}	$3402^{+54}_{-53} \quad (-0.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_{Λ}	$0.684^{+0.014}_{-0.015} \quad (+0.3\sigma)$	k_{eq}	$0.01038^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	χ_{CMB}^2	$2789.1 \quad (\nu: 17.4) \quad (+281.7\sigma)$
Ω_{m}	$0.316^{+0.015}_{-0.014} \quad (-0.3\sigma)$	$100\theta_{\mathrm{eq}}$	$0.813^{+0.010}_{-0.010} \quad (+0.2\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1430^{+0.0023}_{-0.0022} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4493^{+0.0051}_{-0.0052} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.50; R - 1 = 0.01555$$

20.58 base_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00028}_{-0.00027} \quad (+0.9\sigma)$	σ_8	$0.810^{+0.012}_{-0.011} \quad (-0.2\sigma)$	$H(0.38)$	$83.02^{+0.55}_{-0.54} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1193^{+0.0018}_{-0.0019} \quad (-0.6\sigma)$	S_8	$0.825^{+0.021}_{-0.021} \quad (-0.6\sigma)$	$D_M(0.38)$	$1529^{+14}_{-14} \quad (-0.7\sigma)$
$100\theta_{MC}$	$1.04095^{+0.00059}_{-0.00062} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$H(0.51)$	$89.74^{+0.45}_{-0.44} \quad (+0.7\sigma)$
τ	$0.056^{+0.015}_{-0.014} \quad (+0.5\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_M(0.51)$	$1981^{+17}_{-17} \quad (-0.7\sigma)$
Y_P	$0.2434^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$95.36^{+0.38}_{-0.37} \quad (+0.7\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.029}_{-0.027} \quad (+0.3\sigma)$	$r_{drag} h$	$99.6^{+1.4}_{-1.4} \quad (+0.6\sigma)$	$D_M(0.61)$	$2305^{+18}_{-18} \quad (-0.7\sigma)$
n_s	$0.9659^{+0.0078}_{-0.0077} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.040}_{-0.039} \quad (-0.3\sigma)$	$H(2.33)$	$236.1^{+1.1}_{-1.1} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$7.8^{+1.5}_{-1.4} \quad (+0.4\sigma)$	$D_M(2.33)$	$5761^{+18}_{-18} \quad (-0.6\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.103^{+0.062}_{-0.057} \quad (+0.3\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.011}_{-0.010} \quad (-0.6\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.880^{+0.020}_{-0.020} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.011}_{-0.010} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1230^{+23}_{-22} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4748^{+0.0090}_{-0.0088} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5739^{+74}_{-72} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6633^{+0.0094}_{-0.0092} \quad (+0.0\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+25}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4734^{+0.0082}_{-0.0081} \quad (-0.5\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$818.1^{+9.1}_{-9.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6208^{+0.0089}_{-0.0086} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.3^{+3.1}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4684^{+0.0076}_{-0.0075} \quad (-0.4\sigma)$
A^{kSZ}	$< 7.98 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.9659^{+0.0078}_{-0.0077} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0086}_{-0.0083} \quad (+0.1\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	Y_P	$0.2434^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2978^{+0.0044}_{-0.0043} \quad (+0.2\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2448^{+0.0075}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3071^{+0.0048}_{-0.0045} \quad (+0.3\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.791^{+0.041}_{-0.041} \quad (-0.6\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.6\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.75^{+0.47}_{-0.48} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{100}^{dustTE}	$0.116^{+0.075}_{-0.074}$	r_*	$144.59^{+0.44}_{-0.43} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.5}_{-3.7} \quad (-0.6\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.134^{+0.059}_{-0.058}$	$100\theta_*$	$1.04118^{+0.00055}_{-0.00057} \quad (+0.4\sigma)$	$\chi^2_{lensing}$	$9.08 \quad (\nu: 0.2)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.888^{+0.042}_{-0.042} \quad (+0.2\sigma)$	χ^2_{small}	$397.2 \quad (\nu: 1.8) \quad (+0.2\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1059.88^{+0.70}_{-0.71} \quad (+0.4\sigma)$	χ^2_{lowl}	$23.32 \quad (\nu: 0.3) \quad (-0.3\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.25^{+0.45}_{-0.46} \quad (+0.1\sigma)$	χ^2_{plik}	$2359.4 \quad (\nu: 17.0) \quad (+275.1\sigma)$
A_{217}^{dustTE}	$2.08^{+0.53}_{-0.51}$	k_D	$0.14080^{+0.00057}_{-0.00055} \quad (+0.4\sigma)$	χ^2_{Aver15}	$0.9 \quad (\nu: 0.7)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	$0.16067^{+0.00041}_{-0.00043} \quad (-0.6\sigma)$	χ^2_{6DF}	$0.056 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3387^{+41}_{-42} \quad (-0.5\sigma)$	χ^2_{MGS}	$1.23 \quad (\nu: 0.1)$
H_0	$67.62^{+0.84}_{-0.83} \quad (+0.7\sigma)$	k_{eq}	$0.01034^{+0.00013}_{-0.00013} \quad (-0.5\sigma)$	$\chi^2_{DR12BAO}$	$4.9 \quad (\nu: 0.9)$
Ω_Λ	$0.689^{+0.011}_{-0.011} \quad (+0.6\sigma)$	$100\theta_{eq}$	$0.8162^{+0.0080}_{-0.0077} \quad (+0.6\sigma)$	χ^2_{prior}	$11.5 \quad (\nu: 10.1) \quad (+1.1\sigma)$
Ω_m	$0.311^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$100\theta_{s,eq}$	$0.4509^{+0.0041}_{-0.0040} \quad (+0.5\sigma)$	χ^2_{CMB}	$2789.1 \quad (\nu: 17.5) \quad (+281.6\sigma)$
$\Omega_m h^2$	$0.1424^{+0.0017}_{-0.0018} \quad (-0.5\sigma)$	$H(0.15)$	$72.91^{+0.72}_{-0.72} \quad (+0.7\sigma)$	χ^2_{BAO}	$6.2 \quad (\nu: 0.6)$
$\Omega_m h^3$	$0.09627^{+0.00063}_{-0.00061} \quad (+0.5\sigma)$	$D_M(0.15)$	$641.1^{+7.2}_{-7.0} \quad (-0.7\sigma)$		

$$\bar{\chi}^2_{eff} = 2807.65; R - 1 = 0.02242$$

20.59 base_yhe_plikHM_TTTEE_lowl_lowE_Aver15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02233^{+0.00031}_{-0.00030} \quad (+0.7\sigma)$	$\Omega_{\mathrm{m}}h^2$	$0.1432^{+0.0026}_{-0.0025} \quad (-0.1\sigma)$	$100\theta_{\mathrm{eq}}$	$0.812^{+0.011}_{-0.011} \quad (+0.2\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1202^{+0.0027}_{-0.0026} \quad (-0.2\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09625^{+0.00064}_{-0.00062} \quad (+0.4\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4490^{+0.0057}_{-0.0058} \quad (+0.1\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04084^{+0.00066}_{-0.00068} \quad (+0.0\sigma)$	σ_8	$0.812^{+0.014}_{-0.013} \quad (+0.1\sigma)$	$H(0.15)$	$72.6^{+1.0}_{-1.0} \quad (+0.3\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	S_8	$0.835^{+0.032}_{-0.031} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.15)$	$645^{+11}_{-10} \quad (-0.3\sigma)$
Y_{P}	$0.2433^{+0.0074}_{-0.0076} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.457^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$H(0.38)$	$82.78^{+0.75}_{-0.75} \quad (+0.3\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.046^{+0.028}_{-0.026} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.609^{+0.016}_{-0.016} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.38)$	$1536^{+21}_{-20} \quad (-0.3\sigma)$
n_{s}	$0.9640^{+0.0092}_{-0.0090} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.991^{+0.022}_{-0.022} \quad (-0.1\sigma)$	$H(0.51)$	$89.55^{+0.60}_{-0.59} \quad (+0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$98.9^{+2.0}_{-2.1} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1989^{+25}_{-24} \quad (-0.3\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.452^{+0.055}_{-0.053} \quad (-0.0\sigma)$	$H(0.61)$	$95.22^{+0.49}_{-0.47} \quad (+0.4\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	z_{re}	$< 8.97 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2313^{+26}_{-26} \quad (-0.3\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.104^{+0.059}_{-0.055} \quad (+0.4\sigma)$	$H(2.33)$	$236.6^{+1.6}_{-1.6} \quad (-0.1\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.883^{+0.023}_{-0.023} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5767^{+22}_{-23} \quad (-0.4\sigma)$
A_{143}^{PS}	$46^{+20}_{-20} \quad (-0.4\sigma)$	D_{40}	$1234^{+26}_{-25} \quad (+0.0\sigma)$	$f\sigma_8(0.15)$	$0.461^{+0.016}_{-0.016} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$43^{+20}_{-20} \quad (-0.1\sigma)$	D_{220}	$5732^{+75}_{-75} \quad (+0.5\sigma)$	$\sigma_8(0.15)$	$0.750^{+0.013}_{-0.011} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.1\sigma)$	D_{810}	$2539^{+26}_{-27} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.479^{+0.013}_{-0.013} \quad (-0.1\sigma)$
A^{kSZ}	$< 7.82 \quad (-0.2\sigma)$	D_{1420}	$817.5^{+9.3}_{-9.4} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.664^{+0.010}_{-0.0098} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.6}_{-3.6} \quad (-0.0\sigma)$	D_{2000}	$231.1^{+3.2}_{-3.2} \quad (+0.7\sigma)$	$f\sigma_8(0.51)$	$0.477^{+0.011}_{-0.011} \quad (-0.1\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.8^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$n_{\mathrm{s},0.002}$	$0.9640^{+0.0092}_{-0.0090} \quad (+0.1\sigma)$	$\sigma_8(0.51)$	$0.6215^{+0.0093}_{-0.0089} \quad (+0.2\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.5^{+6.4}_{-6.6} \quad (+0.1\sigma)$	Y_{P}	$0.2433^{+0.0074}_{-0.0076} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.471^{+0.010}_{-0.010} \quad (-0.0\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2446^{+0.0074}_{-0.0076} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5912^{+0.0088}_{-0.0084} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.115^{+0.075}_{-0.075}$	Age/Gyr	$13.804^{+0.050}_{-0.050} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0044}_{-0.0041} \quad (+0.2\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.057}$	z_*	$1089.90^{+0.57}_{-0.57} \quad (-0.7\sigma)$	$\sigma_8(2.33)$	$0.3069^{+0.0046}_{-0.0043} \quad (+0.3\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	r_*	$144.42^{+0.59}_{-0.59} \quad (-0.1\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.6\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.23^{+0.11}_{-0.10}$	$100\theta_*$	$1.04108^{+0.00060}_{-0.00064} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.872^{+0.055}_{-0.056} \quad (-0.1\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.6} \quad (-0.5\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.53}$	z_{drag}	$1059.80^{+0.75}_{-0.70} \quad (+0.3\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.8) \quad (+0.1\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	r_{drag}	$147.09^{+0.59}_{-0.59} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.7 \quad (\nu: 0.5) \quad (-0.1\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	k_{D}	$0.14093^{+0.00066}_{-0.00064} \quad (+0.5\sigma)$	χ_{plik}^2	$2359.3 \quad (\nu: 17.1) \quad (+275.1\sigma)$
H_0	$67.2^{+1.2}_{-1.2} \quad (+0.3\sigma)$	$100\theta_{\mathrm{D}}$	$0.16070^{+0.00043}_{-0.00042} \quad (-0.5\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
Ω_{Λ}	$0.683^{+0.016}_{-0.017} \quad (+0.3\sigma)$	z_{eq}	$3406^{+62}_{-59} \quad (-0.1\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 9.9) \quad (+1.1\sigma)$
Ω_{m}	$0.317^{+0.017}_{-0.016} \quad (-0.3\sigma)$	k_{eq}	$0.01040^{+0.00019}_{-0.00018} \quad (-0.1\sigma)$	χ_{CMB}^2	$2780.1 \quad (\nu: 17.0) \quad (+280.1\sigma)$

$\bar{\chi}_{\mathrm{eff}}^2 = 2792.46; R - 1 = 0.01390$

20.60 base_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_b h^2$	$0.02240^{+0.00028}_{-0.00027} \quad (+0.9\sigma)$	σ_8	$0.810^{+0.013}_{-0.013} \quad (-0.2\sigma)$	$H(0.38)$	$83.03^{+0.57}_{-0.56} \quad (+0.7\sigma)$
$\Omega_c h^2$	$0.1193^{+0.0020}_{-0.0019} \quad (-0.6\sigma)$	S_8	$0.825^{+0.025}_{-0.024} \quad (-0.6\sigma)$	$D_M(0.38)$	$1529^{+15}_{-15} \quad (-0.7\sigma)$
$100\theta_{MC}$	$1.04096^{+0.00060}_{-0.00063} \quad (+0.2\sigma)$	$\sigma_8 \Omega_m^{0.5}$	$0.452^{+0.014}_{-0.013} \quad (-0.6\sigma)$	$H(0.51)$	$89.74^{+0.46}_{-0.46} \quad (+0.7\sigma)$
τ	$0.056^{+0.014}_{-0.013} \quad (+0.6\sigma)$	$\sigma_8 \Omega_m^{0.25}$	$0.605^{+0.014}_{-0.013} \quad (-0.5\sigma)$	$D_M(0.51)$	$1980^{+18}_{-18} \quad (-0.7\sigma)$
Y_P	$0.2436^{+0.0073}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.020}_{-0.018} \quad (-0.5\sigma)$	$H(0.61)$	$95.36^{+0.39}_{-0.38} \quad (+0.7\sigma)$
$\ln(10^{10} A_s)$	$3.046^{+0.029}_{-0.027} \quad (+0.4\sigma)$	$r_{drag} h$	$99.6^{+1.5}_{-1.5} \quad (+0.6\sigma)$	$D_M(0.61)$	$2305^{+19}_{-19} \quad (-0.7\sigma)$
n_s	$0.9662^{+0.0080}_{-0.0079} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.438^{+0.048}_{-0.044} \quad (-0.3\sigma)$	$H(2.33)$	$236.1^{+1.2}_{-1.2} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$< 9.12 \quad (+0.4\sigma)$	$D_M(2.33)$	$5760^{+18}_{-19} \quad (-0.7\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_s$	$2.104^{+0.062}_{-0.057} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.456^{+0.013}_{-0.012} \quad (-0.6\sigma)$
$\xi^{tSZ \times CIB}$	—	$10^9 A_s e^{-2\tau}$	$1.880^{+0.021}_{-0.021} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.012}_{-0.011} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	D_{40}	$1229^{+24}_{-23} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.011}_{-0.010} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+60}_{-50} \quad (-0.3\sigma)$	D_{220}	$5737^{+74}_{-74} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.663^{+0.010}_{-0.0097} \quad (+0.1\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4734^{+0.0099}_{-0.0092} \quad (-0.5\sigma)$
$A_{143 \times 217}^{PS}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{1420}	$818.0^{+9.0}_{-9.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6209^{+0.0094}_{-0.0089} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.3^{+3.1}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0094}_{-0.0085} \quad (-0.4\sigma)$
A^{kSZ}	$< 7.95 \quad (-0.2\sigma)$	$n_{s,0.002}$	$0.9662^{+0.0080}_{-0.0079} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5908^{+0.0090}_{-0.0085} \quad (+0.2\sigma)$
A_{100}^{dustTT}	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	Y_P	$0.2436^{+0.0073}_{-0.0074} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2979^{+0.0045}_{-0.0042} \quad (+0.3\sigma)$
A_{143}^{dustTT}	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	Y_P^{BBN}	$0.2449^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0047}_{-0.0044} \quad (+0.3\sigma)$
$A_{143 \times 217}^{dustTT}$	$18.6^{+6.5}_{-6.4} \quad (+0.1\sigma)$	Age/Gyr	$13.791^{+0.042}_{-0.043} \quad (-0.7\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.6\sigma)$
A_{217}^{dustTT}	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.75^{+0.48}_{-0.49} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
A_{100}^{dustTE}	$0.116^{+0.075}_{-0.073}$	r_*	$144.60^{+0.46}_{-0.47} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.5}_{-3.7} \quad (-0.6\sigma)$
$A_{100 \times 143}^{dustTE}$	$0.134^{+0.058}_{-0.058}$	$100\theta_*$	$1.04119^{+0.00057}_{-0.00058} \quad (+0.4\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 2.1) \quad (+0.2\sigma)$
$A_{100 \times 217}^{dustTE}$	$0.48^{+0.17}_{-0.17}$	$D_M(z_*)/\text{Gpc}$	$13.888^{+0.045}_{-0.044} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.27 \quad (\nu: 0.4) \quad (-0.4\sigma)$
A_{143}^{dustTE}	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1059.88^{+0.70}_{-0.68} \quad (+0.4\sigma)$	χ_{plik}^2	$2359.7 \quad (\nu: 17.9) \quad (+275.1\sigma)$
$A_{143 \times 217}^{dustTE}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.26^{+0.49}_{-0.49} \quad (+0.1\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.7)$
A_{217}^{dustTE}	$2.07^{+0.53}_{-0.52}$	k_D	$0.14079^{+0.00059}_{-0.00058} \quad (+0.4\sigma)$	χ_{6DF}^2	$0.058 \quad (\nu: 0.0)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_D$	$0.16067^{+0.00041}_{-0.00042} \quad (-0.6\sigma)$	χ_{MGS}^2	$1.25 \quad (\nu: 0.1)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3386^{+45}_{-44} \quad (-0.5\sigma)$	$\chi_{DR12BAO}^2$	$4.9 \quad (\nu: 1.1)$
H_0	$67.64^{+0.89}_{-0.89} \quad (+0.7\sigma)$	k_{eq}	$0.01033^{+0.00014}_{-0.00013} \quad (-0.5\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_Λ	$0.689^{+0.012}_{-0.012} \quad (+0.7\sigma)$	$100\theta_{eq}$	$0.8163^{+0.0084}_{-0.0083} \quad (+0.6\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.7)$
Ω_m	$0.311^{+0.012}_{-0.012} \quad (-0.7\sigma)$	$100\theta_{s,eq}$	$0.4510^{+0.0043}_{-0.0043} \quad (+0.5\sigma)$	χ_{CMB}^2	$2780.2 \quad (\nu: 17.2) \quad (+280.1\sigma)$
$\Omega_m h^2$	$0.1423^{+0.0019}_{-0.0018} \quad (-0.5\sigma)$	$H(0.15)$	$72.92^{+0.78}_{-0.76} \quad (+0.7\sigma)$		
$\Omega_m h^3$	$0.09627^{+0.00063}_{-0.00061} \quad (+0.5\sigma)$	$D_M(0.15)$	$641.0^{+7.6}_{-7.6} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\text{eff}}^2 = 2798.81; R - 1 = 0.02120$$

20.61 base_yhe_plikHM_TTTEE_lowl_lowE_Aver15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02235^{+0.00030}_{-0.00029} \quad (+0.8\sigma)$	$\Omega_{\mathrm{m}}h^3$	$0.09625^{+0.00063}_{-0.00061} \quad (+0.4\sigma)$	$H(0.15)$	$72.65^{+0.91}_{-0.91} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1200^{+0.0023}_{-0.0023} \quad (-0.3\sigma)$	σ_8	$0.811^{+0.011}_{-0.011} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.7^{+9.2}_{-9.0} \quad (-0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04085^{+0.00064}_{-0.00067} \quad (+0.1\sigma)$	S_8	$0.832^{+0.025}_{-0.025} \quad (-0.3\sigma)$	$H(0.38)$	$82.84^{+0.67}_{-0.66} \quad (+0.4\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.456^{+0.014}_{-0.014} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+18}_{-18} \quad (-0.4\sigma)$
Y_{P}	$0.2433^{+0.0075}_{-0.0076} \quad (-0.1\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.608^{+0.012}_{-0.012} \quad (-0.2\sigma)$	$H(0.51)$	$89.60^{+0.54}_{-0.53} \quad (+0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.045^{+0.026}_{-0.024} \quad (+0.3\sigma)$	$\sigma_8/h^{0.5}$	$0.989^{+0.018}_{-0.017} \quad (-0.2\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+22}_{-21} \quad (-0.4\sigma)$
n_{s}	$0.9643^{+0.0087}_{-0.0085} \quad (+0.1\sigma)$	$r_{\mathrm{drag}}h$	$99.1^{+1.8}_{-1.8} \quad (+0.3\sigma)$	$H(0.61)$	$95.25^{+0.45}_{-0.44} \quad (+0.4\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.448^{+0.043}_{-0.041} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+23}_{-23} \quad (-0.4\sigma)$
A_{217}^{CIB}	$47^{+10}_{-10} \quad (-0.2\sigma)$	z_{re}	$< 8.85 \quad (+0.3\sigma)$	$H(2.33)$	$236.5^{+1.4}_{-1.4} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}}$	$2.101^{+0.054}_{-0.050} \quad (+0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5765^{+21}_{-21} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.2\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.882^{+0.021}_{-0.021} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.460^{+0.013}_{-0.013} \quad (-0.3\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.2\sigma)$	D_{40}	$1233^{+24}_{-23} \quad (-0.0\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0095} \quad (+0.0\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.4\sigma)$	D_{220}	$5734^{+74}_{-74} \quad (+0.5\sigma)$	$f\sigma_8(0.38)$	$0.477^{+0.010}_{-0.010} \quad (-0.2\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.1\sigma)$	D_{810}	$2539^{+26}_{-26} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6636^{+0.0090}_{-0.0081} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{1420}	$817.4^{+9.3}_{-9.5} \quad (+0.6\sigma)$	$f\sigma_8(0.51)$	$0.4754^{+0.0088}_{-0.0088} \quad (-0.2\sigma)$
A^{kSZ}	$< 8.03 \quad (-0.2\sigma)$	D_{2000}	$231.1^{+3.1}_{-3.3} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6209^{+0.0081}_{-0.0078} \quad (+0.1\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	$n_{\mathrm{s},0.002}$	$0.9643^{+0.0087}_{-0.0085} \quad (+0.1\sigma)$	$f\sigma_8(0.61)$	$0.4701^{+0.0081}_{-0.0079} \quad (-0.2\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.4} \quad (+0.1\sigma)$	Y_{P}	$0.2433^{+0.0075}_{-0.0076} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5907^{+0.0078}_{-0.0074} \quad (+0.1\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2446^{+0.0075}_{-0.0077} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2977^{+0.0040}_{-0.0038} \quad (+0.2\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	Age/Gyr	$13.801^{+0.048}_{-0.048} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0044}_{-0.0041} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.116^{+0.074}_{-0.074}$	z_*	$1089.86^{+0.53}_{-0.54} \quad (-0.7\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.5\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.135^{+0.057}_{-0.056}$	r_*	$144.47^{+0.52}_{-0.52} \quad (+0.0\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$100\theta_*$	$1.04109^{+0.00059}_{-0.00063} \quad (+0.2\sigma)$	f_{2000}^{217}	$106.9^{+3.5}_{-3.7} \quad (-0.5\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.876^{+0.049}_{-0.049} \quad (-0.0\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.20 \quad (\nu: 0.2)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.67^{+0.16}_{-0.16}$	z_{drag}	$1059.81^{+0.73}_{-0.72} \quad (+0.3\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.52}$	r_{drag}	$147.13^{+0.53}_{-0.53} \quad (-0.2\sigma)$	χ_{lowl}^2	$23.62 \quad (\nu: 0.4) \quad (-0.2\sigma)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	k_{D}	$0.14089^{+0.00059}_{-0.00059} \quad (+0.5\sigma)$	χ_{plik}^2	$2359.1 \quad (\nu: 16.5) \quad (+275.0\sigma)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16069^{+0.00041}_{-0.00042} \quad (-0.6\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
H_0	$67.3^{+1.0}_{-1.1} \quad (+0.4\sigma)$	z_{eq}	$3401^{+53}_{-52} \quad (-0.2\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.3) \quad (+1.1\sigma)$
Ω_{Λ}	$0.685^{+0.014}_{-0.015} \quad (+0.4\sigma)$	k_{eq}	$0.01038^{+0.00016}_{-0.00016} \quad (-0.2\sigma)$	χ_{CMB}^2	$2788.9 \quad (\nu: 17.0) \quad (+281.6\sigma)$
Ω_{m}	$0.315^{+0.015}_{-0.014} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8135^{+0.0099}_{-0.0098} \quad (+0.3\sigma)$		
$\Omega_{\mathrm{m}}h^2$	$0.1430^{+0.0022}_{-0.0022} \quad (-0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4495^{+0.0051}_{-0.0050} \quad (+0.2\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2801.26; R - 1 = 0.01556$$

20.62 base_yhe_plikHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02240^{+0.00028}_{-0.00027} \quad (+0.9\sigma)$	σ_8	$0.810^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$H(0.38)$	$83.03^{+0.54}_{-0.54} \quad (+0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1193^{+0.0018}_{-0.0018} \quad (-0.6\sigma)$	S_8	$0.825^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+14}_{-14} \quad (-0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04095^{+0.00060}_{-0.00062} \quad (+0.2\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.452^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$H(0.51)$	$89.74^{+0.44}_{-0.44} \quad (+0.7\sigma)$
τ	$0.057^{+0.013}_{-0.012} \quad (+0.6\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.011}_{-0.011} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+17}_{-17} \quad (-0.7\sigma)$
Y_{P}	$0.2435^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.61)$	$95.36^{+0.37}_{-0.37} \quad (+0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.047^{+0.027}_{-0.025} \quad (+0.4\sigma)$	$r_{\mathrm{drag}}h$	$99.6^{+1.4}_{-1.4} \quad (+0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+18}_{-18} \quad (-0.7\sigma)$
n_{s}	$0.9660^{+0.0078}_{-0.0077} \quad (+0.3\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.039}_{-0.038} \quad (-0.3\sigma)$	$H(2.33)$	$236.1^{+1.1}_{-1.1} \quad (-0.5\sigma)$
y_{cal}	$1.0007^{+0.0048}_{-0.0049} \quad (+0.1\sigma)$	z_{re}	$7.9^{+1.2}_{-1.3} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(2.33)$	$5760^{+18}_{-18} \quad (-0.7\sigma)$
A_{217}^{CIB}	$46^{+10}_{-10} \quad (-0.2\sigma)$	$10^9 A_{\mathrm{s}}$	$2.105^{+0.056}_{-0.053} \quad (+0.4\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.011}_{-0.010} \quad (-0.6\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.880^{+0.021}_{-0.020} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.749^{+0.010}_{-0.0096} \quad (-0.1\sigma)$
A_{143}^{tSZ}	$5.5^{+3.8}_{-3.8} \quad (+0.3\sigma)$	D_{40}	$1230^{+23}_{-22} \quad (-0.2\sigma)$	$f\sigma_8(0.38)$	$0.4749^{+0.0089}_{-0.0087} \quad (-0.5\sigma)$
A_{100}^{PS}	$257^{+50}_{-50} \quad (-0.3\sigma)$	D_{220}	$5739^{+74}_{-72} \quad (+0.6\sigma)$	$\sigma_8(0.38)$	$0.6636^{+0.0092}_{-0.0084} \quad (+0.1\sigma)$
A_{143}^{PS}	$45^{+20}_{-20} \quad (-0.5\sigma)$	D_{810}	$2539^{+25}_{-26} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.4736^{+0.0081}_{-0.0078} \quad (-0.4\sigma)$
$A_{143 \times 217}^{\mathrm{PS}}$	$42^{+20}_{-20} \quad (-0.2\sigma)$	D_{1420}	$818.1^{+9.1}_{-9.1} \quad (+0.7\sigma)$	$\sigma_8(0.51)$	$0.6211^{+0.0086}_{-0.0078} \quad (+0.1\sigma)$
A_{217}^{PS}	$115^{+20}_{-20} \quad (+0.0\sigma)$	D_{2000}	$231.3^{+3.1}_{-3.1} \quad (+0.8\sigma)$	$f\sigma_8(0.61)$	$0.4686^{+0.0075}_{-0.0072} \quad (-0.4\sigma)$
A^{kSZ}	$< 7.98 \quad (-0.2\sigma)$	$n_{\mathrm{s},0.002}$	$0.9660^{+0.0078}_{-0.0077} \quad (+0.3\sigma)$	$\sigma_8(0.61)$	$0.5910^{+0.0080}_{-0.0077} \quad (+0.2\sigma)$
$A_{100}^{\mathrm{dustTT}}$	$8.9^{+3.7}_{-3.6} \quad (-0.0\sigma)$	Y_{P}	$0.2435^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2980^{+0.0041}_{-0.0040} \quad (+0.3\sigma)$
$A_{143}^{\mathrm{dustTT}}$	$10.9^{+3.5}_{-3.5} \quad (+0.1\sigma)$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2448^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$\sigma_8(2.33)$	$0.3072^{+0.0044}_{-0.0042} \quad (+0.4\sigma)$
$A_{143 \times 217}^{\mathrm{dustTT}}$	$18.6^{+6.5}_{-6.5} \quad (+0.1\sigma)$	Age/Gyr	$13.791^{+0.041}_{-0.042} \quad (-0.7\sigma)$	f_{2000}^{143}	$29^{+5}_{-6} \quad (-0.6\sigma)$
$A_{217}^{\mathrm{dustTT}}$	$94^{+10}_{-10} \quad (+0.1\sigma)$	z_*	$1089.75^{+0.47}_{-0.48} \quad (-0.9\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{100}^{\mathrm{dustTE}}$	$0.116^{+0.074}_{-0.074}$	r_*	$144.60^{+0.44}_{-0.43} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.8^{+3.5}_{-3.7} \quad (-0.6\sigma)$
$A_{100 \times 143}^{\mathrm{dustTE}}$	$0.134^{+0.059}_{-0.058}$	$100\theta_*$	$1.04118^{+0.00055}_{-0.00058} \quad (+0.4\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.05 \quad (\nu: 0.1)$
$A_{100 \times 217}^{\mathrm{dustTE}}$	$0.48^{+0.17}_{-0.17}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.042}_{-0.041} \quad (+0.2\sigma)$	χ_{small}^2	$397.2 \quad (\nu: 1.9) \quad (+0.2\sigma)$
$A_{143}^{\mathrm{dustTE}}$	$0.22^{+0.11}_{-0.10}$	z_{drag}	$1059.89^{+0.69}_{-0.68} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.32 \quad (\nu: 0.3) \quad (-0.3\sigma)$
$A_{143 \times 217}^{\mathrm{dustTE}}$	$0.66^{+0.16}_{-0.16}$	r_{drag}	$147.25^{+0.46}_{-0.46} \quad (+0.1\sigma)$	χ_{plik}^2	$2359.4 \quad (\nu: 17.0) \quad (+275.1\sigma)$
$A_{217}^{\mathrm{dustTE}}$	$2.08^{+0.53}_{-0.51}$	k_{D}	$0.14080^{+0.00056}_{-0.00055} \quad (+0.4\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.7)$
c_{100}	$0.9997^{+0.0012}_{-0.0012} \quad (+0.1\sigma)$	$100\theta_{\mathrm{D}}$	$0.16066^{+0.00041}_{-0.00043} \quad (-0.6\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.055 \quad (\nu: 0.0)$
c_{217}	$0.9982^{+0.0012}_{-0.0012} \quad (-0.1\sigma)$	z_{eq}	$3386^{+41}_{-42} \quad (-0.5\sigma)$	χ_{MGS}^2	$1.24 \quad (\nu: 0.1)$
H_0	$67.64^{+0.83}_{-0.83} \quad (+0.7\sigma)$	k_{eq}	$0.01033^{+0.00013}_{-0.00013} \quad (-0.5\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.9 \quad (\nu: 0.9)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.6\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8163^{+0.0080}_{-0.0076} \quad (+0.6\sigma)$	χ_{prior}^2	$11.5 \quad (\nu: 10.1) \quad (+1.1\sigma)$
Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4509^{+0.0041}_{-0.0039} \quad (+0.5\sigma)$	χ_{CMB}^2	$2789.0 \quad (\nu: 17.3) \quad (+281.6\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1423^{+0.0017}_{-0.0018} \quad (-0.5\sigma)$	$H(0.15)$	$72.92^{+0.72}_{-0.72} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.2 \quad (\nu: 0.6)$
$\Omega_{\mathrm{m}}h^3$	$0.09627^{+0.00063}_{-0.00061} \quad (+0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.0^{+7.1}_{-7.1} \quad (-0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 2807.50; R - 1 = 0.02309$$

20.63 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{\mathrm{b}}h^2$	0.022378	$0.02228^{+0.00032}_{-0.00032}$ (+0.5 σ)	σ_8	0.8229	$0.808^{+0.015}_{-0.015}$ (−0.4 σ)	$100\theta_{\mathrm{s,eq}}$	0.4516	$0.4503^{+0.0061}_{-0.0060}$ (+0.4 σ)
$\Omega_{\mathrm{c}}h^2$	0.11902	$0.1196^{+0.0027}_{-0.0027}$ (−0.5 σ)	S_8	0.8360	$0.826^{+0.032}_{-0.032}$ (−0.5 σ)	$H(0.15)$	72.99	$72.7^{+1.1}_{-1.0}$ (+0.4 σ)
$100\theta_{\mathrm{MC}}$	1.04099	$1.04081^{+0.00068}_{-0.00068}$ (+0.0 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	0.4579	$0.453^{+0.017}_{-0.017}$ (−0.5 σ)	$D_{\mathrm{M}}(0.15)$	640.2	643^{+11}_{-11} (−0.4 σ)
τ	0.0706	$0.053^{+0.016}_{-0.016}$ (+0.1 σ)	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	0.6138	$0.605^{+0.016}_{-0.016}$ (−0.5 σ)	$H(0.38)$	83.07	$82.84^{+0.79}_{-0.75}$ (+0.4 σ)
Y_{P}	0.2447	$0.2438^{+0.0075}_{-0.0075}$ (−0.1 σ)	$\sigma_8/h^{0.5}$	0.9999	$0.984^{+0.023}_{-0.023}$ (−0.5 σ)	$D_{\mathrm{M}}(0.38)$	1527.4	1534^{+21}_{-21} (−0.4 σ)
$\ln(10^{10}A_{\mathrm{s}})$	3.0785	$3.038^{+0.032}_{-0.033}$ (−0.1 σ)	$r_{\mathrm{drag}}h$	99.79	$99.2^{+2.2}_{-2.1}$ (+0.4 σ)	$H(0.51)$	89.77	$89.58^{+0.63}_{-0.60}$ (+0.4 σ)
n_{s}	0.9681	$0.9651^{+0.0095}_{-0.0095}$ (+0.2 σ)	$\langle d^2 \rangle^{1/2}$	2.471	$2.434^{+0.056}_{-0.056}$ (−0.4 σ)	$D_{\mathrm{M}}(0.51)$	1978.9	1986^{+25}_{-25} (−0.4 σ)
y_{cal}	1.00295	$1.0004^{+0.0049}_{-0.0049}$ (−0.0 σ)	z_{re}	9.24	$7.5^{+1.5}_{-1.7}$ (+0.0 σ)	$H(0.61)$	95.38	$95.21^{+0.51}_{-0.49}$ (+0.4 σ)
A_{100}^{PS}	234.5	240^{+50}_{-50} (−0.9 σ)	$10^9 A_{\mathrm{s}}$	2.173	$2.086^{+0.069}_{-0.067}$ (−0.1 σ)	$D_{\mathrm{M}}(0.61)$	2302.9	2311^{+26}_{-27} (−0.4 σ)
A_{143}^{PS}	42.8	39^{+20}_{-20} (−1.1 σ)	$10^9 A_{\mathrm{s}}e^{-2\tau}$	1.8866	$1.877^{+0.023}_{-0.023}$ (−0.5 σ)	$H(2.33)$	235.93	$236.2^{+1.6}_{-1.6}$ (−0.4 σ)
A_{217}^{PS}	105.0	102^{+30}_{-30} (−1.2 σ)	D_{40}	1234.2	1227^{+27}_{-26} (−0.3 σ)	$D_{\mathrm{M}}(2.33)$	5760.1	5768^{+23}_{-24} (−0.4 σ)
A_{217}^{CIB}	40.7	40^{+10}_{-10} (−1.2 σ)	D_{220}	5753	5717^{+77}_{-78} (+0.1 σ)	$f\sigma_8(0.15)$	0.4627	$0.457^{+0.016}_{-0.016}$ (−0.5 σ)
A_{143}^{tSZ}	5.24	< 7.58 (−0.6 σ)	D_{810}	2548.6	2534^{+26}_{-26} (−0.2 σ)	$\sigma_8(0.15)$	0.7605	$0.746^{+0.013}_{-0.013}$ (−0.4 σ)
$r_{143\times 217}^{\mathrm{PS}}$	0.674	$0.66^{+0.25}_{-0.25}$	D_{1420}	821.0	$815.5^{+9.3}_{-9.4}$ (+0.2 σ)	$f\sigma_8(0.38)$	0.4818	$0.475^{+0.013}_{-0.013}$ (−0.5 σ)
$r_{143\times 217}^{\mathrm{CIB}}$	0.73	—	D_{2000}	232.37	$230.3^{+3.2}_{-3.3}$ (+0.3 σ)	$\sigma_8(0.38)$	0.6744	$0.661^{+0.011}_{-0.011}$ (−0.3 σ)
$\xi^{\mathrm{tSZ}\times\mathrm{CIB}}$	0.54	—	$n_{\mathrm{s},0.002}$	0.9681	$0.9651^{+0.0095}_{-0.0095}$ (+0.2 σ)	$f\sigma_8(0.51)$	0.4806	$0.473^{+0.012}_{-0.012}$ (−0.5 σ)
A^{kSZ}	1.7	—	Y_{P}	0.2447	$0.2438^{+0.0075}_{-0.0075}$ (−0.1 σ)	$\sigma_8(0.51)$	0.6312	$0.618^{+0.010}_{-0.010}$ (−0.3 σ)
A_{100}^{dust}	1.009	$1.01^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	0.2460	$0.2451^{+0.0075}_{-0.0075}$ (−0.1 σ)	$f\sigma_8(0.61)$	0.4756	$0.468^{+0.011}_{-0.011}$ (−0.5 σ)
A_{143}^{dust}	0.953	$0.96^{+0.34}_{-0.35}$	Age/Gyr	13.791	$13.808^{+0.052}_{-0.053}$ (−0.3 σ)	$\sigma_8(0.61)$	0.6006	$0.5884^{+0.0099}_{-0.0099}$ (−0.2 σ)
A_{217}^{dust}	0.981	$0.97^{+0.20}_{-0.20}$	z_*	1089.80	$1089.94^{+0.61}_{-0.58}$ (−0.6 σ)	$f\sigma_8(2.33)$	0.3029	$0.2966^{+0.0050}_{-0.0049}$ (−0.1 σ)
$A_{143\times 217}^{\mathrm{dust}}$	0.997	$1.03^{+0.33}_{-0.31}$	r_*	144.68	$144.61^{+0.63}_{-0.62}$ (+0.3 σ)	$\sigma_8(2.33)$	0.3124	$0.3056^{+0.0053}_{-0.0052}$ (−0.1 σ)
c_{100}	0.99773	$0.9975^{+0.0021}_{-0.0021}$ (−3.4 σ)	$100\theta_*$	1.04119	$1.04105^{+0.00061}_{-0.00061}$ (+0.1 σ)	f_{2000}^{143}	28.8	30^{+6}_{-6} (−0.5 σ)
c_{217}	1.00116	$1.0011^{+0.0031}_{-0.0031}$ (+4.6 σ)	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	13.896	$13.890^{+0.058}_{-0.058}$ (+0.3 σ)	f_{2000}^{217}	106.37	$106.8^{+3.8}_{-3.8}$ (−0.6 σ)
c_{TE}	0.9951	$0.9965^{+0.0096}_{-0.0097}$	z_{drag}	1059.86	$1059.64^{+0.75}_{-0.78}$ (+0.2 σ)	$f_{2000}^{143\times 217}$	31.21	32^{+4}_{-4} (−0.6 σ)
c_{EE}	0.9916	$0.992^{+0.010}_{-0.0097}$	r_{drag}	147.34	$147.30^{+0.62}_{-0.63}$ (+0.2 σ)	χ_{small}^2	402.51	396.9 (ν : 1.4) (+0.0 σ)
H_0	67.73	$67.4^{+1.2}_{-1.2}$ (+0.4 σ)	k_{D}	0.14064	$0.14064^{+0.00071}_{-0.00072}$ (+0.2 σ)	χ_{lowl}^2	23.31	23.3 (ν : 0.5) (−0.4 σ)
Ω_{Λ}	0.6903	$0.686^{+0.017}_{-0.017}$ (+0.4 σ)	$100\theta_{\mathrm{D}}$	0.160759	$0.16082^{+0.00048}_{-0.00046}$ (−0.4 σ)	$\chi_{\mathrm{CamSpec}}^2$	11498.1	11514.6 (ν : 15.7)
Ω_{m}	0.3097	$0.314^{+0.017}_{-0.017}$ (−0.4 σ)	z_{eq}	3379	3391^{+62}_{-62} (−0.4 σ)	χ_{Aver15}^2	0.08	0.9 (ν : 0.8)
$\Omega_{\mathrm{m}}h^2$	0.14204	$0.1425^{+0.0026}_{-0.0026}$ (−0.4 σ)	k_{eq}	0.010313	$0.01035^{+0.00019}_{-0.00019}$ (−0.4 σ)	χ_{prior}^2	3.4	7.8 (ν : 5.7) (+0.1 σ)
$\Omega_{\mathrm{m}}h^3$	0.09620	$0.09604^{+0.00067}_{-0.00065}$ (+0.2 σ)	$100\theta_{\mathrm{eq}}$	0.8175	$0.815^{+0.012}_{-0.012}$ (+0.4 σ)	χ_{CMB}^2	11923.9	11934.8 (ν : 16.1) (+1895.7 σ)

Best-fit $\chi_{\mathrm{eff}}^2 = 11927.35$; $\bar{\chi}_{\mathrm{eff}}^2 = 11943.52$; $R - 1 = 0.01118$

χ_{eff}^2 : Abund - Yp_Aver2015: 0.08 CMB - simall_100x143_offlike5_EE_Aplanck_B: 402.51 commander_dx12_v3.2_29: 23.31 CamSpec like_10.7HM_1400_unified: 11498.08

20.64 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02232^{+0.00030}_{-0.00029} \quad (+0.7\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.448^{+0.014}_{-0.013} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+16}_{-16} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1189^{+0.0020}_{-0.0020} \quad (-0.8\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.601^{+0.014}_{-0.013} \quad (-0.8\sigma)$	$H(0.51)$	$89.73^{+0.48}_{-0.46} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00063}_{-0.00064} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.979^{+0.021}_{-0.020} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+18}_{-18} \quad (-0.7\sigma)$
τ	$0.053^{+0.016}_{-0.015} \quad (+0.2\sigma)$	$r_{\mathrm{drag}}h$	$99.8^{+1.6}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$95.33^{+0.41}_{-0.39} \quad (+0.6\sigma)$
Y_{P}	$0.2439^{+0.0073}_{-0.0075} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.424^{+0.051}_{-0.047} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+20}_{-20} \quad (-0.7\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.038^{+0.033}_{-0.032} \quad (-0.1\sigma)$	z_{re}	$7.6^{+1.6}_{-1.6} \quad (+0.1\sigma)$	$H(2.33)$	$235.8^{+1.2}_{-1.2} \quad (-0.7\sigma)$
n_{s}	$0.9668^{+0.0081}_{-0.0082} \quad (+0.4\sigma)$	10^9A_{s}	$2.087^{+0.069}_{-0.065} \quad (-0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+18}_{-19} \quad (-0.5\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0048} \quad (+0.0\sigma)$	$10^9A_{\mathrm{s}}e^{-2\tau}$	$1.875^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.453^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1224^{+24}_{-25} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.745^{+0.013}_{-0.013} \quad (-0.5\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5721^{+77}_{-78} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2534^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.660^{+0.011}_{-0.011} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.0^{+9.1}_{-9.4} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.471^{+0.010}_{-0.0098} \quad (-0.8\sigma)$
A_{143}^{tSZ}	$< 7.53 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.1}_{-3.2} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.618^{+0.010}_{-0.010} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9668^{+0.0081}_{-0.0082} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4657^{+0.0096}_{-0.0092} \quad (-0.8\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2439^{+0.0073}_{-0.0075} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.588^{+0.010}_{-0.0096} \quad (-0.3\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2966^{+0.0051}_{-0.0048} \quad (-0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.798^{+0.042}_{-0.044} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3059^{+0.0053}_{-0.0050} \quad (+0.0\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	z_*	$1089.83^{+0.51}_{-0.50} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	r_*	$144.75^{+0.50}_{-0.49} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.6^{+3.9}_{-3.9} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04113^{+0.00057}_{-0.00058} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.30}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.903^{+0.047}_{-0.047} \quad (+0.6\sigma)$	χ_{small}^2	$397.0 \quad (\nu: 1.5) \quad (+0.0\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.70^{+0.73}_{-0.72} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.93 \quad (\nu: 0.4) \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	r_{drag}	$147.44^{+0.52}_{-0.52} \quad (+0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.7 \quad (\nu: 15.9)$
c_{TE}	$0.9966^{+0.0096}_{-0.0099}$	k_{D}	$0.14053^{+0.00064}_{-0.00067} \quad (+0.0\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
c_{EE}	$0.9922^{+0.010}_{-0.0099}$	$100\theta_{\mathrm{D}}$	$0.16080^{+0.00047}_{-0.00045} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.046 \quad (\nu: 0.0)$
H_0	$67.69^{+0.91}_{-0.89} \quad (+0.7\sigma)$	z_{eq}	$3375^{+46}_{-45} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.36 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.8\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00014} \quad (-0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.8)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8180^{+0.0088}_{-0.0085} \quad (+0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1419^{+0.0019}_{-0.0019} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4519^{+0.0045}_{-0.0044} \quad (+0.7\sigma)$	χ_{BAO}^2	$6.0 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}}h^3$	$0.09604^{+0.00068}_{-0.00064} \quad (+0.2\sigma)$	$H(0.15)$	$72.95^{+0.79}_{-0.77} \quad (+0.7\sigma)$	χ_{CMB}^2	$11934.6 \quad (\nu: 15.8) \quad (+1895.6\sigma)$
σ_8	$0.806^{+0.015}_{-0.014} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.6^{+7.7}_{-7.8} \quad (-0.7\sigma)$		
S_8	$0.819^{+0.026}_{-0.024} \quad (-0.8\sigma)$	$H(0.38)$	$83.03^{+0.60}_{-0.57} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.33; R - 1 = 0.01547$$

20.65 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00032}_{-0.00031} \quad (+0.5\sigma)$	S_8	$0.828^{+0.025}_{-0.026} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.6^{+9.4}_{-9.5} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1197^{+0.0024}_{-0.0024} \quad (-0.4\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$H(0.38)$	$82.81^{+0.71}_{-0.67} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04080^{+0.00067}_{-0.00067} \quad (-0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+19}_{-19} \quad (-0.4\sigma)$
τ	$0.053^{+0.015}_{-0.015} \quad (+0.2\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$H(0.51)$	$89.56^{+0.58}_{-0.55} \quad (+0.4\sigma)$
Y_{P}	$0.2437^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$r_{\mathrm{drag}} h$	$99.2^{+1.9}_{-1.8} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1987^{+22}_{-23} \quad (-0.4\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.040^{+0.029}_{-0.029} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.439^{+0.043}_{-0.044} \quad (-0.3\sigma)$	$H(0.61)$	$95.20^{+0.48}_{-0.45} \quad (+0.3\sigma)$
n_{s}	$0.9646^{+0.0088}_{-0.0091} \quad (+0.2\sigma)$	z_{re}	$7.6^{+1.4}_{-1.6} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(0.61)$	$2312^{+23}_{-24} \quad (-0.4\sigma)$
y_{cal}	$1.0005^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.091^{+0.061}_{-0.060} \quad (-0.0\sigma)$	$H(2.33)$	$236.3^{+1.5}_{-1.5} \quad (-0.3\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.8\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.878^{+0.022}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5769^{+22}_{-23} \quad (-0.3\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	D_{40}	$1229^{+25}_{-24} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5720^{+78}_{-78} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.010}_{-0.010} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{1420}	$815.6^{+9.4}_{-9.5} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6618^{+0.0095}_{-0.0095} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	D_{2000}	$230.3^{+3.2}_{-3.3} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4737^{+0.0091}_{-0.0092} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9646^{+0.0088}_{-0.0091} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6192^{+0.0089}_{-0.0089} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2437^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4685^{+0.0083}_{-0.0085} \quad (-0.4\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5891^{+0.0086}_{-0.0086} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	Age/Gyr	$13.809^{+0.049}_{-0.050} \quad (-0.3\sigma)$	$f\sigma_8(2.33)$	$0.2969^{+0.0046}_{-0.0045} \quad (-0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	z_*	$1089.95^{+0.57}_{-0.54} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3059^{+0.0049}_{-0.0049} \quad (+0.0\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.58^{+0.55}_{-0.55} \quad (+0.2\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.30}$	$100\theta_*$	$1.04103^{+0.00061}_{-0.00060} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.8^{+3.8}_{-3.9} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.888^{+0.051}_{-0.052} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.64^{+0.75}_{-0.78} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.28 \quad (\nu: 0.2)$
c_{TE}	$0.9964^{+0.0097}_{-0.0098}$	r_{drag}	$147.27^{+0.56}_{-0.56} \quad (+0.1\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.3) \quad (+0.0\sigma)$
c_{EE}	$0.9918^{+0.0098}_{-0.0098}$	k_{D}	$0.14067^{+0.00066}_{-0.00068} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.40 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$67.3^{+1.1}_{-1.1} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16081^{+0.00047}_{-0.00045} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.0 \quad (\nu: 14.8)$
Ω_{Λ}	$0.685^{+0.015}_{-0.015} \quad (+0.4\sigma)$	z_{eq}	$3393^{+55}_{-55} \quad (-0.4\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
Ω_{m}	$0.315^{+0.015}_{-0.015} \quad (-0.4\sigma)$	k_{eq}	$0.01036^{+0.00017}_{-0.00017} \quad (-0.4\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1426^{+0.0023}_{-0.0023} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.010}_{-0.010} \quad (+0.4\sigma)$	χ_{CMB}^2	$11943.6 \quad (\nu: 16.1) \quad (+1897.2\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09605^{+0.00067}_{-0.00064} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4501^{+0.0054}_{-0.0052} \quad (+0.4\sigma)$		
σ_8	$0.809^{+0.012}_{-0.012} \quad (-0.3\sigma)$	$H(0.15)$	$72.65^{+0.96}_{-0.92} \quad (+0.4\sigma)$		

$\bar{\chi}_{\mathrm{eff}}^2 = 11952.40; R - 1 = 0.01479$

20.66 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02232^{+0.00030}_{-0.00029} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.011} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+15}_{-15} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1191^{+0.0019}_{-0.0019} \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$H(0.51)$	$89.70^{+0.46}_{-0.44} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00064}_{-0.00064} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.982^{+0.017}_{-0.016} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+17}_{-18} \quad (-0.7\sigma)$
τ	$0.055^{+0.015}_{-0.014} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.5}_{-1.4} \quad (+0.7\sigma)$	$H(0.61)$	$95.31^{+0.40}_{-0.38} \quad (+0.6\sigma)$
Y_{P}	$0.2439^{+0.0073}_{-0.0075} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.432^{+0.041}_{-0.040} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+19}_{-19} \quad (-0.6\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.042^{+0.029}_{-0.028} \quad (+0.1\sigma)$	z_{re}	$7.7^{+1.4}_{-1.5} \quad (+0.3\sigma)$	$H(2.33)$	$235.9^{+1.2}_{-1.2} \quad (-0.6\sigma)$
n_{s}	$0.9663^{+0.0081}_{-0.0081} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.096^{+0.061}_{-0.059} \quad (+0.1\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+18}_{-19} \quad (-0.5\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.021}_{-0.020} \quad (-0.5\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1226^{+23}_{-23} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.011} \quad (-0.3\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+77}_{-77} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4733^{+0.0091}_{-0.0092} \quad (-0.7\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6619^{+0.0096}_{-0.0094} \quad (-0.2\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.2^{+9.1}_{-9.4} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4720^{+0.0083}_{-0.0083} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.6\sigma)$	D_{2000}	$230.5^{+3.1}_{-3.1} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6195^{+0.0090}_{-0.0088} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9663^{+0.0081}_{-0.0081} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4672^{+0.0077}_{-0.0077} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2439^{+0.0073}_{-0.0075} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5895^{+0.0087}_{-0.0084} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2452^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2973^{+0.0046}_{-0.0043} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.799^{+0.042}_{-0.044} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3065^{+0.0048}_{-0.0046} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	z_*	$1089.84^{+0.50}_{-0.48} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	r_*	$144.71^{+0.46}_{-0.45} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.6^{+3.8}_{-3.9} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.98^{+0.20}_{-0.21}$	$100\theta_*$	$1.04112^{+0.00058}_{-0.00057} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.30}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.043}_{-0.044} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.29 \quad (\nu: 0.3)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.71^{+0.76}_{-0.73} \quad (+0.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	r_{drag}	$147.40^{+0.48}_{-0.49} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.11 \quad (\nu: 0.3) \quad (-0.4\sigma)$
c_{TE}	$0.9965^{+0.0097}_{-0.0098}$	k_{D}	$0.14057^{+0.00062}_{-0.00064} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.1 \quad (\nu: 15.0)$
c_{EE}	$0.9921^{+0.0099}_{-0.0099}$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00047}_{-0.00044} \quad (-0.4\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
H_0	$67.63^{+0.87}_{-0.85} \quad (+0.7\sigma)$	z_{eq}	$3379^{+43}_{-43} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.050 \quad (\nu: 0.0)$
Ω_{Λ}	$0.689^{+0.011}_{-0.011} \quad (+0.7\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.29 \quad (\nu: 0.1)$
Ω_{m}	$0.311^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8174^{+0.0081}_{-0.0079} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0018}_{-0.0018} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4515^{+0.0042}_{-0.0041} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09606^{+0.00067}_{-0.00064} \quad (+0.2\sigma)$	$H(0.15)$	$72.90^{+0.76}_{-0.73} \quad (+0.7\sigma)$	χ_{CMB}^2	$11943.5 \quad (\nu: 15.9) \quad (+1897.2\sigma)$
σ_8	$0.808^{+0.012}_{-0.012} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.1^{+7.3}_{-7.4} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.1 \quad (\nu: 0.5)$
S_8	$0.822^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$83.00^{+0.57}_{-0.54} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.34; R - 1 = 0.01579$$

20.67 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02228^{+0.00032}_{-0.00032} \quad (+0.5\sigma)$	σ_8	$0.809^{+0.014}_{-0.013} \quad (-0.3\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4505^{+0.0061}_{-0.0059} \quad (+0.4\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1196^{+0.0027}_{-0.0027} \quad (-0.5\sigma)$	S_8	$0.827^{+0.031}_{-0.032} \quad (-0.5\sigma)$	$H(0.15)$	$72.7^{+1.1}_{-1.0} \quad (+0.5\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04082^{+0.00069}_{-0.00068} \quad (+0.0\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.453^{+0.017}_{-0.017} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$643^{+10}_{-11} \quad (-0.5\sigma)$
τ	$0.054^{+0.013}_{-0.011} \quad (+0.3\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.605^{+0.016}_{-0.016} \quad (-0.5\sigma)$	$H(0.38)$	$82.85^{+0.79}_{-0.74} \quad (+0.4\sigma)$
Y_{P}	$0.2438^{+0.0075}_{-0.0075} \quad (-0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.985^{+0.023}_{-0.022} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.38)$	$1533^{+21}_{-21} \quad (-0.5\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.026} \quad (+0.0\sigma)$	$r_{\mathrm{drag}} h$	$99.3^{+2.2}_{-2.1} \quad (+0.4\sigma)$	$H(0.51)$	$89.59^{+0.63}_{-0.59} \quad (+0.4\sigma)$
n_{s}	$0.9653^{+0.0094}_{-0.0094} \quad (+0.2\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.437^{+0.055}_{-0.055} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+24}_{-25} \quad (-0.5\sigma)$
y_{cal}	$1.0004^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	z_{re}	$< 8.84 \quad (+0.2\sigma)$	$H(0.61)$	$95.23^{+0.52}_{-0.48} \quad (+0.4\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.058}_{-0.054} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(0.61)$	$2310^{+26}_{-27} \quad (-0.5\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.877^{+0.023}_{-0.023} \quad (-0.5\sigma)$	$H(2.33)$	$236.2^{+1.6}_{-1.6} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{40}	$1227^{+27}_{-26} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(2.33)$	$5768^{+23}_{-23} \quad (-0.4\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{220}	$5717^{+78}_{-78} \quad (+0.1\sigma)$	$f\sigma_8(0.15)$	$0.457^{+0.016}_{-0.016} \quad (-0.5\sigma)$
A_{143}^{tSZ}	$< 7.58 \quad (-0.6\sigma)$	D_{810}	$2534^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.012}_{-0.011} \quad (-0.3\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.25}_{-0.25}$	D_{1420}	$815.5^{+9.3}_{-9.4} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.475^{+0.013}_{-0.013} \quad (-0.5\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	D_{2000}	$230.3^{+3.2}_{-3.2} \quad (+0.4\sigma)$	$\sigma_8(0.38)$	$0.662^{+0.010}_{-0.0096} \quad (-0.2\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9653^{+0.0094}_{-0.0094} \quad (+0.2\sigma)$	$f\sigma_8(0.51)$	$0.473^{+0.011}_{-0.012} \quad (-0.5\sigma)$
A^{kSZ}	—	Y_{P}	$0.2438^{+0.0075}_{-0.0075} \quad (-0.1\sigma)$	$\sigma_8(0.51)$	$0.6194^{+0.0092}_{-0.0088} \quad (-0.1\sigma)$
A_{100}^{dust}	$1.01^{+0.38}_{-0.38}$	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2451^{+0.0076}_{-0.0075} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.468^{+0.010}_{-0.010} \quad (-0.4\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	Age/Gyr	$13.807^{+0.051}_{-0.052} \quad (-0.4\sigma)$	$\sigma_8(0.61)$	$0.5893^{+0.0087}_{-0.0082} \quad (-0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	z_*	$1089.93^{+0.60}_{-0.58} \quad (-0.6\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0043}_{-0.0040} \quad (-0.0\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.31}$	r_*	$144.62^{+0.62}_{-0.62} \quad (+0.3\sigma)$	$\sigma_8(2.33)$	$0.3061^{+0.0046}_{-0.0042} \quad (+0.1\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$100\theta_*$	$1.04105^{+0.00062}_{-0.00061} \quad (+0.1\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.6\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.891^{+0.058}_{-0.057} \quad (+0.3\sigma)$	f_{2000}^{217}	$106.7^{+3.8}_{-3.8} \quad (-0.6\sigma)$
c_{TE}	$0.9964^{+0.0096}_{-0.0097}$	z_{drag}	$1059.65^{+0.78}_{-0.75} \quad (+0.2\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
c_{EE}	$0.9918^{+0.010}_{-0.0097}$	r_{drag}	$147.31^{+0.62}_{-0.63} \quad (+0.2\sigma)$	χ_{small}^2	$396.8 \quad (\nu: 1.4) \quad (-0.1\sigma)$
H_0	$67.4^{+1.3}_{-1.2} \quad (+0.5\sigma)$	k_{D}	$0.14063^{+0.00071}_{-0.00073} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.3 \quad (\nu: 0.5) \quad (-0.4\sigma)$
Ω_{Λ}	$0.686^{+0.017}_{-0.017} \quad (+0.5\sigma)$	$100\theta_{\mathrm{D}}$	$0.16081^{+0.00047}_{-0.00046} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.4 \quad (\nu: 15.6)$
Ω_{m}	$0.314^{+0.017}_{-0.017} \quad (-0.5\sigma)$	z_{eq}	$3390^{+61}_{-62} \quad (-0.4\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1425^{+0.0026}_{-0.0026} \quad (-0.4\sigma)$	k_{eq}	$0.01035^{+0.00019}_{-0.00019} \quad (-0.4\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.6) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09604^{+0.00067}_{-0.00066} \quad (+0.2\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.012}_{-0.011} \quad (+0.5\sigma)$	χ_{CMB}^2	$11934.5 \quad (\nu: 15.7) \quad (+1895.6\sigma)$
$\bar{\chi}_{\mathrm{eff}}^2 = 11943.23; R - 1 = 0.01041$					

20.68 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00030}_{-0.00030} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.449^{+0.014}_{-0.013} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.38)$	$1528^{+16}_{-16} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1189^{+0.0020}_{-0.0020} \quad (-0.8\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.602^{+0.014}_{-0.013} \quad (-0.8\sigma)$	$H(0.51)$	$89.73^{+0.48}_{-0.46} \quad (+0.7\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04091^{+0.00064}_{-0.00064} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.980^{+0.020}_{-0.018} \quad (-0.8\sigma)$	$D_{\mathrm{M}}(0.51)$	$1980^{+18}_{-18} \quad (-0.7\sigma)$
τ	$0.055^{+0.013}_{-0.012} \quad (+0.4\sigma)$	$r_{\mathrm{drag}} h$	$99.8^{+1.6}_{-1.5} \quad (+0.7\sigma)$	$H(0.61)$	$95.33^{+0.41}_{-0.39} \quad (+0.6\sigma)$
Y_{P}	$0.2440^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.427^{+0.049}_{-0.046} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.61)$	$2304^{+20}_{-20} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.041^{+0.028}_{-0.026} \quad (+0.0\sigma)$	z_{re}	$< 8.89 \quad (+0.3\sigma)$	$H(2.33)$	$235.8^{+1.2}_{-1.2} \quad (-0.7\sigma)$
n_{s}	$0.9670^{+0.0081}_{-0.0082} \quad (+0.4\sigma)$	$10^9 A_{\mathrm{s}}$	$2.092^{+0.059}_{-0.055} \quad (+0.0\sigma)$	$D_{\mathrm{M}}(2.33)$	$5763^{+19}_{-19} \quad (-0.6\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0048} \quad (-0.0\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.874^{+0.022}_{-0.022} \quad (-0.7\sigma)$	$f\sigma_8(0.15)$	$0.454^{+0.013}_{-0.013} \quad (-0.8\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1224^{+25}_{-25} \quad (-0.4\sigma)$	$\sigma_8(0.15)$	$0.746^{+0.012}_{-0.011} \quad (-0.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5721^{+78}_{-78} \quad (+0.2\sigma)$	$f\sigma_8(0.38)$	$0.472^{+0.011}_{-0.011} \quad (-0.8\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2534^{+26}_{-26} \quad (-0.2\sigma)$	$\sigma_8(0.38)$	$0.661^{+0.010}_{-0.0096} \quad (-0.3\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$815.9^{+9.2}_{-9.4} \quad (+0.3\sigma)$	$f\sigma_8(0.51)$	$0.4711^{+0.0099}_{-0.0095} \quad (-0.7\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{2000}	$230.4^{+3.2}_{-3.2} \quad (+0.4\sigma)$	$\sigma_8(0.51)$	$0.6189^{+0.0094}_{-0.0088} \quad (-0.2\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.26}$	$n_{\mathrm{s},0.002}$	$0.9670^{+0.0081}_{-0.0082} \quad (+0.4\sigma)$	$f\sigma_8(0.61)$	$0.4663^{+0.0092}_{-0.0086} \quad (-0.7\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2440^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5889^{+0.0089}_{-0.0083} \quad (-0.1\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2453^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2970^{+0.0044}_{-0.0041} \quad (-0.0\sigma)$
A^{kSZ}	—	Age/Gyr	$13.797^{+0.042}_{-0.044} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0046}_{-0.0043} \quad (+0.1\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.38}$	z_*	$1089.82^{+0.51}_{-0.50} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{143}^{dust}	$0.97^{+0.35}_{-0.35}$	r_*	$144.76^{+0.50}_{-0.49} \quad (+0.6\sigma)$	f_{2000}^{217}	$106.6^{+3.9}_{-3.9} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04113^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.31}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.904^{+0.047}_{-0.047} \quad (+0.6\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.5) \quad (-0.0\sigma)$
c_{100}	$0.9975^{+0.0020}_{-0.0021} \quad (-3.4\sigma)$	z_{drag}	$1059.71^{+0.76}_{-0.73} \quad (+0.2\sigma)$	χ_{lowl}^2	$22.95 \quad (\nu: 0.4) \quad (-0.5\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	r_{drag}	$147.44^{+0.52}_{-0.52} \quad (+0.5\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.5 \quad (\nu: 15.8)$
c_{TE}	$0.9965^{+0.0095}_{-0.0099}$	k_{D}	$0.14052^{+0.00064}_{-0.00067} \quad (+0.0\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
c_{EE}	$0.9922^{+0.0099}_{-0.0099}$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00047}_{-0.00045} \quad (-0.4\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.044 \quad (\nu: 0.0)$
H_0	$67.71^{+0.91}_{-0.90} \quad (+0.7\sigma)$	z_{eq}	$3375^{+46}_{-45} \quad (-0.8\sigma)$	χ_{MGS}^2	$1.37 \quad (\nu: 0.1)$
Ω_{Λ}	$0.690^{+0.012}_{-0.012} \quad (+0.8\sigma)$	k_{eq}	$0.01030^{+0.00014}_{-0.00014} \quad (-0.8\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.6 \quad (\nu: 0.8)$
Ω_{m}	$0.310^{+0.012}_{-0.012} \quad (-0.8\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8182^{+0.0089}_{-0.0085} \quad (+0.8\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^2$	$0.1419^{+0.0019}_{-0.0019} \quad (-0.8\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4520^{+0.0046}_{-0.0044} \quad (+0.8\sigma)$	χ_{BAO}^2	$5.97 \quad (\nu: 0.5)$
$\Omega_{\mathrm{m}} h^3$	$0.09605^{+0.00068}_{-0.00064} \quad (+0.2\sigma)$	$H(0.15)$	$72.97^{+0.79}_{-0.77} \quad (+0.7\sigma)$	χ_{CMB}^2	$11934.4 \quad (\nu: 15.6) \quad (+1895.6\sigma)$
σ_8	$0.807^{+0.013}_{-0.013} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.15)$	$640.5^{+7.7}_{-7.7} \quad (-0.7\sigma)$		
S_8	$0.819^{+0.025}_{-0.024} \quad (-0.8\sigma)$	$H(0.38)$	$83.04^{+0.60}_{-0.57} \quad (+0.7\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11949.07; R - 1 = 0.01536$$

20.69 base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_lensing_zre6p5

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}}h^2$	$0.02228^{+0.00032}_{-0.00031} \quad (+0.5\sigma)$	S_8	$0.828^{+0.025}_{-0.026} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.15)$	$643.3^{+8.8}_{-9.3} \quad (-0.4\sigma)$
$\Omega_{\mathrm{c}}h^2$	$0.1196^{+0.0023}_{-0.0024} \quad (-0.5\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.5}$	$0.454^{+0.014}_{-0.014} \quad (-0.4\sigma)$	$H(0.38)$	$82.83^{+0.71}_{-0.65} \quad (+0.4\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04081^{+0.00068}_{-0.00066} \quad (+0.0\sigma)$	$\sigma_8\Omega_{\mathrm{m}}^{0.25}$	$0.606^{+0.013}_{-0.013} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(0.38)$	$1534^{+18}_{-19} \quad (-0.4\sigma)$
τ	$0.055^{+0.013}_{-0.011} \quad (+0.4\sigma)$	$\sigma_8/h^{0.5}$	$0.986^{+0.018}_{-0.018} \quad (-0.4\sigma)$	$H(0.51)$	$89.58^{+0.57}_{-0.52} \quad (+0.4\sigma)$
Y_{P}	$0.2437^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$r_{\mathrm{drag}}h$	$99.2^{+1.9}_{-1.8} \quad (+0.4\sigma)$	$D_{\mathrm{M}}(0.51)$	$1986^{+21}_{-22} \quad (-0.4\sigma)$
$\ln(10^{10}A_{\mathrm{s}})$	$3.042^{+0.026}_{-0.024} \quad (+0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.441^{+0.043}_{-0.043} \quad (-0.3\sigma)$	$H(0.61)$	$95.21^{+0.47}_{-0.44} \quad (+0.4\sigma)$
n_{s}	$0.9649^{+0.0088}_{-0.0087} \quad (+0.2\sigma)$	z_{re}	$< 8.86 \quad (+0.3\sigma)$	$D_{\mathrm{M}}(0.61)$	$2311^{+22}_{-24} \quad (-0.4\sigma)$
y_{cal}	$1.0004^{+0.0048}_{-0.0049} \quad (+0.0\sigma)$	$10^9 A_{\mathrm{s}}$	$2.095^{+0.054}_{-0.050} \quad (+0.1\sigma)$	$H(2.33)$	$236.2^{+1.4}_{-1.4} \quad (-0.4\sigma)$
A_{100}^{PS}	$240^{+50}_{-50} \quad (-0.9\sigma)$	$10^9 A_{\mathrm{s}}e^{-2\tau}$	$1.878^{+0.021}_{-0.021} \quad (-0.4\sigma)$	$D_{\mathrm{M}}(2.33)$	$5768^{+21}_{-22} \quad (-0.4\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.1\sigma)$	D_{40}	$1229^{+25}_{-24} \quad (-0.2\sigma)$	$f\sigma_8(0.15)$	$0.458^{+0.013}_{-0.013} \quad (-0.4\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{220}	$5720^{+78}_{-78} \quad (+0.2\sigma)$	$\sigma_8(0.15)$	$0.748^{+0.010}_{-0.0096} \quad (-0.2\sigma)$
A_{217}^{CIB}	$40^{+10}_{-10} \quad (-1.2\sigma)$	D_{810}	$2534^{+26}_{-26} \quad (-0.1\sigma)$	$f\sigma_8(0.38)$	$0.476^{+0.010}_{-0.010} \quad (-0.4\sigma)$
A_{143}^{tSZ}	$< 7.52 \quad (-0.6\sigma)$	D_{1420}	$815.6^{+9.3}_{-9.5} \quad (+0.2\sigma)$	$\sigma_8(0.38)$	$0.6624^{+0.0090}_{-0.0081} \quad (-0.1\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	D_{2000}	$230.3^{+3.2}_{-3.3} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4740^{+0.0090}_{-0.0090} \quad (-0.4\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	$n_{\mathrm{s},0.002}$	$0.9649^{+0.0088}_{-0.0087} \quad (+0.2\sigma)$	$\sigma_8(0.51)$	$0.6198^{+0.0081}_{-0.0079} \quad (-0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	Y_{P}	$0.2437^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$f\sigma_8(0.61)$	$0.4688^{+0.0081}_{-0.0082} \quad (-0.4\sigma)$
A^{kSZ}	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2450^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5897^{+0.0078}_{-0.0075} \quad (-0.0\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	Age/Gyr	$13.808^{+0.048}_{-0.050} \quad (-0.4\sigma)$	$f\sigma_8(2.33)$	$0.2972^{+0.0040}_{-0.0038} \quad (+0.0\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	z_*	$1089.93^{+0.56}_{-0.54} \quad (-0.6\sigma)$	$\sigma_8(2.33)$	$0.3063^{+0.0044}_{-0.0041} \quad (+0.1\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.20}$	r_*	$144.60^{+0.53}_{-0.53} \quad (+0.3\sigma)$	f_{2000}^{143}	$30^{+6}_{-6} \quad (-0.5\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.30}$	$100\theta_*$	$1.04104^{+0.00061}_{-0.00059} \quad (+0.1\sigma)$	f_{2000}^{217}	$106.7^{+3.7}_{-3.8} \quad (-0.6\sigma)$
c_{100}	$0.9975^{+0.0021}_{-0.0020} \quad (-3.4\sigma)$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.890^{+0.050}_{-0.050} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.6\sigma)$
c_{217}	$1.0011^{+0.0032}_{-0.0031} \quad (+4.6\sigma)$	z_{drag}	$1059.65^{+0.78}_{-0.75} \quad (+0.2\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.23 \quad (\nu: 0.2)$
c_{TE}	$0.9964^{+0.0096}_{-0.0097}$	r_{drag}	$147.29^{+0.55}_{-0.54} \quad (+0.2\sigma)$	χ_{small}^2	$396.9 \quad (\nu: 1.4) \quad (-0.0\sigma)$
c_{EE}	$0.9918^{+0.0098}_{-0.0098}$	k_{D}	$0.14066^{+0.00066}_{-0.00068} \quad (+0.2\sigma)$	χ_{lowl}^2	$23.38 \quad (\nu: 0.4) \quad (-0.3\sigma)$
H_0	$67.4^{+1.1}_{-1.0} \quad (+0.4\sigma)$	$100\theta_{\mathrm{D}}$	$0.16081^{+0.00047}_{-0.00045} \quad (-0.4\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11513.9 \quad (\nu: 14.7)$
Ω_{Λ}	$0.686^{+0.015}_{-0.014} \quad (+0.4\sigma)$	z_{eq}	$3392^{+53}_{-54} \quad (-0.4\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
Ω_{m}	$0.314^{+0.014}_{-0.015} \quad (-0.4\sigma)$	k_{eq}	$0.01035^{+0.00016}_{-0.00016} \quad (-0.4\sigma)$	χ_{prior}^2	$7.9 \quad (\nu: 5.7) \quad (+0.2\sigma)$
$\Omega_{\mathrm{m}}h^2$	$0.1426^{+0.0022}_{-0.0023} \quad (-0.4\sigma)$	$100\theta_{\mathrm{eq}}$	$0.815^{+0.010}_{-0.0098} \quad (+0.4\sigma)$	χ_{CMB}^2	$11943.4 \quad (\nu: 15.7) \quad (+1897.2\sigma)$
$\Omega_{\mathrm{m}}h^3$	$0.09605^{+0.00067}_{-0.00064} \quad (+0.2\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4503^{+0.0053}_{-0.0051} \quad (+0.4\sigma)$		
σ_8	$0.809^{+0.011}_{-0.011} \quad (-0.2\sigma)$	$H(0.15)$	$72.68^{+0.95}_{-0.88} \quad (+0.4\sigma)$		

 $\bar{\chi}_{\mathrm{eff}}^2 = 11952.14; R - 1 = 0.01491$

20.70 **base_yhe_CamSpecHM_TTTEEE_lowl_lowE_Aver15_post_BAO_lensing_zre6p5**

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{\mathrm{b}} h^2$	$0.02233^{+0.00030}_{-0.00029} \quad (+0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.5}$	$0.450^{+0.012}_{-0.011} \quad (-0.7\sigma)$	$D_{\mathrm{M}}(0.38)$	$1529^{+15}_{-15} \quad (-0.7\sigma)$
$\Omega_{\mathrm{c}} h^2$	$0.1190^{+0.0019}_{-0.0018} \quad (-0.7\sigma)$	$\sigma_8 \Omega_{\mathrm{m}}^{0.25}$	$0.603^{+0.011}_{-0.011} \quad (-0.6\sigma)$	$H(0.51)$	$89.71^{+0.46}_{-0.44} \quad (+0.6\sigma)$
$100\theta_{\mathrm{MC}}$	$1.04089^{+0.00064}_{-0.00064} \quad (+0.1\sigma)$	$\sigma_8/h^{0.5}$	$0.983^{+0.016}_{-0.016} \quad (-0.6\sigma)$	$D_{\mathrm{M}}(0.51)$	$1981^{+17}_{-18} \quad (-0.7\sigma)$
τ	$0.056^{+0.013}_{-0.012} \quad (+0.5\sigma)$	$r_{\mathrm{drag}} h$	$99.7^{+1.5}_{-1.4} \quad (+0.7\sigma)$	$H(0.61)$	$95.32^{+0.40}_{-0.38} \quad (+0.6\sigma)$
Y_{P}	$0.2439^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$\langle d^2 \rangle^{1/2}$	$2.433^{+0.040}_{-0.039} \quad (-0.5\sigma)$	$D_{\mathrm{M}}(0.61)$	$2305^{+18}_{-19} \quad (-0.7\sigma)$
$\ln(10^{10} A_{\mathrm{s}})$	$3.044^{+0.026}_{-0.025} \quad (+0.2\sigma)$	z_{re}	$7.8^{+1.2}_{-1.3} \quad (+0.4\sigma)$	$H(2.33)$	$235.9^{+1.1}_{-1.2} \quad (-0.7\sigma)$
n_{s}	$0.9664^{+0.0080}_{-0.0080} \quad (+0.3\sigma)$	$10^9 A_{\mathrm{s}}$	$2.099^{+0.055}_{-0.052} \quad (+0.2\sigma)$	$D_{\mathrm{M}}(2.33)$	$5764^{+18}_{-19} \quad (-0.5\sigma)$
y_{cal}	$1.0006^{+0.0048}_{-0.0048} \quad (+0.1\sigma)$	$10^9 A_{\mathrm{s}} e^{-2\tau}$	$1.876^{+0.021}_{-0.020} \quad (-0.6\sigma)$	$f\sigma_8(0.15)$	$0.455^{+0.011}_{-0.011} \quad (-0.7\sigma)$
A_{100}^{PS}	$239^{+50}_{-50} \quad (-0.9\sigma)$	D_{40}	$1226^{+23}_{-23} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	$0.747^{+0.011}_{-0.0098} \quad (-0.2\sigma)$
A_{143}^{PS}	$39^{+20}_{-20} \quad (-1.2\sigma)$	D_{220}	$5725^{+77}_{-77} \quad (+0.3\sigma)$	$f\sigma_8(0.38)$	$0.4735^{+0.0090}_{-0.0090} \quad (-0.6\sigma)$
A_{217}^{PS}	$102^{+30}_{-30} \quad (-1.2\sigma)$	D_{810}	$2535^{+26}_{-26} \quad (-0.1\sigma)$	$\sigma_8(0.38)$	$0.6623^{+0.0089}_{-0.0088} \quad (-0.1\sigma)$
A_{217}^{CIB}	$39^{+10}_{-10} \quad (-1.3\sigma)$	D_{1420}	$816.2^{+9.2}_{-9.4} \quad (+0.4\sigma)$	$f\sigma_8(0.51)$	$0.4723^{+0.0081}_{-0.0081} \quad (-0.6\sigma)$
A_{143}^{tSZ}	$< 7.51 \quad (-0.6\sigma)$	D_{2000}	$230.5^{+3.1}_{-3.1} \quad (+0.5\sigma)$	$\sigma_8(0.51)$	$0.6199^{+0.0084}_{-0.0082} \quad (-0.0\sigma)$
$r_{143 \times 217}^{\mathrm{PS}}$	$0.66^{+0.26}_{-0.25}$	$n_{\mathrm{s},0.002}$	$0.9664^{+0.0080}_{-0.0080} \quad (+0.3\sigma)$	$f\sigma_8(0.61)$	$0.4674^{+0.0076}_{-0.0075} \quad (-0.6\sigma)$
$r_{143 \times 217}^{\mathrm{CIB}}$	—	Y_{P}	$0.2439^{+0.0074}_{-0.0074} \quad (-0.1\sigma)$	$\sigma_8(0.61)$	$0.5899^{+0.0080}_{-0.0078} \quad (+0.0\sigma)$
$\xi^{\mathrm{tSZ} \times \mathrm{CIB}}$	—	$Y_{\mathrm{P}}^{\mathrm{BBN}}$	$0.2452^{+0.0074}_{-0.0075} \quad (-0.1\sigma)$	$f\sigma_8(2.33)$	$0.2975^{+0.0041}_{-0.0040} \quad (+0.1\sigma)$
A^{kSZ}	—	Age/Gyr	$13.799^{+0.042}_{-0.044} \quad (-0.5\sigma)$	$\sigma_8(2.33)$	$0.3067^{+0.0044}_{-0.0042} \quad (+0.2\sigma)$
A_{100}^{dust}	$1.00^{+0.38}_{-0.39}$	z_*	$1089.84^{+0.50}_{-0.47} \quad (-0.8\sigma)$	f_{2000}^{143}	$29^{+6}_{-6} \quad (-0.5\sigma)$
A_{143}^{dust}	$0.96^{+0.34}_{-0.35}$	r_*	$144.72^{+0.45}_{-0.45} \quad (+0.5\sigma)$	f_{2000}^{217}	$106.6^{+3.8}_{-3.9} \quad (-0.6\sigma)$
A_{217}^{dust}	$0.97^{+0.20}_{-0.21}$	$100\theta_*$	$1.04112^{+0.00058}_{-0.00058} \quad (+0.3\sigma)$	$f_{2000}^{143 \times 217}$	$32^{+4}_{-4} \quad (-0.7\sigma)$
$A_{143 \times 217}^{\mathrm{dust}}$	$1.03^{+0.33}_{-0.30}$	$D_{\mathrm{M}}(z_*)/\mathrm{Gpc}$	$13.900^{+0.042}_{-0.044} \quad (+0.5\sigma)$	$\chi_{\mathrm{lensing}}^2$	$9.23 \quad (\nu: 0.2)$
c_{100}	$0.9975^{+0.0021}_{-0.0021} \quad (-3.3\sigma)$	z_{drag}	$1059.71^{+0.75}_{-0.74} \quad (+0.2\sigma)$	χ_{small}^2	$397.1 \quad (\nu: 1.6) \quad (+0.1\sigma)$
c_{217}	$1.0011^{+0.0031}_{-0.0031} \quad (+4.5\sigma)$	r_{drag}	$147.40^{+0.48}_{-0.49} \quad (+0.4\sigma)$	χ_{lowl}^2	$23.11 \quad (\nu: 0.3) \quad (-0.4\sigma)$
c_{TE}	$0.9964^{+0.0096}_{-0.0097}$	k_{D}	$0.14056^{+0.00062}_{-0.00065} \quad (+0.1\sigma)$	$\chi_{\mathrm{CamSpec}}^2$	$11514.0 \quad (\nu: 14.9)$
c_{EE}	$0.9921^{+0.0099}_{-0.0099}$	$100\theta_{\mathrm{D}}$	$0.16079^{+0.00047}_{-0.00044} \quad (-0.4\sigma)$	χ_{Aver15}^2	$0.9 \quad (\nu: 0.8)$
H_0	$67.65^{+0.88}_{-0.84} \quad (+0.7\sigma)$	z_{eq}	$3378^{+42}_{-42} \quad (-0.7\sigma)$	$\chi_{6\mathrm{DF}}^2$	$0.048 \quad (\nu: 0.0)$
Ω_{Λ}	$0.690^{+0.011}_{-0.011} \quad (+0.7\sigma)$	k_{eq}	$0.01031^{+0.00013}_{-0.00013} \quad (-0.7\sigma)$	χ_{MGS}^2	$1.30 \quad (\nu: 0.1)$
Ω_{m}	$0.310^{+0.011}_{-0.011} \quad (-0.7\sigma)$	$100\theta_{\mathrm{eq}}$	$0.8175^{+0.0080}_{-0.0078} \quad (+0.7\sigma)$	$\chi_{\mathrm{DR12BAO}}^2$	$4.7 \quad (\nu: 0.8)$
$\Omega_{\mathrm{m}} h^2$	$0.1420^{+0.0018}_{-0.0018} \quad (-0.7\sigma)$	$100\theta_{\mathrm{s,eq}}$	$0.4516^{+0.0041}_{-0.0040} \quad (+0.7\sigma)$	χ_{prior}^2	$7.8 \quad (\nu: 5.8) \quad (+0.1\sigma)$
$\Omega_{\mathrm{m}} h^3$	$0.09606^{+0.00067}_{-0.00064} \quad (+0.2\sigma)$	$H(0.15)$	$72.91^{+0.76}_{-0.73} \quad (+0.7\sigma)$	χ_{CMB}^2	$11943.4 \quad (\nu: 15.6) \quad (+1897.2\sigma)$
σ_8	$0.808^{+0.012}_{-0.011} \quad (-0.3\sigma)$	$D_{\mathrm{M}}(0.15)$	$641.0^{+7.3}_{-7.4} \quad (-0.7\sigma)$	χ_{BAO}^2	$6.02 \quad (\nu: 0.5)$
S_8	$0.822^{+0.021}_{-0.021} \quad (-0.7\sigma)$	$H(0.38)$	$83.00^{+0.57}_{-0.54} \quad (+0.6\sigma)$		

$$\bar{\chi}_{\mathrm{eff}}^2 = 11958.15; R - 1 = 0.01663$$

20.71 base_yhe_CleanedCamSpecHM_TT_lowl_lowE

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_b h^2$	0.02214	$0.02212^{+0.00060}_{-0.00058} \quad (-0.0\sigma)$	$\sigma_8 \Omega_m^{0.25}$	0.6098	$0.608^{+0.024}_{-0.023} \quad (-0.2\sigma)$	$H(0.15)$	72.42	$72.4^{+2.0}_{-1.9} \quad (+0.1\sigma)$
$\Omega_c h^2$	0.12037	$0.1203^{+0.0044}_{-0.0042} \quad (-0.2\sigma)$	$\sigma_8/h^{0.5}$	0.9914	$0.989^{+0.032}_{-0.032} \quad (-0.2\sigma)$	$D_M(0.15)$	645.9	$646^{+20}_{-19} \quad (-0.1\sigma)$
$100\theta_{MC}$	1.04103	$1.0408^{+0.0018}_{-0.0018} \quad (+0.0\sigma)$	$r_{drag} h$	98.75	$98.7^{+3.6}_{-3.6} \quad (+0.1\sigma)$	$H(0.38)$	82.64	$82.6^{+1.5}_{-1.5} \quad (+0.1\sigma)$
τ	0.0524	$0.052^{+0.016}_{-0.016} \quad (+0.0\sigma)$	$\langle d^2 \rangle^{1/2}$	2.446	$2.447^{+0.087}_{-0.085} \quad (-0.1\sigma)$	$D_M(0.38)$	1538.8	$1540^{+40}_{-39} \quad (-0.1\sigma)$
Y_P	0.2526	$0.246^{+0.042}_{-0.042} \quad (-0.0\sigma)$	z_{re}	7.57	$7.5^{+1.6}_{-1.7} \quad (+0.0\sigma)$	$H(0.51)$	89.43	$89.4^{+1.3}_{-1.2} \quad (+0.1\sigma)$
$\ln(10^{10} A_s)$	3.0406	$3.038^{+0.035}_{-0.035} \quad (-0.1\sigma)$	$10^9 A_s$	2.092	$2.087^{+0.074}_{-0.072} \quad (-0.1\sigma)$	$D_M(0.51)$	1992.4	$1994^{+47}_{-46} \quad (-0.1\sigma)$
n_s	0.9647	$0.963^{+0.022}_{-0.022} \quad (-0.0\sigma)$	$10^9 A_s e^{-2\tau}$	1.8836	$1.880^{+0.031}_{-0.031} \quad (-0.3\sigma)$	$H(0.61)$	95.10	$95.1^{+1.1}_{-1.0} \quad (+0.1\sigma)$
y_{cal}	1.00040	$1.0004^{+0.0049}_{-0.0048} \quad (-0.0\sigma)$	D_{40}	1228.5	$1231^{+44}_{-43} \quad (-0.1\sigma)$	$D_M(0.61)$	2318	$2319^{+51}_{-50} \quad (-0.1\sigma)$
A_{100}^{PS}	260	$257^{+60}_{-60} \quad (-0.3\sigma)$	D_{220}	5706	$5707^{+80}_{-80} \quad (-0.1\sigma)$	$H(2.33)$	236.58	$236.5^{+2.6}_{-2.4} \quad (-0.2\sigma)$
A_{143}^{tSZ}	6.00	$< 7.55 \quad (-0.6\sigma)$	D_{810}	2532.5	$2531^{+28}_{-28} \quad (-0.4\sigma)$	$D_M(2.33)$	5773	$5776^{+50}_{-52} \quad (-0.0\sigma)$
A^{kSZ}	0.6	—	D_{1420}	811.5	$812^{+11}_{-11} \quad (-0.4\sigma)$	$f\sigma_8(0.15)$	0.4621	$0.461^{+0.025}_{-0.024} \quad (-0.2\sigma)$
A_{100}^{dust}	1.001	$1.01^{+0.38}_{-0.38}$	D_{2000}	228.1	$228.8^{+5.1}_{-5.2} \quad (-0.3\sigma)$	$\sigma_8(0.15)$	0.7496	$0.748^{+0.017}_{-0.017} \quad (-0.2\sigma)$
A_{143}^{power}	13.4	$10.7^{+6.0}_{-5.5}$	$n_{s,0.002}$	0.9647	$0.963^{+0.022}_{-0.022} \quad (-0.0\sigma)$	$f\sigma_8(0.38)$	0.4789	$0.478^{+0.019}_{-0.019} \quad (-0.2\sigma)$
A_{217}^{power}	12.8	$8.5^{+5.9}_{-4.7}$	Y_P	0.2526	$0.246^{+0.042}_{-0.042} \quad (-0.0\sigma)$	$\sigma_8(0.38)$	0.6637	$0.662^{+0.015}_{-0.015} \quad (-0.2\sigma)$
$A_{143 \times 217}^{power}$	9.04	< 9.83	Y_P^{BBN}	0.2540	$0.247^{+0.042}_{-0.043} \quad (-0.0\sigma)$	$f\sigma_8(0.51)$	0.4767	$0.475^{+0.016}_{-0.016} \quad (-0.2\sigma)$
γ_{143}^{power}	1.27	$1.32^{+0.99}_{-0.85}$	Age/Gyr	13.819	$13.83^{+0.11}_{-0.12} \quad (-0.0\sigma)$	$\sigma_8(0.51)$	0.6208	$0.619^{+0.014}_{-0.014} \quad (-0.1\sigma)$
γ_{217}^{power}	1.06	—	z_*	1090.55	$1090.3^{+1.4}_{-1.3} \quad (-0.0\sigma)$	$f\sigma_8(0.61)$	0.4712	$0.470^{+0.014}_{-0.015} \quad (-0.2\sigma)$
$\gamma_{143 \times 217}^{power}$	1.04	$1.30^{+1.2}_{-0.99}$	r_*	144.49	$144.55^{+0.92}_{-0.98} \quad (+0.2\sigma)$	$\sigma_8(0.61)$	0.5905	$0.589^{+0.013}_{-0.013} \quad (-0.1\sigma)$
c_{100}	0.99799	$0.9978^{+0.0021}_{-0.0022} \quad (-2.9\sigma)$	$100\theta_*$	1.04104	$1.0410^{+0.0010}_{-0.00098} \quad (+0.1\sigma)$	$f\sigma_8(2.33)$	0.2975	$0.2967^{+0.0070}_{-0.0068} \quad (-0.1\sigma)$
c_{217}	0.99944	$0.9994^{+0.0032}_{-0.0029} \quad (+1.9\sigma)$	$D_M(z_*)/\text{Gpc}$	13.879	$13.885^{+0.087}_{-0.091} \quad (+0.2\sigma)$	$\sigma_8(2.33)$	0.3064	$0.3056^{+0.0077}_{-0.0074} \quad (-0.1\sigma)$
H_0	67.07	$67.0^{+2.2}_{-2.2} \quad (+0.1\sigma)$	z_{drag}	1059.67	$1059.4^{+2.5}_{-2.4} \quad (-0.0\sigma)$	f_{2000}^{143}	25.2	$24^{+8}_{-8} \quad (-2.0\sigma)$
Ω_Λ	0.6818	$0.681^{+0.028}_{-0.031} \quad (+0.1\sigma)$	r_{drag}	147.23	$147.30^{+0.95}_{-1.0} \quad (+0.2\sigma)$	f_{2000}^{217}	18.0	$17.1^{+5.7}_{-5.5} \quad (-34.9\sigma)$
Ω_m	0.3182	$0.319^{+0.031}_{-0.028} \quad (-0.1\sigma)$	k_D	0.14024	$0.1404^{+0.0015}_{-0.0015} \quad (-0.1\sigma)$	$f_{2000}^{143 \times 217}$	12.8	$11.4^{+6.5}_{-6.0} \quad (-7.8\sigma)$
$\Omega_m h^2$	0.14315	$0.1431^{+0.0041}_{-0.0039} \quad (-0.2\sigma)$	$100\theta_D$	0.16140	$0.1611^{+0.0016}_{-0.0015} \quad (+0.0\sigma)$	χ_{small}^2	395.88	$396.9 \quad (\nu: 1.4) \quad (+0.0\sigma)$
$\Omega_m h^3$	0.09601	$0.0959^{+0.0016}_{-0.0015} \quad (-0.1\sigma)$	z_{eq}	3405	$3403^{+98}_{-93} \quad (-0.2\sigma)$	χ_{lowl}^2	23.34	$23.9 \quad (\nu: 2.2) \quad (-0.0\sigma)$
σ_8	0.8119	$0.810^{+0.019}_{-0.019} \quad (-0.2\sigma)$	k_{eq}	0.010394	$0.01039^{+0.00030}_{-0.00028} \quad (-0.2\sigma)$	$\chi_{CamSpec}^2$	6704.6	$6717.0 \quad (\nu: 14.9)$
S_8	0.8362	$0.835^{+0.050}_{-0.048} \quad (-0.2\sigma)$	$100\theta_{eq}$	0.8122	$0.812^{+0.018}_{-0.018} \quad (+0.2\sigma)$	χ_{prior}^2	1.2	$5.3 \quad (\nu: 4.3) \quad (-0.5\sigma)$
$\sigma_8 \Omega_m^{0.5}$	0.4580	$0.457^{+0.028}_{-0.026} \quad (-0.2\sigma)$	$100\theta_{s,eq}$	0.4490	$0.4491^{+0.0094}_{-0.0094} \quad (+0.2\sigma)$	χ_{CMB}^2	7123.8	$7137.8 \quad (\nu: 14.9) \quad (+1049.1\sigma)$

Best-fit $\chi_{eff}^2 = 7125.00$; $\Delta\chi_{eff}^2 = -0.12$; $\bar{\chi}_{eff}^2 = 7143.10$; $\Delta\bar{\chi}_{eff}^2 = 0.90$; $R - 1 = 0.00767$

χ_{eff}^2 : CMB - simall_100x143_offlike5_EE_Aplanck_B: 395.88 (Δ 0.10) commander_dx12_v3.2_29: 23.34 (Δ -0.37) CamSpec like_10.7cleaned: 6704.60 (Δ 0.17)